HIDEOUT, UTAH TOWN COUNCIL
SPECIAL SESSION - WORK MEETING
September 04, 2020
Agenda

PUBLIC NOTICE IS HEREBY GIVEN that the Town Council of Hideout, Utah will hold a Special Session Work Meeting for the purposes and at the times as described below on Friday, September 04, 2020

This meeting will be an electronic meeting without an anchor location pursuant to Mayor Rubin's August 26, 2020 determination letter (attached)

All public meetings are available via ZOOM conference call and net meeting.
Interested parties may join by dialing in as follows:

Meeting URL: https://zoom.us/j/4356594739 To join by telephone dial: US: +1 408 638 0986
Meeting ID: 435 659 4739

Regular Meeting
6:30 PM

I. Call to Order

II. Roll Call

III. Agenda Items

1. Work Session to discuss Judge Brown's September 3, 2020 Ruling and options related to the possibility of an annexation across county lines and the possible boundaries of such annexation. The potential annexation area includes areas in Summit County in the vicinity of Richardson Flat. The work session will also address the advisability of rescinding the Pre-Annexation, Development, and Reimbursement Agreement entered into between the Town of Hideout and N Brockbank Investments, LLC on July 14, 2020 and material terms that may be included within any new pre-annexation agreement relating to the potential annexation that is the subject of this work session.

IV. Closed Executive Session - Discussion of pending or reasonably imminent litigation, personnel matters, and/or sale or acquisition of real property as needed

IV. Meeting Adjournment

Pursuant to the Americans with Disabilities Act, individuals needing special accommodations during the meeting should notify the Mayor or Town Clerk at 435-659-4739 at least 24 hours prior to the meeting.

HIDEOUT TOWN COUNCIL
10860 N. Hideout Trail
Hideout, UT 84036
Phone: 435-659-4739
Posted 9/03/2020

August 26, 2020

DETERMINATION REGARDING CONDUCTING TOWN OF HIDEOUT PUBLIC MEETINGS WITHOUT AN ANCHOR LOCATION

The Mayor of the Town of Hideout hereby determines that conducting a meeting with an anchor location presents a substantial risk to the health and safety of those who may be present at the anchor location pursuant to Utah Code section 52-4-207(4) and Hideout Town Ordinance 2020-03. The facts upon which this determination is based include: The percent and number of positive COVID-19 cases in Utah has been significantly higher since May 27, 2020. The seven day average of cases has been over 300 since June 5, 2020. COVID-19 patients in Utah hospitals have increased during the same time period. Hideout is located in Wasatch County and is a close neighbor of Summit County, which have the fourth and fifth highest number of cases per capita in the state.

This meeting will not have a physical anchor location. All attendees will connect remotely. All public meetings are available via ZOOM conference call and net meeting. Interested parties may join by dialing in as follows:

Meeting URL: https://zoom.us/j/4356594739
To join by telephone dial: US: +1 408-638-0986
Meeting ID: 4356594739

Additionally, comments may be emailed to the Town Clerk afairbourne@hideoututah.gov.

This determination will expire in 30 days on September 25, 2020.

BY:

Mayor Philip Rubin

ATTEST:

Alicia Fairbourne, Town Clerk

TOWN OF HIDEOUT CORPORATE Seal WASATCH COUNTY, UTAH

Parcel	Land Use	Acreage	ERU's per Acre		Estimat
			Less Dense	More dense	Less Dense
1	OPEN SPACE	3.45			0
2	RVMD	13.59	20		272
3	OPEN SPACE	20.76			0
4	RVHD	4.30	20	26	86
5	RVHD	4.27	20	26	85
6	OPEN SPACE	2.23			0
7	RVHD	3.93	12	20	47
8	RVHD	2.30	12	26	28
9	RVMD	8.86	4	6	35
10	RVMD	1.89	2	4	4
11	RVMD	2.57	2	4	5
12	RVMD	23.98	3	4	72
13	OPEN SPACE	3.00			0
14	RVMD	40.67	10	10	407
15	OPEN SPACE	139.61			0
16	RVMD	37.96	6	6	228
17	RVMD	6.82	4	6	27
18	OPEN SPACE	42.05			0
19	RVMD	3.33	3	4	10
20	RVMD	2.90	3	4	9
21	OPEN SPACE	3.32			0
22	MOUNTAIN	14.19	1	1	14
23	MOUNTAIN	0.76	1	1	1
24	MOUNTAIN	4.00	1	1	4
25	OPEN SPACE	2.07			0
26	MOUNTAIN	29.56	1	1	30
27	COMMUNITY SITE	4.88			0
28	MOUNTAIN	13.98	1	1	14
29	OPEN SPACE	2.99			0
30	MOUNTAIN	25.16	1	1	25
31	OPEN SPACE	9.06			0
32	MOUNTAIN	18.37	1	1	18
33	MOUNTAIN	10.22	1	1	10
34	OPEN SPACE	2.03			0
35	MOUNTAIN	3.72	1	1	4

36	OPEN SPACE	1.92			0
37	MOUNTAIN	4.78	1	1	5
38	MOUNTAIN	13.13	1	1	13
39	OPEN SPACE	3.51			0
40	OPEN SPACE	6.74			0
41	MOUNTAIN	13.90	1	1	14
42	MOUNTAIN	16.26	1	1	16
43	MOUNTAIN	2.49	1	1	2
	ROADWAYS	28.34			
		603.85			1,485

1. Total ERU's for the entire Richardson Master Plan area will not exceed 3,500.
2. The maximum ERUs in each land use area will not exceed the max ERUs identified in the table.
3. Total Open Space Provided = Approximately 245 acres (+/-40%)

:ed Units

More Dense
0
272
0
112
111
0
79
60
53
8
10
96
0
407
0
228
41
0
13
12
0
14
1
4
0
30
0
14
0
25
0
18
10
0
4

0

5

13

0

0

14

16

2

1,671

August 24, 2020

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

Richardson Flat East

Park City, Utah

Prepared by:

DK Environmental

3739 Wagon Wheel Way
Park City, UT 84098

Project Number 20-056

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LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
Richardson Flat East
Park City, Utah

1.0 INTRODUCTION

DK Environmental, LLC was retained by RB 248 LLC and NB 248 LLC (Client) to prepare a Limited Phase II Environmental Site Assessment for Parcel 1 East, Parcel 2, Parcel 3A (including OU1 South) and Parcel 6, collectively referred to as Richardson Flat East (Subject Property). For discussion purposes in this report, OU1 South is described separately from Parcel 3A. The legal description of the Subject Property is included as **Appendix A.** The Subject Property is located east of Highway 40, north and south of Richardson Flat Road, and north of Hwy 248 in Park City, Summit County, Utah. The Subject Property consists of approximately 244 acres as shown on **Figures 1 and 2**.

2.0 OBJECTIVE

The purpose of the Limited Phase II Environmental Site Assessment was to assess whether soils in portions of the Subject Property have been impacted with lead and arsenic and to aid in meeting the current standard for "all appropriate inquiries" (AAI) stipulated by the United States Environmental Protection Agency (EPA) in 40 CFR Part 312.

The Subject Property is located adjacent to and within Richardson Flat Operable Unit 1 (OU1). Richardson Flat OU1 is listed on CERCLIS and has been used for storage of mine tailings associated with mining activities since before the 1950's. Richardson Flat OU1 is still in remedial action pending additional cover material in areas where future placement of mine waste may occur. Areas of concern for Limited Phase II testing have been identified at the Subject Property based on the Phase I Environmental Site Assessment completed in August 2020.

Test Pit locations were chosen by examining historical aerial photographs which showed potential areas of impact to the Subject Property from Richardson Flat OU1 and by visual reconnaissance during the field work. Soils testing focused on low-lying areas adjacent to Richardson Flat OU1 and in identified areas of fill and debris material of unknown origin. This Limited Phase II was not intended to fully identify the lateral and vertical extent of the potential lead and arsenic impacts across the Subject Property.

3.0 SCOPE OF WORK

DK Environmental excavated test pits with a backhoe and screened soils with an x-ray fluorescence (XRF) unit for real-time readings of the lead and arsenic concentrations. Soils in the test pits were screened from the ground surface to a depth where native soil was observed or when lead concentrations were below the target screening level. A Trimble global positioning system (GPS) unit was used to locate the Test Pits and plot locations on a map. Field work was conducted in June and August 2020.

The scope of work included collecting the following soil samples in the identified areas of concern:

- Excavate two test pits in low-lying areas in Parcel 1 East;
- Excavate one test pit in Parcel 2;

- Excavate five test pits in Parcel 3A; three in low-lying areas and two in upland areas with surface debris;
- Excavate seven test pits in Parcel OU1 South; four in low-lying areas and three in upland areas; and
- Screen soils for lead and arsenic concentrations with an XRF.

4.0 METHODOLOGY

4.1 Target Screening Levels

Lead and arsenic XRF readings were compared to the EPA Regional Screening Level (EPA RSL) for lead and arsenic. The Residential EPA RSL for soils is 400 milligrams per kilogram (mg/kg) and the Residential EPA RSL for arsenic is 0.68 mg/kg. Note that similar mining impacted sites in the Park City historical mining area have used 100 mg/kg arsenic as a target concentration. Also, the soil target levels established at Richardson Flat OU1 in the Record of Decision (ROD) is 500 mg/kg for lead and 100 mg/kg for arsenic.

4.2 Soil Screening Methods

Soil screening was conducted at 15 Test Pits across the Subject Property as shown on **Figure 3**. Soil was typically screened from the ground surface to the total depth of the test pit. Test pit total depths were determined in the field based on the XRF results and the presence of undisturbed native material. XRF readings were collected from the excavation sidewall and for deeper Test Pits, from the backhoe bucket. Each excavation was backfilled after XRF screening.

Quality control (QC) of the XRF was completed by daily internal standardization of the instrument and XRF readings of a provided lead and arsenic “blank” sample and a provided sample of a known concentration (Till4). Accuracy of the XRF was evaluated by collecting two soil samples for laboratory analysis and then compared to the XRF reading of the sample. The XRF error sensitivity is presented as a “+/-” concentration in mg/kg.

The laboratory soil samples were placed in a plastic ziploc-type bag, screened with the XRF, transferred to clean laboratory-provided sampling container, and placed in an ice filled cooler. The samples were transported under proper chain of custody to American West Analytical Laboratory (AWAL) in Salt Lake City, Utah.

5.0 RESULTS

5.1 Soil Screening Results

Results of the XRF soil screening indicate areas of elevated lead in Parcels 3 South and OU1 South. Test Pit locations are shown on **Figure 3** and XRF results are presented in **Table 1**. Parcel 6 was not sampled because it is outside of, and higher in elevation than the boundaries of Richardson Flat OU1 and historical information did not indicate mining activities or tailings disposal in that area.

As shown on **Table 1,** in samples where the XRF reading were less than the Level of Detection (<LOD) the arsenic concentration error range was above the Residential EPA RSL of 0.68 mg/kg. The field XRF is not sufficiently sensitive to meet the Residential EPA RSL for arsenic. Additional laboratory analysis of soil samples would be required to quantify arsenic

concentrations to the arsenic EPA RSL. Therefore, soil lead concentrations will be used in the following results discussion to estimate the area of impacted soils on the Subject Property.

5.1.1 Parcel 1 East

Two Test Pits were excavated and screened in Parcel 1 East (Test Pits 9A and 9B) as shown on **Figure 3** and presented on **Table 1**. Both Test Pits were excavated in low-lying areas adjacent to Richardson Flat OU1. Soils were screened to a maximum depth of 36 inches below ground surface (bgs) and native undisturbed soil was encountered. Soil lead concentrations ranged from <LOD to 25 mg/kg and were below the EPA RSL of 400 mg/kg.

5.1.2 Parcel 2

One Test Pit, 8A, was screened in Parcel 2. The excavation was advanced to 18 inches bgs due to bedrock being encountered. The highest soil lead concentration was measured at 6 inches bgs at a concentration off 211 mg/kg which is below the lead Residential EPA RSL.

5.1.3 Parcel 3A

Five Test Pits were screened in Parcel 3A: Test Pits 6A, 6B, 7A, 7B and 8B. Two Test Pits were located in an upland area where isolated areas of surface trash disposal was observed. The trash consisted of glass, bottles, paper, plastic, cookware, etc. (6A and 6B). Three Test Pits were excavated in low-lying areas (7A, 7B and 8B) located adjacent to OU1.

Low-lying Areas: Soil lead concentrations from the Test Pits in the low-lying areas were below the lead Residential EPA RSL.

Upland Areas: Soil lead concentrations above the Residential EPA RSL were detected in Test Pit 6B at the location of a debris pile. The soil lead concentration was 1840 mg/kg at 6 inches bgs.

5.1.4 Parcel OU1 South

Seven Test Pits were screened in Parcel OU1 South: Test Pits 5A, 5B, 10, 42, 43, 44 and 45. Test Pits 5A, 5B, 42 and 45 were in low-lying areas adjacent to Richardson Flat OU1. Test Pits 10, 43 and 44 were collected in upland areas.

Low-lying Areas: Soil lead concentrations were detected above the Residential EPA RSL at two depths in Test Pit 42; 4004 mg/kg at 3 feet bgs and 1043 mg/kg at 4 feet bgs. The material with lead concentrations above the EPA RSL in Test Pit 42 was a sandy gray material that appears consistent with mine tailings.

Upland Areas: Soil lead concentrations ranged from <LOD to a maximum of 104 mg/kg in Test Pit 44 at 4 feet bgs. Lead concentrations were not detected above the Residential EPA RSL.

5.1.5 Quality Control

XRF readings and laboratory analytical results are presented on **Table 2.** Comparison of XRF readings and laboratory analytical results indicate an acceptable correlation. In addition, the provided blank and standard (Till4) also indicate an acceptable correlation as presented on **Table 1**.

6.0 DISCUSSION

Lead concentrations are present in soils above the Residential EPA RSL at the Subject Property. The following areas were identified with soil lead concentrations above the Residential EPA RSL on Parcel 3A and OU1 South:

- Isolated debris piles are present in Parcel 3 South. One of the debris piles was sampled and approximately 100 cy of impacted debris was identified. Additional small debris piles are also present in this area.
- Approximately 125 cy of impacted material was identified in the drainage ditch at 3 feet to 4 feet bgs in Parcel OU1 South. This material appears to be consistent with mine tailings present at Richardson Flat OU1.

Figure 4 shows the estimated areas that exceed the soil lead EPA RSL that were tested. The volume of impacted material was estimated based on the XRF results collected from the test pits.

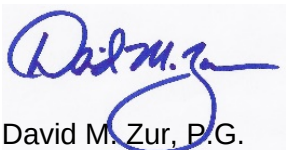
It is important to note that the XRF is not sufficiently sensitive to detect arsenic at the Residential EPA RSL of 0.68 mg/kg. However, similar mining impacted sites in the Park City historical mining area use 100 mg/kg arsenic as a target concentration and the soil target level established at the Richardson Flat OU1 CERCLIS site is 500 mg/kg for lead and 100 mg/kg for arsenic.

7.0 LIMITATIONS

This report has been prepared in accordance with generally accepted professional consulting practices. No warranty, expressed or implied, is made regarding the professional conclusions or recommendations provided in this report and are based on information provided by the client, others, and site data and observations. If future changes in the nature, usage, or layout of the Subject Property are made, the conclusions and recommendations contained in this report may not be valid.

Respectfully Submitted,

DK Environmental, LLC



David M. Zur, P.G.
Professional Geologist/Owner



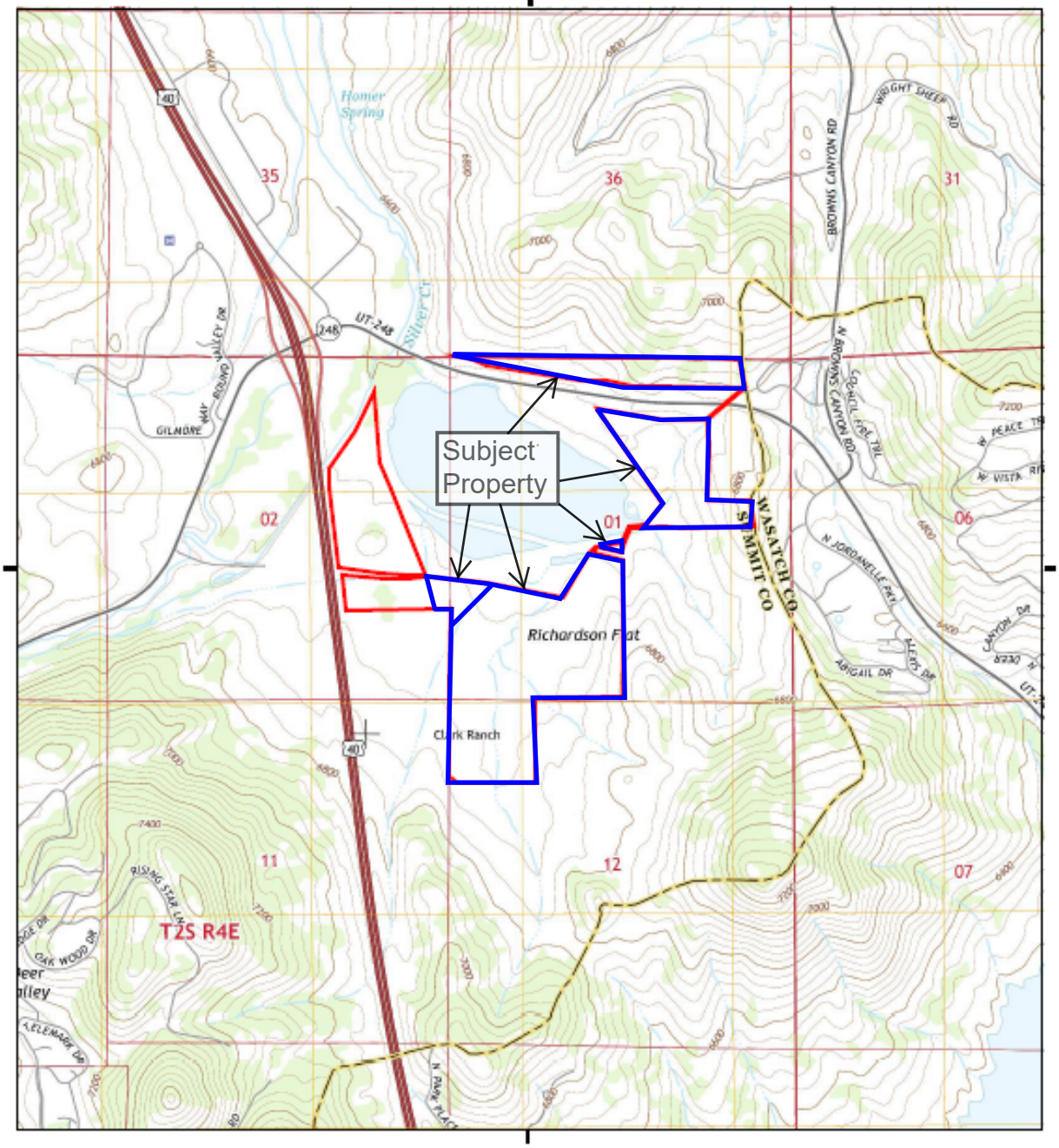
Kathy M. Harris
Project Manager

FIGURES

EDR

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Park City East, 2014, 7.5-minute

SITE NAME: Richardson Flat
ADDRESS: US 40 W & State Route 248
Park City, UT 84060
CLIENT: DK Environmental LLC

N

5700457 - 4 page 5

Legend

N

Property boundaries are approximate.

SCALE:	not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	
DWN BY:	KMH
CHK'D BY:	DMZ

CLIENT
NB 248 LLC and RB 248 LLC

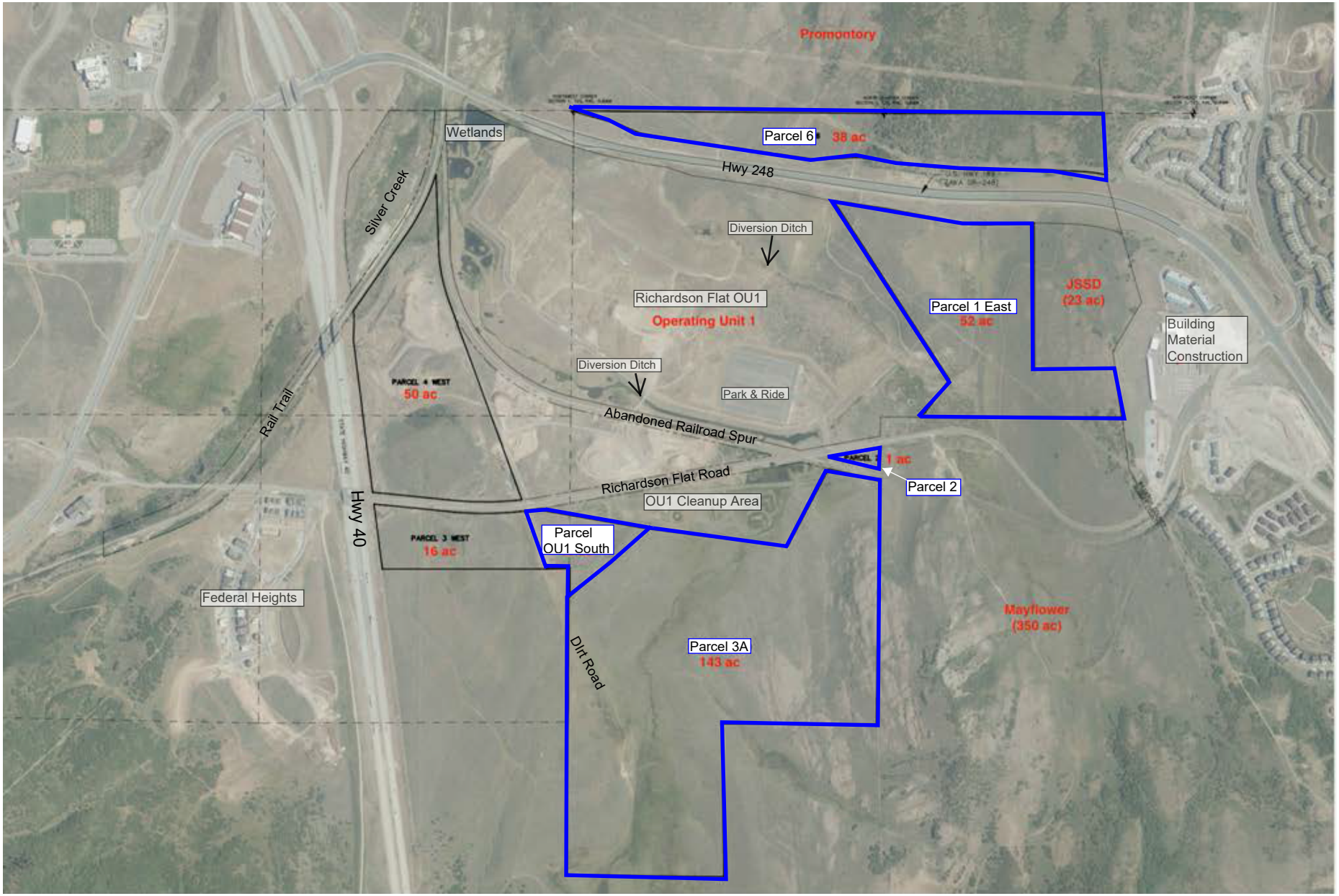
PROJECT
Limited Phase II Environmental Site Assessment Richardson Flat East
Summit County, Utah

DK Environmental

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE
Location Map

FIGURE NO:
1



Legend

Subject Property

SCALE:	Not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	
DWN BY:	KMH
CHK'D BY:	DMZ

CLIENT: NB 248 LLC and RB 248 LLC

PROJECT: Limited Phase II Environmental Site Assessment
Richardson Flat East
Summit County, Utah

DK Environmental
DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE: Subject Property Map

FIGURE NO: 2



Legend

- Test Pit location excavated June 2020
- Test Pit location excavated August 2020

SCALE:	Not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	Google Earth Maps
DWN BY:	KMH
CHK'D BY:	KMH

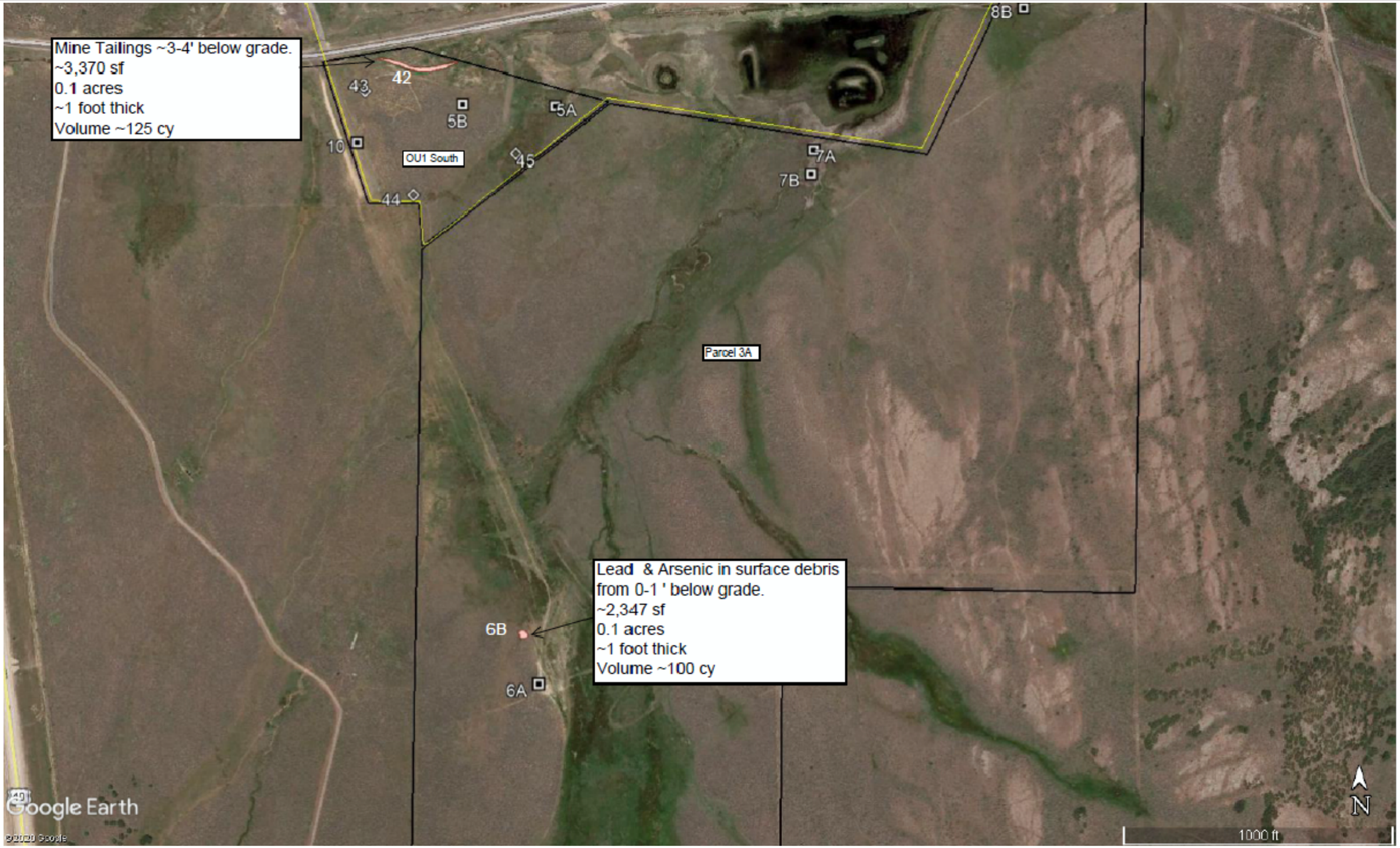
CLIENT
NB 248 LLC and RB 248 LLC

DK Environmental
DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

PROJECT
Limited Phase II Environmental Site Assessment
Richardson Flat East, Park City, Utah

TITLE
Soil Screening Test Pit Map

FIGURE NO:
3



Legend

- Test Pit location excavated June 2020
- Test Pit location excavated August 2020
- Area of Contamination

SCALE:	Not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	Google Earth Maps
DWN BY:	KMH
CHK'D BY:	KMH

CLIENT
NB 248 LLC and RB 248 LLC

PROJECT
Limited Phase II Environmental Site Assessment
Richardson Flat East, Park City, Utah

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE
Areas of Contaminated Soil Map

FIGURE NO:
4

TABLES

TABLE 1
X-RAY FLUORESCENCE RESULTS
RICHARDSON FLAT EAST
PARK CITY, UTAH

Date	Test Pit Location	Parcel Number	XRF Number	Depth (in.)	XRF Reading				Comments
					As (mg/kg)	As +/- (mg/kg)	Pb (mg/kg)	Pb +/- (mg/kg)	
EPA Residential RSL for Soils:					**0.68**		**400**		
EPA Industrial RSL for Soils:					**3**		**800**		
									Parcel 1 East
6/29/20	9A	1 East	4	2	<LOD	11	21	5	Parcel 1 East - drainage
6/29/20			5	6	<LOD	10	17	4	
6/29/20			6	12	<LOD	12	21	5	
6/29/20			7	18	<LOD	11	<LOD	14	
6/29/20			8	36	<LOD	11	14	5	
6/29/20	9B	1 East	9	6	<LOD	10	25	4	Parcel 1 East - drainage
6/29/20			10	12	<LOD	13	<LOD	16	
6/29/20			11	24	<LOD	10	24	4	
6/29/20			12	36	<LOD	13	24	5	
									Parcel 2
6/29/20	8A	2	78	6	**39**	11	211	13	Parcel 2 - triangle between Richardson Flat Road and railroad grade. Bedrock and cobbles at 18"
6/29/20			79	12	<LOD	15	33	6	
6/29/20			80	18	<LOD	14	<LOD	16	
									Parcel 3A
6/29/20	8B	3A	17	6	<LOD	12	27	5	Parcel 3A - drainage
6/29/20			18	12	<LOD	26	190	11	
6/29/20			19	18	<LOD	16	60	7	
6/29/20			20	24	<LOD	19	94	8	
6/29/20			21	36	<LOD	12	16	5	
6/29/20	7A	3A	22	6	<LOD	15	42	7	Parcel 3A - drainage south of OU1 cleanup area
6/29/20			23	12	<LOD	18	63	8	
6/29/20			24	24	<LOD	16	44	7	
6/29/20			25	36	<LOD	12	24	5	
7/1/20	7A - bag sample	3A	22	0-36	<LOD	12	41	5	Bag sample 7A 0-36". Submitted for AWAL laboratory analysis
6/29/20	7B	3A	26	6	**17**	5	39	6	Parcel 3A - drainage south of OU1 cleanup area
6/29/20			27	12	<LOD	13	57	6	
6/29/20			28	24	<LOD	12	18	5	
6/29/20			29	36	<LOD	11	14	5	
6/29/20	6A	3A	30	2	<LOD	12	24	5	Parcel 3A - disturbed area west of double track road at south end of parcel
6/29/20			31	6	<LOD	11	16	5	
6/29/20			32	12	<LOD	13	26	6	
6/29/20			33	24	<LOD	15	31	7	
6/29/20			34	36	<LOD	13	20	6	
6/29/20	6B	3A	35	2	<LOD	18	115	8	Parcel 3A - Small pile of debris, grey colored material at 6" bgs; sandy texture - possibly tailings.
6/29/20			36	6	**109**	26	**1840**	44	
6/29/20			37	12	**34**	8	202	10	
6/29/20			38	24	<LOD	18	63	8	
7/1/20	6B - bag sample	3A	21	0-6	**63**	20	**1351**	32	Bag sample 6B 6". Submitted for AWAL laboratory analysis
									OU1 South
6/29/20	5A	OU1 South	39	6	<LOD	23	266	10	OU1 South Parcel - drainage
6/29/20			40	12	<LOD	25	82	11	
6/29/20			41	24	<LOD	14	30	6	
6/29/20			42	36	<LOD	15	<LOD	18	
6/29/20	5B	OU1 South	43	6	<LOD	15	67	6	OU1 South Parcel - drainage
6/29/20			44	12	<LOD	15	32	6	
6/29/20			45	24	<LOD	13	25	5	
6/29/20			46	36	<LOD	15	33	6	

Table 1
X-ray Fluoresence
Richardson Flat
Park City, Utah

Date	Test Pit Location	Parcel Number	XRF Number	Depth (in.)	XRF Reading				Comments
					As (mg/kg)	As +/- (mg/kg)	Pb (mg/kg)	Pb +/- (mg/kg)	
EPA Residential RSL for Soils:					**0.68**		**400**		
EPA Industrial RSL for Soils:					**3**		**800**		
6/29/20	10	OU1 South	47	6	<LOD	14	23	6	OU1 South Parcel - adjacent to dirt road
6/29/20			48	12	<LOD	12	26	5	
6/29/20			49	24	<LOD	14	35	6	
6/29/20			50	48	<LOD	12	<LOD	16	
8/6/20	44	OU1 South	99	6	**32**	9	68	10	OU1 South - south boundary
8/6/20			102	12	**24**	8	68	9	OU1 South - south boundary
8/6/20			103	24	<LOD	18	40	8	
8/6/20			104	36	<LOD	23	104	10	
8/6/20	45	OU1 South	105	6	<LOD	30	171	13	OU1 South - south boundary in drainage
8/6/20			106	12	<LOD	15	45	7	
8/6/20			107	24	<LOD	14	<LOD	16	
8/6/20			108	36	<LOD	11	<LOD	15	
8/6/20	42	OU1 South	109	6	<LOD	14	24	6	OU1 South - drainage ditch along Richardson Flat Road, gray, sandy tailings approximately 1' thick
8/6/20			110	12	<LOD	12	<LOD	14	
8/6/20			111	12	<LOD	21	95	9	
8/6/20			112	36	<LOD	122	**4004**	86	
8/6/20			113	48	**185**	24	**1043**	34	
8/6/20			114	96 (8')	<LOD	14	38	6	
8/6/20	43	OU1 South	115	6	<LOD	15	26	6	OU1 South - northwest area
8/6/20			116	12	<LOD	14	20	6	
8/6/20			117	24	<LOD	15	30	7	
8/6/20			118	36	<LOD	15	25	6	
8/6/20			119	48	<LOD	13	<LOD	16	
6/29/20			1						Standard - Pass
6/29/20			2		<LOD	8	<LOD	11	Blank
6/29/20			3		104	7	44	6	Till4
6/29/20			1						Standard - Pass
7/1/20			19						Standard - Pass

<LOD - less than Level of Detection or Non-detect

mg/kg = milligrams per kilogram

Blank: <LOD

TILL4: As = 111 mg/kg, Pb = 50 mg/kg

"Bold" values exceed EPA Residential Regional Screening Levels.

Test pits depths were terminated when native material was identified unless otherwise indicated.

TABLE 2
SOIL LABORATORY ANALYSIS
RICHARDSON FLAT EAST
PARK CITY, UTAH

Date Sampled	Sample Number	Parcel Number	Arsenic (mg/kg)	Lead (mg/kg)
EPA Residential RSL for Soil			**0.68**	**400**
EPA Industrial RSL for Soil			**3**	**800**
6/29/2020	6B 6"	3A	**22.5**	**1,630**
6/29/2020	*XRF #21	3A	**63**	**1,351**
6/29/2020	7A 0-36"	3A	**8.08**	33.2
6/29/2020	*XRF #22	3A	<LOD	41

RSL- Regional Screening Level
mg/kg - milligrams per kilogram
<LOD - less than Level of Detection or Non-detect
"Bold" data exceed their respective Residential RSL.
* XRF results from Table 1

APPENDIX A – LEGAL DESCRIPTION

EXHIBIT A

PROPERTY DESCRIPTION AND DEPICTION

PARCEL 1 EAST

A parcel of land located in the north half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described at follows:

Beginning at a point South 00°44'33" East 2641.90 feet coincident with the section line and West 647.07 feet from the northeast corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence along the south line of the northeast quarter of Section 1 North 89°50'21" West 1722.59 feet; thence North 36°45'45" East 401.85 feet; thence North 32°35'26" West 1843.40 feet to a point on the southerly right-of-way of Highway U-189; thence coincident with the southerly right-of-way of Highway U-189 the following four (4) courses: 1) South 81°29'38" East 463.60 feet to a right-of-way monument; thence 2) South 78°57'52" East 621.18 feet to a right-of-way monument; thence 3) South 85°29'09" East 193.03 feet to a right-of-way monument; thence 4) North 88°34'36" East 459.30 feet; thence South 1263.44 feet; thence South 89°58'46" East 696.77 feet to the Summit-Wasatch County line; thence coincident with the Summit-Wasatch County line South 07°49'47" East 428.95 feet to the point of beginning.

Description contains 51.88 acres.

PARCEL 2

A parcel of land located in the southwest quarter of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at point North 00°43'31" East 2218.71 feet along the center of section line from the south quarter corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence along the northerly line of the abandoned Union Pacific Railroad right-of-way North 76°40'50" West 450.61 feet; thence along the southerly right-of-way line of the county road (UDOT F.A.P.93-B) North 79°44'00" East 447.99 feet; thence along the center of section line South 00°43'31" West 183.67 feet to the point of beginning.

Description contains 0.93. acres.

PARCEL 3A

A parcel of land located in the southwest quarter of Section 1, the southeast quarter of Section 2, and the northwest quarter of Section 12, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described as follows:

Beginning at the southwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence coincident with the section line North 00°34'37" East 1327.29 feet; thence coincident with the south line of the north half of the southeast quarter of Section 2 South 89°58'53" West 188.10 feet; thence North 19°56'15" West 537.89 feet to a point on a non

tangent 2914.90 foot radius curve to the left, of which the radius point bears North 07°03'59" West, said point being on the southerly right-of-way of the county road (UDOT F.A.P. 93-B); thence coincident with the southerly right-of-way of the county road (UDOT F.A.P. 93-B) the following two (2) courses: 1) along the arc of said curve 162.81 feet through a central angle of 03°12'01"; thence 2) North 79°44'00" East 236.14 feet; thence South 71°47'16" East 704.98 feet; thence South 82°38'01" East 1191.60 feet; thence North 27°48'26" East 758.25 feet to the southerly line of the abandoned Union Pacific Railroad right-of-way; thence along the southerly line of the abandoned Union Pacific Railroad right-of-way South 76°40'50" East 451.55 feet to the center line of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; thence coincident with the center line of Section 1 South 00°43'31" West 2116.24 feet to the south quarter corner of Section 1; thence coincident with the south line of Section 1 North 89°30'05" West 1326.50 feet; thence coincident with the east line of the northwest quarter of the northwest quarter of Section 12 South 00°41'29" East 1332.41 feet; thence coincident with the south line of the northwest quarter of the northwest quarter of Section 12 North 89°23'28" West 1347.55 feet; thence coincident with the west line of the northwest quarter of the northwest quarter of Section 12 North 00°12'46" East 1329.54 feet to the point of beginning.

Description contains 153.31 acres.

PARCEL 6

A parcel of land located in the north half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at the northwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence coincident with the north boundary of said Section 1 the following two (2) courses: 1) South 89°31'25" East 2666.74 feet; thence (2) North 89°59'53" East 1875.55 feet to the Summit-Wasatch county line; thence coincident with the Summit-Wasatch county line South 03°53'07" East 535.39 feet to the north right-of-way boundary of U.S. Highway 189 (also known as SR-248), said point being on a non tangent curve to the left having a radius of 2139.86 feet, of which the radius point bears South 10°52'23" West; thence coincident with said right-of-way the following ten (10) courses: 1) Westerly along the arc of said curve 201.77 feet through a central angle of 05°24'09"; thence 2) North 87°41'03" West 339.16 feet; thence 3) North 89°19'46" West 540.85 feet to a point on a curve to the right having a radius of 5502.89 feet, of which the radius point bears North 00°40'14" East; thence 4) along the arc of said curve 751.38 feet through a central angle of 07°49'24"; thence 5) North 81°30'46" West 302.59 feet; thence 6) South 87°10'38" West 407.66 feet; thence 7) North 81°30'46" West 1224.14 feet to a point on a non tangent curve to the right having a radius of 5579.56 feet, of which the radius point bears North 08°29'18" East; thence 8) Westerly along the arc of said curve 268.64 feet through a central angle of 02°45'31"; thence 9) North 66°59'31" West 246.59 feet to a point on a non tangent curve to the right having a radius of 5534.58 feet, of which the radius point bears North 13°44'49" East; thence 10) Westerly along the arc of said curve 355.11 feet through a central angle of 03°40'34" to the west boundary of the northwest quarter of said Section 1; thence coincident with said west boundary North 00°34'37" East 4.53 feet to the point of beginning.

Description contains 37.91 acres.

10.00 Acres of Parcel 3A:

A parcel of land lying and situate in the Southwest Quarter of Section 1 and the Northeast Quarter of the Southeast Quarter of Section 2, Township 2 South, Range 4 East, Salt Lake Base and Meridian. Basis of Bearing for Subject being North 00°34’37” East 1327.07 feet measured coincident with the west line of the Southwest Quarter of the Southwest Quarter of said Section 1. Subject parcel being more particularly described as follows:

Commencing at the Southwest Corner of said Section 1 thence North 00°34’37” East 1895.80 feet coincident with the west line of said Section 1 to a point on the south right of way line of Richardson Flat Road (F.A.P. 93-B) and the True Point of Beginning;
Thence North 79°43’15” East 17.92 feet; Thence departing said right of way
South 71°47’16” East 703.04 feet; Thence South 49°29’31” West 912.26 feet to a point on the west sixteenth section line of said Section 1; Thence coincident with said sixteenth section line North 00°34’37” East 240.40 feet to a number five rebar and cap stamped “Alliance” monumenting the South Sixteenth Corner of said Section 1; Thence South 89°59’21” West 189.47 feet coincident with the south line of the Northeast Quarter of the Southwest Quarter of said Section 2; Thence North 19°55’49” West 534.69 feet to said south right of way line; Thence the following two (2) courses coincident with said right of way 1) Northeasterly along the arc of a 2518.90 foot radius curve to the left (center bears North 07°48’23” West) through a central angle of 02°28’22”; 2) North 79°43’15” East 274.52 feet to the point of beginning.

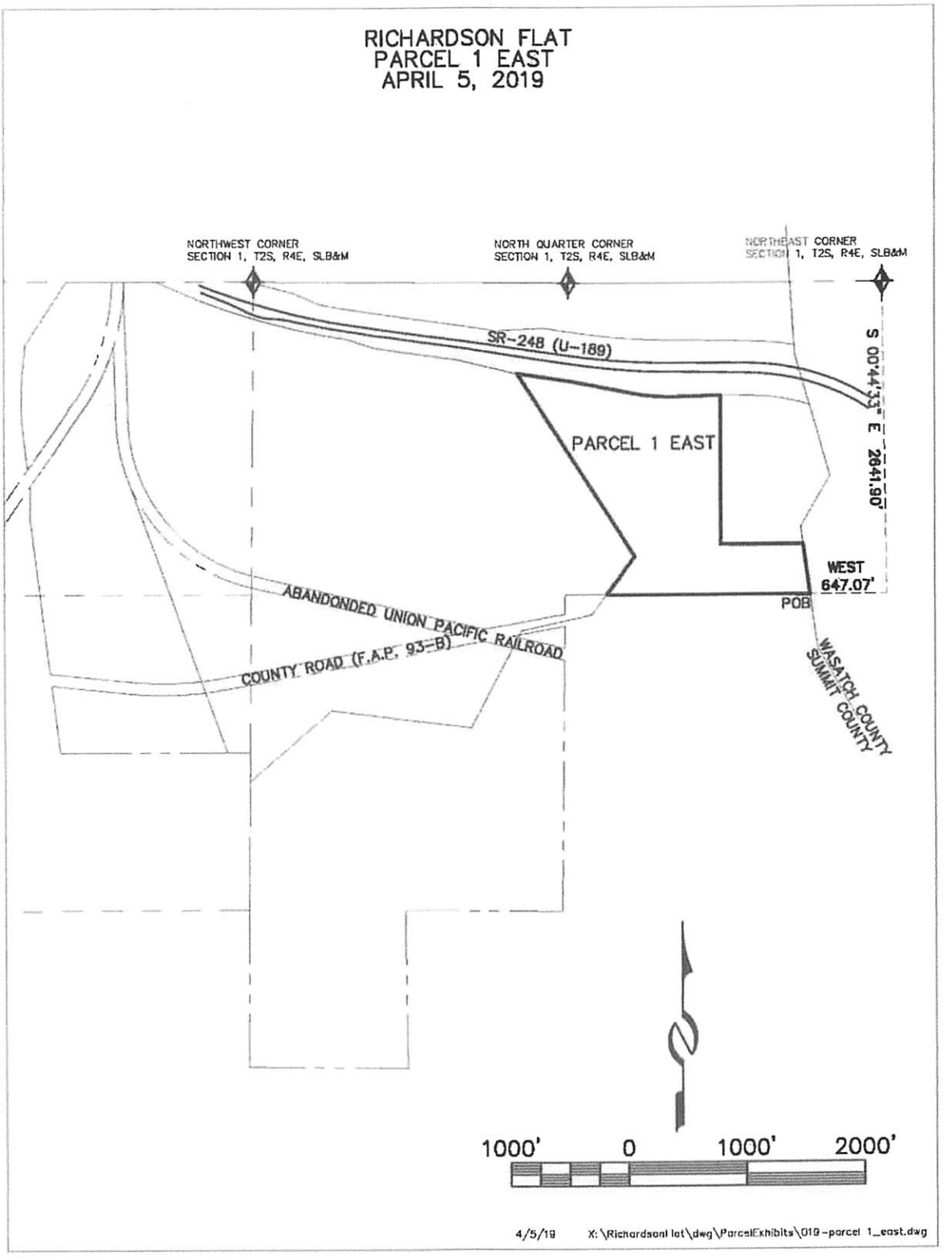
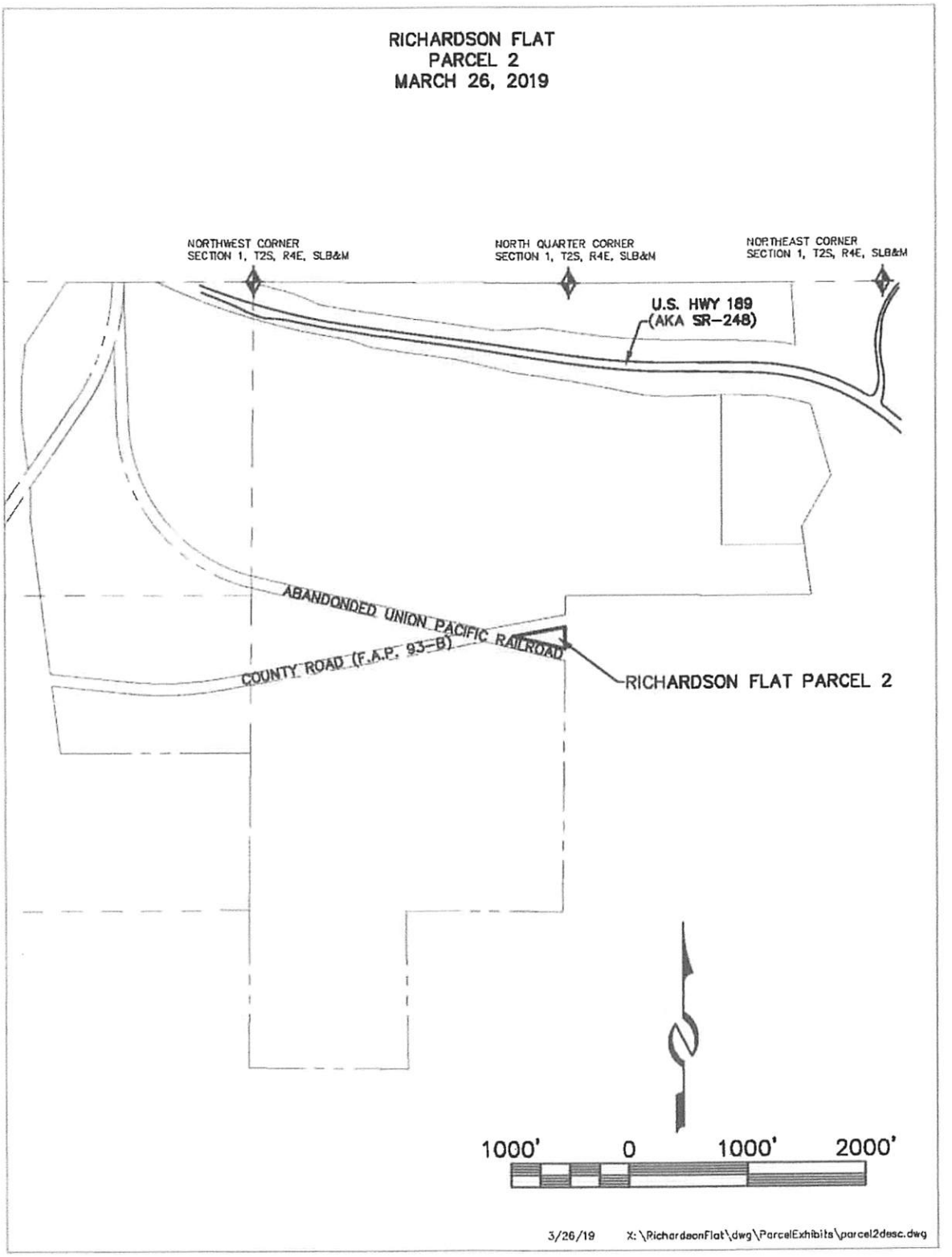


Exhibit A to Agreement for Purchase and Sale of Real Property
Page 3 of 6


RICHARDSON FLAT
PARCEL 2
MARCH 26, 2019
NORTHWEST CORNER
SECTION 1, T2S, R4E, SLB&M
NORTH QUARTER CORNER
SECTION 1, T2S, R4E, SLB&M
NORTHEAST CORNER
SECTION 1, T2S, R4E, SLB&M
U.S. HWY 189
(AKA SR-248)
ABANDONDED UNION PACIFIC RAILROAD
COUNTY ROAD (F.A.P. 93-B)
RICHARDSON FLAT PARCEL 2
1000'
0
1000'
2000'
3/26/19
X:\RichardsonFlat\dwg\ParcelExhibits\parcel2desc.dwg

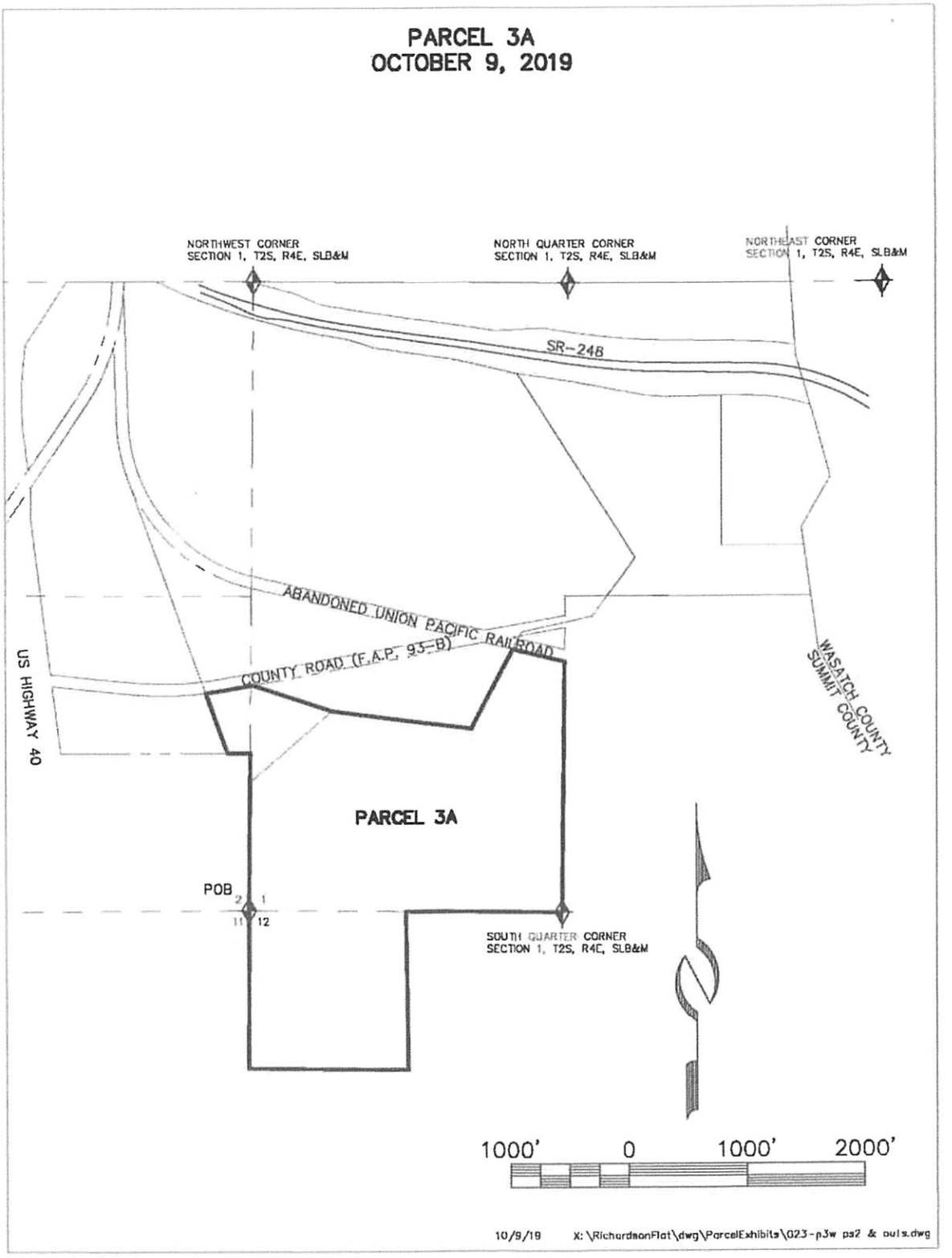
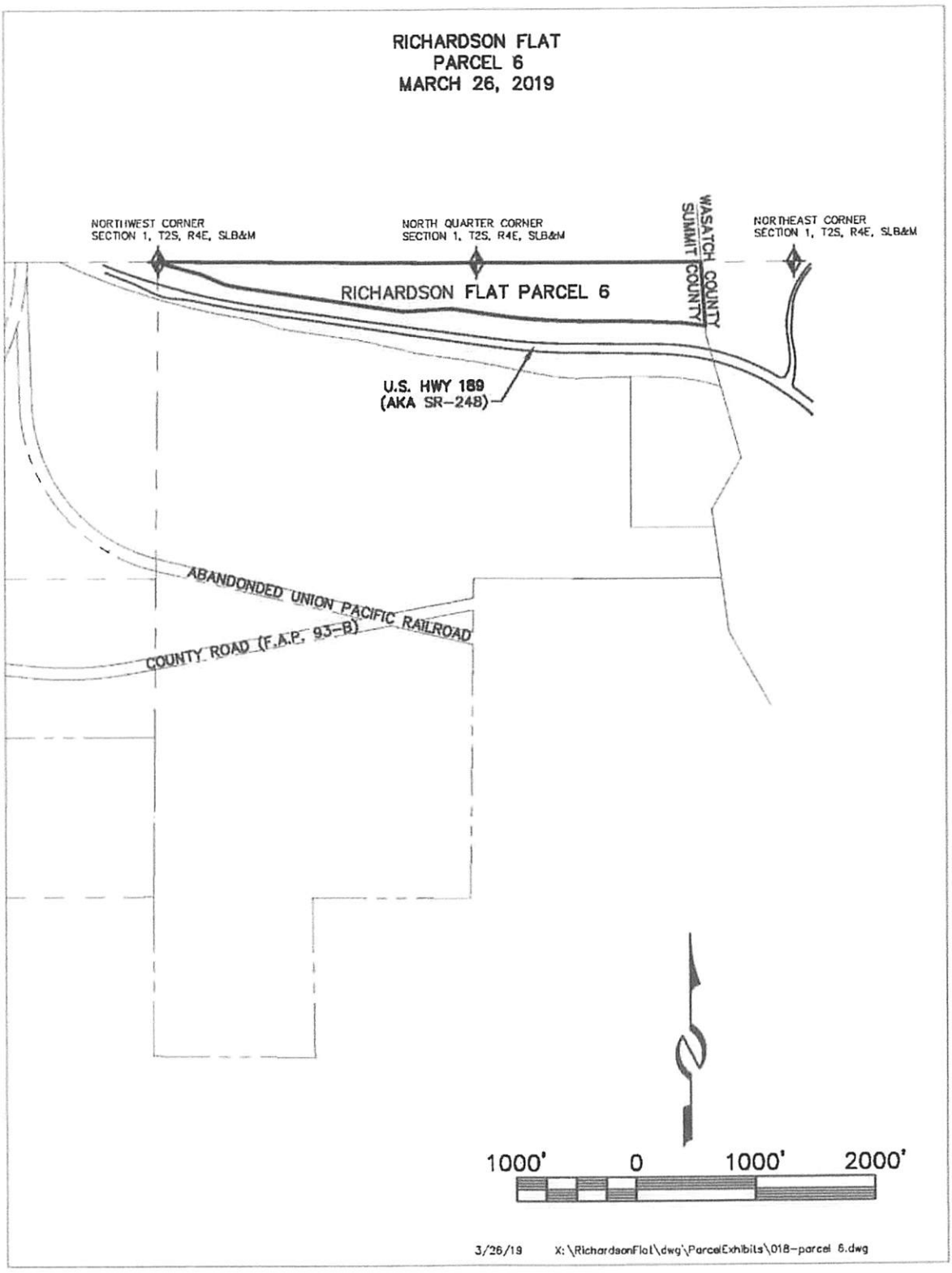


Exhibit A to Agreement for Purchase and Sale of Real Property
Page 5 of 6


RICHARDSON FLAT
PARCEL 6
MARCH 26, 2019
NORTHWEST CORNER
SECTION 1, T2S, R4E, SLB&M
NORTH QUARTER CORNER
SECTION 1, T2S, R4E, SLB&M
NORTHEAST CORNER
SECTION 1, T2S, R4E, SLB&M
WASATCH COUNTY
SUMMIT COUNTY
RICHARDSON FLAT PARCEL 6
U.S. HWY 189
(AKA SR-248)
ABANDONDED UNION PACIFIC RAILROAD
COUNTY ROAD (F.A.P. 93-B)
1000'
0
1000'
2000'
3/26/19
X:\RichardsonFlat\dwg\ParcelExhibits\018-parcel 6.dwg

APPENDIX B – ANALYTICAL REPORT

American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
Fax: (801) 263-8687
e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Kathy Harris
DK Environmental
3739 Wagon Wheel Way
Park City, UT 84098
TEL: (801) 718-7020

RE: Richardson Flat / 20-

Dear Kathy Harris: Lab Set ID: 2007042B

American West Analytical Laboratories received sample(s) on 7/1/2020 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by: _____
Laboratory Director or designee

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

INORGANIC ANALYTICAL REPORT

Client: DK Environmental **Contact:** Kathy Harris
Project: Richardson Flat / 20-
Lab Sample ID: 2007042B-003
Client Sample ID: 6B 6"
Collection Date: 6/29/2020 1030h
Received Date: 7/1/2020 1450h

Analytical Results TOTAL METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/kg-dry	7/6/2020 1433h	7/7/2020 1845h	SW6020B	0.615	**22.5**	
Barium	mg/kg-dry	7/6/2020 1433h	7/8/2020 1450h	SW6020B	24.6	**1,680**	
Cadmium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1845h	SW6020B	0.615	**5.87**	
Chromium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1845h	SW6020B	12.3	**69.6**	
Lead	mg/kg-dry	7/6/2020 1433h	7/8/2020 1450h	SW6020B	14.8	**1,630**	
Mercury	mg/kg-dry	7/7/2020 1500h	7/8/2020 1428h	SW7471B	0.0457	**1.44**	
Selenium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1845h	SW6020B	2.46	< 2.46	
Silver	mg/kg-dry	7/6/2020 1433h	7/7/2020 1845h	SW6020B	0.369	**5.32**	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

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INORGANIC ANALYTICAL REPORT

Client: DK Environmental **Contact:** Kathy Harris
Project: Richardson Flat / 20-
Lab Sample ID: 2007042B-004
Client Sample ID: 7A 0-36"
Collection Date: 6/29/2020 940h
Received Date: 7/1/2020 1450h

Analytical Results TOTAL METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	0.648	**8.08**	
Barium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	6.48	**382**	
Cadmium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	0.648	**0.988**	
Chromium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	13.0	**32.6**	
Lead	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	3.89	**33.2**	
Mercury	mg/kg-dry	7/7/2020 1500h	7/8/2020 1430h	SW7471B	0.0444	**0.0555**	
Selenium	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	2.59	< 2.59	
Silver	mg/kg-dry	7/6/2020 1433h	7/7/2020 1848h	SW6020B	0.389	< 0.389	

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-71135	Date Analyzed:	07/15/2020 1833h											
Test Code: 6020B-DIS	Date Prepared:	07/15/2020 1102h											
Arsenic	0.219	mg/L	SW6020B	0.00127	0.00400	0.2000	0	109	85 - 115				
Barium	0.216	mg/L	SW6020B	0.00163	0.00200	0.2000	0	108	85 - 115				
Cadmium	0.210	mg/L	SW6020B	0.000160	0.000700	0.2000	0	105	85 - 115				
Chromium	0.216	mg/L	SW6020B	0.00810	0.0200	0.2000	0	108	85 - 115				
Lead	0.218	mg/L	SW6020B	0.00143	0.00200	0.2000	0	109	85 - 115				
Selenium	0.214	mg/L	SW6020B	0.000862	0.00200	0.2000	0	107	85 - 115				
Silver	0.214	mg/L	SW6020B	0.000342	0.00200	0.2000	0	107	85 - 115				
Lab Sample ID: LCS-70920	Date Analyzed:	07/07/2020 1749h											
Test Code: 6020B-S	Date Prepared:	07/06/2020 1433h											
Arsenic	22.2	mg/kg	SW6020B	0.145	0.500	20.00	0	111	85 - 115				
Barium	20.6	mg/kg	SW6020B	2.88	5.00	20.00	0	103	85 - 115				
Cadmium	21.9	mg/kg	SW6020B	0.0800	0.500	20.00	0	109	85 - 115				
Chromium	21.4	mg/kg	SW6020B	2.96	10.0	20.00	0	107	85 - 115				
Lead	21.0	mg/kg	SW6020B	1.94	3.00	20.00	0	105	85 - 115				
Selenium	20.4	mg/kg	SW6020B	0.221	2.00	20.00	0	102	85 - 115				
Silver	22.3	mg/kg	SW6020B	0.0755	0.300	20.00	0	111	85 - 115				
Lab Sample ID: LCS-71069	Date Analyzed:	07/13/2020 1838h											
Test Code: HG-DIS-7470A	Date Prepared:	07/13/2020 1134h											
Mercury	0.00369	mg/L	SW7470A	0.0000396	0.0000900	0.003330	0	111	80 - 120				
Lab Sample ID: LCS-70935	Date Analyzed:	07/08/2020 1344h											
Test Code: HG-S-7471B	Date Prepared:	07/07/2020 1500h											
Mercury	0.213	mg/kg	SW7471B	0.00938	0.0400	0.2000	0	106	80 - 120				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-71135	Date Analyzed:	07/15/2020 1829h											
Test Code: 6020B-DIS	Date Prepared:	07/15/2020 1102h											
Arsenic	< 0.00400	mg/L	SW6020B	0.00127	0.00400								
Barium	< 0.00200	mg/L	SW6020B	0.00163	0.00200								
Cadmium	< 0.000700	mg/L	SW6020B	0.000160	0.000700								
Chromium	< 0.0200	mg/L	SW6020B	0.00810	0.0200								
Lead	< 0.00200	mg/L	SW6020B	0.00143	0.00200								
Selenium	< 0.00200	mg/L	SW6020B	0.000862	0.00200								
Silver	< 0.00200	mg/L	SW6020B	0.000342	0.00200								
Lab Sample ID: MB-FILTER-70836	Date Analyzed:	07/15/2020 1854h											
Test Code: 6020B-DIS	Date Prepared:	07/15/2020 1102h											
Arsenic	< 0.00400	mg/L	SW6020B	0.00127	0.00400								
Barium	< 0.00200	mg/L	SW6020B	0.00163	0.00200								
Cadmium	< 0.000700	mg/L	SW6020B	0.000160	0.000700								
Chromium	< 0.0200	mg/L	SW6020B	0.00810	0.0200								
Lead	0.00390	mg/L	SW6020B	0.00143	0.00200								B
Selenium	< 0.00200	mg/L	SW6020B	0.000862	0.00200								
Silver	< 0.00200	mg/L	SW6020B	0.000342	0.00200								
Lab Sample ID: MB-70920	Date Analyzed:	07/07/2020 1746h											
Test Code: 6020B-S	Date Prepared:	07/06/2020 1433h											
Arsenic	< 0.100	mg/kg	SW6020B	0.0290	0.100								
Barium	< 1.00	mg/kg	SW6020B	0.576	1.00								
Cadmium	< 0.100	mg/kg	SW6020B	0.0160	0.100								
Chromium	< 2.00	mg/kg	SW6020B	0.591	2.00								
Lead	< 0.600	mg/kg	SW6020B	0.387	0.600								
Selenium	< 0.400	mg/kg	SW6020B	0.0442	0.400								
Silver	< 0.0600	mg/kg	SW6020B	0.0151	0.0600								

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MBLK

Analyte		Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID:	**MB-71069**	Date Analyzed:	07/13/2020 1836h											
Test Code:	HG-DIS-7470A	Date Prepared:	07/13/2020 1134h											
Mercury		< 0.0000900	mg/L	SW7470A	0.0000396	0.0000900								
Lab Sample ID:	**MB-FILTER-70836**	Date Analyzed:	07/13/2020 1851h											
Test Code:	HG-DIS-7470A	Date Prepared:	07/13/2020 1134h											
Mercury		< 0.0000900	mg/L	SW7470A	0.0000396	0.0000900								
Lab Sample ID:	**MB-70935**	Date Analyzed:	07/08/2020 1342h											
Test Code:	HG-S-7471B	Date Prepared:	07/07/2020 1500h											
Mercury		< 0.0400	mg/kg	SW7471B	0.00938	0.0400								

B - This analyte was also detected in the Filter Method Blank above the PQL at 0.00390 mg/L.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 2007042-001AMS	Date Analyzed: 07/15/2020 1847h												
Test Code: 6020B-DIS	Date Prepared: 07/15/2020 1102h												
Arsenic	0.222	mg/L	SW6020B	0.00127	0.00400	0.2000	0.00217	110	75 - 125				
Barium	0.529	mg/L	SW6020B	0.00163	0.00200	0.2000	0.328	100	75 - 125				
Cadmium	0.204	mg/L	SW6020B	0.000160	0.000700	0.2000	0.000918	102	75 - 125				
Chromium	0.203	mg/L	SW6020B	0.00810	0.0200	0.2000	0	101	75 - 125				
Lead	0.207	mg/L	SW6020B	0.00143	0.00200	0.2000	0.00323	102	75 - 125				
Selenium	0.207	mg/L	SW6020B	0.000862	0.00200	0.2000	0.0012	103	75 - 125				
Silver	0.204	mg/L	SW6020B	0.000342	0.00200	0.2000	0.000705	102	75 - 125				
Lab Sample ID: 2007042-002AMS	Date Analyzed: 07/07/2020 1816h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Arsenic	94.0	mg/kg-dry	SW6020B	0.170	0.585	23.39	56.7	159	75 - 125				3
Cadmium	41.4	mg/kg-dry	SW6020B	0.0936	0.585	23.39	19.5	93.4	75 - 125				
Chromium	60.8	mg/kg-dry	SW6020B	3.46	11.7	23.39	36.1	106	75 - 125				
Selenium	23.4	mg/kg-dry	SW6020B	0.258	2.34	23.39	1.7	92.9	75 - 125				
Silver	31.5	mg/kg-dry	SW6020B	0.0883	0.351	23.39	6.44	107	75 - 125				
Lab Sample ID: 2007042-002AMS	Date Analyzed: 07/07/2020 1838h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Barium	795	mg/kg-dry	SW6020B	26.9	46.8	23.39	806	-45.5	75 - 125				2
Lead	1,640	mg/kg-dry	SW6020B	18.1	28.1	23.39	1770	-520	75 - 125				2
Lab Sample ID: 2007043-001AMS	Date Analyzed: 07/07/2020 1917h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Arsenic	47.0	mg/kg-dry	SW6020B	0.171	0.589	23.55	19.8	116	75 - 125				
Lead	176	mg/kg-dry	SW6020B	2.28	3.53	23.55	149	112	75 - 125				
Lab Sample ID: 2007042-001AMS	Date Analyzed: 07/13/2020 1847h												
Test Code: HG-DIS-7470A	Date Prepared: 07/13/2020 1134h												
Mercury	0.00305	mg/L	SW7470A	0.0000396	0.0000900	0.003330	0	91.6	80 - 120				

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 2007065-001AMS	Date Analyzed:	07/08/2020 1448h											
Test Code: HG-S-7471B	Date Prepared:	07/07/2020 1500h											
Mercury	0.442	mg/kg-dry	SW7471B	0.0217	0.0925	0.2312	0.242	86.4	80 - 120				

[2] - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.

[3] - Matrix spike recoveries and/or high RPDs indicate suspected sample non-homogeneity. The method is in control as indicated by the LCS.

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 2007042-001AMSD	Date Analyzed: 07/15/2020 1850h												
Test Code: 6020B-DIS	Date Prepared: 07/15/2020 1102h												
Arsenic	0.221	mg/L	SW6020B	0.00127	0.00400	0.2000	0.00217	110	75 - 125	0.222	0.479	20	
Barium	0.526	mg/L	SW6020B	0.00163	0.00200	0.2000	0.328	99.2	75 - 125	0.529	0.479	20	
Cadmium	0.203	mg/L	SW6020B	0.000160	0.000700	0.2000	0.000918	101	75 - 125	0.204	0.871	20	
Chromium	0.202	mg/L	SW6020B	0.00810	0.0200	0.2000	0	101	75 - 125	0.203	0.155	20	
Lead	0.206	mg/L	SW6020B	0.00143	0.00200	0.2000	0.00323	101	75 - 125	0.207	0.624	20	
Selenium	0.202	mg/L	SW6020B	0.000862	0.00200	0.2000	0.0012	100	75 - 125	0.207	2.87	20	
Silver	0.203	mg/L	SW6020B	0.000342	0.00200	0.2000	0.000705	101	75 - 125	0.204	0.757	20	
Lab Sample ID: 2007042-002AMSD	Date Analyzed: 07/07/2020 1820h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Arsenic	86.1	mg/kg-dry	SW6020B	0.168	0.581	23.22	56.7	127	75 - 125	94	8.72	20	3
Cadmium	145	mg/kg-dry	SW6020B	0.0929	0.581	23.22	19.5	542	75 - 125	41.4	111	20	3
Chromium	54.3	mg/kg-dry	SW6020B	3.43	11.6	23.22	36.1	78.2	75 - 125	60.8	11.4	20	
Selenium	21.5	mg/kg-dry	SW6020B	0.257	2.32	23.22	1.7	85.3	75 - 125	23.4	8.52	20	
Silver	28.7	mg/kg-dry	SW6020B	0.0877	0.348	23.22	6.44	96.0	75 - 125	31.5	9.35	20	
Lab Sample ID: 2007042-002AMSD	Date Analyzed: 07/07/2020 1841h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Barium	717	mg/kg-dry	SW6020B	26.8	46.4	23.22	806	-383	75 - 125	795	10.3	20	2
Lead	2,570	mg/kg-dry	SW6020B	18.0	27.9	23.22	1770	3,460	75 - 125	1640	43.9	20	2
Lab Sample ID: 2007043-001AMSD	Date Analyzed: 07/07/2020 1921h												
Test Code: 6020B-S	Date Prepared: 07/06/2020 1433h												
Arsenic	39.8	mg/kg-dry	SW6020B	0.143	0.493	19.73	19.8	102	75 - 125	47	16.5	20	
Lead	152	mg/kg-dry	SW6020B	1.91	2.96	19.73	149	11.6	75 - 125	176	14.6	20	2
Lab Sample ID: 2007042-001AMSD	Date Analyzed: 07/13/2020 1849h												
Test Code: HG-DIS-7470A	Date Prepared: 07/13/2020 1134h												
Mercury	0.00367	mg/L	SW7470A	0.0000396	0.0000900	0.003330	0	110	80 - 120	0.00305	18.4	20	

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QA Officer

QC SUMMARY REPORT

Client: DK Environmental
Lab Set ID: 2007042B
Project: Richardson Flat / 20-

Contact: Kathy Harris
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 2007065-001AMSD	Date Analyzed:	07/08/2020 1454h											
Test Code: HG-S-7471B	Date Prepared:	07/07/2020 1500h											
Mercury	0.432	mg/kg-dry	SW7471B	0.0241	0.103	0.2569	0.242	74.0	80 - 120	0.442	2.18	20	[3]

[2] - *Analyte concentration is too high for accurate matrix spike recovery and/or RPD.*

[3] - *Matrix spike recoveries and/or high RPDs indicate suspected sample non-homogeneity. The method is in control as indicated by the LCS.*

All analyses applicable to the CWA, SDWA, and RCRA are performed in accordance to NELAC protocols. Pertinent sampling information is located on the attached COC. Confidential Business Information: This report is provided for the exclusive use of the addressee. Privileges of subsequent use of the name of this company or any member of its staff, or reproduction of this report in connection with the advertisement, promotion or sale of any product or process, or in connection with the re-publication of this report for any purpose other than for the addressee will be granted only on contact. This company accepts no responsibility except for the due performance of inspection and/or analysis in good faith and according to the rules of the trade and of science.

American West Analytical Laboratories

Rev or Add Emailed: UL

WORK ORDER Summary

Work Order: **2007042B**

Client: DK Environmental — Due Date: 7/16/2020

Client ID: DKE100 — **Contact:** Kathy Harris

Project: **Richardson Flat / 20-** — **QC Level:** II — WO Type: Standard

Comments: QC2 / sample was received in preserved bottle, so it will be reported as potentially dissolved.;

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
2007042B-003A	**6B 6"**	6/29/2020 1030h	7/1/2020 1450h	**3051A-ICPMS-PR**	Soil	☐	DF-Metals	1
				6020B-S		☑	DF-Metals	
				7 SEL Analytes: AS BA CD CR PB SE AG				
				HG-S-7471B		☑	DF-Metals	
				1 SEL Analytes: HG				
				HG-S-PR-B		☐	DF-Metals	
				PMOIST		☐	DF-Metals	
2007042B-004A	**7A 0-36"**	6/29/2020 0940h	7/1/2020 1450h	**3051A-ICPMS-PR**	Soil	☐	DF-Metals	1
				6020B-S		☑	DF-Metals	
				7 SEL Analytes: AS BA CD CR PB SE AG				
				HG-S-7471B		☑	DF-Metals	
				1 SEL Analytes: HG				
	7A 0-36"	6/29/2020 0940h	7/1/2020 1450h	**HG-S-PR-B**	Soil		DF-Metals	1

AWAL Use Only - One or more samples expired upon receipt:

Test Code
FILTER-PR

Printed: 08/25/20 11:23 LABORATORY CHECK: %M ☐ RT ☐ CN ☐ TAT ☐ QC ☐ LUO ☐ HOK_ _ _ _ HOK_ _ _ _ HOK_ _ _ _ COC Emailed_ _ _ _ _ _ _

American West Analytical Laboratories

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www.awal-labs.com

CHAIN OF CUSTODY

2007042A
2007042B

AWAL Lab Sample Set # 2007042

Page ____ of ____

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

QC Level: 1 (2) 2+ 3 3+

Turn Around Time: 1 2 3 4 5 (Stnd)

Unless other arrangements have been made, signed reports will be emailed by **5:00 pm** on the day they are due.

Due Date: 7/15

Client: DK Environmental

Address: 3739 Wagon Wheel Way

City, State, Zip: Park City, UT

Contact: Kathy Harris

Phone #: 801/428-7020 → Cell #:

E-mail: kathyharris027@gmail.com

Project Name: Richardson Flat

Project #: 20-

PO #:

Sampler Name: Kathy Harris

- ☐ Report down to the MDL
- ☐ Include EDD:
- ☐ Lab Filter for:
- ☐ Field Filtered For:

For Compliance With:

- ☐ NELAP
- ☐ RCRA
- ☐ CWA
- ☐ SDWA
- ☐ ELAP / A2LA
- ☐ NLLAP
- ☐ Non-Compliance
- ☐ Other:

	Sample ID:		Date Sampled	Time Sampled	# of Containers	Sample Matrix	SVOC, VOC, RCRA8 metals	RCRA8 metals								Known Hazards & Sample Comments
1	RF-MW-01	2007042A-001	6/29/20	1745	8	W	+									
2	3B 0-12"	2007042A-002	6/29/20	1328 1350	1	S		X								
3	6B 6"	2007042B-003	6/29/20	1030	1	S		X								
4	7A 0-36"	2007042B-004	6/29/20	0940	1	S		X								
5	14A 0-16"	2007042A-005	6/30/20	1630	1	S		X								
6																
7																
8																
9																
10																
11																
12																
13																

Laboratory Use Only

Samples Were:

1. Shipped or hand delivered
2. Ambient or Chilled
3. Temperature 3.9 °C
4. Received Broken/Leaking (Improperly Sealed) Y (N)
5. Properly Preserved (Y) N Checked at bench
6. Received Within Holding Times (Y) N

COC Tape Was:

1. Present on Outer Package Y N (NA)
2. Unbroken on Outer Package Y N (NA)
3. Present on Sample Y N (NA)
4. Unbroken on Sample Y N (NA)

Discrepancies Between Sample Labels and COC Record? Y (N)

Relinquished by: Signature	Kathy Harris	Date: 7/1/20	Received by: Signature		Date: 7/1/20
Print Name:	Kathy Harris	Time: 0716	Print Name:	Dave Zinn	Time: 0716
Relinquished by: Signature	Dave Zinn	Date: 7/1/20	Received by: Signature		Date: 7/1/20
Print Name:	Dave Zinn	Time: 1450	Print Name:	Elona Hamilton	Time: 1450
Relinquished by: Signature		Date:	Received by: Signature		Date:
Print Name:		Time:	Print Name:		Time:
Relinquished by:		Date:	Received by: Signature		Date:
		Time:	Print Name:		Time:

Special Instructions:

Lab will filter RCRA 8 metal sample.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Richardson Flat East

Park City, Utah

August 24, 2020

Prepared by:

DK Environmental

3739 Wagon Wheel Way
Park City, UT 84098

Project Number 20-056

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EXECUTIVE SUMMARY

DK Environmental, LLC was retained by NB 248 LLC and RB 248 LLC to conduct a Phase I Environmental Site Assessment (ESA) of Parcels 1 East, 2, 3A and 6, collectively referred to as Richardson Flat East (Subject Property). Parcel OU1 South is part of Parcel 3A but is called out in this document for discussion purposes. The Subject Property is located adjacent to the Richardson Flat Tailings OU1 Site on the west, north and south of Richardson Flat Road, and north of Hwy 248 in Park City, Summit County, Utah. The Subject Property consists of approximately 244 acres. This Phase I ESA was conducted in general accordance with the American Society for Testing and Materials (ASTM) Standard E1527-13 to provide an assessment of recognized environmental conditions, if any, at the Subject Property prior to a potential acquisition of the Subject Property. Any exceptions to, or deviations from, this practice are discussed in this report. The term *recognized environmental condition* (REC) is defined by ASTM E1527-13 as:

> "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

The term does not include *de minimis* conditions, which generally do not present a material risk to human health and would not be subject to enforcement action if brought to the attention of governmental agencies.

RECs

Based on this Phase I ESA completed by DK Environmental, RECs were identified on the Subject Property. Historic activities from the Richardson Flat Tailings OU1 Site have impacted the Subject Property, including debris and fill material of unknown origin present along the road in Parcel 3A and mine tailings associated with the adjacent Richardson Flat Tailings OU1 Site in Parcel OU1 South.

A Limited Phase II Subsurface investigation (DK Environmental 2020c) showed concentrations of lead in soil above the Residential EPA Regional Screening Levels (EPA RSL) in Parcel 3A and Parcel OU1 South. Concern remains that additional localized contaminated material may be present in these areas.

Historical RECs

Based on the Phase I ESA completed by DK Environmental, no HREC (defined below) were identified on the Subject Property.

Controlled RECs

Based on the Phase I ESA completed by DK Environmental, the Richardson Flat OU1 site is identified as a CREC based on the engineering controls present.

BER

Based on the Phase I ESA completed by DK Environmental, no BERs (defined below) were identified affecting the Subject Property.

De Minimis Conditions

The Phase I ESA revealed no evidence of *de minimis* conditions in connection with the Subject Property.

The preceding summary is intended for introductory and reference use only. A complete reading of this report is suggested.

1.0 INTRODUCTION

DK Environmental, LLC performed a Phase I Environmental Site Assessment (ESA) for NB 248 LLC and RB 248 LLC of Parcels 1 East, 2, 3A and 6, collectively referred to as Richardson Flat East (Subject Property). Parcel OU1 South is part of Parcel 3A but is called out in this document for discussion purposes.

The Subject Property is located approximately 0.5 miles east of Park City, Utah. It is adjacent to the Richardson Flat Tailings OU1 Site on the west, north and south of Richardson Flat Road, north and south of Hwy 248, and extends east to the Summit/Wasatch County line in Park City, Summit County, Utah. The Subject Property consists of approximately 244 acres. The Phase I ESA was performed on the Subject Property for a potential property acquisition by NB 248 LLC and RB 248 LLC.

1.1 PURPOSE

The sole purpose of the Phase I ESA was to document current and historical information on the Subject Property and vicinity to identify "recognized environmental conditions" (RECs) as defined by the American Society for Testing and Materials (ASTM) ASTM E1527-13. This Phase I ESA generally conforms to the standards established in 2013 by ASTM E1527-13 and the current standard for "all appropriate inquiries" (AAI) stipulated by the United States Environmental Protection Agency (EPA) in 40 CFR Part 312. The term *recognized environmental condition* is defined by ASTM E1527-13 as:

- REC – Recognized Environmental Condition – is "the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

For this report, and as defined by the ASTM, a:

- HREC – Historical Recognized Environmental Condition – is "a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

- CREC – Controlled Recognized Environmental Condition – is "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required.

- *De Minimis* Condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

- BER – Business Environmental Risk – is "a risk that can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily limited to those environmental issues required to be assessed investigated in this practice." BERs may affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the Subject Property.

1.2 SCOPE OF SERVICES

The scope of work for the Phase I ESA may include the following:

- A physical reconnaissance and visual evaluation of the Subject Property and visual observation of surrounding properties in readily accessible areas to identify RECs.
- A review of readily available records, possibly including previous environmental reports, tax assessment records, city directories, building permit and planning records, historical land usage records, aerial photographs, local fire department hazardous material (HAZMAT) incident records, and other records or User provided information.
- Interviews with knowledgeable persons (as available and reasonable) for consideration of past and present releases, spills, or on-site disposal of contaminants or waste;
- A review of available information on the soils, geology, and hydrogeology near the Subject Property.
- A review of available environmental documentation for the Subject Property and vicinity properties from local, state, tribal, and federal environmental agencies as specified in ASTM E1527-13.
- A review of the information obtained and an assessment of the potential for impact by toxic, hazardous, or otherwise regulated materials.
- Significant data gaps were identified, if present, including missing or unattainable information that would affect the environmental professional (EP) from identifying conditions indicative of releases or threatened releases of hazardous substances.
- An electronic report documenting the results of the Phase I ESA.

The scope of work did not include:

- collecting or testing groundwater, surface water, drinking water samples;
- wetland delineation;
- air sampling (including radon and mold);
- building material sampling for hazardous materials (including PCBs);
- asbestos or lead-based paint sampling;
- geotechnical or geologic hazards studies;
- potential noise or air quality impacts; and
- Americans with Disabilities Act (ADA) concerns.

The Phase I ESA report should not be used for any other purposes outside the scope.

1.3 SIGNIFICANT ASSUMPTIONS

The findings and conclusions provided herein are based upon the assumption that honest and complete responses were received from individuals interviewed and the data from outside sources was valid and complete. If the assumptions were questioned during the completion of the Phase I ESA, they are addressed in the pertinent sections of this report.

1.4 LIMITATIONS, EXCEPTIONS, SPECIAL TERMS AND CONDITIONS

The quality of information, findings, conclusions, and opinions contained herein are consistent with the level of effort involved in DK Environmental services and based on:

i. information available at the time of preparation,
ii. data supplied by outside sources, including the User, and
iii. assumptions, conditions, and qualifications set forth in this report.

The EP preparing this report has made a reasonable effort to obtain relevant information regarding RECs regarding the Subject Property. Information provided from the environmental records search, interviews, historic record reviews, and User-provided information have not been independently verified unless an obvious need for independent verification was identified during completion of the Phase I ESA. A reasonable effort has been made to independently verify information if the EP(s) preparing this report had actual knowledge that certain information was incorrect. This assessment included, in part, a review of documents prepared by others; therefore, it must be recognized that DK Environmental has no responsibility for the accuracy of information obtained by others.

Environmental impairment of a property may result from activities such as illegal or unreported dumping, or the spilling of hazardous wastes or materials. It should be noted that the presence of contaminants at a property may not always be apparent, and the completion of a Phase I ESA in accordance with ASTM E1527-13 cannot guarantee that hazardous wastes or materials do not exist.

The findings contained herein are relevant to the dates of the Subject Property reconnaissance and should not be relied upon to represent later conditions. If changes in the nature, usage, or layout of the property or nearby properties are made, the findings, opinions, and conclusions contained in this report may not be valid. If additional information becomes available, it should be provided to DK Environmental so the original findings, opinions, and conclusions can be modified, as necessary.

1.5 USER RELIANCE

This report is certified to, can be relied upon by, and has been prepared for the exclusive use of the following entities: NB 248 LLC and RB 248 LLC, including their affiliates, successors, assigns, subsidiaries and lenders subject to the terms and conditions of this report. This report should not be relied upon by other parties without the express written consent of NB 248 LLC and RB 248 LLC.

In accordance with ASTM E1527-13, this report is viable for one year from the date of the intended transaction, assuming interviews, a search for environmental liens, a review of government records, the visual inspection of the Subject Property and surrounding properties, and the EP declarations are updated within 180 days prior to the intended transaction.

Provided that the report is still valid and reliable, as per the limitations and exceptions listed above, DK Environmental will issue a third-party reliance letter to parties identified in writing, upon payment of the then current fee for such letters. All third parties relying on the DK Environmental report, by such reliance agree to be bound by DK Environmental standard reliance letter. Our standard reliance letter indicates that in no event shall DK Environmental be liable for any damages, howsoever arising, relating to third-party reliance on this report. No reliance by any party is permitted without such agreement.

1.6 ACRONYMS

The following is a list of acronyms, which may be used in this document:

ACM	Asbestos-Containing Materials
AOC	Area of Concern
ACBM	Asbestos-Containing Building Materials
AST	Aboveground Storage Tank
ASTM	Formerly the American Society for Testing and Materials
BTEXN	Benzene, Toluene, Ethylbenzene, Xylenes, and Naphthalene
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
COC	Chemicals of Concern
CORRACTS	RCRA Corrective Action List
EP	Environmental Professional
EPA	Environmental Protection Agency (United States)
ERNS	Emergency Response Notification System
HREC	Historical Recognized Environmental Condition
LUST	Leaking Underground Storage Tank
mg/kg	Milligrams per Kilogram
ml/l	Milliliters per Liter
NFRAP	No Further Remedial Action Planned (CERCLA Sites)
NPL	National Priority List
O&G	Oil and Grease
OSHA	Occupational Safety and Health Administration (United States)
PCB	Polychlorinated Biphenyl
ppm	Parts Per Million
pVEC	Potential Vapor Encroachment Condition
RCRA	Resource Conservation and Recovery Act
RCRA SG	RCRA Small Quantity Generator
RCRA LG	RCRA Large Quantity Generator
RCRA TSD	RCRA Treatment, Storage, and Disposal
RCRIS RCRA	Information System
REC	Recognized Environmental Condition
Sq ft	square feet
SWLF	Solid Waste Landfill Facility
SVOC	Semi-volatile Organic Compound
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substance Control Act
UDAQ	Utah Division of Air Quality
UDEQ	Utah Department of Environmental Quality
UDNR	Utah Department of Natural Resources
UDERR	Utah Division of Environmental Response and Remediation
UDWMRC	Utah Division of Waste Management and Radiation Control
UDWR	Utah Division of Water Rights
UGS	Utah Geological Survey
UOSH	Utah Occupational Safety and Health (Utah Industrial Commission)
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey (Department of Interior)
UST	Underground Storage Tank
User	Person or Entity Requesting the Phase I ESA
VCP	Voluntary Cleanup Program
VES	Vapor Encroachment Screening
VOC	Volatile Organic Compound

2.0 USER PROVIDED INFORMATION

Per Section 6.0 of ASTM E1527-13, the User (NB 248 LLC and RB 248 LLC) is required to perform specific tasks that will aid in the identification of RECs related to the Subject Property to qualify for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability protection. A copy of the User Provided Information Questionnaire was completed by Mr. Nate Brockbank, and is included in **Appendix A**. DK Environmental understands this assessment was performed for Client as a prospective buyer of the Subject Property.

Client Questionnaire Responses				
Questionnaire Item and Comments	**Client Response**			
	Yes	**No**	**No Response**	**Comments**
Environmental Liens or Activity and Use Limitations		X		The User was not aware of any liens or recorded restrictions.
Specialized knowledge or experience relating to the Subject Property		X		The User does not have specialized knowledge or experience relating to the Subject Property.
Does the purchase price reasonably reflect fair market value of the property	X			The purchase price for the Subject Property does reasonably reflect the fair market value of the property.
Commonly known or reasonably ascertainable environmental information relating to the Subject Property	X			The User was aware that the property may be impacted from previous studies.
Presence or likely presence of contamination at the Subject Property		X		The User indicated no obvious contamination, but historical use and proximity to Richardson Flat repository is of some concern.

2.1 TITLE RECORDS

A Title Commitment dated July 29, 2020 was provided to DK Environmental by the User (**Appendix B**). Environmental liens and AULs were not recorded for the Subject Property.

3.0 GENERAL DESCRIPTION AND LOCATION

The Subject Property is located along Richardson Flat Road and Hwy 248 in Park City, Summit County, Utah. **Figure 1** is a Site Location Map showing the general area of the Subject Property. The legal description is included in **Appendix B.**

The Subject Property is undeveloped with some of the parcels used as livestock grazing south of Richardson Flat Road. Several dirt trails bisect the Subject Property. The area is vegetated with scrub oak, sagebrush, and grasses. The parcels of the Subject Property are adjacent to Richardson Flat OU1 on the north, south, and west sides (**Figure 2**).

Figure 2 shows the Subject Property and the main characteristics are summarized as follows:

Site Characteristics Summary Table	
Subject Property Characteristics	**Observations**
Subject Property Size	Approximately 244 acres
Characteristics	Undeveloped – scrub oak, sagebrush, and grasses
Building Type/Description	Undeveloped
County	Summit
Distance to Major Landmark	The Subject Property is adjacent to Richardson Flat OU1.
Current Occupant	Vacant – undeveloped
Current Use	Grazing

3.1 ADJACENT PROPERTIES

At the time of the site reconnaissance, the properties adjacent to the Subject Property were characterized as:

Adjacent Properties	
North	North of Parcel 6 is undeveloped, vegetated with aspen, conifer, scrub oak and sage. North of Parcel 1 East is Hwy 248 and beyond is Parcel 6. North of Parcels 2 and 3A is Richardson Flat Road and beyond is Richardson Flat OU1.
East	East of Parcel 6 is Black Rock Ridge development and beyond is Browns Canyon Road. East of Parcel 1 East is undeveloped land and Building Materials & Construction Solutions (BMC). East of Parcels 2 and 3A is undeveloped grazing land.
South	South of Parcel 6 is Hwy 248 and beyond is Parcel 1 East and Richardson Flat OU1. South of Parcel 1 East is undeveloped grazing land and Richardson Flat Road. South of Parcels 2 and 3A is undeveloped grazing land.
West	West of Parcel 6 is undeveloped land and Hwy 248. West of Parcel 1 East is Richardson Flat OU1. West of Parcels 2 and 3A is undeveloped land and Hwy 40.

4.0 PHYSICAL SETTING

DK Environmental's understanding of subsurface conditions near the Subject Property is based on readily available data in the area. The following discretionary physical setting sources pursuant to ASTM Standard E1527-13 § 9.4.1.6, were obtained and reviewed to provide supplemental information regarding geology, hydrogeology, and soils near the Subject Property.

The Subject Property is located near latitude 40.67135 north and longitude 111.446663 west at approximately 6,640 feet above mean sea level near the center of the Subject Property. The topography ranges from approximately 6,610 feet to 6,820 feet above sea level. The Subject Property slopes to a central low area and then north towards Silver Creek as shown in the United States Geological Survey (USGS) 7.5-minute topographic map for the Park City East Quadrangle.

4.1 GEOLOGY

The bedrock geology in the Park City area consists of quartzite, limestones, sandstones, siltstones, and shales ranging in age from Pennsylvanian to Jurassic with Tertiary volcanic and intrusive rocks. Structurally, the area is located with a complex fold and thrust belt (Gill and Lund, 1984). Surface soils consist of thin, glacial till and alluvium deposited during Quaternary glaciation (Gil and Lund, 1984).

4.2 HYDROGEOLOGY AND HYDROLOGY

The transport of hazardous materials on the surface and in the subsurface is controlled by topography, drainage patterns, soil types, depth to groundwater, groundwater flow direction, and gradient, etc. Typically, contaminants migrate vertically through porous soils to shallow groundwater, and then travel with the flow of groundwater. Locally, subsurface transport can be diverted by manufactured conduits, including backfilled annular spaces such as sewers, water lines, or wells.

Groundwater in the Subject Property area occurs in shallow thin alluvial deposits and consolidated rocks. Alluvial groundwater is assumed to flow with topography, towards the north-northwest to the Silver Creek drainage.

One USGS monitoring well point of diversion (POD) was identified on the Subject Property near the north boundary of Parcel OU1 South. No well or other structure associated with this POD was noted during the site reconnaissance.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Program information provided for the Subject Property and Subject Property vicinity, the low-lying areas in the north portion of Parcel 3A, including Parcel OU1 South are in the 500-year flood zone.

4.3 SOILS

Soil maps for the State Soil Geographic Database (STATSGO) are compiled by generalizing more detailed soil survey maps. DK Environmental's understanding of the dominant soil composition in the general area of the Subject Property is based on STATSGO data. The soil component at the higher elevations of the Subject Property was identified as predominantly the Yeates Hollow, a very stony loam soil, and the Echo Creek loam and Ayoub cobbly loam in lower elevations.

5.0 HISTORICAL USE INFORMATION ON THE SUBJECT PROPERTY

The objective of consulting historical sources is to develop a history of the previous uses of the Subject Property and surrounding area to help identify the likelihood of past uses having led to RECs relating to the Subject Property. To accomplish this, DK Environmental attempted to identify obvious uses of the Subject Property from the present back to the Subject Property's first developed use. This requires reviewing only as many sources as are necessary to meet the objective, only those records that are reasonably ascertainable, and only items likely to be useful. The following sections discuss the historical information findings.

DK Environmental subcontracted the historical document search to EDR. Databases searched and documents available are summarized as the following:

- A search of the EDR Historic Map Collection with coverage from 1867 through 1994, was conducted for the Subject Property. Sanborn Fire Insurance Maps did not cover the Subject Property.
- City Directories have been published for many cities and towns across the United States since the 18th century. Many rural areas and small towns may not be included in the City Directories. The issuance of City Directories has been discontinued for many cities. No listings were present for the Subject Property.
- Historical aerial photographs of the Subject Property and surrounding area were obtained and reviewed from EDR for 1953, 1962, 1976, 1978, 1981, 1983, 1993, 1997, 2006, 2011, and 2016. A review of the aerial photography is provided in the table below.
- Historical topographic maps of the Subject Property and surrounding area were obtained from EDR from 1900, 1903, 1955, 1999, and 2014. A review of the historical topographic maps is provided in the table below.

A discussion is presented below, and copies of the EDR reports are presented in **Appendix C**.

Date	Source	Subject Property	Adjoining Properties
1900, 1903	Topo Maps	Roads are located on portions of the Subject Property.	North – Undeveloped. South – Undeveloped. East – Undeveloped. West – Railroad and roads. Richardson Flat OU1 – Not identified.
1953, 1962	Historical Aerial Photos	Trails are located on portions of the Subject Property.	North – Undeveloped and trails. South – Undeveloped. East – Undeveloped, trails and railroad. West – Railroad and roads Richardson Flat OU1 – Tailings present.
1955	Topo Map	Roads are located on portions of the Subject Property. Power line through Parcel 6.	North – Hwy 248. South – Undeveloped. Clark Ranch. East – Undeveloped, roads and railroad spur. West –Silver Creek, railroad, roads, and Keetley Junction. Richardson Flat OU1 – Tailings pond and railroad spur are present.
1976, 1978	Historical Aerial Photos	Road (airstrip) from Richardson Flat OU1 extends south into Parcel 3A (including Parcel OU1 South). Two airplanes are visible on 1978 aerial photo.	North – Undeveloped and trails. Hwy 248. South – Undeveloped. East – Undeveloped, trails and railroad. West – Railroad and roads. Richardson Flat OU1 – Additional tailings are present.

Date	Source	Subject Property	Adjoining Properties
1981, 1983	Historic Aerial Photos	Road (airstrip) from Richardson Flat OU1 extends south into Parcel 3A. The road is less used.	North – Undeveloped and trails. Hwy 248. South – Undeveloped. East – Undeveloped, trails and railroad. West – Railroad and roads. Richardson Flat OU1 – Boundary of tailings pond more defined.
1993, 1997	Historic Aerial Photos	Road (airstrip) from Richardson Flat OU1 extends south into Parcel 3A is less used.	North – Undeveloped and trails. Hwy 248. South – Undeveloped. East – Undeveloped, trails and railroad. West – Hwy 40 is present. Richardson Flat OU1 – Boundary of tailings are present.
1999	Topo Map	Roads are located on portions of the Subject Property. Power line through Parcel 6.	North – Hwy 248. South – Undeveloped. Clark Ranch. East – Undeveloped, roads and railroad spur. West –Silver Creek, railroad, Hwy 40, and Keetley Junction. Richardson Flat OU1 – Tailings pond and railroad spur are present.
2006, 2011, 2016	Historic Aerial Photos	Road from Richardson Flat OU1 extends south into Parcel 3A with vehicle parking. Possible bike track at south end of road in Parcel 3A.	North – Undeveloped and roads. South – Undeveloped. East – Buildings under construction, roads, and railroad. West – Hwy 40 is present. Richardson Flat OU1 –Parking lot structure, boundary of tailings are present.
2014	Topo Map	Roads are located on portions of the Subject Property.	North – Hwy 248. South – Undeveloped. Clark Ranch. East – Undeveloped and roads, West –Silver Creek, railroad, and Hwy 40. Richardson Flat OU1 – Tailings pond and railroad spur are present.

5.1 PREVIOUS REPORTS REVIEW

The following reports were reviewed, and pertinent information is presented in later sections of this report except where indicated:

CDM Federal Programs Corporation for USEPA, July 2001. Technical Oversight Report – May 2001 Sampling Event for Richardson Flat Tailings Site.

DK Environmental, 2020a, Phase I Environmental Site Assessment, Richardson Flat West, Park City, Utah, January 2020.

DK Environmental, 2020b, Phase I Environmental Site Assessment, Richardson Flat East, Park City, Utah, January 2020.

DK Environmental, 2020c. Limited Phase II Environmental Assessment Report, Richardson Flat East, August 24, 2020.

Soil screening was conducted at 15 Test Pits at Parcel 1 East, Parcel 2 and Parcel 3A, including OU1 South. Soil was typically screened from the ground surface to the total depth of the test pit. Results of the XRF soil screening indicate areas of elevated lead concentrations in Parcels 3 South and OU1 South above the Residential EPA Regional Screening Levels (EPA RSL).

Resource & Environmental Management Consultants (RMC), July 26, 2004. Focused Feasibility Study for Richardson Flat Tailings Site.

RMC, September 2, 2004. Focused Remedial Investigation Report for Richardson Flat Tailings Site, UT980952840.

USEPA, July 8, 2005. Record of Decision, Richardson Flat Tailings Site.

USEPA, February 7, 2018. First Five-Year Review Report for the Richardson Flat Tailings Site.

USEPA, August 10, 2018. Second Five-Year Review Report for Richardson Flat Tailings Superfund Site.

6.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify RECs relating to the Subject Property.

6.1 STANDARD ENVIRONMENTAL RECORD SOURCES

DK Environmental subcontracted EDR to conduct a search of standard environmental record sources published by local State, Federal, and Tribal regulatory agencies. It should be noted that regulatory listings include only those sites known to the regulatory agencies to be contaminated, in the process of evaluation for potential contamination, or regulated at the time of publication. DK Environmental reviewed the results of the EDR database search (**Appendix C**) to determine if the Subject Property or nearby properties are listed as having a past or present record of actual or potential environment impact. Upgradient and/or downgradient determination was made based on a groundwater flow direction of north. The databases consulted from the EDR database service for this assessment include the following:

Federal Databases
National Priority List (NPL);
Proposed NPL Sites;
Delisted NPL;
NPL Liens;
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS);
Superfund Enterprise Management System (SEMS);
CERCLIS No Further Remedial Action Planned (CERC-NFRAP);
Corrective Action Report (CORRACTS);
Resource Conservation and Recovery Act Information, Treatment, Store, and Disposal Facilities (RCRA-TSDF);
Resource Conservation and Recovery Act Information, Large Quantity Generators (RCRA-LQG);
Resource Conservation and Recovery Act Information, Small Quantity Generators (RCRA-SQG);
Land Use Control Information System (LUCIS);
Engineering Controls Sites List (US ENG CONTROLS);
Sites with Institutional Controls (US INST CONTROLS);
Emergency Response Notification System (ERNS);

State, Tribal, and Local Databases
State Hazardous Waste Sites (SHWS);
Solid Waste Facilities/Landfill Sites (SWF/LF);
Leaking Aboveground Storage Tanks (LAST);
Leaking Underground Storage Tanks List (LUST);
Underground Storage Tank Facility List (UST);
Aboveground Storage Tanks (AST);
Spills Database (SPILLS);
Institutional Controls (INST CONTROL);
Voluntary Cleanup Sites List (VCP);
Registered Drycleaners (DRYCLEANERS);
Brownfields Assessment Sites (BROWNFIELDS);

Tribal Records
Indian Reservations (INDIAN RESERV);
Leaking Underground Storage Tank Sites on Indian Land (INDIAN LUST);
Underground Storage Tank Sites on Indian Land (INDIAN UST);
FEMA UST;
Indian VCP;

Indian Open Dumps Inventory (INDIAN ODI);
Debris Region 9 (Torres Martinez Reservation Illegal Dump Site Locations);
Open Dumps on Indian Land (IHS OPEN DUMPS);

Additional Environmental Records
US Brownfields (US BROWNFIELDS);
Open Dump Inventory (ODI);
National Clandestine Laboratory Register (US HIST CDL);
Methamphetamine Contaminated Properties Listing (CDL);
Clandestine Drug Labs (CDL) ;
CERCLA Lien Information (LIENS 2);
Hazardous Materials Information Reporting System (HMIRS);
Spills Data (SPILLS);
Spills90 (SPILLS 90);
RCRA – Non-Generators / No Longer Regulated (RCRA NonGen/NLR);
Department of Defense Sites (DOD);
Formerly Used Defense Sites (FUDS);
Federal and Indian Lands (FEDLAND);
State Coalition for Remediation of Drycleaners Listing (SCRD DRYCLEANERS);
Financial Assurance Information (US FIN ASSUR);
EPA Watch List;
2020 Correction Action Program List (2020 COR ACTION);
Toxic Substances Control Act (TSCA);
Toxic Chemical Release Inventory System (TRIS);
Section 7 Tracking Systems (SSTS);
Records of Decision (ROD);
Risk Management Plans (RMP);
RCRA Administrative Action Tracking System (RAATS);
Potentially Responsible Parties (PRP);
PCB Activity Database System (PADS);
Integrated Compliance Information System (ICIS);
FIFRA/TSCA Tracking System-FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/ TSCA (Toxic Substances Control Act) (FTTS);
Material Licensing Tracking System (MLTS);
Steam-Electric Plant Operation Data (COAL ASH DOE);
Coal Combustion Residues Surface Impoundments List (COAL ASH EPA);
PCB Transformer Registration Database (PCB TRANSFORMER);
Radiation Information Database (RADINFO) ;
Historic FTTS (HIST FTTS);
Incident and Accident Data (DOT OPS);
Superfund (CERCLA) Consent Decrees (CONSENT);
Biennal Reporting System (BRS) ;
Indian Reservations (INDIAN RESERV);
Formerly Utilized Sites Remedial Action Program (FUSRAP);
Uranium Mill Tailings Sites (UMTRA);
Lead Smelter Sites (LEAD SMELTER);
Aerometric Information Retrieval System Facility Subsystem (US AIRS AFS);
Air Facility System Data (US AIRS MINOR);
Mines Master Index File (US MINES);
Ferrous and Non-Ferrous Metal Mines Database Listing (US MINES 2);
Active Mines & Mineral Plants Database Listing (US MINES 3);
Abandoned Mines;
Facility Index System/Facility Registry System (FINDS);
Enforcement and Compliance History Online (ECHO);

Hazardous Waste Compliance Docket Listing (DOCKET HWC);
Unexploded Ordnance Sites (UXO);
EPA Fuels Program Registered Listing (FUELS PROGRAM);
Registered Drycleaners (DRYCLEANERS);
Enforceable Written Assurances (EWA);
Financial Assurance Information Listing (Financial Assurance);
Formerly Used Defense Sites (FUDS);
Military Munitions Response Program (MMRP);
Permitted Facilities Listing (NPDES);
Tier 2 Facility Listing (TIER 2);
Underground Injection Control Wells (UIC) Listing (UIC);
Used Oil Permitted Facilities (UOPF);

EDR Exclusive Records
EDR MGP: EDR Proprietary Manufactured Gas Plants;
EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations;
EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners;
Recovered Government Archive Solid Waste Facilities List (RGA LF);
Recovered Government Archive Leaking UST (RGA LUST).

6.1.1 Federal Records

The following section includes a partial description of records searched and a complete description is presented in **Appendix C**.

NPL
The National Priorities List searched to one-mile radius. The NPL report, also known as the Superfund list, is an EPA listing of uncontrolled or abandoned hazardous waste sites. The list is primarily based upon a score that the site receives from the EPA's Hazardous Ranking System. These sites are targeted for possible long-term remedial action under the Superfund Program.

CERCLIS
The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) were searched to a one-half mile radius. The CERCLIS List contains sites that are proposed either to or on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Federal CERCLIS NFRAP
CERC-NFRAP Archived sites are sites that have been removed and archived form the inventory of CERCLIS sites. Archived status indicates that, to the best of EPAs knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List, unless further information indicates this decision is not appropriate. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

RCRA
The RCRA Treatment, Storage, and Disposal Facilities (TSD) searched to one half-mile radius. The EPA's RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal.

RCRA CORRACTS TSD
Corrective Action Facilities (CORRACTS) searched to one-mile radius. This database is a compilation of facilities that are undergoing "corrective action". A "corrective action order" is

issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required regardless of when the release occurred, even if it predates RCRA.

RCRA Generators

RCRA Generators (GEN) - searched to one-quarter mile radius. The RCRA database, maintained by the EPA, lists facilities that have notified the EPA of hazardous waste activity. The notifying companies may engage in the generation, transportation, treatment, storage, and/or disposal of hazardous wastes. There are three categories of hazardous waste generators:

1. 100 to 1,000 kg/mo., known as small-quantity generators (SQG).
2. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

RCRA NON-Generators

RCRA Non-Gen - searched to one-quarter mile radius. The RCRA database, maintained by the EPA, lists facilities that have notified the EPA of hazardous waste activity. The notifying companies may engage in the generation, transportation, treatment, storage, and/or disposal of hazardous wastes. Non-Generators do not presently generate hazardous waste.

Sites with Institutional Controls (US INST CONTROLS) or Engineering Controls (US ENG CONTROLS)

Institutional controls include administrative measures, such as ground water use restrictions, construction restrictions, property use restriction, and post remediation care requirements intended to prevent exposure to contaminants remaining on site.

Emergency Response Notification System (ERNS)

The Emergency Response Notification System (ERNS) is a national database of information or report releases of oil or hazardous substances. The database contains information from spill reports made to the federal authorities including the U.S. EPA, U.S. Coast Guard, and the U.S. Department of Transportation. The ASTM-defined search radius for this database is limited to the Subject Property.

CONSENT

Addresses listed in major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites are released periodically by United States District Courts after settlement by the parties to the litigation matters. The ASTM-defined search radius for this database is one mile from the Subject Property.

RODs

Records of Decision (RODs) documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup. The ASTM-defined search radius for this database is one mile from the Subject Property.

MINES

The MINES database is a record of mine locations maintained by the United States Department of Labor, Mine Safety and Health Administration. The ASTM-defined search radius for this database is one-half mile from the Subject Property.

Toxic Substances Control Act (TSCA)
The TSCA database identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list maintained by the EPA. The ASTM-defined search radius for this database is limited to the Subject Property.

6.1.2 State and Local Records

UST
This database contains a summary listing of all underground storage tanks located within the State of Utah that have been registered with UDEQ and the UDERR. It should be noted that heating oil tanks do not require registration in Utah and may not be documented on sites where they occur. Additionally, USTs installed prior to enactment of current registration regulations may not be documented. The ASTM-defined search radius for this database is one-quarter mile from the Subject Property.

LUST
This database contains a comprehensive listing of all facilities located within the State of Utah, which have reported a release or suspected release of regulated materials to UDERR. The ASTM-defined search radius for this database is one-quarter mile from the Subject Property.

AST
This database contains a summary listing of all ASTs located within the State of Utah that have been registered with UDEQ and the UDERR. It should be noted that heating oil tanks do not require registration in Utah and may not be documented on sites where they occur. Additionally, ASTs installed prior to enactment of current registration regulations may not be documented.

LAST
This database contains a comprehensive listing of all facilities located within the State of Utah, which have reported a release or suspected release of regulated materials to UDERR.

US Brownfields
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off undeveloped land, open land, and both improves and protects the environment. This program is designed to help states, tribes, and municipalities minimize the uncertainties of contamination often associated with Brownfields.

6.2 SUBJECT PROPERTY LISTED FACILITIES

One site is listed on the Subject Property on the EDR database.

Facility Name and Location	Estimated Direction/Distance	Database Listings
Richardson Flat Superfund Site / Richardson Flat Tailings (OU1)	Includes Subject Property Parcel OU1 South; it is the adjoining site to the north, south and west of Subject Property parcels	ROD, PRP, Proposed NPL, SEMS FINDS, ECHO, ICIS

Richardson Flat Superfund Site and Richardson Flat Tailings (OU1) – The Subject Property Parcel OU1 South is part of the designated Richardson Flat Tailings OU1 site boundaries. In addition, based on aerial photographs and document review of Richardson Flat Tailings site, areas outside of OU1 and within the Subject Property may have been impacted to some degree by historical activities at OU1. The following provides a brief history of sampling and remediation activities that were completed on OU1.

Prior to 1950, the Richardson Flat area was used as an impoundment for mine tailings. The tailings primarily consisted of sand-sized carbonaceous particles and material containing lead, zinc and other metals. In the 1950s, an embankment was already in-place on the west side of the tailings impoundment (RMC 2004a). No information is available of the type of material that was used to create the embankment.

In the 1970s, renewed mining allowed additional mine tailings deposits at the site and construction of a containment dike along the southern and eastern borders; surface water diversion ditches along the north, east, and southern perimeters; and an additional embankment on the west side. Since 1982, tailings have not been placed at the site.

Multiple investigations have been completed at the site since the 1970s. The EPA proposed listing the site on the National Priority List (NPL) in 1988 and 1992. The site has not been listed on the NPL, but the site is listed on CERCLIS. In the 1990s, UPK placed a soil cover over the tailings impoundment. Through an Administrative Order on Consent (AOC) in 2000, the EPA required a Focused Remedial Investigation/Feasibility Study (RI/FS) to evaluate the soil cover, evaluate impacts to surface water and groundwater, and complete of an ecological and human health risk assessment.

The Record of Decision (ROD) indicated the selected remedy included: source removal in low lying areas south of the site boundary (near Parcel OU1 South and Parcel 3A) and the north wetland area; a minimum 12-inch thick low-permeability soil cover where tailings are left in-place; and construction of a wedge buttress near the north boundary (EPA 2005). A Remedial Design/Remedial Action (RD/RA) Consent Decree to implement the ROD was filed on October 4, 2007.

The extent of tailings outside of OU1 was identified through aerial photography and field investigations (RMC 2004a). A map showing the extent of tailings south of OU1 is included in **Appendix D**.

During the 2001 investigation, soil samples were collected at ten locations south of OU1 on or directly adjacent to the Subject Property at Parcel OU1 South and Parcel 3A (RMC 2004a). The samples were collected at a maximum depth of 6 inches below ground surface (bgs) and analyzed for lead and arsenic concentrations. The arsenic concentration at 0-2” bgs ranged from 6.4 milligrams per kilogram (mg/kg) to 14 mg/kg and lead concentrations ranged from 17 mg/kg to 135 mg/kg. Samples collected at 1-6” bgs had a range of arsenic concentrations of 7 mg/kg to 9.8 mg/kg and the lead concentrations ranged from 18 mg/kg to 52 mg/kg. A map showing the soil sample results outside OU1 is included in **Appendix D**.

In 2007, tailings located south of Richardson Flat Road were excavated and moved inside the site (EPA 2018). Confirmation samples indicated soils present in the source removal area contain less than 500 mg/kg lead and 100 mg/kg arsenic. A map showing the area of tailings removal south of OU1 is included in **Appendix D**. **Figure 3** is a map showing the tailings remediation areas and the Subject Property boundary.

There are no current land use restrictions or institutional controls at Richardson Flat OU1; however, the future land use may be limited based on the presence of contaminated material (EPA 2018). These restrictions may possibly be extended onto adjacent areas including the Subject Property (telephone interview, Robert Parker, EPA, 2020).

6.3 SURROUNDING PROPERTIES LISTED FACILITIES

The following mapped sites were found in the surrounding property listings provided in the EDR Report's summary of government databases and other agency reports. Additional information from local agencies regarding the adjoining properties were reviewed where available.

Facility Name and Location	Estimated Direction/Distance	Database Listings
Phoston Siding Site	Approx. 2,400' NW of Subject Property	LUST, UST
Historic Park City Landfill Monitoring Well	Approx. 2,000' NW of Subject Property	No listings.
Blue Sky Ranch and Resort	West of and adjacent to Parcel 6	FINDS, ECHO
Park City Service Center	Northwest of the Subject Property approx. 2,500 feet	LUST, UST

Phoston Siding Site is listed on the LUST and UST databases. One UST was closed in 1996. Based on aerial photograph review, buildings were present at the Phoston site from 1976 through 1983. The buildings were removed when Hwy 40 was re-routed to its current location in the mid-1990s. Phosphate rock was transported from Vernal, Utah and loaded on rail cars at a phosphate reloading facility located at Phoston, Utah (UtahRails.net 2019) located approximately 1.6 miles east of the Subject Property.

Historic Park City Landfill Monitoring Well is not listed on any databases reviewed. It was referenced in the Richardson Flat OU1 RI/FS. A copy of the map showing the monitoring well location is included in **Appendix D**. No additional information was available for this site after searching the Department of Environmental Quality (DEQ) databases and interviewing EPA Project Manager Robert Parker and Park City Environmental Coordinator Jim Blankenau (DK Environmental, 2020b). The monitoring well was observed offsite to the west during the site visit.

Blue Sky Ranch and Resort is located adjacent on the west side of Parcel 6. The site is listed as a minor individual NPDES permit that expired in 2018. The permit may be related to construction of an electrical power pole, electrical station, or the location is incorrectly mapped. No reported violations. Based on available data and expired permit, this site is unlikely to have impacted the Subject Property.

Park City Service Center is located approximately 2,300 feet north of the Subject Property. Four UST were closed in 1990 and the file was closed in 1995. No releases or violations were reported. Based on distance and downgradient location, this site is unlikely to have impacted the Subject Property.

Orphan Sites

A total of four unmapped or orphan sites were provided in the EDR Report's summary of government databases. Based on distance, downgradient location, or regulatory status, the unmapped sites are unlikely to impact the Subject Property.

7.0 SITE RECONNAISSANCE

The information provided in this section was obtained from the Subject Property reconnaissance by DK Environmental, readily available maps, documents, and interviews with people knowledgeable about the Subject Property. Mr. David Zur conducted the Subject Property reconnaissance on August 11, 2020. Photographs obtained during the Subject Property reconnaissance are included in **Appendix E.** The Subject Property site visit focused on observation of current and past conditions of the Subject Property indicating the likelihood of RECs relating to the Subject Property. The Subject Property site visit was conducted on foot and visual and/or physical observations were made from the Subject Property and the surrounding properties. DK Environmental made reasonable efforts to view as much of the Subject Property as possible.

Figure 2, Subject Property Map, shows landscape features at the Subject Property. The Subject Property conditions observed during the site reconnaissance are as follows:

Parcel 3A, which includes Parcel OU1 South, is located south of Richardson Flat Road and south of OU1 wetland areas. The parcel was covered with sagebrush and grasses and appeared to be used for livestock grazing. A dirt road traverses southeast on the west portion of the parcel. Some isolated piles of debris, glass fragments, and rock were observed along the road. The south area is dominated by a drainage covered with grasses associated with standing water and potential wetlands. Excavated livestock watering holes were observed. The drainage source is located off-site directly southwest and flows to the north to the adjacent OU1 wetland areas. The east side of Parcel 3A is covered with sagebrush and rock outcrops.

Parcel 2 is a one-acre triangular parcel between the historic railroad line and Richardson Flat Road. Rock outcrops, sage, and minor debris was observed.

Parcel 1 East is located east of OU1 and extends north to Hwy 248 and east to the Summit/Wasatch County line. A ridge is present on the east side and a lower elevation northwest trending ridge is present on the west side of the parcel. Drainage flows and ponds in the center of the parcel from the higher elevation ridges, and then flows south and then west towards the diversion ditch in OU1. The ridges are covered with sagebrush and the lower areas are covered with grasses. Several trails, a power line, and a pipeline bisect the parcel.

Parcel 6 is located on the north side of Hwy 248 and west of Black Rock Ridge subdivision. The area slopes steeply down to Hwy 248 and is covered with sagebrush, scrub oak, and grasses. Pipelines and power lines bisect the parcel.

A summary of uses and conditions consistent with ASTM Standard E1527-13 § 9.4 indicating the likelihood of recognized environmental conditions relating to the Subject Property is provided below.

Subject Property Reconnaissance			
Identified Feature or Characteristic			Comment
YES	NO		
X		Hazardous Substances Related to Identified Uses	Possible mine waste associated with Richardson Flat OU1.
	X	Petroleum Products Related to Identified Uses	
	X	Aboveground or Underground Storage Tanks (ASTs/USTs)	

	X	Suspect Containers Not Related with Identified Use	
	X	Electrical or Mechanical Equipment Likely to Contain PCBs	
	X	Interior Stains or Corrosion	
	X	Drains or Sumps	
	X	Wastewater Discharges	
	X	Septic or Sewage Tanks	
	X	Pits, Ponds or Lagoons	
	X	Pools of Liquid or Standing Water	
X		Solid Waste Dumping, Landfills or Suspect Fill Material	Unknown fill material and isolated debris piles.
	X	Stained Soil or Pavement	
	X	Stressed Vegetation	
	X	Wells	
	X	Odors	
	X	Vapor Migration	
X		Other Uses of Concern	Parcels adjacent to Richardson Flat OU1 may contain unidentified areas of lead and arsenic impacted soil.

7.1 UTILITIES

Based on DK Environmental's review of information obtained during the Subject Property reconnaissance, the following utilities likely are available to the Subject Property area:

Electricity	Rocky Mountain Power
Potable Water	Jordanelle Special Service District
Sanitary Sewer	Jordanelle Special Service District
Natural Gas	Dominion Energy

7.2 OIL AND GAS WELLS AND PIPELINES

Wells can act as potential conduits for the migration of contamination, unless they have been properly abandoned (i.e., filled and plugged) in such a manner as to prevent the conducting of hazardous material into the groundwater aquifers. Pipelines were identified on the Subject Property during the site reconnaissance on Parcel 6 and Parcel 1 East.

7.3 PUBLIC WATER WELLS

Public water wells were not observed and not identified during the site reconnaissance. The EDR report on the Subject Property did not identify public water wells on the Subject Property.

7.4 ENGINEERING CONTROLS

No engineering controls were noted on the Subject Property at the time of the site reconnaissance. Soil caps, embankments, buttress, and surface water diversion engineering controls are present on Richardson Flat OU1.

7.5 VAPOR ENCROACHMENT SCREENING

The ASTM Standard E2600 defines the practice for conducting a vapor intrusion assessment, to identify if a vapor intrusion condition (VIC) exists. A VIC is defined as "*the presence or likely presence of any chemical of concern (COC) in the indoor air environment of existing or planned structures cause by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property, at a concentration that presents or may present an unacceptable health risk to occupants."* An existence of a potential VIC (pVIC) exists when the screening process identifies a pVIC where there is "*insufficient data to ascertain the presence or likely presence of COC in the indoor air environment of existing or planned structures on a target property".*

A limited preliminary pVIC evaluation was performed using readily available data in the EDR report, reconnaissance, and other documentation in the area of concern (AOC). On-site pVICs may include active, idle, and abandoned oil wells, pipelines, sumps, and former UST locations. If the contamination at the known or potentially contaminated site within the AOC consist of COCs, then a potential Vapor Encroachment Conditions (pVEC) exists and Tier II is recommended. If no known or potentially contaminated sites with COCs exist within the AOC, no further inquiry is necessary.

No sites were identified in the report and historical research within the AOC that were considered to pose a pVIC at the Subject Property based on the Tier 1 evaluation.

7.6 OTHER ISSUES OF CONCERN

The following is a partial list of items that may be of concern to the User but are specifically excluded from this scope of work and specifically excluded in ASTM E1527-13. Testing was not completed for these items.

- Sensitive receptors and wetlands may limit an owner's ability to modify the property when present. Wetlands were not identified at the Subject Property in the EDR Report. However, based on observed grass types in drainage areas, those areas may be potentially identified as wetlands.

- Polychlorinated Biphenyls (PCBs) were used as coolants and insulators in electrical transformers beginning in 1929. No records or evidence were identified indicating the presence of PCBs on the Subject Property.

- Suspect Asbestos-Containing Materials (ACM) in building materials has not been fully prohibited by federal law, and it has voluntarily been discontinued since the late 1970s. No records or evidence were identified indicating the presence of ACMs on the Subject Property.

- Lead-based paint was banned in 1978 by the Consumer Products Safety Commission in paint and other surface-coating materials. No records or evidence were identified indicating the presence of lead-based paint on the Subject Property.

- Lead in drinking water standard is set by the EPA's national primary drinking water regulations requiring public water systems to optimize corrosion control to minimize lead contamination from the corrosion of plumbing materials. EPA has established an action level of 15 parts per billion (ppb) for lead in drinking water. The Subject Property is undeveloped and drinking water was not an issue of concern.

- Radon is a gas that can seep into structures constructed in areas with soils containing uranium. The Subject Property is in Summit County, Utah, and is in Zone 2 with an average indoor radon levels are 2 to 4 pCi/L (County Radon, 2020) which is below the EPA radon action level of 4 pCi/L.

- Mold and/or fungi growth generally occurs on cellulose-based material, such as wood or drywall paper, that has been inundated with excess moisture. Buildings were not present on the Subject Property.

8.0 SUMMARY OF ADJOINING PROPERTY RECONNAISSANCE FINDINGS

Visual observations of adjoining properties were made from the vantage point of the Subject Property and public rights-of-way to evaluate the potential impact of these sites on the Subject Property. A summary of uses and conditions identified on adjoining properties consistent with ASTM Standard E1527-13 § 9.4 indicating the likelihood of RECs related to the Subject Property is provided below.

Adjoining Property Feature Summary Table			
Identified Feature or Characteristic			Comment
YES	NO		
X		Hazardous Substances Related to Identified Uses	Mine tailings and mine waste associated Richardson Flat OU1.
	X	Petroleum Products Related to Identified Uses	
	X	Aboveground or Underground Storage Tanks (ASTs/USTs)	
	X	Suspect Containers Not Related to Identified Use	
	X	Electrical or Mechanical Equipment Likely to Contain PCBs	
	X	Interior Stains or Corrosion	
	X	Drains or Sumps	
	X	Wastewater Discharges	
	X	Septic or Sewage Tanks	
X		Pits, Ponds or Lagoons	Richardson Flat OU1 tailings impoundment has standing water. Diversion ditches are present around the impoundment.
	X	Pools of Liquid or Standing Water	
X		Solid Waste Dumping, Landfills or Suspect Fill Material	Fill material used as embankments and cover at Richardson Flat OU1.
	X	Stained Soil or Pavement	
X		Stressed Vegetation	Unvegetated areas in Richardson Flat OU1.
	X	Wells	
	X	Odors	
	X	Vapor Migration	
X		Other Uses of Concern	Richardson Flat OU1 may contain unidentified areas of lead and arsenic impacted soil.

9.0 INTERVIEWS

When possible, interviews of persons who are knowledgeable about the Subject Property were conducted during completion of this Phase I ESA. The objective of the interview was to obtain information indicating the potential for RECs regarding the Subject Property. According to ASTM E1527-13, Section 10, interviews address questions to be asked of past and present owners, operators, and occupants of the Subject Property and questions to be asked of local government officials. The results of these interviews, where applicable, are discussed in the following sections.

9.1 INTERVIEW WITH OWNER AND/OR OWNER REPRESENTATIVE

At the time of the Phase I ESA, DK Environmental spoke with Mr. Nate Brockbank, Mr. Douglas Ogilvy and Mr. Robert Parker regarding their understanding of the history and/or use of the Subject Property. Comments have been incorporated into appropriate sections of this report.

9.2 INTERVIEWS WITH PAST OWNERS/OCCUPANTS

The Subject Property is in an area of historic silver mining and currently is undeveloped and used for grazing and recreational biking and hiking activities. Contact information for the current or past owners was not provided to DK Environmental by the User at the time of the Phase I ESA.

9.3 INTERVIEWS WITH NEIGHBORING OWNERS/OCCUPANTS

According to ASTM E1527-13, Section 10.5.5, interviews with one or more owners or occupants of neighboring or nearby properties shall be conducted for an abandoned Subject Property where there is evidence of potential unauthorized uses of the abandoned Subject Property or evidence of uncontrolled access to the abandoned Subject Property. Since the current Subject Property is vacant but not abandoned, DK Environmental personnel did not conduct interviews with neighboring owners.

10.0 FINDINGS AND CONCLUSIONS

Based on the results of the Phase I ESA, DK Environmental offers the following findings and conclusions regarding the Subject Property.

The Subject Property consists of Parcels 1 East, 2, 3A including Parcel OU1 South, and 6. The Subject Property is located adjacent to the Richardson Flat Tailings OU1 Site on the west, north and south of Richardson Flat Road, and north of Hwy 248 in Park City, Summit County, Utah. The Subject Property consists of approximately 244 acres. The Subject Property is undeveloped with some of the parcels used as livestock grazing south of Richardson Flat Road. Several dirt trails bisect the Subject Property. The area is vegetated with scrub oak, sagebrush, and grasses.

The majority of the Subject Property is located outside the designated Richardson Flat OU1 boundaries except for a 10-acre Parcel OU1 South. Based on aerial photographs and Richardson Flat Tailings OU1 document review, areas within the Subject Property may have been impacted to some degree by historical activities at OU1. The Richardson Flat area was used as a mine tailings impoundment prior to the 1950s. In the 1970s, additional mine tailings were deposited, and containment dikes were constructed on the southern and eastern borders; surface water diversion ditches along the north, east, and southern perimeters; and an additional embankment construction on the west side. Tailings placement ceased in 1982. The site has not been listed on the NPL although it has been proposed for listing twice. Since the 1970s, multiple investigations and cleanup activities have been completed at the site. In 2000, the EPA required a RI/FS to evaluate the soil cover, impacts to surface water, groundwater, and complete an ecological and human health risk assessment.

During the 2001 investigation, surface soil samples were collected at ten locations on or directly adjacent to the Subject Property Parcels OU1 South and Parcel 3A. The samples were collected at a maximum depth of 6 inches bgs and analyzed for lead and arsenic concentrations. The arsenic and lead concentrations were below the target levels of 100 mg/kg for arsenic and 500 mg/kg lead. Tailings were also removed in the low-lying drainages located north and adjacent to Parcel 3A and OU1 South.

The ROD indicated the selected remedy included: source removal in low lying areas south of the OU1 site boundary and the north wetland area; a minimum 12-inch thick low-permeability soil cover where tailings are left in-place; and wedge buttress constructed near the north boundary. In 2007, tailings located south of Richardson Flat Road were excavated and moved inside the site.

The Limited Phase II ESA (DK 2020c) indicated isolated debris piles with lead concentrations above the Residential EPA RSL in Parcel 3 South and mine tailings in a drainage in OU1 South. There are no current land use restrictions or institutional controls at Richardson Flat OU1; however, the future land use may be limited based on the presence of contaminated material (EPA 2018). These restrictions may extend onto adjacent areas including the Subject Property; at this time there are no definite plans to extend the boundaries of land use restrictions beyond OU1.

10.1 OPINION

DK Environmental has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 of the Richardson Flat Property. Any exceptions to, or deletions from, this practice are described in Sections 1.4 and 10.2 of this report. This assessment has revealed no evidence of REC in connection with the Subject Property except for the following.

RECs
Based on this Phase I ESA completed by DK Environmental, RECs were identified on the Subject Property. Historic activities from the Richardson Flat Tailings OU1 Site have impacted the Subject Property, including debris and fill material of unknown origin present along the road in Parcel 3A and mine tailings associated with the adjacent Richardson Flat Tailings OU1 Site in Parcel OU1 South.

A Limited Phase II Subsurface investigation (DK Environmental 2020c) showed concentrations of lead in soil above the Residential EPA Regional Screening Levels (EPA RSL) in Parcel 3A and Parcel OU1 South. Concern remains that additional localized contaminated material may be present in these areas.

Historical RECs
Based on the Phase I ESA completed by DK Environmental, no HRECs were identified on the Subject Property.

Controlled RECs
Based on the Phase I ESA completed by DK Environmental, the Richardson Flat OU1 site is identified as a CREC based on the engineering controls present.

BER
Based on the Phase I ESA completed by DK Environmental, no BERs were identified affecting the Subject Property.

De Minimis Conditions
The Phase I ESA revealed no evidence of *de minimis* conditions in connection with the Subject Property.

10.2 DEVIATIONS AND LIMITATIONS

This report was prepared in general accordance with the ASTM Standard E1527-13. Deviations from this standard or limiting conditions are listed below:

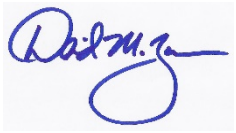
- No deviations or limitations were noted.

11.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONALS

DK Environmental, LLC conducted a Phase I ESA of the Subject Property. The scope of work was conducted in accordance with the American Society of Testing and Materials (ASTM) Designation E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The qualifications of the environmental professional are presented in **Appendix F.**

Respectfully Submitted

DK Environmental, LLC



David M. Zur, P.G.
Professional Geologist/Owner

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR§ 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

12.0 REFERENCES

All Appropriate Inquiry User Questionnaire, August 16, 2020.

EDR Radius Map Report, August 10, 2020.

EDR City Directory, August 10, 2020.

EDR Aerial Photo Decade Package, August 11, 2020.

EDR Historical Topo Map Report, August 10, 2020.

EDR Sanborn Map, August 10, 2020.

Site reconnaissance, August 11, 2020.

Other References:

Bromfield, C.S., 1968, General Geology of the Park City Region, Utah. Utah Geological Society Guidebook to the Geology of Utah no. 22.

Boutwell, James Mason, 1912, Geology and Ore Deposits of the Park City District, Utah, USGS Professional Paper 77.

CDM Federal Programs Corporation for USEPA, July 2001. Technical Oversight Report – May 2001 Sampling Event for Richardson Flat Tailings Site.

County Radon, 2020, https://www.epa.gov/radon/find-information-about-local-radon-zones-and-state-contact-information

DK Environmental, 2020a, Phase I Environmental Site Assessment, Richardson Flat West, Park City, Utah, January 2020.

DK Environmental, 2020b, Phase I Environmental Site Assessment, Richardson Flat East, Park City, Utah, January 2020.

DK Environmental 2020c, Limited Phase II Environmental Assessment Report, Richardson Flat East, August 24, 2020.

Gill, Harold E., and William R. Lund, 1984. Engineering Geology of Park City, Summit County, Utah. Utah Geological and Mineral Survey, Special Studies 66.

http://utahrails.net/articles/up-park-city.php. UtahRails.net, from Echo to Park City. May 26, 2019.

Resource & Environmental Management Consultants (RMC), July 26, 2004. Focused Feasibility Study for Richardson Flat Tailings Site.

RMC, September 2, 2004a. Focused Remedial Investigation Report for Richardson Flat Tailings Site, UT980952840.

USEPA, July 8, 2005. Record of Decision, Richardson Flat Tailings Site.

USEPA, February 7, 2013. First Five-Year Review Report for the Richardson Flat Tailings Site.

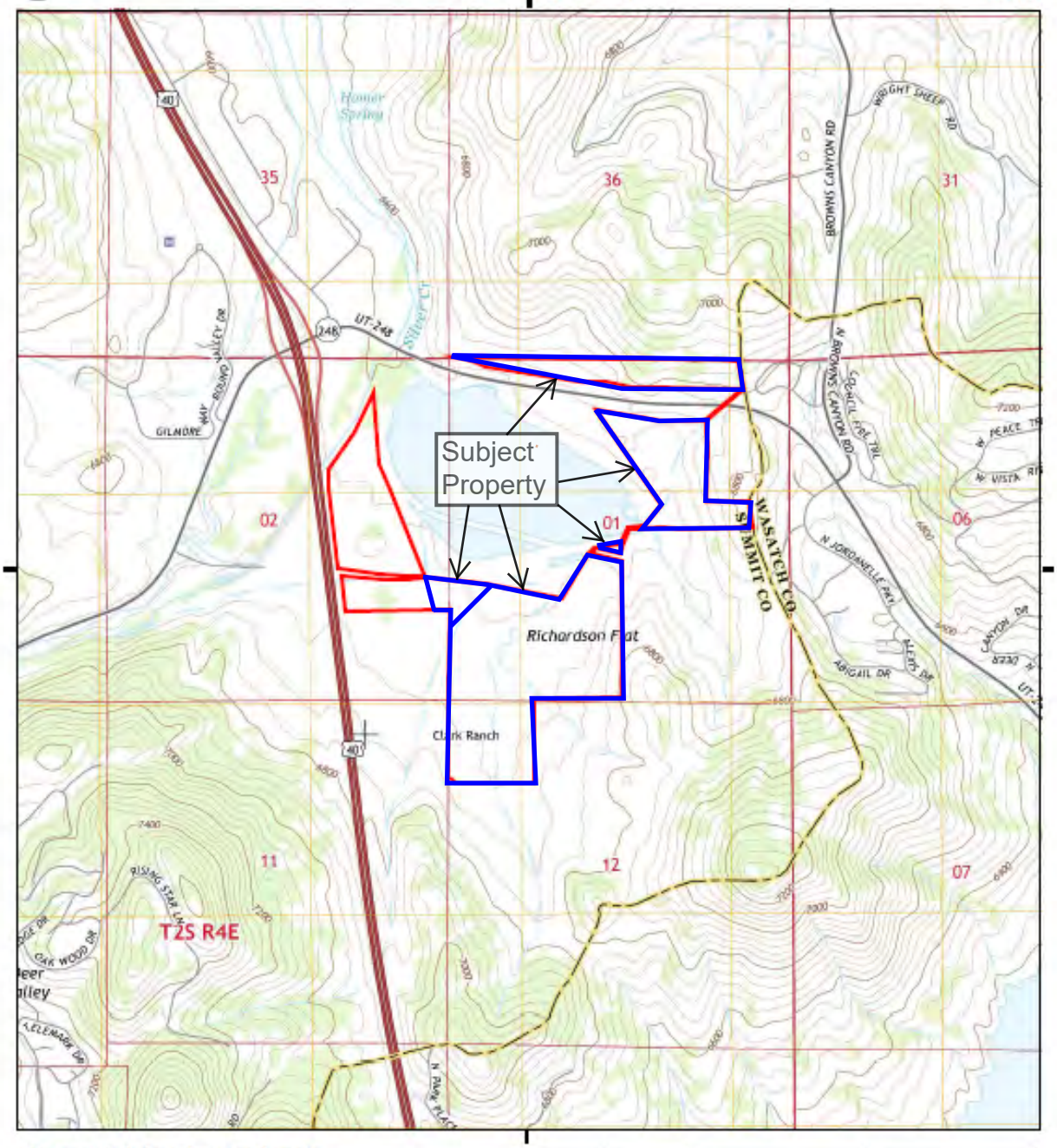
USEPA, August 10, 2018. Second Five-Year Review Report for Richardson Flat Tailings Superfund Site.

FIGURES

EDR

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Park City East, 2014, 7.5-minute

SITE NAME: Richardson Flat
ADDRESS: US 40 W & State Route 248
Park City, UT 84060
CLIENT: DK Environmental LLC

N

5700457 - 4 page 5

Legend

N

Property boundaries are approximate.

SCALE:	not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	
DWN BY:	KMH
CHK'D BY:	DMZ

CLIENT
NB 248 LLC and RB 248 LLC

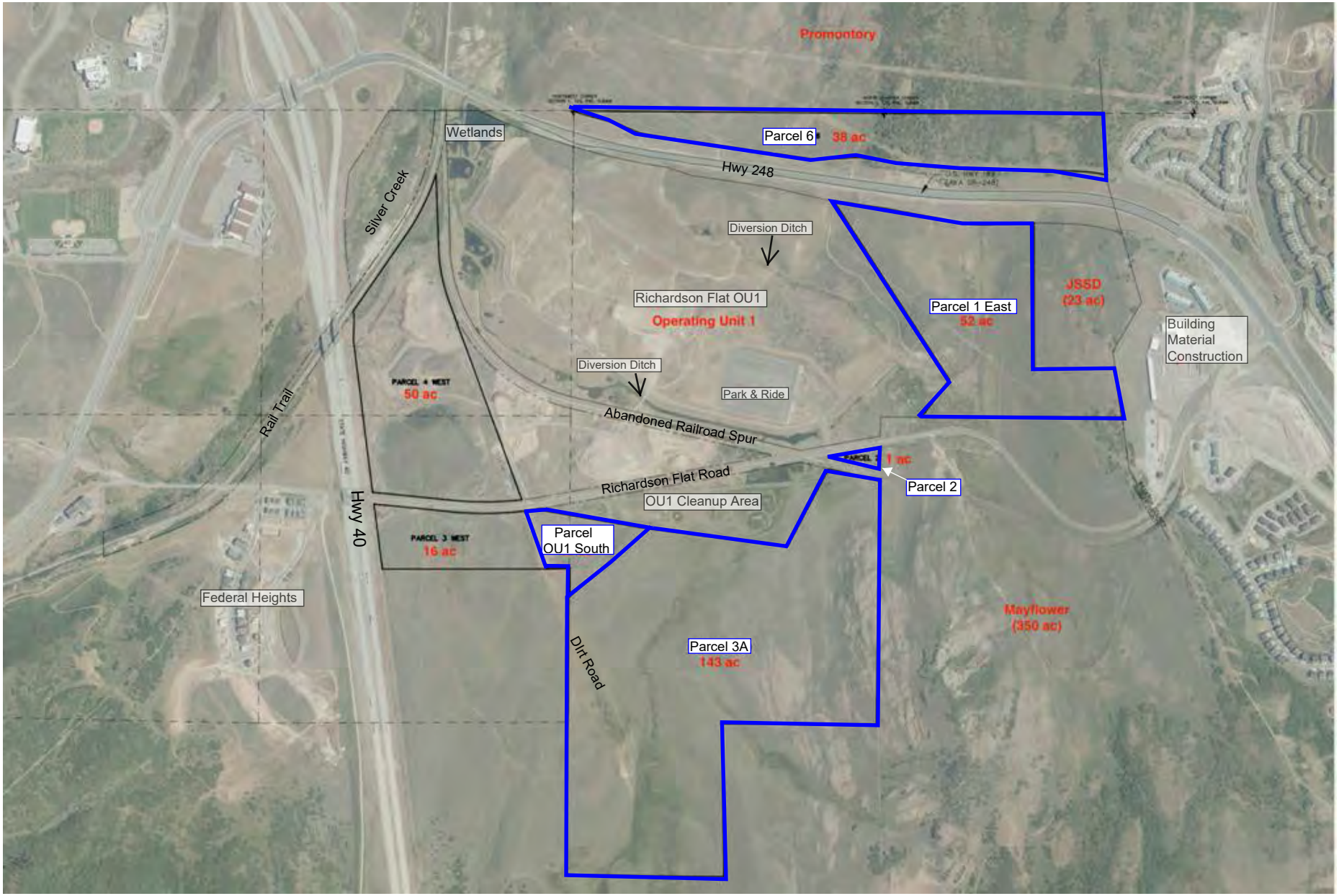
PROJECT
Phase I Environmental Site Assessment
Richardson Flat East
Summit County, Utah

DK Environmental

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE
Location Map

FIGURE NO:
1



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Subject Property

SCALE:	Not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	
DWN BY:	KMH
CHK'D BY:	DMZ

CLIENT

NB 248 LLC and RB 248 LLC

PROJECT

Phase I Environmental Site Assessment
Richardson Flat East
Summit County, Utah

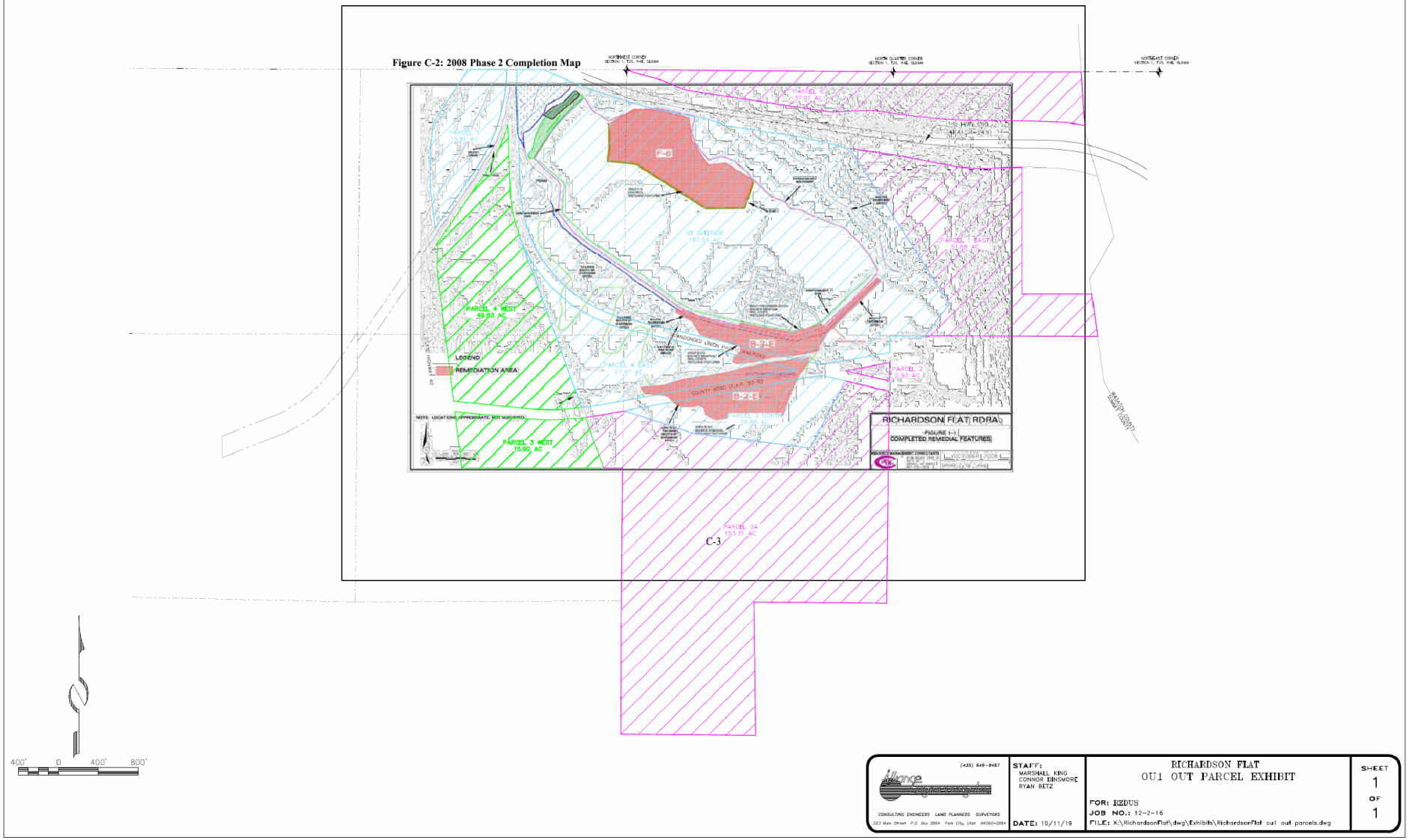
DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE

Subject Property Map

FIGURE NO

2



Legend

Subject Property

SCALE:	Not to scale
DATE:	08/23/2020
PROJECT NO:	20-056
DATUM/PROJECTION:	
DWN BY:	KMH
CHK'D BY:	DMZ

CLIENT

NB 248 LLC and RB 248 LLC

PROJECT

Phase I Environmental Site Assessment
Richardson Flat East
Summit County, Utah

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
dk-env.com

TITLE

Richardson Flat
Parcel Areas

FIGURE NO

3

APPENDIX A

Completed User Questionnaire

DK Environmental

Phase I Environmental Site Assessment (ESA)
All Appropriate Inquiry (AAI) – ASTM E1527-13 User Questionnaire

Instructions: Please answer the following questions to the best of User's ability, and provide relevant documentation as requested and/or as necessary. For clarity, User is defined in the ASTM standard as "the party seeking to use practice E1527-13 to complete an environmental assessment of the property." It should be noted, if the User cannot provide some or all of the information requested in this questionnaire, DK Environmental must include the missing information as a data gap in the Phase I ESA report. It is possible for the User to have no knowledge of any or all questions in this User Questionnaire.

Per EPA 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiry), and ASTM E 1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process), in order to qualify for one of the *Landowner Liability Protections (LLPs),* the following requirements to satisfy "*all appropriate inquiry*" shall be provided to the Environmental Professional by the User. The information provided by the User will be included in the Phase I ESA report.

Please complete and e-mail to kathyharris027@gmail.com or call 801-718-7020 with questions.

Business Name of User: L@ 026 JJA P@ 026 JJA

User Contact Name: Nathan Brockbank **Date:** 8/16/20

User Phone Number: 801-268-8070

Property Name and Address/Parcel No.: Pgaf_pbqml Dj_r Parcel 3A, Parcel 2, Parcel 1East, Parcel 6

1.) Environmental cleanup liens that are filed or recorded against the property (40 CFR 312.25). Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? If yes, please provide details and documentation. No

2.) Activity and land use limitations (AULs) that are in place on the property or that have been filed or recorded in a registry (40 CFR 312.26). Are you aware of any AULs, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law? If yes, please provide details and documentation. No

3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28). As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? If yes, please provide details. NO

4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29). Does the purchase price being paid for this property reasonably reflect the fair market value of the property? Yes: X No: _____

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? Please explain the reason. No

5.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30). Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as User,

(a.) Do you know the past uses of the property? If yes, please provide details. No.

(b.) Do you know of specific chemicals that are present or once were present at the property? If yes, please provide details. No.

(c.) Do you know of spills or other chemical releases that have taken place at the property? If yes, please provide details. ~~No~~ yes from Stadium on Richardson Blvd West.

(d.) Do you know of any environmental cleanups that have taken place at the property? If yes, please provide details. No.

(6.) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31). As the *User* of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property? If yes, please provide details. No.

APPENDIX B

Legal Description

EXHIBIT A

PROPERTY DESCRIPTION AND DEPICTION

PARCEL 1 EAST

A parcel of land located in the north half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described at follows:

Beginning at a point South 00°44'33" East 2641.90 feet coincident with the section line and West 647.07 feet from the northeast corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence along the south line of the northeast quarter of Section 1 North 89°50'21" West 1722.59 feet; thence North 36°45'45" East 401.85 feet; thence North 32°35'26" West 1843.40 feet to a point on the southerly right-of-way of Highway U-189; thence coincident with the southerly right-of-way of Highway U-189 the following four (4) courses: 1) South 81°29'38" East 463.60 feet to a right-of-way monument; thence 2) South 78°57'52" East 621.18 feet to a right-of-way monument; thence 3) South 85°29'09" East 193.03 feet to a right-of-way monument; thence 4) North 88°34'36" East 459.30 feet; thence South 1263.44 feet; thence South 89°58'46" East 696.77 feet to the Summit-Wasatch County line; thence coincident with the Summit-Wasatch County line South 07°49'47" East 428.95 feet to the point of beginning.

Description contains 51.88 acres.

PARCEL 2

A parcel of land located in the southwest quarter of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at point North 00°43'31" East 2218.71 feet along the center of section line from the south quarter corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence along the northerly line of the abandoned Union Pacific Railroad right-of-way North 76°40'50" West 450.61 feet; thence along the southerly right-of-way line of the county road (UDOT F.A.P.93-B) North 79°44'00" East 447.99 feet; thence along the center of section line South 00°43'31" West 183.67 feet to the point of beginning.

Description contains 0.93. acres.

PARCEL 3A

A parcel of land located in the southwest quarter of Section 1, the southeast quarter of Section 2, and the northwest quarter of Section 12, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described as follows:

Beginning at the southwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence coincident with the section line North 00°34'37" East 1327.29 feet; thence coincident with the south line of the north half of the southeast quarter of Section 2 South 89°58'53" West 188.10 feet; thence North 19°56'15" West 537.89 feet to a point on a non

tangent 2914.90 foot radius curve to the left, of which the radius point bears North 07°03'59" West, said point being on the southerly right-of-way of the county road (UDOT F.A.P. 93-B); thence coincident with the southerly right-of-way of the county road (UDOT F.A.P. 93-B) the following two (2) courses: 1) along the arc of said curve 162.81 feet through a central angle of 03°12'01"; thence 2) North 79°44'00" East 236.14 feet; thence South 71°47'16" East 704.98 feet; thence South 82°38'01" East 1191.60 feet; thence North 27°48'26" East 758.25 feet to the southerly line of the abandoned Union Pacific Railroad right-of-way; thence along the southerly line of the abandoned Union Pacific Railroad right-of-way South 76°40'50" East 451.55 feet to the center line of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; thence coincident with the center line of Section 1 South 00°43'31" West 2116.24 feet to the south quarter corner of Section 1; thence coincident with the south line of Section 1 North 89°30'05" West 1326.50 feet; thence coincident with the east line of the northwest quarter of the northwest quarter of Section 12 South 00°41'29" East 1332.41 feet; thence coincident with the south line of the northwest quarter of the northwest quarter of Section 12 North 89°23'28" West 1347.55 feet; thence coincident with the west line of the northwest quarter of the northwest quarter of Section 12 North 00°12'46" East 1329.54 feet to the point of beginning.

Description contains 153.31 acres.

PARCEL 6

A parcel of land located in the north half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

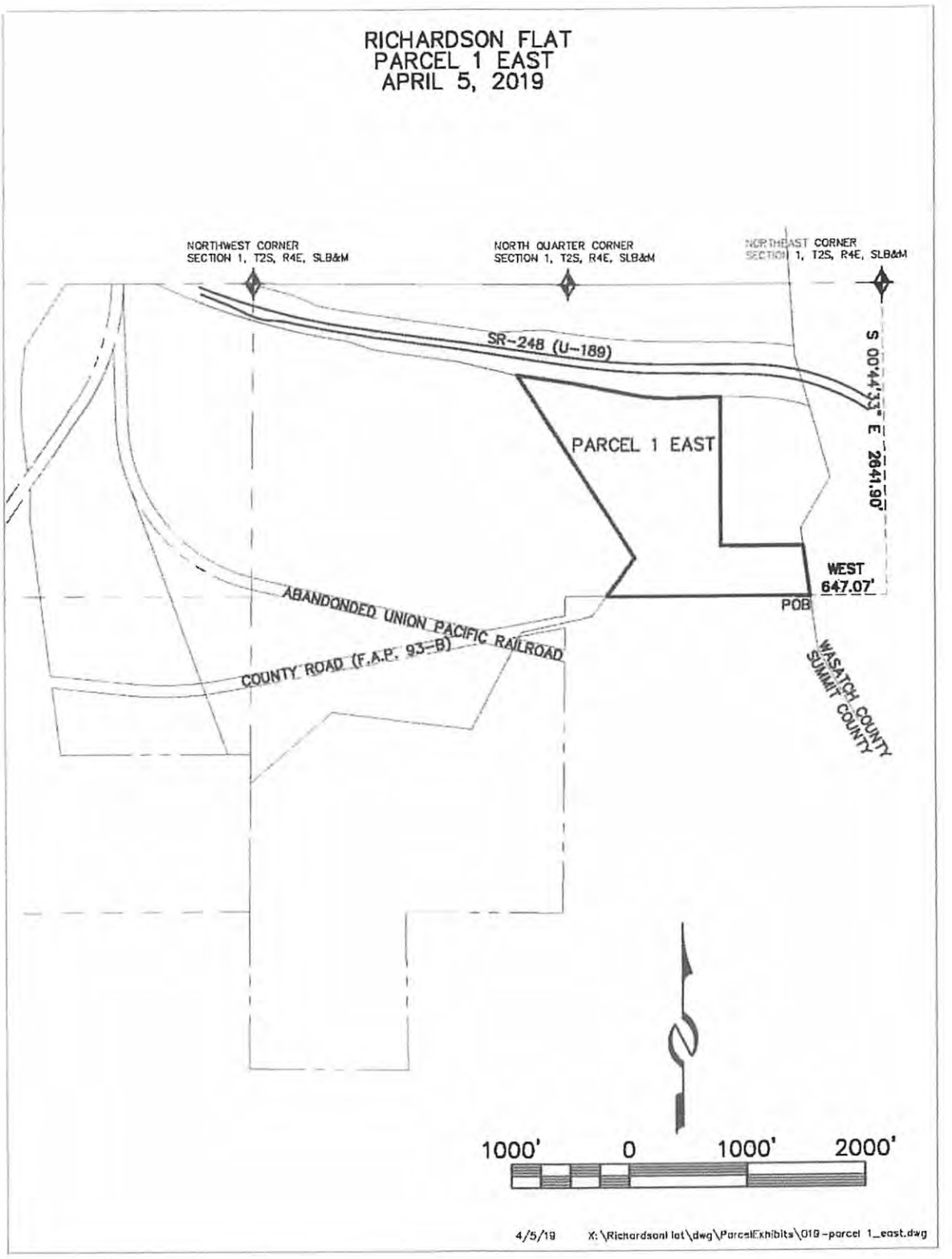
Beginning at the northwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence coincident with the north boundary of said Section 1 the following two (2) courses: 1) South 89°31'25" East 2666.74 feet; thence (2) North 89°59'53" East 1875.55 feet to the Summit-Wasatch county line; thence coincident with the Summit-Wasatch county line South 03°53'07" East 535.39 feet to the north right-of-way boundary of U.S. Highway 189 (also known as SR-248), said point being on a non tangent curve to the left having a radius of 2139.86 feet, of which the radius point bears South 10°52'23" West; thence coincident with said right-of-way the following ten (10) courses: 1) Westerly along the arc of said curve 201.77 feet through a central angle of 05°24'09"; thence 2) North 87°41'03" West 339.16 feet; thence 3) North 89°19'46" West 540.85 feet to a point on a curve to the right having a radius of 5502.89 feet, of which the radius point bears North 00°40'14" East; thence 4) along the arc of said curve 751.38 feet through a central angle of 07°49'24"; thence 5) North 81°30'46" West 302.59 feet; thence 6) South 87°10'38" West 407.66 feet; thence 7) North 81°30'46" West 1224.14 feet to a point on a non tangent curve to the right having a radius of 5579.56 feet, of which the radius point bears North 08°29'18" East; thence 8) Westerly along the arc of said curve 268.64 feet through a central angle of 02°45'31"; thence 9) North 66°59'31" West 246.59 feet to a point on a non tangent curve to the right having a radius of 5534.58 feet, of which the radius point bears North 13°44'49" East; thence 10) Westerly along the arc of said curve 355.11 feet through a central angle of 03°40'34" to the west boundary of the northwest quarter of said Section 1; thence coincident with said west boundary North 00°34'37" East 4.53 feet to the point of beginning.

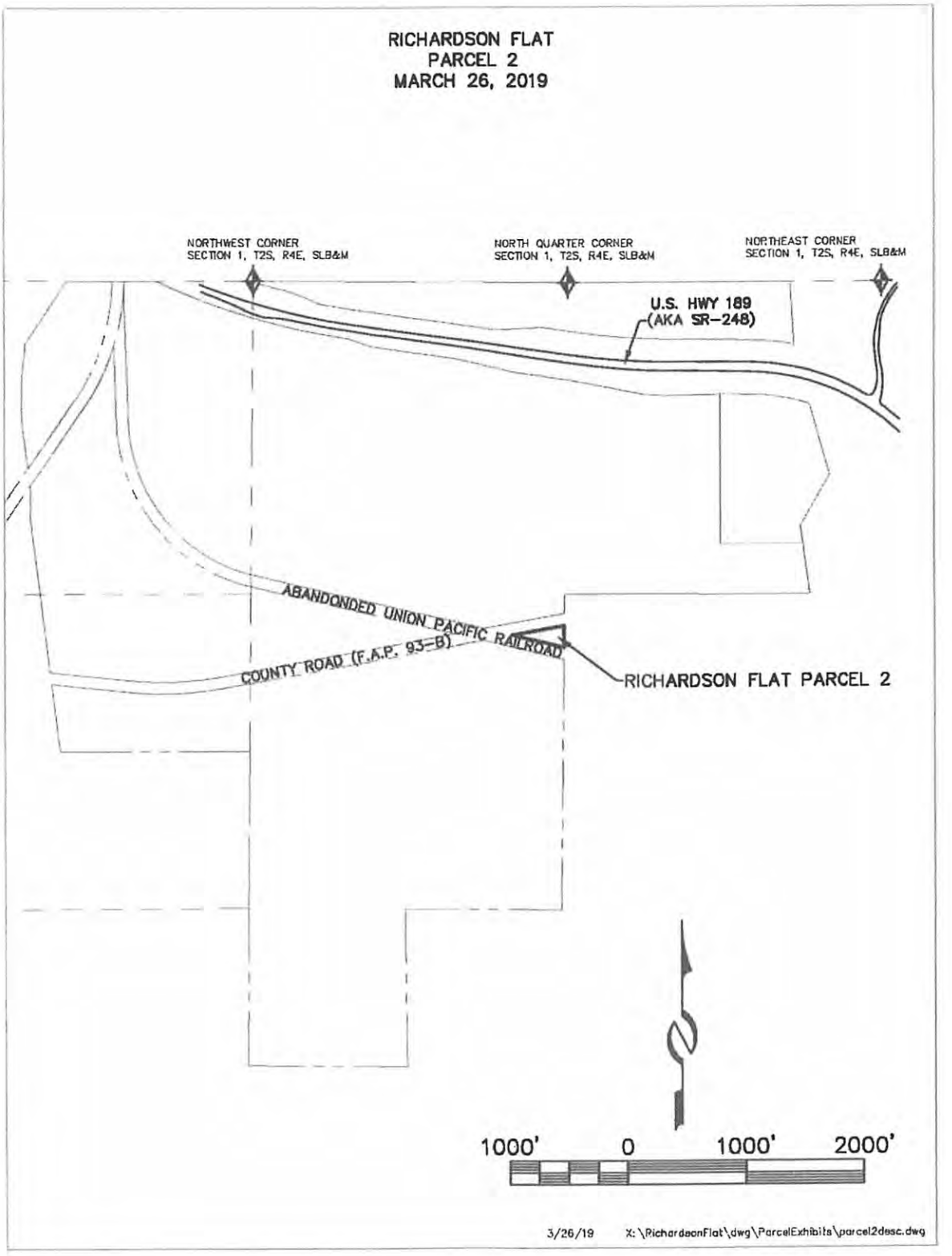
Description contains 37.91 acres.

10.00 Acres of Parcel 3A:

A parcel of land lying and situate in the Southwest Quarter of Section 1 and the Northeast Quarter of the Southeast Quarter of Section 2, Township 2 South, Range 4 East, Salt Lake Base and Meridian. Basis of Bearing for Subject being North 00°34’37” East 1327.07 feet measured coincident with the west line of the Southwest Quarter of the Southwest Quarter of said Section 1. Subject parcel being more particularly described as follows:

Commencing at the Southwest Corner of said Section 1 thence North 00°34’37” East 1895.80 feet coincident with the west line of said Section 1 to a point on the south right of way line of Richardson Flat Road (F.A.P. 93-B) and the True Point of Beginning;
Thence North 79°43’15” East 17.92 feet; Thence departing said right of way
South 71°47’16” East 703.04 feet; Thence South 49°29’31” West 912.26 feet to a point on the west sixteenth section line of said Section 1; Thence coincident with said sixteenth section line North 00°34’37” East 240.40 feet to a number five rebar and cap stamped “Alliance” monumenting the South Sixteenth Corner of said Section 1; Thence South 89°59’21” West 189.47 feet coincident with the south line of the Northeast Quarter of the Southwest Quarter of said Section 2; Thence North 19°55’49” West 534.69 feet to said south right of way line; Thence the following two (2) courses coincident with said right of way 1) Northeasterly along the arc of a 2518.90 foot radius curve to the left (center bears North 07°48’23” West) through a central angle of 02°28’22”; 2) North 79°43’15” East 274.52 feet to the point of beginning.


RICHARDSON FLAT
PARCEL 1 EAST
APRIL 5, 2019
NORTHWEST CORNER
SECTION 1, T2S, R4E, SLB&M
NORTH QUARTER CORNER
SECTION 1, T2S, R4E, SLB&M
NORTHEAST CORNER
SECTION 1, T2S, R4E, SLB&M
SR-248 (U-189)
S 00°44'33" E 2641.90'
PARCEL 1 EAST
WEST
647.07'
POB
ABANDONDED UNION PACIFIC RAILROAD
COUNTY ROAD (F.A.P. 93-B)
WASATCH COUNTY
SUMMIT COUNTY
1000'
0
1000'
2000'
4/5/19
X:\Richardson flat\dwg\ParcelExhibits\019-parcel 1_east.dwg


RICHARDSON FLAT
PARCEL 2
MARCH 26, 2019
NORTHWEST CORNER
SECTION 1, T2S, R4E, SLB&M
NORTH QUARTER CORNER
SECTION 1, T2S, R4E, SLB&M
NORTHEAST CORNER
SECTION 1, T2S, R4E, SLB&M
U.S. HWY 189
(AKA SR-248)
ABANDONDED UNION PACIFIC RAILROAD
COUNTY ROAD (F.A.P. 93-B)
RICHARDSON FLAT PARCEL 2
1000'
0
1000'
2000'
3/26/19
X:\RichardsonFlat\dwg\ParcelExhibits\parcel2desc.dwg

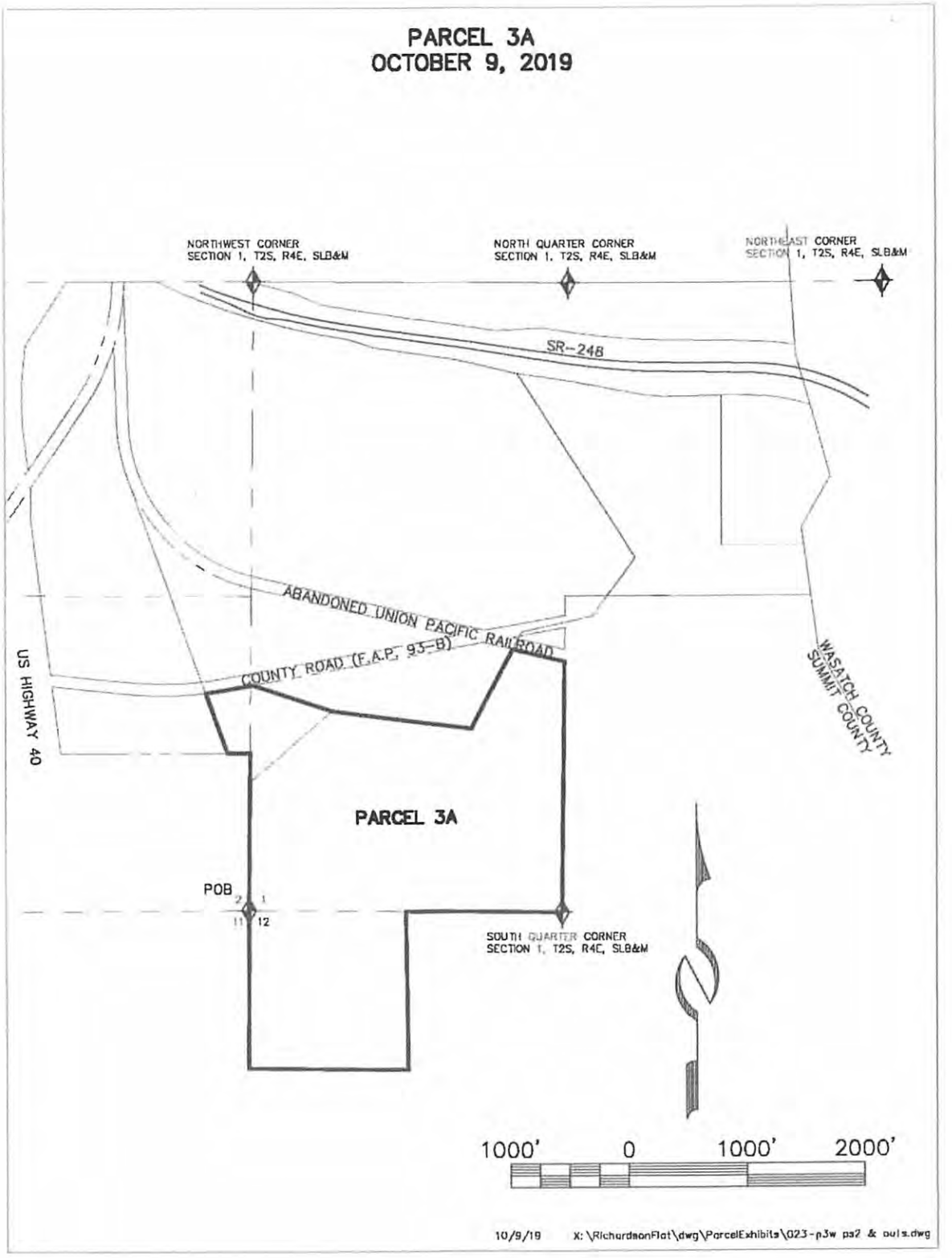
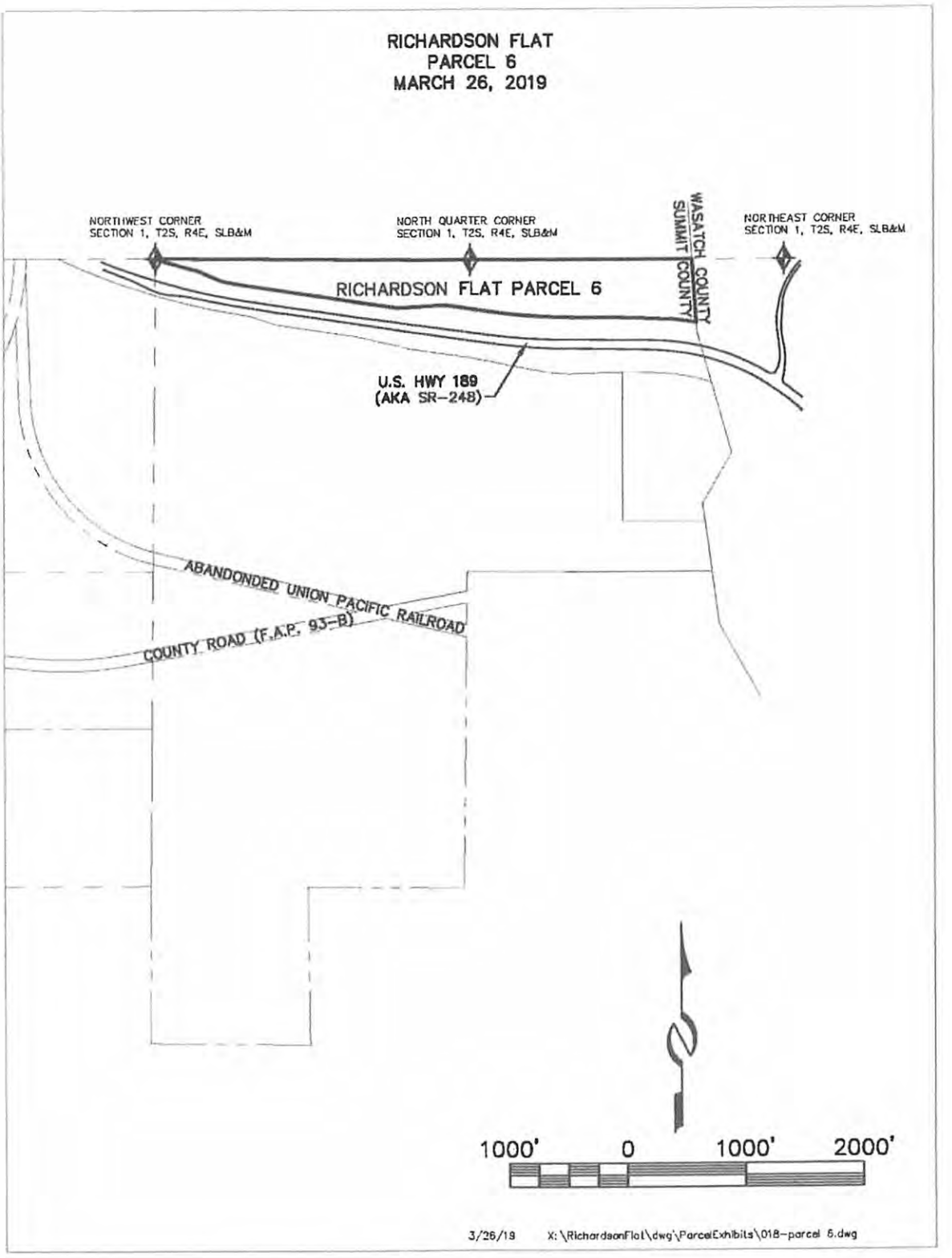


Exhibit A to Agreement for Purchase and Sale of Real Property
Page 5 of 6


RICHARDSON FLAT
PARCEL 6
MARCH 26, 2019
NORTHWEST CORNER
SECTION 1, T2S, R4E, SLB&M
NORTH QUARTER CORNER
SECTION 1, T2S, R4E, SLB&M
NORTHEAST CORNER
SECTION 1, T2S, R4E, SLB&M
WASATCH COUNTY
SUMMIT COUNTY
RICHARDSON FLAT PARCEL 6
U.S. HWY 189
(AKA SR-248)
ABANDONDED UNION PACIFIC RAILROAD
COUNTY ROAD (F.A.P. 93-B)
1000'
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3/26/19
X:\RichardsonFlat\dwg\ParcelExhibits\018-parcel 6.dwg

OLD REPUBLIC TITLE

File Number: 121413-CAF

COMMITMENT FOR TITLE INSURANCE
Issued by
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Florida Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within 180 days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

COTTONWOOD TITLE

Authorized Countersignature

Cottonwood Title Insurance Agency, Inc.
Salt Lake City, Utah
File No.: 121413-CAF

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
A Stock Company
400 Second Avenue South, Minneapolis, Minnesota 55401
(612) 371-1111

By _____ *President*

Attest _____ *Secretary*

COMMITMENT CONDITIONS

1. DEFINITIONS

(a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
(b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
(c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
(d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
(e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
(f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
(g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
(h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
(a) the Notice;
(b) the Commitment to Issue Policy;
(c) the Commitment Conditions;
(d) Schedule A;
(e) Schedule B, Part I—Requirements; [and]
(f) Schedule B, Part II—Exceptions[; and
(g) a counter-signature by the Company or its issuing agent that may be in electronic form].

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

(a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  (i) comply with the Schedule B, Part I—Requirements;
  (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
  (iii) acquire the Title or create the Mortgage covered by this Commitment.
(b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
(c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
(d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
(e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
(f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

(a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
(b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
(c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.

COMMITMENT CONDITIONS
(Continued)

(d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
(e) Any amendment or endorsement to this Commitment must be in writing [and authenticated by a person authorized by the Company].
(f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT
The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY
The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION
The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is $2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at *http://www.alta.org/arbitration*.

COTTONWOOD TITLE INSURANCE AGENCY, INC. PRIVACY POLICY

Title V of the Gramm-Leach-Biley Act (GLBA) generally prohibits any financial institution, directly or through its affiliates, from sharing nonpublic personal information about a consumer with a nonaffiliated third party unless the institution provides the consumer with a notice of its privacy policies and practices, such as the type of information that it collects about the consumer and the categories of persons or entities to whom it may be disclosed.

In compliance with the GLBA, we do not share nonpublic personal information about a consumer with a nonaffiliated third party, unless allowed or required by law.

In compliance with the GLBA, our privacy practices regarding nonpublic personal financial information of consumers and customers (as defined by GLBA) are as follows, subject to any exceptions as permitted by law.

- We protect nonpublic personal information of customers and consumers.
- We allow access on a need to know basis only. Only title company personnel who need to know can access nonpublic personal information. Examples may include bookkeepers, title examiners, title underwriter personnel, auditors, closers and their assistants, management, scanning personnel, and claims related investigation personnel, and including but not limited to retained counsel.
- We allow customers and consumers to review their nonpublic personal information that we have collected, and we allow them to provide us with requests for amendment or deletion of such information, to which we will reasonably respond.
- We require consent from a proper party to the transaction to provide nonpublic personal information relating to that transaction. On closed files, we require a written instruction by a party.
- We have implemented a security procedure for protection of nonpublic personal information: We allow only authorized personnel to review the information, and we keep closed files in secure storage, with limited access, or we store the files on computer with limited password access.
- We generally do not keep copies of credit reports, loan applications, and tax returns on consumers and customers.
- We don't share copies of owner's policies of customers on residential transactions, unless at the request of the insured owner.
- If we share starter title information, we don't share nonpublic personal information, such as sales price (unless it is public information), policy numbers, or the amount of insurance on owner's policies issued to customers.
- We don't share nonpublic personal information, such as social security numbers, shown on affidavits of identity.
- We periodically inform our personnel about our policy.
- We don't share nonpublic personal information with independent contractors, unless there is a need to process the transaction as allowed by law, and the contractors agree in writing not to further share the information.

Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We will use our best efforts to train and oversee our employees and authorized contractors to ensure that your information will be handled responsibly and in accordance with this Privacy Policy. We currently maintain physical, electronic, and procedural safeguards that comply with Federal regulations to guard your nonpublic personal information.

OLD REPUBLIC TITLE

File Number: 121413-CAF

1st Amended

COMMITMENT FOR TITLE INSURANCE

SCHEDULE A

1. Commitment Date: July 29, 2020 at 7:30AM

2. Policy (or Policies) to be issued:

		Policy Amount	Premium
(a)	Owner's Policy (ALTA Owners Policy (06/17/06))	$11,500,000.00	$18,016.00
	Proposed Insured: **N Brockbank Investments, LLC, a Utah limited liability company**		
(b)	Loan Policy (ALTA Loan Policy (06/17/06))	$9,500,000.00	$10,331.00
	Proposed Insured: **REDUS Park City LLC, a Delaware limited liability company, its successors and/or assigns as their respective interests may appear.**		
(c)	Endorsements:		

3. The estate or interest in the Land described or referred to in this Commitment and covered herein is Fee Simple.

4. Title to the estate or interest in the Land is at the Commitment Date vested in:

   United Park City Mines Company, a Delaware corporation

5. The Land referred to in this Commitment is situated in the County of Summit, State of Utah, and is described as follows:

   See Exhibit A attached hereto

NOTE: Parcel Identification Numbers: SS-87 and PP-28-A (for reference purposes only)

Cort Ashton
Commercial Escrow Officer

COTTONWOOD TITLE

1996 East 6400 South, Suite 120, Salt Lake City, UT 84121
Office: 801 277 9999 | Direct: 801 424 6415 | Email: cort@cottonwoodtitle.com

Cottonwood Title Insurance Agency, Inc. Utah State License Number: **UT 92856**
Cort Ashton Utah State License Number: **UT 86794**

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Old Republic National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; and Schedule B, Part II-Exceptions.

SCHEDULE B
PART I - REQUIREMENTS

All of the following requirements must be met:

A. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

B. Pay the agreed amount for the estate or interest to be insured.

C. Pay the premiums, fees, and charges for the Policy to the Company. In the event the transaction for which this commitment is furnished cancels, the minimum cancellation fee will be $125.00.

D. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

E. Any additional documentation requested by Cottonwood Title Insurance Agency, Inc. and/or Old Republic National Title Insurance Company, its underwriter.

NOTICE TO APPLICANT

The company requires that the following additional requirements be complied with:

1. Provide Insurer with a copy of the Corporate Resolution of the Board of Directors for United Park City Mines Company, authorizing the current transaction.

2. The Company requires for its review a satisfactory copy of the "Operating Agreement" and the regulations of the REDUS Park City LLC, and any amendment thereof, a certificate of good standing, and satisfactory evidence of authority of the officers, managers or members to execute the documents.

3. The Company requires for its review a satisfactory copy of the "Operating Agreement" and the regulations of the N Brockbank Investments, LLC, and any amendment thereof, a certificate of good standing, and satisfactory evidence of authority of the officers, managers or members to execute the documents.

4. The Company requires for its review a satisfactory Deed conveying the title to the Land.

5. Mortgage or Deed of Trust from N Brockbank Investments, LLC, a Utah limited liability company to secure your loan.

6. The Company requires the payment of all taxes and assessments and any penalties and interest for the year(s) 2019, due and payable at closing.

7. Underwriter approval from Old Republic National Title Insurance Company. Additional documentation may be requested by Cottonwood Title Insurance Agency, Inc. and/or Old Republic National Title Insurance Company.

8. Inspection of the State Construction Registry prior to the recording of the deed of trust. Should the inspection reveal either a preliminary notice or notice of retention filed, additional requirements or exceptions may be added including proof that the lien claimant has accepted payment in full for construction services.

SCHEDULE B
PART II - EXCEPTIONS

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

NOTE: Exceptions 1-8 will be eliminated in an ALTA Extended Lender's Policy

1. Taxes or assessments which are now payable or which are not shown as existing liens by the records of any taxing authority that levies taxes or assessment on real property or by the Public Records.

2. Any facts, rights, interest, or claims which are not shown by the Public Records but which could be ascertained by an inspection of said Land or by making inquiry of persons in possession, or claiming to be in possession, thereof.

3. Easements, liens, encumbrances, or claims of easements, liens or encumbrances which are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.

5. a) Unpatented mining claims; b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; c) water rights, claims or title to water, whether or not the matters excepted under a), b), or c) are shown by the Public Records.

6. Any liens, or right to a lien, for services, labor or materials theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

7. Any defect, lien, encumbrance, adverse claim, or other matter, that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and in the date on which all of the Schedule B, Part I-Requirements are met.

8. Any service, installation, connection, maintenance or construction charges for sewer, water, electricity or garbage collection or disposal or other utilities unless shown as an existing lien by the Public Records.

9. Taxes for the year 2020 are accruing as a lien, not yet due and payable under Parcel No. SS-87.

   Taxes for 2019 are a lien past due and payable in the amount of $8,041.63, plus penalties and interest under Parcel No. SS-87. (affects Parcel 1 East, Parcel 2, Parcel 6 and a portion of Parcel 3A)

   Taxes for the year 2020 are accruing as a lien, not yet due and payable under Parcel No. PP-28-A.

   Taxes for 2019 are a lien past due and payable in the amount of $1,035.72, plus penalties and

SCHEDULE B
PART II - EXCEPTIONS
(Continued)

interest under Parcel No. PP-28-A. (affects remainder of Parcel 3A)

10. The herein described Land is located within the boundaries of Summit County, Snyderville Basin Water Reclamation District, Park City Fire Service District, Summit County Mosquito Abatement District, Summit County Special Service District No. 1, Snyderville Basin Recreation District, and is subject to any and all charges and assessments levied thereunder.

11. Minerals of whatsoever kind, subsurface and surface substances, including but not limited to coal, lignite, oil, gas, uranium, clay, rock, sand and gravel in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not appearing in the Public Records or listed in Schedule B. The Company makes no representation as to the present ownership of any such interests. There may be leases, grants, exceptions or reservations of interests that are not listed.

12. Claim, right, title or interest to water or water rights whether or not shown by the Public Records.

13. Easement in favor of Salt Lake Pipeline Company, a Nevada Corporation for the right of way to lay, construct, reconstruct, replace, renew, repair, maintain, operate, change the size of, increase the number of and remove pipe lines and appurtenances thereof for the transportation of oil, petroleum, gas, gasoline, water, or other substances, or any thereof, and to erect, install, maintain, operate, repair, renew, add to and remove telegraph, telephone or power lines and appurtenances thereof on a single line of poles, or underground and incidental purposes, by instrument recorded June 18, 1948, as Entry No. 77580, in Book Z, at Page 255.

    The location of said Easement being more particularly described in that certain document recorded November 23, 1948 as Entry No. 78177 in Book Z at Page 371, of official records.

    The effects of that certain Quitclaim of Right of Way between Chevron Pipe Line Company, a Delaware corporation, as Grantor and United Park City Mines Company, a Delaware corporation, as Grantee, recorded August 11, 2000 as Entry No. 570793 in Book 1329 at Page 1115, of official records.

14. Easement in favor of Salt Lake Pipeline Company, a Nevada Corporation for the right of way to lay, construct, reconstruct, replace, renew, repair, maintain, operate, change the size of, increase the number of and remove pipe lines and appurtenances thereof for the transportation of oil, petroleum, gas, gasoline, water, or other substances, or any thereof, and to erect, install, maintain, operate, repair, renew, add to and remove telegraph, telephone or power lines and appurtenances thereof on a single line of poles, or underground and incidental purposes, by instrument recorded October 13, 1955, as Entry No. 86010, in Book 2A, at Page 338.

    The location of said Easement being more particularly described in that certain document recorded August 31, 1956 as Entry No. 87084 in Book 2A at Page 453, of official records.

    The effects of that certain Quitclaim of Right of Way between Chevron Pipe Line Company, a Delaware corporation, as Grantor and United Park City Mines Company, a Delaware corporation, as Grantee, recorded August 11, 2000 as Entry No. 570792 in Book 1329 at Page 1113, of official records.

15. Right of Way Grant in favor of Chevron Pipe Line Company, a Delaware corporation for a right of way from time to time to lay, construct, reconstruct, replace, renew, repair, maintain, operate, change the size of, increase the number of, and remove pipelines together with such valves, fittings, meters, cathodic equipment, heating stations and other appurtenances as may be necessary or convenient to the operation of said lines, for the transportation of oil, petroleum, gas, gasoline, water or other substances, or any

SCHEDULE B
PART II - EXCEPTIONS
(Continued)

thereof, and to erect, install, maintain, operate, repair, renew, add to and remove telegraph, telephone or power lines and appurtenances thereof on a single line of poles or underground and incidental purposes, by instrument dated September 18, 1987 and recorded October 2, 1987, as Entry No. 143738, in Book 194, at Page 823.

16. Right of Way Grant in favor of Chevron Pipe Line Company, a Delaware corporation for a right of way from time to time to lay, construct, reconstruct, replace, renew, repair, maintain, operate, change the size of, increase the number of, and remove pipelines together with such valves, fittings, meters, cathodic equipment, heating stations and other appurtenances as may be necessary or convenient to the operation of said lines, for the transportation of oil, petroleum, gas, gasoline, water or other substances, or any thereof, and to erect, install, maintain, operate, repair, renew, add to and remove telegraph, telephone or power lines and appurtenances thereof on a single line of poles or underground and incidental purposes, by instrument dated October 11, 1991 and recorded October 17, 1991 as Entry No. 348500, in Book 629, at Page 19A.

17. Right of Way Easement in favor of PacifiCorp, an Oregon corporation, its successors and assigns to construct, reconstruct, operate, maintain and repair electric transmission and other equipment and incidental purposes, over, under and across a portion of the subject Land. Said Easement recorded July 6, 1998, as Entry No. 511586, in Book 1161, at Page 507.

18. Grant of Easements (Well Site Parcels) in favor of Jordanelle Special Service District, a special service district created by Wasatch County, State of Utah for a non-exclusive easement to locate, construct, equip, and install an underground water well and non-exclusive access easements and incidental purposes, by instrument dated August 16, 2002 and recorded August 27, 2002, as Entry No. 630268, in Book 1468, at Page 1140.

19. Access easement as contained in that certain Special Warranty Deed (Surface Estate Parcels) recorded August 27, 2002 as Entry No. 630270 in Book 1468 at Page 1153.

20. Notice of Consent Decree recorded November 19, 2007 as Entry No. 830829 in Book 1900 at Page 86.

21. Grant of Easement in favor of the United States of America acting through the United States Environmental Protection Agency and the State of Utah acting through the Department of Environmental Quality for access at all reasonable times to said Land for the purpose of conducting any activity related to the Consent Decree referred to in said Grant of Easement, and incidental purposes, by instrument dated April 9, 2010 and recorded April 9, 2010, as Entry No. 895759, in Book 2027, at Page 1190.

22. Notice of Interest and Right-of-Way wherein G-BAR Ventures, LLC, a Utah limited liability company claims and asserts a right-of-way for all roads and utility purposes, dated January 26, 2017 and recorded January 31, 2017 as Entry No. 1062933 in Book 2395 at Page 979.

23. Access to Parcel 1 East and Parcel 6 is limited to those openings permitted by the United States of America as evidenced by that certain Amended Complaint in Condemnation, recorded September 4, 1996 as Entry No. 461947 in Book 990 at Page 22, of official records.

24. Development Agreement for Flagstaff Mountain, Bonanza Flats, Richardson Flats, The 20-Acre Quinn's Junction Parcel and Iron Mountain by and between United Park City Mines Company, Deer Valley Resort Company and Park City Municipal Corporation, dated June 24, 1999 and recorded July 26, 1999 as Entry No. 544835 in Book 1276 at Page 485.

SCHEDULE B
PART II - EXCEPTIONS
(Continued)

Amended and Restated Development Agreement for Flagstaff Mountain, Bonanza Flats, Richardson Flats, The 20-Acre Quinn's Junction Parcel and Iron Mountain, recorded March 2, 2007 as Entry No. 806100 in Book 1850 at Page 1897.

25. Development Improvements Agreement for Richardson Flat Park & Ride Project by and between Summit County, a political subdivision of the State of Utah and United Park City Mines Company, a Delaware corporation, dated July 18, 2008 and recorded October 23, 2008 as Entry No. 857422 in Book 1954 at Page 175.

26. A Judgment against United Park City Mines Company, a Delaware corporation, et. al. as Defendant in favor of Wells Fargo Bank, National Association, and Midtown Acquisitions L.P. as Plaintiff, represented by Keven M. Rowe and George W. Pratt, dated April 15, 2015 and recorded April 16, 2015 as Entry No. 1016864 in Book 2288 at Page 1311 for the Principal Amount of $158,597,589.55 and any other amounts due thereunder, Civil No. 156500424 issued from the Third Judicial District Court of Salt Lake County.

A Writ of Execution issued pursuant to said judgment on November 25, 2019 and recorded December 17, 2019 as Entry No. 1123829 in Book 2545 at Page 1557, of official records.

27. Rights of tenant(s) in the Land, if any, and rights of all parties claiming by, through or under said tenant(s).

28. Notwithstanding those items described herein-above, the Land is also subject to any additional discrepancies, conflicts in the boundary lines, shortage in area, encroachments, or any other facts which an ALTA/NSPS Survey, (made in accordance with the current Minimum Standard Detail Requirements for Land Title Surveys jointly established and adopted by (ALTA) American Land Title Association and (NSPS) National Society of Professional Surveyors) may disclose.

29. Taxes for 2019 are a lien past due and payable in the amount of $8,041.63, plus penalties and interest under Parcel No. SS-87. (affects Parcel 1 East, Parcel 2, Parcel 6 and a portion of Parcel 3A)

Taxes for 2019 are a lien past due and payable in the amount of $1,035.72, plus penalties and interest under Parcel No. PP-28-A. (affects remainder of Parcel 3A)

30. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

NOTE: Except as shown in Schedule B, Part II above, examination of the Public Records for the following name(s) discloses no judgments or other matters that, in the opinion of the Company, would constitute liens against the Land:

N Brockbank Investments, LLC, a Utah limited liability company

REDUS Park City LLC, a Delaware limited liability company

Your order has been assigned to CORT ASHTON for a full service escrow. For questions concerning the escrow, please contact Cottonwood Title Insurance Agency, Inc. at 801 277 9999.

In the event the transaction for which this commitment was ordered "cancels", please refer to Paragraph C under Schedule B, Part 1 for required cancellation fee.

SCHEDULE B
PART II - EXCEPTIONS
(Continued)

NOTE: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

EXHIBIT A
LEGAL DESCRIPTION

PARCEL 1 EAST:

A parcel of land located in the North half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described at follows:

Beginning at a point South 00°44'33" East 2641.90 feet coincident with the section line and West 647.07 feet from the Northeast corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian and running thence along the South line of the Northeast quarter of Section 1 North 89°50'21" West 1722.59 feet; thence North 36°45'45" East 401.85 feet; thence North 32°35'26" West 1843.40 feet to a point on the Southerly right-of-way of Highway U-189; thence coincident with the Southerly right-of-way of Highway U-189 the following four (4) courses: 1) South 81°29'38" East 463.60 feet to a right-of-way monument; thence 2) South 78°57'52" East 621.18 feet to a right-of-way monument; thence 3) South 85°29'09" East 193.03 feet to a right-of-way monument; thence 4) North 88°34'36" East 459.30 feet; thence South 1263.44 feet; thence South 89°58'46" East 696.77 feet to the Summit-Wasatch County line; thence coincident with the Summit-Wasatch County line South 07°49'47" East 428.95 feet to the point of beginning.

PARCEL 2:

A parcel of land located in the Southwest quarter of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at point North 00°43'31" East 2218.71 feet along the center of section line from the South quarter corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian and running thence along the Northerly line of the abandoned Union Pacific Railroad right-of-way North 76°40'50" West 450.61 feet; thence along the Southerly right-of-way line of the County Road (UDOT F.A.P. 93-B) North 79°44'00" East 447.99 feet; thence along the center of section line South 00°43'31" West 183.67 feet to the point of beginning.

PARCEL 3A:

A parcel of land located in the Southwest quarter of Section 1, the Southeast quarter of Section 2, and the Northwest quarter of Section 12, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being described as follows:

Beginning at the Southwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian and running thence coincident with the section line North 00°34'37" East 1327.29 feet; thence coincident with the South line of the North half of the Southeast quarter of Section 2 South 89°58'53" West 188.10 feet; thence North 19°56'15" West 537.89 feet to a point on a non tangent 2914.90 foot radius curve to the left, of which the radius point bears North 07°03'59" West, said point being on the Southerly right-of-way of the County Road (UDOT F.A.P. 93-B); thence coincident with the Southerly right-of-way of the County Road (UDOT F.A.P. 93-B) the following two (2) courses: 1) along the arc of said curve 162.81 feet through a central angle of 03°12'01"; thence 2) North 79°44'00" East 236.14 feet; thence South 71°47'16" East 704.98 feet; thence South 82°38'01" East 1191.60 feet; thence North 27°48'26" East 758.25 feet to the Southerly line of the abandoned Union Pacific Railroad right-of-way; thence along the Southerly line of the abandoned Union Pacific Railroad right-of-way South 76°40'50" East 451.55 feet to the center line of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; thence coincident with the center line of Section 1 South 00°43'31" West 2116.24 feet to the South quarter corner of Section 1; thence coincident with the South line of Section 1 North 89°30'05" West 1326.50 feet; thence coincident with the East line of the Northwest quarter of the Northwest quarter of Section 12 South 00°41'29" East 1332.41 feet; thence coincident with the South line of the Northwest quarter of the Northwest quarter of Section 12

EXHIBIT A
LEGAL DESCRIPTION
(Continued)

North 89°23'28" West 1347.55 feet; thence coincident with the West line of the Northwest quarter of the Northwest quarter of Section 12 North 00°12'46" East 1329.54 feet to the point of beginning.

PARCEL 6:

A parcel of land located in the North half of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at the Northwest corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian and running thence coincident with the North boundary of said Section 1 the following two (2) courses: 1) South 89°31'25" East 2666.74 feet; thence (2) North 89°59'53" East 1875.55 feet to the Summit-Wasatch County line; thence coincident with the Summit-Wasatch County line South 03°53'07" East 535.39 feet to the North right-of-way boundary of U.S. Highway 189 (also known as SR-248), said point being on a non tangent curve to the left having a radius of 2139.86 feet, of which the radius point bears South 10°52'23" West; thence coincident with said right-of-way the following ten (10) courses: 1) Westerly along the arc of said curve 201.77 feet through a central angle of 05°24'09"; thence 2) North 87°41'03" West 339.16 feet; thence 3) North 89°19'46" West 540.85 feet to a point on a curve to the right having a radius of 5502.89 feet, of which the radius point bears North 00°40'14" East; thence 4) along the arc of said curve 751.38 feet through a central angle of 07°49'24"; thence 5) North 81°30'46" West 302.59 feet; thence 6) South 87°10'38" West 407.66 feet; thence 7) North 81°30'46" West 1224.14 feet to a point on a non tangent curve to the right having a radius of 5579.56 feet, of which the radius point bears North 08°29'18" East; thence 8) Westerly along the arc of said curve 268.64 feet through a central angle of 02°45'31"; thence 9) North 66°59'31" West 246.59 feet to a point on a non tangent curve to the right having a radius of 5534.58 feet, of which the radius point bears North 13°44'49" East; thence 10) Westerly along the arc of said curve 355.11 feet through a central angle of 03°40'34" to the West boundary of the Northwest quarter of said Section 1; thence coincident with said West boundary North 00°34'37" East 4.53 feet to the point of beginning.

APPENDIX C

EDR Data Base Search Records

RF
Richardson Flat Road
Heber City, UT 84032

Inquiry Number: 6151179.2s
August 10, 2020

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

RICHARDSON FLAT ROAD
HEBER CITY, UT 84032

COORDINATES

Latitude (North):	40.6714810 - 40˚ 40' 17.33''
Longitude (West):	111.4495800 - 111˚ 26' 58.48''
Universal Tranverse Mercator:	Zone 12
UTM X (Meters):	462001.4
UTM Y (Meters):	4502175.0
Elevation:	6638 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6009015 PARK CITY EAST, UT
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140701
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
RICHARDSON FLAT ROAD
HEBER CITY, UT 84060

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	RICHARDSON FLAT TAIL	1 MILE E. OF TOWN NE	Proposed NPL, SEMS, ROD, PRP	Same	1 ft.
A1	RICHARDSON FLAT SUPE	NW 1/4 SEC 1 T2S R 4	ICIS, FINDS, ECHO	Lower	1 ft.
2	PHOSTON SIDING SITE	5 MI E OF PARK CITY	LUST, UST	Higher	1 ft.
A3	RICHARDSON FLATS TAI	NORTH WEST 1/4, SECT	FINDS	Lower	1 ft.
4	BLUE SKY RANCH AND R	2071 SR32	FINDS, ECHO	Higher	1 ft.
5	PARK CITY SERVICE CE	4115 ATKINSON RD	LUST, UST	Lower	2326, 0.441, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROLS ---------- Institutional Controls Sites List

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS ---------- This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- List of Landfills

State and tribal leaking storage tank lists

LAST ---------- Leaking Aboveground Storage Tank Sites
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Listing of Aboveground Storage Tanks
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL ---------- Sites with Institutional Controls

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Sites List
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfields Assessment Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register

CDL	Methamphetamine Contaminated Properties Listing
US CDL	National Clandestine Laboratory Register
PFAS	PFAS Site Information Listing

Local Land Records

LIENS 2	CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
SPILLS	Spills Data
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
EMI	Division of Air Quality
DRYCLEANERS	Registered Drycleaners
EWA	Enforceable Written Assurances
Financial Assurance	Financial Assurance Information Listing
FUDS	Formerly Used Defense Sites
MMRP	Military Munitions Response Program

NPDES Permitted Facilities Listing
TIER 2 Tier 2 Facility Listing
UIC UIC Site Location Listing
UOPF Used Oil Permitted Facilities
MINES MRDS Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF Recovered Government Archive Solid Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL: Proposed NPL sites . The source of this database is the U.S. EPA.

A review of the Proposed NPL list, as provided by EDR, and dated 04/27/2020 has revealed that there is 1 Proposed NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT TAIL Site ID:: 800705 EPA ID:: UTD980952840	***1 MILE E. OF TOWN NE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 04/27/2020 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT TAIL Site ID: 0800705 EPA Id: UTD980952840	***1 MILE E. OF TOWN NE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Quality's Potential Leaking UST Sites.

A review of the LUST list, as provided by EDR, and dated 04/13/2020 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PHOSTON SIDING SITE Facility ID: 1100067 Date Closed: 04/16/1996	***5 MI E OF PARK CITY***	***0 - 1/8 (0.000 mi.)***	***2***	***22***

Lower Elevation	Address	Direction / Distance	Map ID	Page
PARK CITY SERVICE CE Facility ID: 7000074 Date Closed: 04/12/1995	***4115 ATKINSON RD***	***NNW 1/4 - 1/2 (0.441 mi.)***	***5***	***24***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains a listing of Facility, Owner, Location & Tanks not Closed or Removed. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Quality's Facilities with at Least One Non-exempt Tank.

A review of the UST list, as provided by EDR, and dated 04/13/2020 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PHOSTON SIDING SITE Facility ID: 1100067	***5 MI E OF PARK CITY***	***0 - 1/8 (0.000 mi.)***	***2***	***22***

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 04/27/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT TAIL EPA ID:: UTD980952840	***1 MILE E. OF TOWN NE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 04/27/2020 has revealed that there is 1 PRP site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT TAIL	***1 MILE E. OF TOWN NE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT SUPE FRS ID:: 110009347812	***NW 1/4 SEC 1 T2S R 4***	***0 - 1/8 (0.000 mi.)***	***A1***	***16***

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 02/03/2020 has revealed that there are 3

FINDS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BLUE SKY RANCH AND R Registry ID:: 110064621592	***2071 SR32***	***0 - 1/8 (0.000 mi.)***	***4***	***23***

Lower Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT SUPE Registry ID:: 110009347812	***NW 1/4 SEC 1 T2S R 4***	***0 - 1/8 (0.000 mi.)***	***A1***	***16***
RICHARDSON FLATS TAI Registry ID:: 110020117078	NORTH WEST 1/4, SECT	0 - 1/8 (0.000 mi.)	A3	23

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 04/04/2020 has revealed that there are 2 ECHO sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BLUE SKY RANCH AND R Registry ID: 110064621592	***2071 SR32***	***0 - 1/8 (0.000 mi.)***	***4***	***23***

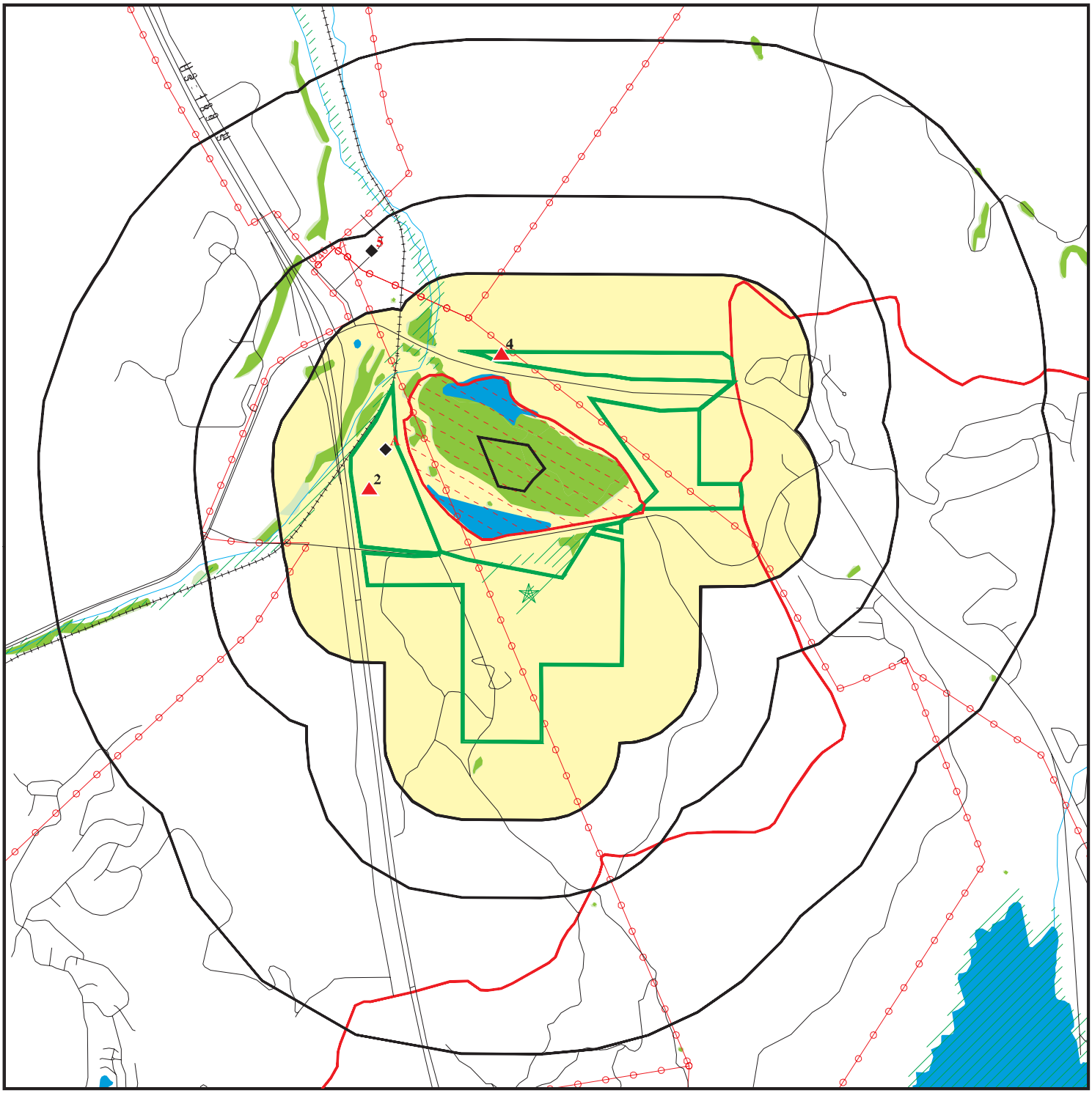
Lower Elevation	Address	Direction / Distance	Map ID	Page
RICHARDSON FLAT SUPE Registry ID: 110009347812	***NW 1/4 SEC 1 T2S R 4***	***0 - 1/8 (0.000 mi.)***	***A1***	***16***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
MARSAC MILLS	SEMS
PAYLESS DRUG STORE	LUST, UST
SILVER MEADOWS ESTATES	LUST
TRIANGLE PARCEL, LOWER SILVER CREE	VCP

OVERVIEW MAP - 6151179.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: RF ADDRESS: Richardson Flat Road Heber City UT 84032 LAT/LONG: 40.671481 / 111.44958	CLIENT: DK Environmental LLC CONTACT: Kathy Harris INQUIRY #: 6151179.2s DATE: August 10, 2020 6:16 pm

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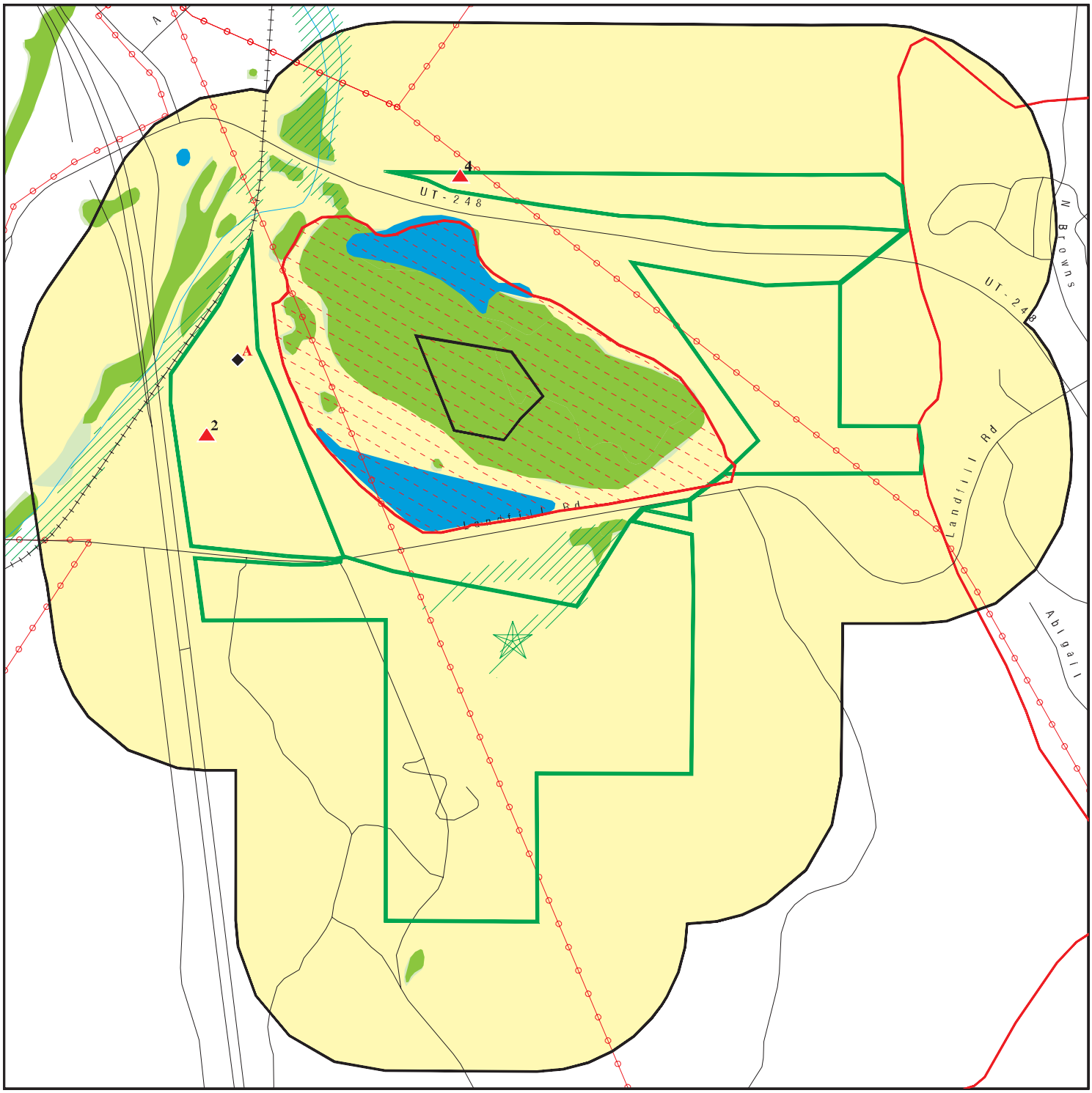
DETAIL MAP - 6151179.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/8 1/4 1/2 Miles

- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: RF ADDRESS: Richardson Flat Road Heber City UT 84032 LAT/LONG: 40.671481 / 111.44958	CLIENT: DK Environmental LLC CONTACT: Kathy Harris INQUIRY #: 6151179.2s DATE: August 10, 2020 6:17 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		1	0	0	0	NR	1
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	1	NR	NR	2
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		1	0	NR	NR	NR	1
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		1	NR	NR	NR	NR	1
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		3	NR	NR	NR	NR	3
ECHO	0.001		2	NR	NR	NR	NR	2
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EWA	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
FUDS	0.001		0	NR	NR	NR	NR	0
MMRP	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
TIER 2	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UOPF	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	12	0	1	0	0	13

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

NPL **RICHARDSON FLAT TAILINGS** **Proposed NPL** **1000239793**
Region **1 MILE E. OF TOWN NEAR US 40** **SEMS** **UTD980952840**
PARK CITY, UT 84060 **ROD**
< 1/8 **PRP**
1 ft.

Proposed NPL:

Name:	RICHARDSON FLAT TAILINGS
Address:	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E
City,State,Zip:	PARK CITY, UT 84060
EPA ID:	UTD980952840
Site ID:	800705
EPA Region:	8
Proposed Date:	1992-02-07 00:00:00
Fed Description:	N
Latitude:	40.706879
Longitude:	-111.46697

SEMS:

Site ID:	0800705
EPA ID:	UTD980952840
Name:	RICHARDSON FLAT TAILINGS
Address:	1 MILE E. OF TOWN NEAR US 40
Address 2:	NW 1/4 SEC 1 T2S R 4E
City,State,Zip:	PARK CITY, UT 84060
Cong District:	03
FIPS Code:	49043
Latitude:	+40.706879
Longitude:	-111.466970
FF:	N
NPL:	Proposed for NPL
Non NPL Status:	Not reported

SEMS Detail:

Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	2003-07-21 04:00:00
Finish Date:	9/28/2004 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	1

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Start Date:	2005-07-06 04:00:00
Finish Date:	7/6/2005 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1992-09-03 04:00:00
Finish Date:	9/3/1992 4:00:00 AM
Qual:	H
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	JF
Action Name:	ECO RISK
SEQ:	1
Start Date:	2001-05-01 04:00:00
Finish Date:	1/30/2004 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	ED
Action Name:	R/H ASMT
SEQ:	1
Start Date:	2001-10-09 04:00:00
Finish Date:	3/15/2003 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Action Code:	TA
Action Name:	TECH ASSIST
SEQ:	1
Start Date:	2007-01-04 05:00:00
Finish Date:	5/22/2009 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	1
Start Date:	2012-10-26 04:00:00
Finish Date:	3/14/2013 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	2
Start Date:	2007-01-08 05:00:00
Finish Date:	7/1/2007 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	TA
Action Name:	TECH ASSIST
SEQ:	2
Start Date:	2008-07-24 04:00:00
Finish Date:	1/20/2009 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

NPL:	P
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1991-07-15 04:00:00
Finish Date:	7/15/1991 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	AS
Action Name:	AIR SRVY
SEQ:	1
Start Date:	1991-06-30 04:00:00
Finish Date:	6/30/1991 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1988-06-24 04:00:00
Finish Date:	6/24/1988 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1996-04-26 04:00:00
Finish Date:	8/15/2001 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	2
Start Date:	2017-06-01 04:00:00
Finish Date:	8/10/2018 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1984-10-01 04:00:00
Finish Date:	10/1/1984 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	NR
Action Name:	REM PROP
SEQ:	1
Start Date:	1991-02-11 05:00:00
Finish Date:	2/11/1991 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1990-08-30 04:00:00
Finish Date:	8/30/1990 4:00:00 AM
Qual:	Not reported

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	2
Start Date:	1992-02-07 05:00:00
Finish Date:	2/7/1992 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	00
Action Code:	TA
Action Name:	TECH ASSIST
SEQ:	3
Start Date:	2013-09-25 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	02
Action Code:	ED
Action Name:	R/H ASMT
SEQ:	2
Start Date:	2018-09-27 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	02
Action Code:	EE
Action Name:	EE/CA
SEQ:	3

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Start Date:	2017-06-16 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	2
Start Date:	2000-09-28 04:00:00
Finish Date:	7/6/2005 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	BE
Action Name:	PRP RD
SEQ:	1
Start Date:	2007-08-07 04:00:00
Finish Date:	2/7/2008 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	02
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	3
Start Date:	2009-09-29 04:00:00
Finish Date:	3/6/2014 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	02

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

Action Code:	EE
Action Name:	EE/CA
SEQ:	2
Start Date:	2014-03-06 05:00:00
Finish Date:	6/16/2017 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	BF
Action Name:	PRP RA
SEQ:	1
Start Date:	2008-02-07 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	04
Action Code:	EE
Action Name:	EE/CA
SEQ:	1
Start Date:	2013-04-11 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS
NPL:	P
FF:	N
OU:	01
Action Code:	MA
Action Name:	ST COOP
SEQ:	2
Start Date:	2001-08-15 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	St Perf
Region:	08
Site ID:	0800705
EPA ID:	UTD980952840
Site Name:	RICHARDSON FLAT TAILINGS

RICHARDSON FLAT TAILINGS (Continued) **1000239793**

NPL:	P
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1984-12-01 05:00:00
Finish Date:	12/1/1984 5:00:00 AM
Qual:	H
Current Action Lead:	St Perf

ROD:

Name:	RICHARDSON FLAT TAILINGS
Address:	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E
City,State,Zip:	PARK CITY, UT 84060
EPA ID:	UTD980952840
RG:	8
Site ID:	800705
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	RICHARDSON FLAT
SEQ ID:	1
Action Completion:	2005-07-06 00:00:00
NPL Status:	Proposed
Non NPL Status:	Not reported

PRP:

PRP Name:
ASARCO INC
ASARCO INC
ATLANTIC RICHFIELD COMPANY
ATLANTIC RICHFIELD COMPANY
E.I. DU PONT DE NEMOURS & CO., INC.
FALCONBRIDGE LIMITED
NORANDA, INC.
NORANDA, INC.
PARK CITY MUNICIPAL CORPORATION
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY
UNITED PARK CITY MINES COMPANY

A1 **RICHARDSON FLAT SUPERFUND SITE** **ICIS 1016280000**
NW 1/4 SEC 1 T2S R 4E **FINDS N/A**
< 1/8 **PARK CITY, UT 84060** **ECHO**
1 ft.

Site 1 of 2 in cluster A

Relative: Lower
Actual: 6623 ft.

ICIS:

Enforcement Action ID:	HQ-2003-6003
FRS ID:	110009347812
Action Name:	Asarco & Southern Peru Copper Company
Facility Name:	RICHARDSON FLAT SUPERFUND SITE
Facility Address:	NW 1/4 SEC 1 T2S R 4E PARK CITY, UT 84060

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

Enforcement Action Type: Civil Judicial Action
Facility County: SUMMIT
Program System Acronym: CERCLIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: UTD980952840
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2014-0034
FRS ID: 110009347812
Action Name: RICHARDSON FLAT TAILINGS SITE OU 2 AND 3
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 106
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2013-0028
FRS ID: 110009347812
Action Name: RICHARDSON FLAT TAILINGS SITE OU4
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 104E5A
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2013-0028
FRS ID: 110009347812
Action Name: RICHARDSON FLAT TAILINGS SITE OU4

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

Facility Name:	RICHARDSON FLAT SUPERFUND SITE
Facility Address:	NW 1/4 SEC 1 T2S R 4E
	PARK CITY, UT 84060
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	SUMMIT
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	122/104
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.67833
Longitude in Decimal Degrees:	-111.4583
Permit Type Desc:	Not reported
Program System Acronym:	37975
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	08-2013-0028
FRS ID:	110009347812
Action Name:	RICHARDSON FLAT TAILINGS SITE OU4
Facility Name:	RICHARDSON FLAT SUPERFUND SITE
Facility Address:	NW 1/4 SEC 1 T2S R 4E
	PARK CITY, UT 84060
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	SUMMIT
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	107L
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.67833
Longitude in Decimal Degrees:	-111.4583
Permit Type Desc:	Not reported
Program System Acronym:	37975
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	08-2013-0028
FRS ID:	110009347812
Action Name:	RICHARDSON FLAT TAILINGS SITE OU4
Facility Name:	RICHARDSON FLAT SUPERFUND SITE
Facility Address:	NW 1/4 SEC 1 T2S R 4E
	PARK CITY, UT 84060
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	SUMMIT
Program System Acronym:	ICIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	106
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.67833
Longitude in Decimal Degrees:	-111.4583
Permit Type Desc:	Not reported
Program System Acronym:	37975
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

Enforcement Action ID: 08-2009-0218
FRS ID: 110009347812
Action Name: Richardson Flats - Lower Silver Creek OU2
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 122/104
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2006-0119
FRS ID: 110009347812
Action Name: ASARCO INCORPORATED (NATIONAL CASE)
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: Bankruptcy
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Judicial
EA Type Code: BNK
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2006-0035
FRS ID: 110009347812
Action Name: Richardson Flat Superfund Site
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: Civil Judicial Action
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Judicial
EA Type Code: CIV
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Enforcement Action ID: 08-2000-0291
FRS ID: 110009347812
Action Name: RICHARDSON FLAT TAILINGS
Facility Name: RICHARDSON FLAT SUPERFUND SITE
Facility Address: NW 1/4 SEC 1 T2S R 4E
PARK CITY, UT 84060
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: SUMMIT
Program System Acronym: ICIS
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: 122/104
Facility SIC Code: Not reported
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.67833
Longitude in Decimal Degrees: -111.4583
Permit Type Desc: Not reported
Program System Acronym: 37975
Facility NAICS Code: Not reported
Tribal Land Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: RICHARDSON FLAT SUPERFUND SITE
Address: NW 1/4 SEC 1 T2S R 4E
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

FINDS:
Registry ID: 110009347812

Click Here:

Environmental Interest/Information System:

RICHARDSON FLAT SUPERFUND SITE (Continued) **1016280000**

SUPERFUND NPL
ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016280000
Registry ID:	110009347812
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110009347812
Name:	RICHARDSON FLAT TAILINGS
Address:	NW 1/4 SEC 1 T2S R 4E
City,State,Zip:	PARK CITY, UT 84060

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2 **PHOSTON SIDING SITE** **LUST U002264321**
5 MI E OF PARK CITY **UST N/A**
< 1/8 **PARK CITY, UT 84098**
1 ft.

Relative: Higher
Actual: 6638 ft.

LUST:

Name:	PHOSTON SIDING SITE
Address:	5 MI E OF PARK CITY
City,State,Zip:	PARK CITY, UT 84098
Facility ID:	1100067
Release Id:	JBJ
Closed Date:	**04/16/1996**
Notification Date:	09/02/1993
Owner Name:	CHEVRON REAL ESTATE MANAGEMENT CO
Owner Address:	225 BUSH STREET
Owner City:	SAN FRANCISCO
Owner State:	CA
Owner Zip:	94104
Owner City,St,Zip:	SAN FRANCISCO, CA 94104
Project Manager:	Mark Crim

UST:

Name:	PHOSTON SIDING SITE
Address:	5 MI E OF PARK CITY
City,State,Zip:	PARK CITY, UT 84098
Facility ID:	1100067
Owner Name:	CHEVRON REAL ESTATE MANAGEMENT CO
Owner Address:	225 BUSH STREET
Owner City,St,Zip:	SAN FRANCISCO, CA 94104
Owner Phone:	(415) 894-1419
Total Tanks:	1

PHOSTON SIDING SITE (Continued) **U002264321**

Closed Tanks: 1

A3 **RICHARDSON FLATS TAILINGS** **FINDS** **1007842933**
NORTH WEST 1/4, SECTION 1, TOWNSHIP 2S, RANGE 4E **N/A**
< 1/8 **PARK CITY, UT 84060**
1 ft.

Site 2 of 2 in cluster A

Relative: Lower
Actual: 6623 ft.

FINDS:
Registry ID: 110020117078

Click Here:

Environmental Interest/Information System:
The CIM (Utah - Common Identifier Mechanism) is Utah's Department of Environmental Quality (UDEQ) mechanism for compliance and permitting operations.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

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4 **BLUE SKY RANCH AND RESORT** **FINDS** **1017747476**
2071 SR32 **ECHO** **N/A**
< 1/8 **WANSHIP, UT 84017**
1 ft.

Relative: Higher
Actual: 6673 ft.

FINDS:
Registry ID: 110064621592

Click Here:

Environmental Interest/Information System:
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1017747476
Registry ID:	110064621592
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110064621592
Name:	BLUE SKY RANCH AND RESORT
Address:	2071 SR32
City,State,Zip:	WANSHIP, UT 84017

5
NNW
1/4-1/2
0.441 mi.
2326 ft.

PARK CITY SERVICE CENTER
4115 ATKINSON RD
PARK CITY, UT 84060

LUST **U003033313**
UST **N/A**

Relative:
Lower

Actual:
6606 ft.

LUST:

Name:	PARK CITY SERVICE CENTER
Address:	4115 ATKINSON RD
City,State,Zip:	PARK CITY, UT 84060
Facility ID:	7000074
Release Id:	FOX
Closed Date:	**04/12/1995**
Notification Date:	03/15/1990
Owner Name:	ROCKY MOUNTAIN POWER
Owner Address:	1407 W. NORTH TEMPLE, ROOM 110
Owner City:	SALT LAKE CITY
Owner State:	UT
Owner Zip:	84116
Owner City,St,Zip:	SALT LAKE CITY, UT 84116
Project Manager:	[Dale Urban]

UST:

Name:	PARK CITY SERVICE CENTER
Address:	4115 ATKINSON RD
City,State,Zip:	PARK CITY, UT 84060
Facility ID:	7000074
Owner Name:	ROCKY MOUNTAIN POWER
Owner Address:	1407 W. NORTH TEMPLE, ROOM 110
Owner City,St,Zip:	SALT LAKE CITY, UT 84116
Owner Phone:	(801) 220-2535
Total Tanks:	4
Closed Tanks:	4

Count: 4 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
PARK CITY	U003033317	PAYLESS DRUG STORE	450 IRON HORSE DR ;; 400 FT N	84060	LUST, UST
PARK CITY	S109345578	SILVER MEADOWS ESTATES	KEARNS BOULEVARD	84060	LUST
PARK CITY	1001126523	MARSAC MILLS	MARSAC AND HEBER AVENUES IN PA	84060	SEMS
PARK CITY	S110335630	TRIANGLE PARCEL, LOWER SILVER CREE	EAST SIDE OF EAST FRONTAGE ROA		VCP

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/02/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 30

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/04/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 07/15/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: N/A

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: List of Landfills

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/30/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 06/11/2020
Number of Days to Update: 71

Source: Department of Environmental Quality
Telephone: 801-538-6170
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

State and tribal leaking storage tank lists

LUST: Sites with Leaking Underground Storage Tanks

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/13/2020
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/06/2020
Number of Days to Update: 82

Source: Department of Environmental Quality
Telephone: 801-536-4115
Last EDR Contact: 07/15/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Sites

A listing of leaking aboveground storage tank locations.

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/12/2020
Date Made Active in Reports: 02/20/2020
Number of Days to Update: 8

Source: Department of Environmental Quality
Telephone: 801-536-4141
Last EDR Contact: 05/28/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 12/17/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 55
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

UST: List of Sites with Underground Storage Tanks
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/13/2020
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/06/2020
Number of Days to Update: 82
Source: Department of Environmental Quality
Telephone: 801-536-4115
Last EDR Contact: 07/15/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Quarterly

AST: Listing of Aboveground Storage Tanks
Aboveground storage tank site locations.

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/12/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 71
Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 05/28/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019
Date Data Arrived at EDR: 12/05/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 67

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/27/2020
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/23/2020
Next Scheduled EDR Contact: 11/01/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/24/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Sites with Institutional Controls
Sites included on the Brownfields Sites listing that have institutional controls in place.

Date of Government Version: 04/20/2020
Date Data Arrived at EDR: 04/22/2020
Date Made Active in Reports: 07/06/2020
Number of Days to Update: 75
Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

VCP: Voluntary Cleanup Sites List
The purpose of the program is to encourage the voluntary cleanup of sites where there has been a contaminant release threatening public health and the environment, thereby removing the stigma attached to these sites which blocks economic redevelopment. Voluntary cleanup of these sites will hopefully result in clearing the pathway for returning these properties to beneficial use.

Date of Government Version: 02/06/2020
Date Data Arrived at EDR: 02/12/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 71
Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Assessment Sites
A Brownfields site means real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant, controlled substance or petroleum product.

Date of Government Version: 03/20/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 76
Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

CDL: Methamphetamine Contaminated Properties Listing

Utah Administrative Rule 19-6-901 Illegal Drug Operations Site Reporting and Decontamination Act requires local health departments to maintain a list of properties believed to be contaminated by the illegal manufacture of drugs. The following properties were reported to the Salt Lake Valley Health Department by a complaint or report from a law enforcement agency and the Department has determined that reasonable evidence exists that the property is contaminated.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/04/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 71

Source: Salt Lake Valley Health Department
Telephone: 801-468-2750
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Quarterly

PFAS: PFAS Site Information Listing

PFAS site information

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/13/2020
Date Made Active in Reports: 03/31/2020
Number of Days to Update: 47

Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 06/05/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/27/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/23/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

SPILLS: Spills Data
Incidents reported to the Division of Environmental Response and Remediation

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 04/30/2020
Number of Days to Update: 65
Source: Department of Environmental Quality
Telephone: 801-536-4100
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/31/2011
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 57
Source: Environmental Protection Agency
Telephone: 303-312-6149
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/28/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 85
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites
This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62
Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/05/2020
Next Scheduled EDR Contact: 11/23/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 03/01/2020
Date Data Arrived at EDR: 04/21/2020
Date Made Active in Reports: 07/15/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/31/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 08/03/2020
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/15/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/13/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 06/30/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019
Date Data Arrived at EDR: 10/25/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 82
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/20/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/06/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 06/24/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/06/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/22/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/07/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/28/2020
Next Scheduled EDR Contact: 11/16/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 08/03/2020
Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/11/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/31/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 50

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/22/2020
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines
An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/05/2020
Date Data Arrived at EDR: 03/06/2020
Date Made Active in Reports: 05/29/2020
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (303) 312-6312
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 06/26/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/02/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 08/03/2020
Number of Days to Update: 76

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/19/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Quarterly

AIRS: Division of Air Quality

Emissions inventory

Date of Government Version: 04/07/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 16

Source: Department of Environmental Quality
Telephone: 801-536-4183
Last EDR Contact: 07/27/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Varies

DRYCLEANERS: Registered Drycleaners

A listing of registered drycleaners.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 10/17/2019
Date Made Active in Reports: 12/30/2019
Number of Days to Update: 74

Source: Department of Environmental Quality
Telephone: 801-536-4437
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Varies

EWA: Enforceable Written Assurances

EWA contains locations of potential Enforceable Written Assurance sites. EWAs will generally ensure to property owners or prospective property owners that there is no unacceptable risk to human health or the environment. EWA locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/18/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 801-536-4167
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 03/30/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 06/08/2020
Number of Days to Update: 68

Source: Department of Environmental Quality
Telephone: 801-538-6794
Last EDR Contact: 07/14/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

Financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 05/29/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 06/08/2020
Number of Days to Update: 10

Source: Department of Environmental Quality
Telephone: 801-536-4141
Last EDR Contact: 05/28/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

Formerly used defense sites.

Date of Government Version: 04/20/2020
Date Data Arrived at EDR: 04/22/2020
Date Made Active in Reports: 07/07/2020
Number of Days to Update: 76

Source: Utah AGRC
Telephone: 801-538-3665
Last EDR Contact: 07/21/2020
Next Scheduled EDR Contact: 11/02/2020
Data Release Frequency: Varies

MMRP: Military Munitions Response Program

Environment.MMRP contains locations of Military Munitions Response Program sites. MMRP manages the environmental, health and safety issues presented by unexploded ordnances (UXO), discarded military munitions (DMM) and munitions constituents (MC). Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/18/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 801-539-4164
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

NPDES: Permitted Facilities Listing

A listing of Division of Water Quality permits.

Date of Government Version: 03/27/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/11/2020
Number of Days to Update: 72

Source: Department of Environmental Quality
Telephone: 801-538-6146
Last EDR Contact: 06/04/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

TIER 2: Tier 2 Facility Listing

TIER 2 contains locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/18/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 801-536-4152
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

UIC: UIC Site Location Listing

A listing of underground injection control wells.

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 05/01/2020
Number of Days to Update: 65

Source: Department of Natural Resources
Telephone: 801-538-5329
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Quarterly

UOPF: Used Oil Permitted Facilities

DSHW Permitted Used Oil Facilities contains locations in Utah of all Used Oil Facilities: Marketers, Porcessoors, Transfer, Transport and Off-specification Permitted by UDEQ Division of Hazardous Waste (DSHW) ? Used Oil Section.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/18/2020
Date Made Active in Reports: 06/03/2020
Number of Days to Update: 77

Source: Department of Environmental Quality
Telephone: 801-538-9408
Last EDR Contact: 06/18/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 07/01/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/19/2020
Data Release Frequency: Semi-Annually

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/08/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Utah.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 199

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Quality in Utah.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Environmental Quality
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/31/2020
Next Scheduled EDR Contact: 11/09/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/09/2020
Next Scheduled EDR Contact: 10/26/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/04/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Provider List
Source: Department of Health
Telephone: 801-538-9299

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Utah Geological Survey
Telephone: 801-537-3300

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

RF
RICHARDSON FLAT ROAD
HEBER CITY, UT 84032

TARGET PROPERTY COORDINATES

Latitude (North):	40.671481 - 40° 40' 17.33''
Longitude (West):	111.44958 - 111° 26' 58.49''
Universal Tranverse Mercator:	Zone 12
UTM X (Meters):	462001.4
UTM Y (Meters):	4502175.0
Elevation:	6638 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6009015 PARK CITY EAST, UT
Version Date:	2014

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

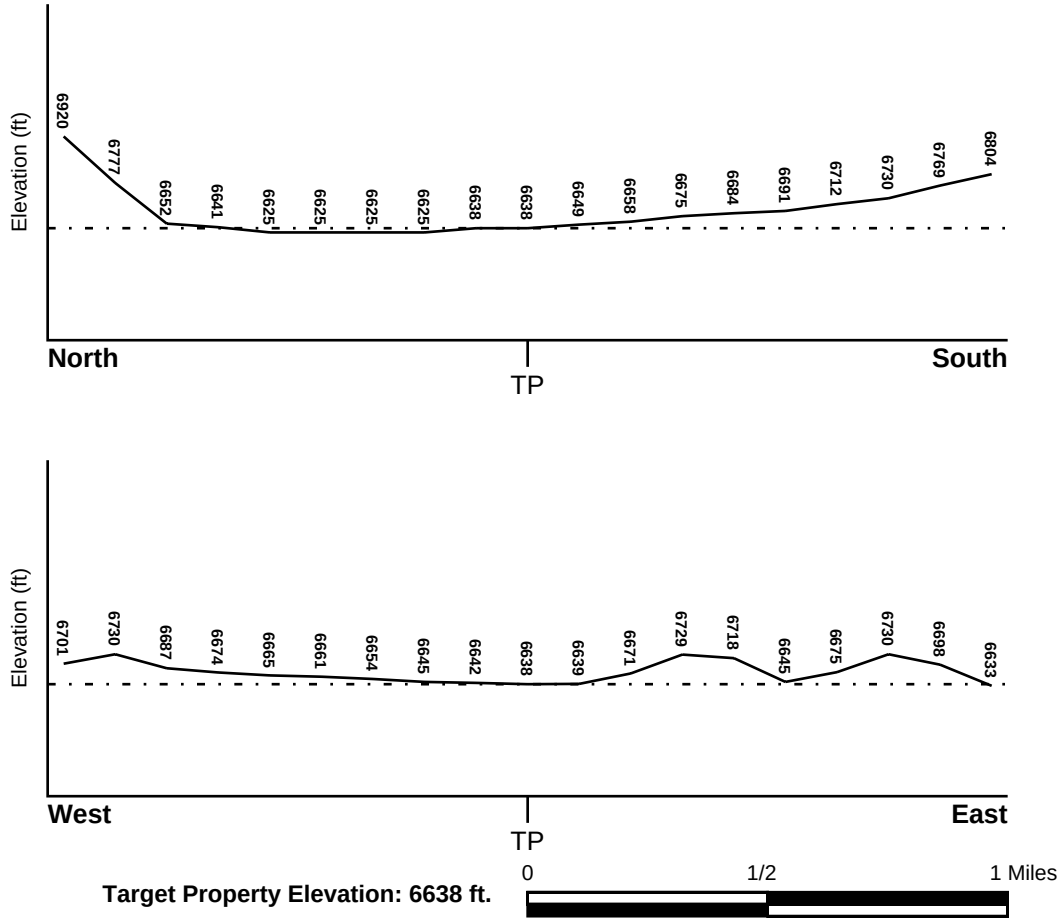
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
49051C0025E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PARK CITY EAST	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

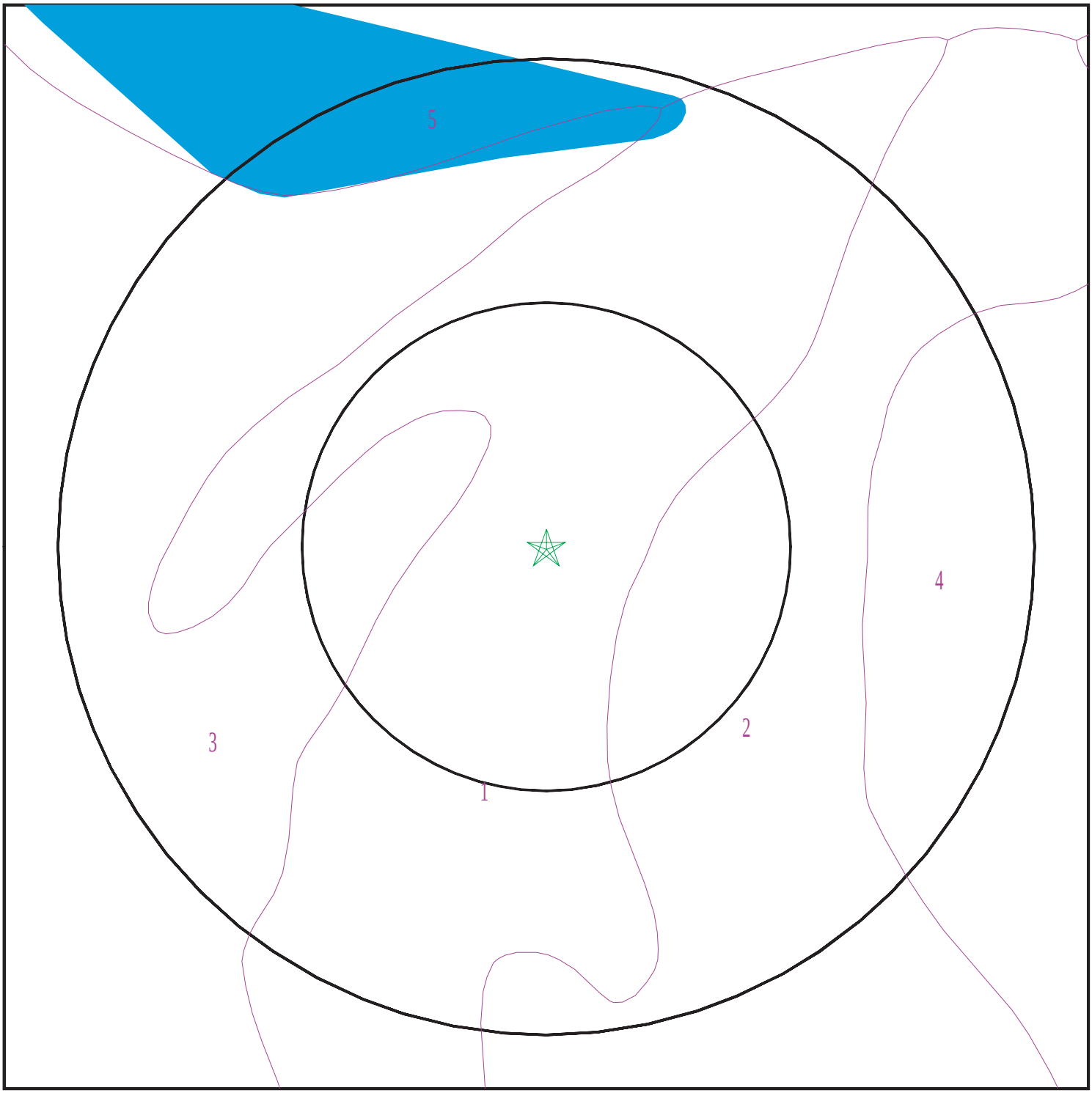
Era:	Cenozoic
System:	Tertiary
Series:	Lower Tertiary volcanic rocks
Code:	lTv *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Volcanic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6151179.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME: RF ADDRESS: Richardson Flat Road Heber City UT 84032 LAT/LONG: 40.671481 / 111.44958	CLIENT: DK Environmental LLC CONTACT: Kathy Harris INQUIRY #: 6151179.2s DATE: August 10, 2020 6:17 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: ECHOCREEK

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 46 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
2	7 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
3	18 inches	25 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	25 inches	38 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
5	38 inches	44 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
6	44 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: AYOUB

Soil Surface Texture: cobbly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 89 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	cobbly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	5 inches	11 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
3	11 inches	18 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
4	18 inches	22 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
5	22 inches	35 inches	very cobbly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
6	35 inches	44 inches	bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name: YEATES HOLLOW

Soil Surface Texture: very stony loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 109 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	very stony loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4.23 Min: 1.41	Max: Min:
2	11 inches	25 inches	very cobbly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4.23 Min: 1.41	Max: Min:
3	25 inches	37 inches	very cobbly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4.23 Min: 1.41	Max: Min:
4	37 inches	42 inches	extremely cobbly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4.23 Min: 1.41	Max: Min:
5	42 inches	52 inches	bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4.23 Min: 1.41	Max: Min:

Soil Map ID: 4

Soil Component Name: AYOUB

Soil Surface Texture: cobbly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 48 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	cobbly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	5 inches	11 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
3	11 inches	18 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
4	18 inches	22 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
5	22 inches	35 inches	very cobbly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
6	35 inches	44 inches	bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

Soil Map ID: 5

Soil Component Name: DUMPS, MINES

Soil Surface Texture: cobbly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40001190399	1/8 - 1/4 Mile WNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

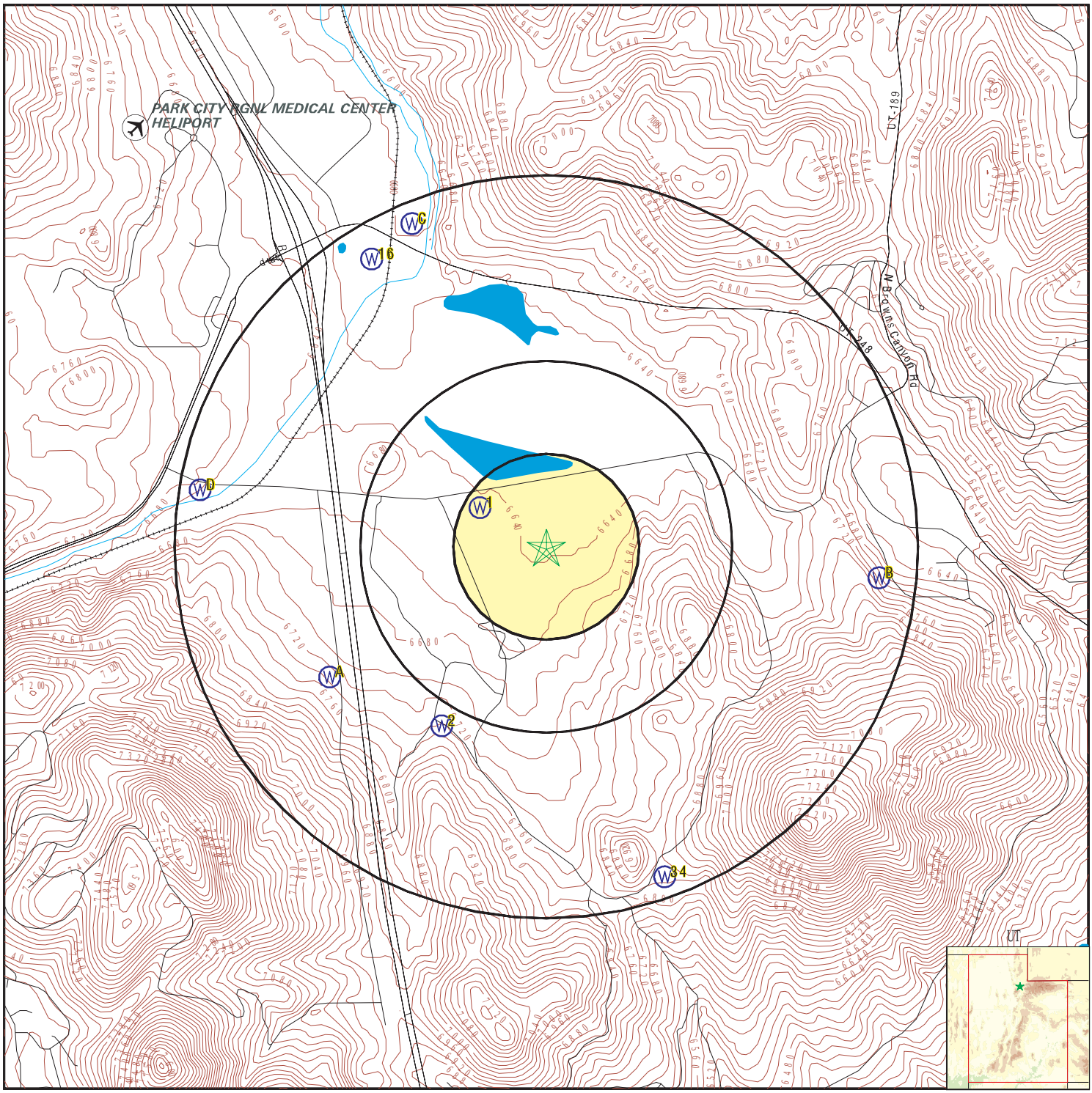
Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	UTDNR2000127637	1/2 - 1 Mile SSW
A3	UTDNR2000022497	1/2 - 1 Mile WSW
A4	UTDNR2000055359	1/2 - 1 Mile WSW
B5	UTDNR2000268653	1/2 - 1 Mile East
B6	UTDNR2000269859	1/2 - 1 Mile East
B7	UTDNR2000268417	1/2 - 1 Mile East
B8	UTDNR2000000258	1/2 - 1 Mile East
B9	UTDNR2000264808	1/2 - 1 Mile East
B10	UTDNR2000269864	1/2 - 1 Mile East
B11	UTDNR2000292318	1/2 - 1 Mile East
B12	UTDNR2000307862	1/2 - 1 Mile East
B13	UTDNR2000291467	1/2 - 1 Mile East
B14	UTDNR2000270596	1/2 - 1 Mile East
B15	UTDNR2000271092	1/2 - 1 Mile East
16	UTDNR2000290160	1/2 - 1 Mile NNW
B17	UTDNR2000030887	1/2 - 1 Mile East
C18	UTDNR2000117805	1/2 - 1 Mile NNW
C19	UTDNR2000117808	1/2 - 1 Mile NNW
C20	UTDNR2000117992	1/2 - 1 Mile NNW
C21	UTDNR2000115996	1/2 - 1 Mile NNW
C22	UTDNR2000115785	1/2 - 1 Mile NNW
C23	UTDNR2000115788	1/2 - 1 Mile NNW
C24	UTDNR2000115952	1/2 - 1 Mile NNW
C25	UTDNR2000304316	1/2 - 1 Mile NNW
C26	UTDNR2000304387	1/2 - 1 Mile NNW
C27	UTDNR2000315166	1/2 - 1 Mile NNW
C28	UTDNR2000127625	1/2 - 1 Mile NNW
C29	UTDNR2000117995	1/2 - 1 Mile NNW
C30	UTDNR2000119854	1/2 - 1 Mile NNW
C31	UTDNR2000125254	1/2 - 1 Mile NNW
D32	UTDNR2000127620	1/2 - 1 Mile West
D33	UTDNR2000127621	1/2 - 1 Mile West
34	UTDNR2000007180	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 6151179.2s



0 1/4 1/2 1 Miles

- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Oil, gas or related wells

N

SITE NAME: RF	CLIENT: DK Environmental LLC
ADDRESS: Richardson Flat Road Heber City UT 84032	CONTACT: Kathy Harris
LAT/LONG: 40.671481 / 111.44958	INQUIRY #: 6151179.2s
	DATE: August 10, 2020 6:17 pm

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Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WNW
1/8 - 1/4 Mile
Higher | **FED USGS** | **USGS40001190399**

Organization ID:	USGS-UT	Organization Name:	USGS Utah Water Science Center
Monitor Location:	(D- 2- 4) 1cbc- 1	Type:	Well
Description:	Not Reported	HUC:	16020101
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	15	Level reading date:	1995-09-05
Feet below surface:	9.89	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1995-08-03	Feet below surface:	8.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-07-07	Feet below surface:	6.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-06-12	Feet below surface:	3.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-05-09	Feet below surface:	3.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-04-06	Feet below surface:	3.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-03-14	Feet below surface:	8.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-12-21	Feet below surface:	13.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-11-09	Feet below surface:	12.91
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-10-07	Feet below surface:	12.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-10-03	Feet below surface:	12.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-09-09	Feet below surface:	12.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-08-11	Feet below surface:	11.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-07-12	Feet below surface:	10.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-06-16	Feet below surface:	9.16

Feet to sea level: Not Reported Note: Not Reported

2
SSW
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000127637**

Database:	Water Rights Database	Water Right #:	35-8832
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Appeal to Appropriate Certificated	Priority Date:	19150226
Uses:	Domestic,	Cubic ft/sec:	.022
Well ID:	0	Owner:	John Clark
Water Right Type:	WR	Supply Source:	Crystal Spring Number 2

A3
WSW
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000022497**

Database:	Water Rights Database	Water Right #:	35-5580
Exchange #:	Not Reported	Type of Diversion:	Point to Point
Application Status:	Perfected; proof filed, right certified		
Status:	Diligence Claim	Priority Date:	1862
Uses:	Domestic,Stockwatering,	Cubic ft/sec:	0
Well ID:	0	Owner:	Nadine F. Gillmor
Water Right Type:	WR	Supply Source:	Springs

A4
WSW
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000055359**

Database:	Water Rights Database	Water Right #:	35-5580
Exchange #:	Not Reported	Type of Diversion:	Point to Point
Application Status:	Perfected; proof filed, right certified		
Status:	Diligence Claim	Priority Date:	1862
Uses:	Domestic,Stockwatering,	Cubic ft/sec:	0
Well ID:	0	Owner:	Nadine F. Gillmor
Water Right Type:	WR	Supply Source:	Springs

B5
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000268653**

Database:	Water Rights Database	Water Right #:	55-9544
Exchange #:	a25137	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20001213	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Extension Irrigation Company	Water Right Type:	CH
Supply Source:	Underground Water Wells (32)		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B6
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000269859**

Database:	Water Rights Database	Water Right #:	55-9631
Exchange #:	a26085	Type of Diversion:	Underground
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Amended	Priority Date:	20011029
Uses:	Municipal,	Cubic ft/sec:	0
Well ID:	0	Owner:	Jordanelle Special Service District
Water Right Type:	CH	Supply Source:	Underground Water Wells (5)

B7
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000268417**

Database:	Water Rights Database	Water Right #:	55-9443
Exchange #:	a24923	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20000911	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Extension Irrigation Company	Water Right Type:	CH
Supply Source:	Underground Water Wells (32)		

B8
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000000258**

Database:	Water Rights Database	Water Right #:	0055003P00
Exchange #:	Not Reported	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	Not Reported	Uses:	Not Reported
Cubic ft/sec:	0	Well ID:	22259
Owner:	Kristin Mclachlan For Jordanelle Special Service Dist		
Water Right Type:	NP	Supply Source:	Non-Production Well: Test

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B9
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000264808**

Database:	Water Rights Database	Water Right #:	55-11203
Exchange #:	a24462	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20000508	Uses:	Irrigation,Municipal,Other,Stockwatering,
Cubic ft/sec:	5.5	Well ID:	0
Owner:	Jordanelle Special Service Dist., Interested Party		
Water Right Type:	CH	Supply Source:	Ontario Drain Tunnel and Provo River

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B10
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000269864**

Database:	Water Rights Database	Water Right #:	55-9632
Exchange #:	a26086	Type of Diversion:	Underground
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Amended	Priority Date:	20011029
Uses:	Municipal,	Cubic ft/sec:	0
Well ID:	0	Owner:	Jordanelle Special Service District
Water Right Type:	CH		
Supply Source:	Underground Water Wells (4) existing/other appls.		

B11
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000292318**

Database:	Water Rights Database	Water Right #:	55-9669
Exchange #:	t27055	Type of Diversion:	Underground
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Permanently Lapsed		
Priority Date:	20020910	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Jordanelle Special Service District	Water Right Type:	CH
Supply Source:	Underground Water Wells (6)		

B12
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000307862**

Database:	Water Rights Database	Water Right #:	55-9632
Exchange #:	a32391	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20070124	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Jordanelle Special Service District	Water Right Type:	HT
Supply Source:	Underground Water Wells (4) existing/other appls.		

B13
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000291467**

Database:	Water Rights Database	Water Right #:	55-9443
Exchange #:	t24922	Type of Diversion:	Underground
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Withdrawn	Priority Date:	20000911
Uses:	Municipal,	Cubic ft/sec:	0
Well ID:	0	Owner:	Extension Irrigation Company
Water Right Type:	CH	Supply Source:	Underground Water Wells (32)

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B14
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000270596**

Database:	Water Rights Database	Water Right #:	55-9669
Exchange #:	a26676	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20020718	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Jordanelle Special Service District	Water Right Type:	CH
Supply Source:	Underground Water Wells (6)		

B15
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000271092**

Database:	Water Rights Database	Water Right #:	55-9699
Exchange #:	a27147	Type of Diversion:	Underground
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	20021108	Uses:	Municipal,
Cubic ft/sec:	0	Well ID:	0
Owner:	Jordanelle Special Service District	Water Right Type:	CH
Supply Source:	Underground Water Wells (6)		

16
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000290160**

Database:	Water Rights Database	Water Right #:	35-10282
Exchange #:	t20241	Type of Diversion:	Surface
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Withdrawn	Priority Date:	19960729
Uses:	Other,	Cubic ft/sec:	0
Well ID:	0	Owner:	Weber River Water User'S Association
Water Right Type:	CH	Supply Source:	Silver Creek and Weber River

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B17
East
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000030887**

Database:	Water Rights Database	Water Right #:	55-7928
Exchange #:	Not Reported	Type of Diversion:	Point to Point
Application Status:	Perfected; proof filed, right certified		
Status:	Diligence Claim	Priority Date:	1862
Uses:	Domestic,Stockwatering,	Cubic ft/sec:	0
Well ID:	0	Owner:	Charles F. And Nadine F. Gillmor
Water Right Type:	WR	Supply Source:	Todd Hollow and Springs

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C18
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000117805**

Database:	Water Rights Database	Water Right #:	35-11804
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,Stockwatering,	Cubic ft/sec:	1.869
Well ID:	5758	Owner:	Estate Of Florence Gillmor
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

---

C19
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000117808**

Database:	Water Rights Database	Water Right #:	35-11805
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,	Cubic ft/sec:	.25
Well ID:	5758	Owner:	Florence Gillmor
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

---

C20
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000117992**

Database:	Water Rights Database	Water Right #:	35-11980
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Domestic,Irrigation,Stockwatering,	Cubic ft/sec:	0
Well ID:	5758	Owner:	G-Bar Ventures, Llc
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

---

C21
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000115996**

Database:	Water Rights Database	Water Right #:	35-10525
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,Municipal,	Cubic ft/sec:	2.11
Well ID:	5758	Owner:	Park City Municipal Building Authority
Water Right Type:	WR		
Supply Source:	Silver Creek, Dorrity & Pace Springs and Seepage		

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
C22 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000115785**

Database:	Water Rights Database	Water Right #:	35-10074
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,	Cubic ft/sec:	0
Well ID:	5758		
Owner:	Mountain Regional Water Special Service District		
Water Right Type:	WR	Supply Source:	Silver Creek, Springs, Seepage Water

---

	Database	EDR ID Number
C23 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000115788**

Database:	Water Rights Database	Water Right #:	35-10075
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,Municipal,	Cubic ft/sec:	.418
Well ID:	5758		
Owner:	Mountain Regional Water Special Service District		
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity and Pace Springs

---

	Database	EDR ID Number
C24 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000115952**

Database:	Water Rights Database	Water Right #:	35-10447
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Terminated; right most likely consolidated		
Status:	Decree Terminated	Priority Date:	1861
Uses:	Domestic,Irrigation,Stockwatering,	Cubic ft/sec:	1.725
Well ID:	5758	Owner:	Park City Water Service District
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

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	Database	EDR ID Number
C25 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000304316**

Database:	Water Rights Database	Water Right #:	35-10447
Exchange #:	a21295	Type of Diversion:	Surface
Application Status:	Terminated; right most likely consolidated		
Status:	Appeal to Appropriate Withdrawn	Priority Date:	19970707
Uses:	Domestic,Irrigation,Municipal,Stockwatering,		
Cubic ft/sec:	1.725	Well ID:	0
Owner:	Park City Water Service District	Water Right Type:	HT
Supply Source:	Silver Creek, Dorrity & Pace Springs		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C26
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000304387**

Database:	Water Rights Database	Water Right #:	35-10525
Exchange #:	a21683	Type of Diversion:	Surface
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	19971112	Uses:	Irrigation,Municipal,
Cubic ft/sec:	2.11	Well ID:	0
Owner:	Park City Municipal Building Authority		
Water Right Type:	HT	Supply Source:	Silver Creek, Dorrity & Pace Springs

---

C27
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000315166**

Database:	Water Rights Database	Water Right #:	35-1587
Exchange #:	E148	Type of Diversion:	Surface
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	19640413	Uses:	Irrigation,
Cubic ft/sec:	0	Well ID:	5758
Owner:	Resort Center Associates, Llc	Water Right Type:	EX
Supply Source:	Wanship Reservoir		

C28
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000127625**

Database:	Water Rights Database	Water Right #:	35-8820
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Domestic,Irrigation,Municipal,Stockwatering,		
Cubic ft/sec:	2.116	Well ID:	5758
Owner:	Park City Municipal Building Authority		
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

---

C29
NNW
1/2 - 1 Mile
Lower

UT WELLS **UTDNR2000117995**

Database:	Water Rights Database	Water Right #:	35-11981
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Domestic,Irrigation,Stockwatering,	Cubic ft/sec:	0
Well ID:	5758	Owner:	Resort Center Associates, Llc
Water Right Type:	WR	Supply Source:	Silver Creek, Dorrity & Pace Springs

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
C30 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000119854**

Database:	Water Rights Database	Water Right #:	35-12946
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,	Cubic ft/sec:	0
Well ID:	5758		
Owner:	Mountain Regional Water Special Service District		
Water Right Type:	WR	Supply Source:	Silver Creek, Springs, Seepage Water

---

	Database	EDR ID Number
C31 **NNW** **1/2 - 1 Mile** **Lower**	**UT WELLS**	**UTDNR2000125254**

Database:	Water Rights Database	Water Right #:	35-5706
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	18610101
Uses:	Domestic,Irrigation,Municipal,Stockwatering,		
Cubic ft/sec:	0	Well ID:	5758
Owner:	Municipal Building Authority Of Park City		
Water Right Type:	WR	Supply Source:	Silver Crk.Dorrity Spg.Pace & L.Pace

---

	Database	EDR ID Number
D32 **West** **1/2 - 1 Mile** **Higher**	**UT WELLS**	**UTDNR2000127620**

Database:	Water Rights Database	Water Right #:	35-8818
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,	Cubic ft/sec:	.8
Well ID:	0	Owner:	Union Lime & Stone Co.
Water Right Type:	WR	Supply Source:	Silver Creek

	Database	EDR ID Number
D33 **West** **1/2 - 1 Mile** **Higher**	**UT WELLS**	**UTDNR2000127621**

Database:	Water Rights Database	Water Right #:	35-8819
Exchange #:	Not Reported	Type of Diversion:	Surface
Application Status:	Perfected; proof filed, right certified		
Status:	Decree	Priority Date:	1861
Uses:	Irrigation,	Cubic ft/sec:	1.4
Well ID:	0	Owner:	Silver King Coalition Mining Co.
Water Right Type:	WR	Supply Source:	Silver Creek

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database | EDR ID Number

34
SSE
1/2 - 1 Mile
Higher

UT WELLS **UTDNR2000007180**

Database:	Water Rights Database	Water Right #:	1255007M00
Exchange #:	Not Reported	Type of Diversion:	Abandonded Well
Application Status:	Approved	Status:	Appeal to Appropriate Approved
Priority Date:	Not Reported	Uses:	Not Reported
Cubic ft/sec:	0	Well ID:	436241
Owner:	Ivory Development	Water Right Type:	NP
Supply Source:	Non-Production Well: Test		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: UT Radon

Radon Test Results

Zipcode	Maximum	Average	Num Tests	Test Term
84060	11	1.4	22	Long Term
84060	47.2	4.5	152	Short Term

Federal EPA Radon Zone for SUMMIT County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Utah Geological Survey
Telephone: 801-537-3300

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Rights Database
Source: Department of Natural Resources, Division of Water Rights
Telephone: 801-538-7408

Division of Drinking Water Well Data
Source: Department of Environmental Quality
Telephone: 801-536-4200

OTHER STATE DATABASE INFORMATION

Utah Oil, Gas and Mining Database
Source: Department of Natural Resources
Telephone: 801-538-5340
The Well Data file contains one record of basic information for each well in the Utah Division of Oil, Gas and Mining database.

RADON

State Database: UT Radon
Source: Department of Environmental Quality
Telephone: 801-536-4250
Test Results by Zip Code

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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RF

Richardson Flat Road

Heber City, UT 84032

Inquiry Number: 6151179.8

August 11, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

08/11/20

Site Name:

RF
Richardson Flat Road
Heber City, UT 84032
EDR Inquiry # 6151179.8

Client Name:

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
Contact: Kathy Harris

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=1000'	Flight Year: 2016	USDA/NAIP
2011	1"=1000'	Flight Year: 2011	USDA/NAIP
1993	1"=1000'	Acquisition Date: August 23, 1993	USGS/DOQQ
1983	1"=1000'	Flight Date: September 05, 1983	USDA
1981	1"=1000'	Flight Date: August 17, 1981	USDA
1978	1"=1000'	Flight Date: October 05, 1978	USDA
1976	1"=1000'	Flight Date: August 24, 1976	USGS
1967	1"=1000'	Flight Date: July 11, 1967	USDA
1962	1"=1000'	Flight Date: August 01, 1962	USDA
1953	1"=1000'	Flight Date: July 03, 1953	USGS

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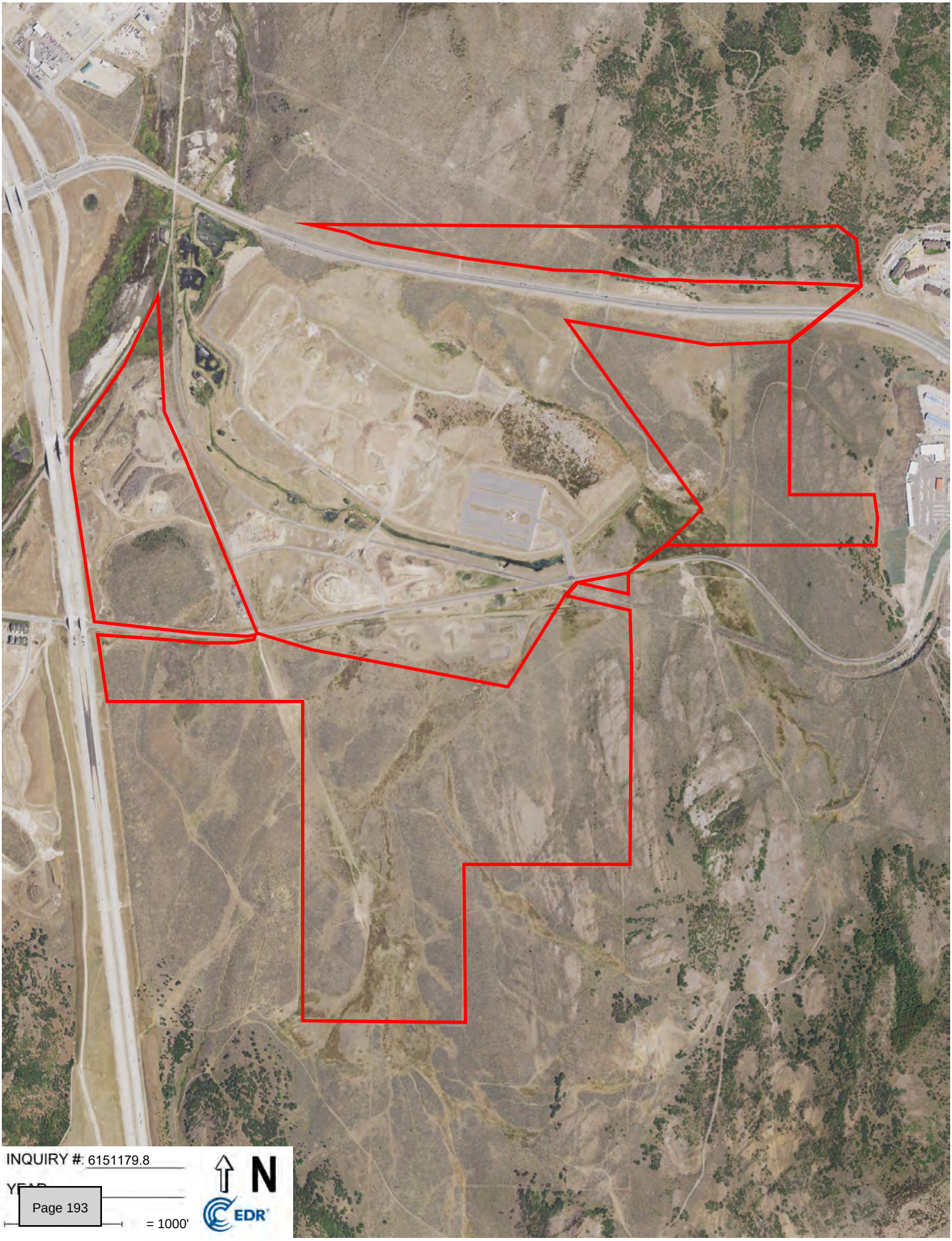
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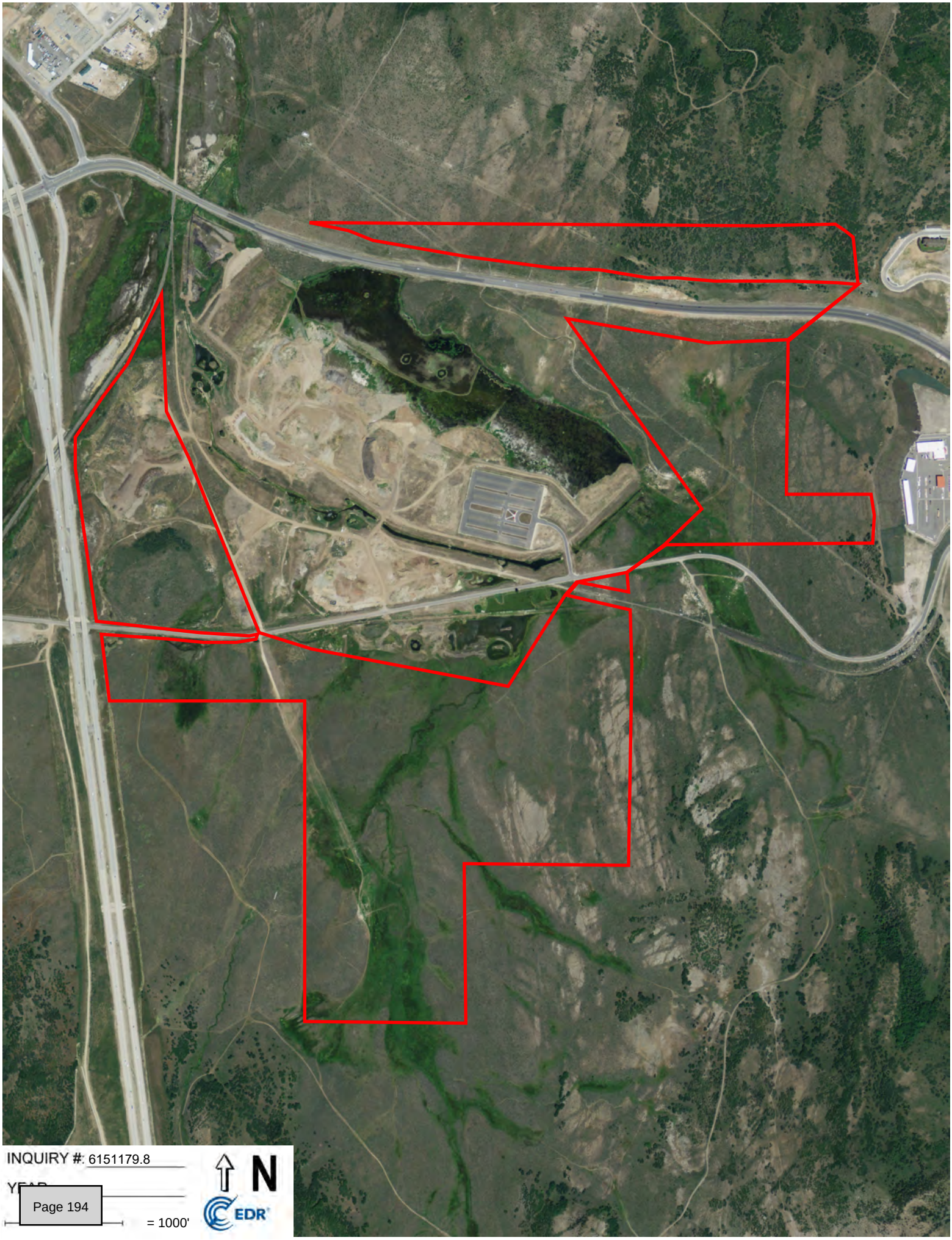
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INQUIRY #: 6151179.8

YEAR

Page 195

= 1000'

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EDR

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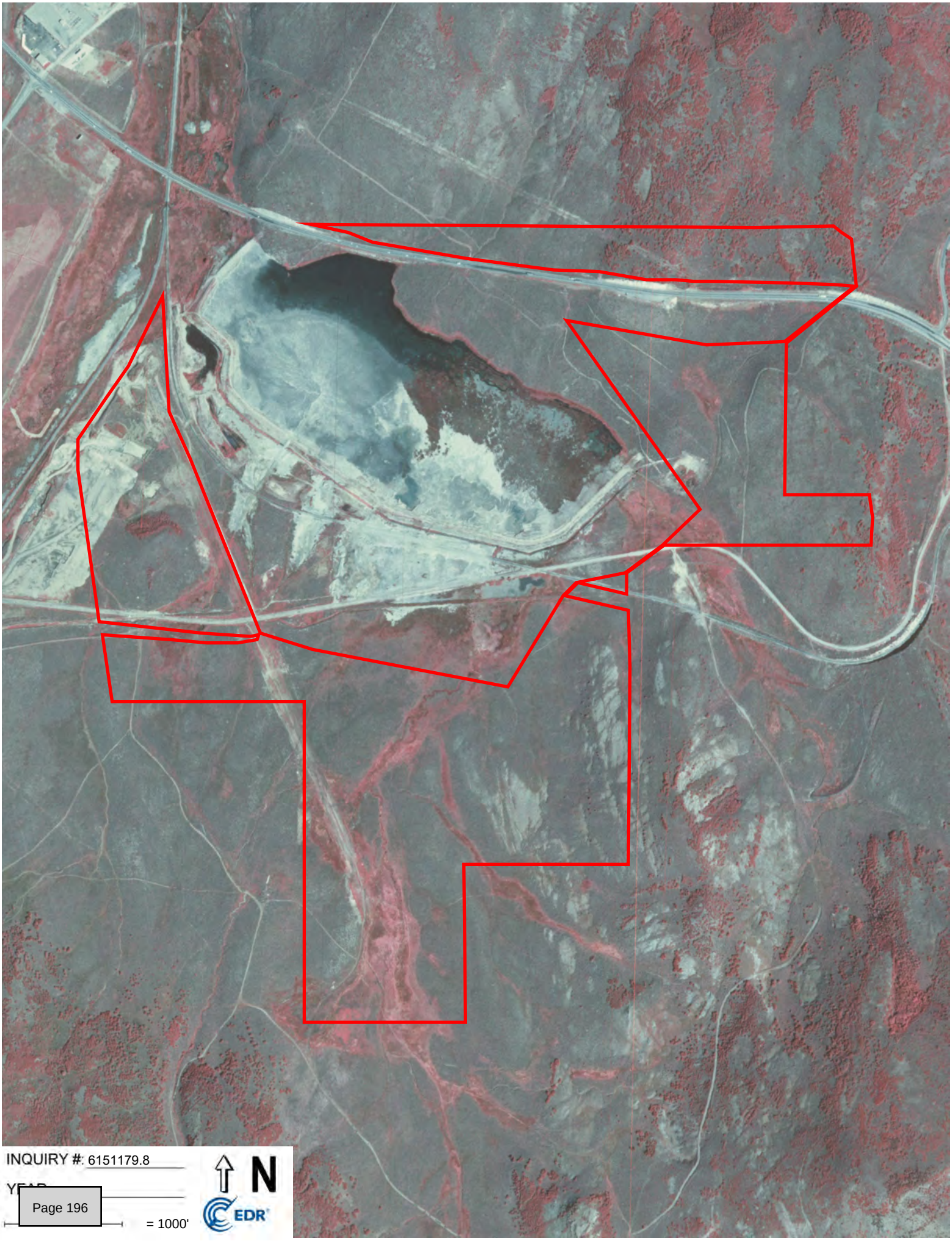
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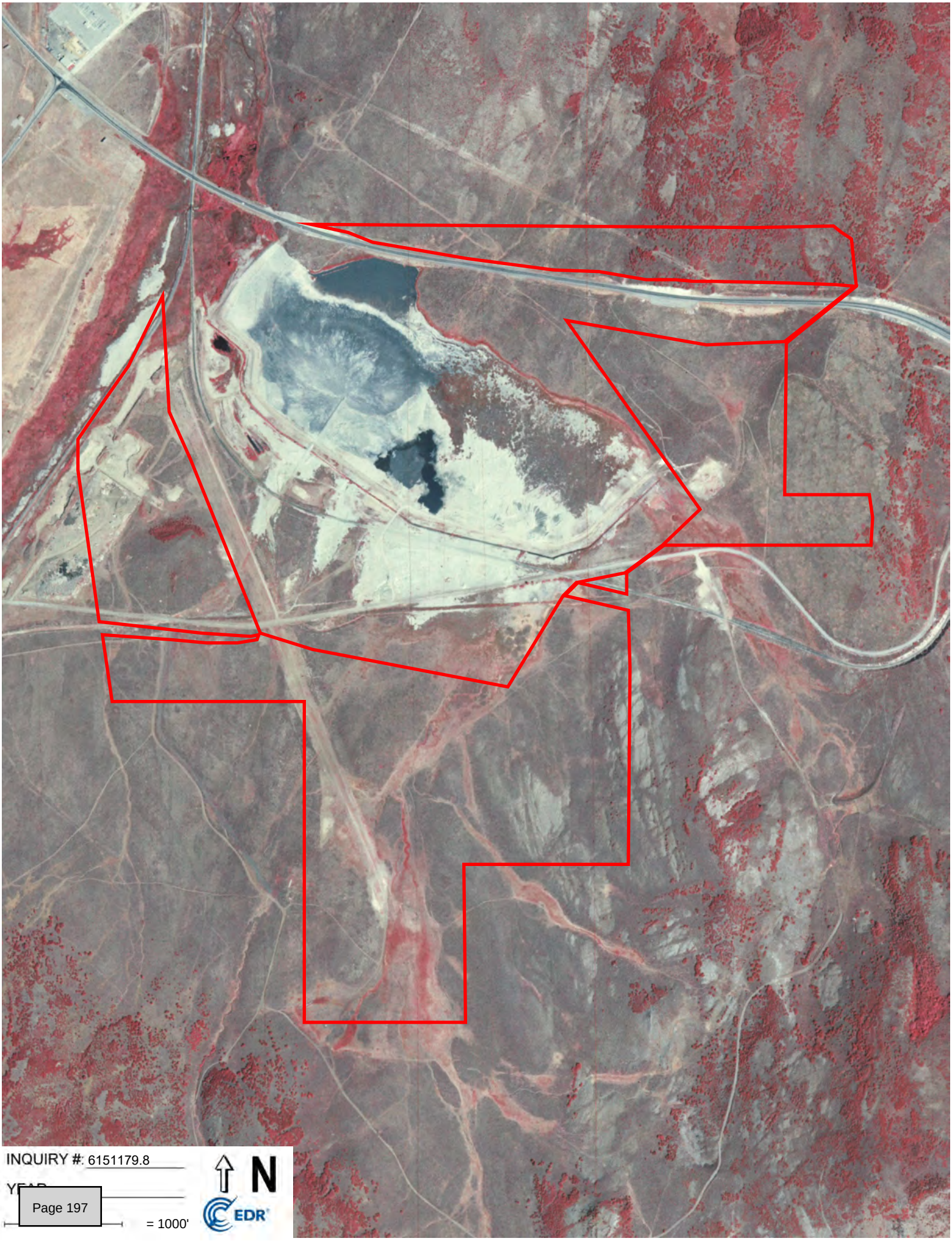
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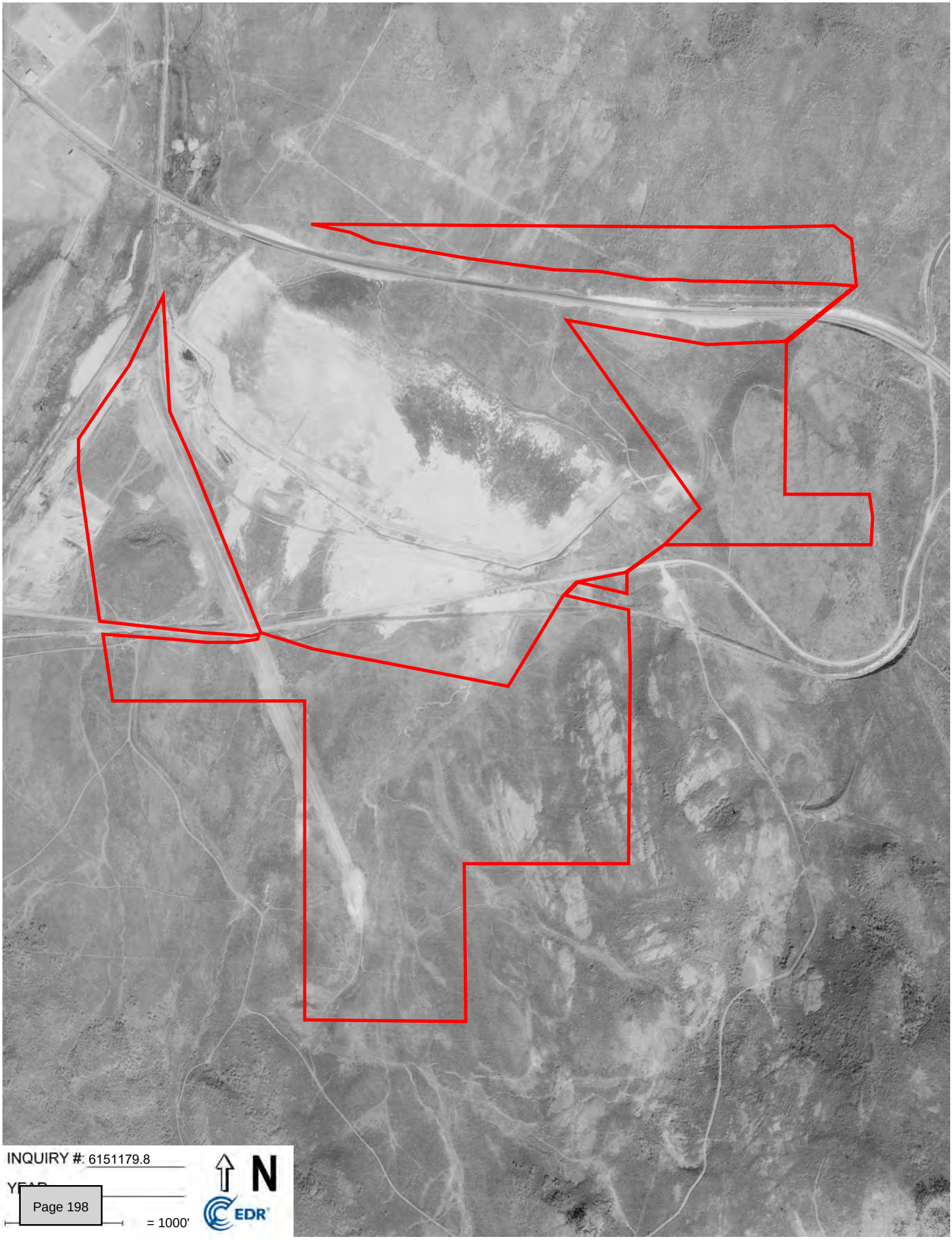
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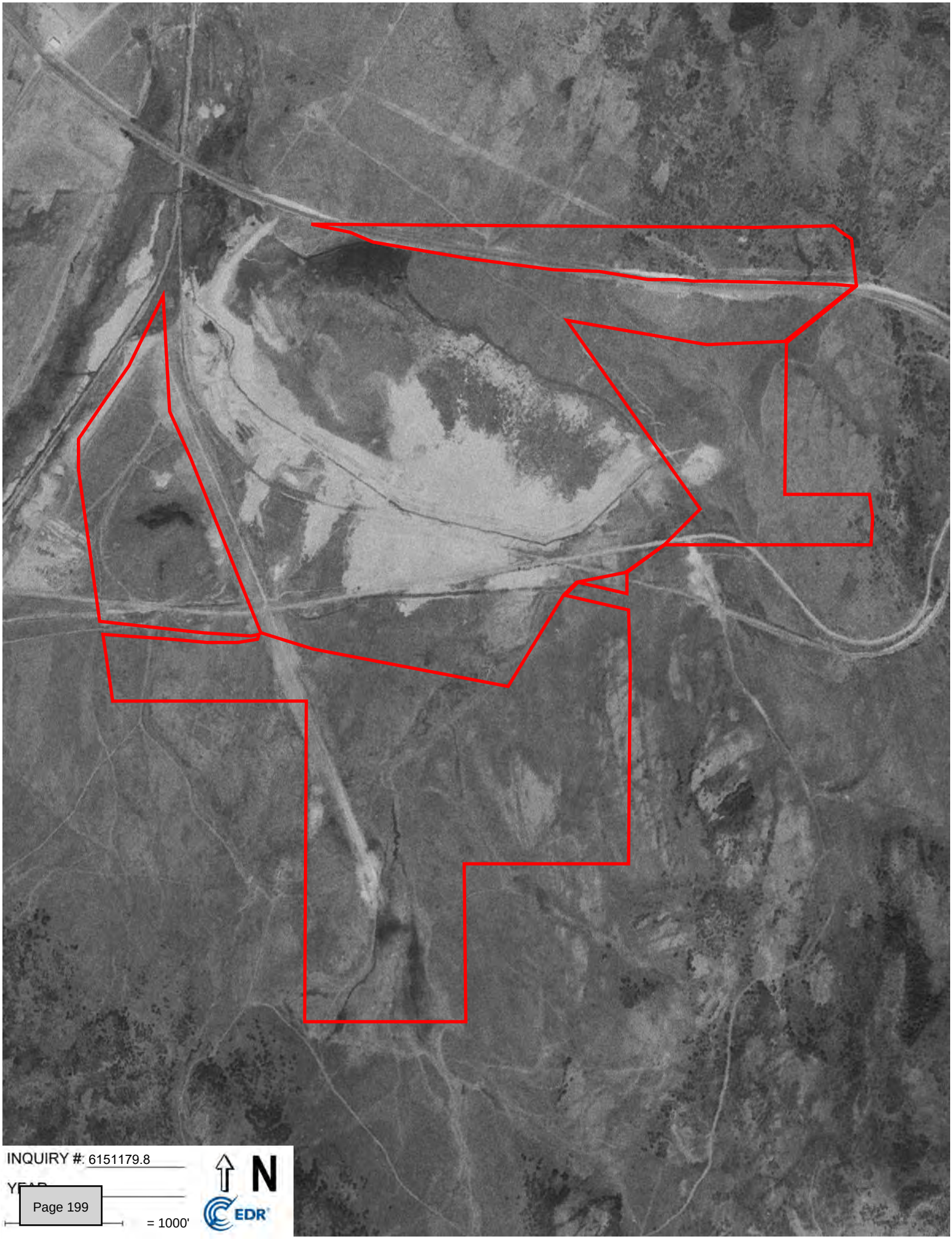
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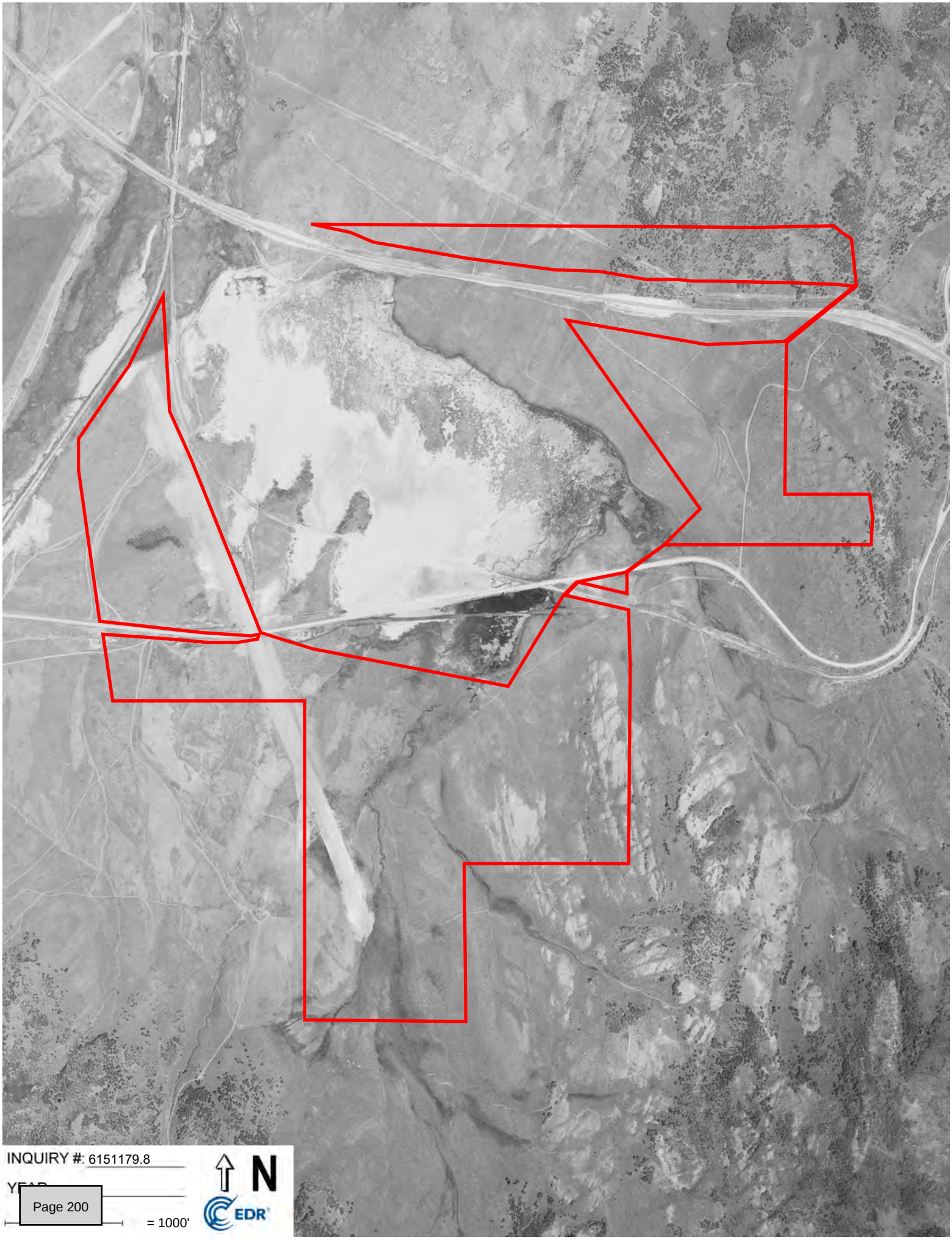
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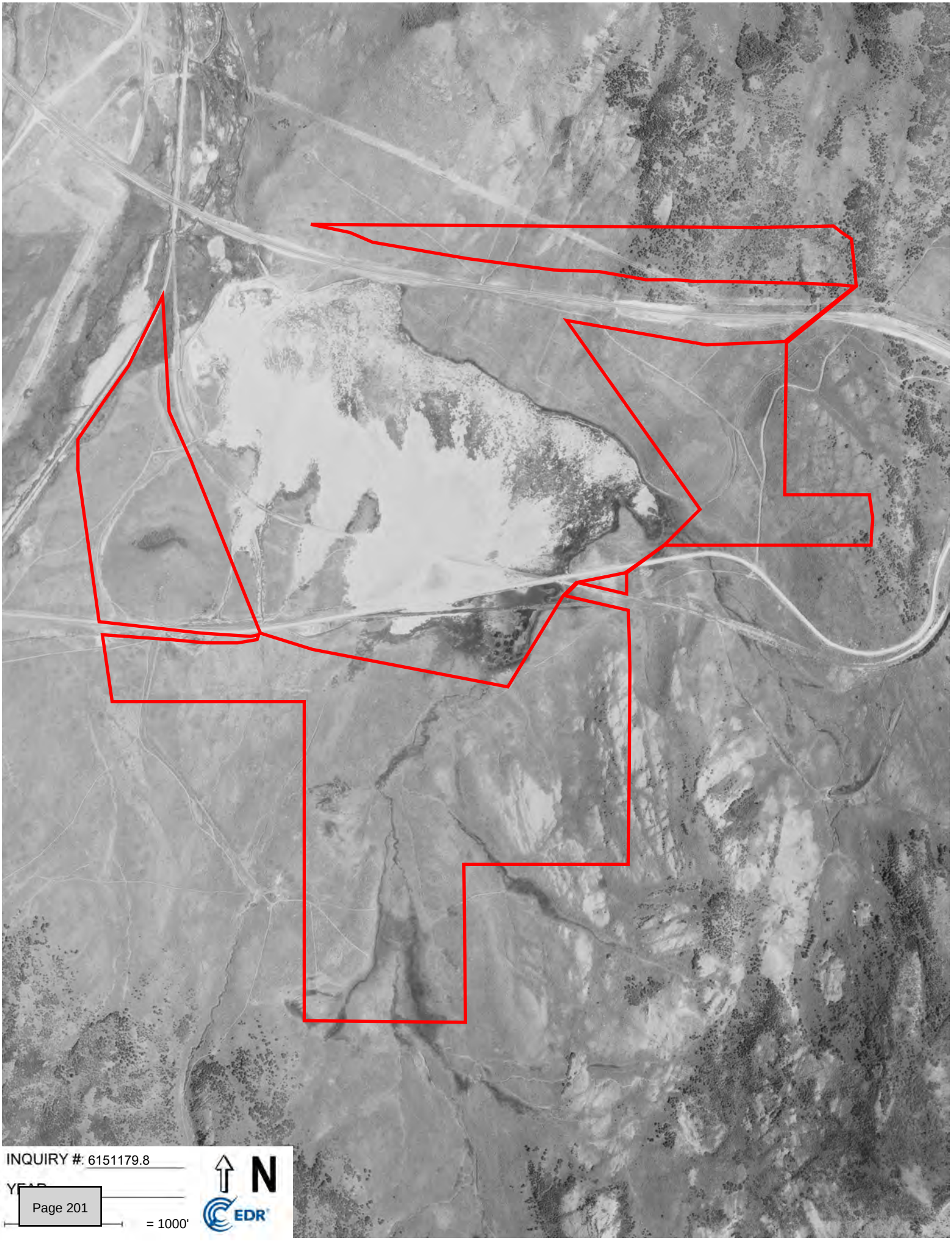
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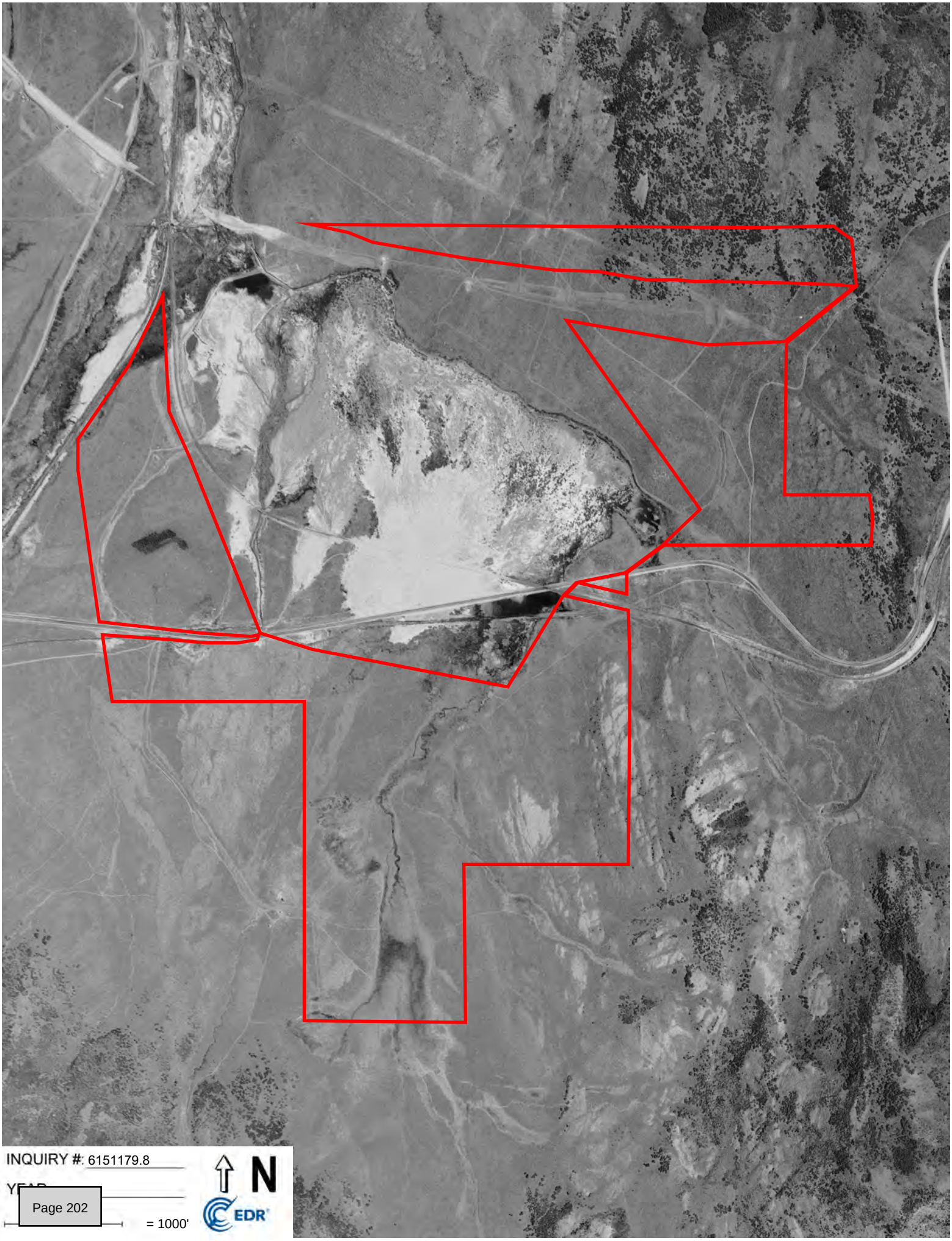
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Page 202
= 1000'
EDR

RF

Richardson Flat Road

Heber City, UT 84032

Inquiry Number: 6151179.4

August 11, 2020

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

08/11/20

Site Name:

RF
Richardson Flat Road
Heber City, UT 84032
EDR Inquiry # 6151179.4

Client Name:

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
Contact: Kathy Harris

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by DK Environmental LLC were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 20-056
Project: RF

Coordinates:

Latitude:	40.671481 40° 40' 17" North
Longitude:	-111.44958 -111° 26' 58" West
UTM Zone:	Zone 12 North
UTM X Meters:	462002.46
UTM Y Meters:	4502386.54
Elevation:	6638.00' above sea level

Maps Provided:

1999
1980
1955
1903
1900

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1999 Source Sheets



Park City East
1999
7.5-minute, 24000
Aerial Photo Revised 1997

1980 Source Sheets



Salt Lake City
1980
30-minute, 100000
Aerial Photo Revised 1976

1955 Source Sheets



Park City East
1955
7.5-minute, 24000
Aerial Photo Revised 1953

1903 Source Sheets



Coalville
1903
30-minute, 125000

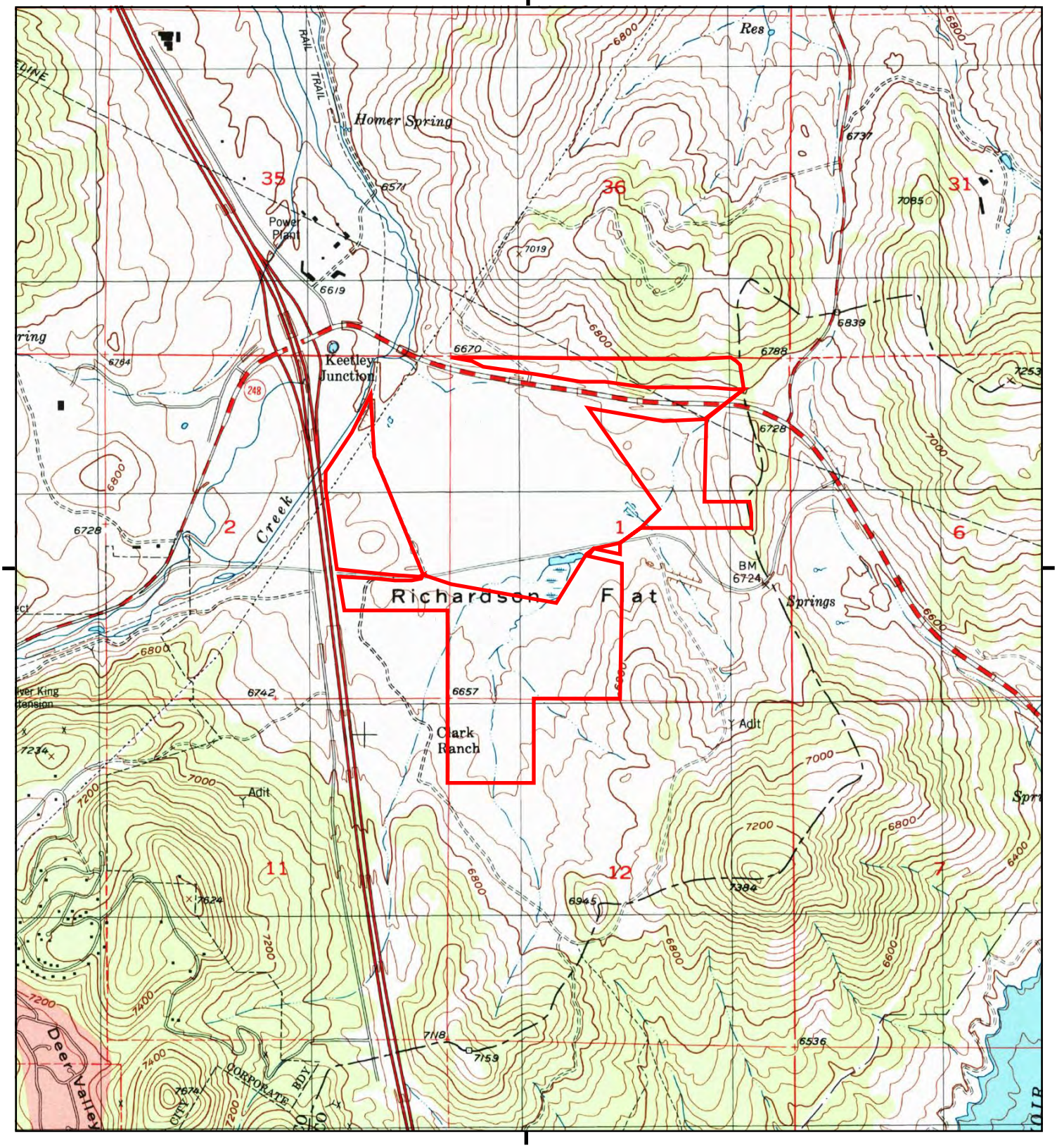
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1900 Source Sheets



Coalville
1900
30-minute, 125000



This report includes information from the following map sheet(s).

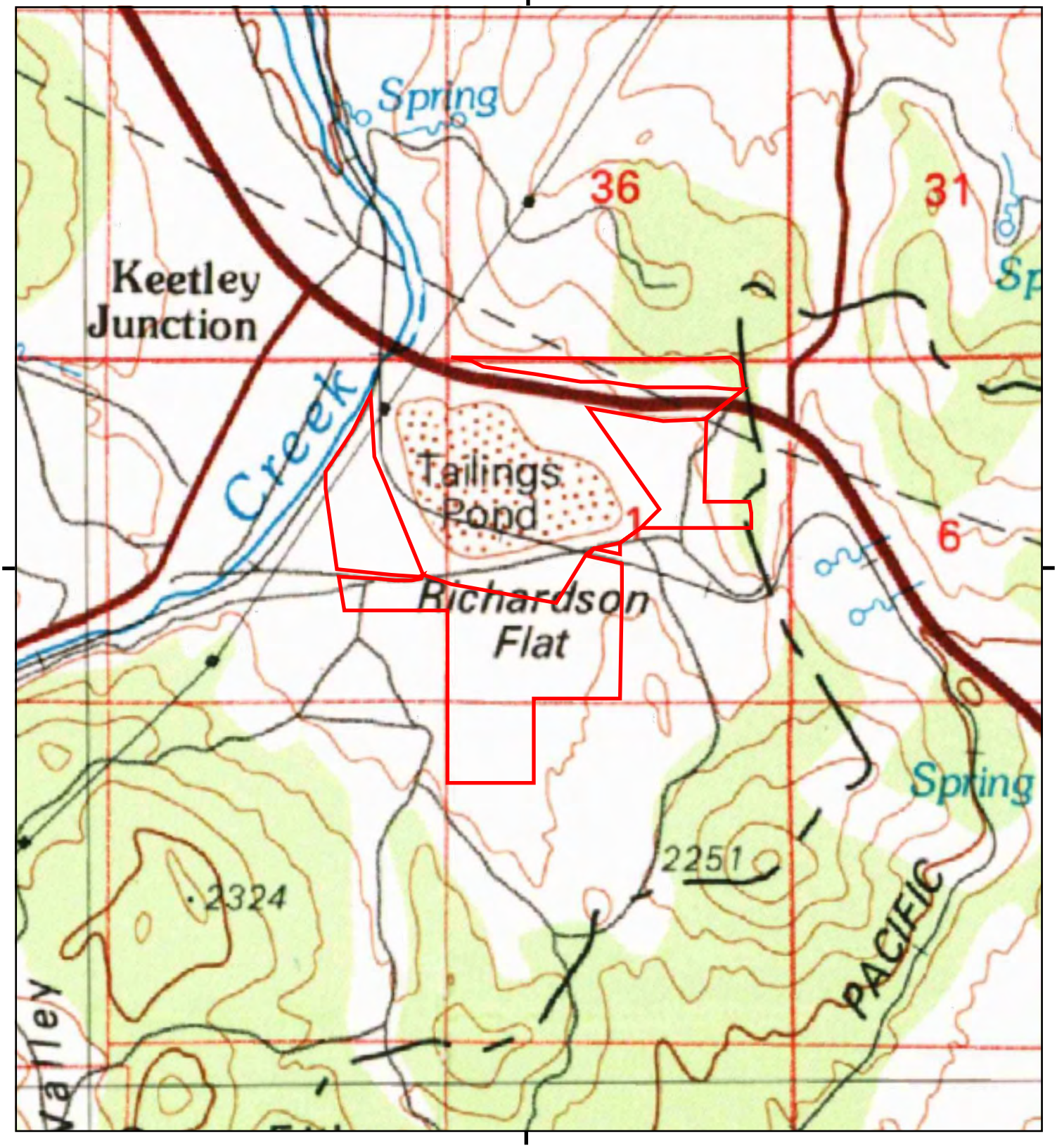
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Park City East, 1999, 7.5-minute

SITE NAME: RF
ADDRESS: Richardson Flat Road
Heber City, UT 84032
CLIENT: DK Environmental LLC

N



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

TP, Salt Lake City, 1980, 30-minute

Page 208

SITE NAME: RF
ADDRESS: Richardson Flat Road
Heber City, UT 84032
CLIENT: DK Environmental LLC

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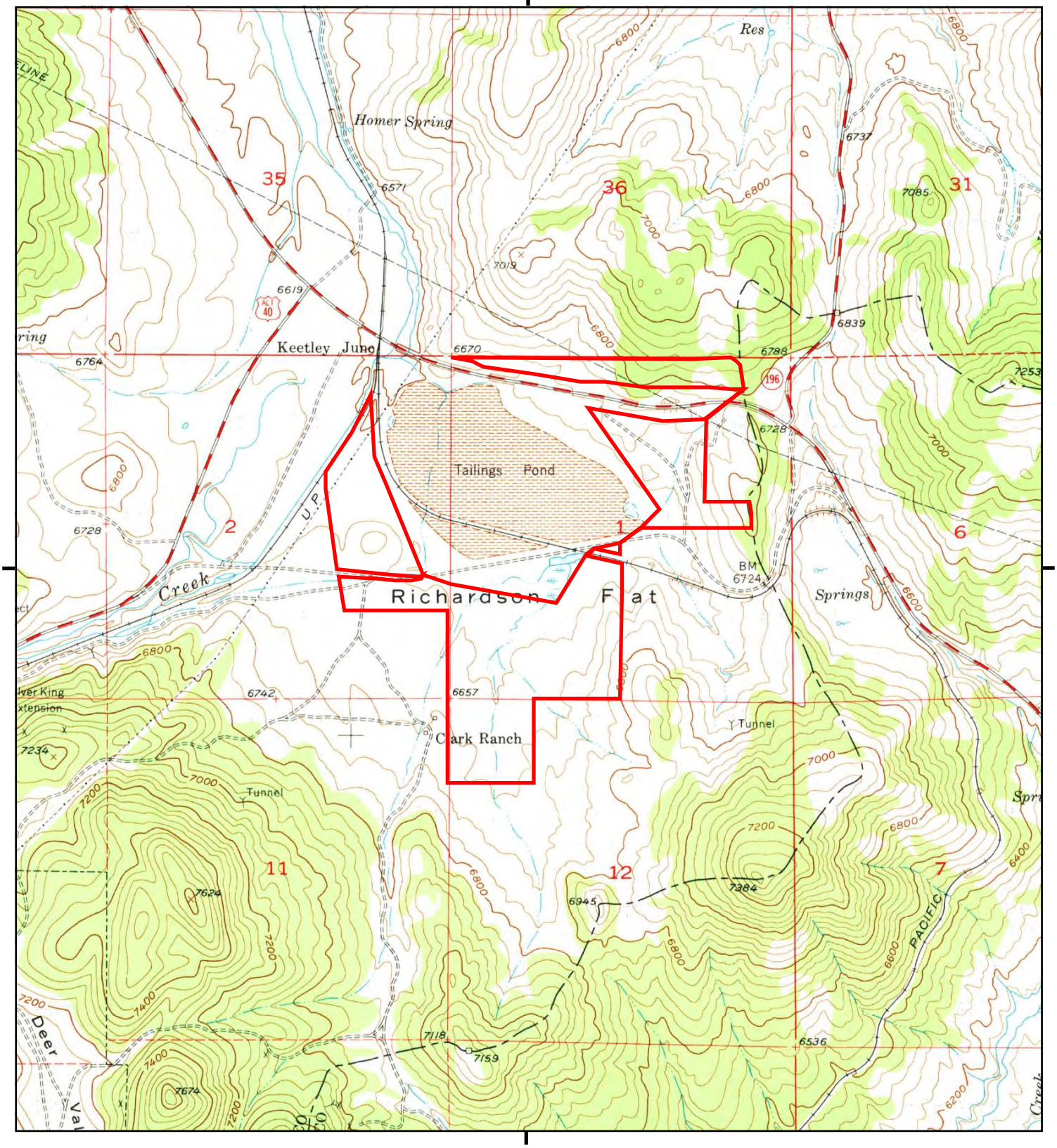

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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Park City East, 1955, 7.5-minute

SITE NAME: RF
ADDRESS: Richardson Flat Road
Heber City, UT 84032
CLIENT: DK Environmental LLC

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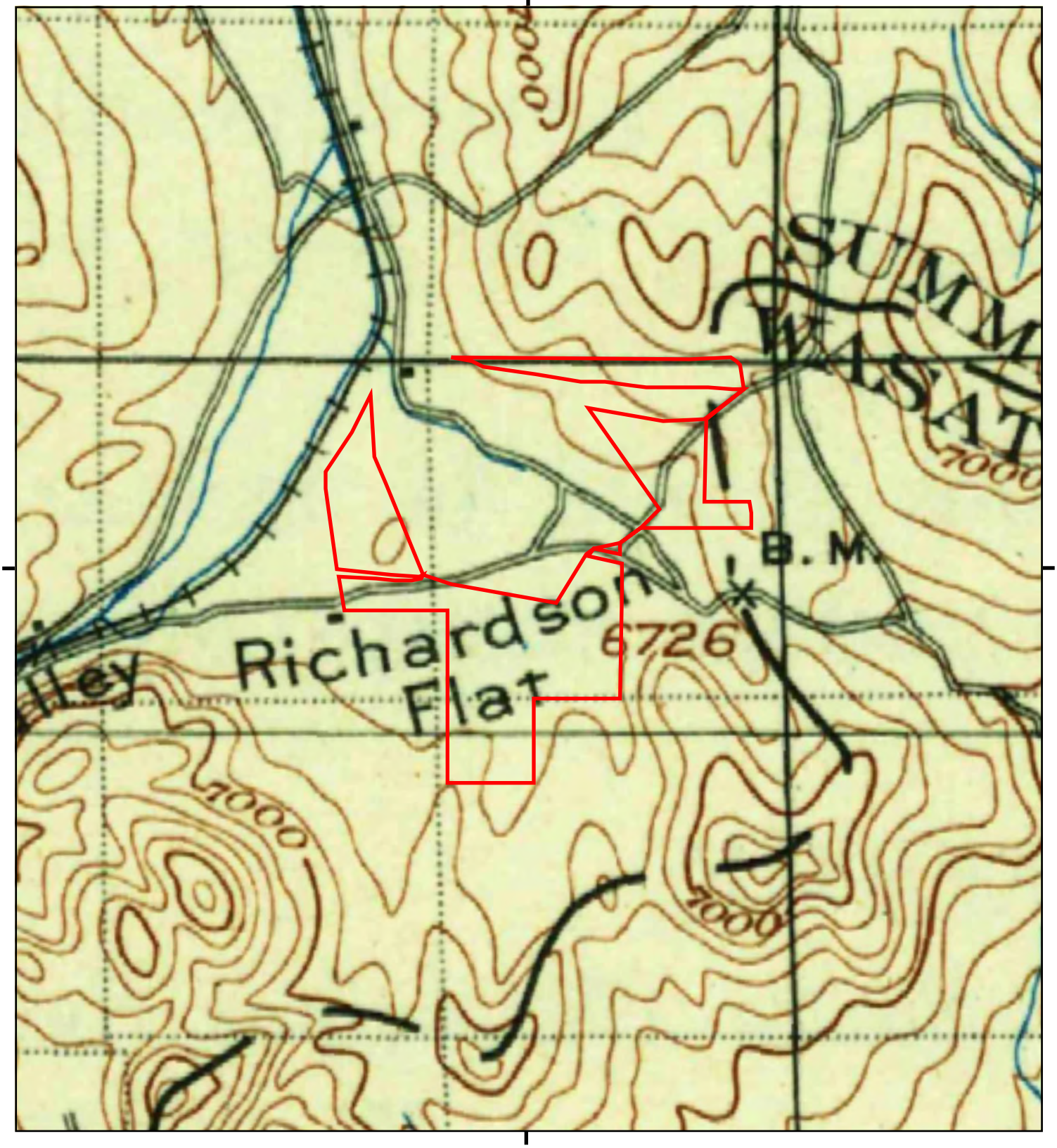

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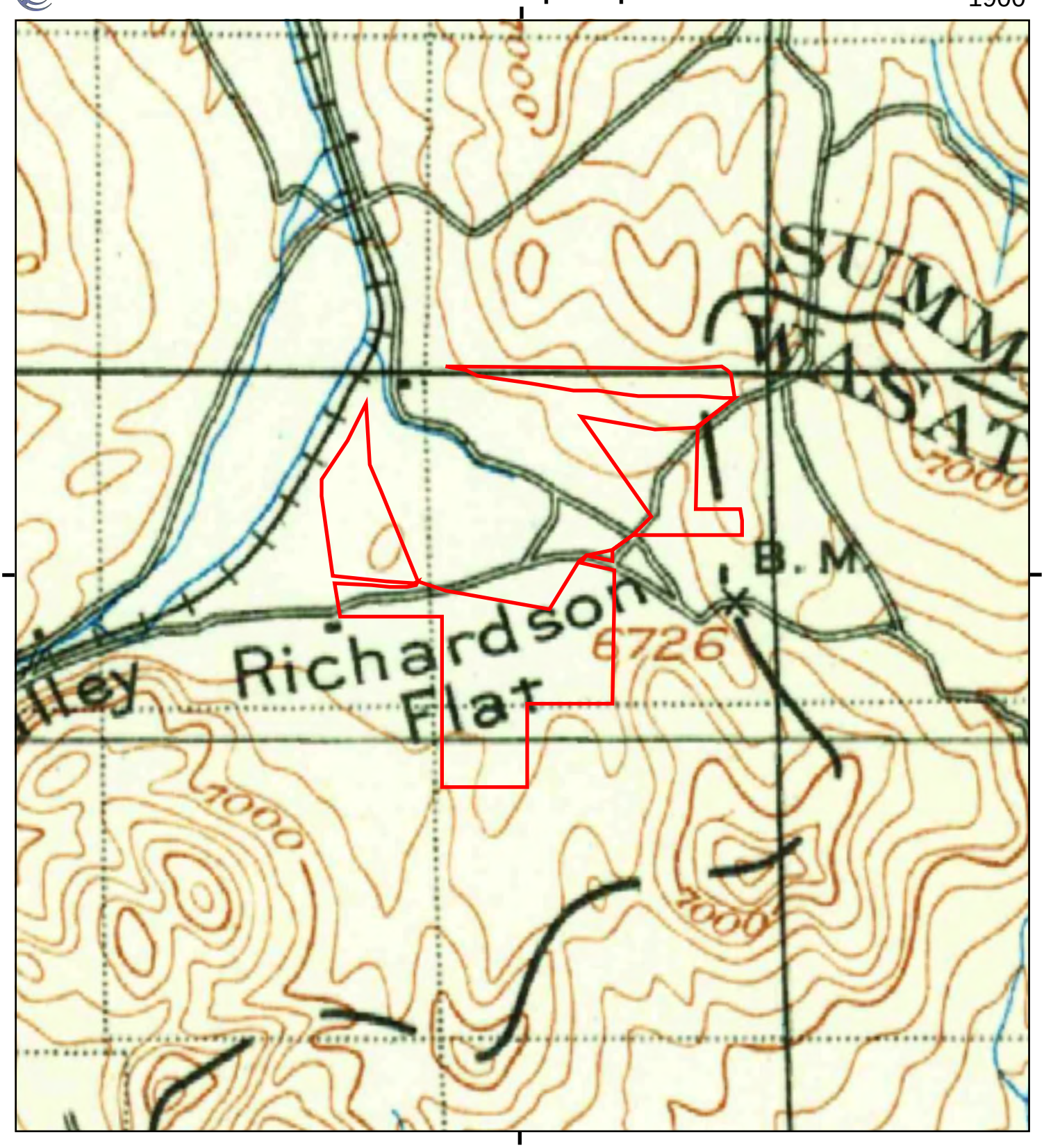
NW N NE
W E
SW S SE

TP, Coalville, 1903, 30-minute

Page 210

SITE NAME: RF
ADDRESS: Richardson Flat Road
Heber City, UT 84032
CLIENT: DK Environmental LLC

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Coalville, 1900, 30-minute

Page 211

SITE NAME: RF
ADDRESS: Richardson Flat Road
Heber City, UT 84032
CLIENT: DK Environmental LLC

N

RF

Richardson Flat Road

Heber City, UT 84032

Inquiry Number: 6151179.3

August 10, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/10/20

Site Name:

RF
Richardson Flat Road
Heber City, UT 84032
EDR Inquiry # 6151179.3

Client Name:

DK Environmental LLC
3739 Wagon Wheel Way
Park City, UT 84098
Contact: Kathy Harris

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by DK Environmental LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 4094-44CF-A522

PO # 20-056

Project RF

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 4094-44CF-A522

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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RF
Richardson Flat Road
Heber City, UT 84032

Inquiry Number: 6151179.10
August 13, 2020

The EDR-City Directory Image Report

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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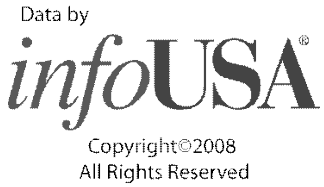


RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☐	☐	EDR Digital Archive
2014	☐	☐	EDR Digital Archive
2010	☐	☐	EDR Digital Archive
2005	☐	☐	EDR Digital Archive
2000	☐	☐	EDR Digital Archive
1995	☐	☐	EDR Digital Archive
1992	☐	☐	EDR Digital Archive

FINDINGS

TARGET PROPERTY STREET

Richardson Flat Road
Heber City, UT 84032

Year	*CD Image*	*Source*	
RICHARDSON FLAT ROAD			
2017	-	EDR Digital Archive	Street not listed in Source
2014	-	EDR Digital Archive	Street not listed in Source
2010	-	EDR Digital Archive	Street not listed in Source
2005	-	EDR Digital Archive	Street not listed in Source
2000	-	EDR Digital Archive	Street not listed in Source
1995	-	EDR Digital Archive	Street not listed in Source
1992	-	EDR Digital Archive	Street not listed in Source

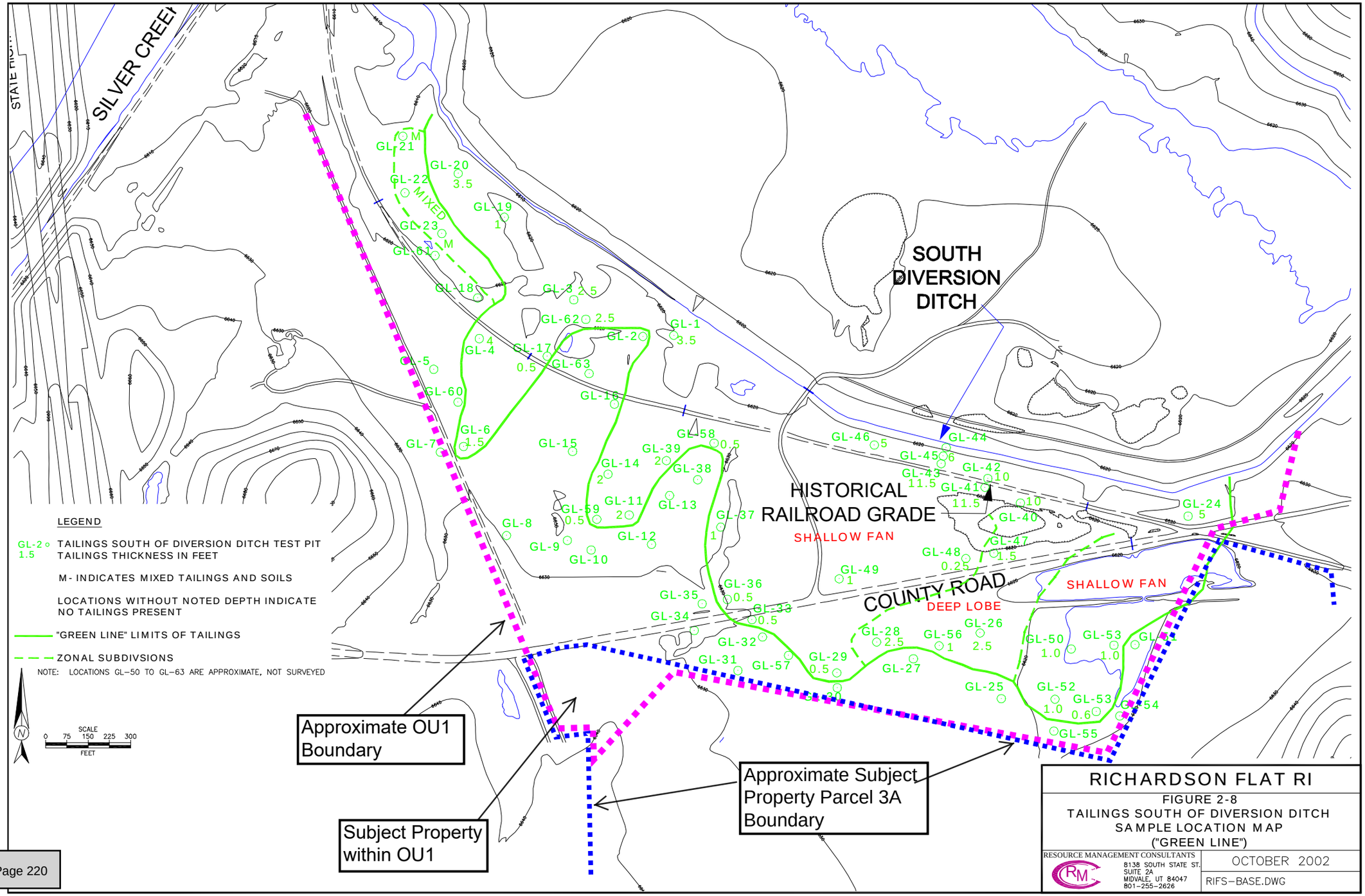
FINDINGS

CROSS STREETS

No Cross Streets Identified

APPENDIX D

Supporting Documents



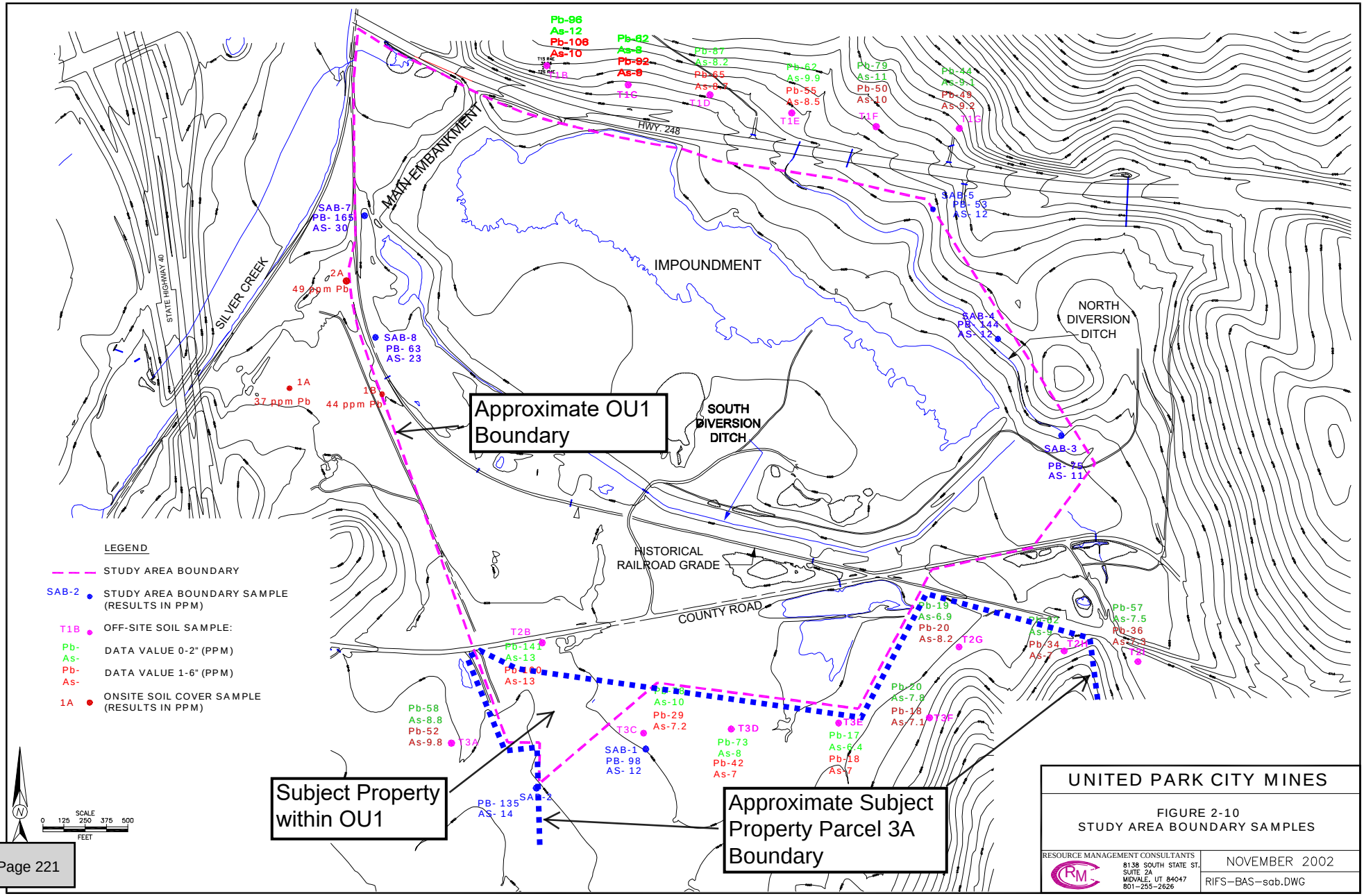
RICHARDSON FLAT RI

FIGURE 2-8
TAILINGS SOUTH OF DIVERSION DITCH
SAMPLE LOCATION MAP
("GREEN LINE")

RESOURCE MANAGEMENT CONSULTANTS
8138 SOUTH STATE ST.
SUITE 2A
MIDVALE, UT 84047
801-255-2626

OCTOBER 2002

RIFS-BASE.DWG



UNITED PARK CITY MINES

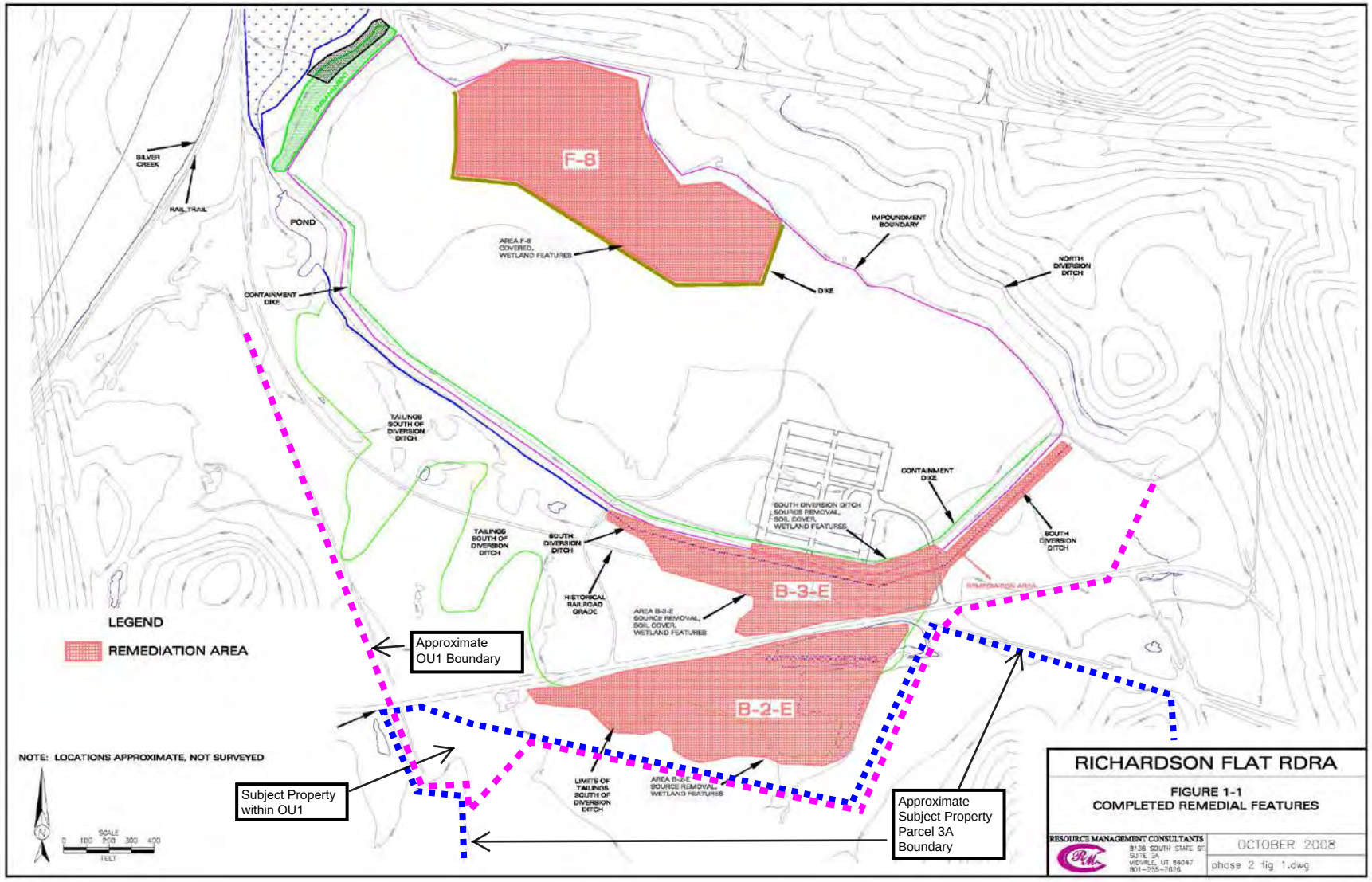
FIGURE 2-10
STUDY AREA BOUNDARY SAMPLES

RESOURCE MANAGEMENT CONSULTANTS
8138 SOUTH STATE ST.
SUITE 2A
MIDVALE, UT 84047
801-255-2626

NOVEMBER 2002

RIFS-BAS-sab.DWG

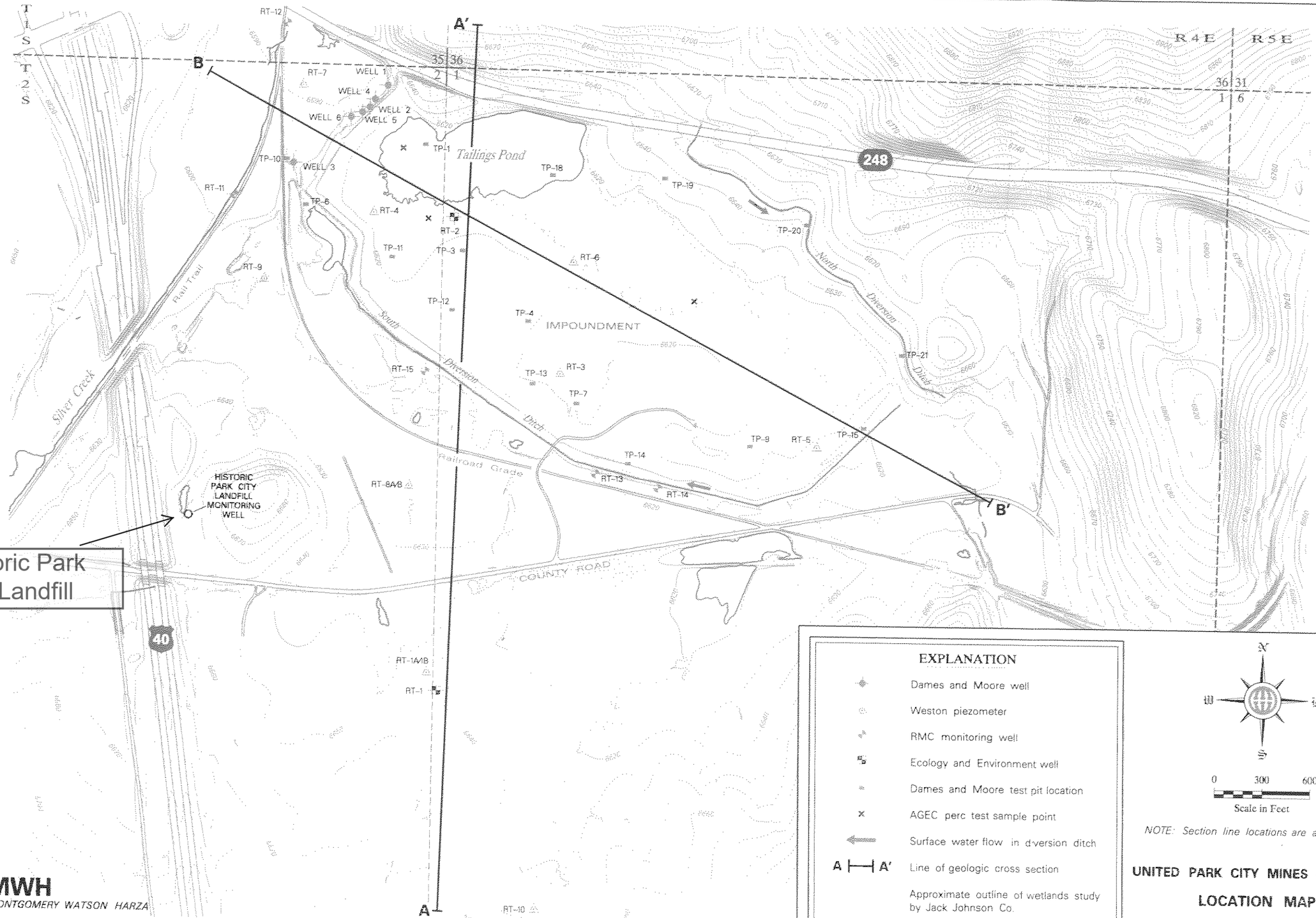
Figure C-2: 2008 Phase 2 Completion Map



PLOT DATE/TIME 032002 03:47:25 PM

I:\parkcity\fig1pcmine.dgn

FILE



NOTE: Section line locations are approximate

MWH
MONTGOMERY WATSON HARZA

UNITED PARK CITY MINES COMPANY

LOCATION MAP

FIGURE 1


N
OU3
OU2 Boundary
OU3
Floodplain
Tailings
OU1
Middle Reach (OU3)
Prospector Square
Drain (OU4)
Silver Maple Claim (OU3)
See Appendix B Map
Legend (Appendix A)
Prospector Square Drain (OU4)
LSC-MR Boundary (OU3)
C Boundary (OU2)
Richardson Flat Boundary (OU1)
0 0.225 0.45 0.9 1.35 1.8
Mile

ENTRY NO. 00830829
11/19/2007 01:12:13 PM B: 1900 P: 0086
Decree PAGE 1/3
ALAN SPRIGGS, SUMMIT COUNTY RECORDER
FEE 14.00 BY KEVIN R MURRAY

WHEN RECORDED MAIL TO:
Kevin R Murray, Esq.
Chapman and Cutler LLP
201 South Main, Suite 2000
Salt Lake City, UT 84111

Parcel No. SS-88

NOTICE OF CONSENT DECREE

Pursuant to this Notice of Consent Decree, ("Notice"), United Park City Mines ("United Park"), a Delaware corporation and owner of certain real property located in Summit County, Utah, as further defined on Exhibit A attached hereto and incorporated herein by reference (the "Property"), hereby provides notice of the matters described herein to all subsequent owners, operators, and other persons who hereafter come to have any interest in the Property as described herein.

1. The Property was originally proposed for inclusion on the National Priorities List ("NPL") on June 24, 1988 but was removed from NPL consideration in February 1991.

2. The Property was re-proposed for the NPL on February 7, 1992 but no action has been taken with regard to this proposed listing.

3. United Park has performed various investigations and studies relating to environmental conditions associated with the Property.

4. The U.S. Environmental Protection Agency adopted on July 6, 2005 a final Record of Decision ("ROD") requiring that certain remedial actions be implemented at the Property.

5. The United States, on behalf of the Administrator of the EPA, filed a complaint in the United States District Court for the District of Utah against United Park (United States of America v. United Park City Mines Company, Civil No. 2:07CV642BSJ) alleging that United Park is a liable party pursuant to Sections 106 and 107 or CERCLA, 42 U.S.C. §§ 9606 and 9607, and seeking *inter alia*, injunctive relief and compensation for its future response costs associated with the Property (the "Litigation").

6. United Park entered into a certain Consent Decree to settle the claims brought in the Litigation, which Consent Decree approved and entered by the Court on October 4, 2007 in the Litigation. By agreement among the parties, the Effective Date of the Consent Decree is October 18, 2007.

7. Pursuant to the Consent Decree, United Park has agreed, among other things, to undertake, perform, and finance certain response actions relating to the Property.

8. Pursuant to the Consent Decree, United Park has agreed to provide the foregoing notice to successors-in-title to the Property.

Unofficial Copy

DATED this 19th day of Nov., 2007.

United Park City Mines Company

By: _____
Kerry Gee

Vice President, United Park City Mines

STATE OF UTAH)
) ss.
COUNTY OF SUMMIT)

The foregoing Notice of Consent Decree was subscribed, sworn to and acknowledged before me this 19th day of November, 2007 by Kerry Gee, acting in his capacity as Vice President of United Park City Mines Company, a Delaware corporation.

NOTARY PUBLIC

Stephanie Saladyga

My commission expires:
July 7, 2008

Residing at:
Park City

NOTARY PUBLIC
Stephanie Saladyga
890 Main Street
P.O. Box 4349
Park City, Utah 84060
My Comm. Exp. July 7 2008
STATE OF UTAH

EXHIBIT A

LEGAL DESCRIPTION

RICHARDSON FLAT - SITE PARCEL 1
JANUARY 23, 2002

A parcel of land located in the east half of Section 2 and Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian.

Beginning at a point South 00°44'33" East 2315.11 feet along section line and West 2124.91 feet from the northeast corner of Section 1, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running thence South 36°45'45" West 616.47 feet; thence South 77°35'22" West 605.69 feet; thence South 27°48'26" West 924.31 feet; thence North 82°38'01" West 1191.60 feet; thence South 49°29'05" West 912.70 feet to a point on the west line of Section 1; thence along section line North 00°34'37" East 241.07 feet; thence South 89°58'53" West 188.10 feet; thence North 19°56'15" West 2478.15 feet to a point on a 1482.41 foot radius curve to the right of which the radius point bears North 70°03'45" East; thence northwesterly along the arc of said curve 466.75 feet through a central angle of 18°02'25"; thence North 14°54'13" East 322.55 feet; thence North 24°31'36" East 280.95 feet; thence North 35°00'22" East 150.75 feet; thence North 30°16'10" East 171.57 feet; thence North 27°39'30" East 146.38 feet; thence North 31°42'44" East 163.77 feet to a point on the southerly right-of-way line of Highway U-189; thence along the southerly right-of-way line of Highway U-189 the following six (6) courses: 1) 853.85 feet along the arc of a 5829.58 foot radius curve to the left (chord bears South 71°03'34" East 853.09 feet) to a right-of-way monument; thence 2) 636.69 feet along the arc of a 5829.58 foot radius curve to the left (chord bears South 78°23'49" East 636.37 feet) to a right-of-way monument; thence 3) South 71°22'30" East 227.84 feet to a right-of-way monument; thence 4) South 81°31'35" East 700.17 feet to a right-of-way monument; thence 5) South 76°56'20" East 501.58 feet to a right-of-way monument; thence 6) South 81°29'38" East 39.69 feet; thence South 32°35'26" East 1843.40 feet to the point of beginning.

Description contains 258.10 acres, more or less.

Appendix E

Subject Property Reconnaissance Photographs

Photo Log
Richardson Flat
Site Reconnaissance: August 11, 2020

Photo 1: Looking SW at Parcel 3A



Photo 2: View looking SW of Parcel 3A



Photo 3: View looking NW of Richardson Flat OU1, the north and west adjoining property



Photo 4: View looking SW of Parcel 1 East



Photo 5: View looking W of Parcel 1 East (left side of photo), Richardson Flat Park and Ride Lot and Richardson Flat OU1



Photo 6: View looking W from Black Rock Ridge Subdivision of Parcel 6



Photo 7: View looking NW of Parcel 6	Photo 8: View looking SW at Parcel 3A and Parcel OU1
	

Appendix F

Qualifications of Environmental Professional

David M. Zur, P.G.
Professional Geologist/Owner
DK Environmental, LLC

Professional Summary

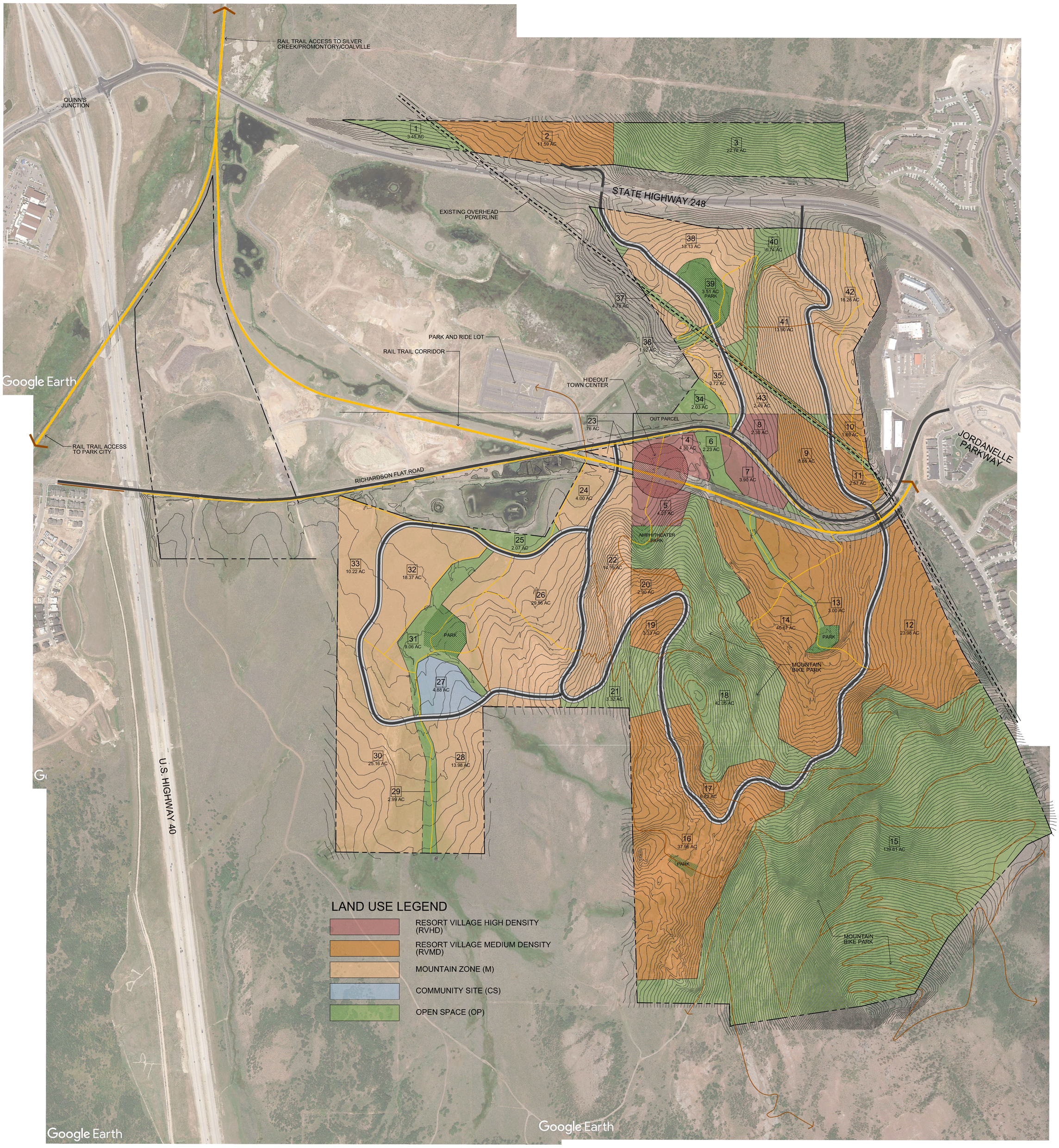
David Zur has 30 years of increasing experience in the environmental and engineering consulting industry responsible for all technical and financial aspects of her projects. David is an experienced technical professional Project Manager, Geologist, and Hydrogeologist and has managed departments of up to 8 staff.

David has extensive experience with CERCLA, RCRA, Brownfields and Utah DEQ regulations and with the ASTM1527-13 Standard. His Clients have included private industry, mining, oil and gas, commercial clients, local municipalities, and State and Federal regulatory agencies. David specializes in balancing regulatory requirements with Client-specific business issues.

Throughout his career he has successfully completed soil, surface water, and groundwater investigations with emphasis on hydrogeology, geology, and geochemistry and finding practical solutions to project completion. He has also brought project investigations to closure by obtaining regulatory approvals, permit acquisition, monitoring and compliance, and mitigation and clean-up. David also has a comprehensive background in the complete management of projects and client issues, including regulatory and sensitive issue negotiation, public meetings, and litigation negotiation.

Education and Professional Registrations

B.S., Geology, University of Wisconsin-Oshkosh, 1986
Registered Professional Geologist, Utah (5370980-2250), 2003
Registered Professional Geologist, Wyoming (PG-2081), 1992
OSHA HazWoper, 40 Hour Course and 8 hour annual updates
MSHA, 24 hour surface mine training and 8 hour annual updates



LAND USE LEGEND

- RESORT VILLAGE HIGH DENSITY (RVHD)
- RESORT VILLAGE MEDIUM DENSITY (RVMD)
- MOUNTAIN ZONE (M)
- COMMUNITY SITE (CS)
- OPEN SPACE (OP)

RICHARDSON

COMMUNITY LAND USE PLAN

AUGUST 2020

N

0 150 300 600 900

SCALE: 1"=300'

LANGVARDT DESIGN GROUP · PLANNING & LANDSCAPE ARCHITECTURE · EST. 2006 · LDG · SALT LAKE CITY

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel PP-28-1

SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14713

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The target property consists of 1 parcel with the following Summit County Parcel ID Number: PP-28-1. In total, the parcel comprises approximately 10.0 acres. The target property is currently undeveloped land with varied terrain included steep hill slopes and relatively flat meadows. An unpaved road/trail crosses the southeast portion of the target property. The target property has historically remained undeveloped land.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified one regulated site/facility on or within the required search radii of the target property (Sections 8.1 and 8.2). Based on the nature of the database listing, site/facility conditions, elevation, and/or distance from the target property, the identified, regulated site/facility does not appear to represent an REC in relation to the target property at the time of this assessment. Based on the observations, research, and interviews conducted while performing this assessment, we did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted. With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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FIGURES

Figure 1: Vicinity Map
Figure 2: Site Map
Figure 3: Geologic Map

APPENDICES

Appendix A: Site Inspection Checklist / Site Photographs
Appendix B: Historical Aerials Package / Historical Topographic Maps / FIM Report
Appendix C: Radius Report
Appendix D: City Directory Report/Water Well Report/Oil Gas Report/Physical Settings
Appendix E: Supporting Documentation
Appendix F: Statement of Qualifications

1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel PP-28-1 in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.661888° N and Longitude: -111.442812° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1903 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: PP-28-1. In total, the parcel comprises approximately 10.0 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.



FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently undeveloped land with varied terrain included hill slopes and relatively flat meadows. An unpaved road crosses the southeast portion of the target property. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: Undeveloped hill slopes and meadows.

East: Undeveloped hill slopes and meadows.

South: Undeveloped hill slopes and meadows.

West: Undeveloped hill slopes and meadows.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

No solid waste was observed on the target property.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	0	0	1	NS	NS	1
Water Wells	0.5000	0	0	2	2	NS	NS	4
Total		**0**	**0**	**2**	**3**	**0**	**0**	**5**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
PP-28-1	Null	10.0	Stichting Mayflower Mountain Fonds

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that the target property and adjacent properties were undeveloped land.

1953: The aerial shows no significant change from the previous imagery.

1962: The aerial shows no significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: An unpaved roads/trail is visible on the southeast portion of the target property. The aerial shows no other significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: The aerial shows no significant change from the previous imagery.

1993: The aerial shows no significant change from the previous imagery.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows no significant change from the previous imagery.

2004: The aerial shows no significant change from the previous imagery.

2006: The aerial shows no significant change from the previous imagery.

2009: The aerial shows no significant change from the previous imagery.

2011: The aerial shows no significant change from the previous imagery.

2014: The aerial shows no significant change from the previous imagery.

2016: The aerial shows no significant change from the previous imagery.

2018: The aerial shows no significant change from the previous imagery.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey, "Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1903, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: No development or improvements are mapped on or adjacent to the target property.

1955: The map shows no changes from the previous mapping.

1999: The map shows an unpaved road/trail crossing the southeast portion of the property from northeast to southwest. No other changes are shown on or adjacent to the property.

2014: The map shows streets associated with the existing commercial and residential development to the northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,590 and 6,600 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Qac	Alluvium and colluvium	Holocene to upper Pleistocene
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene

Map Unit	Description	Age
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene
Tksh	Lava flows and volcanic mudflow breccia of Sage Hen Hollow (Keetley Volcanics)	Upper Eocene

The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** on the following page.

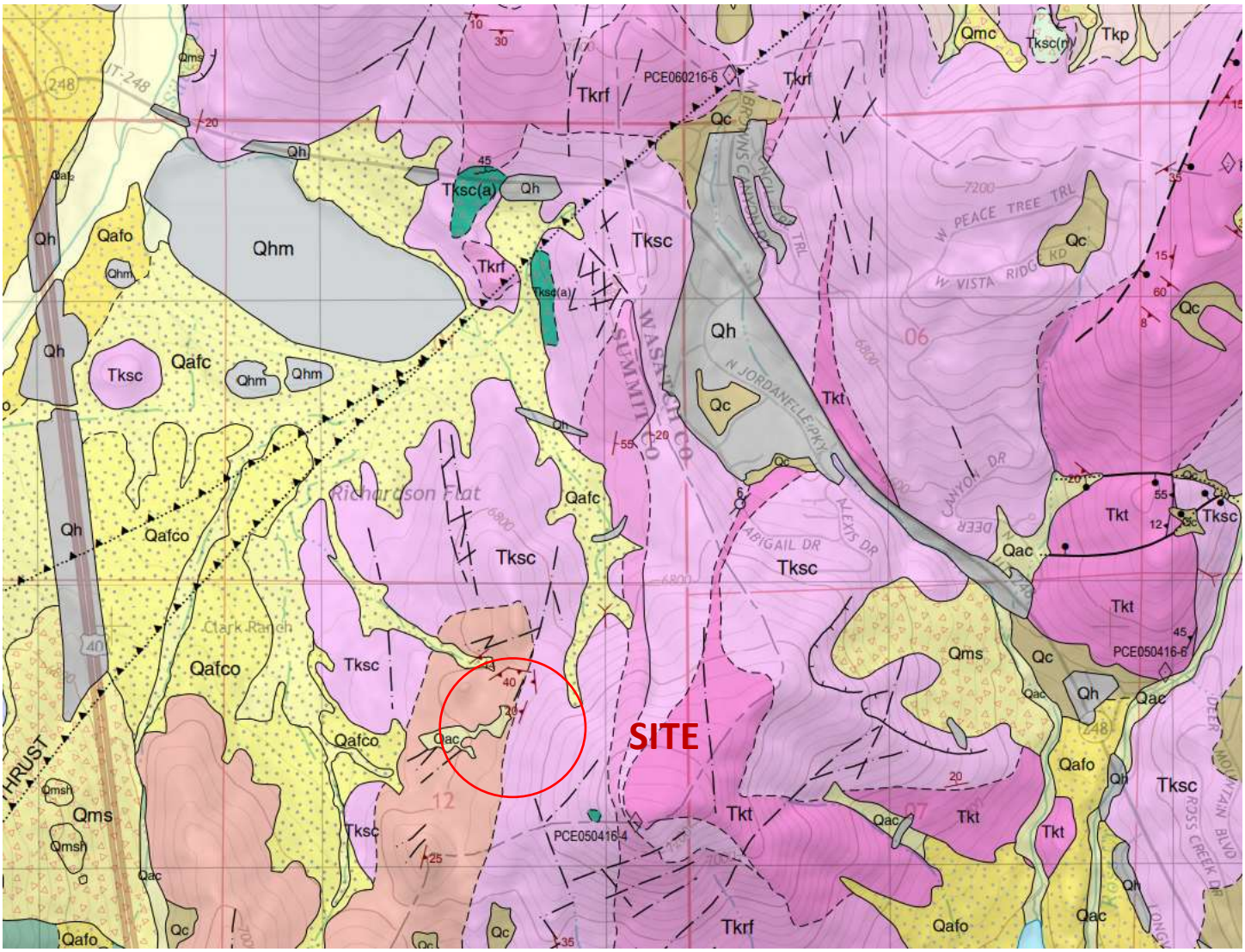

FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the west and northwest at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

No regulated sites or facilities were identified within the boundary of the target property.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
PNPL	Richardson Flat Tailings	Summit County	0.694	NNW	No
RODS	Richardson Flat Tailings	Summit County	0.694	NNW	No

No orphan sites were identified within the Radius Map Report.

The following site history for the Richardson Flat Tailings is from the U.S. EPA:
(https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat

tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**.

The target property is more than 1/2 of a mile from the RFTS and is up-gradient. Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property and do not represent an REC.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS, no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs, HRECs, or CRECs as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. No current Land Use Covenants (LUCs) and associated Activity and Use Limitations (AULs) associated with the target property or surrounding properties were identified at the time of this assessment. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree

of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician



Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website:
https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT ENGINEERING LABORATORIES

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel PP-28-1 Site #_____ CMT Job #14713

Property Address: SE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Stichting Mayflower Mountain Fonds Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description: The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Site is open, undeveloped hill slopes and meadows. Vegetation is scrub oak, sage brush, grasses and weeds. Several unpaved roads/trails cross the site.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel PP-28-1

NORTH

Name: Undevelopd land

Address:

Description: open land, hillsides, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: open hillsides

Address:

Description: undevelped land

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows, fields

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel PP-28-1

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Solid Waste:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Transformers:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel PP-28-1

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel PP-28-1

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel PP-28-1

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel PP-28-1

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel PP-28-1

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View of the target property, looking northwest.



Photo 2 View of the target property, looking west.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

***NEW:** GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355524
Project #: 14713
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.443978803, 40.662762808), (-111.441564815, 40.662762808), (-111.441564815, 40.660956049), (-111.443978803, 40.660956049)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/10/1967	ASCS	1" = 1320'	PI-3
08/01/1962	ASCS	1" = 500'	3-78
07/03/1953	USGS	1" = 500'	1-42
1937	ASCS	1" = 500'	U79

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N

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Richardson Flats Parcel PP-28-1
USDA
2018

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2016

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2014

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2011

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2009

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2006

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2004

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USDA
2003

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USGS
07/08/1997

GeoSearch

JOB #: 355524 - 06/08/2020



N

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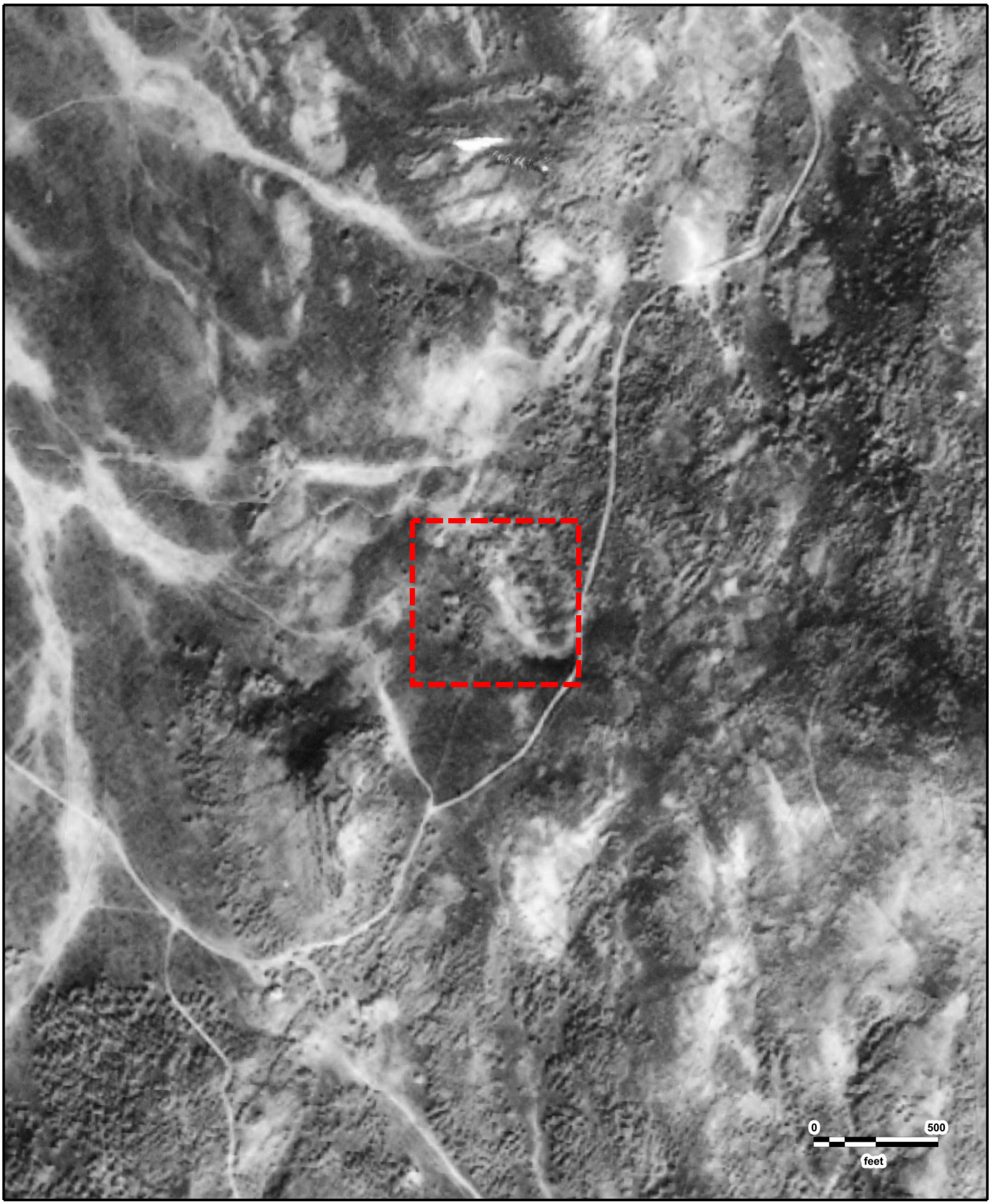
Richardson Flats Parcel PP-28-1
USGS
08/23/1993

GeoSearch

JOB #: 355524 - 06/08/2020



N

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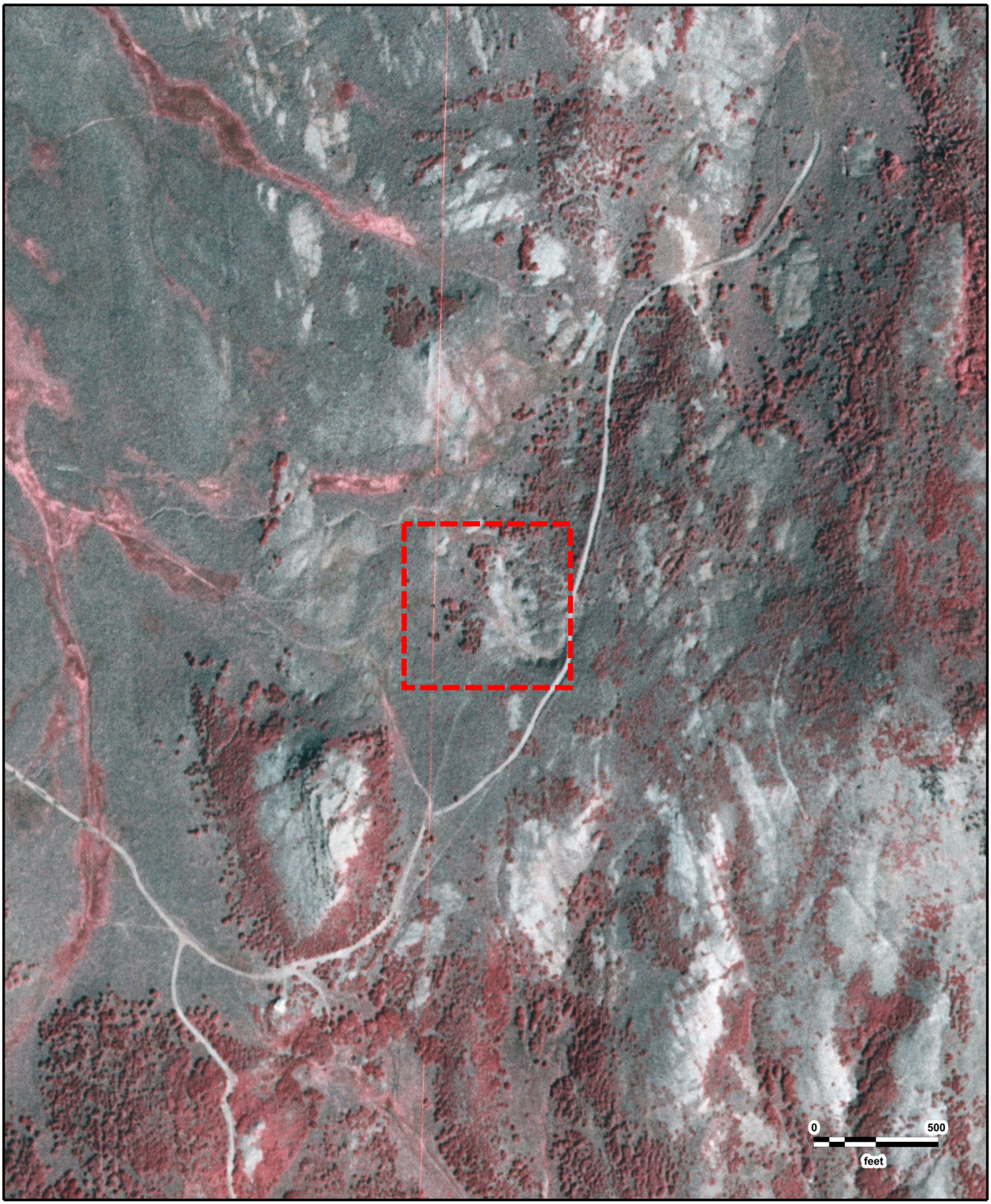
Richardson Flats Parcel PP-28-1
USGS
09/18/1987

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USGS
09/05/1983

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
USGS
08/24/1976

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
ASCS
07/10/1967

GeoSearch

JOB #: 355524 - 06/08/2020



N

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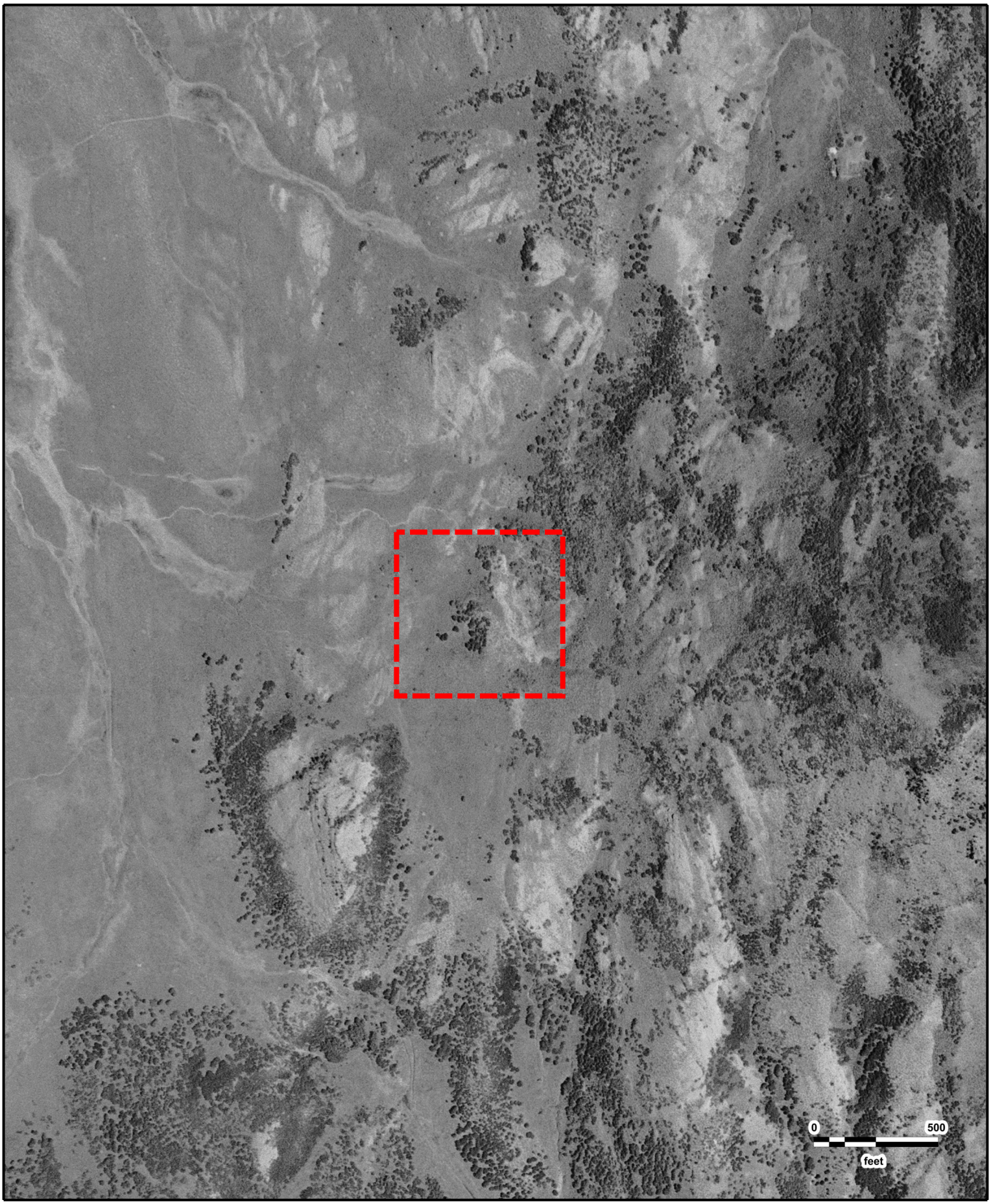
Richardson Flats Parcel PP-28-1
ASCS
08/01/1962

GeoSearch

JOB #: 355524 - 06/08/2020



N

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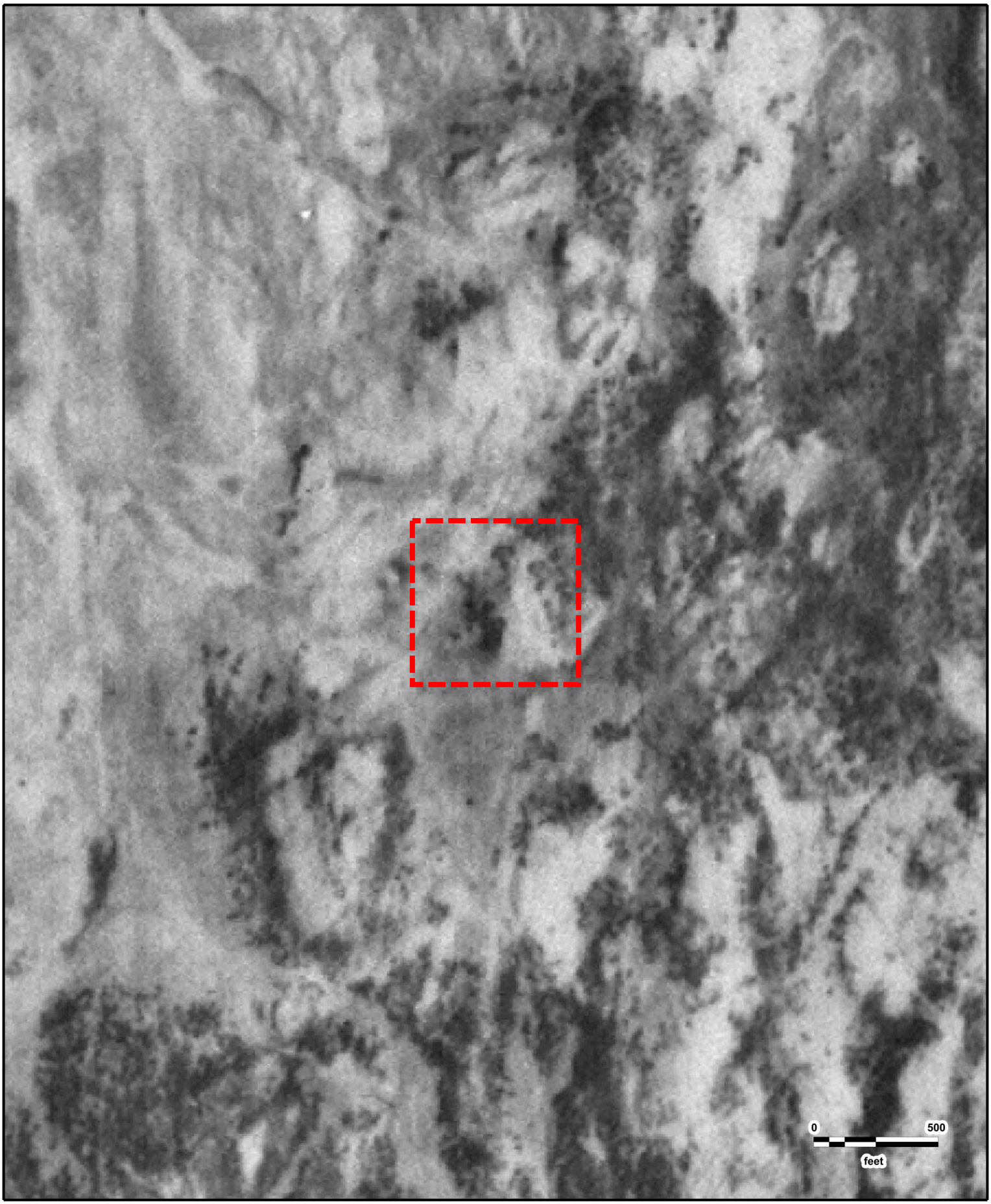
Richardson Flats Parcel PP-28-1
USGS
07/03/1953

GeoSearch

JOB #: 355524 - 06/08/2020



N

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Richardson Flats Parcel PP-28-1
ASCS
1937

GeoSearch

JOB #: 355524 - 06/08/2020

GeoSearch
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Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355523
Project #: 14713
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.443978803, 40.662762808), (-111.441564815, 40.662762808), (-111.441564815, 40.660956049), (-111.443978803, 40.660956049)

Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1903	COALVILLE, UT	1" = 10420'

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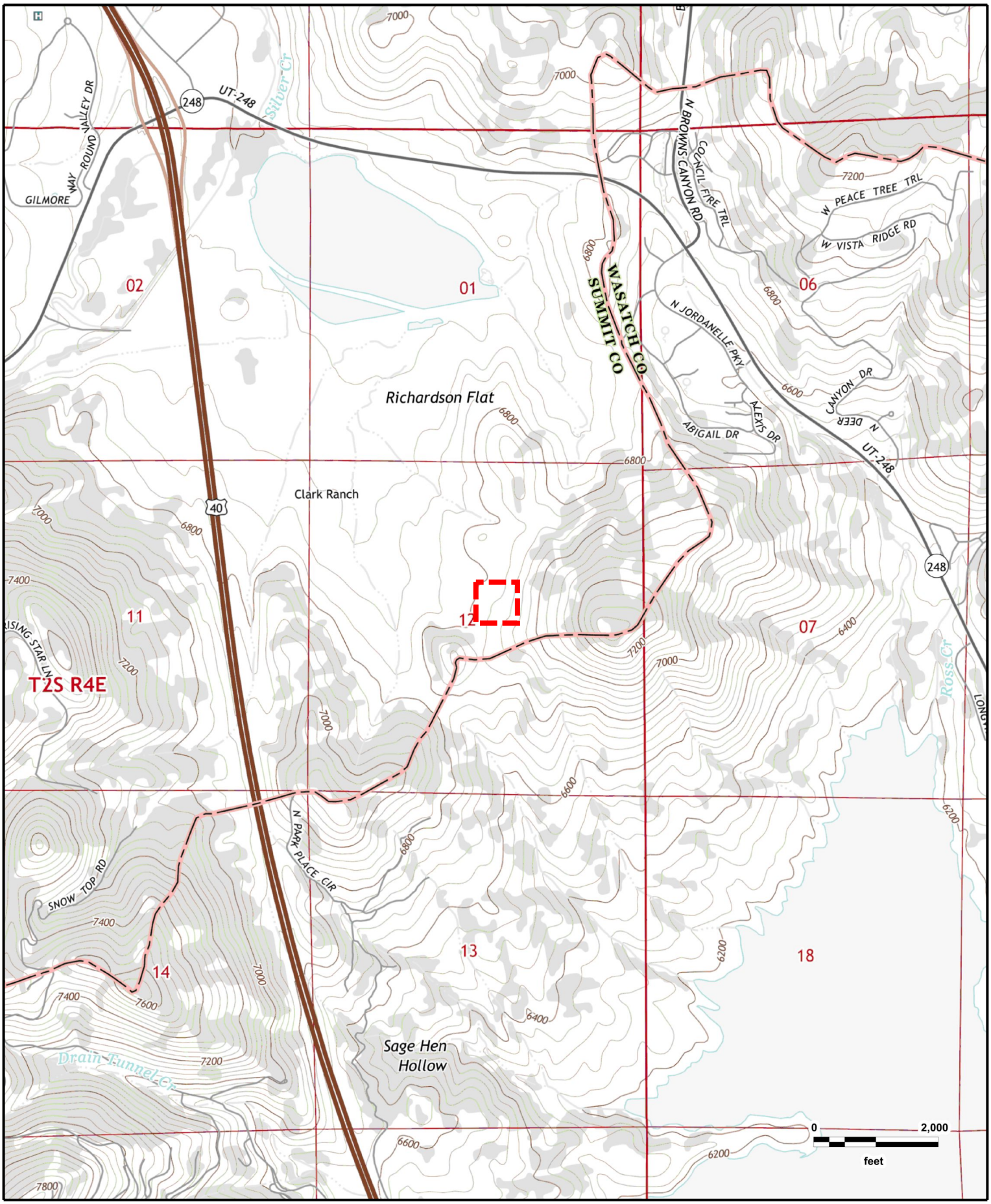
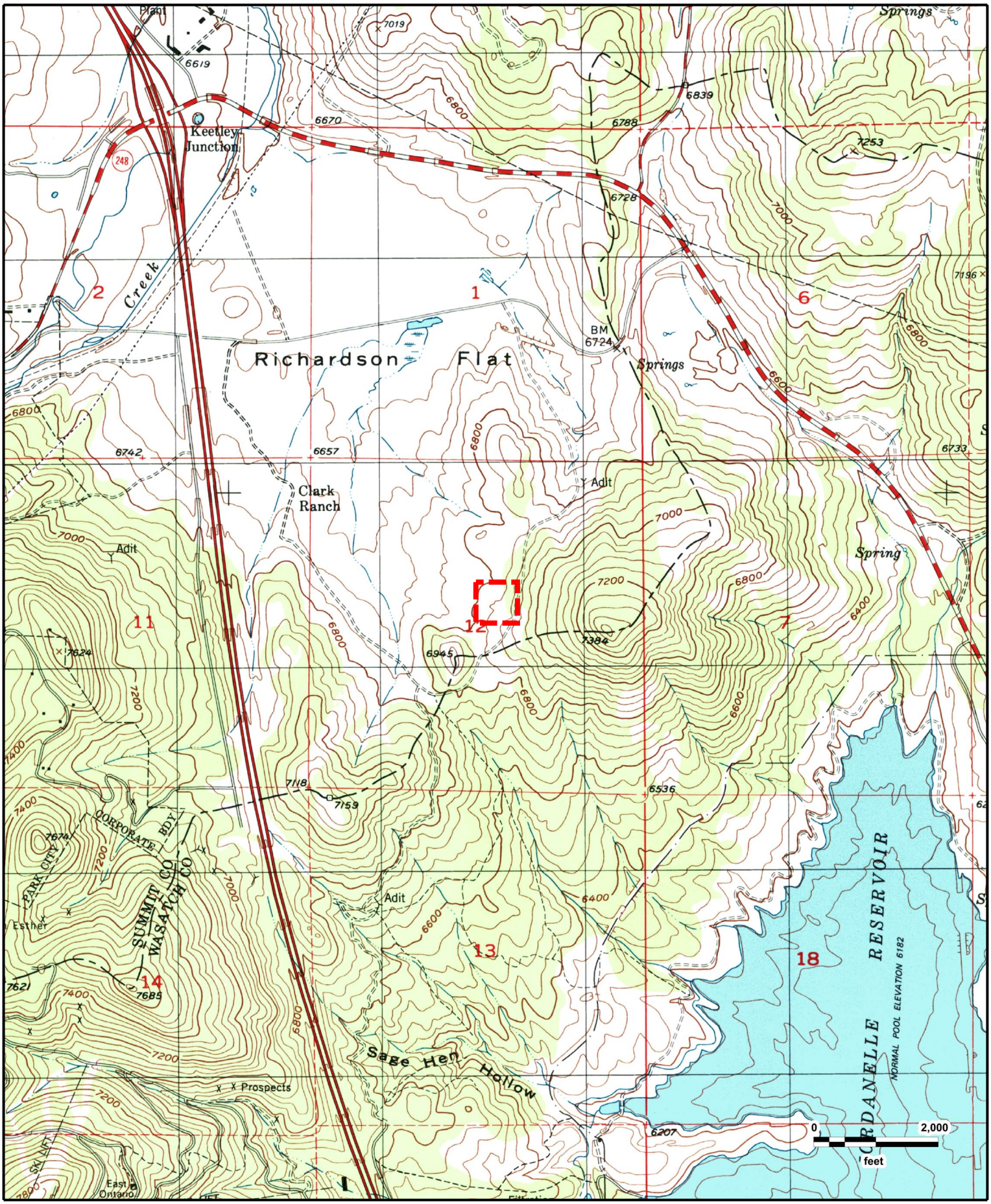


N

Richardson Flats Parcel PP-28-1
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355523 - 06/08/2020



N

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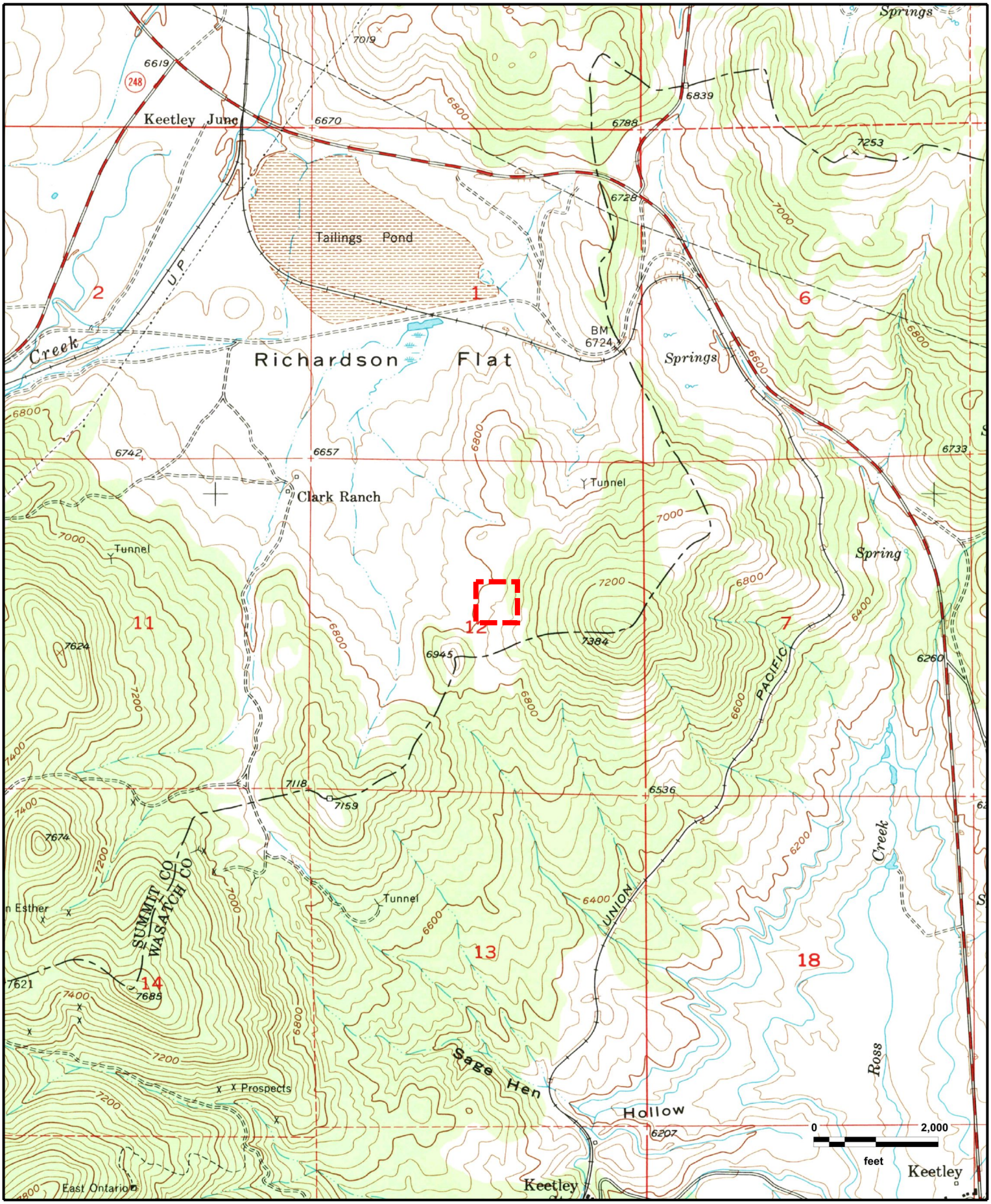
Richardson Flats Parcel PP-28-1
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355523 - 06/08/2020



N

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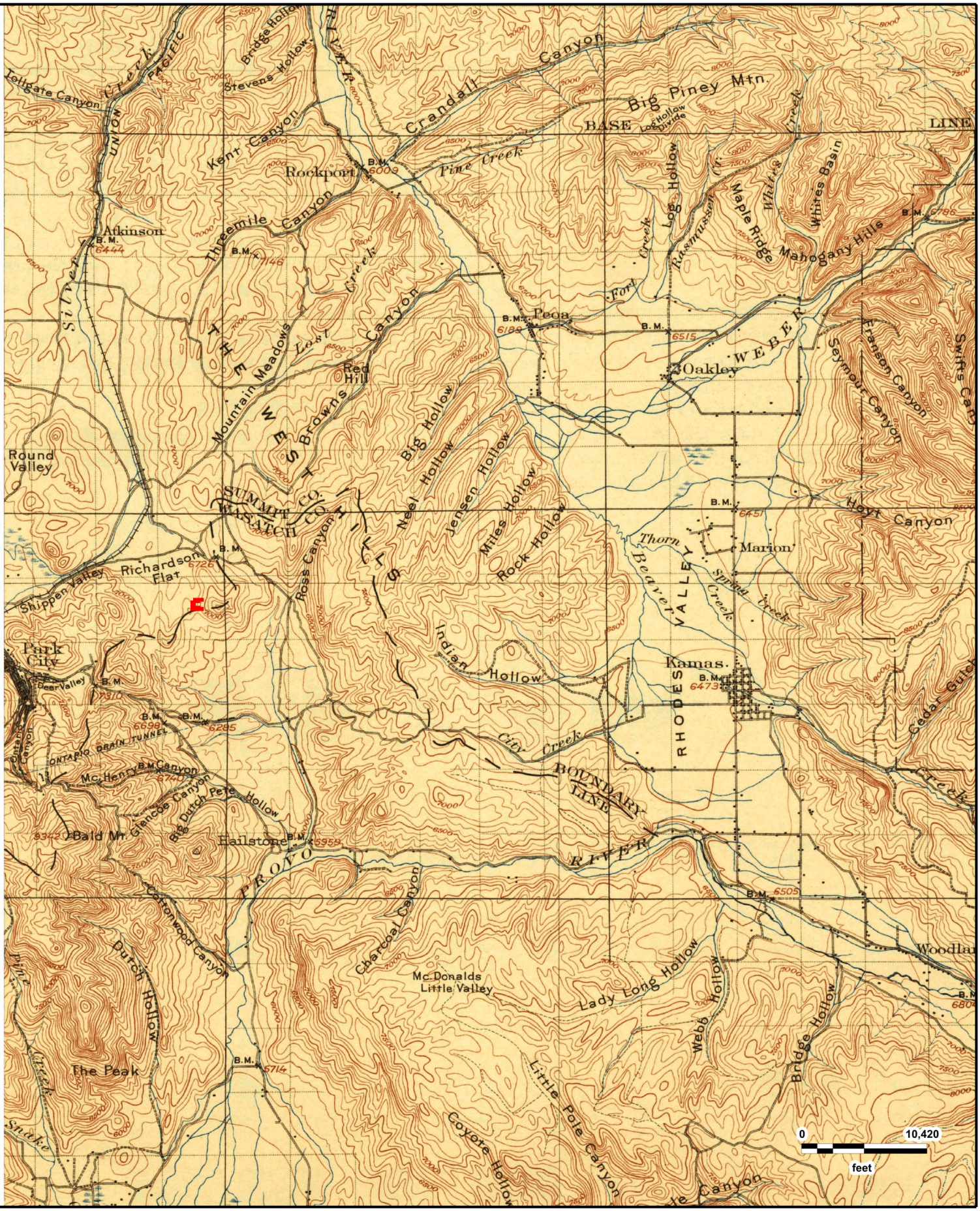
Richardson Flats Parcel PP-28-1
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355523 - 06/08/2020



N

Richardson Flats Parcel PP-28-1
COALVILLE, UT (1903)

GeoSearch

JOB #: 355523 - 06/08/2020

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Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355527
Project #: 14713
PO #: 14713
Date: 06/08/2020

Fire Insurance Map Research Results

Date: 06/08/2020
GS Job Number: 147848
Company Name: CMT Engineering Laboratories-Utah
Project Number: 14713
Site Information: Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah 84060

Research Results: No Coverage Available

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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APPENDIX C

RADIUS MAP
REPORT

GeoSearch
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Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355521
Project #: 14713
PO #: 14713
Date: 06/04/2020

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Environmental Records Definitions 29

Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.44277, 40.6618594)
6,839 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		1	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	0	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	

TOTAL		2	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**0**	**0**	**1**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	0	0	1	NS	1
SUB-TOTAL		0	0	0	0	2	0	2

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

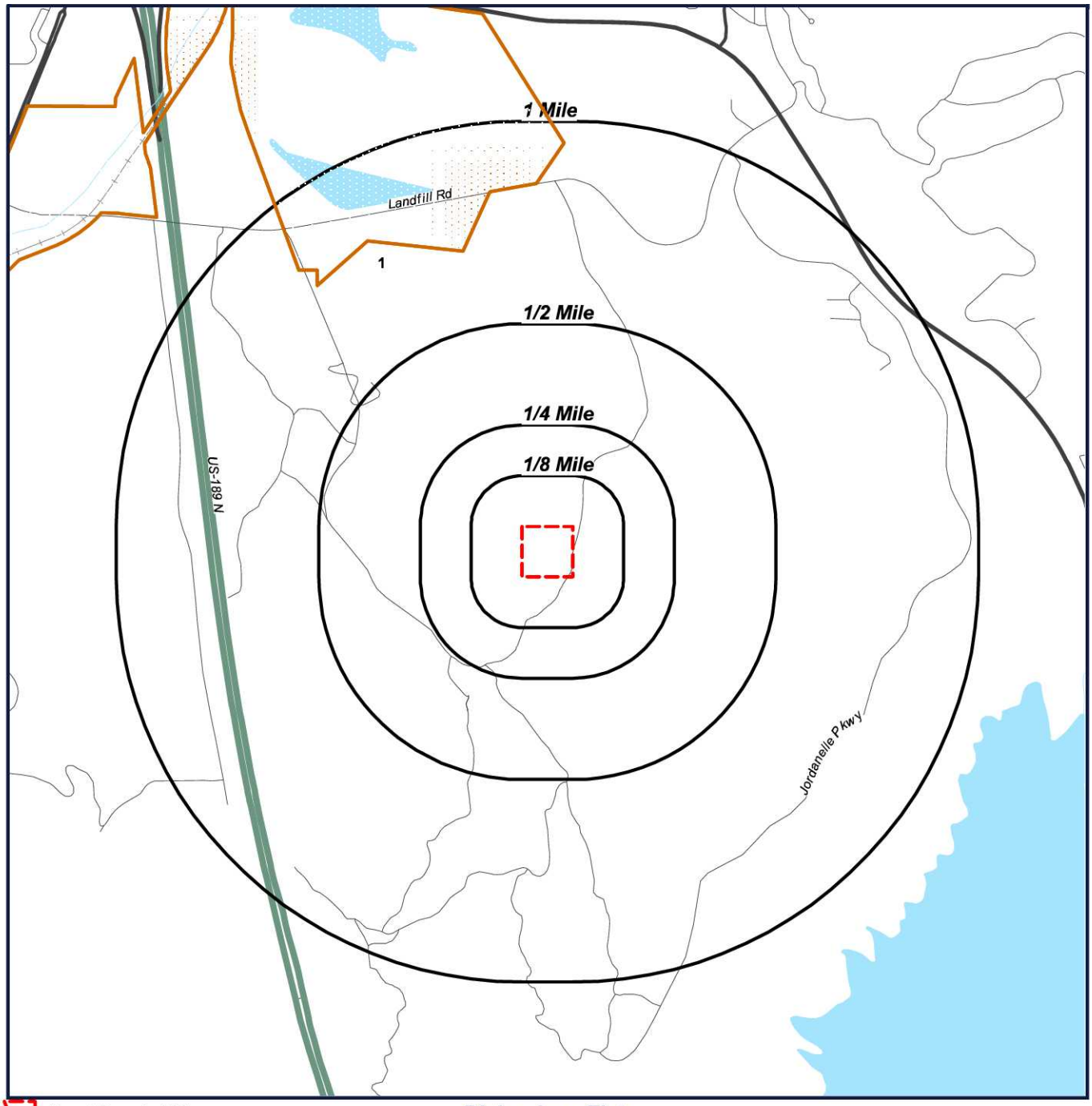
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	2	0	2

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



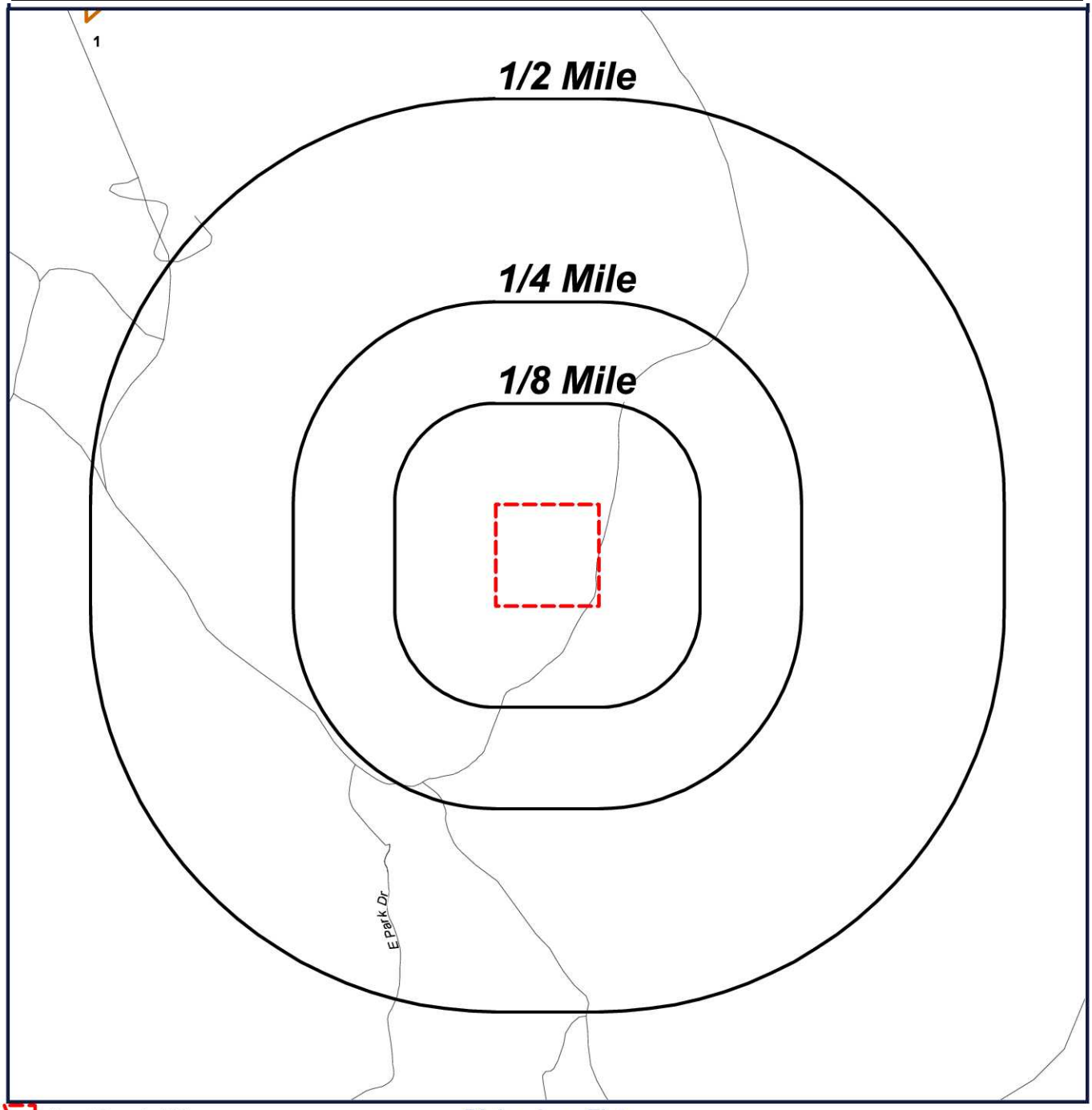
Target Property (TP)
PNPL
RODS

Richardson Flats
Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



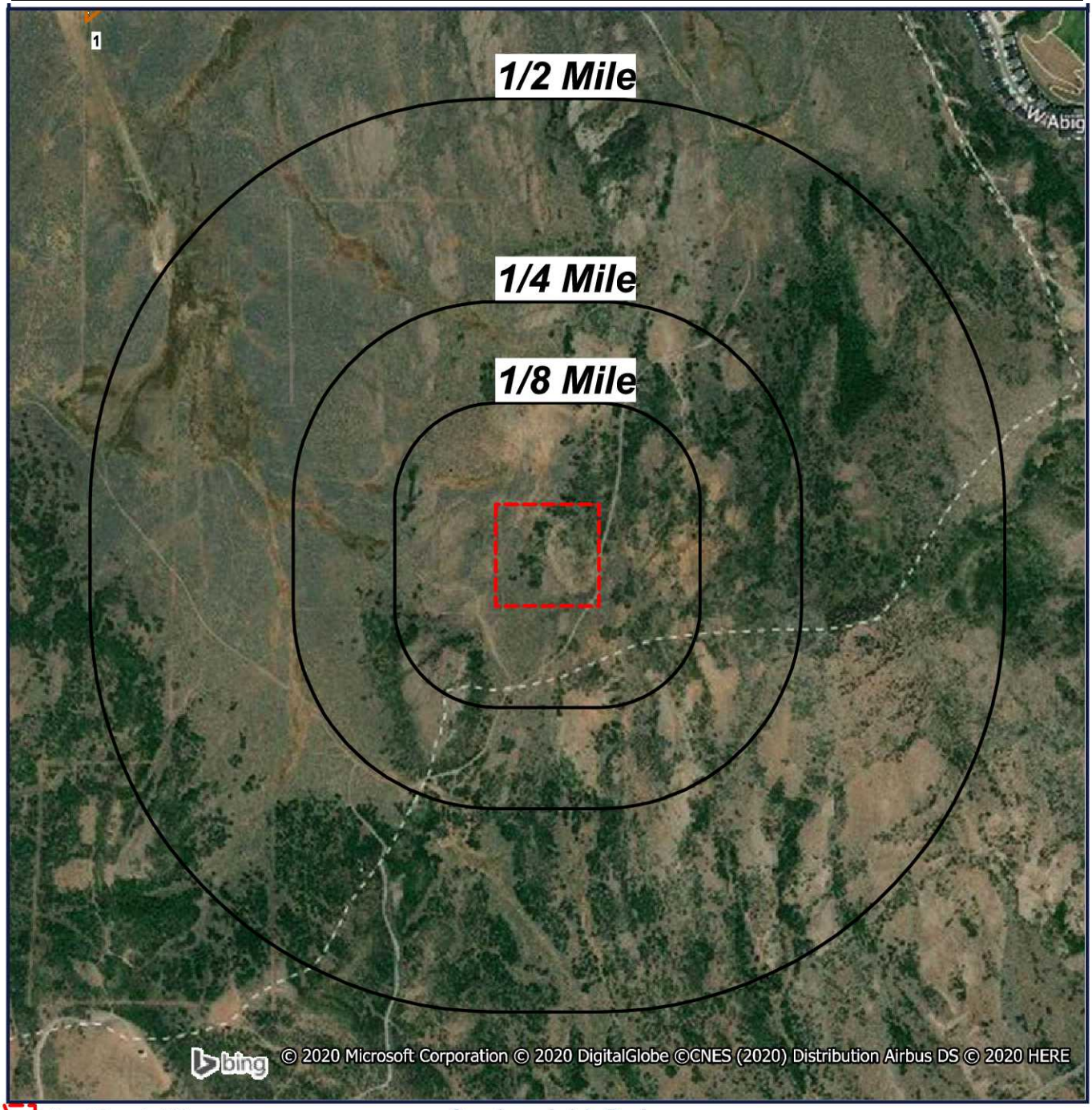
Target Property (TP)
PNPL
RODS

Richardson Flats
Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Ortho Map



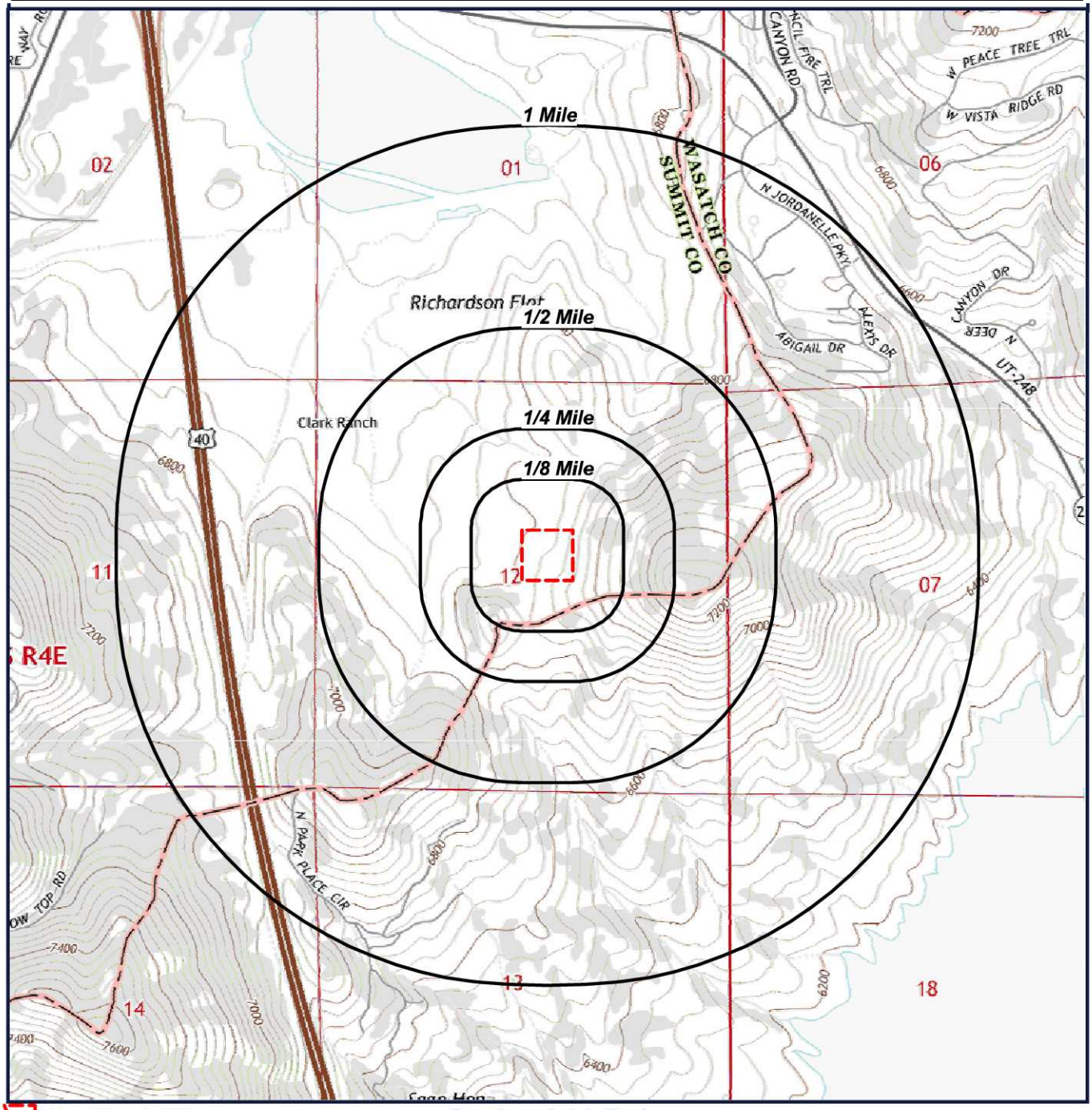
Target Property (TP)
PNPL
RODS

Quadrangle(s): Park City East Richardson Flats
Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Topographic Map



Target Property (TP)

Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.694 mi. NNW (3664 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***17***
1	RODS	UTD980952840	Lower (6,494 ft.)	0.694 mi. NNW (3664 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	27

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.694 mi. NNW (3664 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
1	RODS	UTD980952840	Lower (6,494 ft.)	0.694 mi. NNW (3664 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6839 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***17***
1	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	27

MAP ID# 1

Distance from Property: 0.694 mi. (3,664 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

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Back to Report Summary

MAP ID# 1

Distance from Property: 0.694 mi. (3,664 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14713

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14713

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355526
Project #: 14713
PO #: 14713
Date: 06/04/2020

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Oil & Gas Map 3

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.44277, 40.6618594)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

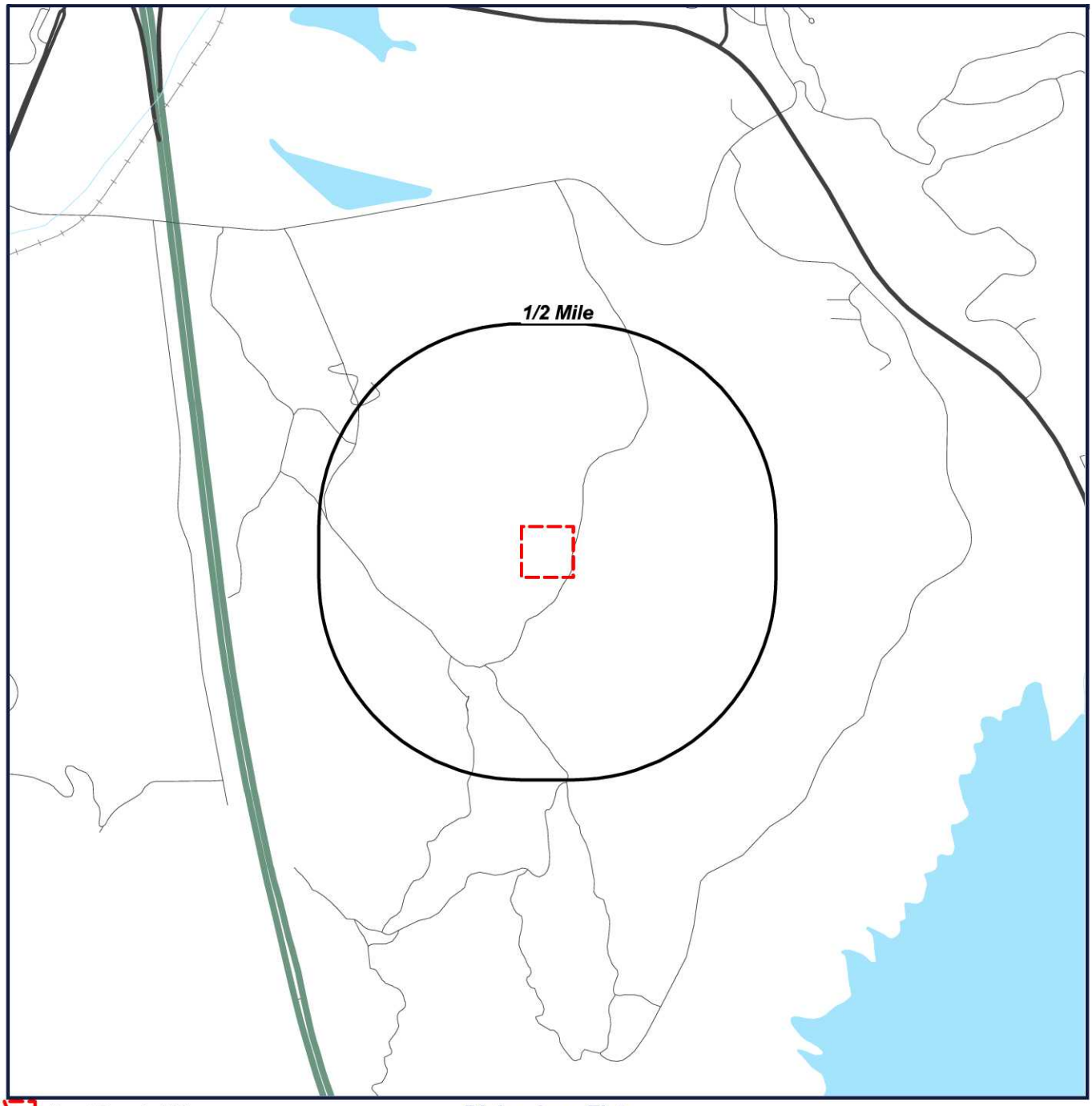
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Target Property (TP)

Well Location

Richardson Flats
Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoSearch
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GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355525
Project #: 14713
PO #: 14713
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.44277, 40.6618594)
6,839 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	0	1	NS	NS	1
SUB-TOTAL		0	0	0	1	0	0	1

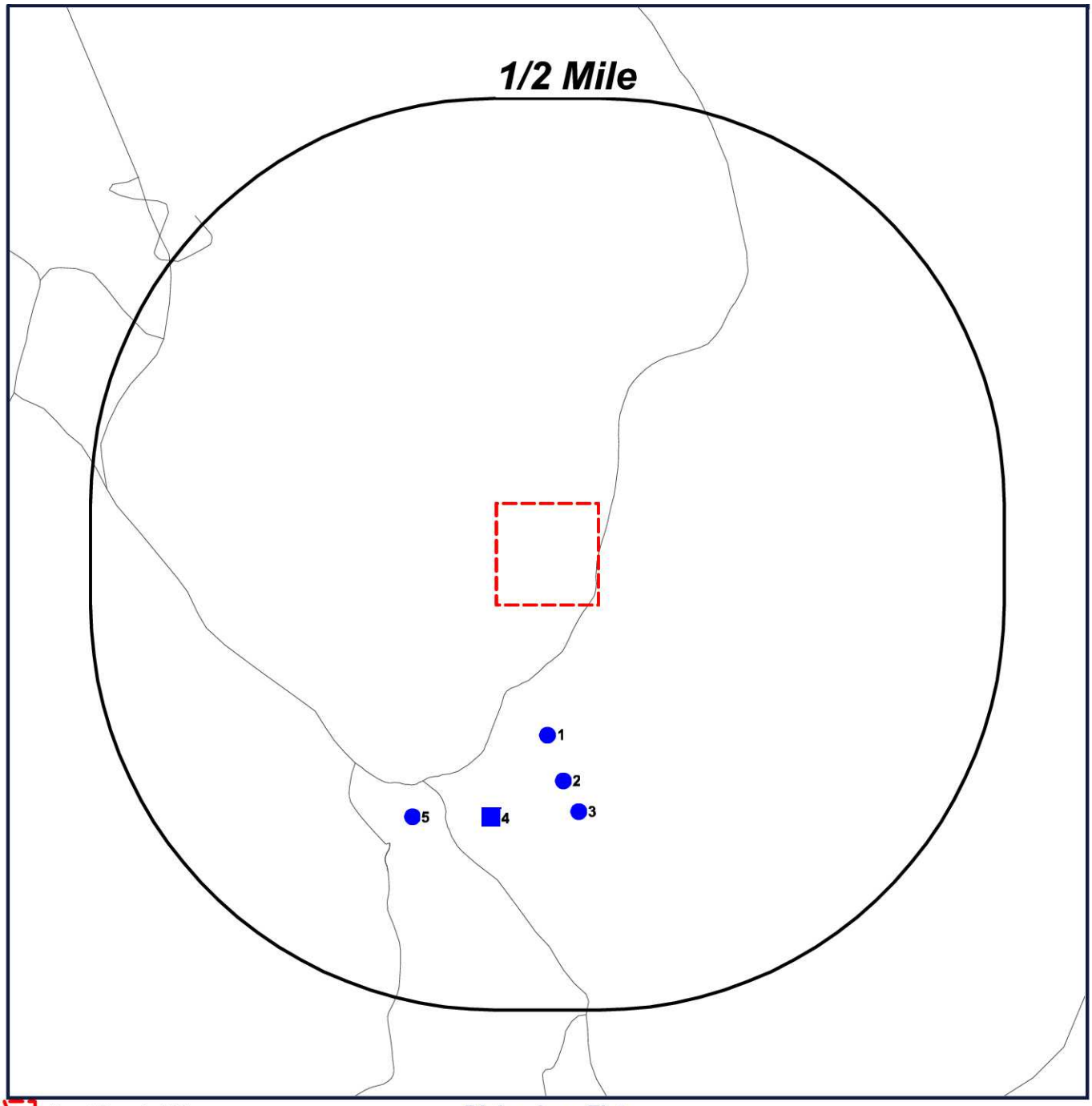
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	0	2	2	NS	NS	4
SUB-TOTAL		0	0	2	2	0	0	4
TOTAL		0	0	2	3	0	0	5

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
WW
NWIS

Richardson Flats
Parcel PP-28-
1
Near 1185 W LORI LN
Heber, Utah
84060

N
W
E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	WW	0007181	Lower (6,824 ft.)	0.159 mi. S (840 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	8
2	WW	0007182	Lower (6,824 ft.)	0.216 mi. S (1140 ft.)		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032	9
3	WW	0007183	Lower (6,737 ft.)	0.253 mi. S (1336 ft.)		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032	10
4	NWIS	USGS_403926111263601	Lower (6,749 ft.)	0.261 mi. S (1378 ft.)	(D- 2- 4)12CDA- 1		11
5	WW	0187175	Lower (6,792 ft.)	0.280 mi. SSW (1478 ft.)		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032	12

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
4	NWIS	USGS_403926111263601	Lower (6,749 ft.)	0.261 mi. S (1378 ft.)	(D- 2- 4)12CDA- 1	
1	WW	0007181	Lower (6,824 ft.)	0.159 mi. S (840 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060
2	WW	0007182	Lower (6,824 ft.)	0.216 mi. S (1140 ft.)		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032
3	WW	0007183	Lower (6,737 ft.)	0.253 mi. S (1336 ft.)		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032
5	WW	0187175	Lower (6,792 ft.)	0.280 mi. SSW (1478 ft.)		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6839 ft.

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	WW	6,824 ft.		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	8
2	WW	6,824 ft.		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032	9
3	WW	6,737 ft.		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032	10
4	NWIS	6,749 ft.	(D- 2- 4)12CDA- 1		11
5	WW	6,792 ft.		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032	12

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.159 mi. (840 ft.) S
Elevation: 6,824 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007181**
WRNUM: **1255007M00**
LOCATION: **S3500 E3000 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **8.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.216 mi. (1,140 ft.) S
Elevation: 6,824 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007182**
WRNUM: **1255007M00**
LOCATION: **S3800 E3100 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **0.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 3

Distance from Property: 0.253 mi. (1,336 ft.) S
Elevation: 6,737 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007183**
WRNUM: **1255007M00**
LOCATION: **S4000 E3200 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **12.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 4

Distance from Property: 0.261 mi. (1,378 ft.) S
Elevation: 6,749 ft. (Lower than TP)

GEOSEARCH ID: **USGS_403926111263601**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **403926111263601**
STATION NAME: **(D- 2- 4)12CDA- 1**
SITE TYPE: **GW**
LATITUDE: **40.657173100**
LONGITUDE: **-111.444081600**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESESWS12 T**
NAME OF LOCATION MAP: **PARK CITY EAST**
SCALE OF LOCATION MAP: **24000**
DATE OF FIRST CONSTRUCTION: **10/09/1972**
DATE SITE ESTABLISHED OR INVENTORIED: **06/16/1994**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **123. FEET**
HOLE DEPTH: **123. FEET**
SOURCE OF DEPTH DATA: **D**
PROJECT NUMBER: **474922100**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **--**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1972-11-04**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1995-09-05**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **12**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

Back to Report Summary

Water Wells (WW)

MAP ID# 5

Distance from Property: 0.280 mi. (1,478 ft.) SSW
Elevation: 6,792 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0187175**
WRNUM: **55-8519**
LOCATION: **N1200 E2300 SW 12 2S 4E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WILLIAM L. GARDNER**
SOURCE: **PROVO RIVER**
USE: **DOMESTIC**
PRIORITY DATE: **19721005**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147848
Job #: 355528
Project #: 14713
PO #: 14713
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah 84060

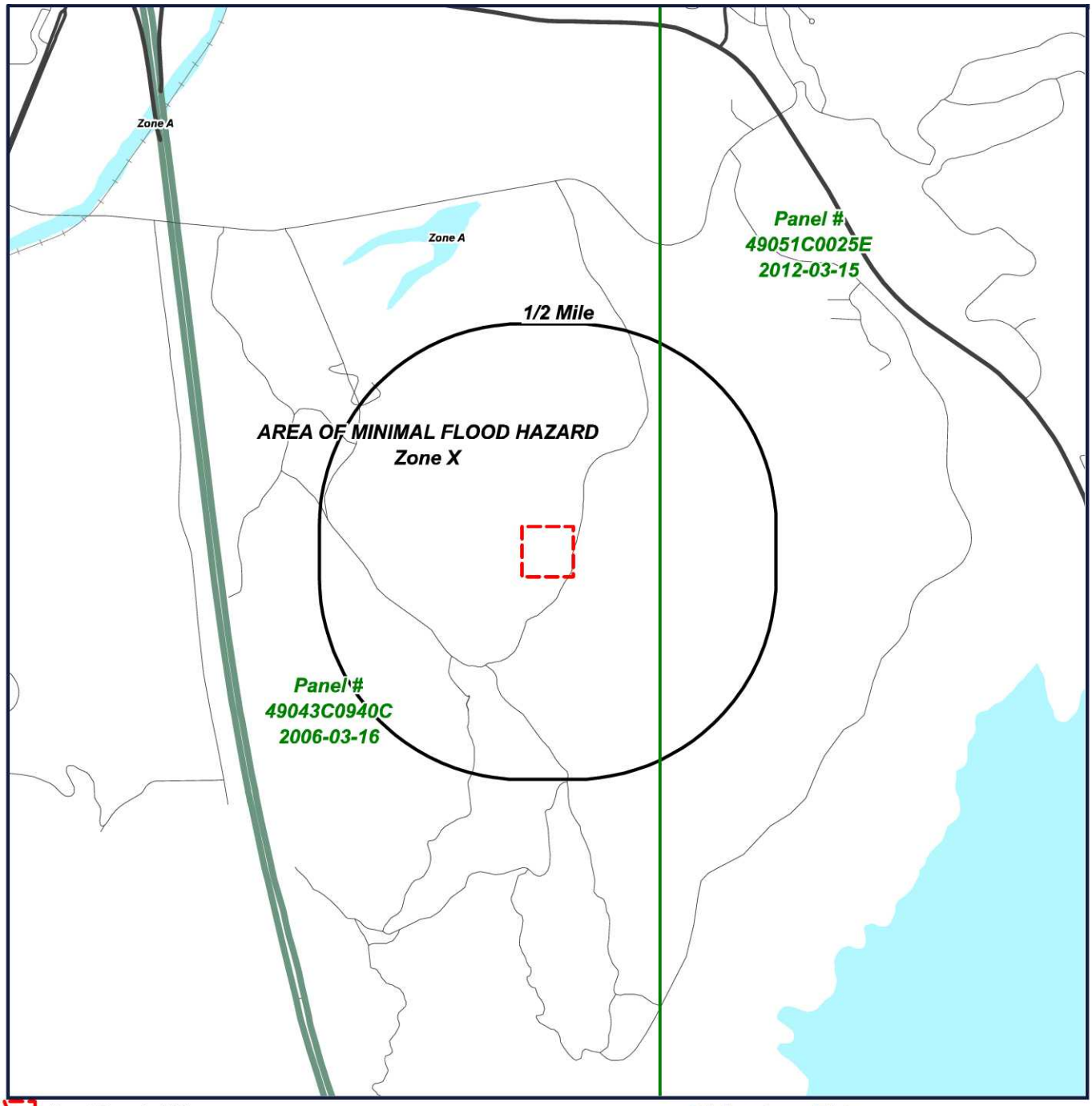
Coordinates
Area centroid (-111.44277, 40.6618594)
6,839 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Harzard - Zone X

Area with Reduced Flood Risk due to Levee - Zone X

Area with Flood Risk due to Levee - Zone D

Digital Data Not Available

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

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0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

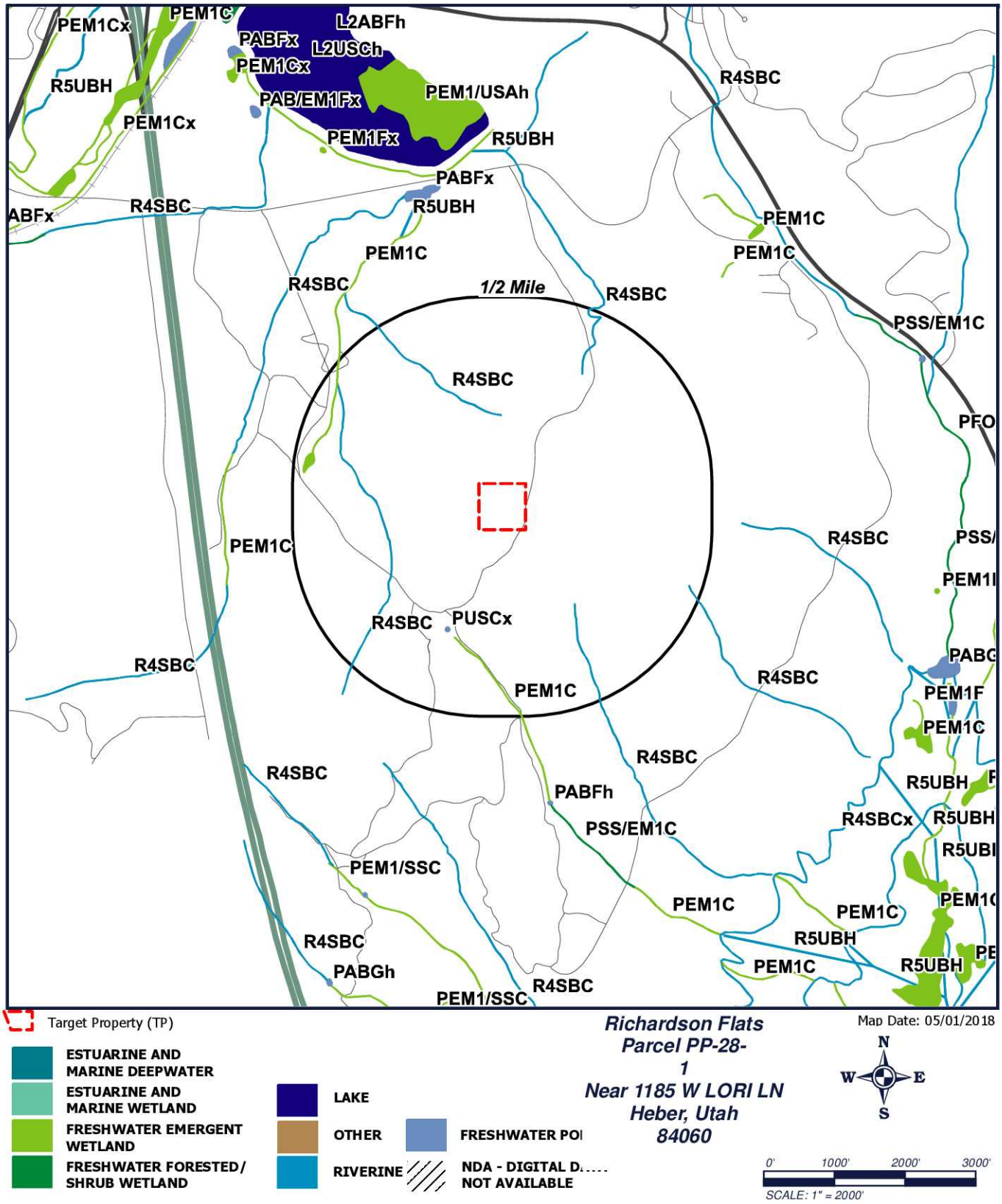
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

ESTUARINE AND MARINE DEEPWATER
ESTUARINE AND MARINE WETLAND
FRESHWATER EMERGENT WETLAND
FRESHWATER FORESTED/ SHRUB WETLAND
LAKE
OTHER
RIVERINE
FRESHWATER POI
NDA - DIGITAL D..... NOT AVAILABLE

Richardson Flats Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

Map Date: 05/01/2018

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SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

PEM1C

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

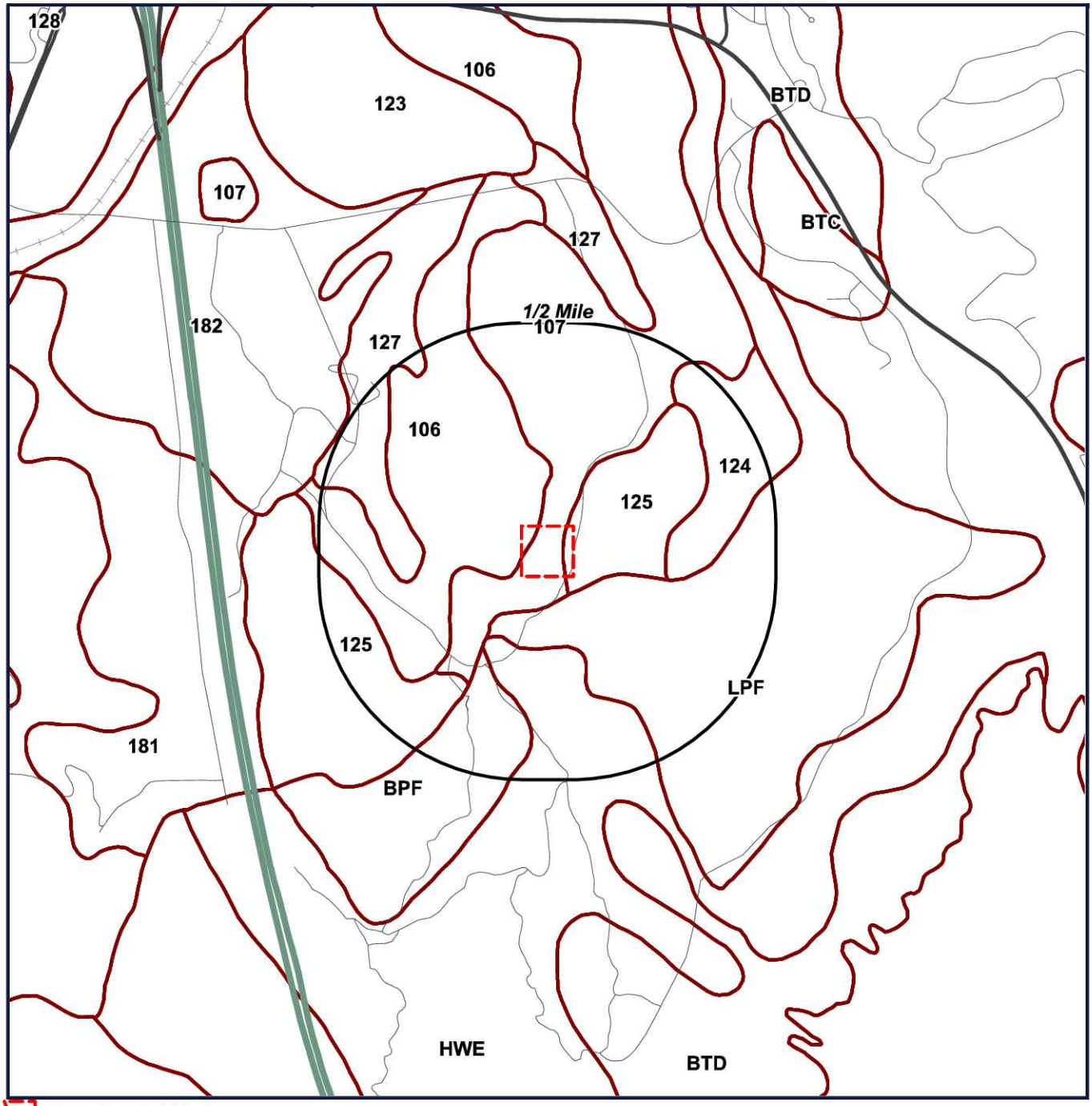
PUSCx

SYSTEM: **PALUSTRINE**
CLASS: **UNCONSOLIDATED SHORE**
SPECIAL MODIFIER: **EXCAVATED**

R4SBC

SYSTEM: **RIVERINE**
SUBSYSTEM: **INTERMITTENT**
CLASS: **STREAMBED**
WATER REGIME: **SEASONALLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Richardson Flats
Parcel PP-28-1
Near 1185 W LORI LN
Heber, Utah
84060

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0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

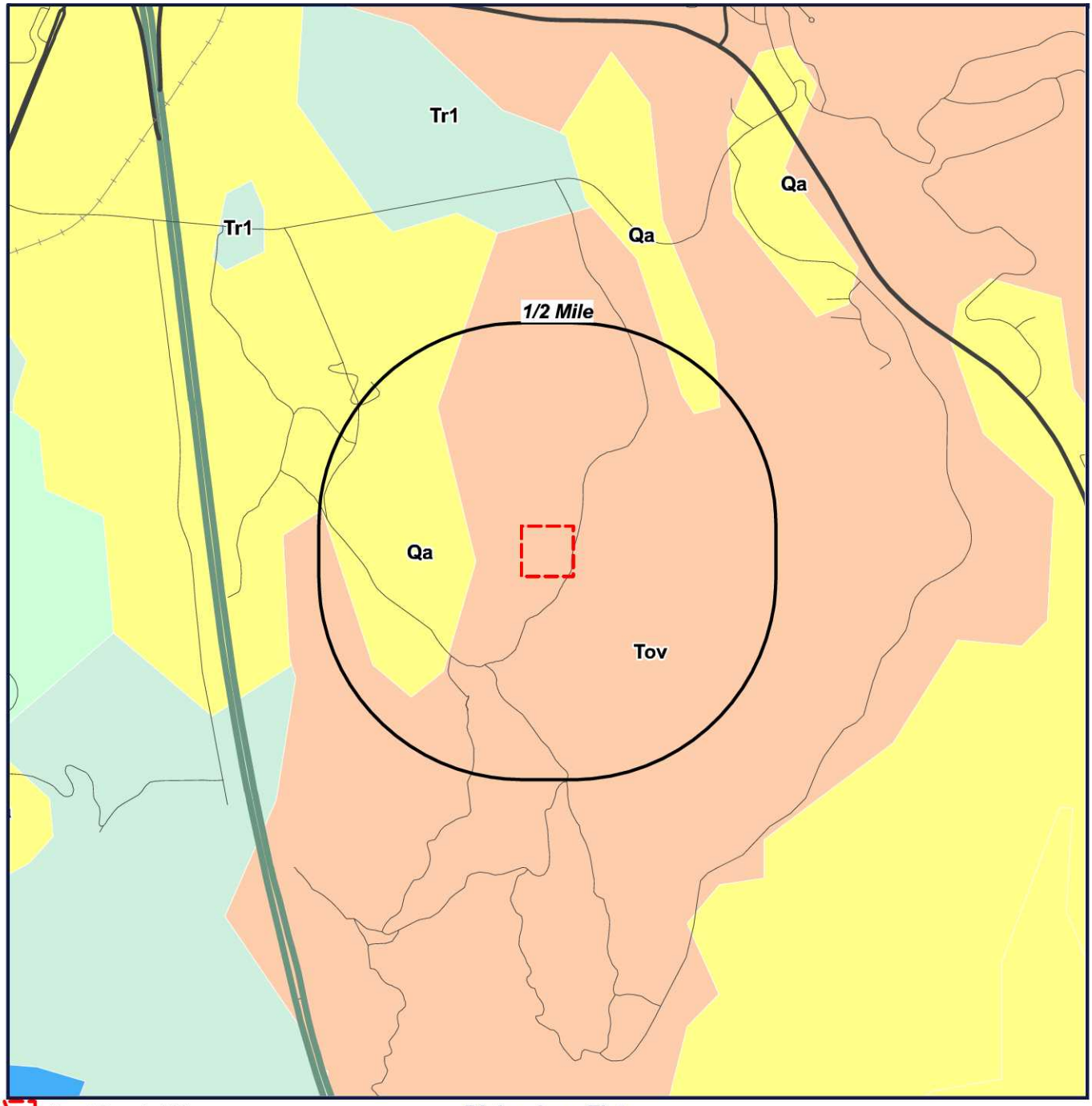
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

BPF	Broadhead-Little Pole association, very steep
HWE	Horrocks-Broadhead association, steep
LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
106	Ayoub cobbly loam, 2 to 15 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes
125	Dunford-Ayoub-Melling complex, 30 to 60 percent slopes
124	Dunford-Ayoub-Melling complex, 15 to 30 percent slopes
127	Echocreek-Kovich loams, 0 to 10 percent slopes

Geology Map



Richardson Flats
Parcel PP-28-
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Near 1185 W LORI LN
Heber, Utah
84060

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0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

APPENDIX E

SUPPORTING DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

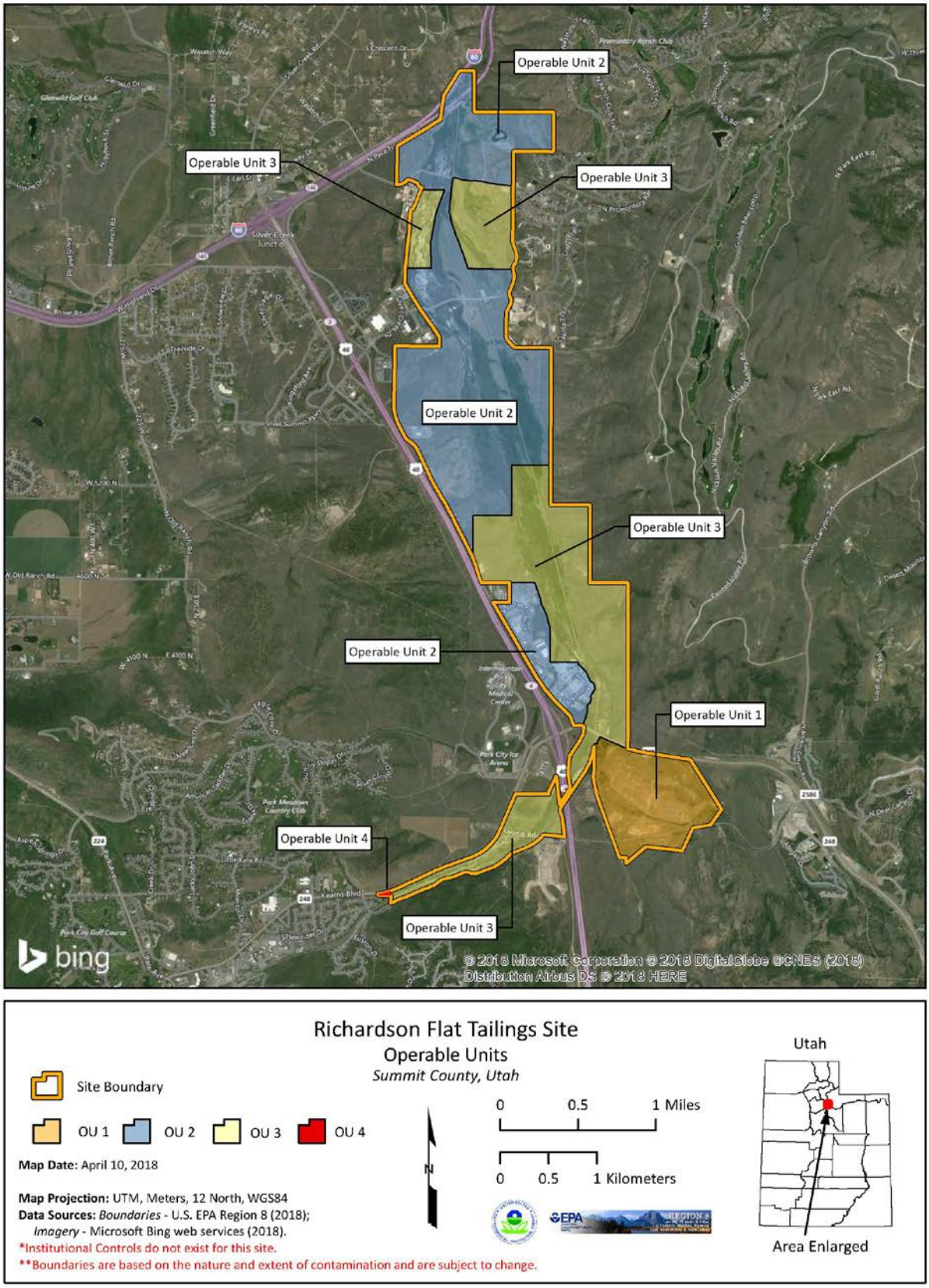
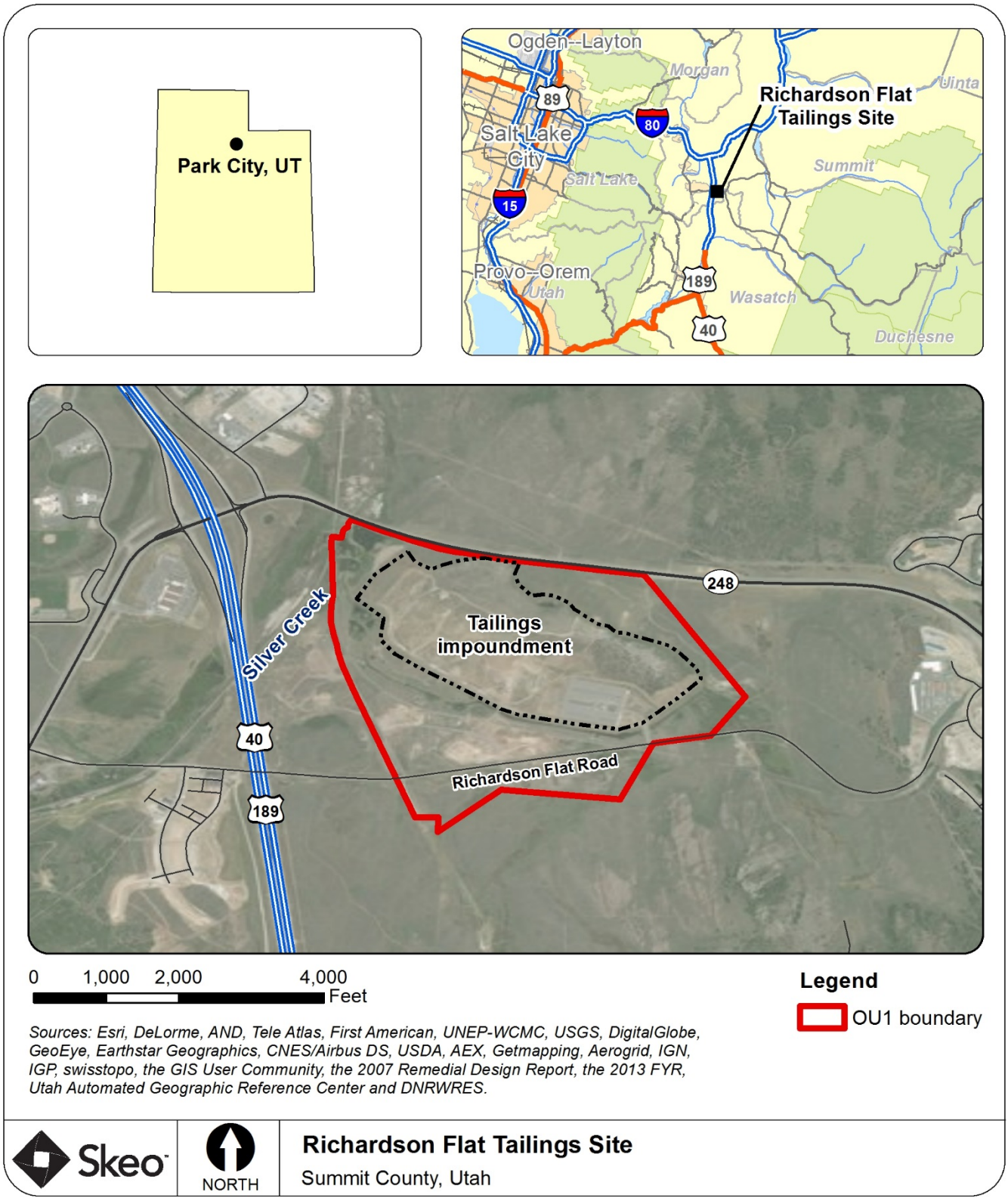


Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

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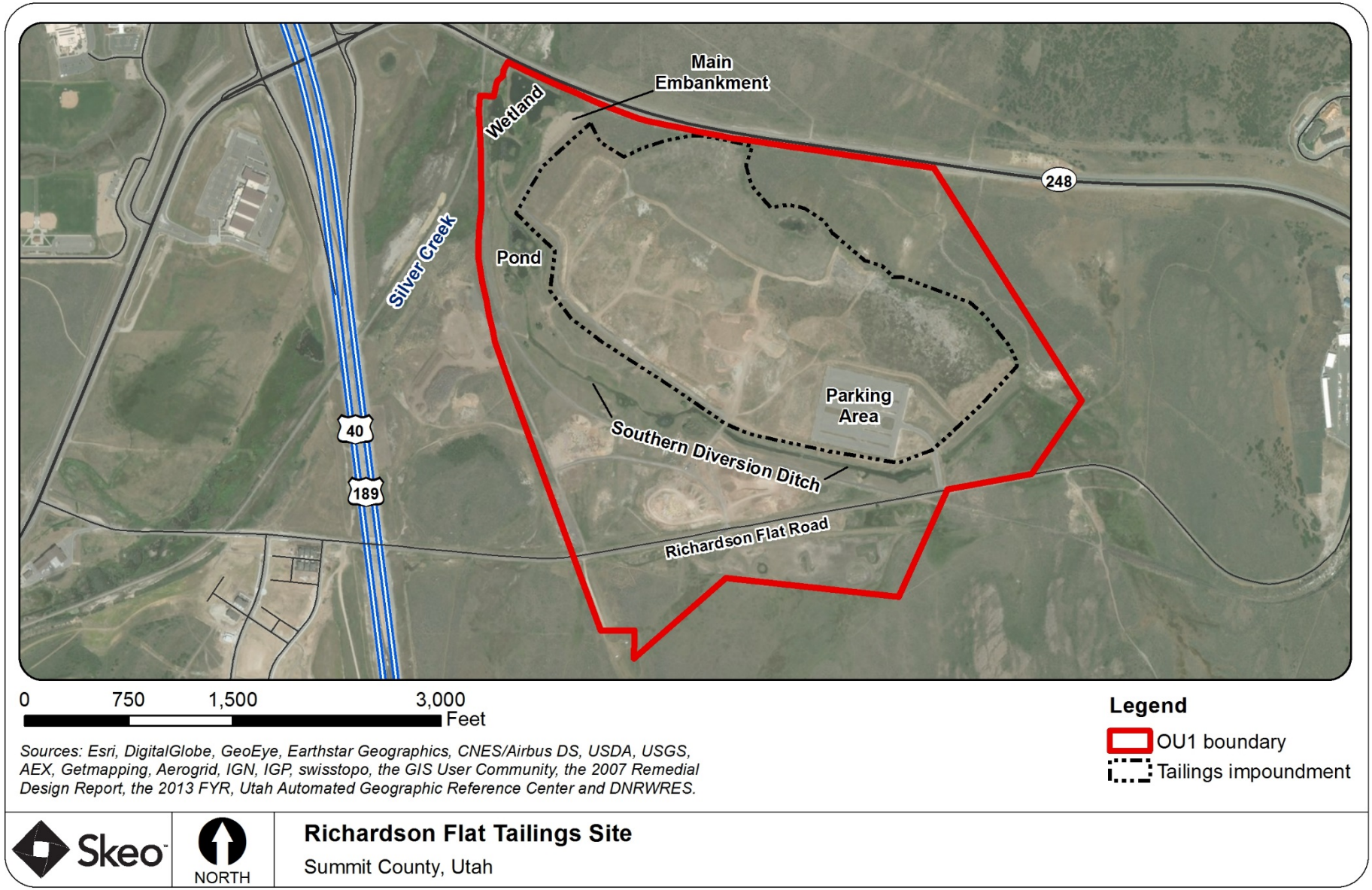
Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

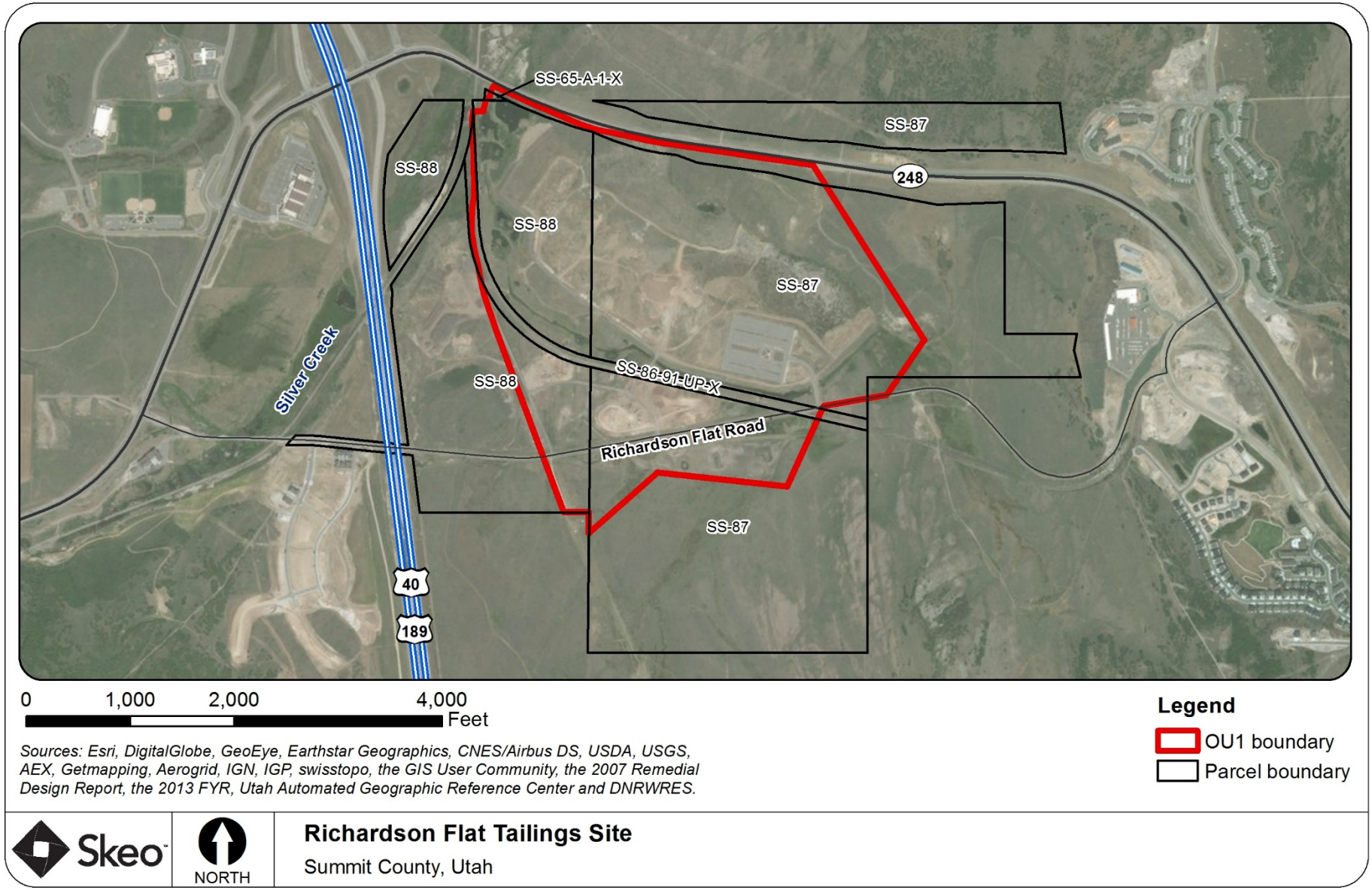
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 μg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below μg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

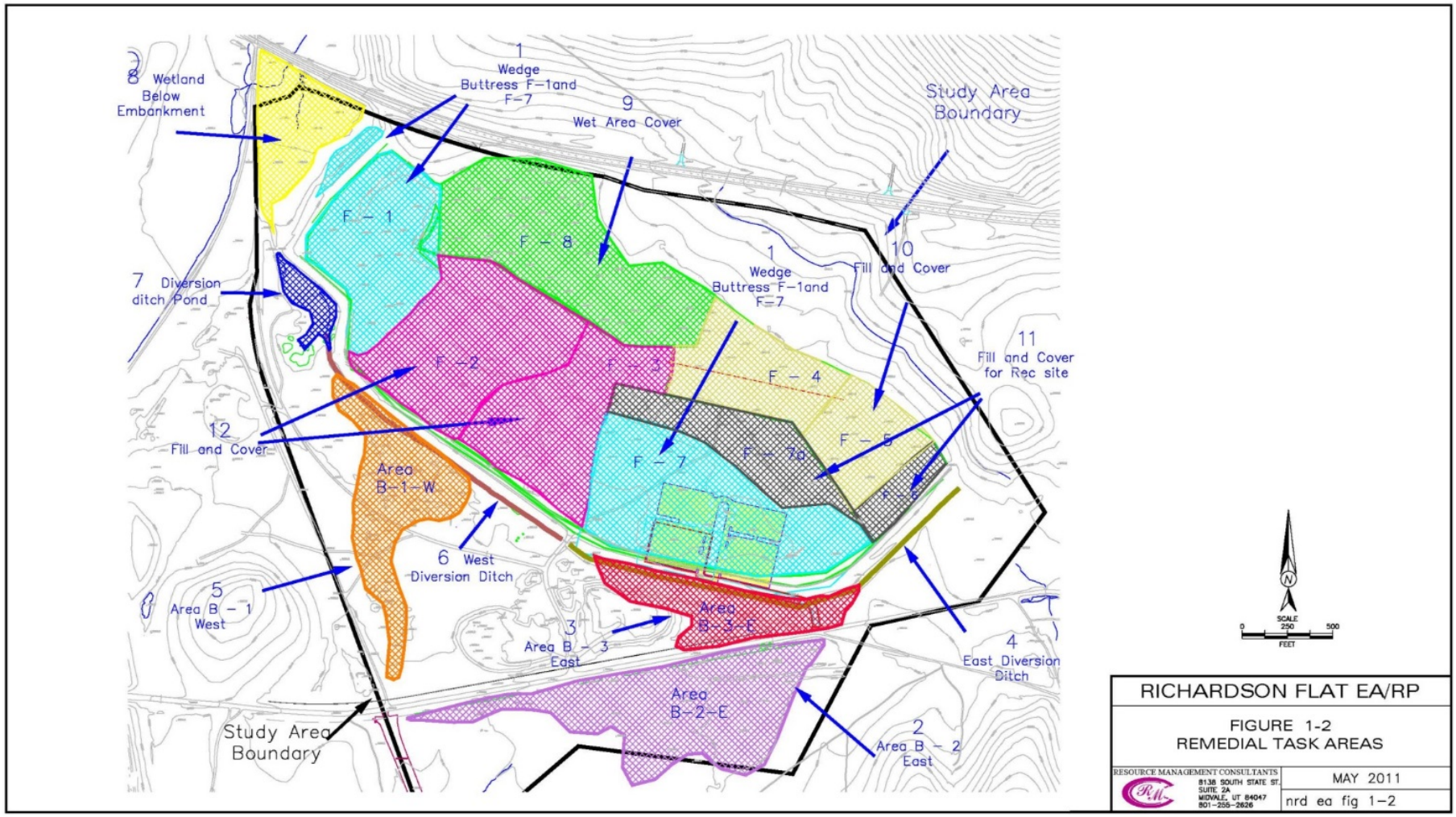


Figure C-2: 2008 Phase 2 Completion Map

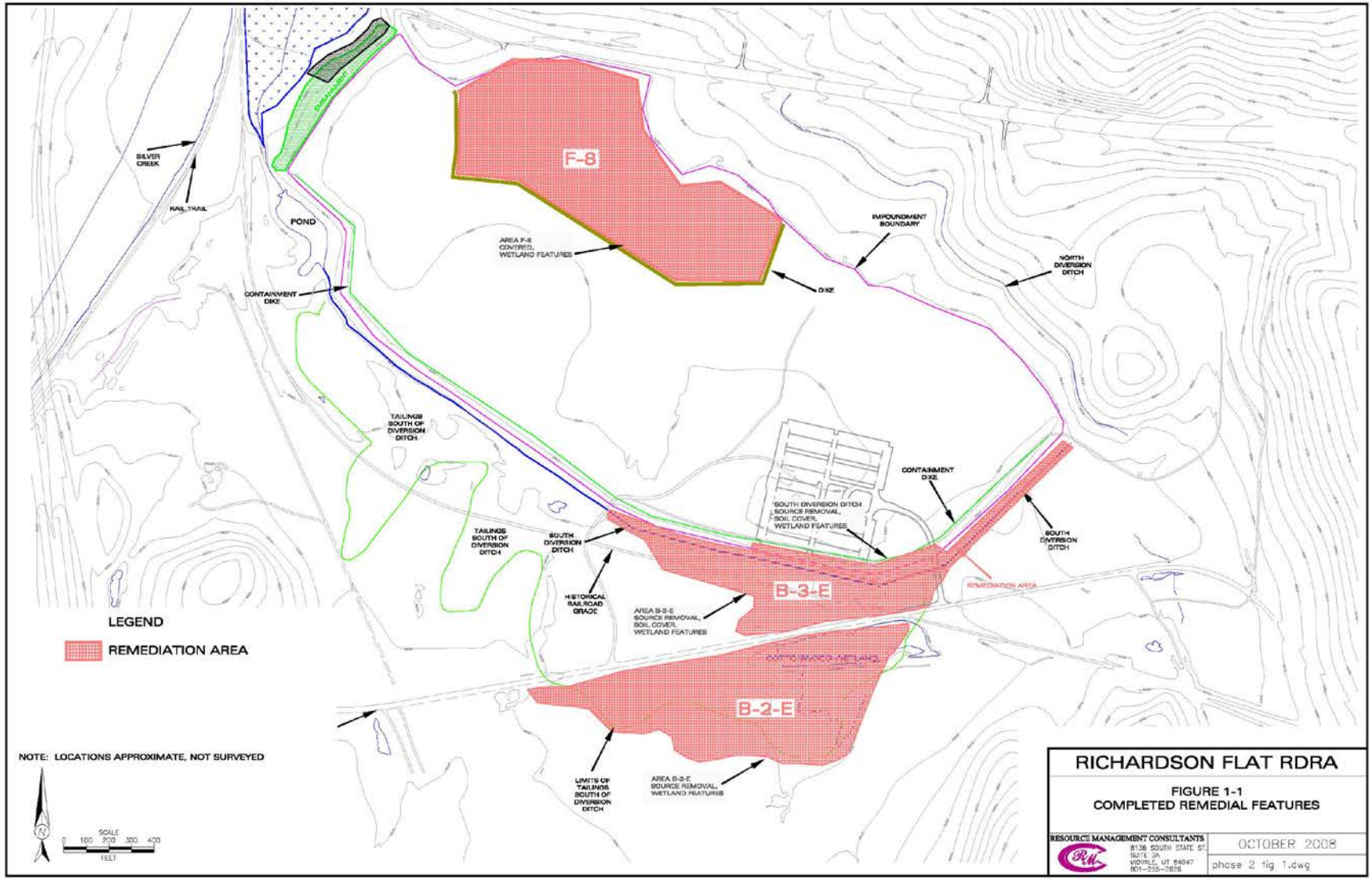


Figure C-3: 2009 Phase 3 Completion Map

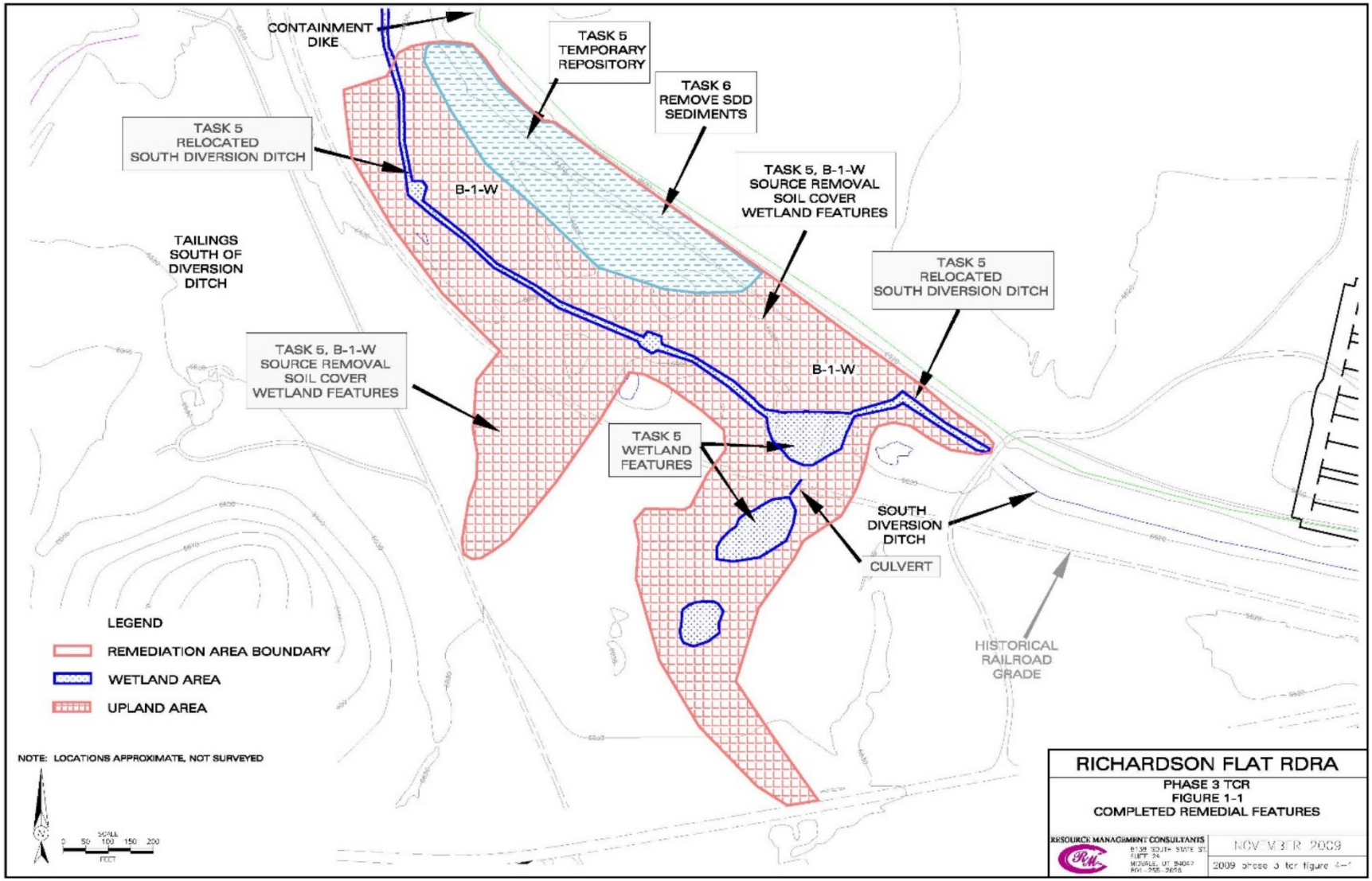


Figure C-4: 2010 Phase 4 Completion Map

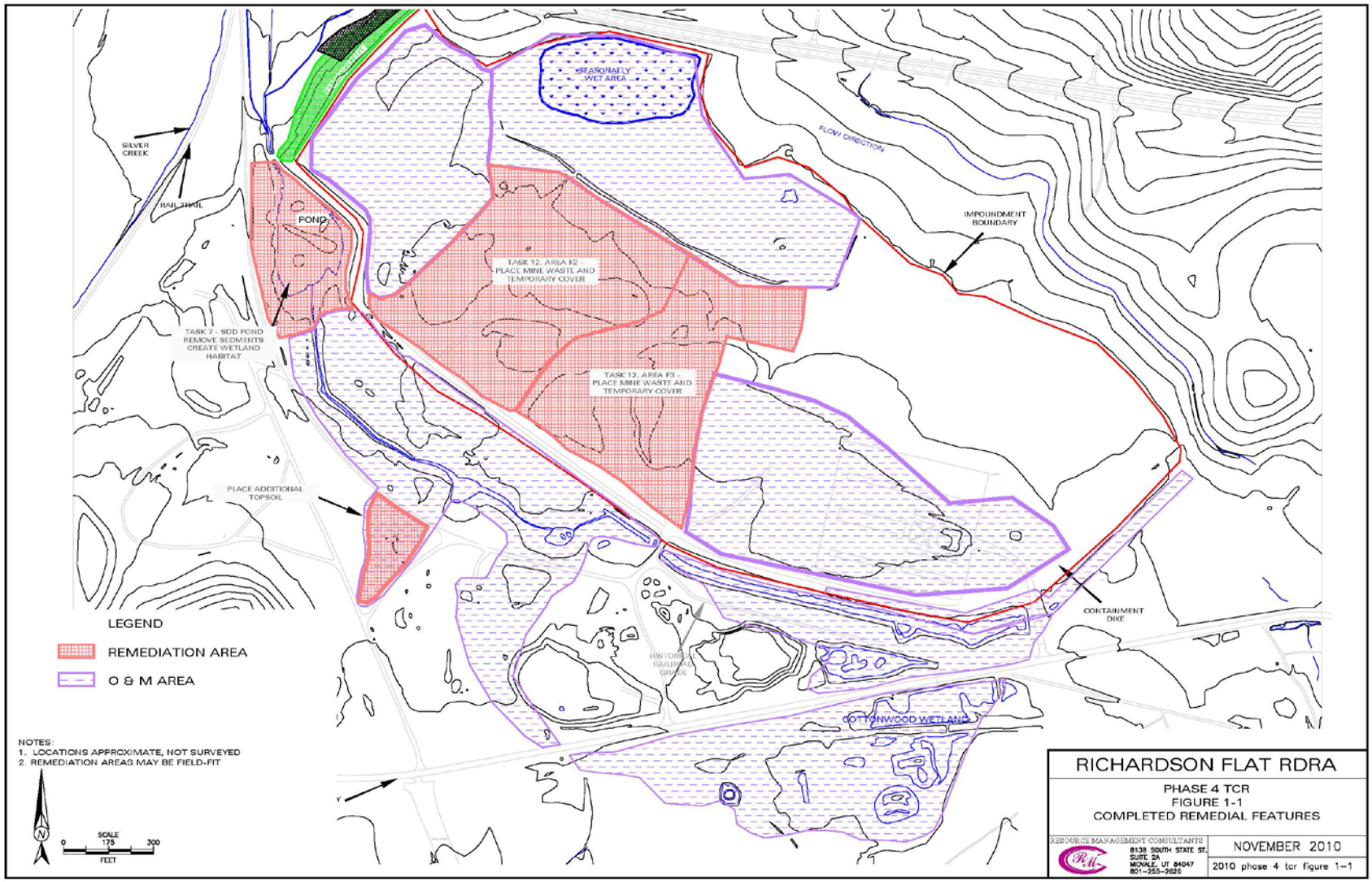
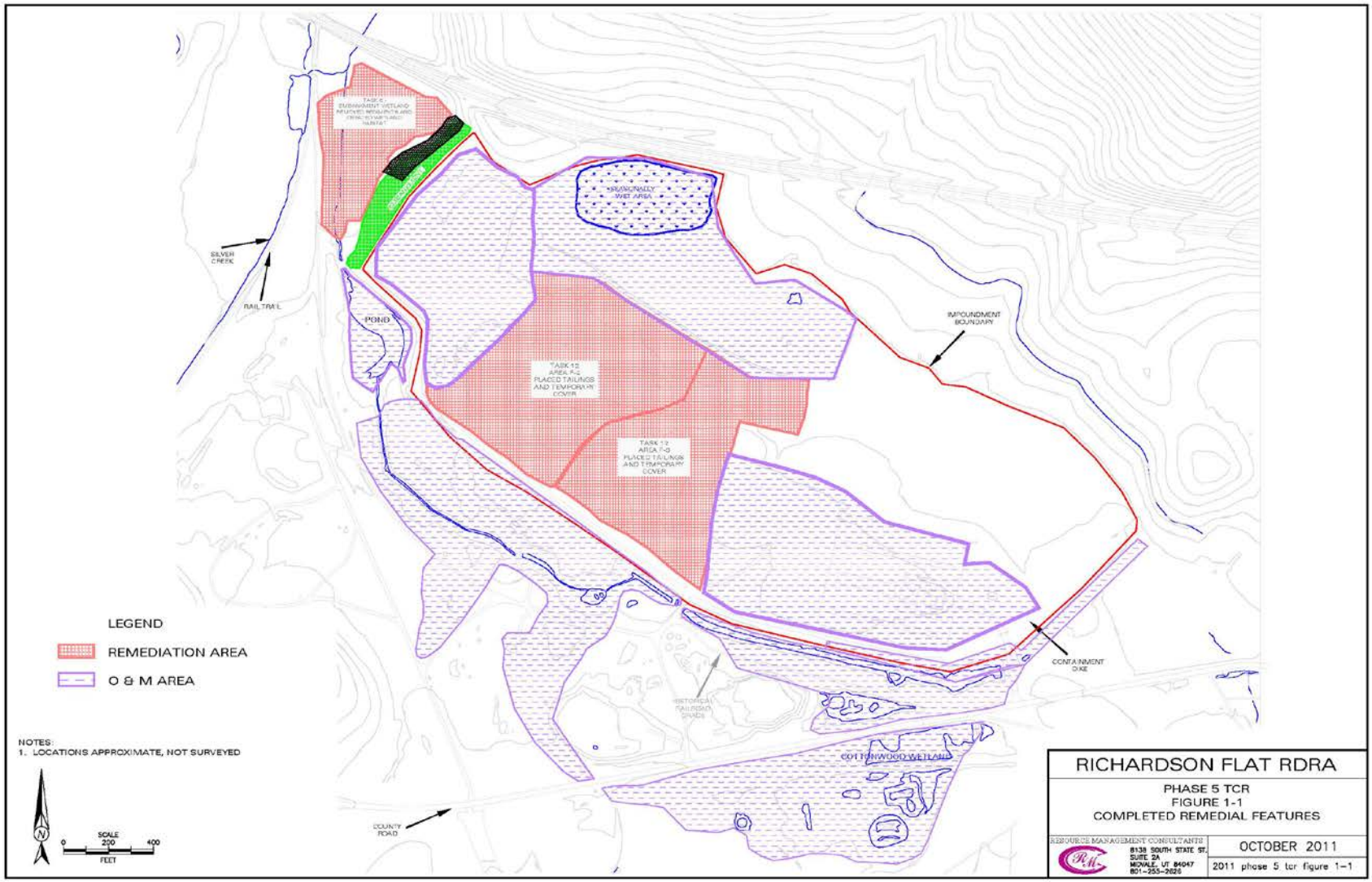


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE

United States Environmental Protection Agency

The U.S. Environmental Protection Agency, Region 8 Announces the Second Five-Year Review for the Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jami Brackin **Affiliation:** Summit County
Subject Contact Information:
Time: 2:30 p.m. **Date:** 09/21/2017
Interview Location: Park City Library

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____	_____	_____	_____	
	Name	Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☒ Erosion not evident
Arial extent: _____ Depth: _____
Remarks: _____

4. **Holes** ☐ Location shown on site map ☒ Holes not evident
Arial extent: _____ Depth: _____
Remarks: _____

5. **Vegetative Cover** ☒ Grass ☒ Cover properly established
☐ No signs of stress ☐ Trees/shrubs (indicate size and locations on a diagram)
Remarks: _____

6. **Alternative Cover** (e.g., armored rock, concrete) ☒ N/A
Remarks: _____

7. **Bulges** ☐ Location shown on site map ☒ Bulges not evident
Arial extent: _____ Height: _____
Remarks: _____

8. **Wet Areas/Water Damage** ☒ Wet areas/water damage not evident

☐ Wet areas ☐ Location shown on site map Arial extent: _____
☐ Ponding ☐ Location shown on site map Arial extent: _____
☐ Seeps ☐ Location shown on site map Arial extent: _____
☐ Soft subgrade ☐ Location shown on site map Arial extent: _____
Remarks: _____

9. **Slope Instability** ☐ Slides ☐ Location shown on site map
☒ No evidence of slope instability
Arial extent: _____
Remarks: _____

B. Benches ☐ Applicable ☒ N/A
(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

2. **Bench Breached** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

3. **Bench Overtopped** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

C. Letdown Channels ☐ Applicable ☒ N/A
(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☐ Erosion not evident

Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.



Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom
NOTARY PUBLIC

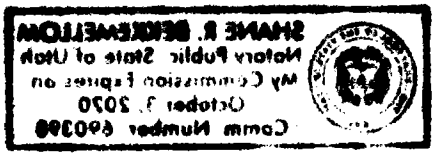
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

0486087 PCH-1-1
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486094 PCH-1-2
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SALT LAKE CITY, UT 84117

APPENDIX F

STATEMENT OF QUALIFICATIONS



MARK **LARSEN, P.G., E.P.**

GEOLOGIST | ENVIRONMENTAL PROFESSIONAL

CONTACT

mark.larsen@cmtlaboratories.com

496 East 1750 North, Suite B,
Vineyard, Utah 84057

801.492.4132

cmtlaboratories.com

EDUCATION

Bachelor of Science Geology,
University of Utah, Salt Lake City,
1997

PROFESSIONAL LICENSES

Professional Geologist,
State of Utah,
License # 5293214-2250
Expires 3/3/19

AFFILLIATIONS

Association of Environmental and
Engineering Geologists (AEG)
Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



LINDSEY **BRADSHAW**

ENVIRONMENTAL SPECIALIST | FULL SERVICE | MARKETING

CONTACT

lindsey.bradshaw@cmtlaboratories.com

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Vineyard, Utah 84057

801.864.9702

cmtlaboratories.com

EDUCATION

Bachelor of Arts, Interior Design,
Utah State University,
2009

ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel PP-28-2

SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14714

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The target property consists of 1 parcel with the following Summit County Parcel ID Number: PP-28-2. In total, the parcel comprises approximately 151.15 acres. The target property is currently undeveloped land with varied terrain included steep hill slopes and relatively flat meadows. Several unpaved roads and trails also cross the target property. The target property has historically remained undeveloped land.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified two regulated sites or facilities on or within the required search radii of the target property (Sections 8.1 and 8.2). Based on the nature of the database listing, site/facility conditions, elevation, and/or distance from the target property, none of the identified, regulated sites/facilities appear to represent an REC in relation to the target property at the time of this assessment. Based on the observations, research, and interviews conducted while performing this assessment, we did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted. With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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APPENDICES

Appendix A: Site Inspection Checklist / Site Photographs
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1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel PP-28-2 in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.664531° N and Longitude: -111.438642° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1903 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: PP-28-2. In total, the parcel comprises approximately 151.15 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.



FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently undeveloped land with varied terrain included steep hill slopes and relatively flat meadows. Several unpaved roads and trails also cross the target property. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: Undeveloped hill slopes and meadows.

East: Undeveloped hill slopes and meadows.

South: Undeveloped hill slopes and meadows.

West: Undeveloped hill slopes and meadows.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

No solid waste was observed on the target property.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	0	1	2	NS	NS	3
Water Wells	0.5000	0	0	17	2	NS	NS	19
Total		**0**	**0**	**18**	**4**	**0**	**0**	**22**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
PP-28-2	Null	151.15	Stichting Mayflower Mountain Fonds

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that the target property and adjacent properties were undeveloped land.

1953: The aerial shows no significant change from the previous imagery.

1962: The aerial shows no significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: Several unpaved roads/trails are visible on the target property. The aerial shows no other significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: The aerial shows no significant change from the previous imagery.

1993: The aerial shows no significant change from the previous imagery.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows no significant change from the previous imagery.

2004: The aerial shows no significant change from the previous imagery.

2006: The aerial shows no significant change from the previous imagery.

2009: The aerial shows no significant change from the previous imagery.

2011: The aerial shows no significant change from the previous imagery.

2014: The aerial shows no significant change from the previous imagery.

2016: The aerial shows no significant change from the previous imagery.

2018: The aerial shows no significant change from the previous imagery.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey, "Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1903, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: No development or improvements are mapped on or adjacent to the target property.

1955: The map shows an apparent mine tunnel/adit on the north-central portion of the target property. No other development or improvements are mapped on or adjacent to the target property.

1999: The map shows an unpaved road/trail crossing the property from north to south. No other changes are shown on or adjacent to the property.

2014: The map shows streets associated with the existing commercial and residential development to the northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,720 and 7,360 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene
Tksh	Lava flows and volcanic mudflow breccia of Sage Hen Hollow (Keetley Volcanics)	Upper Eocene

The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** on the following page.

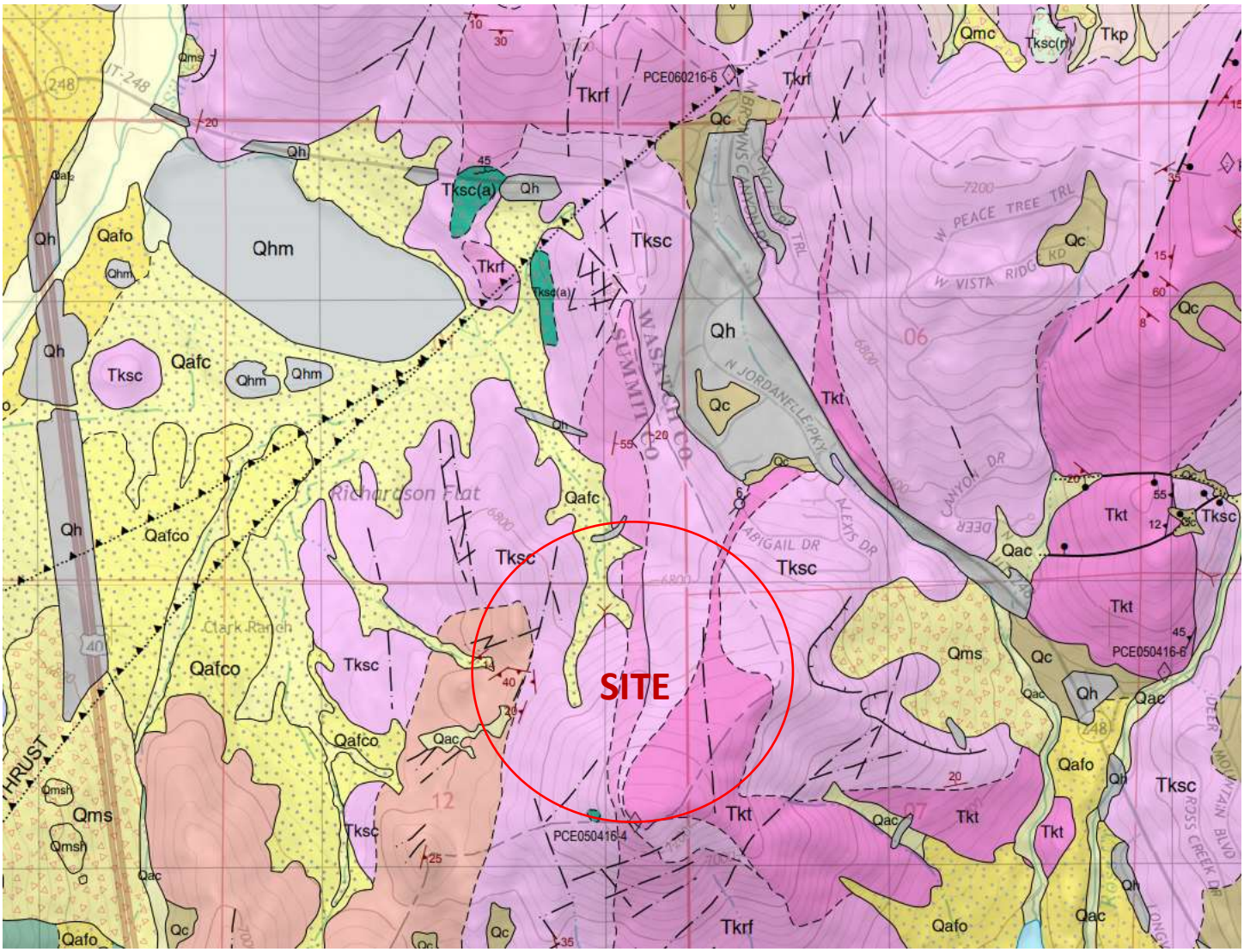

FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the north and northwest at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

The following table list environmental database listings that were identified within the boundary of the target property.

ACRONYM	FACILITY	STREET	REC
MRDS	Unknown Tunnel	Target Property	No

An unknown tunnel/adit, presumably associated with a past mining claim or exploration is mapped on the north central portion of the target property. CMT saw no evidence of this tunnel and possible mining activity at the site, including spoil rock/tailings, during our site reconnaissance or review of historical aerial photos (Section 6.3) and we do not consider this to represent an REC. If evidence of mining activity, including tailings, are discovered on the target property at a later date, additional assessment should be considered to characterize the activity and determine if further environmental assessment is warranted.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
CERCLIS	Richardson Flat Tailings	Summit County	0.335	NNW	No
PNPL	Richardson Flat Tailings	Summit County	0.335	NNW	No
RODS	Richardson Flat Tailings	Summit County	0.335	NNW	No
SEMS	Richardson Flat Tailings	Summit County	0.335	NNW	No

No orphan sites were identified within the Radius Map Report.

The following site history for the Richardson Flat Tailings is from the U.S. EPA: (https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**.

The target property is more than 1/3 of a mile from the RFTS and is up-gradient. Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property and do not represent an REC.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS, no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs, HRECs, or CRECs as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. No current Land Use Covenants (LUCs) and associated Activity and Use Limitations (AULs) associated with the target property or surrounding properties were identified at the time of this assessment. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician

LICENSED PROFESSIONAL GEOLOGIST
No. 6293214
MARK CURTIS LARSEN
6/18/2020
STATE OF UTAH

Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website:
https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT ENGINEERING LABORATORIES

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel PP-28-2 Site #_____ CMT Job #14714

Property Address: SE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Stichting Mayflower Mountain Fonds Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description: The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Site is open, undeveloped hill slopes and meadows. Vegetation is scrub oak, sage brush, grasses and weeds. Several unpaved roads/trails cross the site.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel PP-28-2

NORTH

Name: Undevelopd land

Address:

Description: open land, hillsides, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: open hillsides

Address:

Description: undevelped land

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows, fields

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel PP-28-2

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Solid Waste:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Transformers:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel PP-28-2

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel PP-28-2

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel PP-28-2

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel PP-28-2

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel PP-28-2

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View of the central portion of the target property, looking south.



Photo 2 View of the northeast portion of the target property, looking east.



Photo 3 View of the southeast portion of the target property, looking southeast.



Photo 4 Hill peak on the southeast portion of the target property, looking east.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355532
Project #: 14714
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.441602900, 40.660910656), (-111.441023543, 40.660926933), (-111.441087916, 40.660145617), (-111.440175965, 40.660414195), (-111.439489320, 40.660454889), (-111.438706115, 40.660560692), (-111.438126758, 40.660544415), (-111.437450841, 40.660568831), (-111.436764195, 40.660544415), (-111.436141923, 40.660511860), (-111.435734227, 40.660625802), (-111.435358718, 40.660707189), (-111.435101226, 40.660788576), (-111.434736445, 40.661049013), (-111.434275105, 40.661521054), (-111.434232971, 40.668229508), (-111.443964025, 40.668221371), (-111.443964025, 40.665853235), (-111.443964025, 40.662776975), (-111.441592952, 40.662752559)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/10/1967	ASCS	1" = 500'	PI-3
08/01/1962	ASCS	1" = 500'	3-22
07/03/1953	USGS	1" = 500'	1-42
1937	ASCS	1" = 500'	U79

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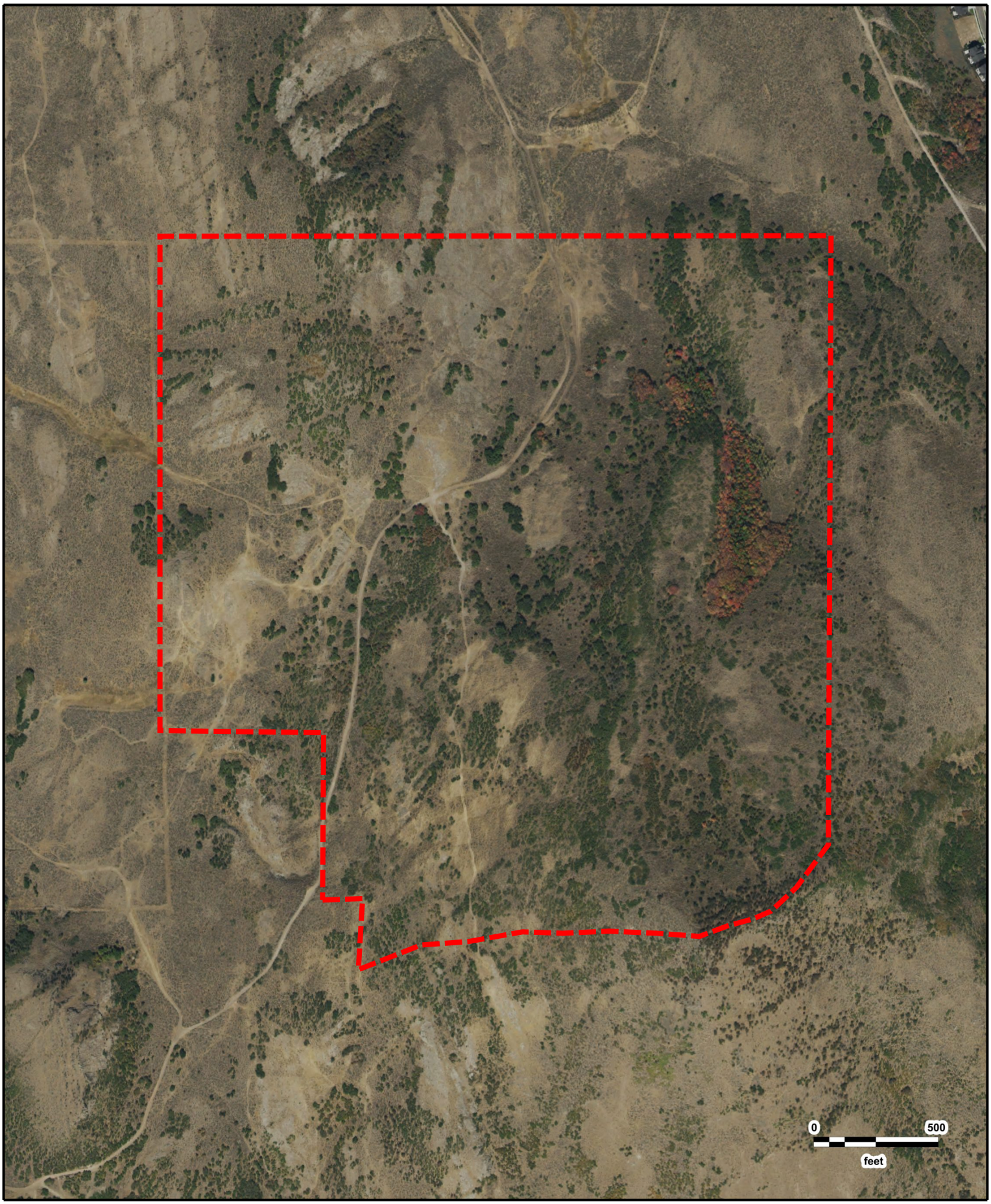

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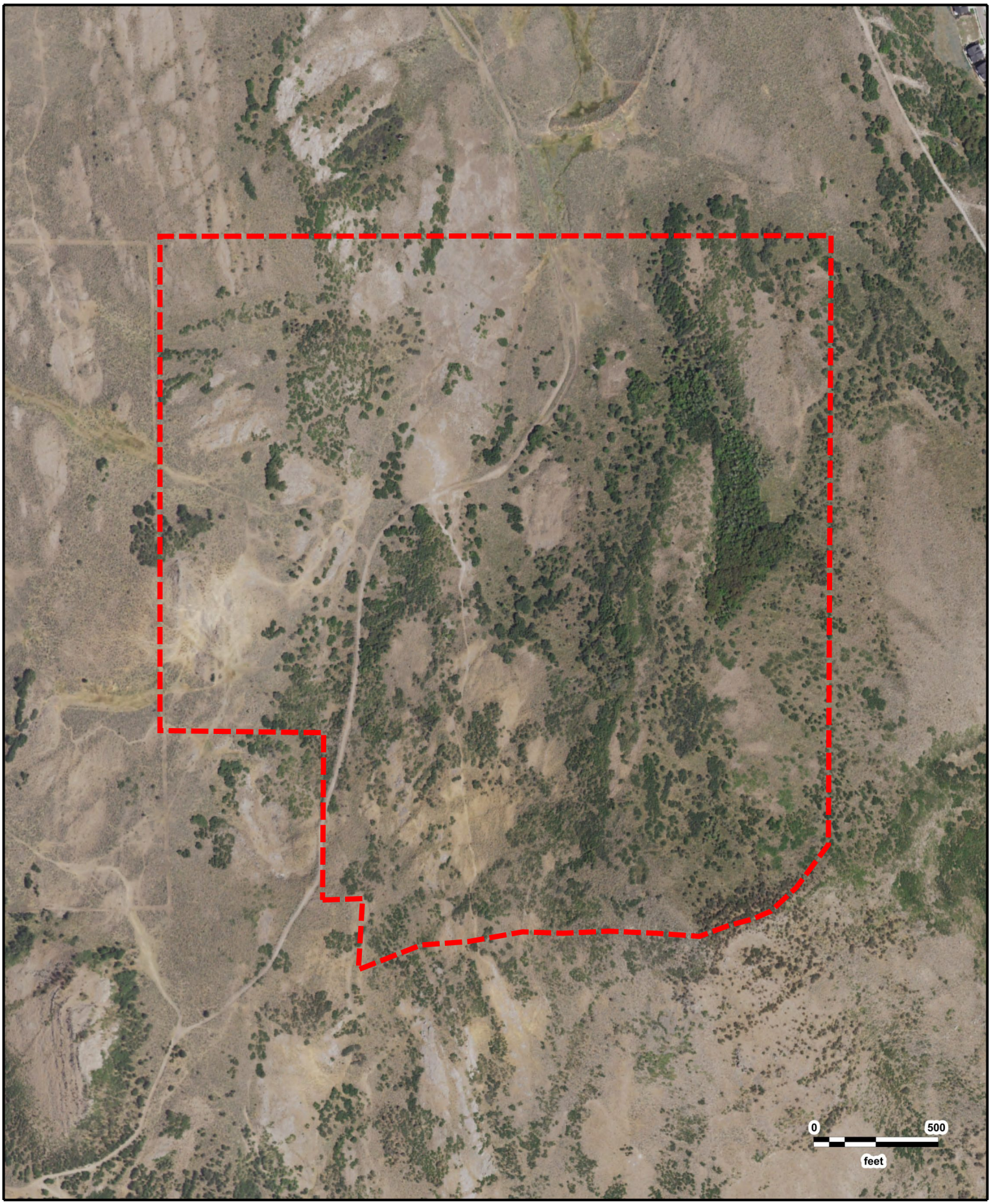
Page 504

Richardson Flats Parcel PP-28-2
USDA
2018

GeoSearch

JOB #: 355532 - 06/08/2020



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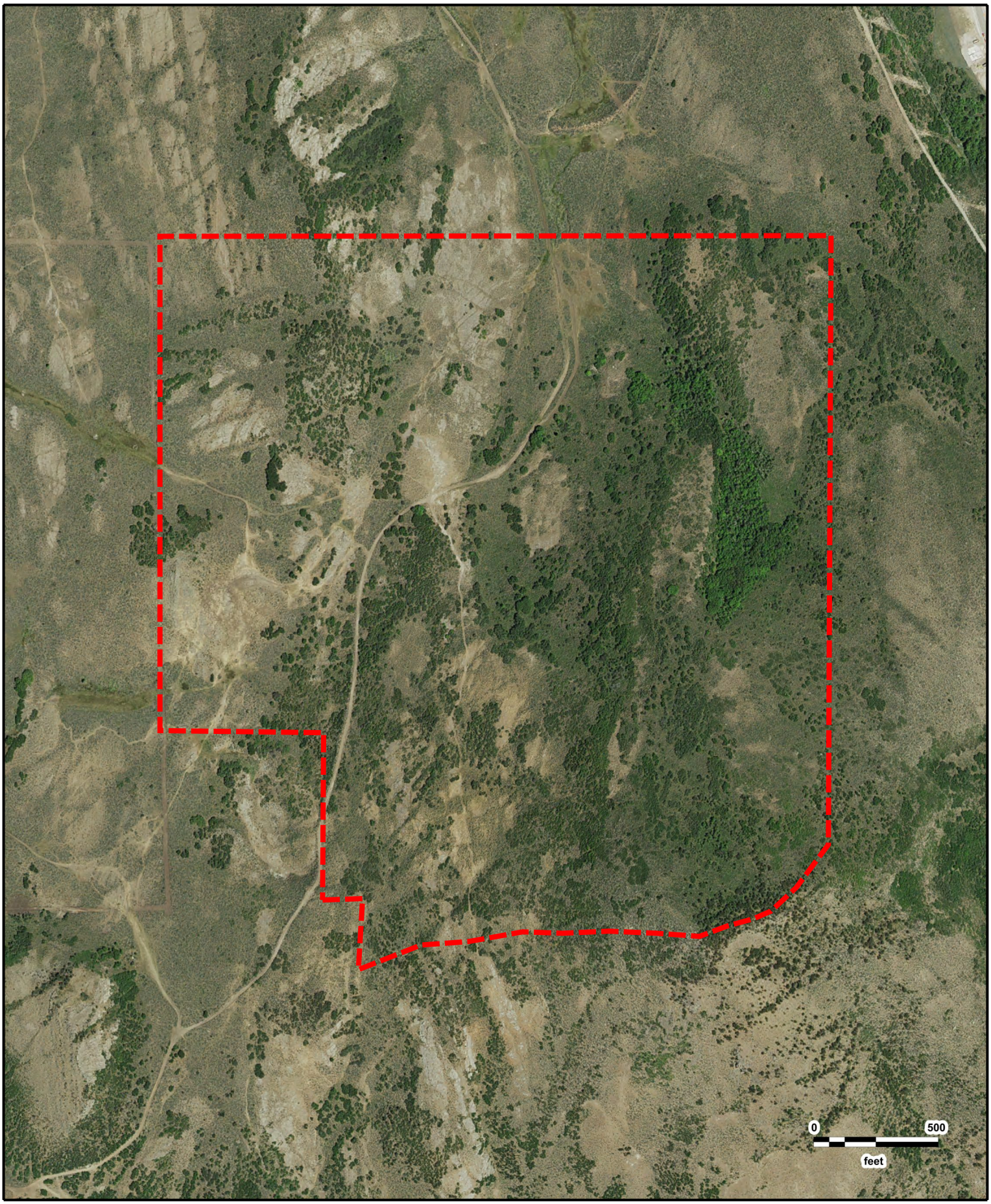
Page 505

Richardson Flats Parcel PP-28-2
USDA
2016

GeoSearch

JOB #: 355532 - 06/08/2020



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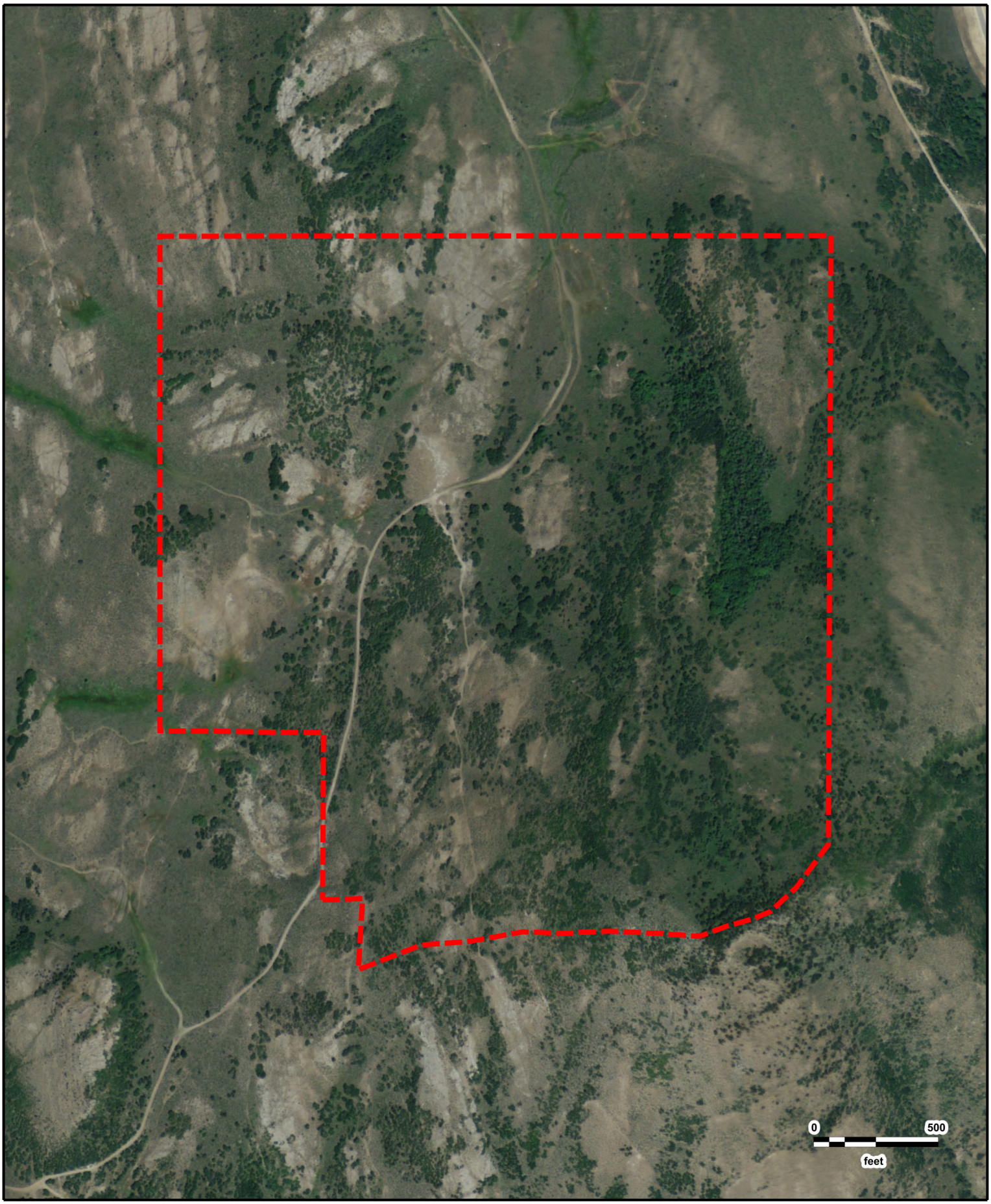
Page 506

Richardson Flats Parcel PP-28-2
USDA
2014

GeoSearch

JOB #: 355532 - 06/08/2020



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Page 507

Richardson Flats Parcel PP-28-2
USDA
2011

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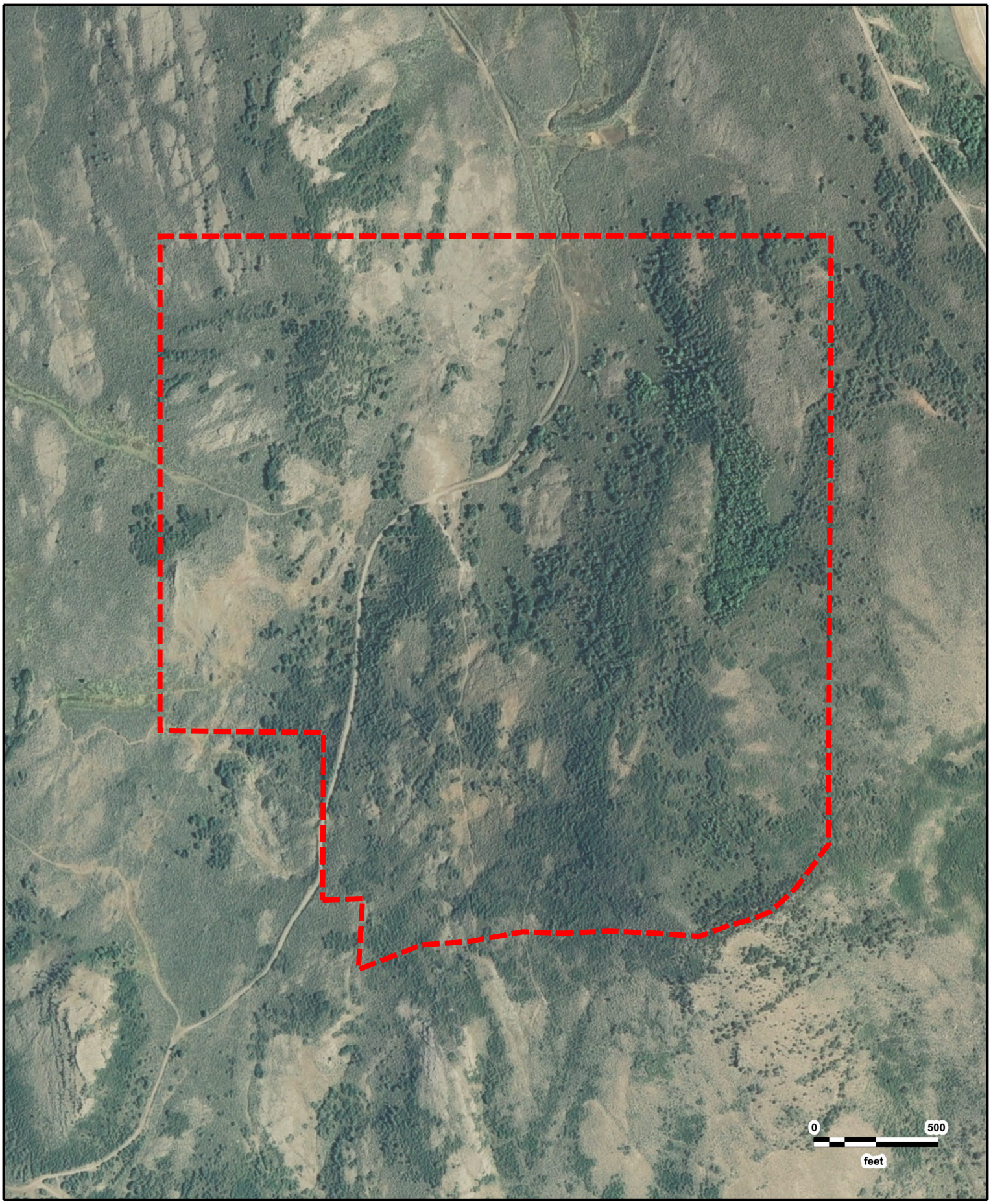

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Page 508

Richardson Flats Parcel PP-28-2
USDA
2009

GeoSearch

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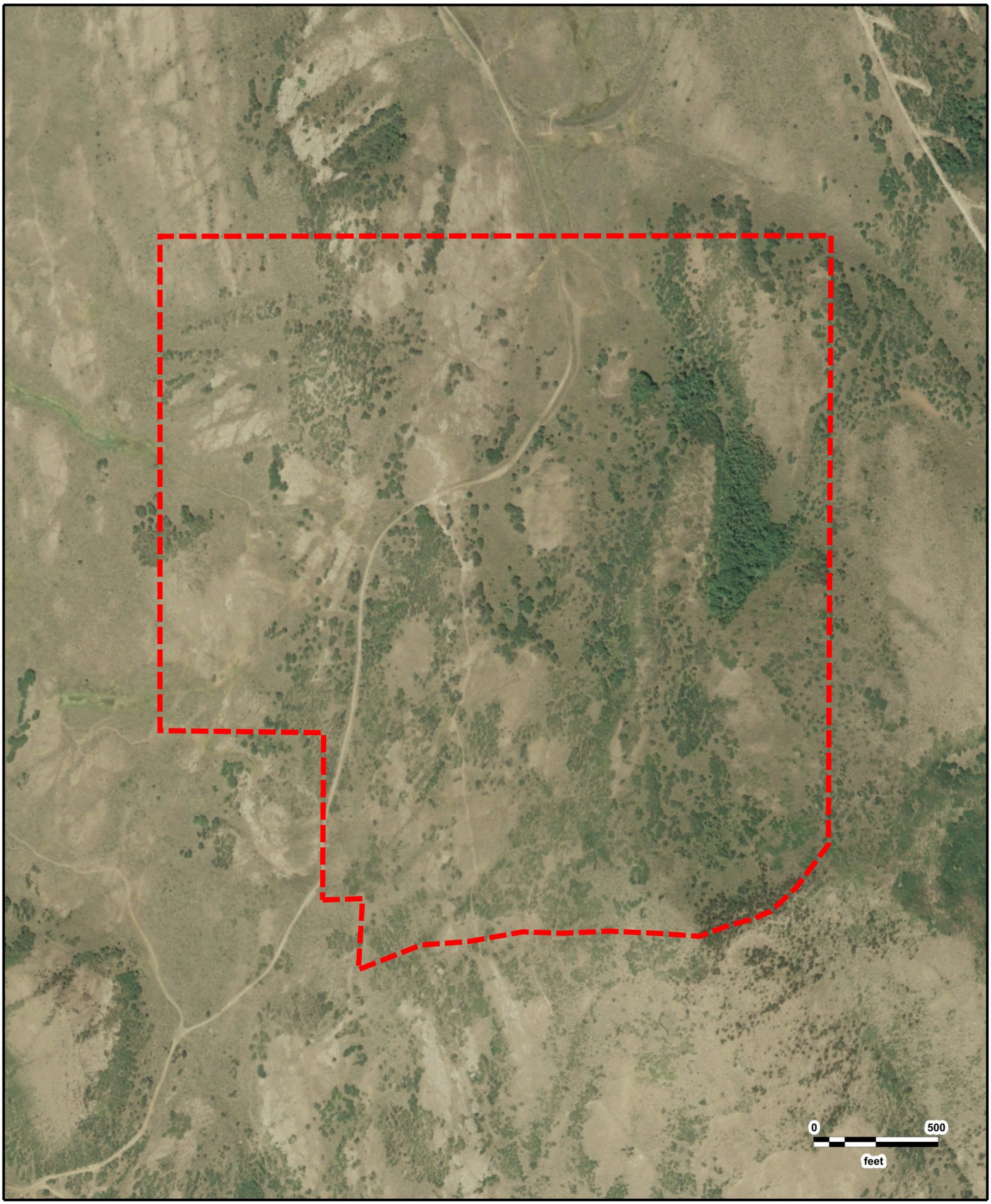

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Page 509

Richardson Flats Parcel PP-28-2
USDA
2006

GeoSearch

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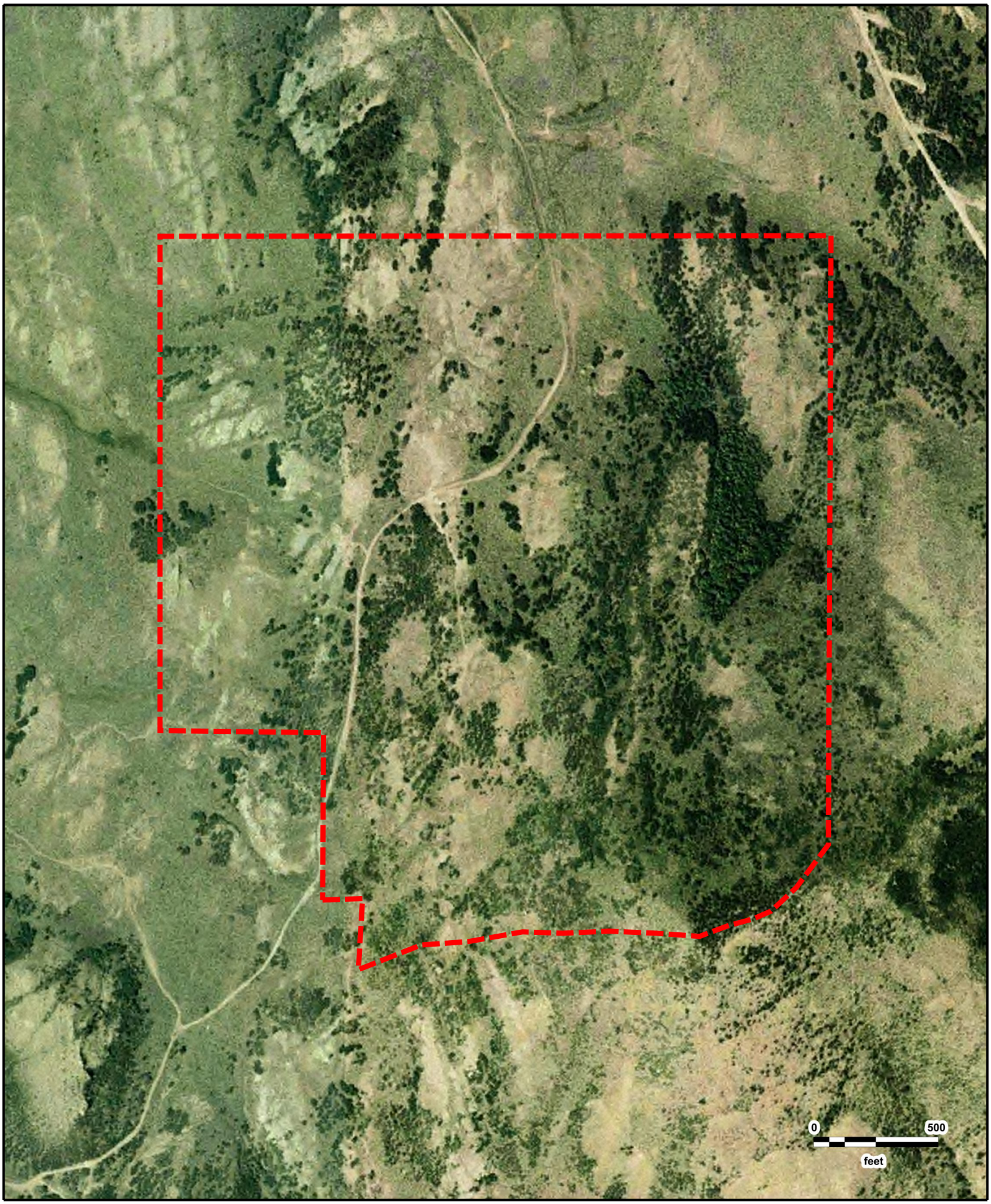

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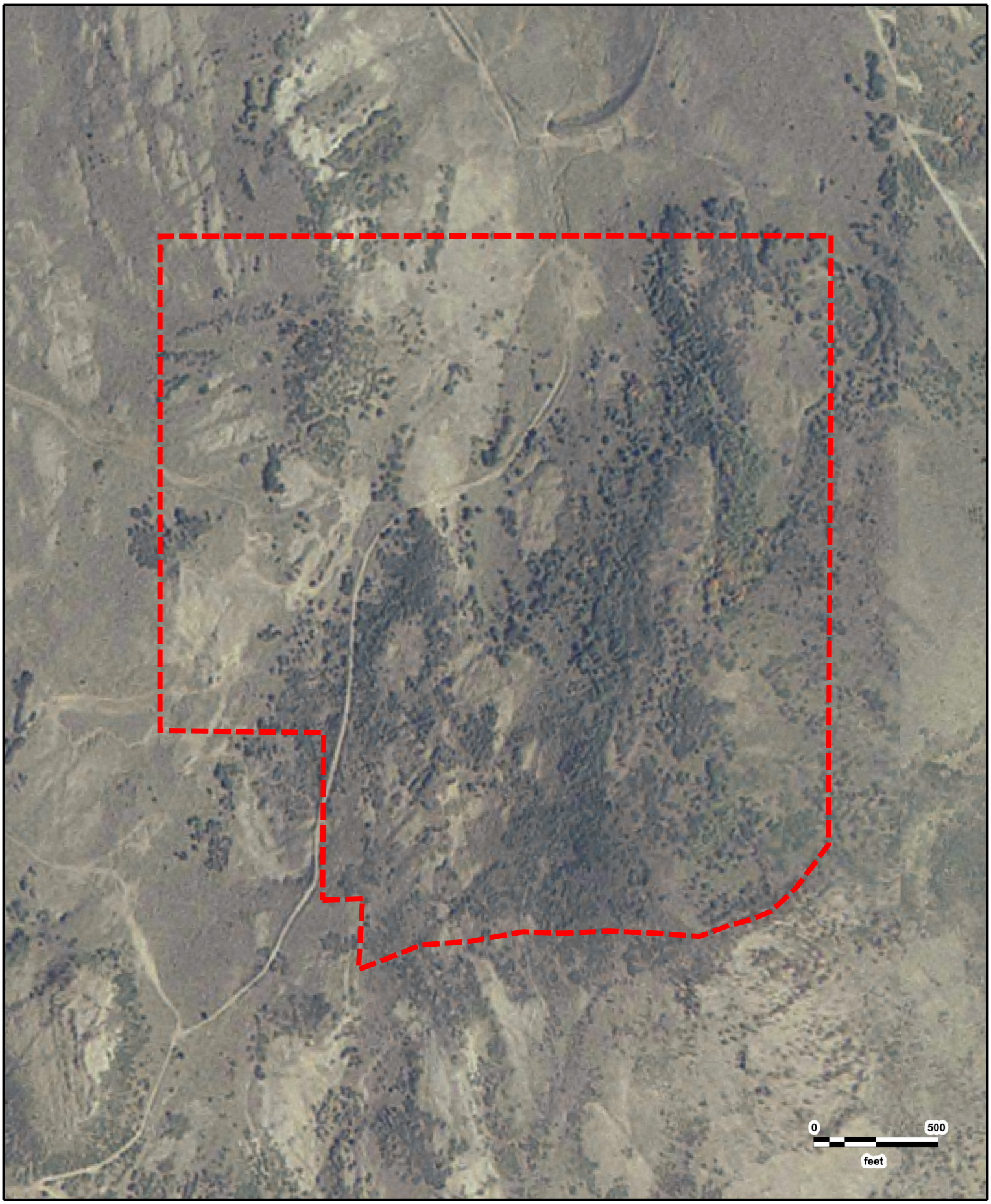
Page 510

Richardson Flats Parcel PP-28-2
USDA
2004

GeoSearch

JOB #: 355532 - 06/08/2020



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Page 511

Richardson Flats Parcel PP-28-2
USDA
2003

GeoSearch

JOB #: 355532 - 06/08/2020



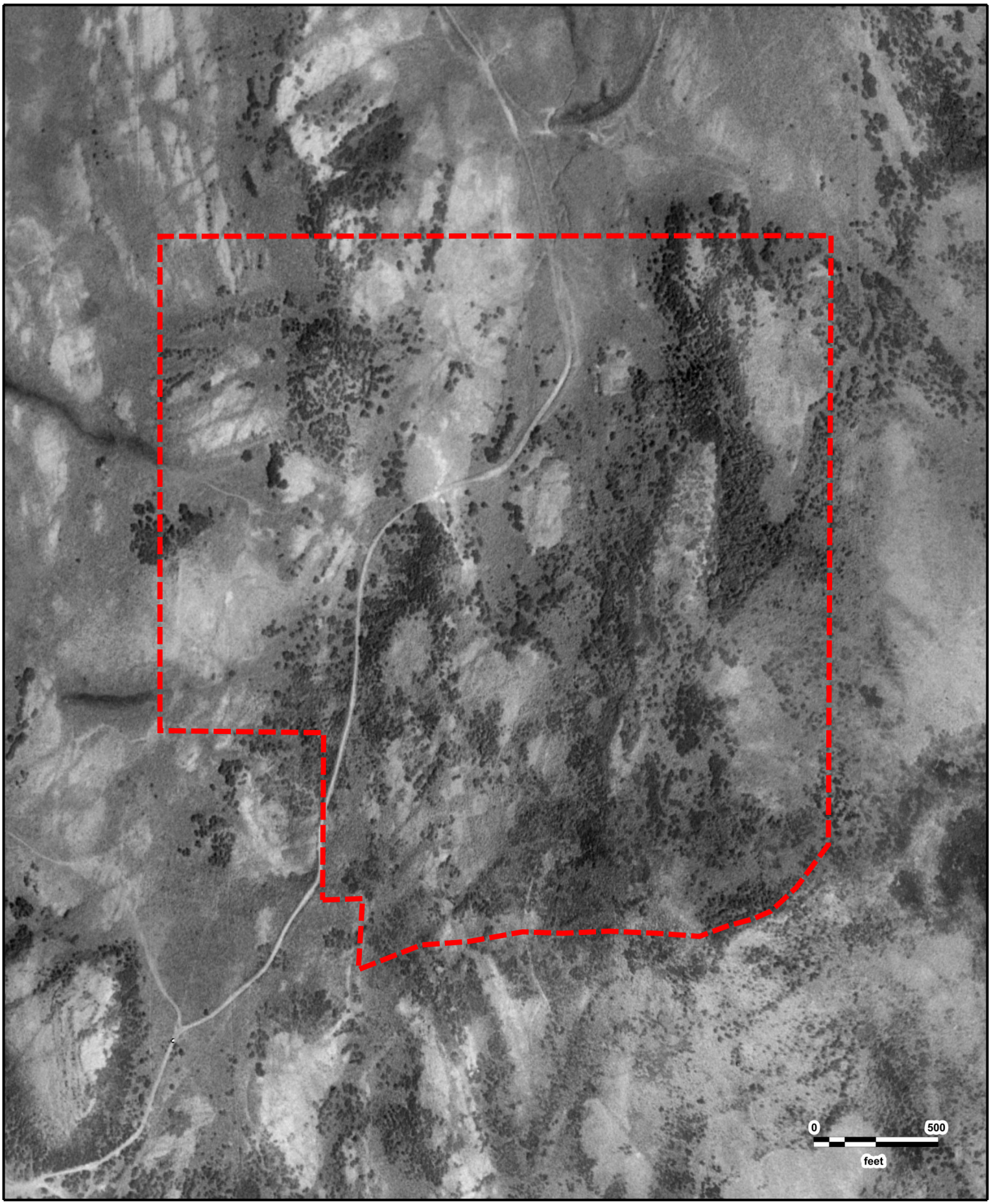
N

Page 512

Richardson Flats Parcel PP-28-2
USGS
07/08/1997

GeoSearch

JOB #: 355532 - 06/08/2020



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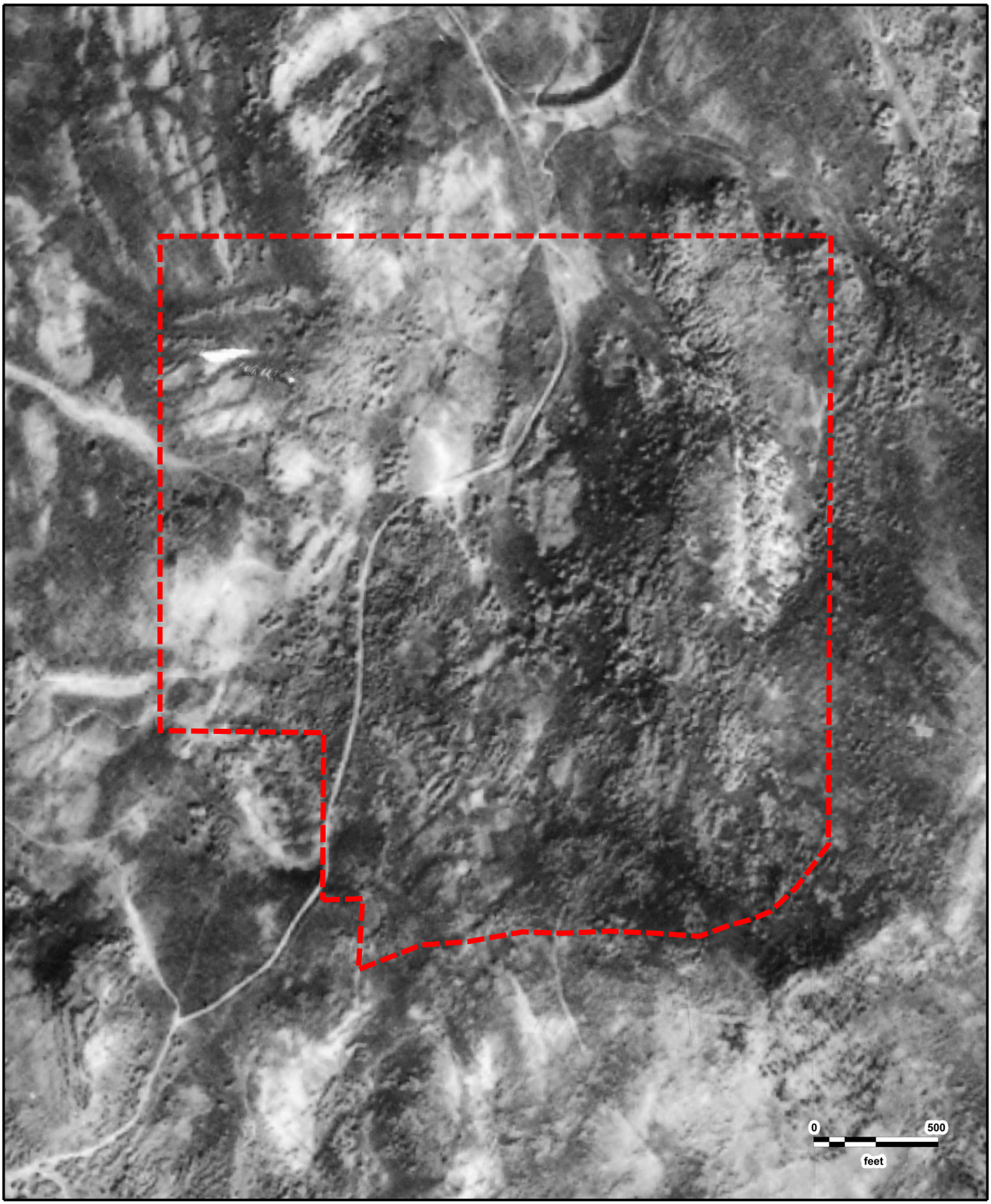
Page 513

Richardson Flats Parcel PP-28-2
USGS
08/23/1993

GeoSearch

JOB #: 355532 - 06/08/2020



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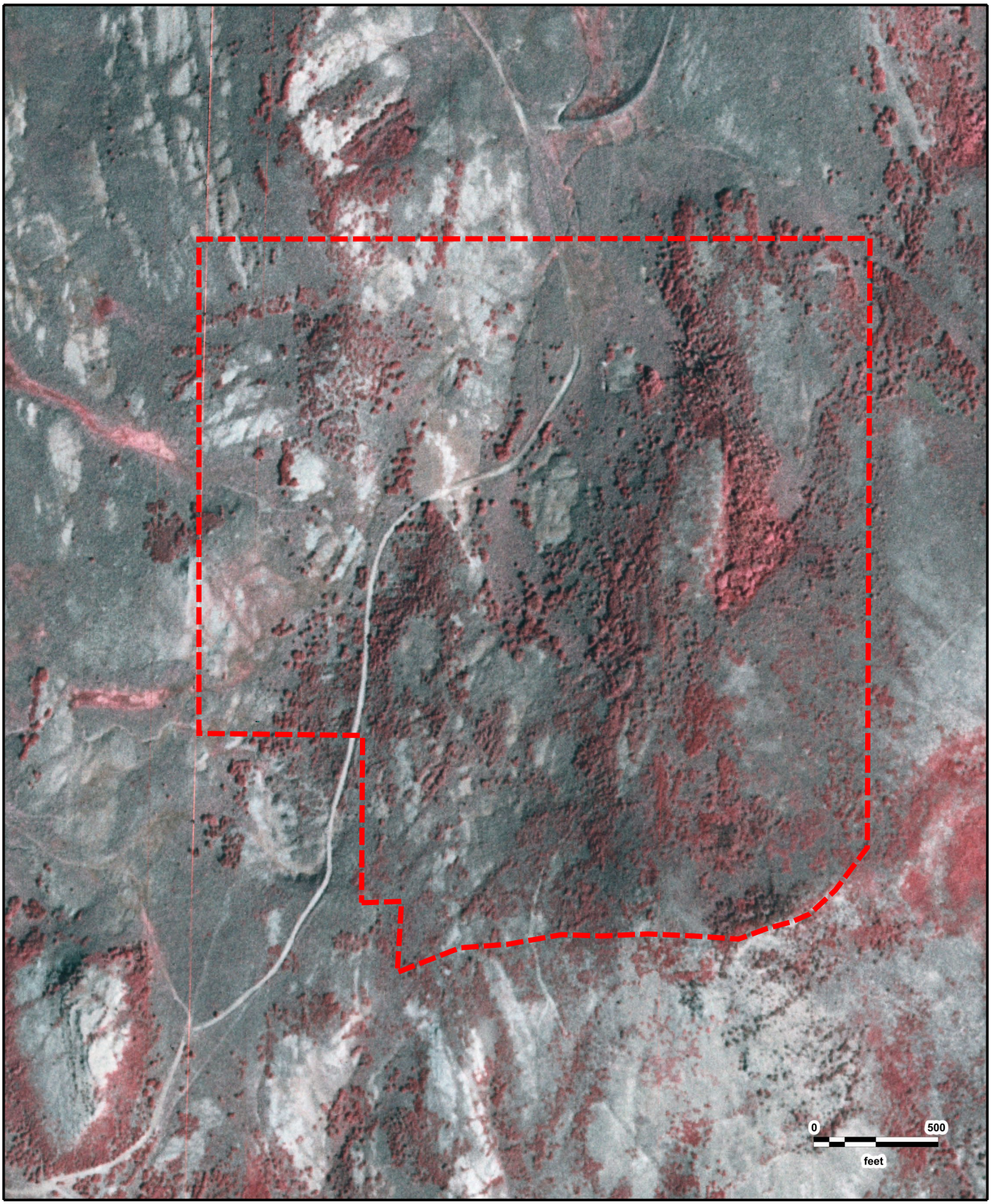
Page 514

Richardson Flats Parcel PP-28-2
USGS
09/18/1987

GeoSearch

JOB #: 355532 - 06/08/2020



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Page 515

Richardson Flats Parcel PP-28-2
USGS
09/05/1983

GeoSearch



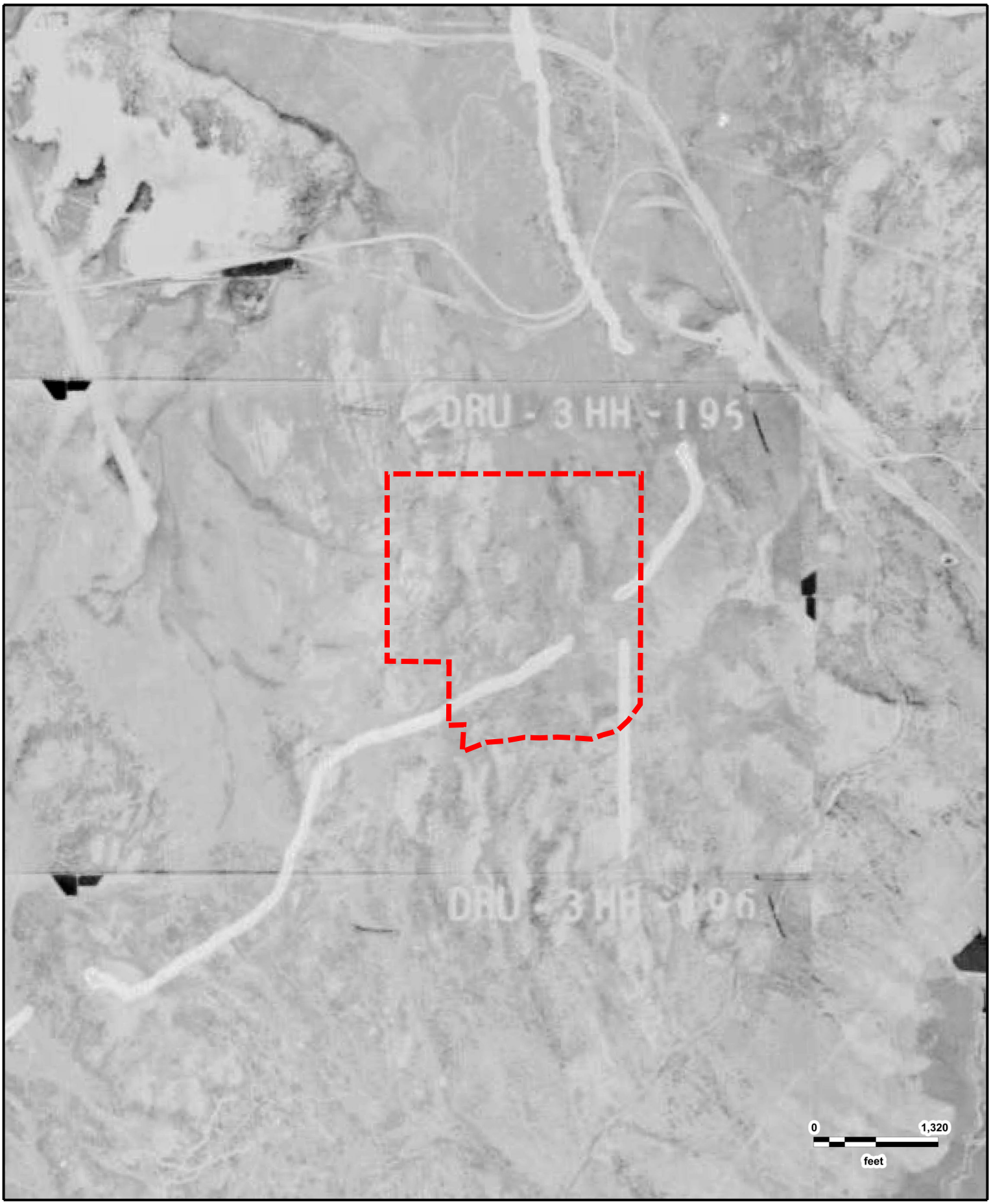
N

Page 516

Richardson Flats Parcel PP-28-2
USGS
08/24/1976

GeoSearch

JOB #: 355532 - 06/08/2020



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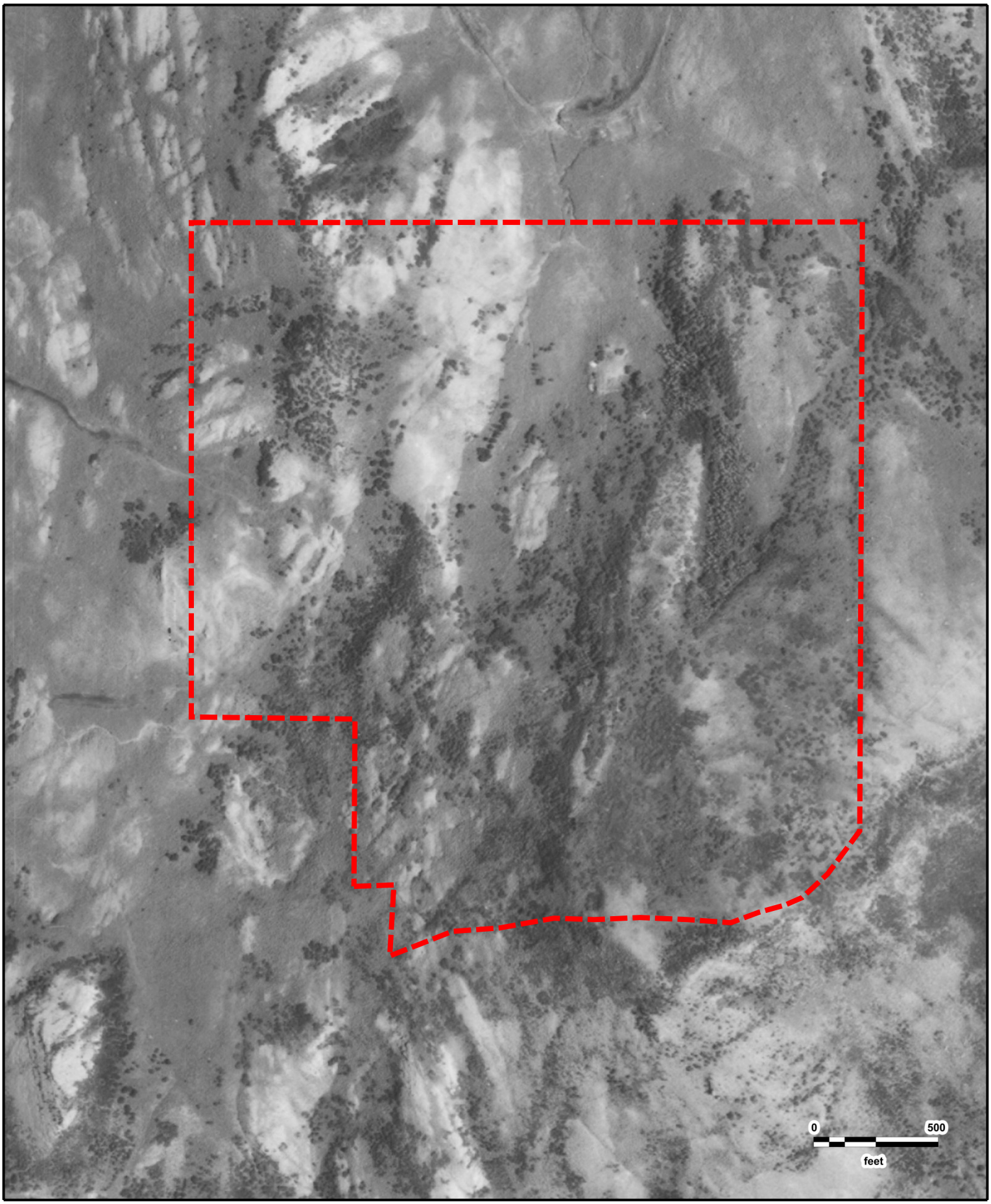
Page 517

Richardson Flats Parcel PP-28-2
ASCS
07/10/1967

GeoSearch

JOB #: 355532 - 06/08/2020



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Page 518

Richardson Flats Parcel PP-28-2
ASCS
08/01/1962

GeoSearch

JOB #: 355532 - 06/08/2020



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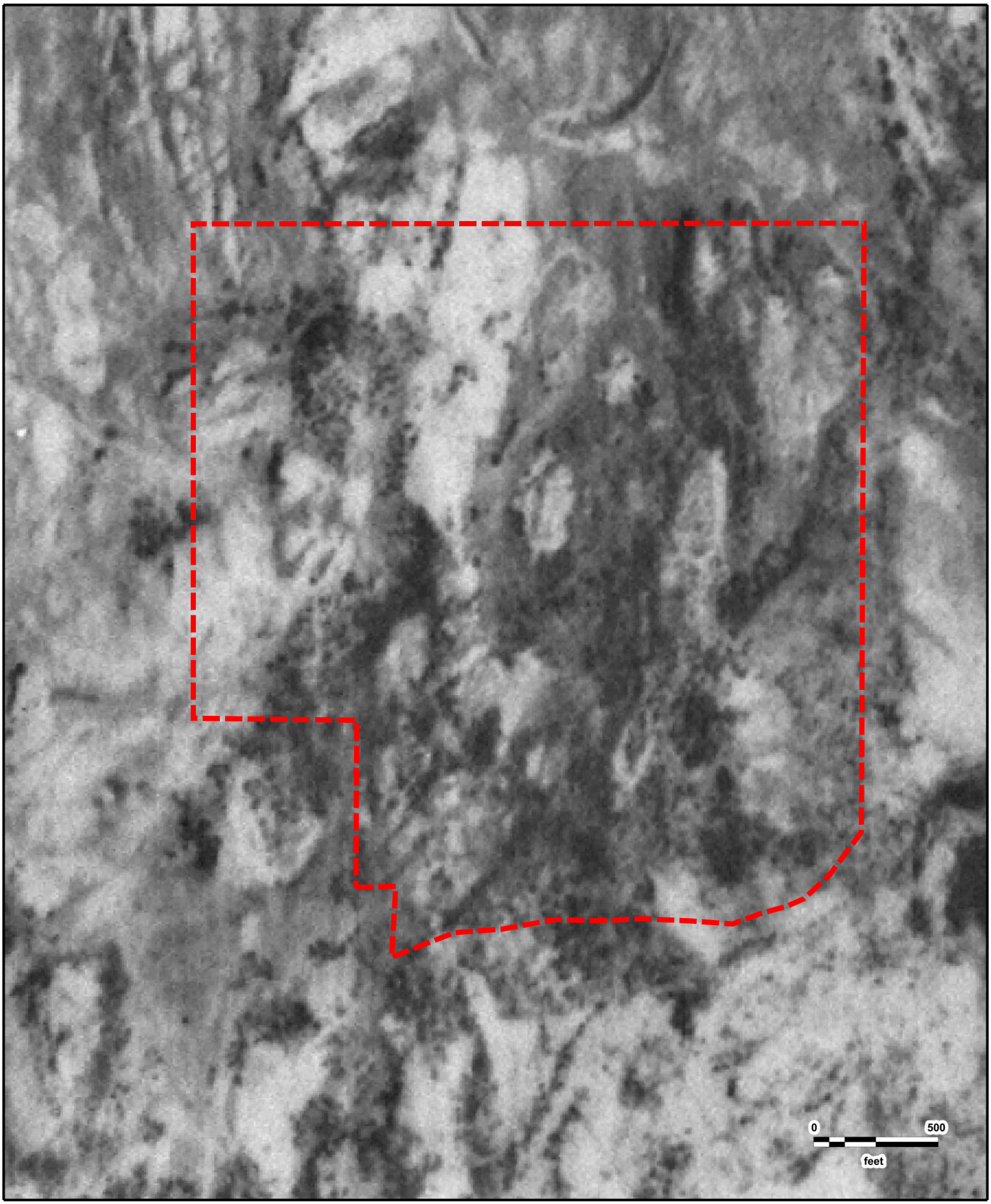
Page 519

Richardson Flats Parcel PP-28-2
USGS
07/03/1953

GeoSearch

JOB #: 355532 - 06/08/2020



N

Page 520

Richardson Flats Parcel PP-28-2
ASCS
1937

GeoSearch

JOB #: 355532 - 06/08/2020

GeoSearch
On time. On target. In touch.™

Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355531
Project #: 14714
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
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Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1903	COALVILLE, UT	1" = 10420'

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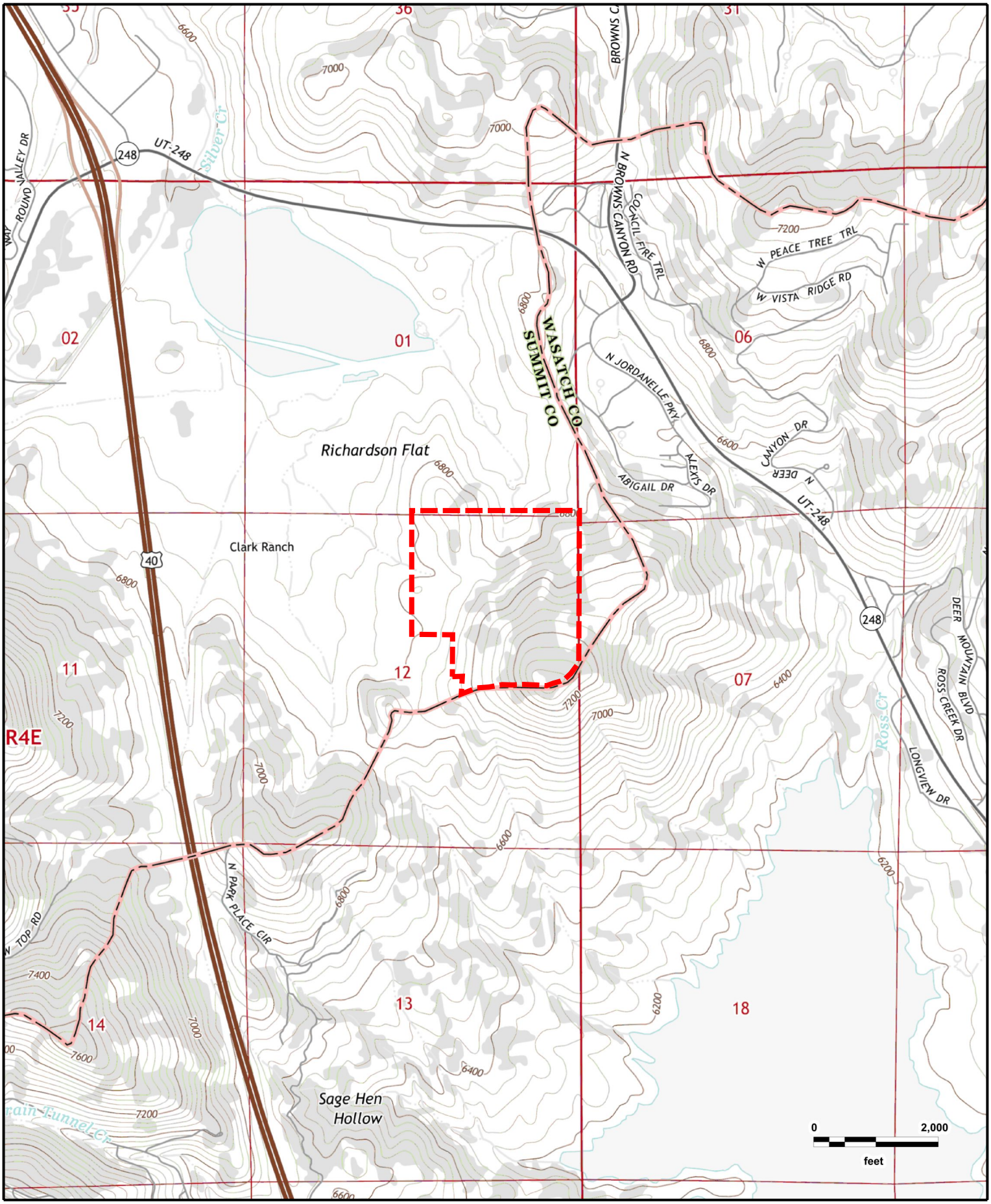
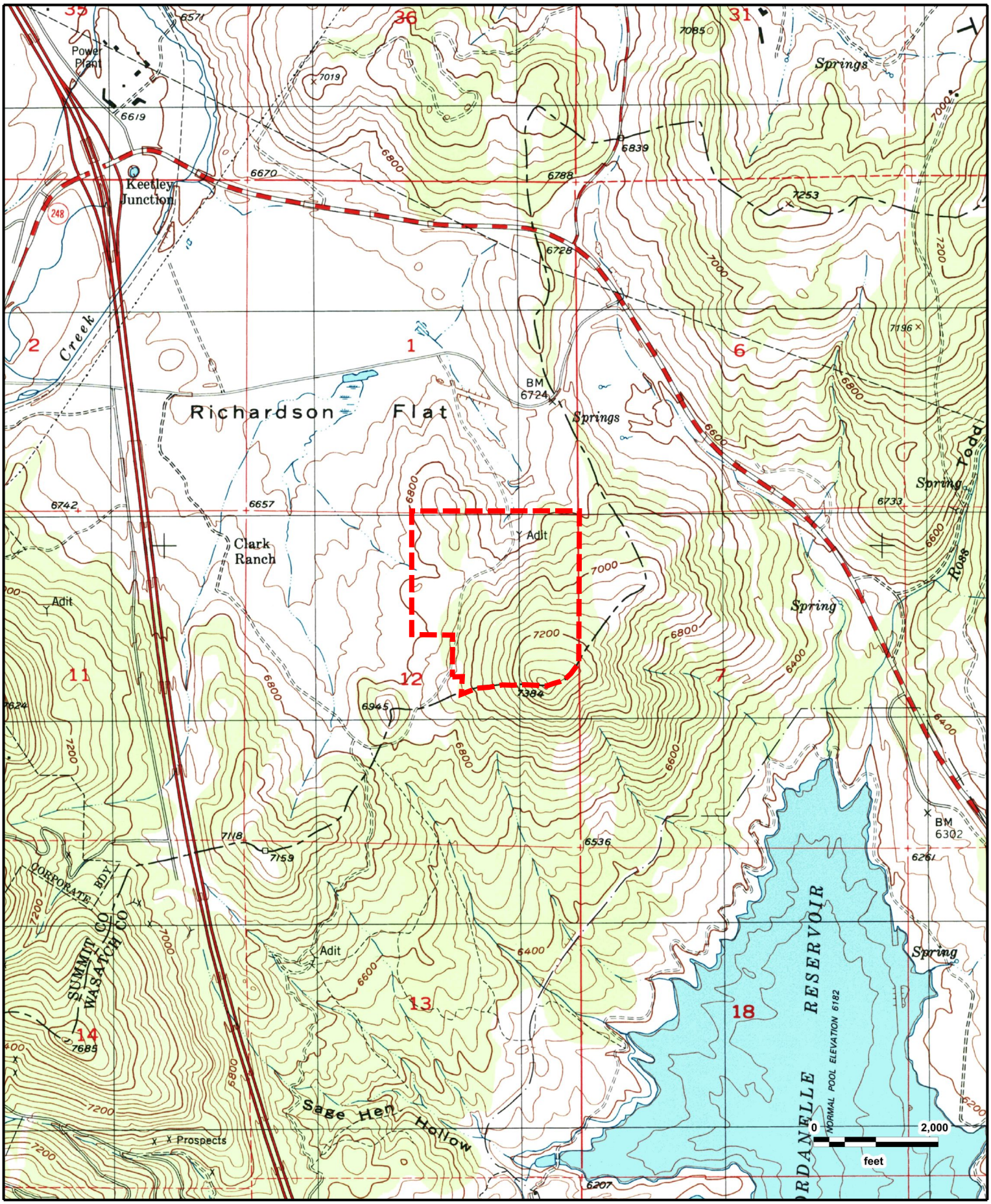


Richardson Flats Parcel PP-28-2
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355531 - 06/08/2020



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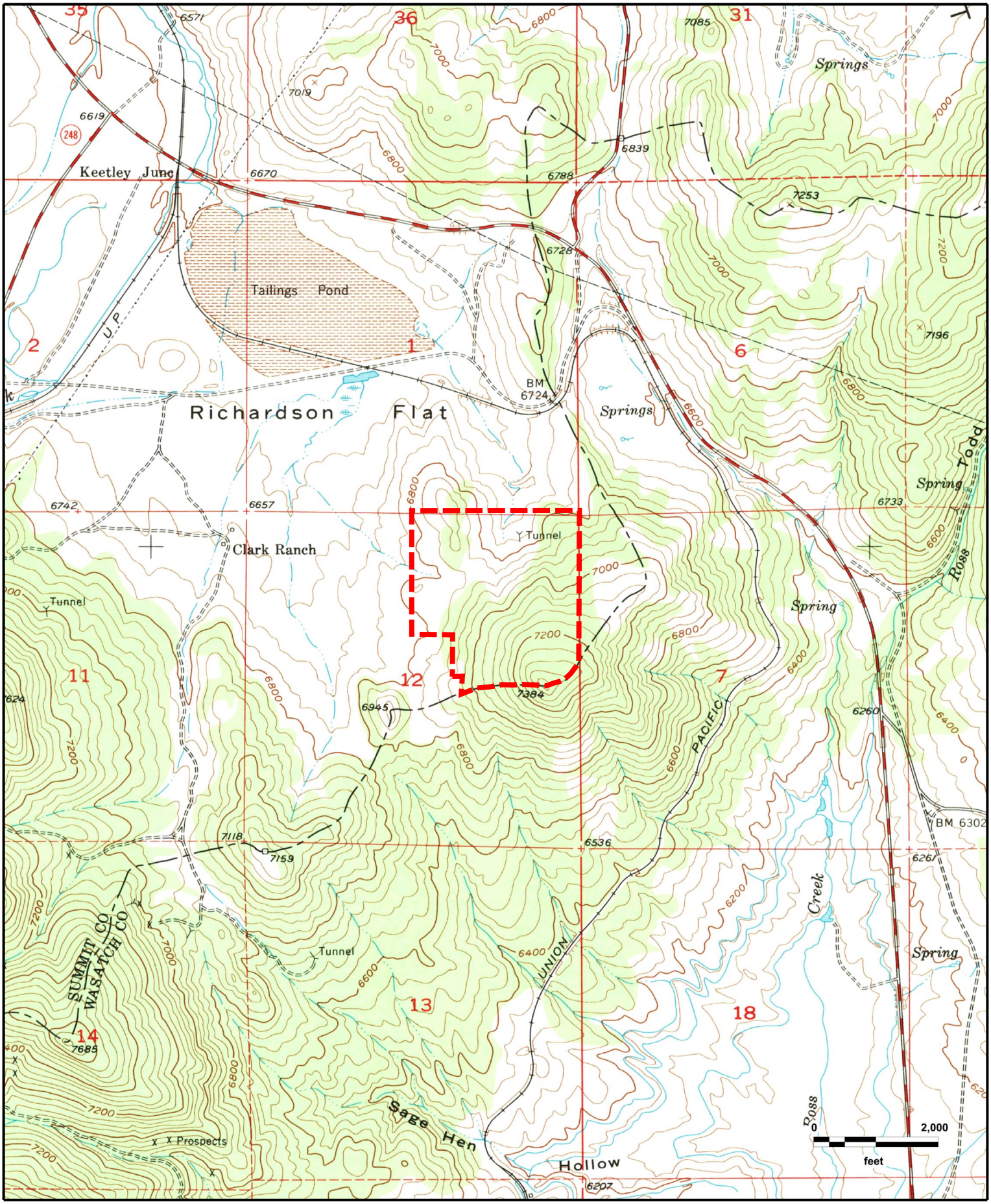
Richardson Flats Parcel PP-28-2
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355531 - 06/08/2020



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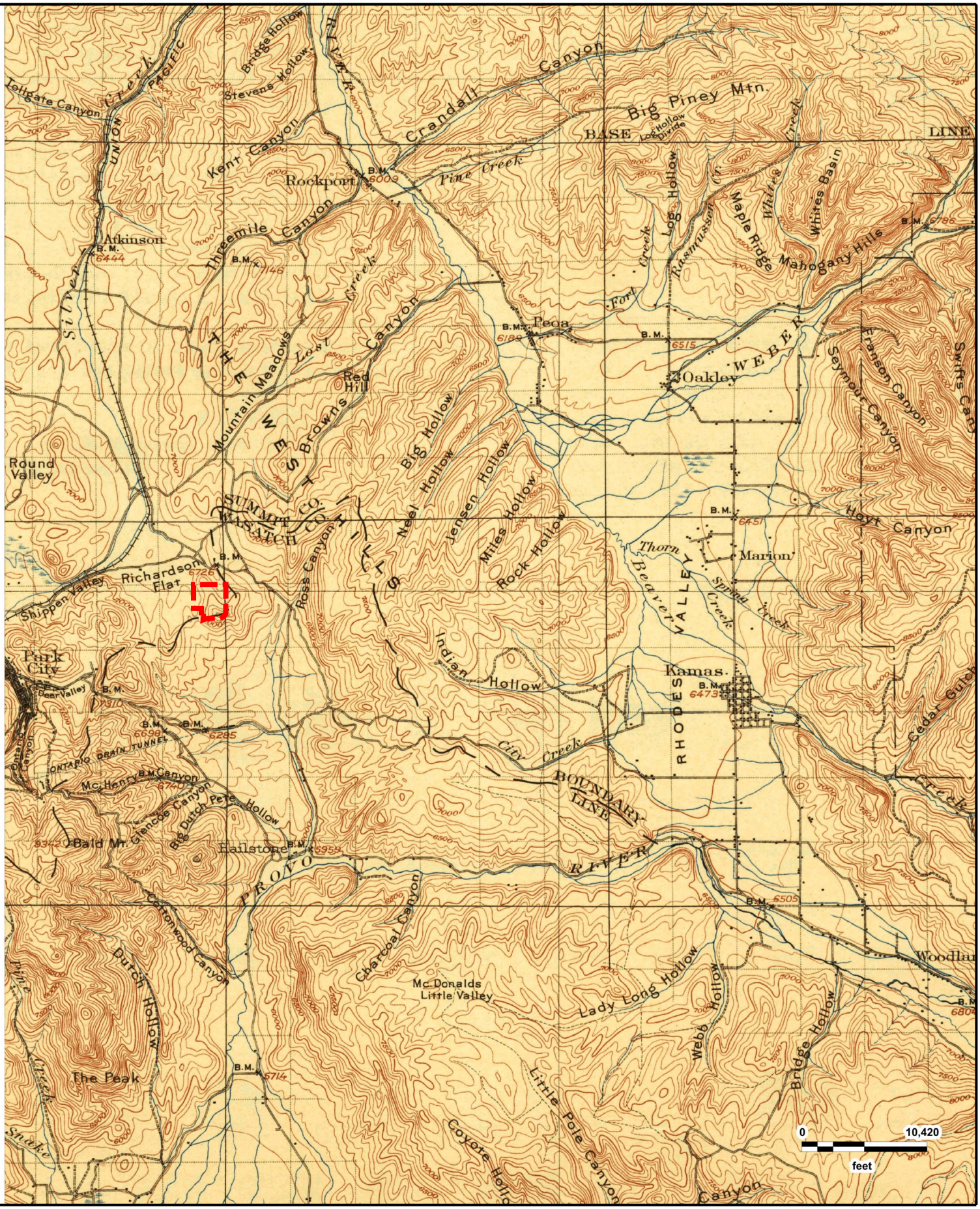
Richardson Flats Parcel PP-28-2
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355531 - 06/08/2020



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Richardson Flats Parcel PP-28-2
COALVILLE, UT (1903)

GeoSearch

JOB #: 355531 - 06/08/2020

GeoSearch
On time. On target. In touch.™

Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355535
Project #: 14714
PO #: 14714
Date: 06/08/2020

Fire Insurance Map Research Results

Date: 06/08/2020
GS Job Number: 147849
Company Name: CMT Engineering Laboratories-Utah
Project Number: 14714
Site Information: Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah 84060

Research Results: No Coverage Available

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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APPENDIX C

RADIUS MAP
REPORT

GeoSearch
On time. On target. In touch.™

Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355529
Project #: 14714
PO #: 14714
Date: 06/04/2020

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43886, 40.6646190)
6,925 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	1	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		2	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	1	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		2	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	1	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		5	0	

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	1	0	0	NS	NS	NS	1
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**0**	**0**	**0**	**1**	**NS**	**NS**	**1**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**0**	**1**	**0**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	0	1	0	NS	1
SUB-TOTAL		1	0	0	3	0	0	4

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**0**	**0**	**0**	**1**	**NS**	**NS**	**1**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**

SUB-TOTAL		0	0	0	1	0	0	1

Database Radius Summary

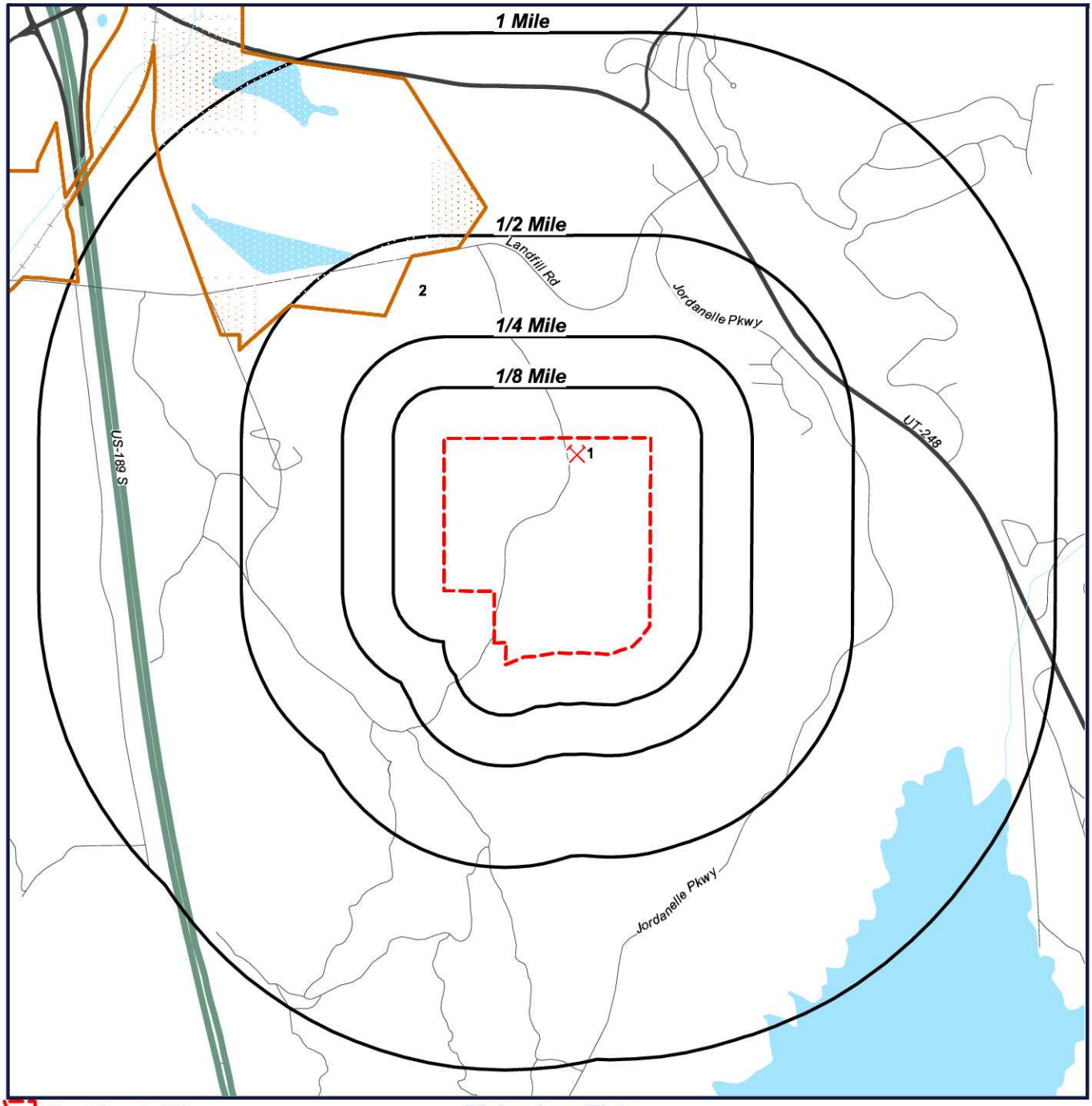
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		1	0	0	4	0	0	5

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



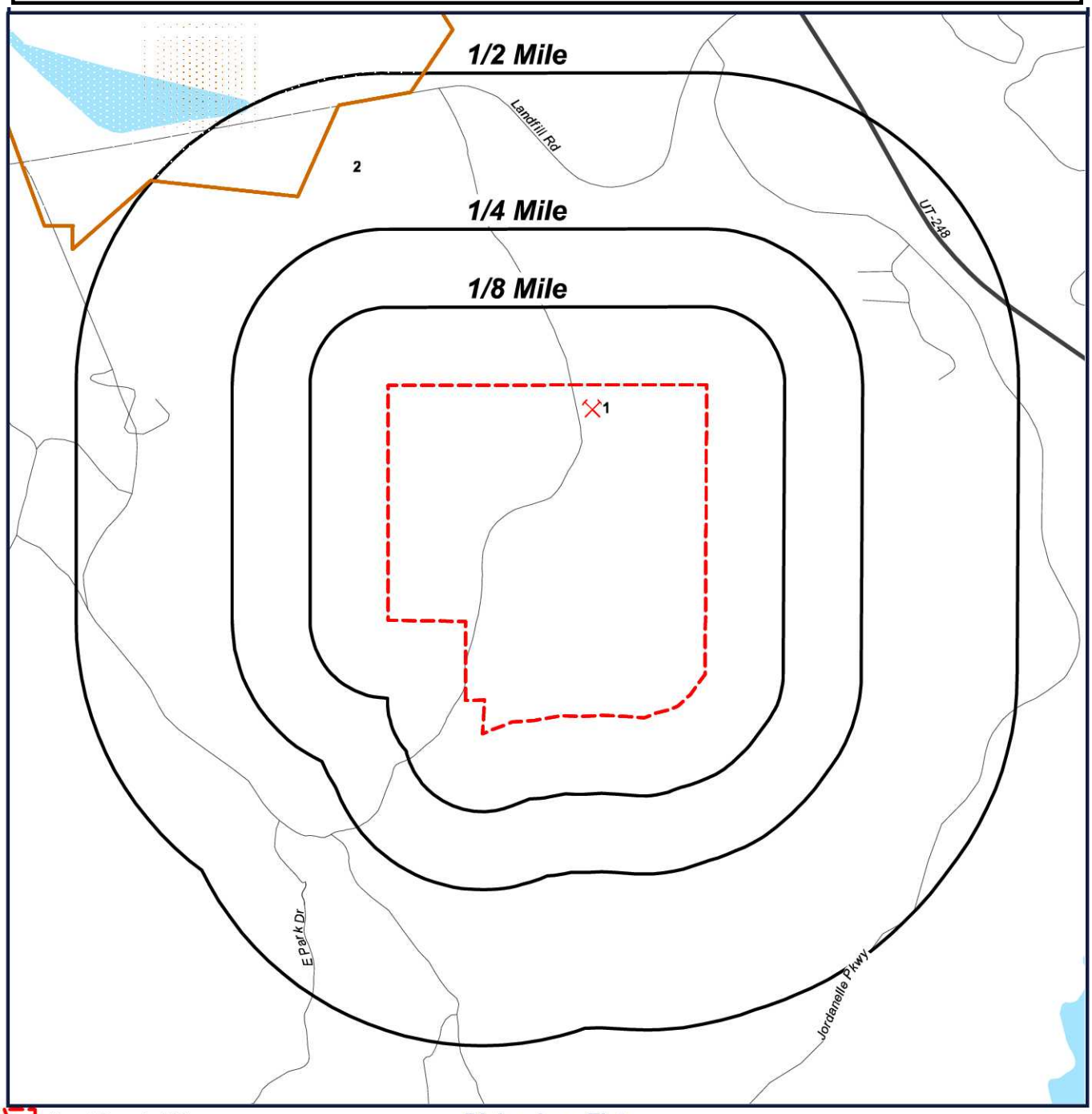
Target Property (TP)
MRDS
PNPL
CERCLIS
SEMS
RODS

Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



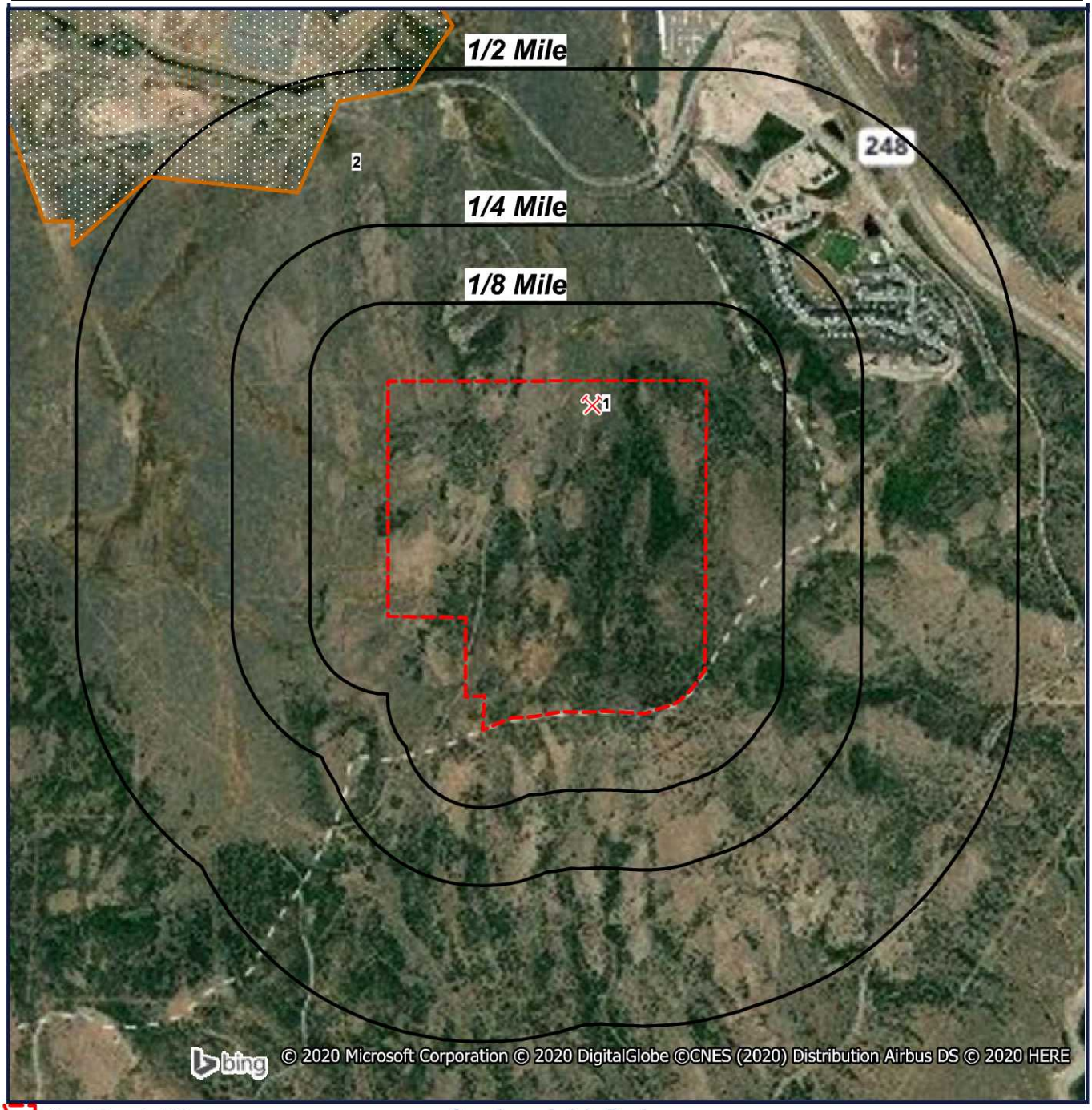
Target Property (TP)
MRDS
PNPL
CERCLIS
SEMS
RODS

Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 650' 1300' 1950'
SCALE: 1" = 1300'

Ortho Map



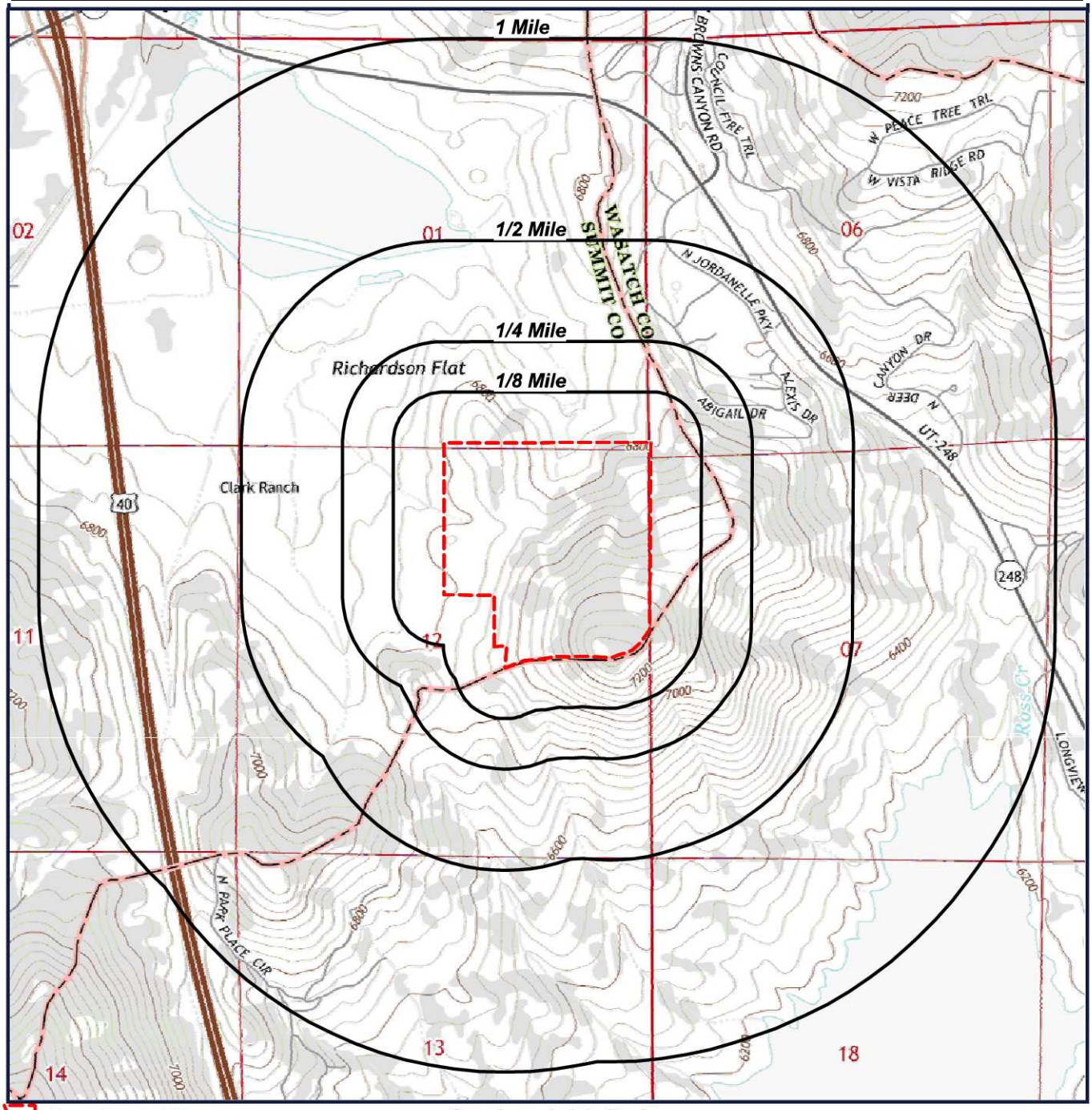
Target Property (TP)
MRDS
PNPL
CERCLIS
SEMS
RODS

Quadrangle(s): Park City East Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 650' 1300' 1950'
SCALE: 1" = 1300'

Topographic Map



Target Property (TP)

Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	MRDS	10011508	Lower (6,733 ft.)	TP	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	***18***
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***19***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.335 mi. NNW (1769 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	29
2	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***30***

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
2	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***
1	MRDS	10011508	Lower (6,733 ft.)	TP	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.335 mi. NNW (1769 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
2	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.335 mi. NNW (1769 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6925 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	MRDS	6,733 ft.	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***CERCLIS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	**18**
2	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	**19**
2	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	29
2	***SEMS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	**30**

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,733 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **10011508**
DEP ID: **10011508**
MINE NAME: **UNKNOWN TUNNEL**
ADDRESS: **SUMMIT COUNTY**
PARK CITY, UT 84060
DEVELOPMENT STATUS: **OCCURRENCE**

COMMODITY DETAILS

COMMODITY: **SILVER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **SILVER**
IMPORTANCE: **PRIMARY**

COMMODITY: **LEAD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **LEAD**
IMPORTANCE: **PRIMARY**

COMMODITY: **ZINC**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **ZINC**
IMPORTANCE: **PRIMARY**

COMMODITY: **GOLD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **GOLD**
IMPORTANCE: **SECONDARY**

COMMODITY: **COPPER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **COPPER**
IMPORTANCE: **SECONDARY**

MATERIAL DETAILS

NO MATERIAL DETAILS REPORTED

NAME DETAILS

SITE NAME: **UNKNOWN TUNNEL**
STATUS: **CURRENT**
SITE NAME: **NEW PARK GROUP**
STATUS: **PREVIOUS**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.335 mi. (1,769 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **UTD980952840**
DERR ID: **UTD980952840**
CIMID: **490000015295**
SITE DESCRIPTION: **CERCLA**
FACILITY NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **3.5 MI NE OF PARK CITY**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
PROJECT MANAGER: **MO SLAM**
CONTACT PHONE: **8015364178**
PROJECT DESCRIPTION: **THE RICHARDSON FLAT TAILINGS SITE CONSISTS OF 160 ACRES. FROM 1975 UNTIL 1981, MINE TAILINGS FROM THE KEETLY ONTARIO MINE AND OTHER MINING OPERATIONS IN THE AREA WERE DISPOSED OF AT THE SITE AND CURRENTLY RANGE UP TO 10 FEET IN DEPTH. UNTIL 1987, MINE TAILINGS WERE REMOVED FROM THE SITE AND USED AS BACKFILL FOR SEWER CONSTRUCTION PROJECTS. CURRENTLY, MINE TAILINGS AT THE SITE ARE BEING COVERED BY SOIL EXCAVATED FROM ON-SITE AREAS. SITE FEATURES INCLUDE A POND THAT COVERS THE NORTHEASTERN CORNER OF THE SITE AND IS CONTAINED BY A DAM AT THE NORTHWESTERN CORNER, AND A DITCH IN THE CENTRAL PORTION OF THE SITE.**
EMERGENCY RESPONSE BRANCH: **NO**
NATIONAL PRIORITY LIST: **NO**
PROPOSED FOR NPL: **YES**
ARCHIVED FOR CERCLIS: **NO**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.335 mi. (1,769 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

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AREA OF SITE FOUND (OU):

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AREA OF SITE FOUND (OU):

Back to Report Summary

MAP ID# 2

Distance from Property: 0.335 mi. (1,769 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.335 mi. (1,769 ft.) NNW
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **UTD980952840**
SITE ID#: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
FEDERAL FACILITY: **NO - NOT A FEDERAL FACILITY**
NPL: **PROPOSED FOR NPL**
NON NPL STATUS: **NOT REPORTED**

Below information was gathered from the prior CERCLIS update completed in 10/2013 update:
NON-NPL STATUS DATE: **NOT REPORTED**
PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MINES/TAILINGS**

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
06/24/1988	**53**	**23988**	**PROPOSED TO THE FINAL NPL**	**39.13000**
02/11/1991	**56**	**5598**	**REMOVED FROM PROPOSED TO THE NPL**	**50.20000**
02/07/1992	**57**	**4824**	**PROPOSED TO THE FINAL NPL**	**39.13000**

SITE DESCRIPTION

THE RICHARDSON FLAT TAILINGS (RFT) SITE (SITE) IS LOCATED 1.5 MILES NORTHEAST OF PARK CITY, UTAH, AND IS PART OF A 650 ACRE PROPERTY OWNED BY UNITED PARK CITY MINES (UPCM) COMPANY. THE SITE IS A TAILINGS IMPOUNDMENT THAT COVERS 160 ACRES IN THE NORTHWEST CORNER OF THE PCM PROPERTY, A SMALL PORTION OF THE MUCH LARGER UPPER SILVER CREEK WATERSHED. SILVER CREEK IS THE PRIMARY SURFACE WATER SOURCE FOUND IN THE AREA AND IS COMPRISED OF RUNOFF FROM THREE SIGNIFICANT DRAINAGES IN THE WATERSHED, INCLUDING ONTARIO CANYON, EMPIRE CANYON AND DEER VALLEY. SILVER CREEK IS CURRENTLY LISTED ON UTAH'S 303(D) LIST FOR ZINC AND CADMIUM AND IS TARGETED FOR TOTAL MAXIMUM DAILY LOAD (TMDL) DEVELOPMENT. HISTORIC MINING ACTIVITIES IN THE CANYONS LEFT BEHIND SIX ACTIVE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS) SITES, INCLUDING EMPIRE CANYON, SILVER CREEK TAILINGS, AND SILVER MAPLE CLAIMS, EACH ONE IMPACTING SILVER CREEK IN SOME WAY. WHILE ZINC AND CADMIUM ARE THE PRIMARY HEAVY METALS FOUND IN SILVER CREEK, LEAD AND ARSENIC ARE THE MAIN CONTAMINANTS IN THE SEDIMENTS AND SOILS OF THE WATERSHED. BECAUSE OF THE VOLUME OF MINING ACTIVITY THROUGHOUT THE DISTRICT AND THE DYNAMICS OF THE WATERSHED HYDROGEOLOGY, IT IS DIFFICULT TO TARGET ANY ONE SITE AS THE MAIN SOURCE OF CONTAMINATION AFFECTING SILVER CREEK AND THE ENVIRONMENTAL MEDIA WITHIN THE WATERSHED. THE OVERALL REMEDIAL GOAL FOR THE WATERSHED IS TO CLEAN UP THE SURROUNDING SITES, INCLUDING THE SITE, THEREBY ELIMINATING CURRENT AND FUTURE HAZARDS TO HUMAN HEALTH AND WELFARE AND THE SURROUNDING ENVIRONMENT.

THE RFT SITE IS A GEOMETRICALLY CLOSED BASIN, BOUND BY HIGHWAY 248 TO THE NORTH, A MAIN EMBANKMENT TO THE WEST, AND DIVERSION DITCHES TO THE SOUTH AND THE NORTHEAST. SILVER CREEK CAN BE FOUND ON THE NORTHWEST BORDER OF THE SITE, SEPARATED FROM THE SITE BY A SMALL STRETCH OF WETLANDS AND RIPARIAN VEGETATION. THE IMPOUNDMENT WAS USED AS A MINE TAILINGS RESERVOIR PRIOR TO 1950. THE SITE NOW HOUSES APPROXIMATELY SEVEN MILLION TONS OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING ZINC, SILVER, LEAD, AND OTHER METALS. USE OF THE SITE BY UPCM ENDED IN 1982. TO DATE, THE SITE IS NOT LISTED ON THE NATIONAL PRIORITIES LIST (NPL). THE SITE WAS CONSIDERED FOR LISTING IN BOTH 1988 AND 1992. UPCM, THE PRIMARY POTENTIALLY RESPONSIBLE PARTY (PRP), HAS TAKEN RESPONSIBILITY FOR FUNDING THE MAJORITY OF THE REMEDIAL

ACTION AT THE SITE.

THE SITE, AND MUCH OF THE SURROUNDING AREA, IS PRIVATELY OWNED BY UPCM. UPCM HAS CONSISTENTLY INDICATED A DESIRE TO RETAIN TITLE AND LIMIT FUTURE USE TO RECREATIONAL ACTIVITIES AT THE SITE. WHILE NO FINAL DECISION HAS BEEN MADE, USES THAT RANGE FROM OPEN SPACE WILDLIFE HABITAT TO ATHLETIC FIELDS ARE CURRENTLY BEING DISCUSSED. ANY TYPE OF RECREATIONAL USE IS CONSISTENT WITH SURROUNDING LAND USES, AND BOTH PARK CITY AND SUMMIT COUNTY HAVE INDICATED GENERAL AGREEMENT WITH RECREATIONAL PROPOSALS. PARK CITY IS PROACTIVE IN OBTAINING AND PRESERVING OPEN SPACE. THERE IS NO INDICATION THAT HIGHER USES OF THE LAND, SUCH AS RESIDENTIAL, ARE REASONABLY FORESEEABLE.

THE SURFACE WATER FEATURES AT THE SITE, INCLUDING THE SOUTH DIVERSION DITCH, THE WETLANDS AREA BELOW THE EMBANKMENT, THE SITE POND AND SILVER CREEK ARE USED AS HABITAT BY A LIMITED NUMBER OF VEGETATIVE SPECIES, FISH, AND WILDLIFE. ALL OF THE SURFACE WATER AND SHALLOW GROUND WATER ON THE SITE EVENTUALLY DISCHARGES TO SILVER CREEK. SILVER CREEK IS CLASSIFIED BY THE STATE OF UTAH AS A POTENTIAL DRINKING WATER SOURCE, A RECREATIONAL USE FEATURE, A COLD WATER FISHERY, AND A POTENTIAL IRRIGATION SOURCE. AT PRESENT, SILVER CREEK IS USED FOR IRRIGATION AND RECREATIONAL FISHING ONLY, AND NO CHANGES ARE EXPECTED. THE STATE OF UTAH IS CONSIDERING ISSUING AN ADVISORY AGAINST FISHING DUE TO ELEVATED METAL LEVELS IN SILVER CREEK. SILVER CREEK IS LISTED ON THE STATE'S CLEAN WATER ACT SECTION 303(D) LIST OF IMPAIRED WATER BODIES BECAUSE ZINC AND CADMIUM LEVELS EXCEED CHRONIC STANDA RDS FOR PROTECTION OF AQUATIC WILDLIFE.

SILVER CREEK HAS BEEN IMPACTED BY THE LEGACY OF MINING ACTIVITIES, THOUGH THE REMEDIAL INVESTIGATION CONFIRMED THAT THE SITE IS NOT, AT PRESENT, A SIGNIFICANT CONTRIBUTOR OF METALS TO THE CREEK. THE GOAL IS TO REMEDIATE THE ENTIRE WATERSHED, IMPROVING THE ECOLOGICAL QUALITY OF THE AREA, THEREBY ALLOWING FOR CONTINUED BENEFICIAL USE OF THE WATERSHED AND THE SITE BY A VARIETY OF LIVING ORGANISMS.

GROUND WATER IN THE IMMEDIATE AREA IS USED ONLY FOR PRIVATE WELLS, AND NO WELLS ARE KNOWN TO BE LOCATED WITHIN A HALF MILE OF THE SITE. MOST AREA DRINKING WATER WELLS ARE FINISHED IN THE DEEPER CONSOLIDATED SEDIMENTARY ROCKS THAT CAN SUSTAIN AQUIFERS AND PRODUCE SUFFICIENT YIELDS FOR CULINARY WELLS. IN THE SITE AREA, THESE FORMATIONS ARE VERY DEEP AND ARE COVERED BY THE KEETLEY VOLCANICS.

THE VOLCANIC ROCKS ARE GENERALLY NOT SUITABLE TO SUSTAIN AQUIFERS AND SERVE AS MORE OF A CONFINING UNIT. THE SHALLOW GROUND WATER AT THE SITE IS GENERALLY ASSOCIATED WITH THE ALLUVIAL SYSTEM OF SILVER CREEK. THIS WATER IS VERY HIGH IN SOLIDS AND IS ALSO OFTEN CONTAMINATED DUE TO WATER QUALITY IN SILVER CREEK AND TAILINGS THAT ARE PRESENT ALONG THE CREEK IN MANY AREAS. THERE ARE NO KNOWN USES FOR THIS WATER AT THIS TIME.

IN 1953, UPCM WAS FORMED THROUGH THE CONSOLIDATION OF SILVER KING COALITION MINES COMPANY AND PARK UTAH CONSOLIDATED MINES COMPANY. AT THAT TIME, THE SITE WAS ALREADY BEING USED AS AN IMPOUNDMENT FOR MINE TAILINGS CONSISTING PRIMARILY OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING LEAD, ZINC, SILVER AND OTHER METALS. ADDITIONALLY, TAILINGS WERE TRANSPORTED TO AND PLACED IN SEVERAL DISTINCT LOW ELEVATION AREAS IN THE SOUTHEAST PORTION OF THE SITE JUST OUTSIDE OF THE MAIN IMPOUNDMENT.

IN 1970, WITH RENEWED MINING ACTIVITY IN THE AREA, PARK CITY VENTURES (PCV), A JOINT VENTURE PARTNERSHIP BETWEEN ANACONDA COPPER COMPANY AND AMERICAN SMELTING COMPANY (ASARCO), ENTERED INTO A LEASE AGREEMENT WITH UPCM. THIS AGREE MENT ALLOWED PCV TO DEPOSIT ADDITIONAL MINE TAILINGS AT THE SITE; HOWEVER, THE SITE HAD TO BE PARTIALLY RECONSTRUCTED. DESIGN, CONSTRUCTION AND OPERATION SPECIFICATIONS WERE APPROVED BY THE STATE OF UTAH. THESE SPECIFICATIONS INCLUDED INSTALLATION OF A LARGE EMBANKMENT ALONG THE WESTERN EDGE OF THE IMPOUNDMENT, AND CONSTRUCTION OF CONTAINMENT DIKE STRUCTURES ALONG THE SOUTHERN AND EASTERN BOARDERS OF THE SITE FOR ADDITIONAL TAILINGS STORAGE. PCV ALSO CREATED A DIVERSION DITCH SYSTEM ALONG THE HIGHER SLOPES NORTH OF THE IMPOUNDMENT AND OUTSIDE

OF THE CONTAINMENT DIKES ALONG THE EAST AND SOUTH PERIMETERS OF THE IMPOUNDMENT TO COLLECT SURFACE RUN OFF. AS PART OF THE APPROVAL PROCESS FOR THE RENEWED USE OF THE SITE, THE STATE OF UTAH REQUIRED INSTALLATION OF GROUNDWATER MONITORING WELLS NEAR THE BASE OF THE MAIN EMBANKMENT.

OVER THE COURSE OF PVC'S USE OF THE SITE, ABOUT 450,000 TONS OF TAILINGS WERE DEPOSITED AT THE SITE THROUGH A SLURRY PIPELINE THAT ORIGINATED AT THEIR MILL FACILITY. IT WAS RECOMMENDED THAT THE TAILINGS BE DEPOSITED AROUND THE PERIMETER OF THE SITE, MOVING TOWARDS THE CENTER OF THE SITE OVER TIME. HOWEVER, PVC CHOSE TO DEPOSIT THE TAILINGS FROM THE SLURRY PIPELINE IN ONE CONSTANT AREA IN THE CENTER OF THE IMPOUNDMENT, CREATING A STEEP, CONE-LIKE STRUCTURE IN THE MIDDLE OF THE IMPOUNDMENT. AFTER PVC DISCONTINUED THEIR USE OF THE SITE IN 1982, HIGH WINDS CAUSED TAILINGS FROM THE CONE-SHAPED FEATURE TO BECOME AIRBORNE, CREATING A POTENTIALLY SIGNIFICANT EXPOSURE PATHWAY. THESE OPERATIONS SHAPED THE TOPOGRAPHY OF THE IMPOUNDMENT WHICH STILL EXISTS TODAY.

FROM 1980 TO 1982, NORANDA MINING, INC. LEASED THE MINING AND MILLING OPERATIONS AND PLACED AN ADDITIONAL 70,000 TONS OF TAILINGS AT THE SITE. SINCE THEN NO FURTHER USE OF THE SITE HAS OCCURRED, BUT UPCM BEGAN TAKING ACTIONS AIMED AT IMPROVING ENVIRONMENTAL CONDITIONS OF THE SITE ALMOST IMMEDIATELY AFTER OPERATIONS STOPPED. THIS WORK CONTINUED INTERMITTENTLY THROUGH THE MID-1990S.

EPA BECAME AWA RE OF THE SITE IN THE MID-1980S. AFTER INITIAL SITE ASSESSMENT WORK, EPA PROPOSED THE SITE FOR LISTING ON THE NPL IN 1988. AFTER CONSIDERING PUBLIC COMMENT, EPA DID NOT PURSUE THE SITE FOR LISTING ON THE NPL. BY 1992, THE HAZARD RANKING SYSTEM (HRS) HAD BEEN REVISED AND EPA AGAIN PROPOSED THE SITE FOR LISTING ON THE NPL. ULTIMATELY, EPA DECIDED NOT TO PURSUE FINAL LISTING ON THE NPL, AND THE SITE REMAINS PROPOSED FOR THE NPL AT THIS TIME.

SUBSEQUENT TO THE SECOND NPL PROPOSAL, THE EPA REGION 8 SUPERFUND EMERGENCY RESPONSE BRANCH CONDUCTED AN INVESTIGATION UNDER THE "MAKE SITES SAFE" INITIATIVE IN 1993. THIS INVESTIGATION CONCLUDED THAT CONDITIONS OF THE SITE DID NOT WARRANT EMERGENCY REMOVAL ACTIONS, BUT MAY PRESENT UNACCEPTABLE RISKS TO HUMAN HEALTH AND THE ENVIRONMENT AND SHOULD BE ADDRESSED THROUGH LONG-TERM REMEDIAL ACTION.

THROUGHOUT THE 1990S, EPA AND THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY (UDEQ) WERE HOPING UPCM WOULD ADDRESS THE SITE THROUGH THE UTAH VOLUNTARY CLEANUP PROGRAM. UPCM DECIDED AGAINST THIS, BUT AT THE SAME TIME CONTINUED TO VOLUNTARILY TAKE STEPS TO IMPROVE ENVIRONMENTAL CONDITIONS AT THE SITE. ADDITIONALLY, UPCM BEGAN COLLECTING HYDROGEOLOGIC DATA, WHICH WAS USED TO BETTER UNDERSTAND THE GROUNDWATER FLOW AND DEPTH OF TAILINGS AT THE SITE. IN 1999, EPA, UDEQ, UPCM, PARK CITY MUNICIPAL CORPORATION, AND OTHER STAKEHOLDERS FORMED THE UPPER SILVER CREEK WATERSHED STAKEHOLDER'S GROUP (USCWSG). THIS COMMUNITY-BASED ORGANIZATION WAS FORMED TO HELP EPA ADDRESS SUPERFUND-RELATED ENVIRONMENTAL ISSUES IN THE PARK

CITY AREA IN A COOPERATIVE FASHION, INCLUDING ISSUES RELATED TO THE SITE. THE USCWSG HAS BEEN VERY SUCCESSFUL AND SEVERAL INVESTIGATIONS AND CLEANUPS HAVE OCCURRED IN PARK CITY AS A RESULT. EARLY IN USCWSG'S HISTORY, UPCM AND EPA AGREED TO ADDRESS THE SITE AS AN "NPL EQUIVALENT" SITE, USING THE SAME PROCESS FOR INVESTIGATION AND CLEANUP THAT IS REQUIRED FOR A NPL SITE.

EPA AND UPCM SIGNED AN ADMINISTRATIVE ORDER ON CONSENT (AOC) ON SEPTEMBER 28, 2000 WHICH CALLED FOR UPCM TO CONDUCT A REMEDIAL INVESTIGATION/ FOCUSED FEASIBILITY STUDY (RI/FFS) FOR THE SITE. EPA AND UPCM HAVE CONTINUOUSLY WORKED WELL TOGETHER SINCE THE INCEPTION OF THE USCWSG, AND BECAUSE OF THIS, EPA WAS ABLE TO EMPLOY INCREASINGLY REDUCED OVERSIGHT FOR THE RI/FFS AS IT PROGRESSED.

EPA CONDUCTED TWO POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCHES FOR THE SITE THAT IDENTIFIED SEVERAL PARTIES THAT MAY HAVE SOME LIABILITY FOR CLEANUP OF THE SITE. THE SITE OWNER, UPCM, HAS CONDUCTED THE

RI/FFS PURSUANT TO AN ADMINISTRATIVE ORDER ON CONSENT (AOC). EPA HAS BEEN FACILITATING THE ALLOCATION OF COSTS OF INVESTIGATION AND CLEANUP BETWEEN THE PRP'S AND UPCM HAS INDICATED ITS WILLINGNESS TO ENTER INTO A CONSENT DECREE (CD) WITH EPA FOR CONDUCT OF REMEDIAL DESIGN AND REMEDIAL ACTION.

THE SITE IS LOCATED IN A RURAL AREA WITHIN A BROAD VALLEY OF MOSTLY UNDEVELOPED RANGELAND WITHIN THE SILVER CREEK WATERSHED, APPROXIMATELY TWO MILES OUTSIDE THE PARK CITY LIMITS. THE DEER VALLEY AND PARK CITY SKI RESORTS SIT AT THE TOP OF THE WATERSHED AND SERVE AS RECREATIONAL USE AREAS FOR SKIERS IN THE WINTER AND BIKERS/HIKERS IN THE WARMER MONTHS. AS SILVER CREEK PASSES THROUGH PARK CITY AND INTO THE SURROUNDING SUBURBAN AREAS, THE LAND USE IS PRIMARILY RESIDENTIAL AND COMMERCIAL, CHANGING TO RECREATIONAL AND AGRICULTURAL IN THE AREAS SURROUNDING RICHARDSON FLAT.

MOST OF THE LAND AROUND THE SITE IS UNDEVELOPED OPEN SPACE. MINING ACTIVITIES AT THE SITE CEASED IN 1982. SINCE THAT TIME, THE SITE HAS NOT BEEN USED AND HAS REMAINED OPEN SPACE. A SMALL RECREATIONAL TRAIL SKIRTS THE SITE ALONG SILVER CREEK. THERE ARE A FEW SMALL INDUSTRIAL OPERATIONS IN THE VICINITY OF THE SITE, INCLUDING A CONCRETE PLANT ON A NEARBY PARCEL. PARK CITY AND OTHER RESORT-LIKE RESIDENTIAL DEVELOPMENTS ARE EXPANDING IN THE GENERAL AREA, BUT NONE ARE CLOSER THAN ONE MILE AWAY.

A RECORD OF DECISION (ROD) ADDRESSING OPERABLE UNIT (OU) 1 WAS COMPLETED ON JULY 6, 2005.

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

TYPE: **NR - REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/11/1991**
ACTION TYPE DEFINITION:
SITE REMOVED FROM THE PROPOSED LIST BEFORE ACHIEVING FINAL STATUS, OR REMOVED FROM THE FINAL LIST.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/24/1988**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **03/13/2009**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **08/28/2007**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**

ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/13/1987**
COMPLETION DATE: **07/14/1988**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/15/1991**
ACTION TYPE DEFINITION:
A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: **SG - SPECIAL NOTICE ISSUED**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/10/1989**
ACTION TYPE DEFINITION:
ISSUANCE UNDER CERCLA SECTION 122 OF A SPECIAL NOTICE LETTER TO POTENTIALLY RESPONSIBLE PARTIES (PRPS). THE ISSUANCE OF A SPECIAL NOTICE LETTER BY EPA TRIGGERS A NEGOTIATION MORATORIUM. SPECIAL NOTICE LETTERS CAN BE ISSUED FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS.

TYPE: **JF - ECOLOGICAL RISK ASSESSMENT**
START DATE: **05/01/2001**
COMPLETION DATE: **01/30/2004**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO ECOLOGICAL RECEPTORS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/23/1991**
COMPLETION DATE: **12/07/1992**
ACTION TYPE DEFINITION:

THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **11/20/2008**
COMPLETION DATE: **09/30/2009**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **12/01/1984**
ACTION TYPE DEFINITION:
COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: **FN - REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
START DATE: **06/07/2000**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
DISCUSSIONS BETWEEN EPA AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) ON LIABILITY FOR AND CONDUCT OF A REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/30/1990**
COMPLETION DATE: **08/30/1990**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT**
START DATE: **04/26/1996**
COMPLETION DATE: **08/15/2001**
ACTION TYPE DEFINITION:
FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: **SI - SITE INSPECTION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/03/1992**
ACTION TYPE DEFINITION:
THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE

HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: **SV - SECTION 107 LITIGATION**
START DATE: **12/09/2005**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL REFERRAL UNDER S107 TO RECOVERY FROM POTENTIALLY RESPONSIBLE PARTIES (PRPS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **01/04/2007**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **07/24/2008**
COMPLETION DATE: **01/20/2009**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **09/25/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RO - RECORD OF DECISION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
START DATE: **02/07/2008**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/07/1992**

ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/29/2009**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/19/2013**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AD - ALTERNATIVE DISPUTE RESOLUTION**
START DATE: **03/06/2006**
COMPLETION DATE: **12/08/2006**
ACTION TYPE DEFINITION:
DECISION TO TAKE COST RECOVERY ACTION BY USE OF ALTERNATIVE DISPUTE RESOLUTION (ADR) INCLUDING MEDIATION, ARBITRATION AND MINI-TRIAL.

TYPE: **AN - REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
START DATE: **03/21/2006**

COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
DISCUSSIONS AND INFORMATION EXCHANGE BETWEEN POTENTIALLY RESPONSIBLE PARTIES (PRPS) AND EPA (OR STATE) OVER THE LIABILITY OF THE PRP, WILLINGNESS, AND ABILITY TO CONDUCT THE REMEDIAL DESIGN AND/OR THE REMEDIAL ACTION AS IDENTIFIED IN THE RECORD OF DECISION (ROD).

TYPE: **AS - AERIAL SURVEY**
START DATE: **06/30/1991**
COMPLETION DATE: **06/30/1991**
ACTION TYPE DEFINITION:
PROVIDE AERIAL PHOTOGRAPHY, MULTISPECTRAL SCANNER (MSS), FORWARD LOOKING INFRARED (FLIR), AND HISTORICAL AERIAL PHOTOGRAPHS WITH ANALYSES SUPPORT FOR REGIONAL OFFICES AND OERR REQUIREMENTS FOR PRE-REMEDIAL AND REMEDIAL ACTIONS. THE AERIAL SURVEY SUPPORT PROVIDES FOUR TYPES OF REMOTE SENSING PROJECTS: (1) EMERGENCY RESPONSE PROJECTS FOR RAPID ACQUISITION AND ASSESSMENT, (2) SINGLE DATE PROJECTS TO ACQUIRE CURRENT DATA, (3) INTENSIVE SITE ANALYSES TO ACQUIRE IMAGERY OVER A PERIOD OF TIME USINGHISTORICAL AERIAL PHOTOGRAPHS DATING BACK AS FAR AS 1920, (4) WASTE SITE INVENTORIES TO ESTABLISH BASELINE REFERENCE OVER LARGE AREAS. CERCLA HAZARDOUS WASTE SITES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/1989**
COMPLETION DATE: **07/01/1992**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/28/2000**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **10/26/2012**
COMPLETION DATE: **03/14/2013**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **BE - POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**

START DATE: **08/07/2007**
COMPLETION DATE: **02/07/2008**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **CB - CLAIM IN BANKRUPTCY PROCEEDING**
START DATE: **06/27/2006**
COMPLETION DATE: **06/05/2009**
ACTION TYPE DEFINITION:
LEGAL ACTION PERFORMED BY EPA REGIONAL ATTORNEYS TO ESTABLISH EPA AS A CREDITOR WHEN POTENTIALLY RESPONSIBLE PARTY (PRP) HAS FILED FOR BANKRUPTCY.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/07/2007**
COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **03/13/2009**
COMPLETION DATE: **06/05/2009**

ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **07/21/2003**
COMPLETION DATE: **09/28/2004**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **01/08/2007**
COMPLETION DATE: **07/01/2007**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **DS - DISCOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **10/01/1984**
ACTION TYPE DEFINITION:
THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: **ED - RISK/HEALTH ASSESSMENT**
START DATE: **10/09/2001**
COMPLETION DATE: **03/15/2003**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO HUMAN HEALTH.

TYPE: **EE - ENGINEERING EVALUATION/COST ANALYSIS**
START DATE: **04/11/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
STUDY TO IDENTIFY THE OBJECTIVES OF A REMOVAL ACTION AND TO ANALYZE THE COST EFFECTIVENESS AND IMPLEMENTABILITY OF THE VARIOUS ALTERNATIVES THAT MAY BE USED TO SATISFY THESE OBJECTIVES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/2009**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL

INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

CONTAMINANTS

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **310 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **179 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2559 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6520 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6.2 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **97 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **44560 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **32700 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM (METAL)**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2400 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5900 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **85 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **33800 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **750 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **46.3 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **260 UG/L**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **83000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT **- NOT AN INSTITUTIONAL CONTROL SITE -**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14714

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14714

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoSearch
On time. On target. In touch.™

GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355533
Project #: 14714
PO #: 14714
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43886, 40.6646190)
6,925 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	1	2	NS	NS	3
SUB-TOTAL		0	0	1	2	0	0	3

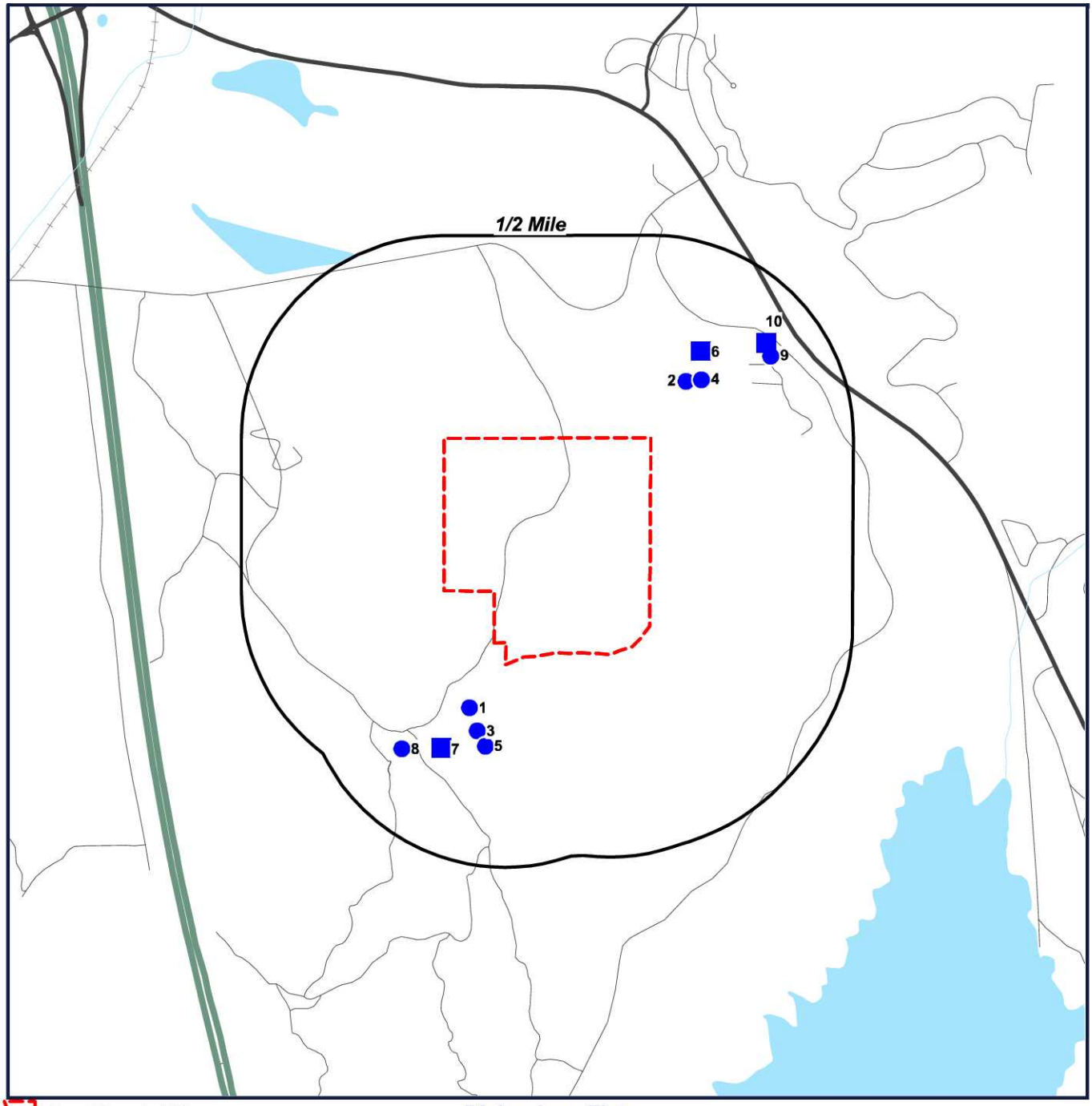
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	0	17	2	NS	NS	19
SUB-TOTAL		0	0	17	2	0	0	19
TOTAL		0	0	18	4	0	0	22

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
WW
NWIS

Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W
E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	WW	0007181	Lower (6,824 ft.)	0.135 mi. SW (713 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	8
2	WW	1775292344	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
2	WW	4022998451	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	996892433	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	11
3	WW	0007182	Lower (6,737 ft.)	0.174 mi. SSW (919 ft.)		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032	12
4	WW	0000259	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
4	WW	0142688	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
4	WW	0146214	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
4	WW	0146425	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
4	WW	0147535	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
4	WW	0147540	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
4	WW	0148159	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
4	WW	0148573	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
4	WW	0166100	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
4	WW	0166641	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	22
4	WW	0177179	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	23
5	WW	0007183	Lower (6,737 ft.)	0.204 mi. SSW (1077 ft.)		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032	24
6	NWIS	USGS_4040171 11255201	Lower (6,636 ft.)	0.248 mi. NE (1309 ft.)	(D- 2- 5) 6CCA-S1		25
7	NWIS	USGS_4039261 11263601	Lower (6,749 ft.)	0.258 mi. SW (1362 ft.)	(D- 2- 4)12CDA- 1		26
8	WW	0187175	Lower (6,792 ft.)	0.327 mi. WSW (1727 ft.)		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032	27
9	WW	0072204	Lower (6,619 ft.)	0.359 mi. ENE (1896 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	28
10	NWIS	USGS_4040181 11254101	Lower (6,619 ft.)	0.368 mi. ENE (1943 ft.)	(D- 2- 5) 6CDB- 1		29

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
6	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.248 mi. NE (1309 ft.)	(D- 2- 5) 6CCA-S1	
7	NWIS	USGS_403926111263601	Lower (6,749 ft.)	0.258 mi. SW (1362 ft.)	(D- 2- 4)12CDA- 1	
10	NWIS	USGS_404018111254101	Lower (6,619 ft.)	0.368 mi. ENE (1943 ft.)	(D- 2- 5) 6CDB- 1	
1	WW	0007181	Lower (6,824 ft.)	0.135 mi. SW (713 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060
2	WW	1775292344	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	4022998451	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	996892433	Lower (6,713 ft.)	0.167 mi. NE (882 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
3	WW	0007182	Lower (6,737 ft.)	0.174 mi. SSW (919 ft.)		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032
4	WW	0000259	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0142688	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0146214	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0146425	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0147535	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0147540	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0148159	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0148573	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0166100	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0166641	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0177179	Lower (6,713 ft.)	0.193 mi. NE (1019 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
5	WW	0007183	Lower (6,737 ft.)	0.204 mi. SSW (1077 ft.)		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032
8	WW	0187175	Lower (6,792 ft.)	0.327 mi. WSW (1727 ft.)		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032
9	WW	0072204	Lower (6,619 ft.)	0.359 mi. ENE (1896 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6925 ft.

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	WW	6,824 ft.		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	8
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	11
3	WW	6,737 ft.		S3800 E3100 SE 02 2S 4E SL, HEBER CITY 84032	12
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	22
4	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	23
5	WW	6,737 ft.		S4000 E3200 SE 02 2S 4E SL, HEBER CITY 84032	24
6	NWIS	6,636 ft.	(D- 2- 5) 6CCA-S1		25
7	NWIS	6,749 ft.	(D- 2- 4)12CDA- 1		26
8	WW	6,792 ft.		N1200 E2300 SW 12 2S 4E SL, HEBER CITY 84032	27
9	WW	6,619 ft.		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	28
10	NWIS	6,619 ft.	(D- 2- 5) 6CDB- 1		29

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.135 mi. (713 ft.) SW
Elevation: 6,824 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007181**
WRNUM: **1255007M00**
LOCATION: **S3500 E3000 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **8.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.167 mi. (882 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **1775292344**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER, INTERESTED PARTY**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.167 mi. (882 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **4022998451**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **SOUTH KAMAS IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.167 mi. (882 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **996892433**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

MAP ID# 3

Distance from Property: 0.174 mi. (919 ft.) SSW
Elevation: 6,737 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007182**
WRNUM: **1255007M00**
LOCATION: **S3800 E3100 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **0.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0000259**
WRNUM: **0055003P00**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **KRISTIN MCLACHLAN FOR JORDANELLE SPECIAL SERVICE DIST**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0142688**
WRNUM: **55-11203**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DIST., INTERESTED PARTY**
SOURCE: **ONTARIO DRAIN TUNNEL AND PROVO RIVER**
USE: **IRRIGATION, MUNICIPAL, OTHER, STOCKWATERING**
PRIORITY DATE: **20000508**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146214**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146425**
WRNUM: **55-9544**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20001213**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147535**
WRNUM: **55-9631**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (5)**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147540**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148159**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020718**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148573**
WRNUM: **55-9699**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20021108**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166100**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166641**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 4

Distance from Property: 0.193 mi. (1,019 ft.) NE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0177179**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20070124**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 5

Distance from Property: 0.204 mi. (1,077 ft.) SSW
Elevation: 6,737 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007183**
WRNUM: **1255007M00**
LOCATION: **S4000 E3200 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **12.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

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MAP ID# 6

Distance from Property: 0.248 mi. (1,309 ft.) NE
Elevation: 6,636 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404017111255201**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404017111255201**
STATION NAME: **(D- 2- 5) 6CCA-S1**
SITE TYPE: **SP**
LATITUDE: **40.671339400**
LONGITUDE: **-111.431859400**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESWSWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1983-08-31**
WATER-QUALITY DATA END DATE: **1983-08-31**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**
SITE-VISIT DATA BEGIN DATE: **1983-08-31**
SITE-VISIT DATA END DATE: **1983-08-31**
SITE-VISIT DATA COUNT: **1**

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MAP ID# 7

Distance from Property: 0.258 mi. (1,362 ft.) SW
Elevation: 6,749 ft. (Lower than TP)

GEOSEARCH ID: **USGS_403926111263601**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **403926111263601**
STATION NAME: **(D- 2- 4)12CDA- 1**
SITE TYPE: **GW**
LATITUDE: **40.657173100**
LONGITUDE: **-111.444081600**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESESWS12 T**
NAME OF LOCATION MAP: **PARK CITY EAST**
SCALE OF LOCATION MAP: **24000**
DATE OF FIRST CONSTRUCTION: **10/09/1972**
DATE SITE ESTABLISHED OR INVENTORIED: **06/16/1994**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **123. FEET**
HOLE DEPTH: **123. FEET**
SOURCE OF DEPTH DATA: **D**
PROJECT NUMBER: **474922100**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **--**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1972-11-04**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1995-09-05**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **12**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

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MAP ID# 8

Distance from Property: 0.327 mi. (1,727 ft.) WSW
Elevation: 6,792 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0187175**
WRNUM: **55-8519**
LOCATION: **N1200 E2300 SW 12 2S 4E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WILLIAM L. GARDNER**
SOURCE: **PROVO RIVER**
USE: **DOMESTIC**
PRIORITY DATE: **19721005**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

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MAP ID# 9

Distance from Property: 0.359 mi. (1,896 ft.) ENE
Elevation: 6,619 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0072204**
WRNUM: **55-3097**
LOCATION: **N1140 E1570 SW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **CHEVRON U.S.A. INC.**
SOURCE: **UNDERGROUND WATER WELL**
USE: **OTHER**
PRIORITY DATE: **19651011**
SUMMARY STATUS: **PERFECTED: PROOF FILED, RIGHT CERTIFICATED**
DRILLING METHOD: **CABLE TOOL**
TOTAL DEPTH (FT.): **480.00000**
FINISH DEPTH (FT.): **310.00000**
SCREEN DEPTH (FT.): **150.00000**
WELL DOC LINK: *Click Here*

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MAP ID# 10

Distance from Property: 0.368 mi. (1,943 ft.) ENE
Elevation: 6,619 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404018111254101**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404018111254101**
STATION NAME: **(D- 2- 5) 6CDB- 1**
SITE TYPE: **GW**
LATITUDE: **40.671617190**
LONGITUDE: **-111.428803700**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWSESWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **01/01/1965**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **NOT REPORTED**
WELL DEPTH: **260 FEET**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **O**
PROJECT NUMBER: **464915800**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1967-05-17**
WATER-QUALITY DATA END DATE: **1967-05-17**
WATER-QUALITY DATA COUNT: **2**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355534
Project #: 14714
PO #: 14714
Date: 06/04/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43886, 40.6646190)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

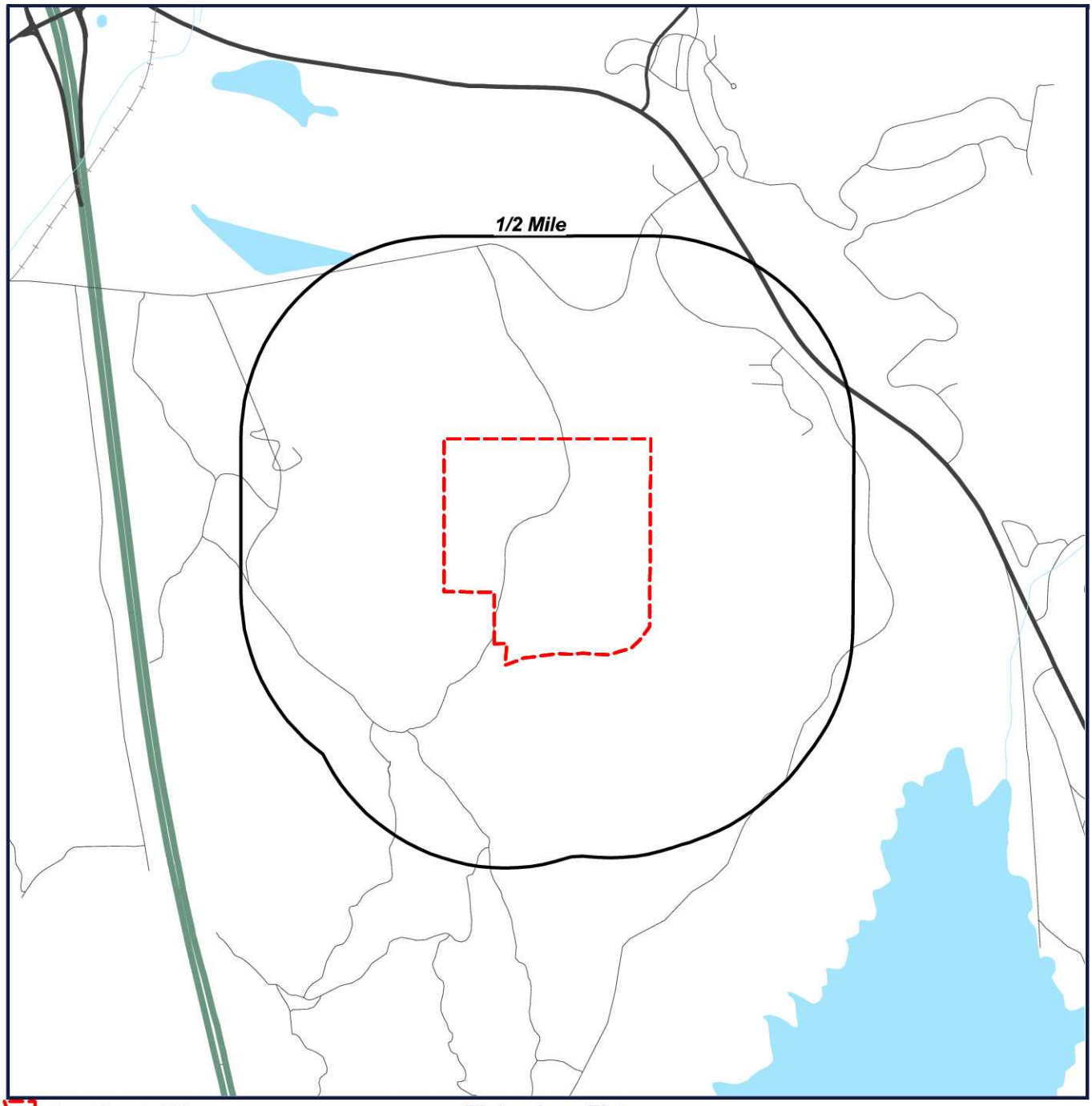
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147849
Job #: 355536
Project #: 14714
PO #: 14714
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah 84060

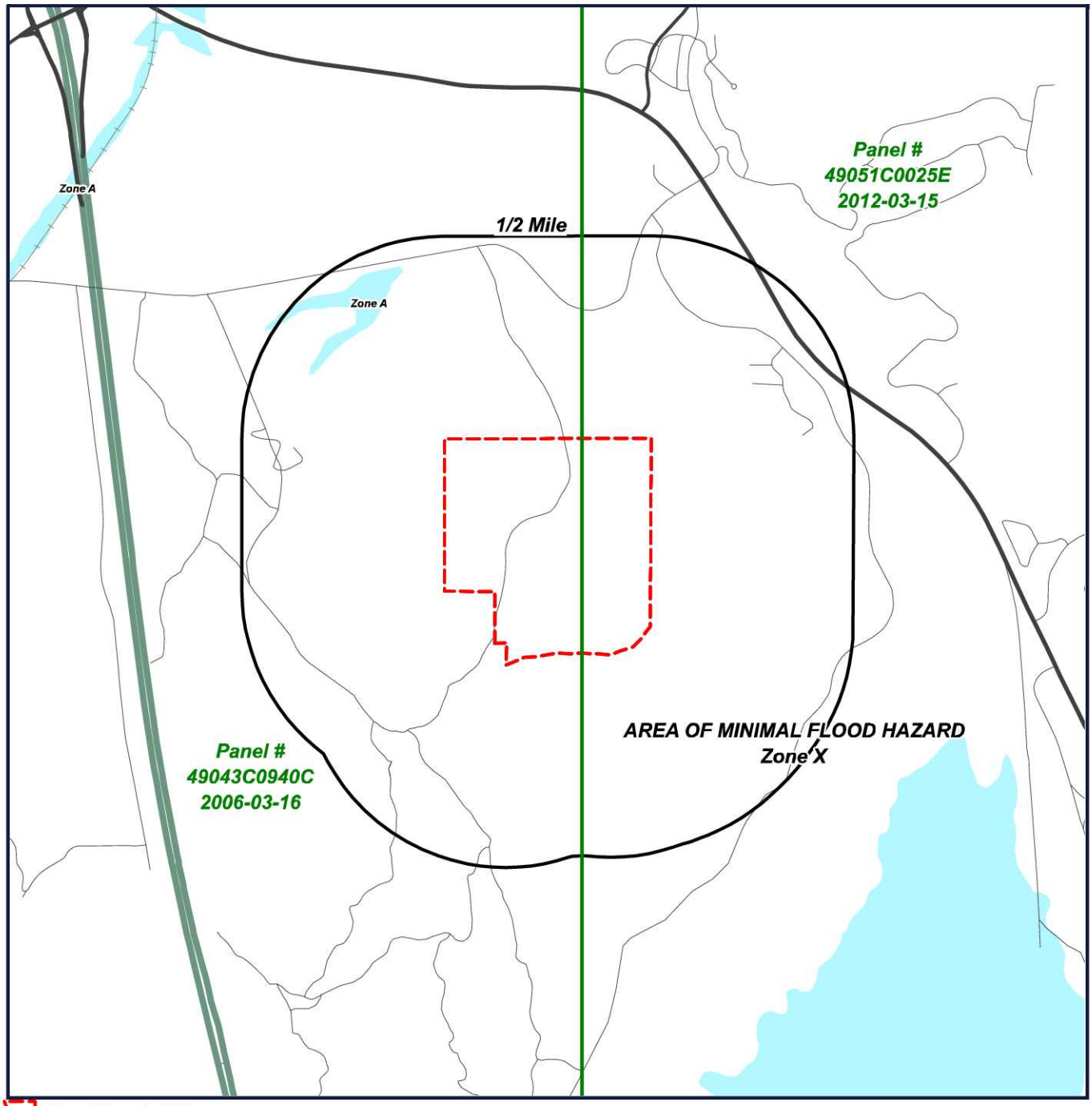
Coordinates
Area centroid (-111.43886, 40.6646190)
6,925 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Hazard - Zone X

Area with Reduced Flood Risk due to Levee - Zone X

Area with Flood Risk due to Levee - Zone D

Digital Data Not Available

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

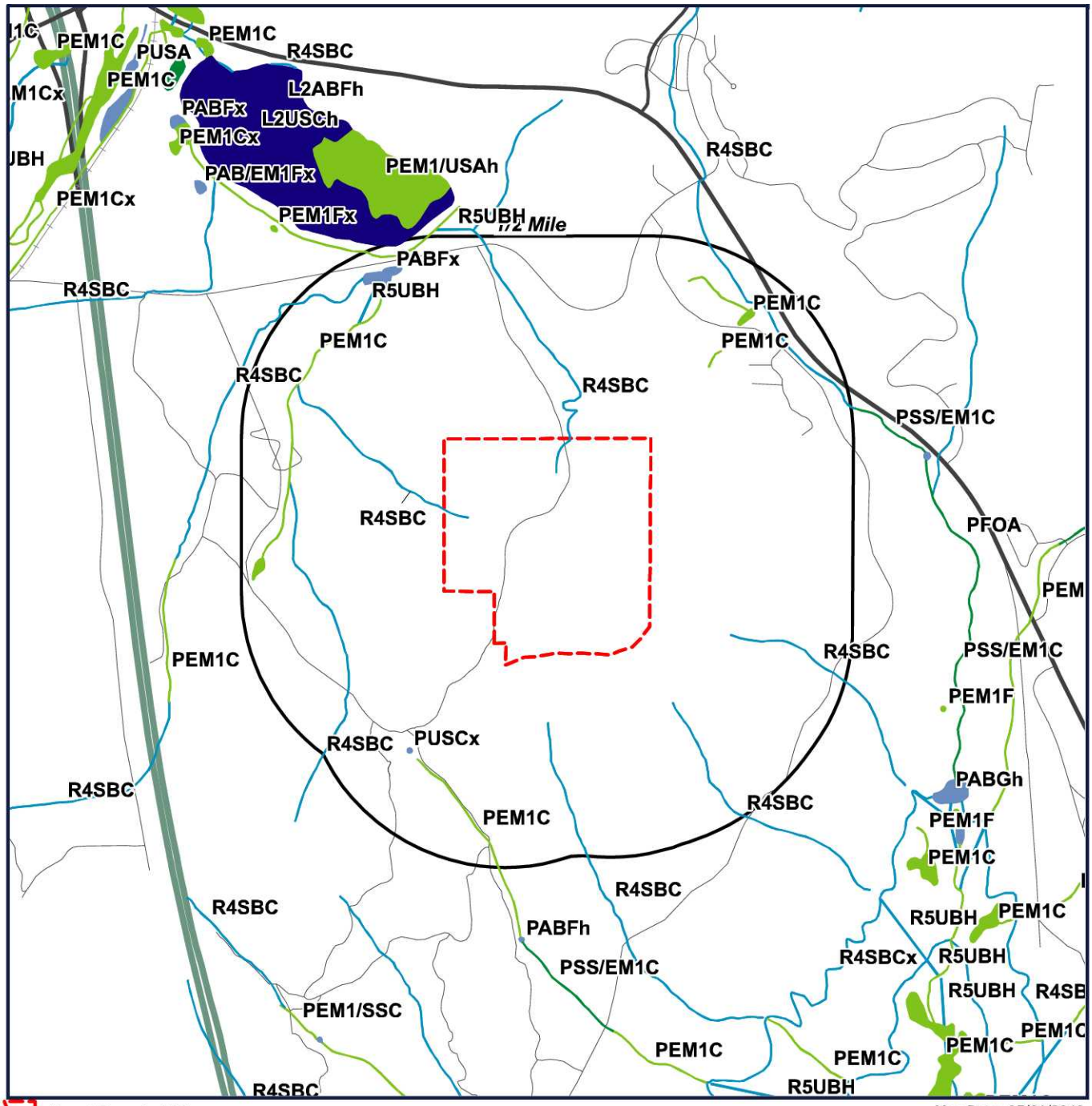
Zone A	Zone A

Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

Map Date: 05/01/2018

ESTUARINE AND MARINE DEEPWATER
ESTUARINE AND MARINE WETLAND
FRESHWATER EMERGENT WETLAND
FRESHWATER FORESTED/ SHRUB WETLAND
LAKE
OTHER
RIVERINE
FRESHWATER POND
NDA - DIGITAL DATA NOT AVAILABLE

Richardson Flats Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W
E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

L2USCh

SYSTEM: **LACUSTRINE**
SUBSYSTEM: **LITTORAL**
CLASS: **UNCONSOLIDATED SHORE**
WATER REGIME: **SEASONALLY FLOODED**
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

PABFx

SYSTEM: **PALUSTRINE**
CLASS: **AQUATIC BED**
SPECIAL MODIFIER: **EXCAVATED**

PEM1C

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

PEM1Cx

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**
SPECIAL MODIFIER: **EXCAVATED**

PUSCx

SYSTEM: **PALUSTRINE**
CLASS: **UNCONSOLIDATED SHORE**
SPECIAL MODIFIER: **EXCAVATED**

R4SBC

SYSTEM: **RIVERINE**
SUBSYSTEM: **INTERMITTENT**
CLASS: **STREAMBED**
WATER REGIME: **SEASONALLY FLOODED**

R5UBH

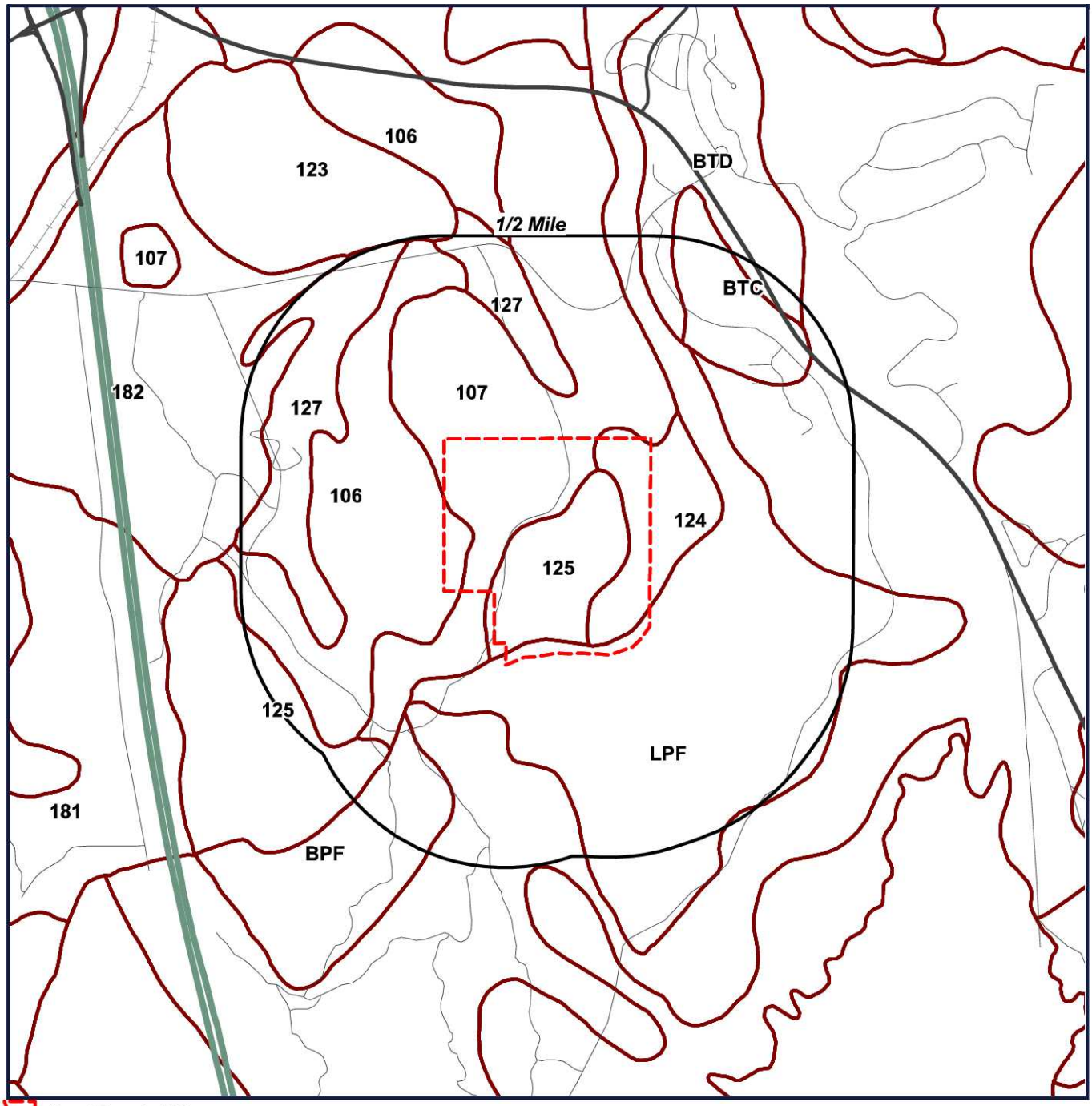
SYSTEM: **RIVERINE**

SUBSYSTEM: **UNKNOWN PERENNIAL**

CLASS: **UNCONSOLIDATED BOTTOM**

WATER REGIME: **PERMANENTLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

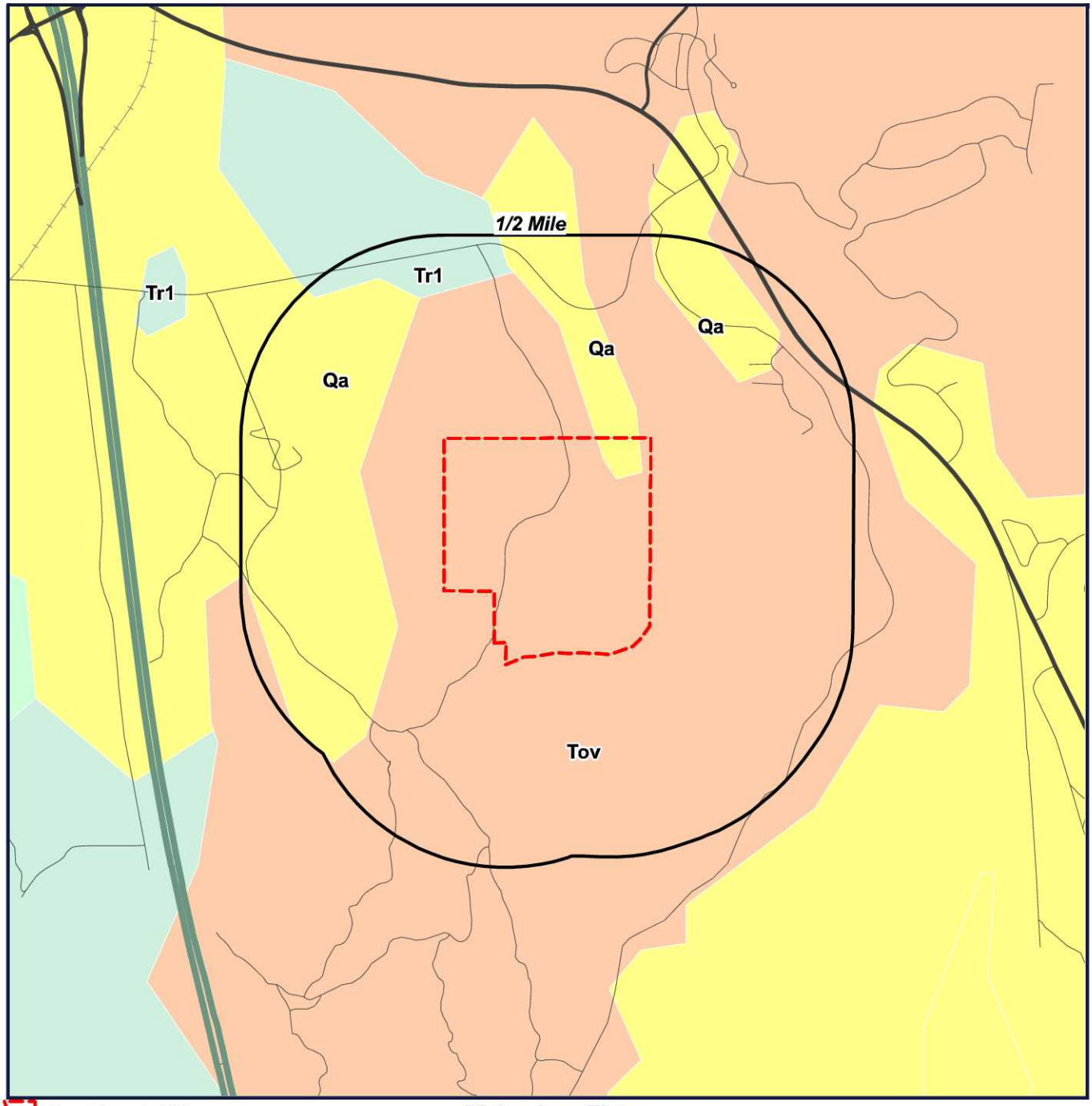
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

BPF	Broadhead-Little Pole association, very steep
BTC	Broadhead soils, 6 to 15 percent slopes
BTD	Broadhead soils, 15 to 25 percent slopes
HWE	Horrocks-Broadhead association, steep
LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
106	Ayoub cobbly loam, 2 to 15 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes
123	Dumps, mines
125	Dunford-Ayoub-Melling complex, 30 to 60 percent slopes
124	Dunford-Ayoub-Melling complex, 15 to 30 percent slopes
127	Echocreek-Kovich loams, 0 to 10 percent slopes
182	Yeates Hollow-Henefer complex, 30 to 60 percent slopes

Geology Map



Target Property (TP)

Richardson Flats
Parcel PP-28-2
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

GEOLOGY SYMBOL: **Tr1**
UNIT NAME: **Triassic (1) sedimentary rocks in Salt Lake City-Coalville-Randolph region**
UNIT AGE: **Early Triassic**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
tidal flat to shallow marine
ROCKTYPE/S: **mudstone; limestone; siltstone; sandstone; evaporite**

APPENDIX E

SUPPORTING
DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

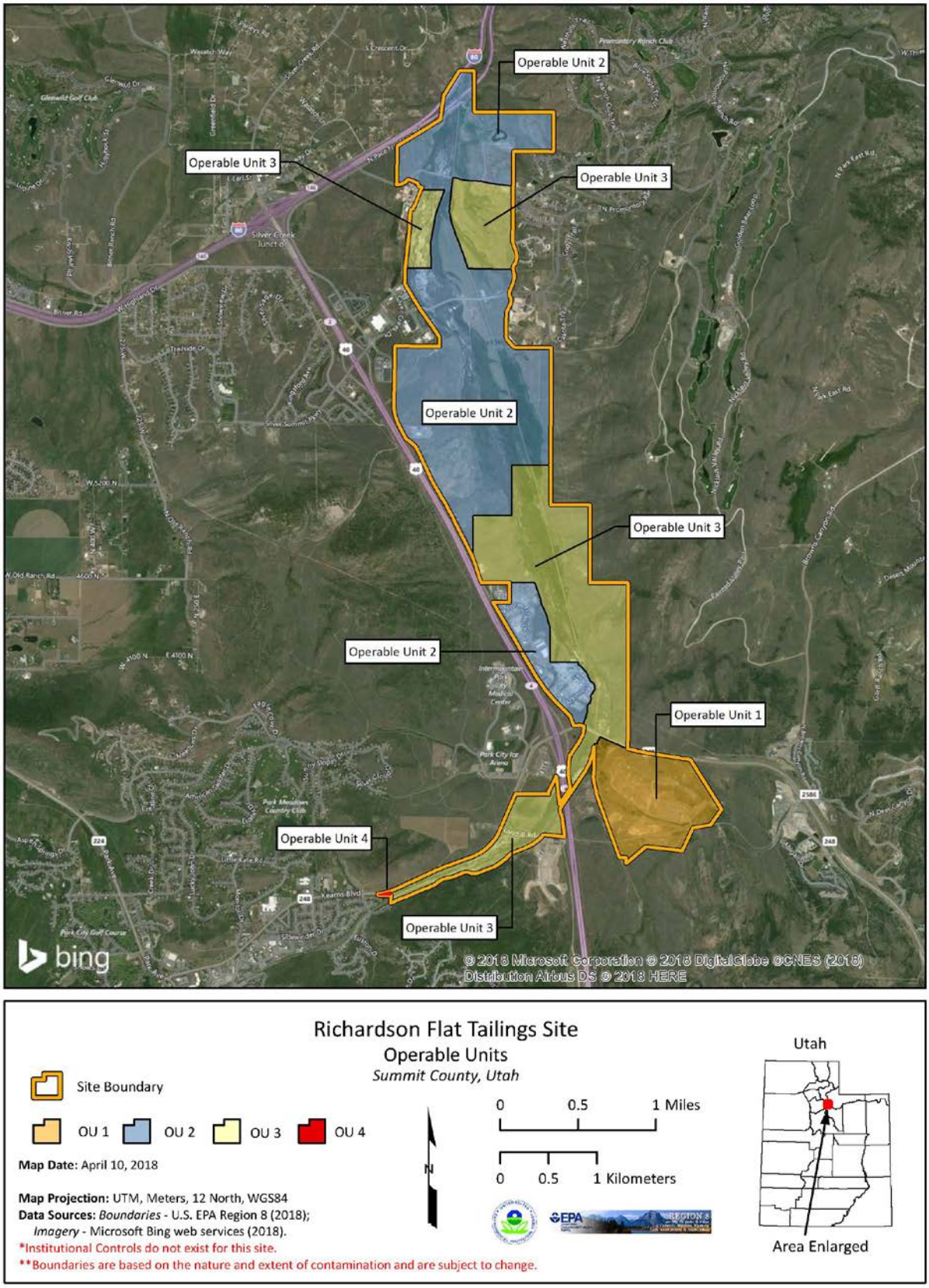
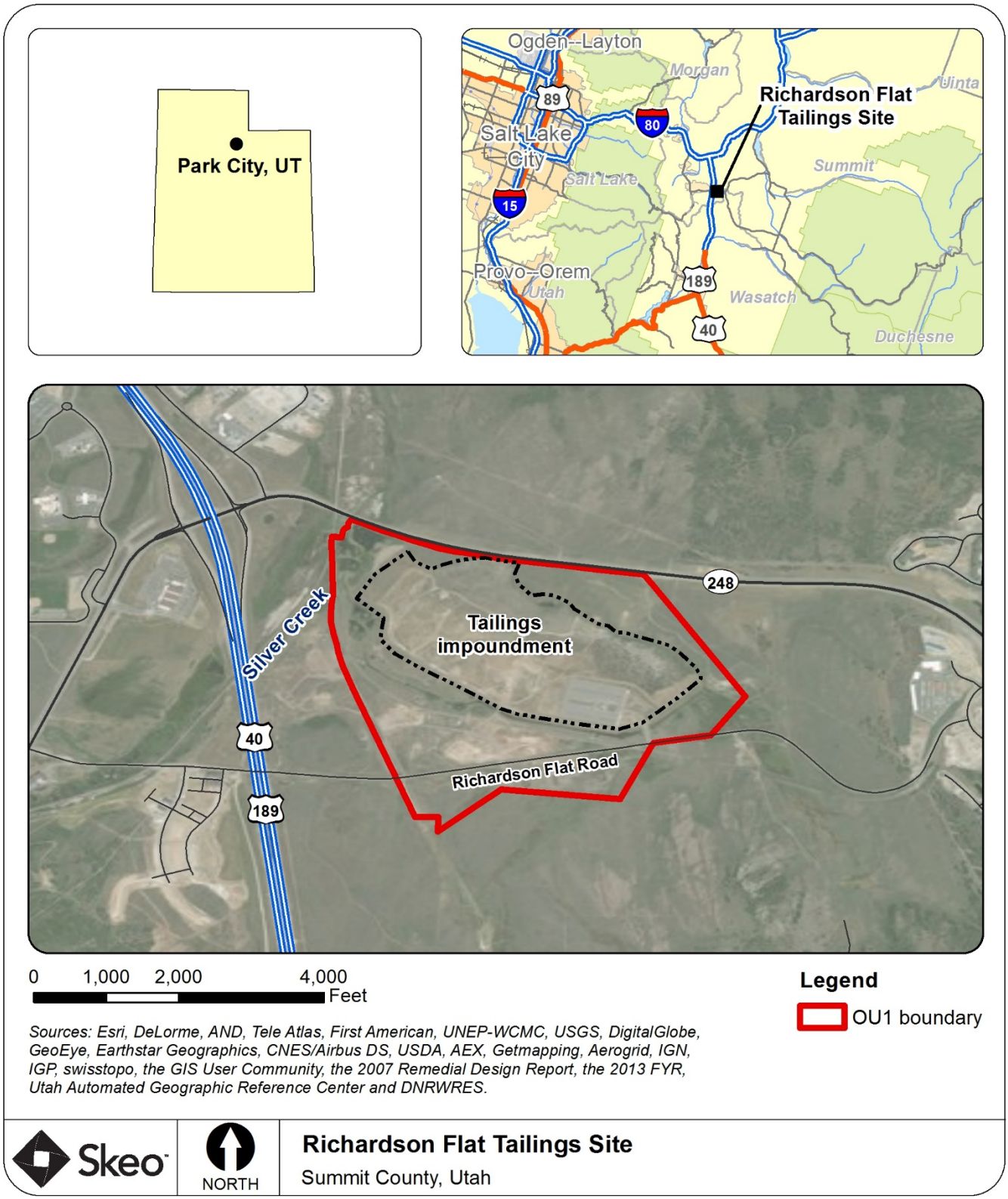


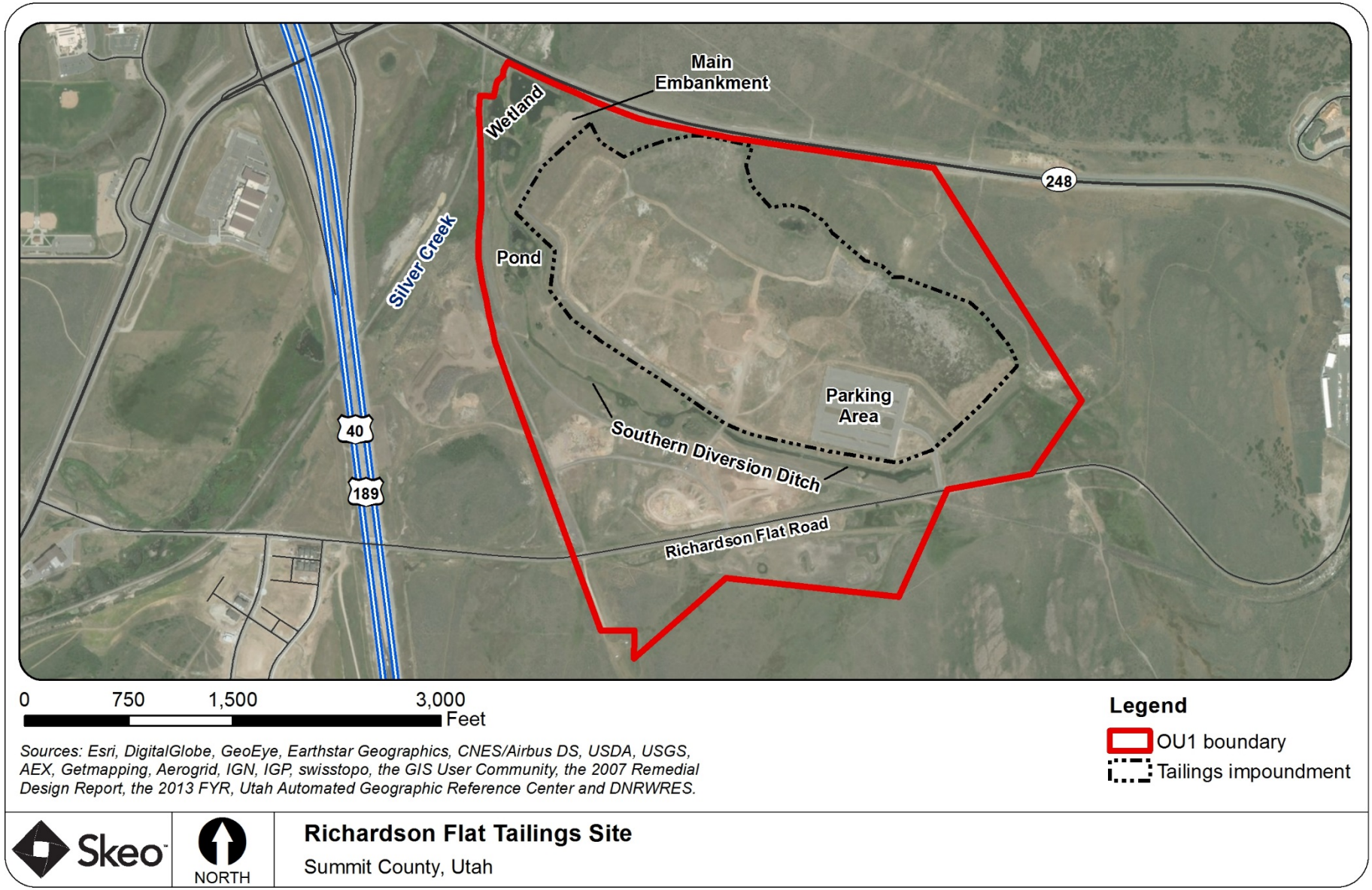
Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

.

Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

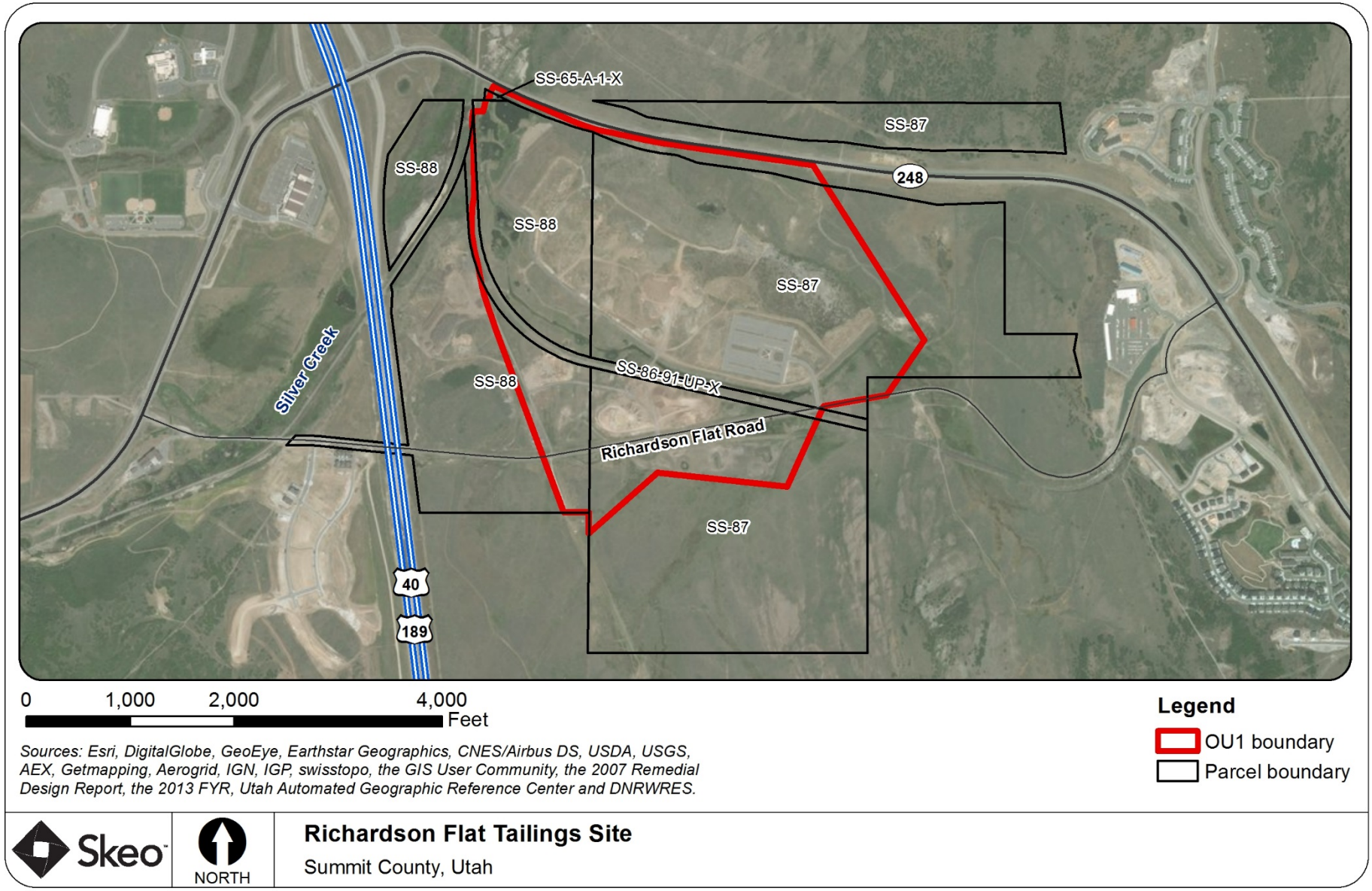
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 µg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below µg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

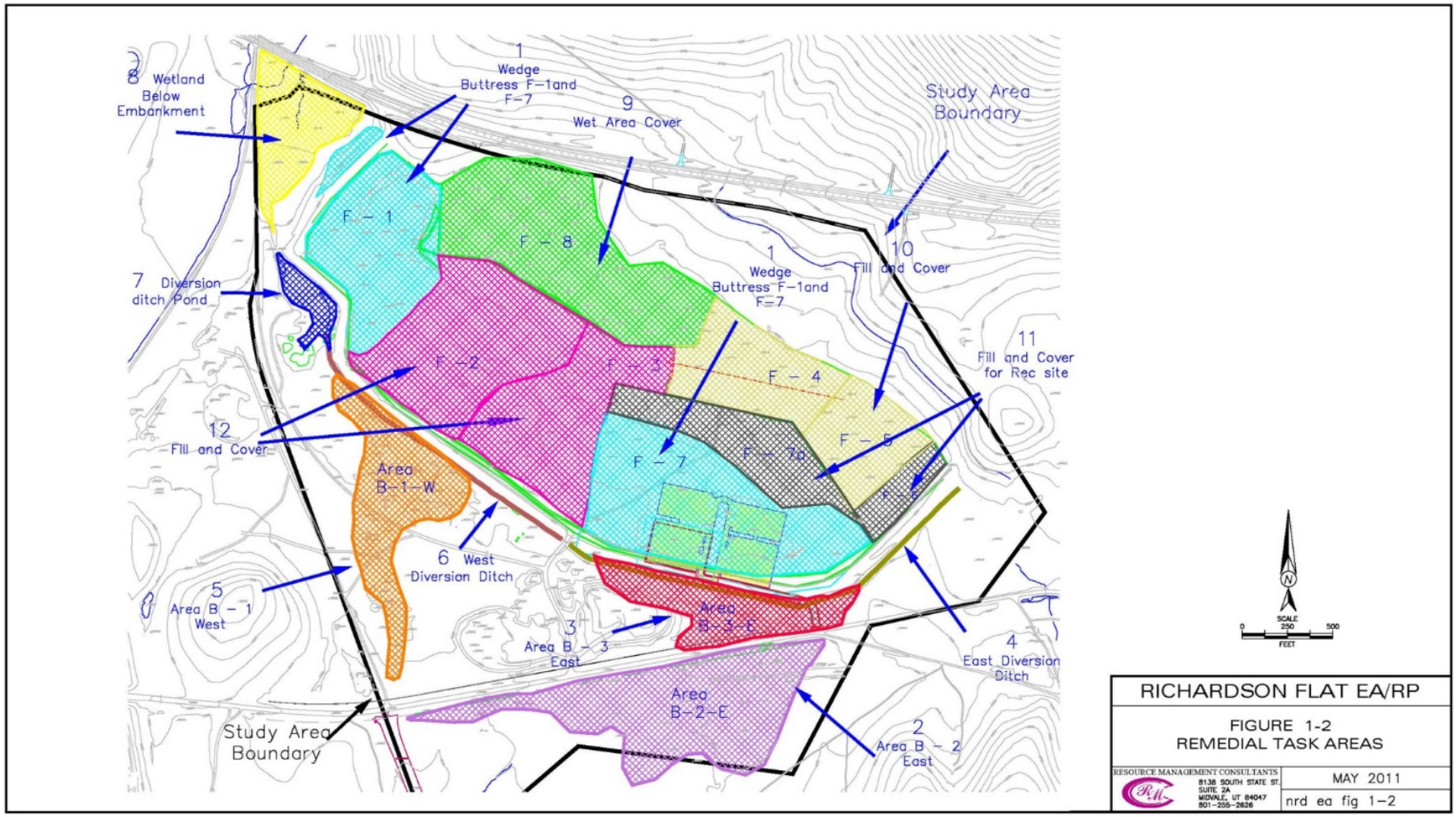


Figure C-2: 2008 Phase 2 Completion Map

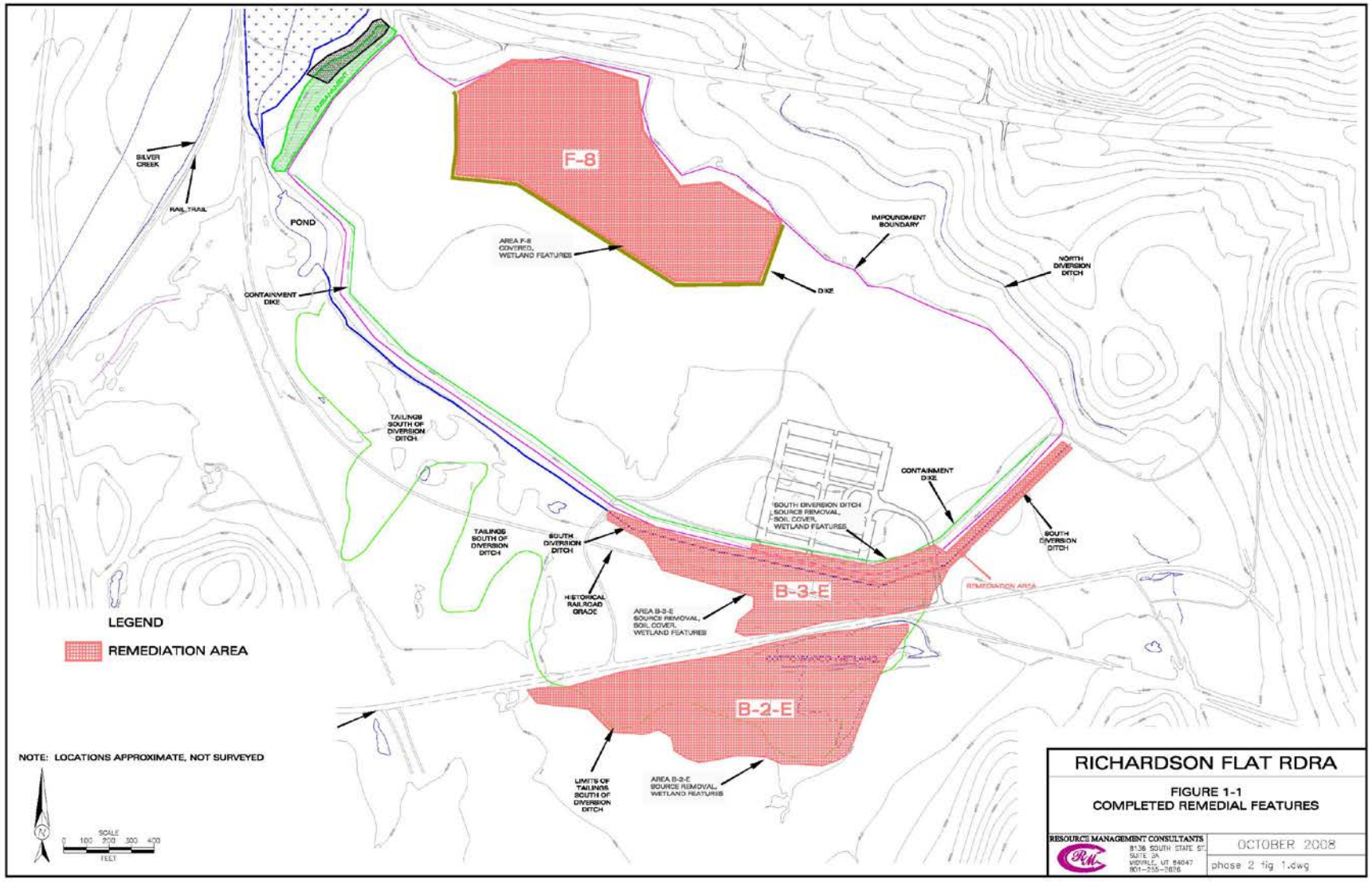


Figure C-3: 2009 Phase 3 Completion Map

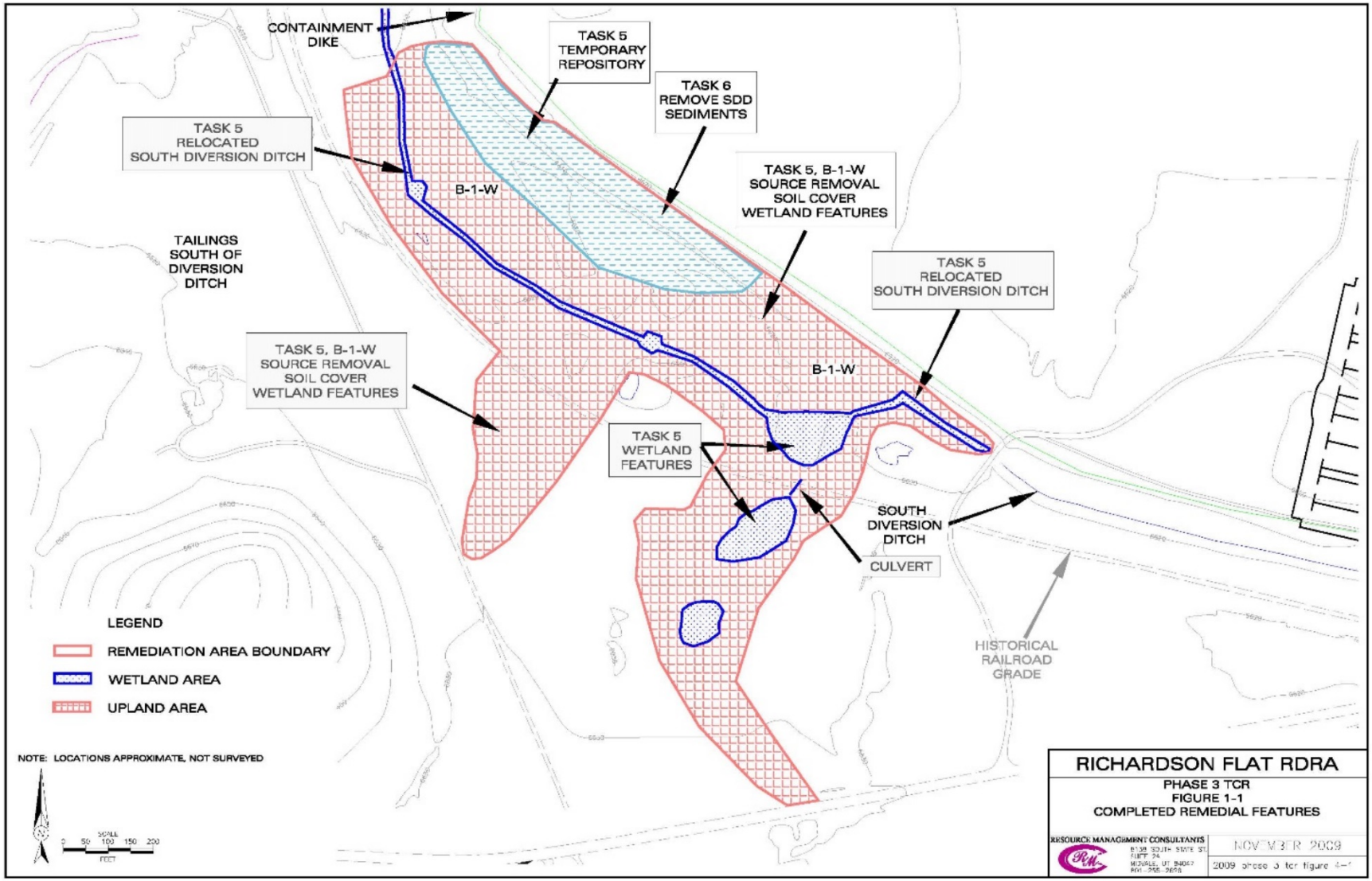


Figure C-4: 2010 Phase 4 Completion Map

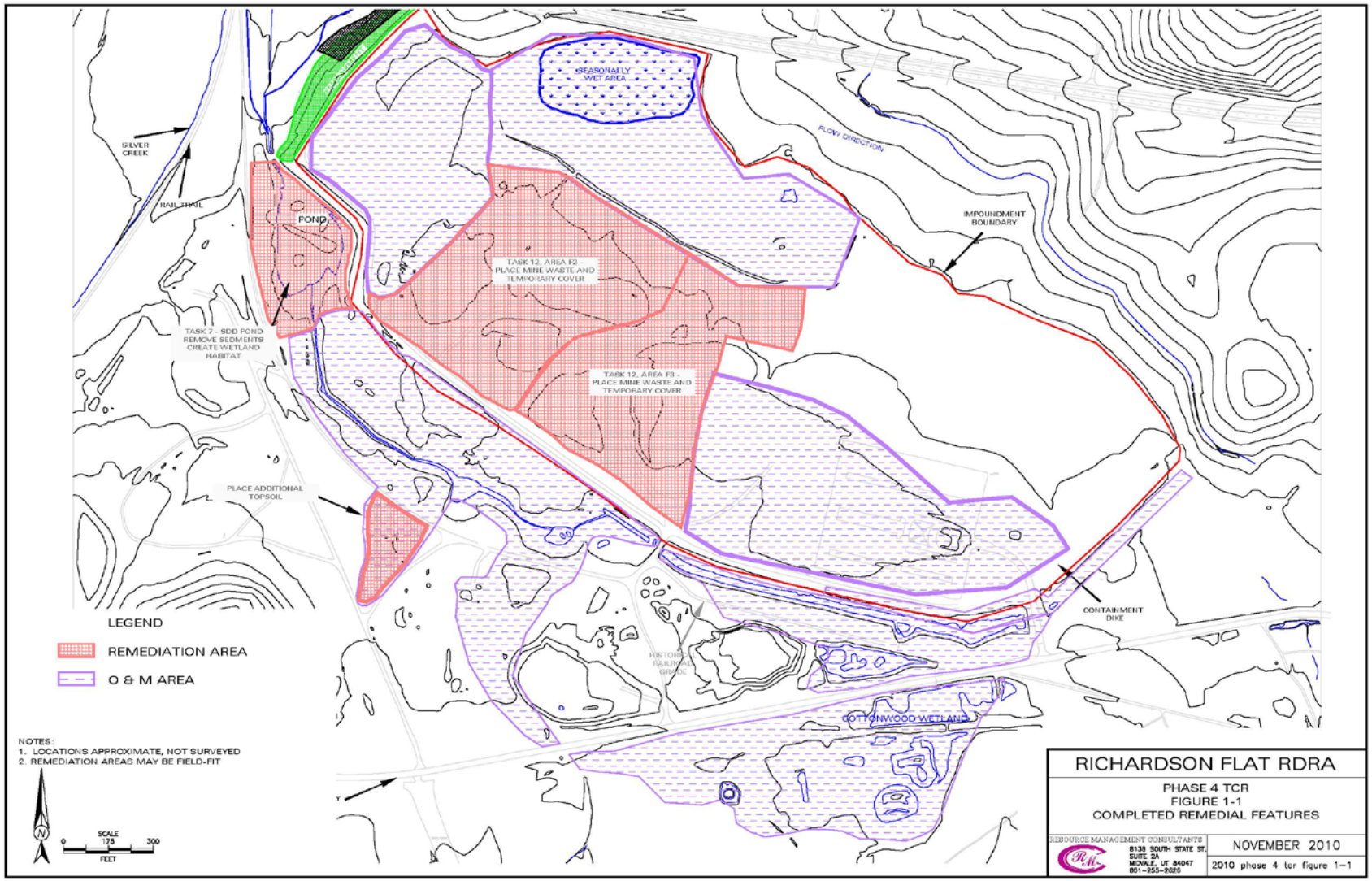
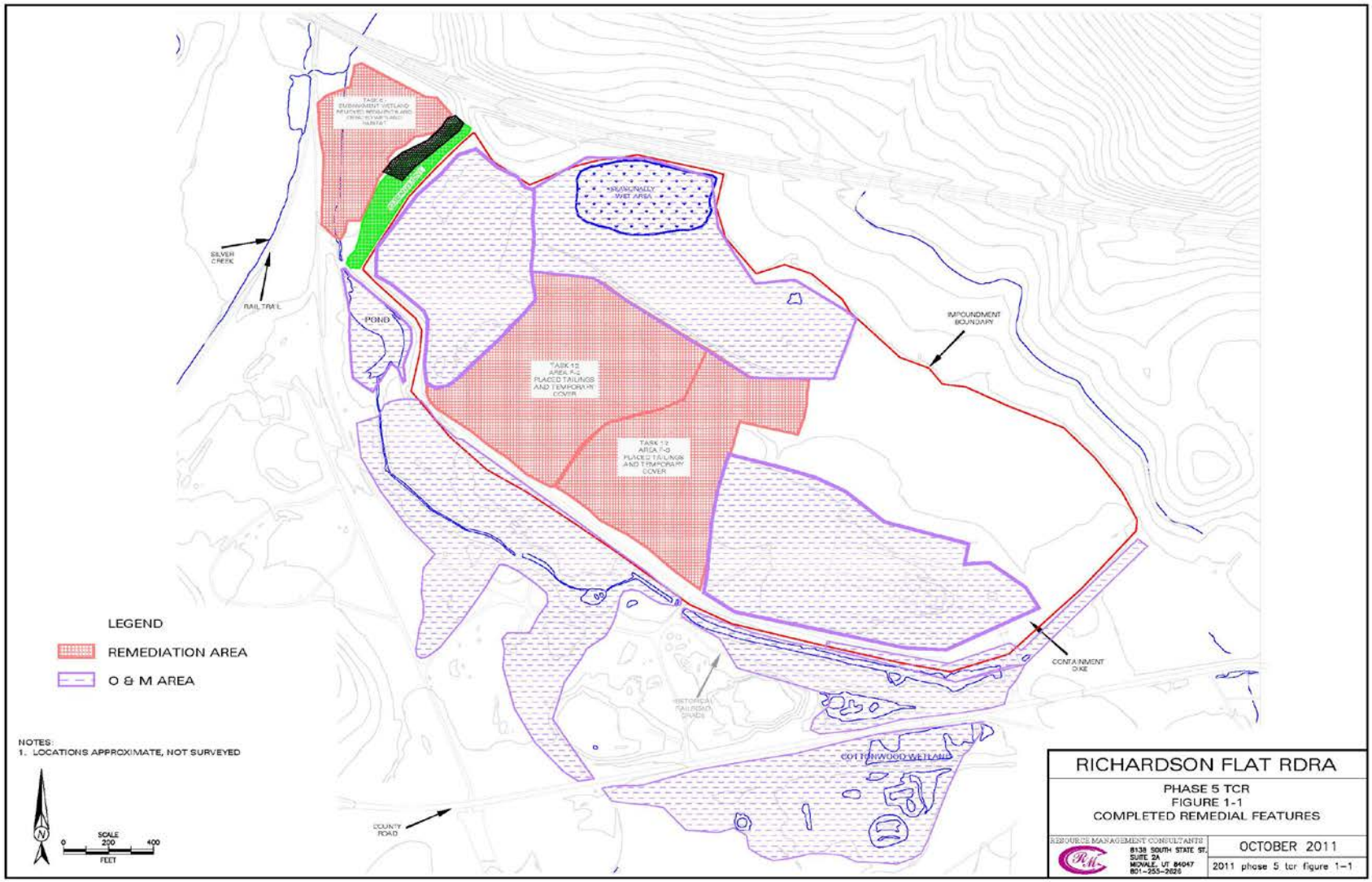


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE



The U.S. Environmental Protection Agency, Region 8 Announces the Second Five-Year Review for the Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jami Brackin **Affiliation:** Summit County
Subject Contact Information:
Time: 2:30 p.m. **Date:** 09/21/2017
Interview Location: Park City Library

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Local Government**

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____ Name	_____ Title	_____ Date	_____ Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☒ Erosion not evident
Arial extent: _____ Depth: _____
Remarks: _____

4. **Holes** ☐ Location shown on site map ☒ Holes not evident
Arial extent: _____ Depth: _____
Remarks: _____

5. **Vegetative Cover** ☒ Grass ☒ Cover properly established
☐ No signs of stress ☐ Trees/shrubs (indicate size and locations on a diagram)
Remarks: _____

6. **Alternative Cover** (e.g., armored rock, concrete) ☒ N/A
Remarks: _____

7. **Bulges** ☐ Location shown on site map ☒ Bulges not evident
Arial extent: _____ Height: _____
Remarks: _____

8. **Wet Areas/Water Damage** ☒ Wet areas/water damage not evident

☐ Wet areas ☐ Location shown on site map Arial extent: _____
☐ Ponding ☐ Location shown on site map Arial extent: _____
☐ Seeps ☐ Location shown on site map Arial extent: _____
☐ Soft subgrade ☐ Location shown on site map Arial extent: _____
Remarks: _____

9. **Slope Instability** ☐ Slides ☐ Location shown on site map
☒ No evidence of slope instability
Arial extent: _____
Remarks: _____

B. Benches ☐ Applicable ☒ N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

2. **Bench Breached** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

3. **Bench Overtopped** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

C. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☐ Erosion not evident

Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.



Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom

NOTARY PUBLIC

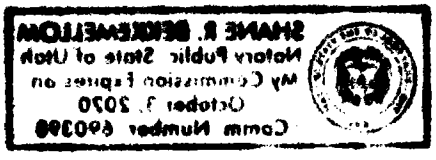
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

0486087 PCH-1-1
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486094 PCH-1-2
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SALT LAKE CITY, UT 84117

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0487073 PCH-1-T25
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0487080 PCH-1-T26
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0487097 PCH-1-T27
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0487105 PCH-1-T28
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

APPENDIX F

STATEMENT OF QUALIFICATIONS



MARK **LARSEN, P.G., E.P.**

GEOLOGIST | ENVIRONMENTAL PROFESSIONAL

CONTACT

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EDUCATION

Bachelor of Science Geology,
University of Utah, Salt Lake City,
1997

PROFESSIONAL LICENSES

Professional Geologist,
State of Utah,
License # 5293214-2250
Expires 3/3/19

AFFILLIATIONS

Association of Environmental and
Engineering Geologists (AEG)
Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



LINDSEY **BRADSHAW**

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EDUCATION

Bachelor of Arts, Interior Design,
Utah State University,
2009

ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel SS-86

SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14715

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-86. In total, the parcel comprises approximately 146.63 acres. The target property is currently predominantly open, undeveloped land with varied terrain included steep hill slopes and flat fields/meadows. The northern portion of the property is crossed by Richardson Flats Road which runs from east to west across the site. An old railroad grade also crosses the northern portion of property and the swath of land occupied by the grade is not included in the boundaries of the target property. The tracks have been removed from the grade and it is no longer in use for rail travel. Several unpaved roads and trails also cross the target property and an earthen berm was previously built across a drainage on the south-central portion of the property, presumably to retain water within the drainage.

The target property has historically remained undeveloped land with the exception of the road and railroad grade crossings on the northern portion of the property.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified three regulated sites or facilities on or within the required search radii of the target property (Sections 8.1 and 8.2).

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs or HRECs, as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. One CREC was identified with OU1 of the Richardson Flat Tailings site, the boundary of which extends onto the extreme northwest corner of the target property (see section 8.1). We do not believe the CREC currently poses an environmental risk to the target property, however, Land Use Covenants (LUCs) and/or associated Activity and Use Limitations (AULs) associated with institutional controls currently being drafted for OU1 of the Richardson Flat Tailings site may

limit future land use on the extreme northwest corner of the target property. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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Appendix C: Radius Report
Appendix D: City Directory Report/Water Well Report/Oil Gas Report/Physical Settings
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1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel SS-86 in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.671497° N and Longitude: -111.439192° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1903 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Richardson Flats Road crosses the northern portion of the target property from east to west. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-86. In total, the parcel comprises approximately 146.63 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.



FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently predominantly open, undeveloped land with varied terrain included steep hill slopes and flat fields/meadows. The northern portion of the property is crossed by Richardson Flats Road which runs from east to west across the site. An old railroad grade also crosses the northern portion of property and the swath of land occupied by the grade is not included in the boundaries of the target property. The tracks have been removed from the grade and it is no longer in use for rail travel. Several unpaved roads and trails also cross the target property and an earthen berm was previously built across a drainage on the south-central portion of the property, presumably to retain water within the drainage. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: Undeveloped hill slopes and fields/meadows with a stream.

East: Richardson Flats road and commercial and residential development.

South: Undeveloped hill slopes and meadows.

West: Undeveloped hill slopes and meadows, Richardson Flats Road, and a park and ride lot to the northwest.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed

conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property. A small, spring-fed stream emanates from the central portion of the property and flows north-northwest off of the property. The small amount of water in the stream was clear with no sheens and appeared to support plant and animal life.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

During the site reconnaissance, several small piles of refuse/debris were observed along an unpaved road on the northwest portion of the property. The refuse/debris appeared to be household items illegally dumped on the property. No staining was observed in conjunction with the refuse/debris and the refuse/debris was observed to be non-hazardous and does not represent an REC.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	1	0	2	NS	NS	3
Water Wells	0.5000	0	14	0	1	NS	NS	15
Total		**0**	**15**	**0**	**3**	**0**	**0**	**18**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
SS-86	Null	146.63	Stichting Mayflower Mountain Fonds

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that Richardson Flats Road was unpaved and crossed the northern portion of the property. The existing railroad grade bisecting the northern portion of the property was also present. The earthen berm across the drainage on the south-central portion of the property (Section 4.3) is also visible in the photo. The remainder of the property appears to have been undeveloped hill slopes and meadows with a few unpaved roads/trails. What appears to be the Richardson Flats Tailings area is visible beyond to the northwest. None of the tailings piles in the area appear to have encroached onto or immediately adjacent to the target property. The remainder of the surrounding, adjacent areas appear to have been undeveloped land.

1953: The aerial shows no significant change from the previous imagery.

1962: The aerial shows no significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: The aerial shows no significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: The aerial shows no significant change from the previous imagery.

1993: The aerial shows no significant change on the target property from the previous imagery. Some work appeared to be in progress in the Richardson Flats Tailings area to the northwest.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows overhead power lines adjacent to the east and crossing the northeast corner of the target property. The aerial shows no other significant change from the previous imagery.

2004: The aerial shows some new road development beyond to the east, including S.R. 248. The aerial shows no other significant change from the previous imagery

2006: The aerial shows the beginnings of the existing commercial and residential development to the east and northeast of the target property. The aerial shows no other significant change from the previous imagery.

2009: The aerial indicates that Richardson Flats Road had been paved. Several commercial structures to the northeast had been completed. The aerial shows no other significant change from the previous imagery.

2011: The aerial shows some of the dumped debris/rubbish on the northwest portion of the target property. Road and drainage work appeared to have been completed in the Richardson Flats Tailings area to the northwest.

2014: The aerial shows no significant change from the previous imagery.

2016: The aerial indicates that additional commercial development and new residential development was in progress to the east and northeast of the target property. The aerial shows no other significant change from the previous imagery.

2018: The aerial indicates that additional commercial development and residential development was in progress to the east and northeast of the target property. The aerial shows no other significant change from the previous imagery. Since 2018, more residential development to the east has occurred.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey, "Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1903, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: The map shows Richardson Flats Road crossing the northern portion of the target property location. No other development is mapped on the target property. Several other unimproved roads are mapped to the north, northeast, and northwest as well as a railroad grade to the northwest.

1955: The map shows Richardson Flats Road (unimproved) and the railroad grade crossing the northern half of the target property. The spring-fed spring emanating on the south-central portion of the property and flowing north-northwest is also mapped. The Richardson Flats Tailings Pond is shown to the northwest of the property and is mapped extending onto the extreme northwest corner of the property.

1999: The map shows an unpaved road/trail crossing the western half of the property from north to south. No other changes are shown on the property. The Richardson Flats Tailings Pond to the northwest is no longer mapped. No other significant changes are shown.

2014: The map shows streets associated with the existing commercial and residential development to the east and northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,620 and 6,860 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qh	Artificial fill	Historical
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene

Unit Qh mapped on the target property is associated with the earthen berm crossing the drainage on the south-central portion of the property. It should also be noted that Unit Qhm associated with the Richardson Flat Tailings site to the northwest does not extend to or onto the target property. The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** below.

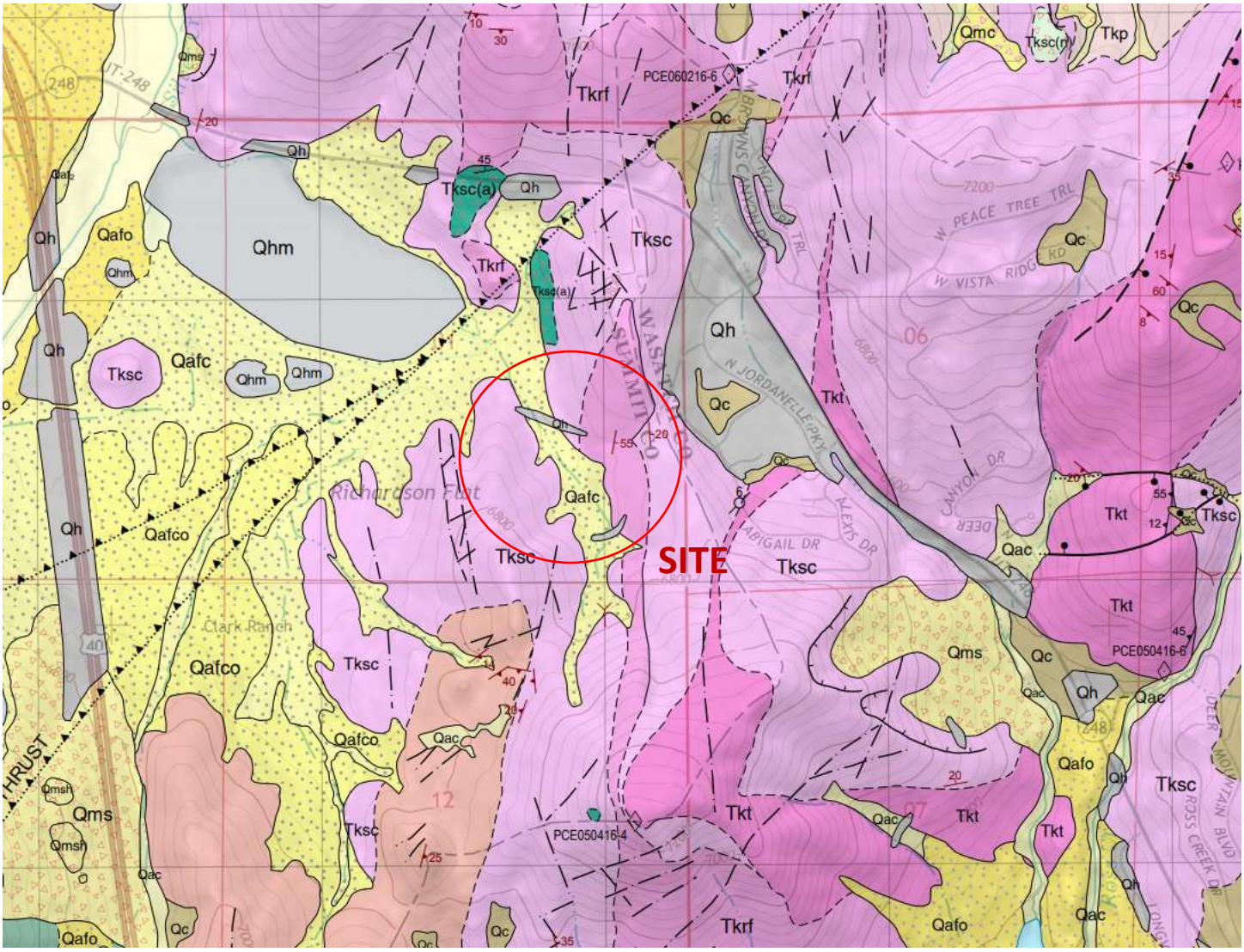


FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the north and northwest at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in

topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

The following table list environmental database listings that were identified within the boundary of the target property.

ACRONYM	FACILITY	STREET	REC
CERCLIS	Richardson Flat Tailings	3.5 Miles NE of Park City, Park City, UT	CREC
ECHOR08	Richardson Flat Tailings	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC
FRSUT	Richardson Flat Tailings	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC
ICIS	Richardson Flat Tailings	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC
PNPL	Richardson Flat Tailings	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC
RODS	Richardson Flat Tailings	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC
SEMS	Richardson Flat Tailings	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	CREC

The following site history for the Richardson Flat Tailings is from the U.S. EPA:

(https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

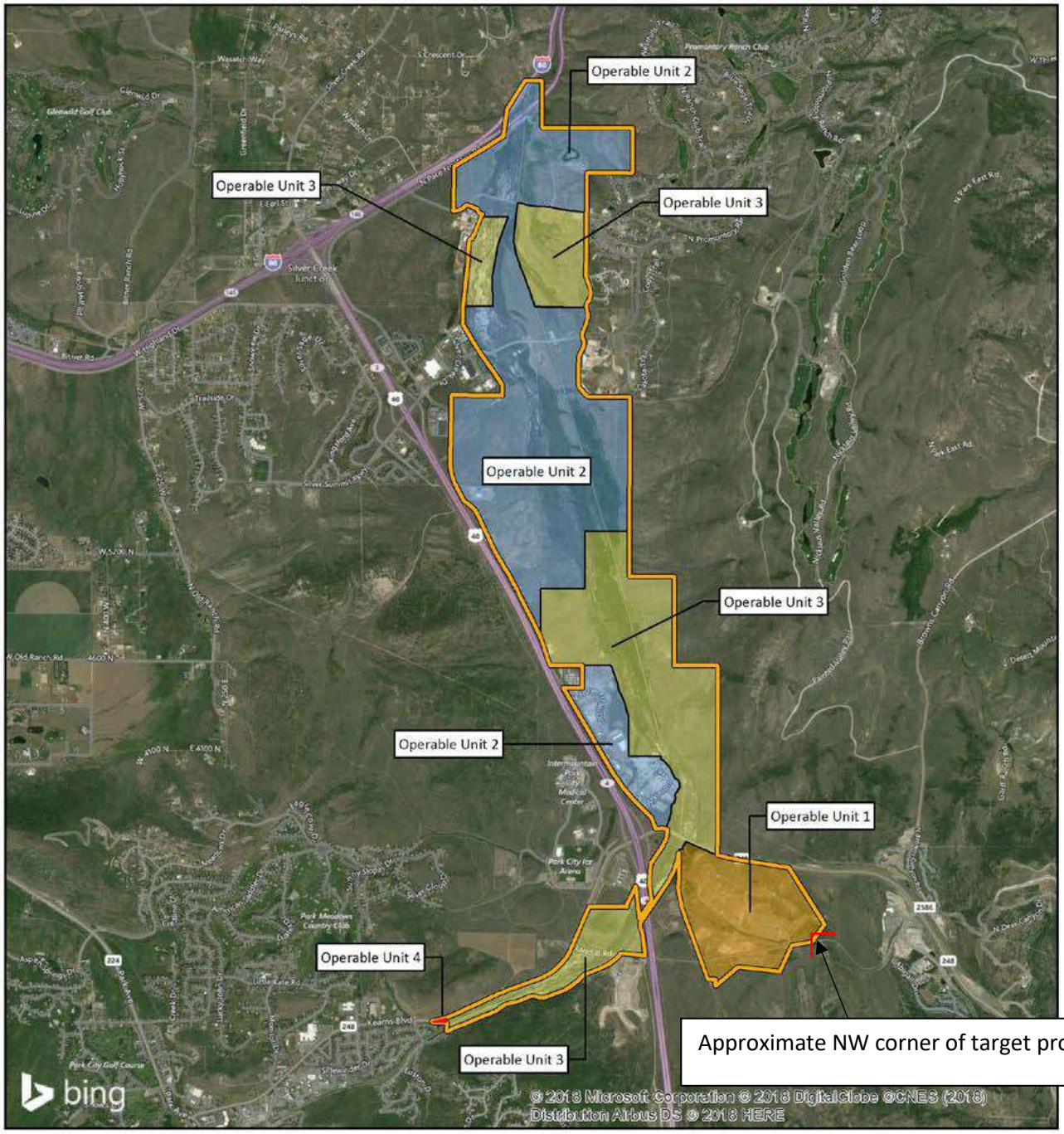
The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The

purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**. A map from the Five-year review showing the boundaries of the RFTS and its operable units is included on the following page. We have shown the approximate northwest corner of the target property on the map in relation to the RFTS site.



Richardson Flat Tailings Site
Operable Units
Summit County, Utah

Site Boundary

OU 1 OU 2 OU 3 OU 4

Map Date: April 10, 2018

Map Projection: UTM, Meters, 12 North, WGS84
Data Sources: *Boundaries* - U.S. EPA Region 8 (2018);
Imagery - Microsoft Bing web services (2018).
*Institutional Controls do not exist for this site.
**Boundaries are based on the nature and extent of contamination and are subject to change.

0 0.5 1 Miles

0 0.5 1 Kilometers

N

Utah

Area Enlarged

Operable Unit 1 (OU1) of the RFTS has received considerable attention and remediation work to this point. Additional work is in discussion or planning stages and institutional controls for the site are being implemented. The boundary of OU1 extends onto the extreme NW corner of the target property. The remainder of the entire RFTS area is located down-gradient of the target property and all surface drainage flows to the north and northwest, away from the target property. Based on our review of historical aerial photographs (Section 6.3) and the geologic map included in Section 7.0, no tailings or other fill associated with OU1 of the RFTS appears to have encroached onto the target property. According to the 2018 Five-year review, there is no risk to off-site groundwater sources from OU1. Tailings have been removed from all areas outside of the current impoundment area on OU1, including areas adjacent to the northwest portion of the target property. The nearest current operation and monitoring areas within the OU1 area are more than 150 feet to the northwest of the target property and tailing impoundment areas awaiting additional remediation are located more than 1,500 feet to the west and northwest of the target property. Institutional controls being drafted for the OU1 area under an existing Record of Decision (ROD) will reportedly institute land use restrictions and shallow groundwater use restrictions for the OU1 area.

Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property. We conclude that OU1 of the RFTS represents a CREC in relation to the target property, and specifically to the extreme northwest portion of the target property within the OU1 boundary where future institutional controls associated with OU1 may impact site use on that portion of the target property. The remainder of the target property outside of the OU1 boundary would not be subject the institutional controls and related site use restrictions. No additional assessments are recommended at this time with respect to the target property and OU1 of the RFTS.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
USICISNPDES	BK Storage	1240 W. Richardson Flat Rd, Kamas, UT	0.017	ENE	No
USMRDS	Unknown Tunnel	Summit Co. Park City, UT	0.034	S	No

The water discharge permit for the BK Storage site, identified in the USICISNPDS Database expired in May of 2019 and was likely in place as a requirement during construction at the site. No violations or enforcement actions associated with the permit were reported. The unknown tunnel identified in the USMRDS database is mapped just south of the target property. CMT did not observed the tunnel or any related spoils or tailings at the time of our site reconnaissance or in our aerial photograph review. No orphan sites were identified within the Radius Map Report.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS (Section 8.1), no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs or HRECs, as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. One CREC was identified with OU1 of the Richardson Flat Tailings site, the boundary of which extends onto the extreme northwest corner of the target property (see section 8.1). We do not believe the CREC currently poses an environmental risk to the target property, however, Land Use Covenants (LUCs) and/or associated Activity and Use Limitations (AULs) associated with institutional controls currently being drafted for OU1 of the Richardson Flat Tailings site may limit future land use on the extreme northwest corner of the target property. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs or HRECs in connection with the Target property or adjacent, surrounding properties. One CREC in connection with an adjacent site was identified (Sections 8.1 and 11.0).

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician

LICENSED PROFESSIONAL GEOLOGIST
No. 5293214
MARK CURTIS LARSEN
6/18/2020
STATE OF UTAH

Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website: https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel SS-86 Site #_____ CMT Job #14715

Property Address: SE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Stichting Mayflower Mountain Fonds Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description: The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Richardson Flats Road crosses the northern portion of the target property from east to west. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-86. In total, the parcel comprises approximately 146.63 acres. The target property is currently predominantly open, undeveloped land with varied terrain included steep hill slopes and flat fields/meadows. The northern portion of the property is crossed by Richardson Flats Road which runs from east to west across the site. An old railroad grade also crosses the northern portion of property and the swath of land occupied by the grade is not included in the boundaries of the target property.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel SS-86

NORTH

Name: Undevelopd land

Address:

Description: open land, fields, hillsides.

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: Commercial and Residential Dev.

Address:

Description: Several businesses, houses, condos

Observed usage: X Residential X Commercial ___ Industrial ___ Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows, fields

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel SS-86

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: x ____ Yes____ No____ Unknown / ____Interior _____ Exterior

Spring feed stream on central and NW portion of site. Clean. No sheens, supports plants and animals

Solid Waste: x ____ Yes____ No____ Unknown / ____Interior _____ Exterior

Some non-hazardous debris rubbish dumped on NW portion of site along dirt road.

Transformers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-86

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel SS-86

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel SS-86

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel SS-86

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View of the central portion of the target property, looking south.



Photo 2 View of the old railroad grade bisecting the northern half of the target property, looking east.



Photo 3 Area with several piles of debris and rubbish on the northwest portion of the target property, looking north.



Photo 4 Pile of rubbish on the northwest portion of the target property.



Photo 5 View of the northwest portion of the target property on the north side of Richardson Flat Road, looking northeast.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355540
Project #: 14715
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434224549, 40.668211114), (-111.434224549, 40.671124376), (-111.435458365, 40.672937239), (-111.436284485, 40.674222905), (-111.436595622, 40.675492272), (-111.443955603, 40.675467861), (-111.443977061, 40.674450742), (-111.441498700, 40.674043889), (-111.439749899, 40.673620761), (-111.438408795, 40.673246452), (-111.437418952, 40.672920965), (-111.436989799, 40.672912827), (-111.436732307, 40.672929102), (-111.436399713, 40.672986062), (-111.436206594, 40.673059297), (-111.435863271, 40.673222040), (-111.435766712, 40.673254589), (-111.435541406, 40.672896553), (-111.436120763, 40.672628025), (-111.436700120, 40.672481554), (-111.437054172, 40.672473417), (-111.437536969, 40.672514103), (-111.438330903, 40.672766358), (-111.439350143, 40.673067434), (-111.440337196, 40.673319686), (-111.441334977, 40.673555664), (-111.443373456, 40.673905559), (-111.443985000, 40.673995067), (-111.443963542, 40.671749197), (-111.443962636, 40.668229755), (-111.439091745, 40.668221617)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/10/1967	ASCS	1" = 1320'	PI-3
08/01/1962	ASCS	1" = 500'	3-22
07/03/1953	USGS	1" = 500'	1-42
1937	ASCS	1" = 500'	U79

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N

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Richardson Flats Parcel SS-86
USDA
2018

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USDA
2016

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USDA
2014

GeoSearch

JOB #: 355540 - 06/08/2020



N

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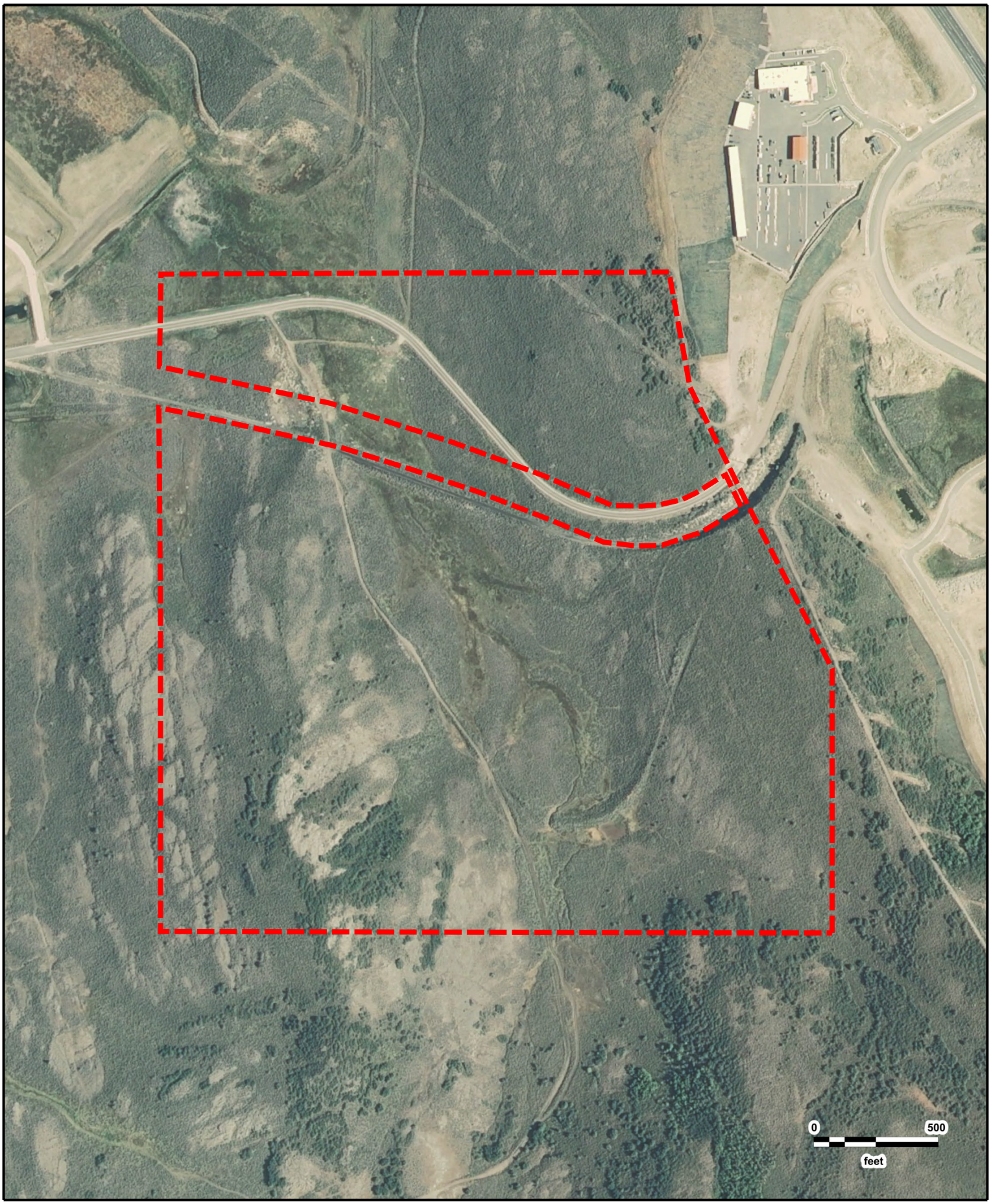
Richardson Flats Parcel SS-86
USDA
2011

GeoSearch

JOB #: 355540 - 06/08/2020



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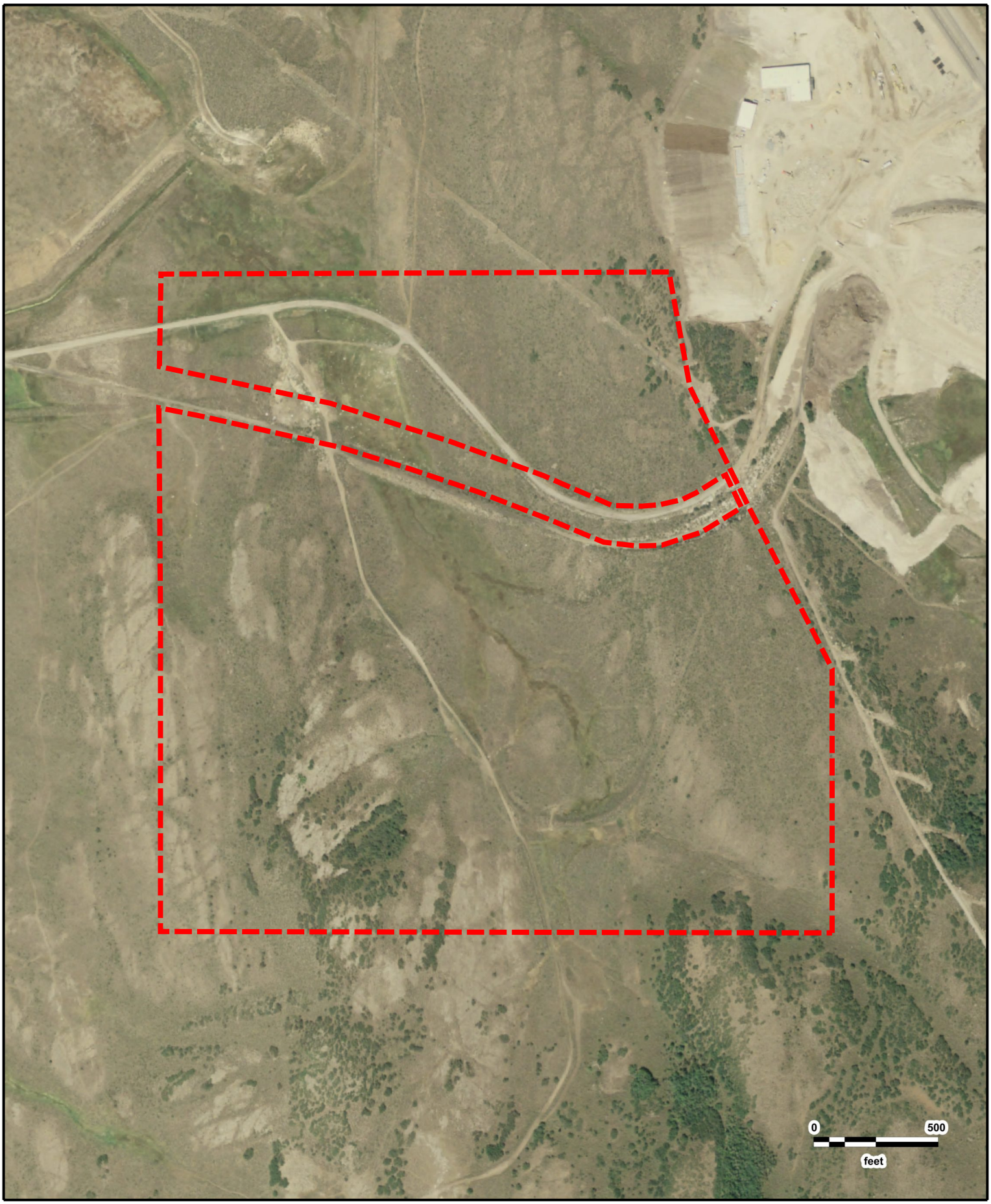
Richardson Flats Parcel SS-86
USDA
2009

GeoSearch

JOB #: 355540 - 06/08/2020



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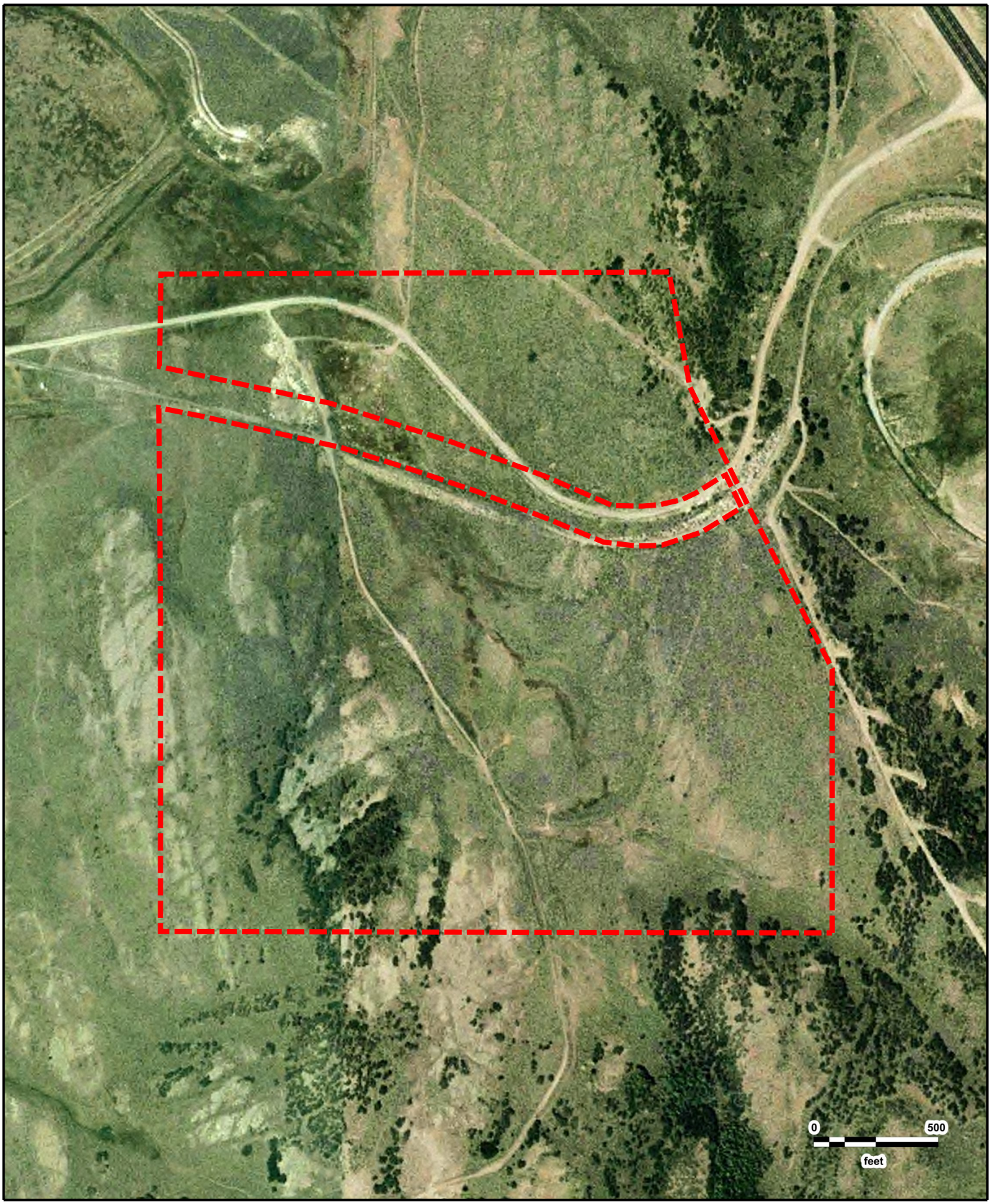
Richardson Flats Parcel SS-86
USDA
2006

GeoSearch

JOB #: 355540 - 06/08/2020



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Richardson Flats Parcel SS-86
USDA
2004

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USDA
2003

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USGS
07/08/1997

GeoSearch

JOB #: 355540 - 06/08/2020



N

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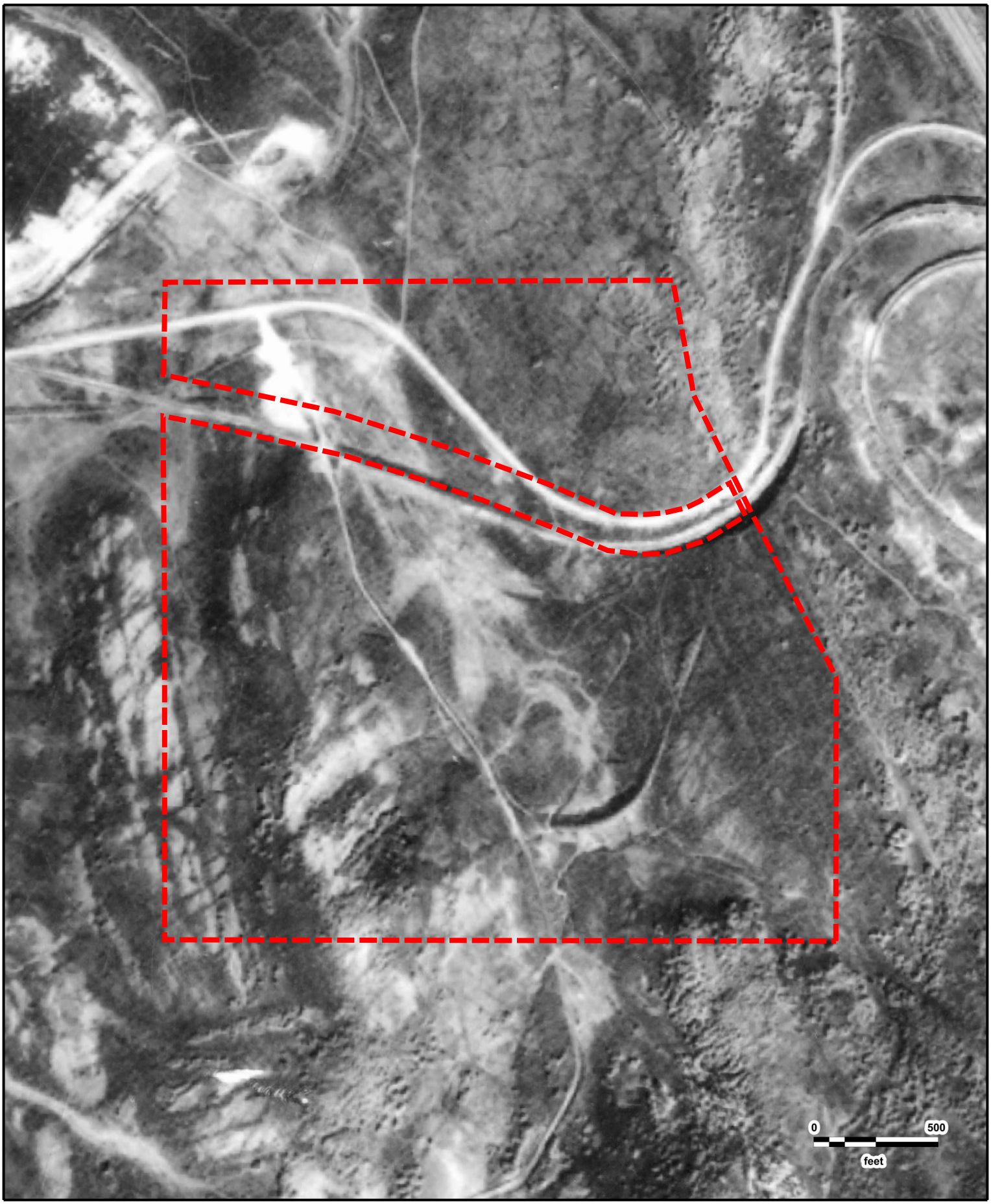
Richardson Flats Parcel SS-86
USGS
08/23/1993

GeoSearch

JOB #: 355540 - 06/08/2020



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Richardson Flats Parcel SS-86
USGS
09/18/1987

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USGS
09/05/1983

GeoSearch

JOB #: 355540 - 06/08/2020



N

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Richardson Flats Parcel SS-86
USGS
08/24/1976

GeoSearch

JOB #: 355540 - 06/08/2020



N

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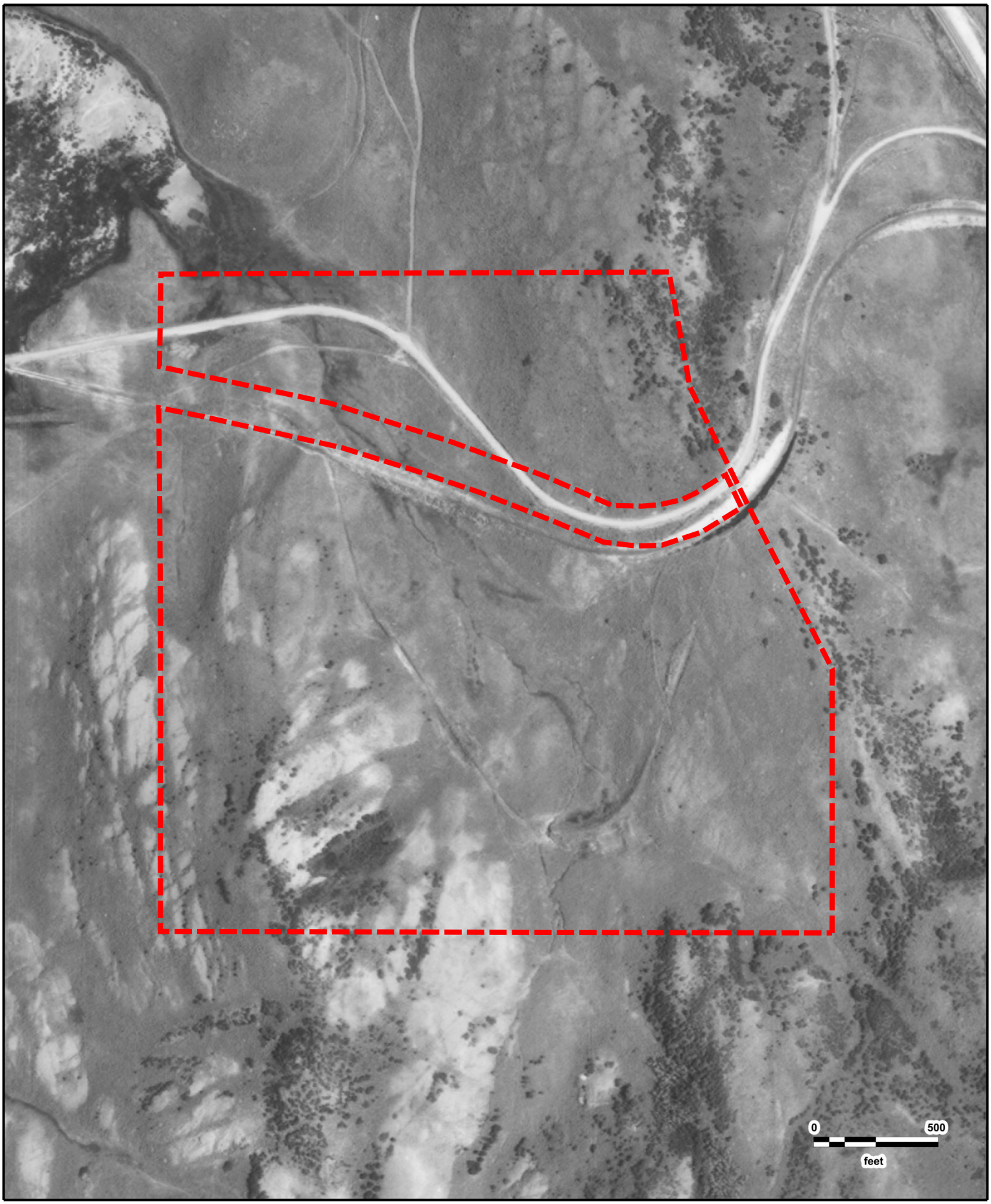
Richardson Flats Parcel SS-86
ASCS
07/10/1967

GeoSearch

JOB #: 355540 - 06/08/2020



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Richardson Flats Parcel SS-86
ASCS
08/01/1962

GeoSearch

JOB #: 355540 - 06/08/2020



N

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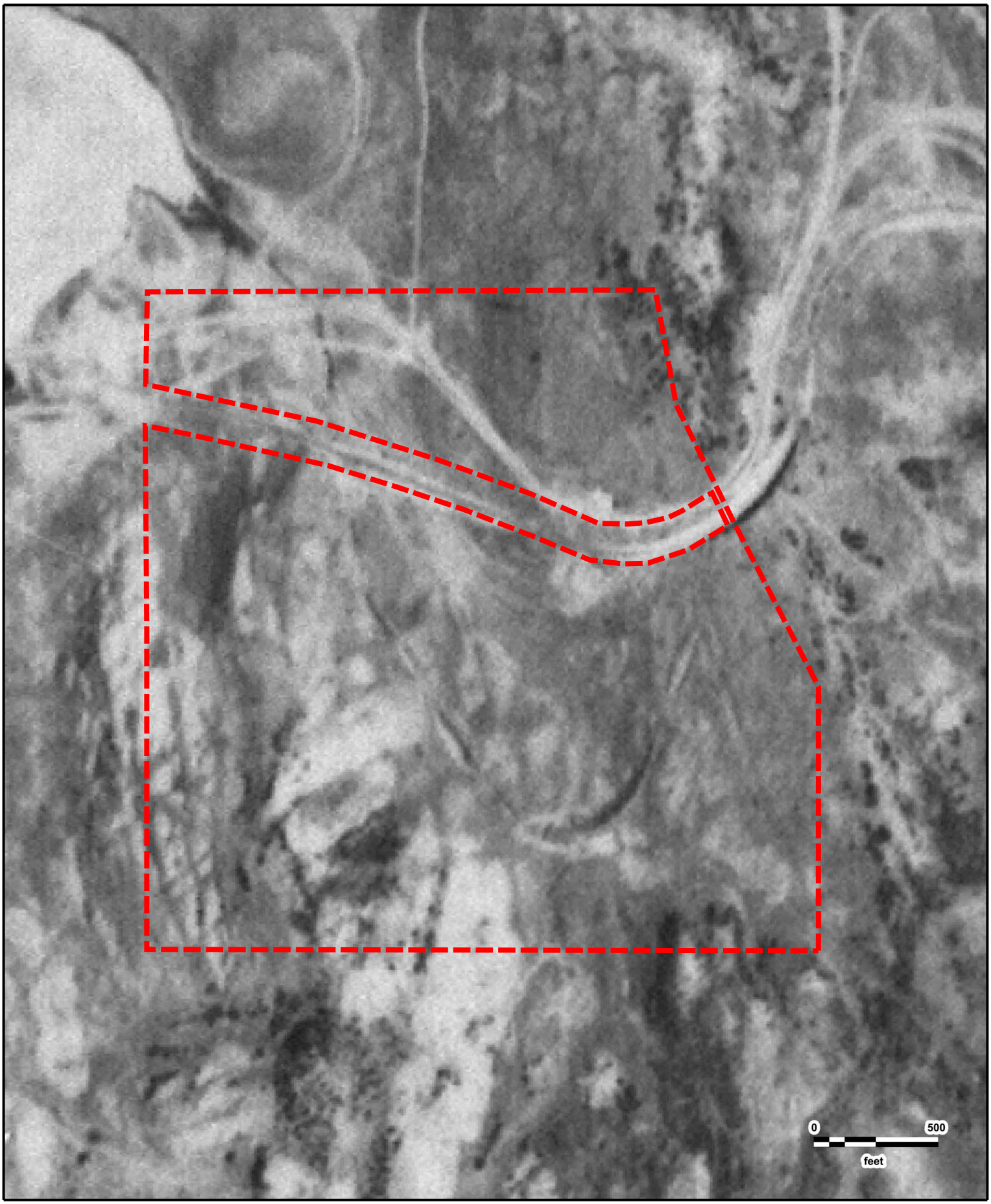
Richardson Flats Parcel SS-86
USGS
07/03/1953

GeoSearch

JOB #: 355540 - 06/08/2020



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Richardson Flats Parcel SS-86
ASCS
1937

GeoSearch

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Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355543
Project #: 14715
PO #: 14715
Date: 06/08/2020

Fire Insurance Map Research Results

Date: 06/08/2020
GS Job Number: 147850
Company Name: CMT Engineering Laboratories-Utah
Project Number: 14715
Site Information: Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Utah 84060

Research Results: No Coverage Available

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355539
Project #: 14715
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434224549, 40.668211114), (-111.434224549, 40.671124376), (-111.435458365, 40.672937239), (-111.436284485, 40.674222905), (-111.436595622, 40.675492272), (-111.443955603, 40.675467861), (-111.443977061, 40.674450742), (-111.441498700, 40.674043889), (-111.439749899, 40.673620761), (-111.438408795, 40.673246452), (-111.437418952, 40.672920965), (-111.436989799, 40.672912827), (-111.436732307, 40.672929102), (-111.436399713, 40.672986062), (-111.436206594, 40.673059297), (-111.435863271, 40.673222040), (-111.435766712, 40.673254589), (-111.435541406, 40.672896553), (-111.436120763, 40.672628025), (-111.436700120, 40.672481554), (-111.437054172, 40.672473417), (-111.437536969, 40.672514103), (-111.438330903, 40.672766358), (-111.439350143, 40.673067434), (-111.440337196, 40.673319686), (-111.441334977, 40.673555664), (-111.443373456, 40.673905559), (-111.443985000, 40.673995067), (-111.443963542, 40.671749197), (-111.443962636, 40.668229755), (-111.439091745, 40.668221617)

Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1903	COALVILLE, UT	1" = 10420'

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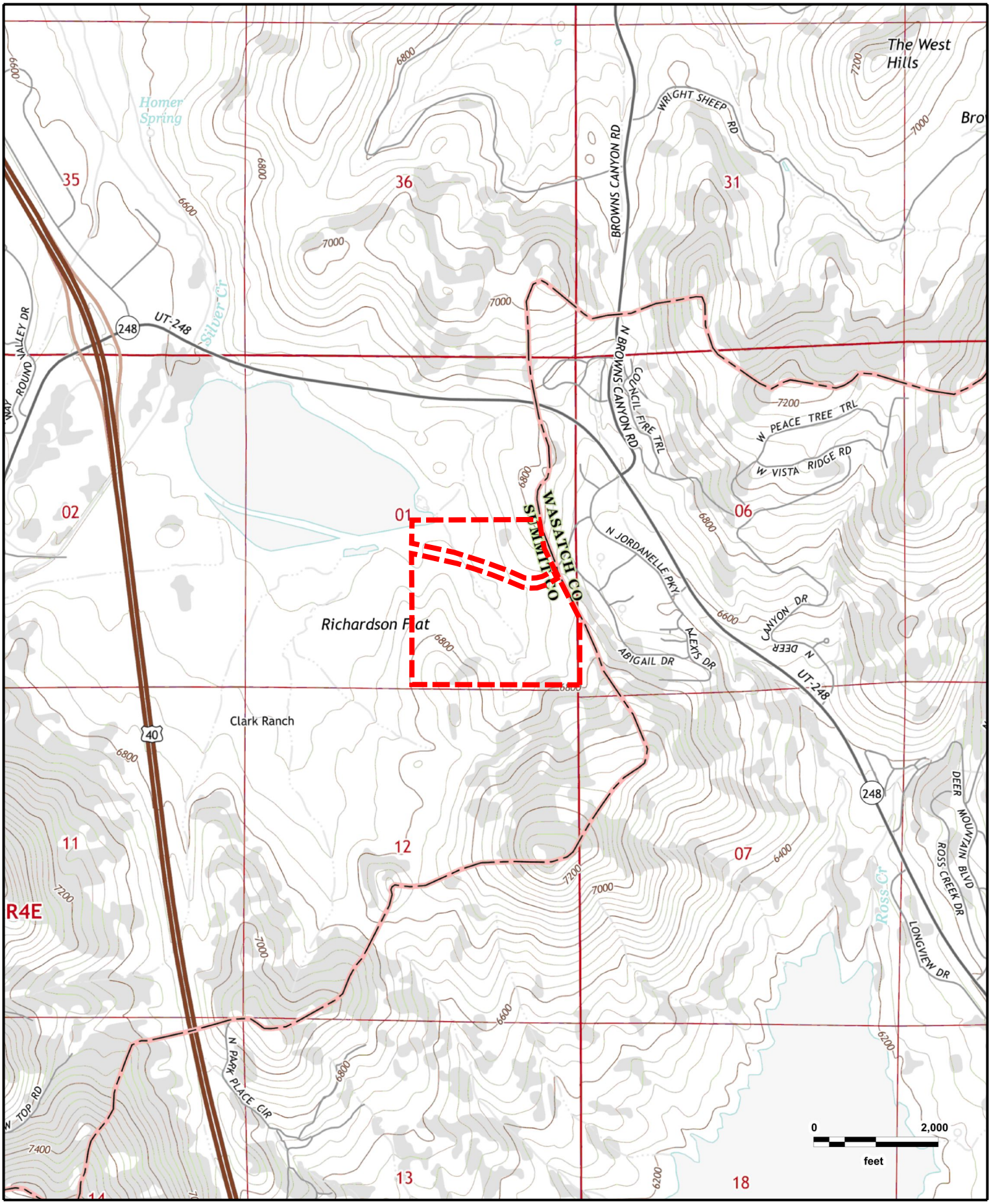

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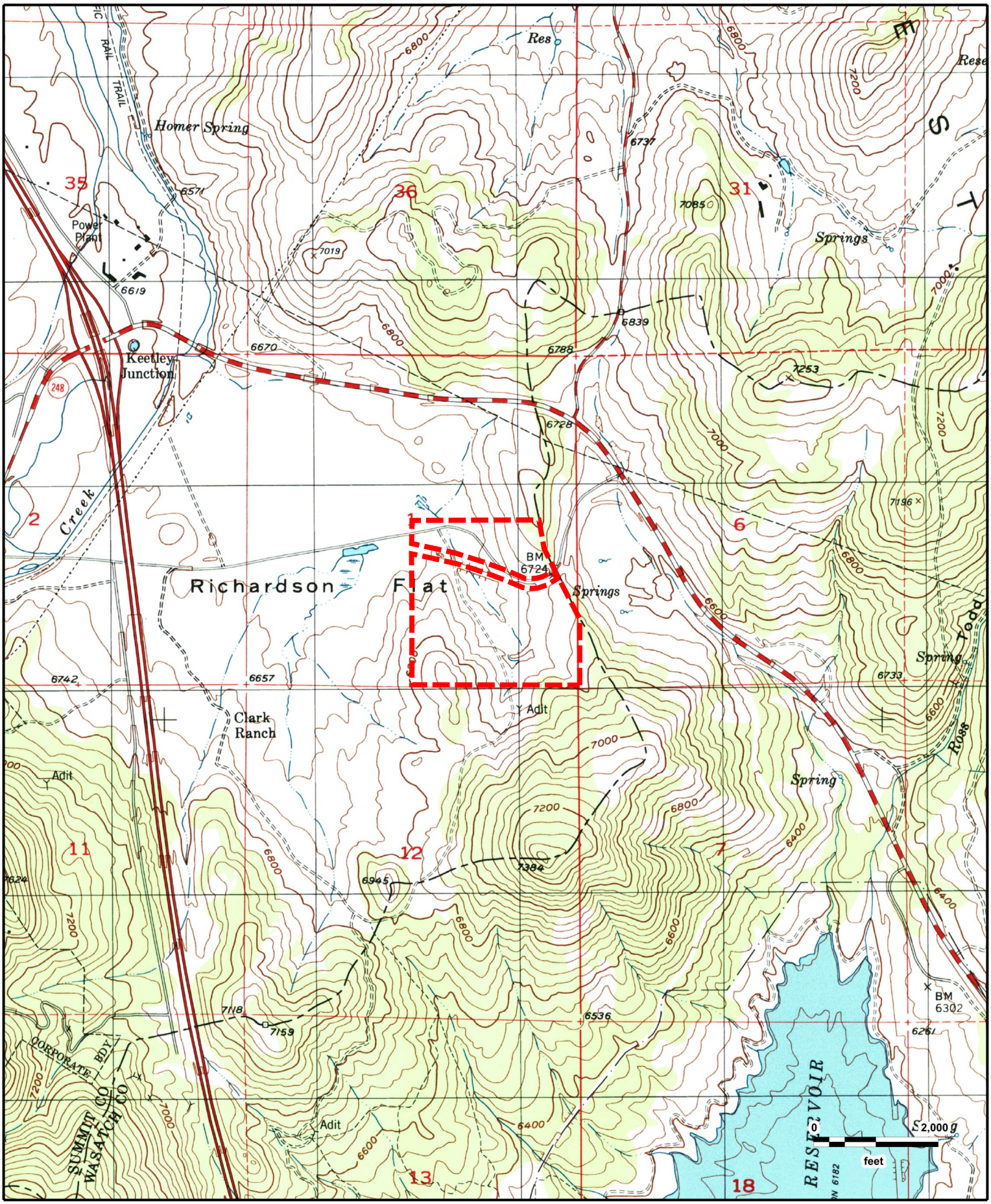
Richardson Flats Parcel SS-86
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355539 - 06/08/2020



N

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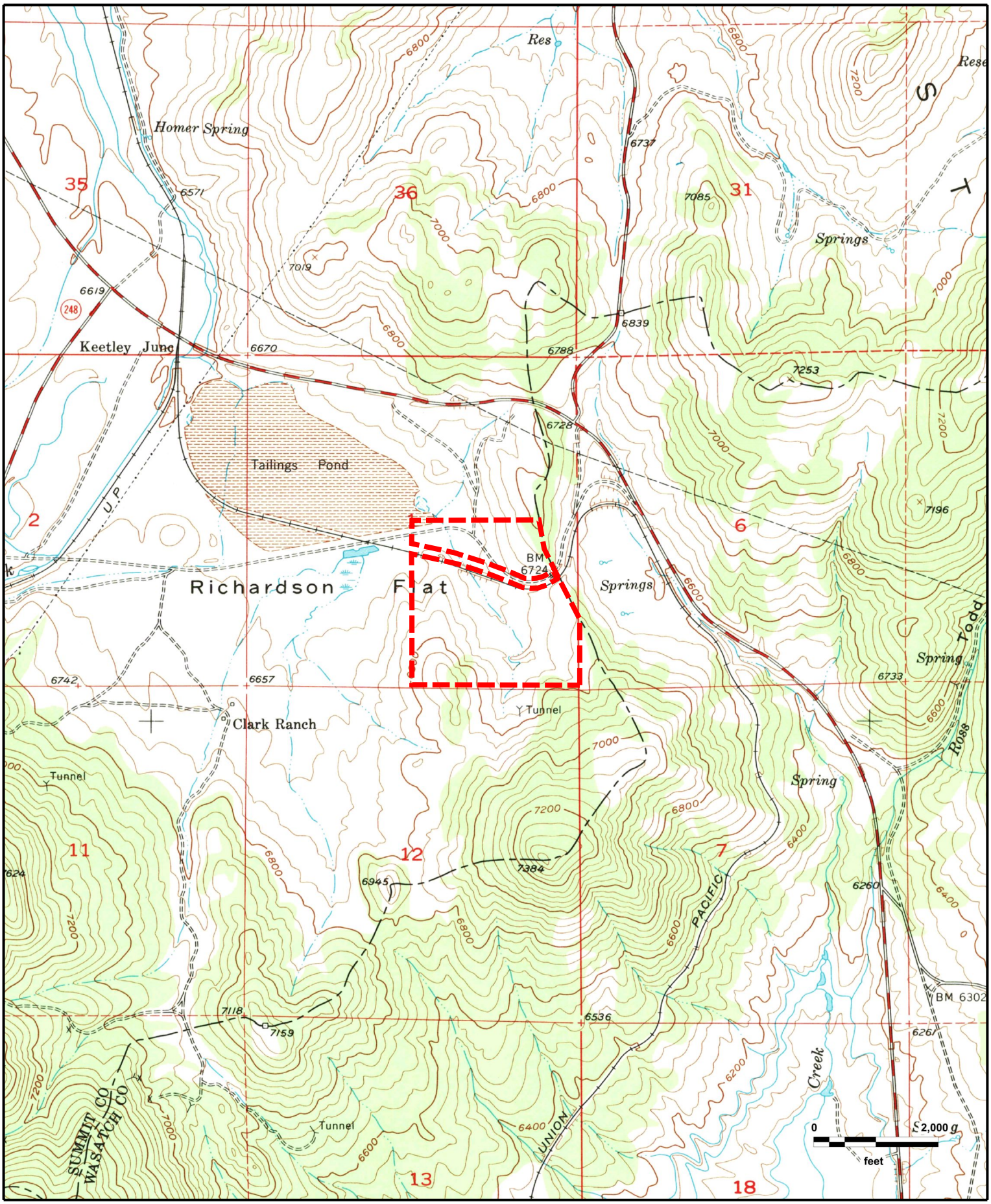
Richardson Flats Parcel SS-86
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355539 - 06/08/2020



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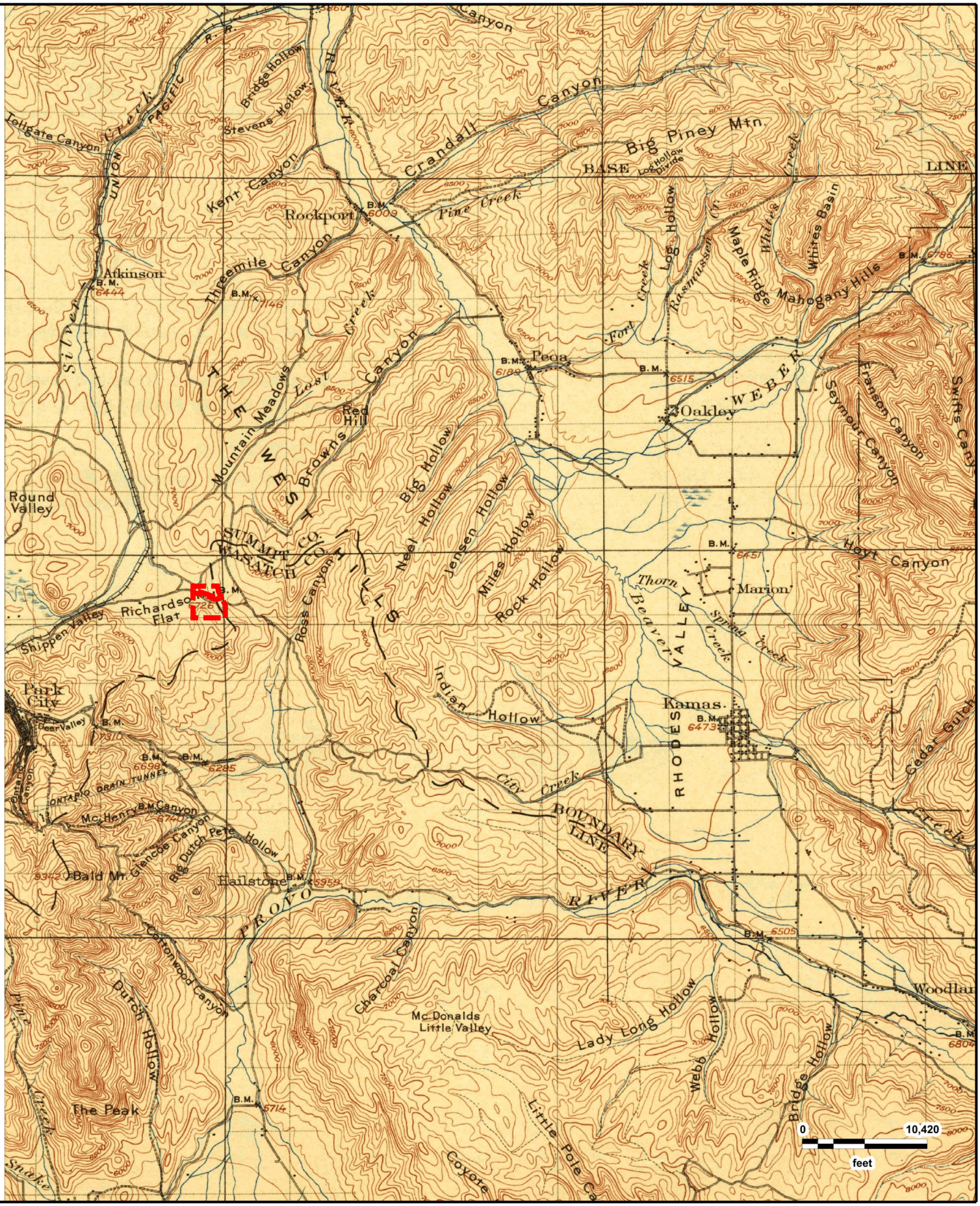
Richardson Flats Parcel SS-86
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355539 - 06/08/2020



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Richardson Flats Parcel SS-86
COALVILLE, UT (1903)

GeoSearch

APPENDIX C

RADIUS MAP
REPORT

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Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355537
Project #: 14715
PO #: 14715
Date: 06/05/2020

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43944, 40.6715475)
6,643 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060, 84098

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	1	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		2	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	1	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	2	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	1	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	1	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	1	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		7	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	1	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		10	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	1	NS	NS	NS	NS	NS	1
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	2	NS	NS	NS	NS	NS	2
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	1	NS	NS	NS	NS	NS	1
ICISNPDES	0.0200	1	NS	NS	NS	NS	NS	1
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	1	0	NS	NS	NS	1
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**1**	**0**	**0**	**0**	**NS**	**NS**	**1**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**1**	**0**	**0**	**0**	**0**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	1	0	0	0	0	NS	1
SUB-TOTAL		8	1	0	0	0	0	9

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**1**	**0**	**0**	**0**	**NS**	**NS**	**1**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**

SUB-TOTAL		1	0	0	0	0	0	1

Database Radius Summary

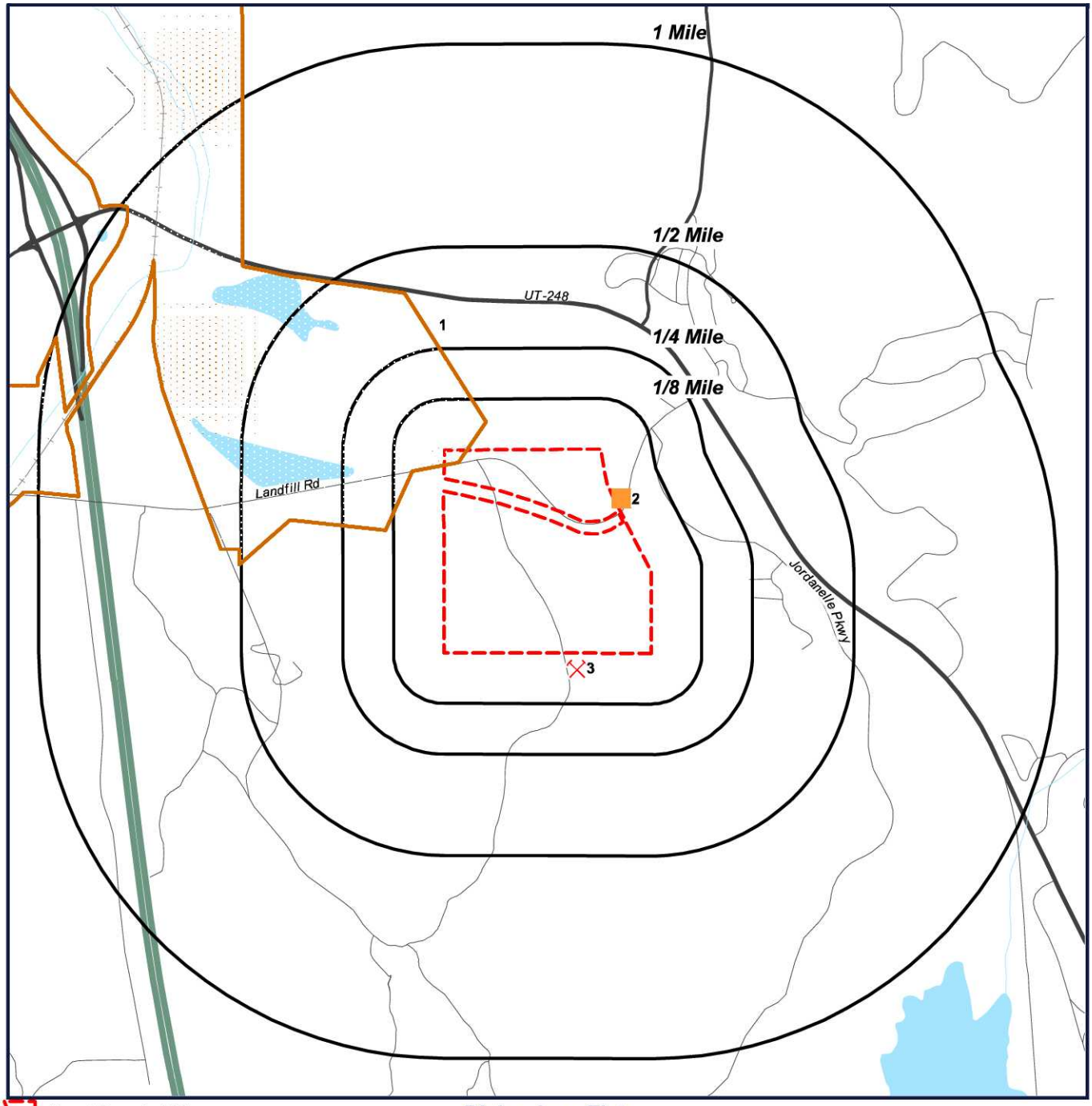
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		9	1	0	0	0	0	10

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



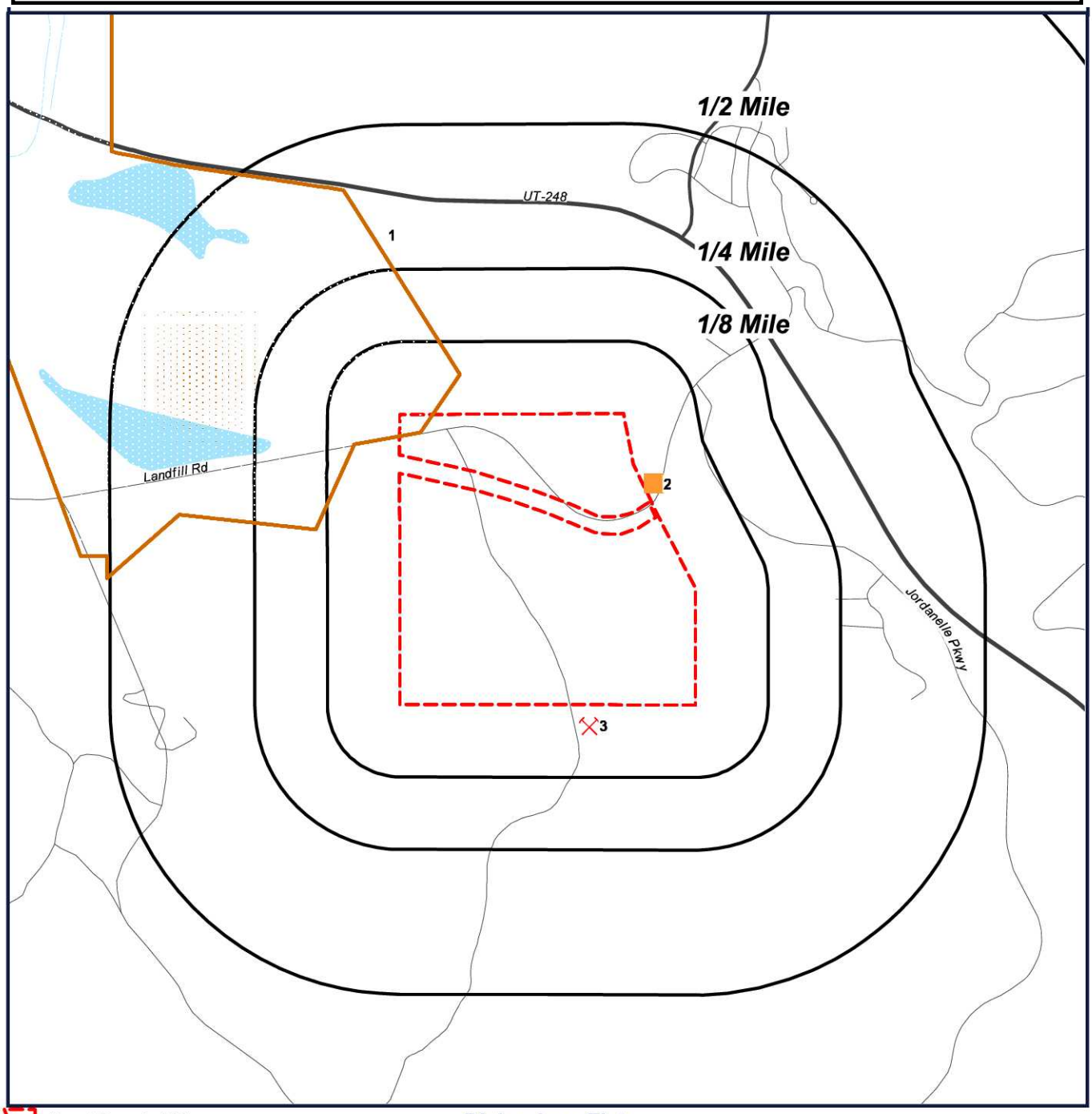
Target Property (TP)
ICIS
PNPL
FRSUT
CERCLIS
SEMS
ECHOR08
RODS
ICISNPDES
MRDS

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



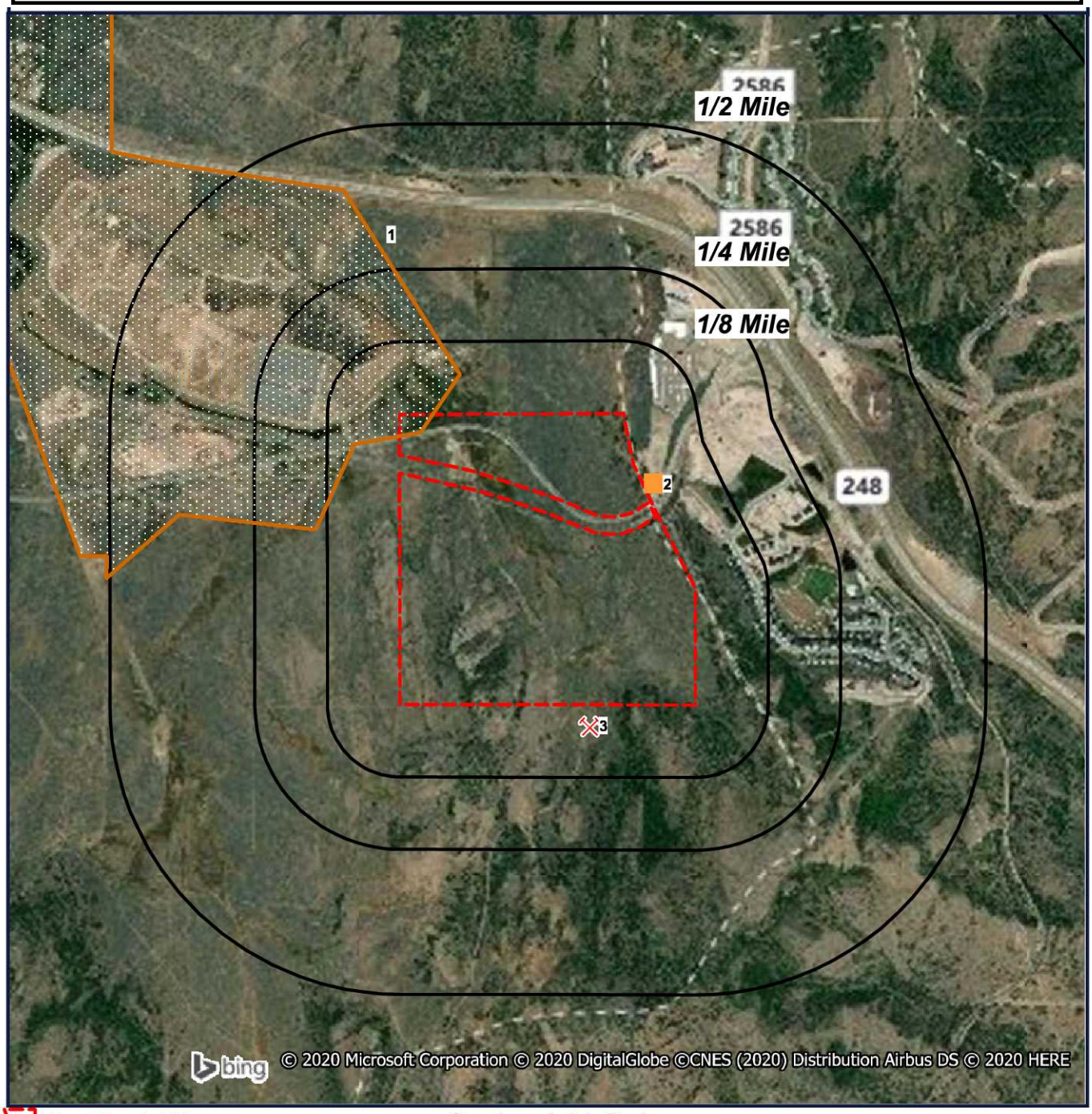
Target Property (TP)
ICIS
PNPL
FRSUT
CERCLIS
SEMS
ECHOR08
RODS
ICISNPDES
MRDS

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 700' 1400' 2100'
SCALE: 1" = 1400'

Ortho Map



Target Property (TP)
ICIS
PNPL
FRSUT
CERCLIS
SEMS
ECHOR08
RODS
ICISNPDES
MRDS

Quadrangle(s): Park City East Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 700' 1400' 2100'
SCALE: 1" = 1400'

Topographic Map



Target Property (TP)

Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	***17***
1	ECHOR08	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	18
1	FRSUT	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	19
1	FRSUT	110020117078	Lower (6,494 ft.)	TP	RICHARDSON FLATS TAILINGS	NORTH WEST 1/4, SECTION 1, TOWNSHIP 2S, RANGE 4E, PARK CITY, UT 84060	20
1	ICIS	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	21
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***22***
1	RODS	UTD980952840	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	32
1	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***33***
2	ICISNPDES	UTR380517INPDES	Higher (6,739 ft.)	0.017 mi. ENE (90 ft.)	BK STORAGE	1240 W RICHARDSON FLAT ROAD, KAMAS, UT 84036	47
3	MRDS	10011508	Higher (6,733 ft.)	0.034 mi. S (180 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	49

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***
1	ECHOR08	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
1	FRSUT	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
1	FRSUT	110020117078	Lower (6,494 ft.)	TP	RICHARDSON FLATS TAILINGS	NORTH WEST 1/4, SECTION 1, TOWNSHIP 2S, RANGE 4E, PARK CITY, UT 84060
1	ICIS	110009347812	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
2	ICISNPDES	UTR380517INPDES	Higher (6,739 ft.)	0.017 mi. ENE (90 ft.)	BK STORAGE	1240 W RICHARDSON FLAT ROAD, KAMAS, UT 84036
3	MRDS	10011508	Higher (6,733 ft.)	0.034 mi. S (180 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
1	RODS	UTD980952840	Lower (6,494 ft.)	TP	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
1	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***TP***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6643 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
2	ICISNPDES	6,739 ft.	BK STORAGE	1240 W RICHARDSON FLAT ROAD, KAMAS, UT 84036	47
3	MRDS	6,733 ft.	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	49

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	***CERCLIS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	***17***
1	ECHOR08	6,494 ft.	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	18
1	FRSUT	6,494 ft.	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	19
1	FRSUT	6,494 ft.	RICHARDSON FLATS TAILINGS	NORTH WEST 1/4, SECTION 1, TOWNSHIP 2S, RANGE 4E, PARK CITY, UT 84060	20
1	ICIS	6,494 ft.	RICHARDSON FLAT TAILINGS	NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	21
1	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***22***
1	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	32
1	***SEMS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***33***

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **UTD980952840**
DERR ID: **UTD980952840**
CIMID: **490000015295**
SITE DESCRIPTION: **CERCLA**
FACILITY NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **3.5 MI NE OF PARK CITY**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
PROJECT MANAGER: **MO SLAM**
CONTACT PHONE: **8015364178**
PROJECT DESCRIPTION: **THE RICHARDSON FLAT TAILINGS SITE CONSISTS OF 160 ACRES. FROM 1975 UNTIL 1981, MINE TAILINGS FROM THE KEETLY ONTARIO MINE AND OTHER MINING OPERATIONS IN THE AREA WERE DISPOSED OF AT THE SITE AND CURRENTLY RANGE UP TO 10 FEET IN DEPTH. UNTIL 1987, MINE TAILINGS WERE REMOVED FROM THE SITE AND USED AS BACKFILL FOR SEWER CONSTRUCTION PROJECTS. CURRENTLY, MINE TAILINGS AT THE SITE ARE BEING COVERED BY SOIL EXCAVATED FROM ON-SITE AREAS. SITE FEATURES INCLUDE A POND THAT COVERS THE NORTHEASTERN CORNER OF THE SITE AND IS CONTAINED BY A DAM AT THE NORTHWESTERN CORNER, AND A DITCH IN THE CENTRAL PORTION OF THE SITE.**
EMERGENCY RESPONSE BRANCH: **NO**
NATIONAL PRIORITY LIST: **NO**
PROPOSED FOR NPL: **YES**
ARCHIVED FOR CERCLIS: **NO**

Back to Report Summary

Enforcement and Compliance History Information (ECHOR08)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **110009347812**
REGISTRY ID: **110009347812**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
FACILITY LINK: *Facility Detail Report*

Back to Report Summary

Facility Registry System (FRSUT)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

REGISTRY ID: **110009347812**

NAME: **RICHARDSON FLAT TAILINGS**

LOCATION ADDRESS: **NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060

COUNTY: **SUMMIT**

EPA REGION: **08**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

RICHARDSON FLATS

RICHARDSON FLAT TAILINGS

PROGRAM/S LISTED FOR THIS FACILITY

ICIS - INTEGRATED COMPLIANCE INFORMATION SYSTEM

SEMS - SEMS

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

Facility Registry System (FRSUT)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

REGISTRY ID: **110020117078**

NAME: **RICHARDSON FLATS TAILINGS**

LOCATION ADDRESS: **NORTH WEST 1/4, SECTION 1, TOWNSHIP 2S, RANGE 4E**
PARK CITY, UT 84060

COUNTY: **SUMMIT**

EPA REGION: **08**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

RICHARDSON FLATS TAILINGS

PROGRAM/S LISTED FOR THIS FACILITY

CIM - UTAH - COMMON IDENTIFIER MECHANISM

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

NO SIC DATA REPORTED

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

NO NAICS DATA REPORTED

Back to Report Summary

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

GEOSEARCH ID: **110009347812**
REGISTRY ID: **110009347812**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **NW 1/4 SEC 1 T2S R 4E**
PARK CITY UT 84060
STANDARD INDUSTRIAL CLASSIFICATION: **NOT REPORTED**

REGIONAL DOCKETS

- NO REGIONAL DOCKETS REPORTED

RELATED ACTIVITIES

- NO RELATED ACTIVITIES REPORTED

VIOLATIONS

CASE NUMBER: **HQ-2003-6003**
RANK ORDER: **NOT REPORTED**
VIOLATION: **CLOSURE & POST-CLOSURE REQUIREMENTS**

CASE IDENTIFIER

CASE NUMBER: **HQ-2003-6003**
FISCAL YEAR: **2003**
CASE NAME: **ASARCO & SOUTHERN PERU COPPER COMPANY**
ACTIVITY TYPE: **JUDICIAL**
ACTIVITY STATUS: **SETTLEMENT PRESENT**
ACTIVITY STATUS DATE: **2/3/2003**
LEAD: **EPA**
CASE STATUS DATE: **2/3/2003**
DOJ DOCKET NUMBER: **NOT REPORTED**
ENFORCEMENT OUTCOME: **NOT REPORTED**
MULTIMEDIA FLAG: **NOT REPORTED**
ENFORCEMENT SUMMARY:

CASE WAS BROUGHT UNDER THE FEDERAL DEBT COLLECTION PROCEDURES ACT AND THE FEDERAL PRIORITIES ACT TO ENJOIN THE TRANSFER OF STOCK ASSETS HELD BY ASARCO TO AN ASSOCIATED SUBSIDIARY, AMERICAS MINING CO., OF THE PARENT COMPANY GRUPO MEXICO. THE SETTLEMENT CREATED A DEDICATED ENVIRONMENTAL TRUST WITH $100M @ 7% FOR 8 YEARS FOR A GROSS VALUE OF $125M.

ENFORCEMENT TYPE

ENFORCEMENT TYPE: **CIVIL JUDICIAL ACTION**

POLLUTANTS CITED

POLLUTANT DESCRIPTION: **CONTAMINATED SEDIMENT**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

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AREA OF SITE FOUND (OU):

Back to Report Summary

Record of Decision System (RODS)

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.000 mi. (0 ft.) X
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **UTD980952840**
SITE ID#: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
FEDERAL FACILITY: **NO - NOT A FEDERAL FACILITY**
NPL: **PROPOSED FOR NPL**
NON NPL STATUS: **NOT REPORTED**

Below information was gathered from the prior CERCLIS update completed in 10/2013 update:
NON-NPL STATUS DATE: **NOT REPORTED**
PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MINES/TAILINGS**

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
06/24/1988	**53**	**23988**	**PROPOSED TO THE FINAL NPL**	**39.13000**
02/11/1991	**56**	**5598**	**REMOVED FROM PROPOSED TO THE NPL**	**50.20000**
02/07/1992	**57**	**4824**	**PROPOSED TO THE FINAL NPL**	**39.13000**

SITE DESCRIPTION

THE RICHARDSON FLAT TAILINGS (RFT) SITE (SITE) IS LOCATED 1.5 MILES NORTHEAST OF PARK CITY, UTAH, AND IS PART OF A 650 ACRE PROPERTY OWNED BY UNITED PARK CITY MINES (UPCM) COMPANY. THE SITE IS A TAILINGS IMPOUNDMENT THAT COVERS 160 ACRES IN THE NORTHWEST CORNER OF THE PCM PROPERTY, A SMALL PORTION OF THE MUCH LARGER UPPER SILVER CREEK WATERSHED. SILVER CREEK IS THE PRIMARY SURFACE WATER SOURCE FOUND IN THE AREA AND IS COMPRISED OF RUNOFF FROM THREE SIGNIFICANT DRAINAGES IN THE WATERSHED, INCLUDING ONTARIO CANYON, EMPIRE CANYON AND DEER VALLEY. SILVER CREEK IS CURRENTLY LISTED ON UTAH'S 303(D) LIST FOR ZINC AND CADMIUM AND IS TARGETED FOR TOTAL MAXIMUM DAILY LOAD (TMDL) DEVELOPMENT. HISTORIC MINING ACTIVITIES IN THE CANYONS LEFT BEHIND SIX ACTIVE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS) SITES, INCLUDING EMPIRE CANYON, SILVER CREEK TAILINGS, AND SILVER MAPLE CLAIMS, EACH ONE IMPACTING SILVER CREEK IN SOME WAY. WHILE ZINC AND CADMIUM ARE THE PRIMARY HEAVY METALS FOUND IN SILVER CREEK, LEAD AND ARSENIC ARE THE MAIN CONTAMINANTS IN THE SEDIMENTS AND SOILS OF THE WATERSHED. BECAUSE OF THE VOLUME OF MINING ACTIVITY THROUGHOUT THE DISTRICT AND THE DYNAMICS OF THE WATERSHED HYDROGEOLOGY, IT IS DIFFICULT TO TARGET ANY ONE SITE AS THE MAIN SOURCE OF CONTAMINATION AFFECTING SILVER CREEK AND THE ENVIRONMENTAL MEDIA WITHIN THE WATERSHED. THE OVERALL REMEDIAL GOAL FOR THE WATERSHED IS TO CLEAN UP THE SURROUNDING SITES, INCLUDING THE SITE, THEREBY ELIMINATING CURRENT AND FUTURE HAZARDS TO HUMAN HEALTH AND WELFARE AND THE SURROUNDING ENVIRONMENT.

THE RFT SITE IS A GEOMETRICALLY CLOSED BASIN, BOUND BY HIGHWAY 248 TO THE NORTH, A MAIN EMBANKMENT TO THE WEST, AND DIVERSION DITCHES TO THE SOUTH AND THE NORTHEAST. SILVER CREEK CAN BE FOUND ON THE NORTHWEST BORDER OF THE SITE, SEPARATED FROM THE SITE BY A SMALL STRETCH OF WETLANDS AND RIPARIAN VEGETATION. THE IMPOUNDMENT WAS USED AS A MINE TAILINGS RESERVOIR PRIOR TO 1950. THE SITE NOW HOUSES APPROXIMATELY SEVEN MILLION TONS OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING ZINC, SILVER, LEAD, AND OTHER METALS. USE OF THE SITE BY UPCM ENDED IN 1982. TO DATE, THE SITE IS NOT LISTED ON THE NATIONAL PRIORITIES LIST (NPL). THE SITE WAS CONSIDERED FOR LISTING IN BOTH 1988 AND 1992. UPCM, THE PRIMARY POTENTIALLY RESPONSIBLE PARTY (PRP), HAS TAKEN RESPONSIBILITY FOR FUNDING THE MAJORITY OF THE REMEDIAL

ACTION AT THE SITE.

THE SITE, AND MUCH OF THE SURROUNDING AREA, IS PRIVATELY OWNED BY UPCM. UPCM HAS CONSISTENTLY INDICATED A DESIRE TO RETAIN TITLE AND LIMIT FUTURE USE TO RECREATIONAL ACTIVITIES AT THE SITE. WHILE NO FINAL DECISION HAS BEEN MADE, USES THAT RANGE FROM OPEN SPACE WILDLIFE HABITAT TO ATHLETIC FIELDS ARE CURRENTLY BEING DISCUSSED. ANY TYPE OF RECREATIONAL USE IS CONSISTENT WITH SURROUNDING LAND USES, AND BOTH PARK CITY AND SUMMIT COUNTY HAVE INDICATED GENERAL AGREEMENT WITH RECREATIONAL PROPOSALS. PARK CITY IS PROACTIVE IN OBTAINING AND PRESERVING OPEN SPACE. THERE IS NO INDICATION THAT HIGHER USES OF THE LAND, SUCH AS RESIDENTIAL, ARE REASONABLY FORESEEABLE.

THE SURFACE WATER FEATURES AT THE SITE, INCLUDING THE SOUTH DIVERSION DITCH, THE WETLANDS AREA BELOW THE EMBANKMENT, THE SITE POND AND SILVER CREEK ARE USED AS HABITAT BY A LIMITED NUMBER OF VEGETATIVE SPECIES, FISH, AND WILDLIFE. ALL OF THE SURFACE WATER AND SHALLOW GROUND WATER ON THE SITE EVENTUALLY DISCHARGES TO SILVER CREEK. SILVER CREEK IS CLASSIFIED BY THE STATE OF UTAH AS A POTENTIAL DRINKING WATER SOURCE, A RECREATIONAL USE FEATURE, A COLD WATER FISHERY, AND A POTENTIAL IRRIGATION SOURCE. AT PRESENT, SILVER CREEK IS USED FOR IRRIGATION AND RECREATIONAL FISHING ONLY, AND NO CHANGES ARE EXPECTED. THE STATE OF UTAH IS CONSIDERING ISSUING AN ADVISORY AGAINST FISHING DUE TO ELEVATED METAL LEVELS IN SILVER CREEK. SILVER CREEK IS LISTED ON THE STATE'S CLEAN WATER ACT SECTION 303(D) LIST OF IMPAIRED WATER BODIES BECAUSE ZINC AND CADMIUM LEVELS EXCEED CHRONIC STANDA RDS FOR PROTECTION OF AQUATIC WILDLIFE.

SILVER CREEK HAS BEEN IMPACTED BY THE LEGACY OF MINING ACTIVITIES, THOUGH THE REMEDIAL INVESTIGATION CONFIRMED THAT THE SITE IS NOT, AT PRESENT, A SIGNIFICANT CONTRIBUTOR OF METALS TO THE CREEK. THE GOAL IS TO REMEDIATE THE ENTIRE WATERSHED, IMPROVING THE ECOLOGICAL QUALITY OF THE AREA, THEREBY ALLOWING FOR CONTINUED BENEFICIAL USE OF THE WATERSHED AND THE SITE BY A VARIETY OF LIVING ORGANISMS.

GROUND WATER IN THE IMMEDIATE AREA IS USED ONLY FOR PRIVATE WELLS, AND NO WELLS ARE KNOWN TO BE LOCATED WITHIN A HALF MILE OF THE SITE. MOST AREA DRINKING WATER WELLS ARE FINISHED IN THE DEEPER CONSOLIDATED SEDIMENTARY ROCKS THAT CAN SUSTAIN AQUIFERS AND PRODUCE SUFFICIENT YIELDS FOR CULINARY WELLS. IN THE SITE AREA, THESE FORMATIONS ARE VERY DEEP AND ARE COVERED BY THE KEETLEY VOLCANICS.

THE VOLCANIC ROCKS ARE GENERALLY NOT SUITABLE TO SUSTAIN AQUIFERS AND SERVE AS MORE OF A CONFINING UNIT. THE SHALLOW GROUND WATER AT THE SITE IS GENERALLY ASSOCIATED WITH THE ALLUVIAL SYSTEM OF SILVER CREEK. THIS WATER IS VERY HIGH IN SOLIDS AND IS ALSO OFTEN CONTAMINATED DUE TO WATER QUALITY IN SILVER CREEK AND TAILINGS THAT ARE PRESENT ALONG THE CREEK IN MANY AREAS. THERE ARE NO KNOWN USES FOR THIS WATER AT THIS TIME.

IN 1953, UPCM WAS FORMED THROUGH THE CONSOLIDATION OF SILVER KING COALITION MINES COMPANY AND PARK UTAH CONSOLIDATED MINES COMPANY. AT THAT TIME, THE SITE WAS ALREADY BEING USED AS AN IMPOUNDMENT FOR MINE TAILINGS CONSISTING PRIMARILY OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING LEAD, ZINC, SILVER AND OTHER METALS. ADDITIONALLY, TAILINGS WERE TRANSPORTED TO AND PLACED IN SEVERAL DISTINCT LOW ELEVATION AREAS IN THE SOUTHEAST PORTION OF THE SITE JUST OUTSIDE OF THE MAIN IMPOUNDMENT.

IN 1970, WITH RENEWED MINING ACTIVITY IN THE AREA, PARK CITY VENTURES (PCV), A JOINT VENTURE PARTNERSHIP BETWEEN ANACONDA COPPER COMPANY AND AMERICAN SMELTING COMPANY (ASARCO), ENTERED INTO A LEASE AGREEMENT WITH UPCM. THIS AGREE MENT ALLOWED PCV TO DEPOSIT ADDITIONAL MINE TAILINGS AT THE SITE; HOWEVER, THE SITE HAD TO BE PARTIALLY RECONSTRUCTED. DESIGN, CONSTRUCTION AND OPERATION SPECIFICATIONS WERE APPROVED BY THE STATE OF UTAH. THESE SPECIFICATIONS INCLUDED INSTALLATION OF A LARGE EMBANKMENT ALONG THE WESTERN EDGE OF THE IMPOUNDMENT, AND CONSTRUCTION OF CONTAINMENT DIKE STRUCTURES ALONG THE SOUTHERN AND EASTERN BOARDERS OF THE SITE FOR ADDITIONAL TAILINGS STORAGE. PCV ALSO CREATED A DIVERSION DITCH SYSTEM ALONG THE HIGHER SLOPES NORTH OF THE IMPOUNDMENT AND OUTSIDE

OF THE CONTAINMENT DIKES ALONG THE EAST AND SOUTH PERIMETERS OF THE IMPOUNDMENT TO COLLECT SURFACE RUN OFF. AS PART OF THE APPROVAL PROCESS FOR THE RENEWED USE OF THE SITE, THE STATE OF UTAH REQUIRED INSTALLATION OF GROUNDWATER MONITORING WELLS NEAR THE BASE OF THE MAIN EMBANKMENT.

OVER THE COURSE OF PVC'S USE OF THE SITE, ABOUT 450,000 TONS OF TAILINGS WERE DEPOSITED AT THE SITE THROUGH A SLURRY PIPELINE THAT ORIGINATED AT THEIR MILL FACILITY. IT WAS RECOMMENDED THAT THE TAILINGS BE DEPOSITED AROUND THE PERIMETER OF THE SITE, MOVING TOWARDS THE CENTER OF THE SITE OVER TIME. HOWEVER, PVC CHOSE TO DEPOSIT THE TAILINGS FROM THE SLURRY PIPELINE IN ONE CONSTANT AREA IN THE CENTER OF THE IMPOUNDMENT, CREATING A STEEP, CONE-LIKE STRUCTURE IN THE MIDDLE OF THE IMPOUNDMENT. AFTER PVC DISCONTINUED THEIR USE OF THE SITE IN 1982, HIGH WINDS CAUSED TAILINGS FROM THE CONE-SHAPED FEATURE TO BECOME AIRBORNE, CREATING A POTENTIALLY SIGNIFICANT EXPOSURE PATHWAY. THESE OPERATIONS SHAPED THE TOPOGRAPHY OF THE IMPOUNDMENT WHICH STILL EXISTS TODAY.

FROM 1980 TO 1982, NORANDA MINING, INC. LEASED THE MINING AND MILLING OPERATIONS AND PLACED AN ADDITIONAL 70,000 TONS OF TAILINGS AT THE SITE. SINCE THEN NO FURTHER USE OF THE SITE HAS OCCURRED, BUT UPCM BEGAN TAKING ACTIONS AIMED AT IMPROVING ENVIRONMENTAL CONDITIONS OF THE SITE ALMOST IMMEDIATELY AFTER OPERATIONS STOPPED. THIS WORK CONTINUED INTERMITTENTLY THROUGH THE MID-1990S.

EPA BECAME AWA RE OF THE SITE IN THE MID-1980S. AFTER INITIAL SITE ASSESSMENT WORK, EPA PROPOSED THE SITE FOR LISTING ON THE NPL IN 1988. AFTER CONSIDERING PUBLIC COMMENT, EPA DID NOT PURSUE THE SITE FOR LISTING ON THE NPL. BY 1992, THE HAZARD RANKING SYSTEM (HRS) HAD BEEN REVISED AND EPA AGAIN PROPOSED THE SITE FOR LISTING ON THE NPL. ULTIMATELY, EPA DECIDED NOT TO PURSUE FINAL LISTING ON THE NPL, AND THE SITE REMAINS PROPOSED FOR THE NPL AT THIS TIME.

SUBSEQUENT TO THE SECOND NPL PROPOSAL, THE EPA REGION 8 SUPERFUND EMERGENCY RESPONSE BRANCH CONDUCTED AN INVESTIGATION UNDER THE "MAKE SITES SAFE" INITIATIVE IN 1993. THIS INVESTIGATION CONCLUDED THAT CONDITIONS OF THE SITE DID NOT WARRANT EMERGENCY REMOVAL ACTIONS, BUT MAY PRESENT UNACCEPTABLE RISKS TO HUMAN HEALTH AND THE ENVIRONMENT AND SHOULD BE ADDRESSED THROUGH LONG-TERM REMEDIAL ACTION.

THROUGHOUT THE 1990S, EPA AND THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY (UDEQ) WERE HOPING UPCM WOULD ADDRESS THE SITE THROUGH THE UTAH VOLUNTARY CLEANUP PROGRAM. UPCM DECIDED AGAINST THIS, BUT AT THE SAME TIME CONTINUED TO VOLUNTARILY TAKE STEPS TO IMPROVE ENVIRONMENTAL CONDITIONS AT THE SITE. ADDITIONALLY, UPCM BEGAN COLLECTING HYDROGEOLOGIC DATA, WHICH WAS USED TO BETTER UNDERSTAND THE GROUNDWATER FLOW AND DEPTH OF TAILINGS AT THE SITE. IN 1999, EPA, UDEQ, UPCM, PARK CITY MUNICIPAL CORPORATION, AND OTHER STAKEHOLDERS FORMED THE UPPER SILVER CREEK WATERSHED STAKEHOLDER'S GROUP (USCWSG). THIS COMMUNITY-BASED ORGANIZATION WAS FORMED TO HELP EPA ADDRESS SUPERFUND-RELATED ENVIRONMENTAL ISSUES IN THE PARK

CITY AREA IN A COOPERATIVE FASHION, INCLUDING ISSUES RELATED TO THE SITE. THE USCWSG HAS BEEN VERY SUCCESSFUL AND SEVERAL INVESTIGATIONS AND CLEANUPS HAVE OCCURRED IN PARK CITY AS A RESULT. EARLY IN USCWSG'S HISTORY, UPCM AND EPA AGREED TO ADDRESS THE SITE AS AN "NPL EQUIVALENT" SITE, USING THE SAME PROCESS FOR INVESTIGATION AND CLEANUP THAT IS REQUIRED FOR A NPL SITE.

EPA AND UPCM SIGNED AN ADMINISTRATIVE ORDER ON CONSENT (AOC) ON SEPTEMBER 28, 2000 WHICH CALLED FOR UPCM TO CONDUCT A REMEDIAL INVESTIGATION/ FOCUSED FEASIBILITY STUDY (RI/FFS) FOR THE SITE. EPA AND UPCM HAVE CONTINUOUSLY WORKED WELL TOGETHER SINCE THE INCEPTION OF THE USCWSG, AND BECAUSE OF THIS, EPA WAS ABLE TO EMPLOY INCREASINGLY REDUCED OVERSIGHT FOR THE RI/FFS AS IT PROGRESSED.

EPA CONDUCTED TWO POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCHES FOR THE SITE THAT IDENTIFIED SEVERAL PARTIES THAT MAY HAVE SOME LIABILITY FOR CLEANUP OF THE SITE. THE SITE OWNER, UPCM, HAS CONDUCTED THE

RI/FFS PURSUANT TO AN ADMINISTRATIVE ORDER ON CONSENT (AOC). EPA HAS BEEN FACILITATING THE ALLOCATION OF COSTS OF INVESTIGATION AND CLEANUP BETWEEN THE PRP'S AND UPCM HAS INDICATED ITS WILLINGNESS TO ENTER INTO A CONSENT DECREE (CD) WITH EPA FOR CONDUCT OF REMEDIAL DESIGN AND REMEDIAL ACTION.

THE SITE IS LOCATED IN A RURAL AREA WITHIN A BROAD VALLEY OF MOSTLY UNDEVELOPED RANGELAND WITHIN THE SILVER CREEK WATERSHED, APPROXIMATELY TWO MILES OUTSIDE THE PARK CITY LIMITS. THE DEER VALLEY AND PARK CITY SKI RESORTS SIT AT THE TOP OF THE WATERSHED AND SERVE AS RECREATIONAL USE AREAS FOR SKIERS IN THE WINTER AND BIKERS/HIKERS IN THE WARMER MONTHS. AS SILVER CREEK PASSES THROUGH PARK CITY AND INTO THE SURROUNDING SUBURBAN AREAS, THE LAND USE IS PRIMARILY RESIDENTIAL AND COMMERCIAL, CHANGING TO RECREATIONAL AND AGRICULTURAL IN THE AREAS SURROUNDING RICHARDSON FLAT.

MOST OF THE LAND AROUND THE SITE IS UNDEVELOPED OPEN SPACE. MINING ACTIVITIES AT THE SITE CEASED IN 1982. SINCE THAT TIME, THE SITE HAS NOT BEEN USED AND HAS REMAINED OPEN SPACE. A SMALL RECREATIONAL TRAIL SKIRTS THE SITE ALONG SILVER CREEK. THERE ARE A FEW SMALL INDUSTRIAL OPERATIONS IN THE VICINITY OF THE SITE, INCLUDING A CONCRETE PLANT ON A NEARBY PARCEL. PARK CITY AND OTHER RESORT-LIKE RESIDENTIAL DEVELOPMENTS ARE EXPANDING IN THE GENERAL AREA, BUT NONE ARE CLOSER THAN ONE MILE AWAY.

A RECORD OF DECISION (ROD) ADDRESSING OPERABLE UNIT (OU) 1 WAS COMPLETED ON JULY 6, 2005.

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

TYPE: **NR - REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/11/1991**
ACTION TYPE DEFINITION:
SITE REMOVED FROM THE PROPOSED LIST BEFORE ACHIEVING FINAL STATUS, OR REMOVED FROM THE FINAL LIST.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/24/1988**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **03/13/2009**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **08/28/2007**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**

ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/13/1987**
COMPLETION DATE: **07/14/1988**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/15/1991**
ACTION TYPE DEFINITION:
A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: **SG - SPECIAL NOTICE ISSUED**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/10/1989**
ACTION TYPE DEFINITION:
ISSUANCE UNDER CERCLA SECTION 122 OF A SPECIAL NOTICE LETTER TO POTENTIALLY RESPONSIBLE PARTIES (PRPS). THE ISSUANCE OF A SPECIAL NOTICE LETTER BY EPA TRIGGERS A NEGOTIATION MORATORIUM. SPECIAL NOTICE LETTERS CAN BE ISSUED FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS.

TYPE: **JF - ECOLOGICAL RISK ASSESSMENT**
START DATE: **05/01/2001**
COMPLETION DATE: **01/30/2004**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO ECOLOGICAL RECEPTORS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/23/1991**
COMPLETION DATE: **12/07/1992**
ACTION TYPE DEFINITION:

THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **11/20/2008**
COMPLETION DATE: **09/30/2009**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **12/01/1984**
ACTION TYPE DEFINITION:
COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: **FN - REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
START DATE: **06/07/2000**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
DISCUSSIONS BETWEEN EPA AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) ON LIABILITY FOR AND CONDUCT OF A REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/30/1990**
COMPLETION DATE: **08/30/1990**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT**
START DATE: **04/26/1996**
COMPLETION DATE: **08/15/2001**
ACTION TYPE DEFINITION:
FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: **SI - SITE INSPECTION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/03/1992**
ACTION TYPE DEFINITION:
THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE

HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: **SV - SECTION 107 LITIGATION**
START DATE: **12/09/2005**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL REFERRAL UNDER S107 TO RECOVERY FROM POTENTIALLY RESPONSIBLE PARTIES (PRPS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **01/04/2007**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **07/24/2008**
COMPLETION DATE: **01/20/2009**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **09/25/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RO - RECORD OF DECISION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
START DATE: **02/07/2008**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/07/1992**

ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/29/2009**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/19/2013**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AD - ALTERNATIVE DISPUTE RESOLUTION**
START DATE: **03/06/2006**
COMPLETION DATE: **12/08/2006**
ACTION TYPE DEFINITION:
DECISION TO TAKE COST RECOVERY ACTION BY USE OF ALTERNATIVE DISPUTE RESOLUTION (ADR) INCLUDING MEDIATION, ARBITRATION AND MINI-TRIAL.

TYPE: **AN - REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
START DATE: **03/21/2006**

COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
DISCUSSIONS AND INFORMATION EXCHANGE BETWEEN POTENTIALLY RESPONSIBLE PARTIES (PRPS) AND EPA (OR STATE) OVER THE LIABILITY OF THE PRP, WILLINGNESS, AND ABILITY TO CONDUCT THE REMEDIAL DESIGN AND/OR THE REMEDIAL ACTION AS IDENTIFIED IN THE RECORD OF DECISION (ROD).

TYPE: **AS - AERIAL SURVEY**
START DATE: **06/30/1991**
COMPLETION DATE: **06/30/1991**
ACTION TYPE DEFINITION:
PROVIDE AERIAL PHOTOGRAPHY, MULTISPECTRAL SCANNER (MSS), FORWARD LOOKING INFRARED (FLIR), AND HISTORICAL AERIAL PHOTOGRAPHS WITH ANALYSES SUPPORT FOR REGIONAL OFFICES AND OERR REQUIREMENTS FOR PRE-REMEDIAL AND REMEDIAL ACTIONS. THE AERIAL SURVEY SUPPORT PROVIDES FOUR TYPES OF REMOTE SENSING PROJECTS: (1) EMERGENCY RESPONSE PROJECTS FOR RAPID ACQUISITION AND ASSESSMENT, (2) SINGLE DATE PROJECTS TO ACQUIRE CURRENT DATA, (3) INTENSIVE SITE ANALYSES TO ACQUIRE IMAGERY OVER A PERIOD OF TIME USINGHISTORICAL AERIAL PHOTOGRAPHS DATING BACK AS FAR AS 1920, (4) WASTE SITE INVENTORIES TO ESTABLISH BASELINE REFERENCE OVER LARGE AREAS. CERCLA HAZARDOUS WASTE SITES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/1989**
COMPLETION DATE: **07/01/1992**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/28/2000**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **10/26/2012**
COMPLETION DATE: **03/14/2013**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **BE - POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**

START DATE: **08/07/2007**
COMPLETION DATE: **02/07/2008**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **CB - CLAIM IN BANKRUPTCY PROCEEDING**
START DATE: **06/27/2006**
COMPLETION DATE: **06/05/2009**
ACTION TYPE DEFINITION:
LEGAL ACTION PERFORMED BY EPA REGIONAL ATTORNEYS TO ESTABLISH EPA AS A CREDITOR WHEN POTENTIALLY RESPONSIBLE PARTY (PRP) HAS FILED FOR BANKRUPTCY.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/07/2007**
COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **03/13/2009**
COMPLETION DATE: **06/05/2009**

ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **07/21/2003**
COMPLETION DATE: **09/28/2004**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **01/08/2007**
COMPLETION DATE: **07/01/2007**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **DS - DISCOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **10/01/1984**
ACTION TYPE DEFINITION:
THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: **ED - RISK/HEALTH ASSESSMENT**
START DATE: **10/09/2001**
COMPLETION DATE: **03/15/2003**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO HUMAN HEALTH.

TYPE: **EE - ENGINEERING EVALUATION/COST ANALYSIS**
START DATE: **04/11/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
STUDY TO IDENTIFY THE OBJECTIVES OF A REMOVAL ACTION AND TO ANALYZE THE COST EFFECTIVENESS AND IMPLEMENTABILITY OF THE VARIOUS ALTERNATIVES THAT MAY BE USED TO SATISFY THESE OBJECTIVES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/2009**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL

INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

CONTAMINANTS

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **310 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **179 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2559 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6520 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6.2 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **97 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **44560 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **32700 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM (METAL)**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2400 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5900 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **85 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **33800 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **750 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **46.3 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **260 UG/L**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **83000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT **- NOT AN INSTITUTIONAL CONTROL SITE -**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.017 mi. (90 ft.) ENE
Elevation: 6,739 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **UTR380517INPDES**
NPDES ID: **UTR380517** FACILITY #: **110070710115**
NAME: **BK STORAGE**
PHYSICAL ADDRESS: **1240 W RICHARDSON FLAT ROAD**
KAMAS UT 84036
COUNTY: **NOT REPORTED**
FACILITY TYPE: **NOT REPORTED**
IMPAIRED WATERS: **NOT REPORTED**

STANDARD INDUSTRIAL CLASSIFICATION

- NOT REPORTED -

PERMITS

FACILITY TYPE INDICATOR: **NON-POTABLE WATER**
PERMIT TYPE: **GENERAL PERMIT COVERED FACILITY**
MAJOR MINOR FACILITY: **MINOR DISCHARGER**
PERMIT STATUS: **EXPIRED**
WATER BODY: **NOT REPORTED**
PERMIT NAME: **MENLOVE CONSTRUCTION**
AGENCY TYPE: **STATE**
ORIGINAL ISSUE DATE: **5/9/2018**
ISSUE DATE: **5/9/2018**
ISSUING AGENCY: **UTAH DIVISION OF WATER QUALITY**
EFFECTIVE DATE: **5/9/2018**
EXPIRATION DATE: **5/9/2019**
RETIREMENT DATE: **NOT REPORTED**
TERMINATION DATE: **NOT REPORTED**
PERMIT COMPLIANCE STATUS: **YES**
PERMIT SUBJECT TO DMR RUN: **NOT REPORTED**
REPORTABLE NONCOMPLIANCE TRACKING IS ON: **YES**

INSPECTIONS

- NO INSPECTIONS REPORTED -

HISTORIC COMPLIANCE

- NO HISTORIC COMPLIANCE REPORTED -

SINGLE EVENT VIOLATIONS

- NO SINGLE EVENT VIOLATIONS REPORTED -

FORMAL ENFORCEMENT ACTIONS

- NO FORMAL ENFORCEMENT ACTIONS REPORTED -

EFFLUENT VIOLATIONS

- NOT REPORTED -

EFFLUENT VIOLATIONS contd..

- NOT REPORTED -

EFFLUENT VIOLATIONS contd..

- NOT REPORTED -

Back to Report Summary

MAP ID# 3

Distance from Property: 0.034 mi. (180 ft.) S
Elevation: 6,733 ft. (Higher than TP)

FACILITY INFORMATION

GEOSEARCH ID: **10011508**
DEP ID: **10011508**
MINE NAME: **UNKNOWN TUNNEL**
ADDRESS: **SUMMIT COUNTY**
PARK CITY, UT 84060
DEVELOPMENT STATUS: **OCCURRENCE**

COMMODITY DETAILS

COMMODITY: **SILVER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **SILVER**
IMPORTANCE: **PRIMARY**

COMMODITY: **LEAD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **LEAD**
IMPORTANCE: **PRIMARY**

COMMODITY: **ZINC**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **ZINC**
IMPORTANCE: **PRIMARY**

COMMODITY: **GOLD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **GOLD**
IMPORTANCE: **SECONDARY**

COMMODITY: **COPPER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **COPPER**
IMPORTANCE: **SECONDARY**

MATERIAL DETAILS

NO MATERIAL DETAILS REPORTED

NAME DETAILS

SITE NAME: **UNKNOWN TUNNEL**
STATUS: **CURRENT**
SITE NAME: **NEW PARK GROUP**
STATUS: **PREVIOUS**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14715

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14715

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355541
Project #: 14715
PO #: 14715
Date: 06/05/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43944, 40.6715475)
6,643 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	1	0	2	NS	NS	3
SUB-TOTAL		0	1	0	2	0	0	3

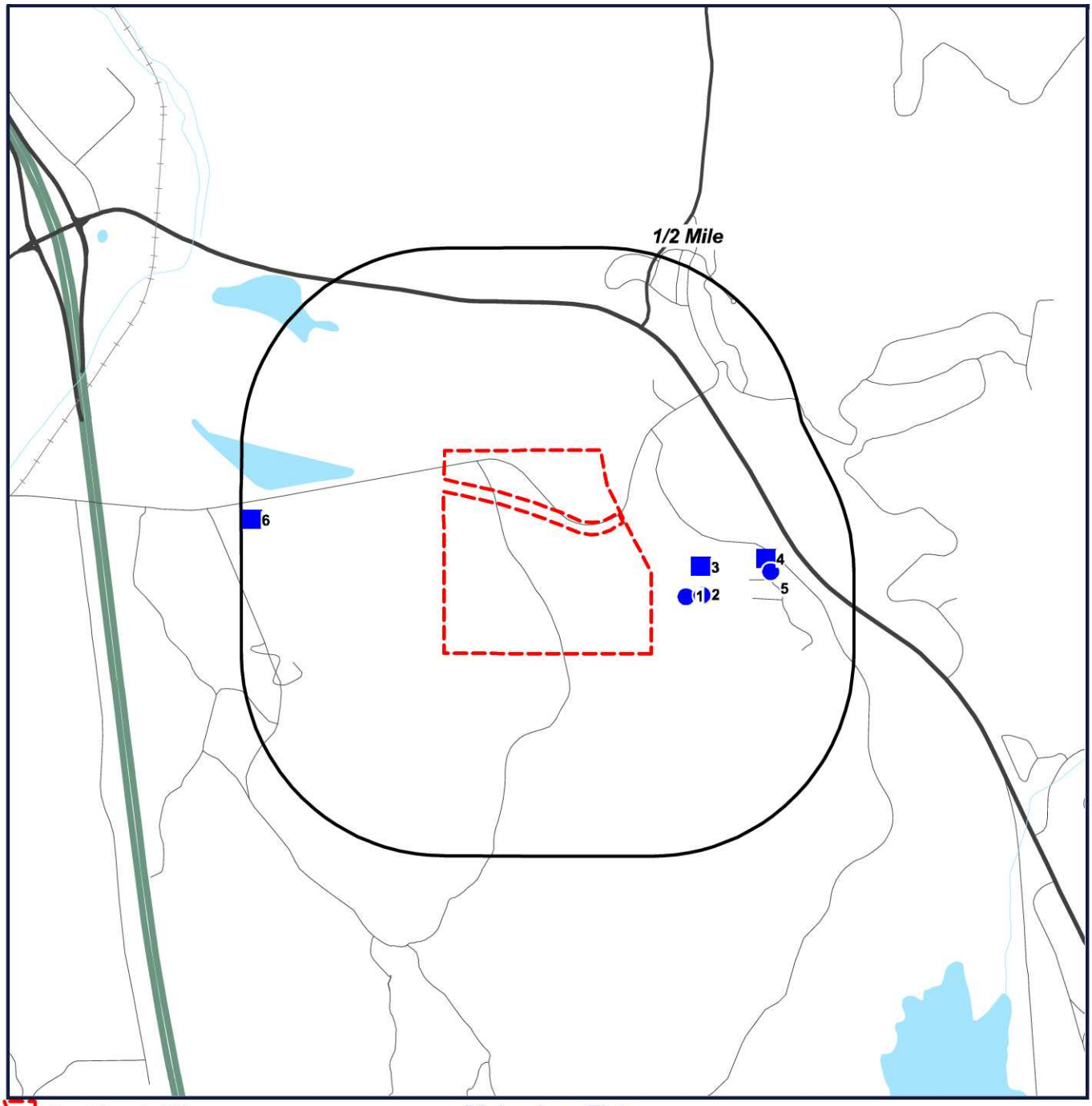
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	14	0	1	NS	NS	15
SUB-TOTAL		0	14	0	1	0	0	15
TOTAL		0	15	0	3	0	0	18

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
WW
NWIS

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	WW	1775292344	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	4022998451	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	996892433	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	0000259	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	0142688	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	0146214	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	0146425	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	0147535	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	0147540	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	0148159	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	0148573	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	0166100	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	0166641	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	0177179	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
3	NWIS	USGS_4040171 11255201	Lower (6,636 ft.)	0.125 mi. E (660 ft.)	(D- 2- 5) 6CCA-S1		22
4	NWIS	USGS_4040181 11254101	Lower (6,619 ft.)	0.286 mi. E (1510 ft.)	(D- 2- 5) 6CDB- 1		23
5	WW	0072204	Lower (6,619 ft.)	0.294 mi. E (1552 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	24
6	NWIS	USGS_4040231 11270801	Lower (6,637 ft.)	0.471 mi. W (2487 ft.)	(D- 2- 4) 1CBC- 1		25

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
3	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.125 mi. E (660 ft.)	(D- 2- 5) 6CCA-S1	
4	NWIS	USGS_404018111254101	Lower (6,619 ft.)	0.286 mi. E (1510 ft.)	(D- 2- 5) 6CDB- 1	
6	NWIS	USGS_404023111270801	Lower (6,637 ft.)	0.471 mi. W (2487 ft.)	(D- 2- 4) 1CBC- 1	
1	WW	1775292344	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	4022998451	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	996892433	Higher (6,713 ft.)	0.085 mi. E (449 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	0000259	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0142688	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146214	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146425	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147535	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147540	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148159	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148573	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166100	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166641	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0177179	Higher (6,713 ft.)	0.124 mi. E (655 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
5	WW	0072204	Lower (6,619 ft.)	0.294 mi. E (1552 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6643 ft.

EQUAL/HIGHER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
3	NWIS	6,636 ft.	(D- 2- 5) 6CCA-S1		22
4	NWIS	6,619 ft.	(D- 2- 5) 6CDB- 1		23
5	WW	6,619 ft.		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	24
6	NWIS	6,637 ft.	(D- 2- 4) 1CBC- 1		25

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.085 mi. (449 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **1775292344**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER, INTERESTED PARTY**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.085 mi. (449 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **4022998451**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **SOUTH KAMAS IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.085 mi. (449 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **996892433**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0000259**
WRNUM: **0055003P00**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **KRISTIN MCLACHLAN FOR JORDANELLE SPECIAL SERVICE DIST**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0142688**
WRNUM: **55-11203**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DIST., INTERESTED PARTY**
SOURCE: **ONTARIO DRAIN TUNNEL AND PROVO RIVER**
USE: **IRRIGATION, MUNICIPAL, OTHER, STOCKWATERING**
PRIORITY DATE: **20000508**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0146214**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0146425**
WRNUM: **55-9544**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20001213**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0147535**
WRNUM: **55-9631**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (5)**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0147540**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0148159**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020718**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0148573**
WRNUM: **55-9699**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20021108**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0166100**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0166641**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.124 mi. (655 ft.) E
Elevation: 6,713 ft. (Higher than TP)

FACILITY INFORMATION

UNIQUE ID: **0177179**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20070124**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 3

Distance from Property: 0.125 mi. (660 ft.) E
Elevation: 6,636 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404017111255201**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404017111255201**
STATION NAME: **(D- 2- 5) 6CCA-S1**
SITE TYPE: **SP**
LATITUDE: **40.671339400**
LONGITUDE: **-111.431859400**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESWSWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1983-08-31**
WATER-QUALITY DATA END DATE: **1983-08-31**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**
SITE-VISIT DATA BEGIN DATE: **1983-08-31**
SITE-VISIT DATA END DATE: **1983-08-31**
SITE-VISIT DATA COUNT: **1**

Back to Report Summary

MAP ID# 4

Distance from Property: 0.286 mi. (1,510 ft.) E
Elevation: 6,619 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404018111254101**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404018111254101**
STATION NAME: **(D- 2- 5) 6CDB- 1**
SITE TYPE: **GW**
LATITUDE: **40.671617190**
LONGITUDE: **-111.428803700**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWSESWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **01/01/1965**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **NOT REPORTED**
WELL DEPTH: **260 FEET**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **O**
PROJECT NUMBER: **464915800**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1967-05-17**
WATER-QUALITY DATA END DATE: **1967-05-17**
WATER-QUALITY DATA COUNT: **2**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

Back to Report Summary

Water Wells (WW)

MAP ID# 5

Distance from Property: 0.294 mi. (1,552 ft.) E
Elevation: 6,619 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0072204**
WRNUM: **55-3097**
LOCATION: **N1140 E1570 SW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **CHEVRON U.S.A. INC.**
SOURCE: **UNDERGROUND WATER WELL**
USE: **OTHER**
PRIORITY DATE: **19651011**
SUMMARY STATUS: **PERFECTED: PROOF FILED, RIGHT CERTIFICATED**
DRILLING METHOD: **CABLE TOOL**
TOTAL DEPTH (FT.): **480.00000**
FINISH DEPTH (FT.): **310.00000**
SCREEN DEPTH (FT.): **150.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 6

Distance from Property: 0.471 mi. (2,487 ft.) W
Elevation: 6,637 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404023111270801**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404023111270801**
STATION NAME: **(D- 2- 4) 1CBC- 1**
SITE TYPE: **GW**
LATITUDE: **40.673005980**
LONGITUDE: **-111.452971700**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **043**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **SWNWSWS01 T**
NAME OF LOCATION MAP: **PARK CITY EAST**
SCALE OF LOCATION MAP: **24000**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **06/16/1994**
LOCAL AQUIFER: **NOT REPORTED**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **474922100**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **--**
WATER-QUALITY DATA END DATE: **--**
WATER-QUALITY DATA COUNT: **0**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1994-06-16**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1995-09-05**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **15**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

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NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355542
Project #: 14715
PO #: 14715
Date: 06/05/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43944, 40.6715475)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

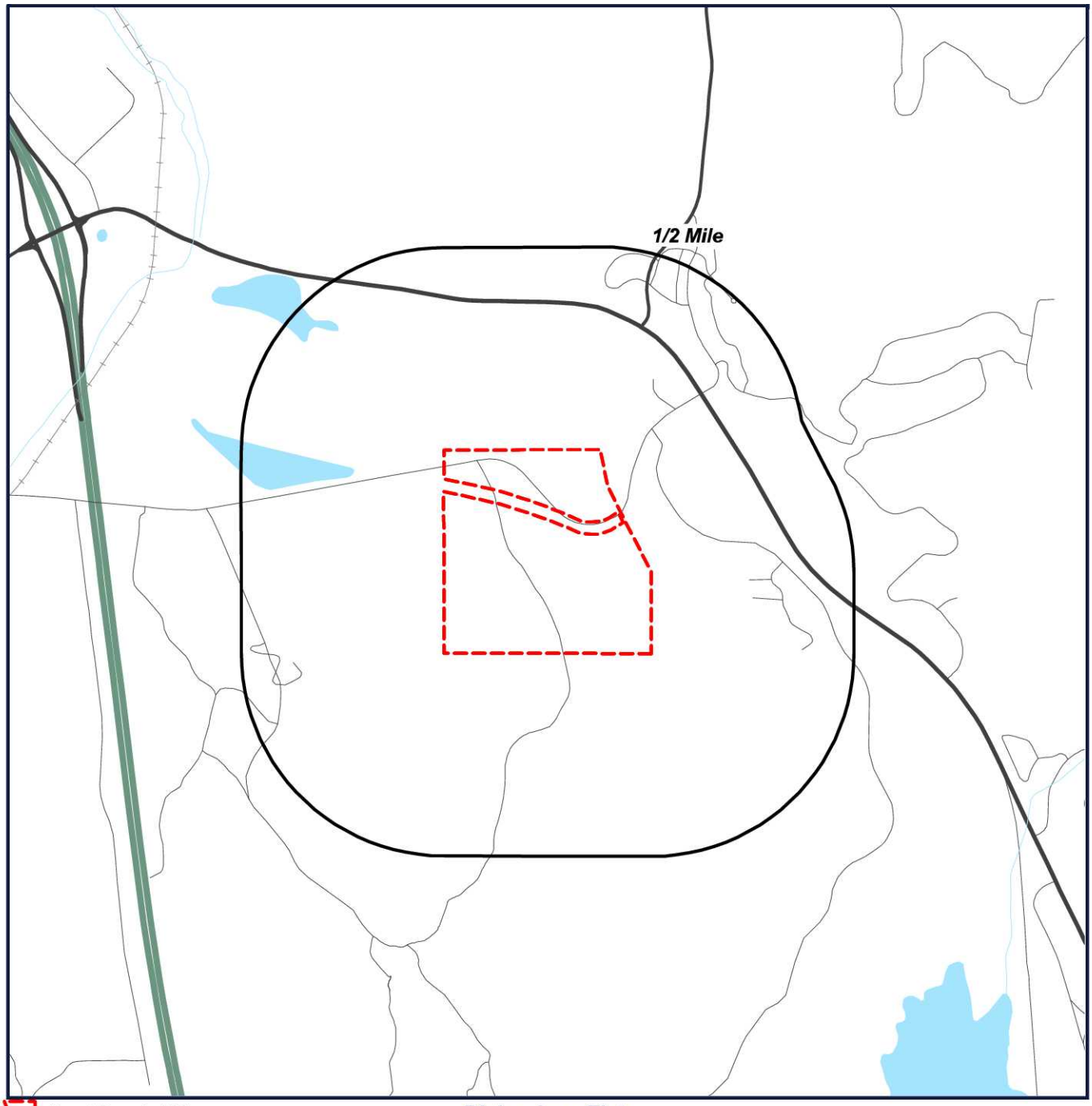
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Target Property (TP)

Well Location

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoSearch
On time. On target. In touch.™

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147850
Job #: 355544
Project #: 14715
PO #: 14715
Date: 06/05/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-86
Near 1185 W LORI LN
Heber, Utah 84060

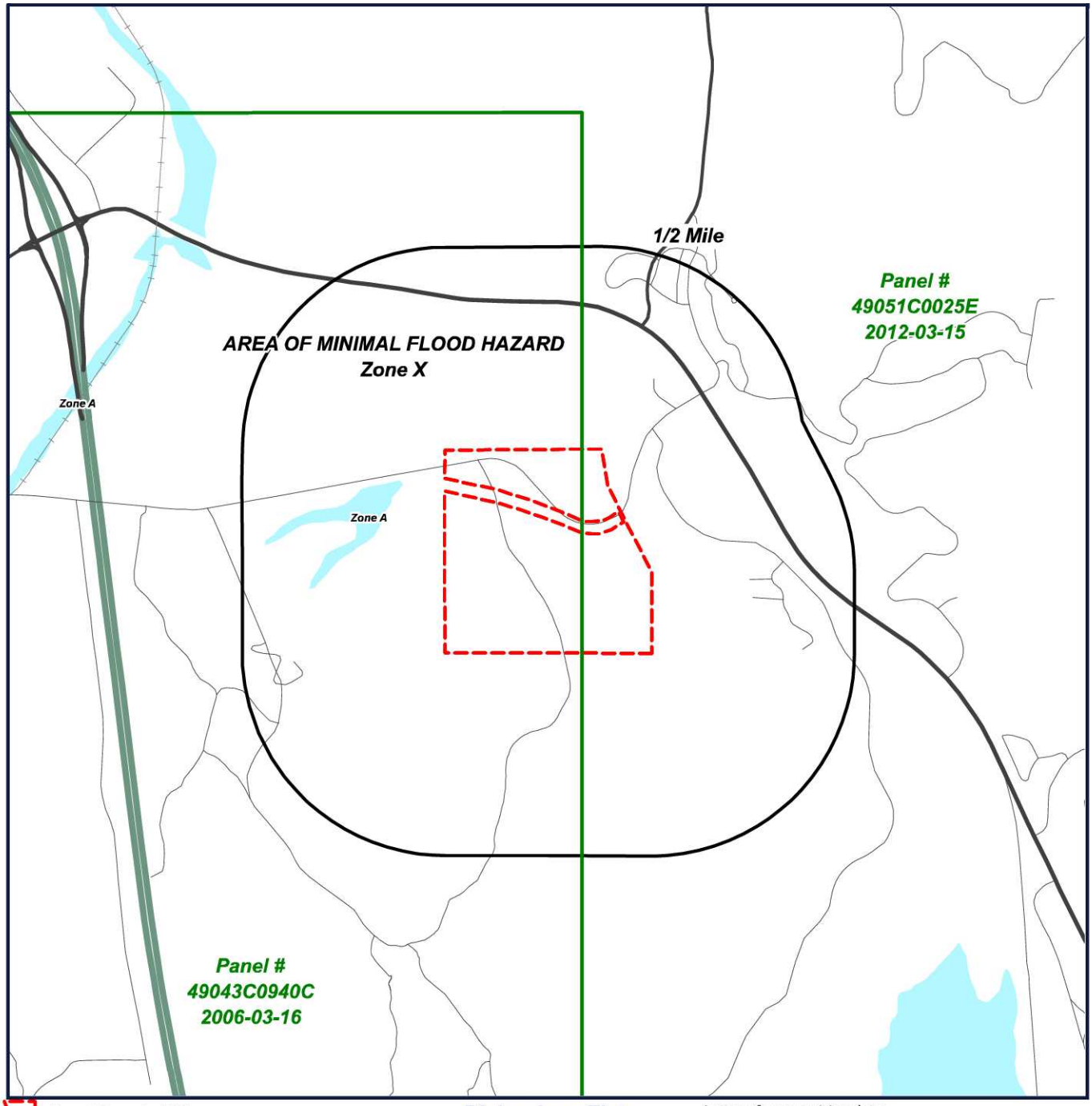
Coordinates
Area centroid (-111.43944, 40.6715475)
6,643 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

N
W E
S

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Hazard - Zone X

Area with Reduced Flood Risk due to Levee - Zone X

Area with Flood Risk due to Levee - Zone D

Digital Data Not Available

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

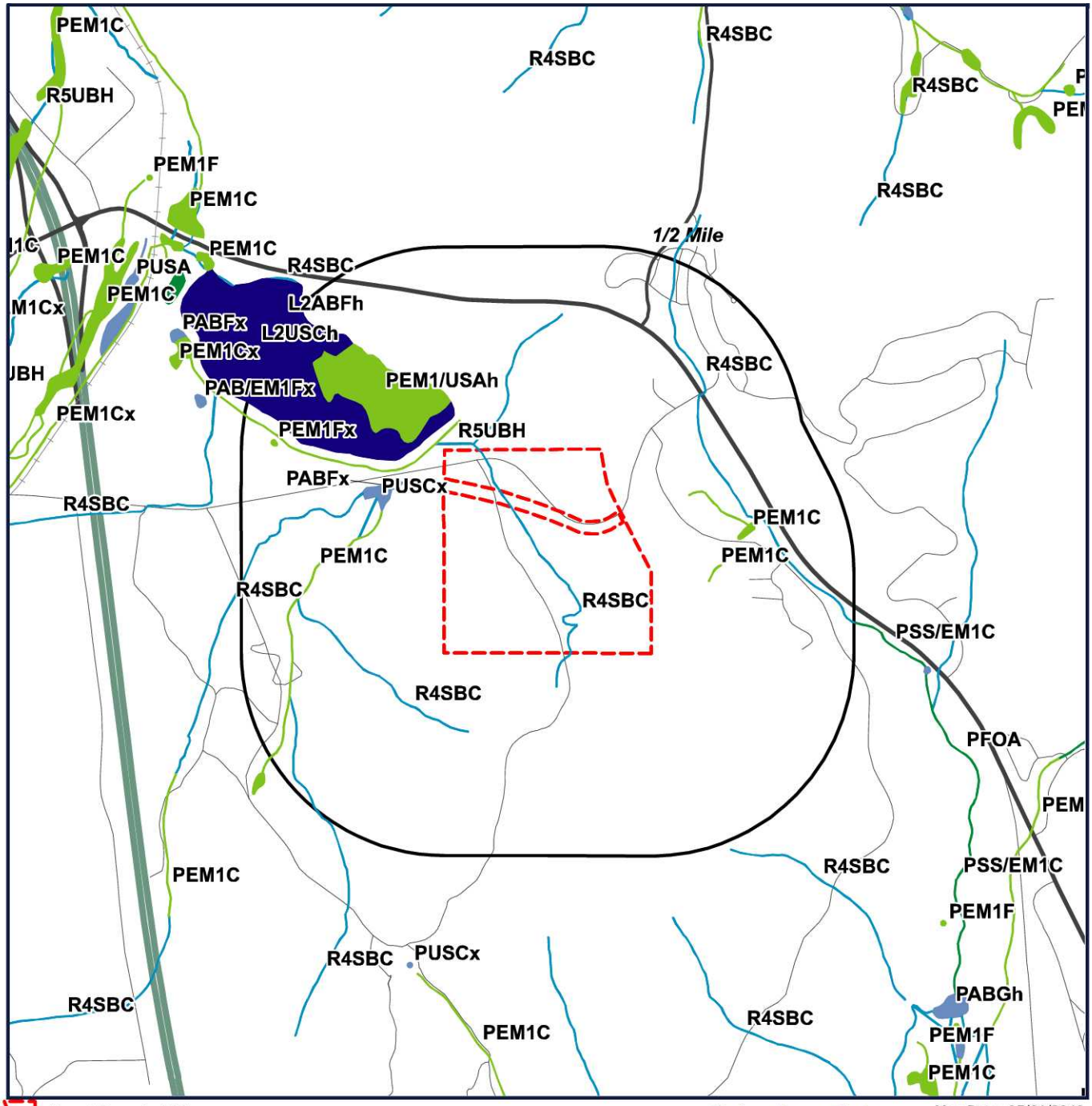
Zone A	Zone A

Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

ESTUARINE AND MARINE DEEPWATER

ESTUARINE AND MARINE WETLAND

FRESHWATER EMERGENT WETLAND

FRESHWATER FORESTED/ SHRUB WETLAND

LAKE

OTHER

RIVERINE

FRESHWATER POND

NDA - DIGITAL DATA NOT AVAILABLE

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

Map Date: 05/01/2018

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

L2ABFh

SYSTEM: **LACUSTRINE**
SUBSYSTEM: **LITTORAL**
CLASS: **AQUATIC BED**
WATER REGIME: **SEMIPERMANENTLY FLOODED**
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

L2USCh

SYSTEM: **LACUSTRINE**
SUBSYSTEM: **LITTORAL**
CLASS: **UNCONSOLIDATED SHORE**
WATER REGIME: **SEASONALLY FLOODED**
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

PABFx

SYSTEM: **PALUSTRINE**
CLASS: **AQUATIC BED**
SPECIAL MODIFIER: **EXCAVATED**

PEM1/USAh

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

PEM1C

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

PEM1Cx

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

SPECIAL MODIFIER: **EXCAVATED**

PEM1Fx

SYSTEM: **PALUSTRINE**

CLASS: **EMERGENT**

SUBCLASS: **BROAD-LEAVED DECIDUOUS**

WATER REGIME: **SEMIPERMANENTLY FLOODED**

SPECIAL MODIFIER: **EXCAVATED**

PUSCx

SYSTEM: **PALUSTRINE**

CLASS: **UNCONSOLIDATED SHORE**

SPECIAL MODIFIER: **EXCAVATED**

R4SBC

SYSTEM: **RIVERINE**

SUBSYSTEM: **INTERMITTENT**

CLASS: **STREAMBED**

WATER REGIME: **SEASONALLY FLOODED**

R5UBH

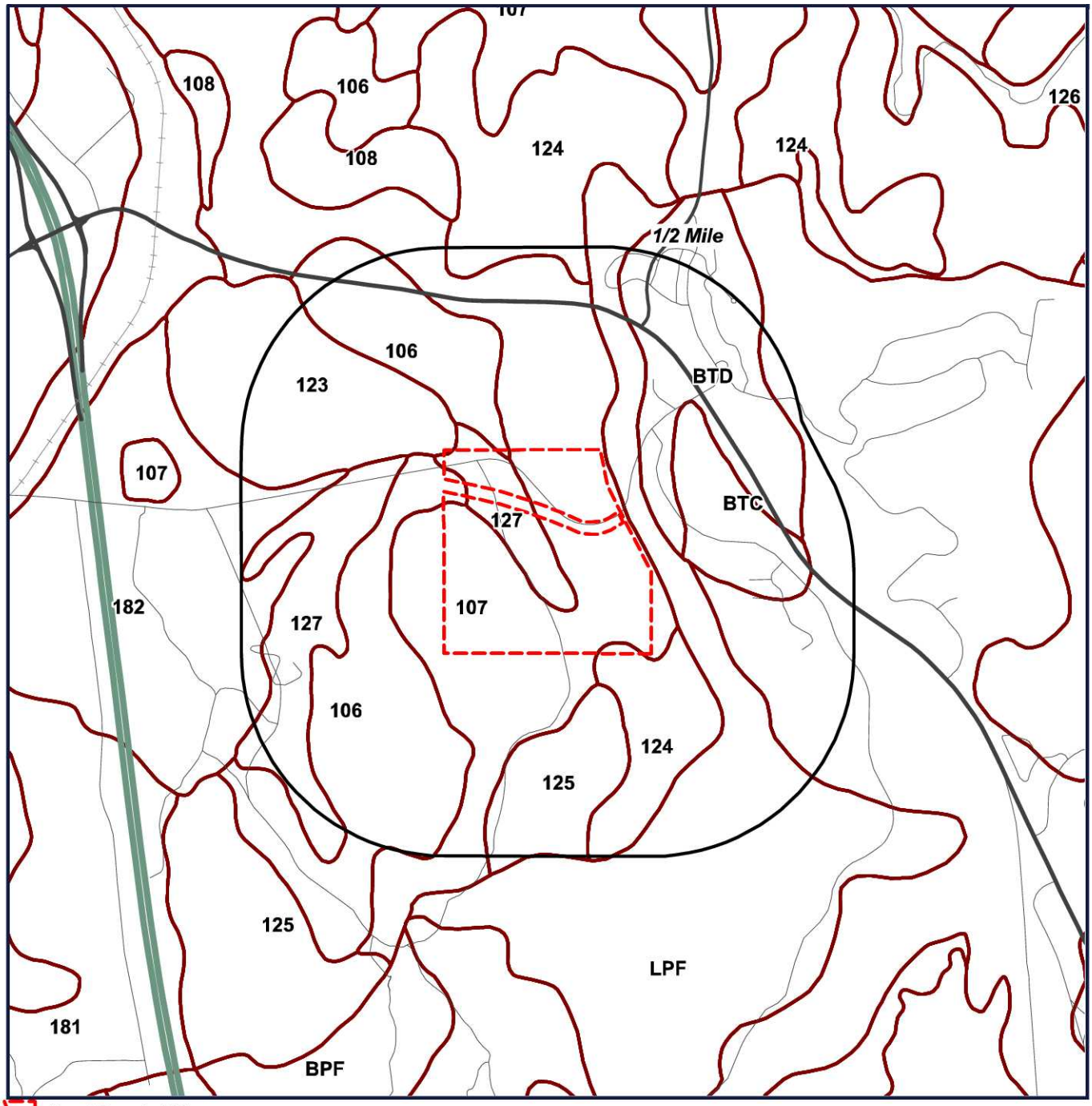
SYSTEM: **RIVERINE**

SUBSYSTEM: **UNKNOWN PERENNIAL**

CLASS: **UNCONSOLIDATED BOTTOM**

WATER REGIME: **PERMANENTLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

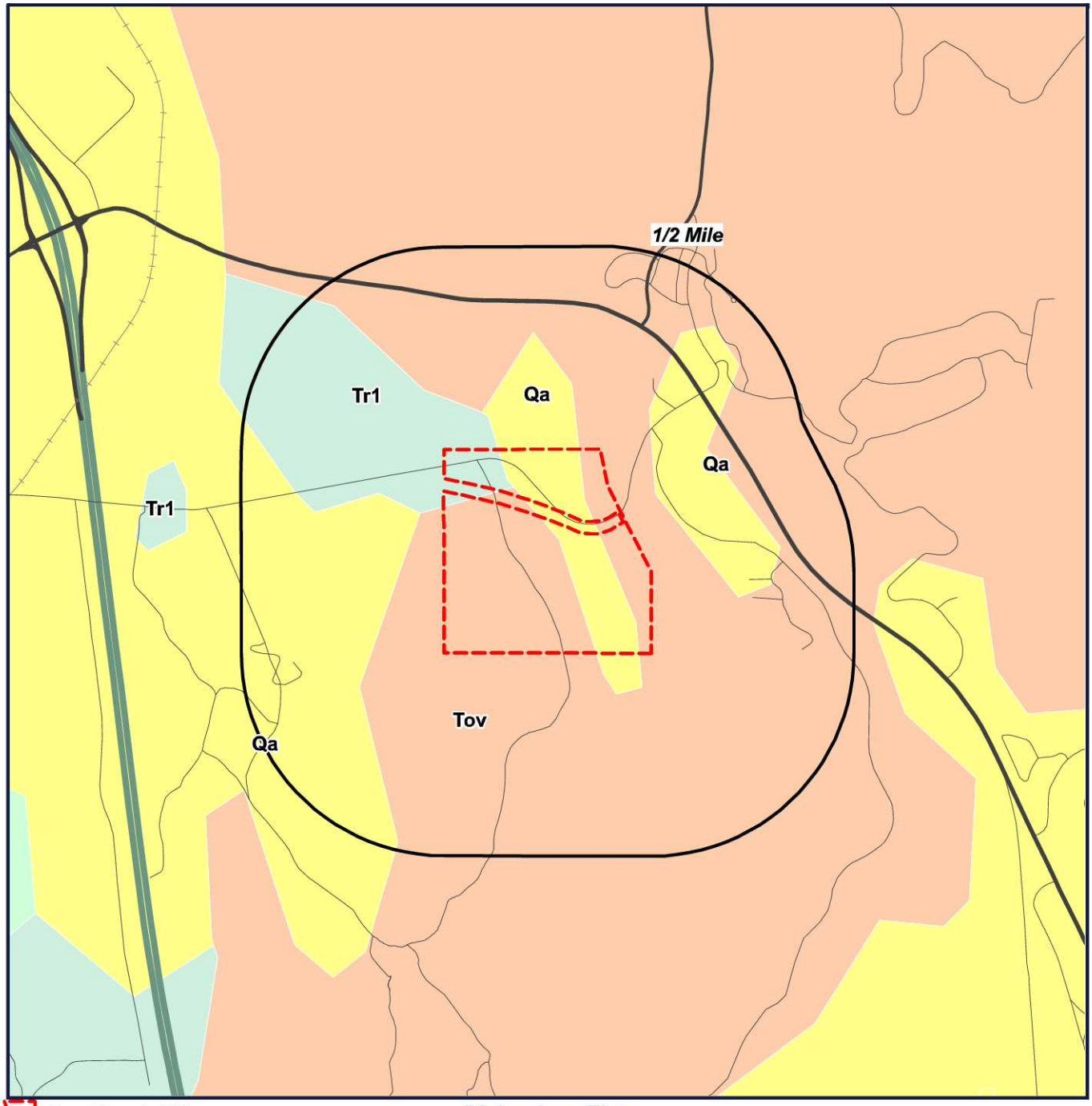
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

BTC	Broadhead soils, 6 to 15 percent slopes
BTD	Broadhead soils, 15 to 25 percent slopes
HWE	Horrocks-Broadhead association, steep
LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
106	Ayoub cobbly loam, 2 to 15 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes
123	Dumps, mines
125	Dunford-Ayoub-Melling complex, 30 to 60 percent slopes
124	Dunford-Ayoub-Melling complex, 15 to 30 percent slopes
127	Echocreek-Kovich loams, 0 to 10 percent slopes
182	Yeates Hollow-Henefer complex, 30 to 60 percent slopes

Geology Map



Target Property (TP)

Richardson Flats
Parcel SS-86
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

GEOLOGY SYMBOL: **Tr1**
UNIT NAME: **Triassic (1) sedimentary rocks in Salt Lake City-Coalville-Randolph region**
UNIT AGE: **Early Triassic**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
tidal flat to shallow marine
ROCKTYPE/S: **mudstone; limestone; siltstone; sandstone; evaporite**

APPENDIX E

SUPPORTING
DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

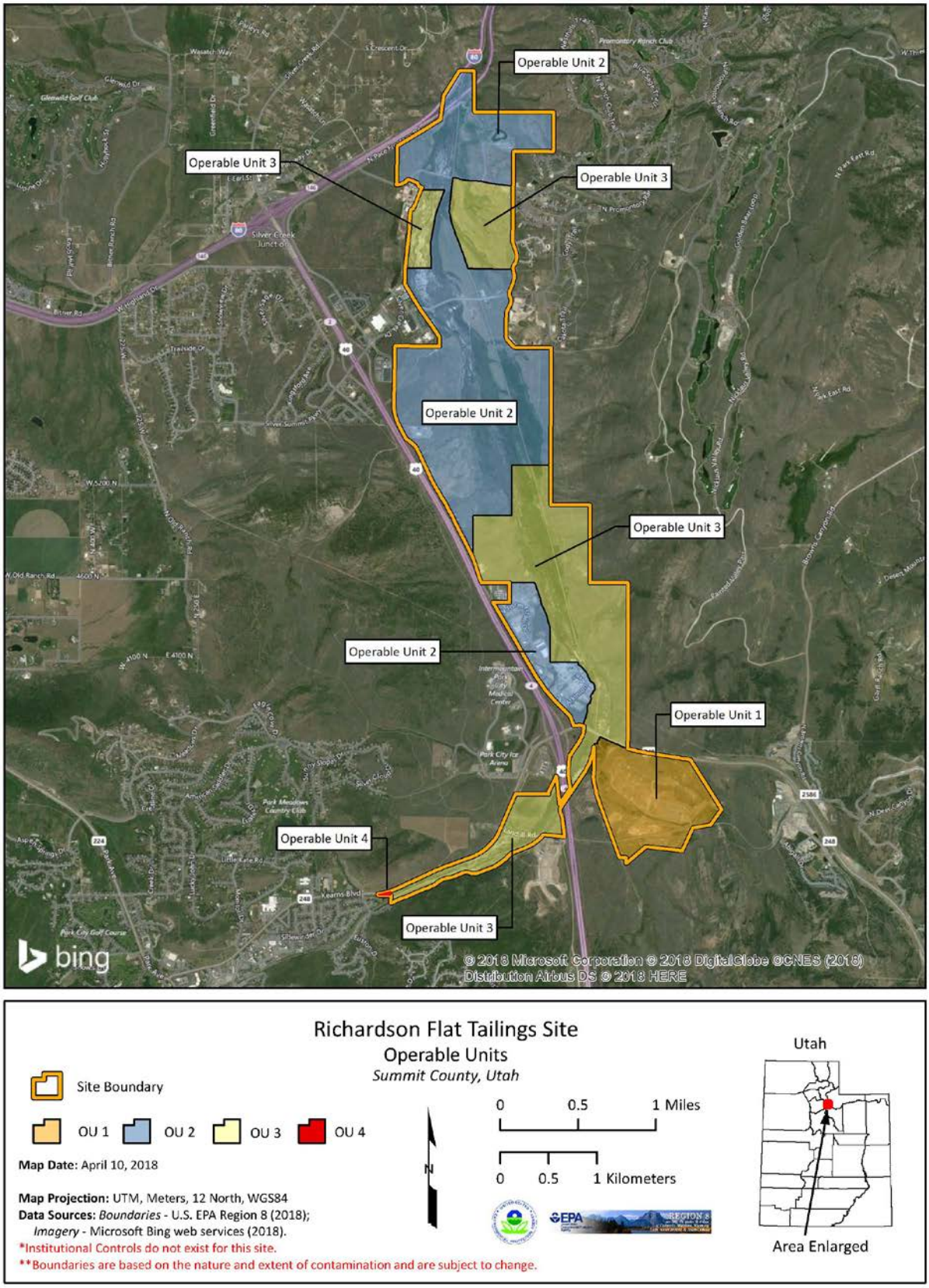
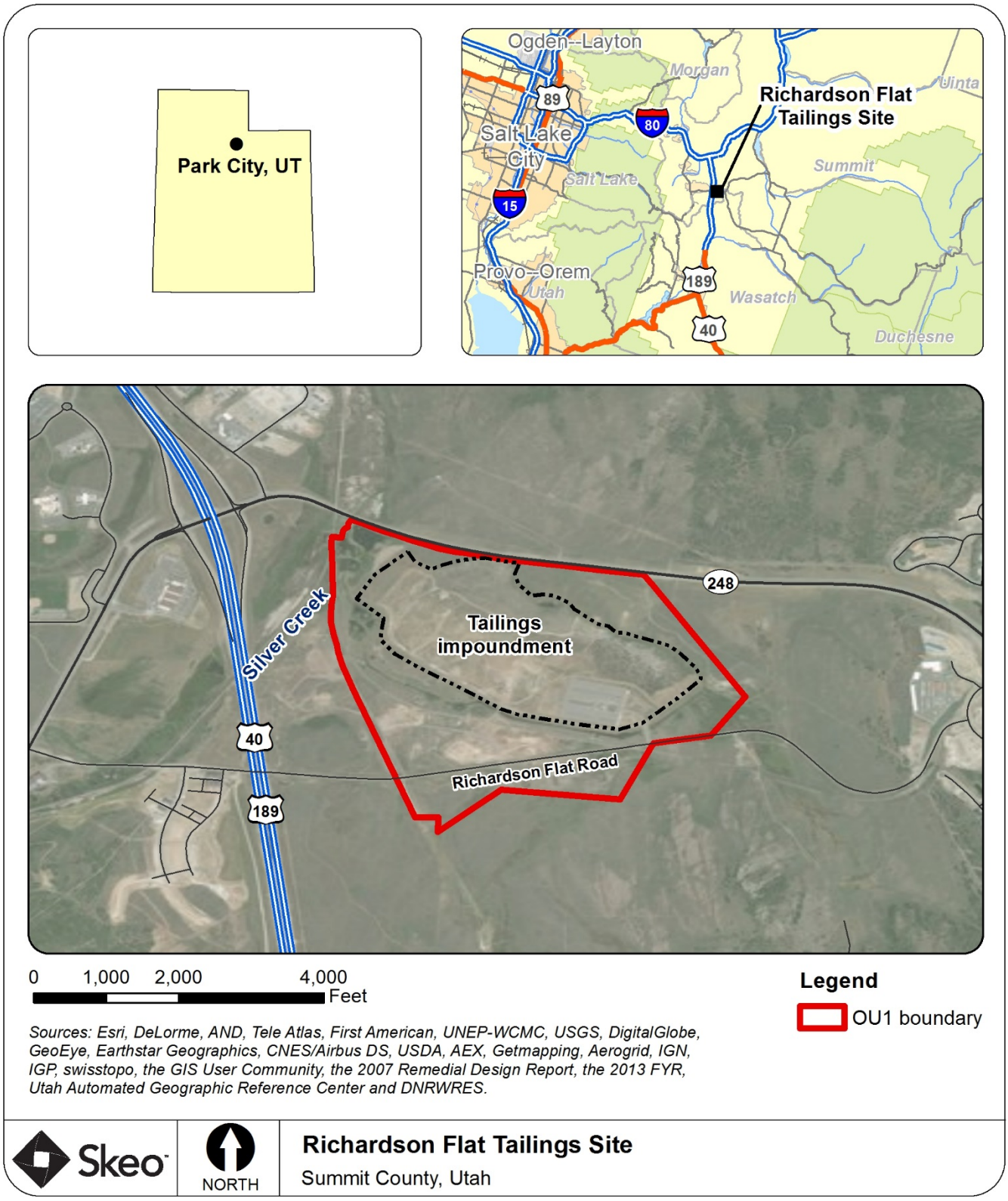


Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

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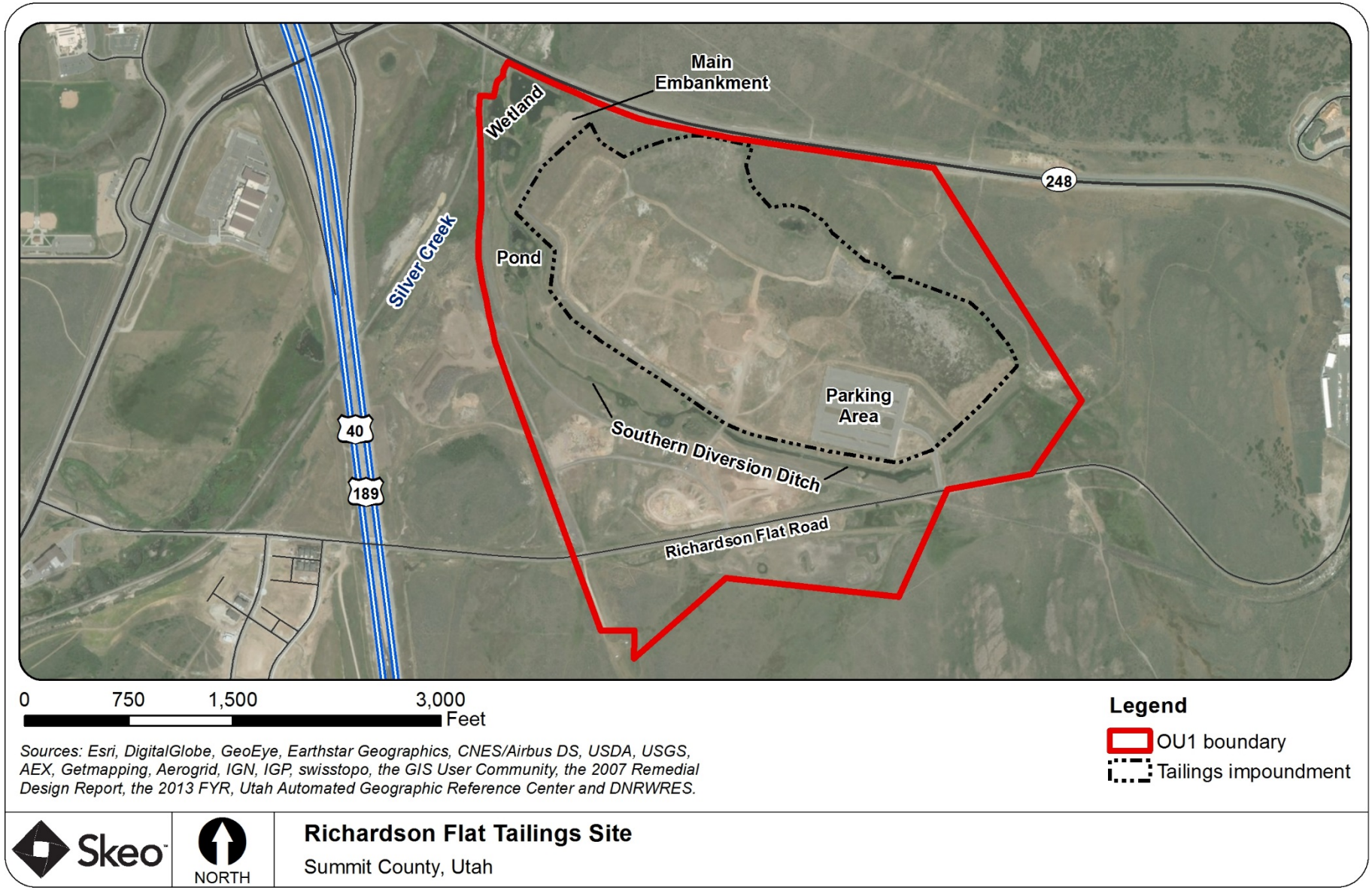
Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

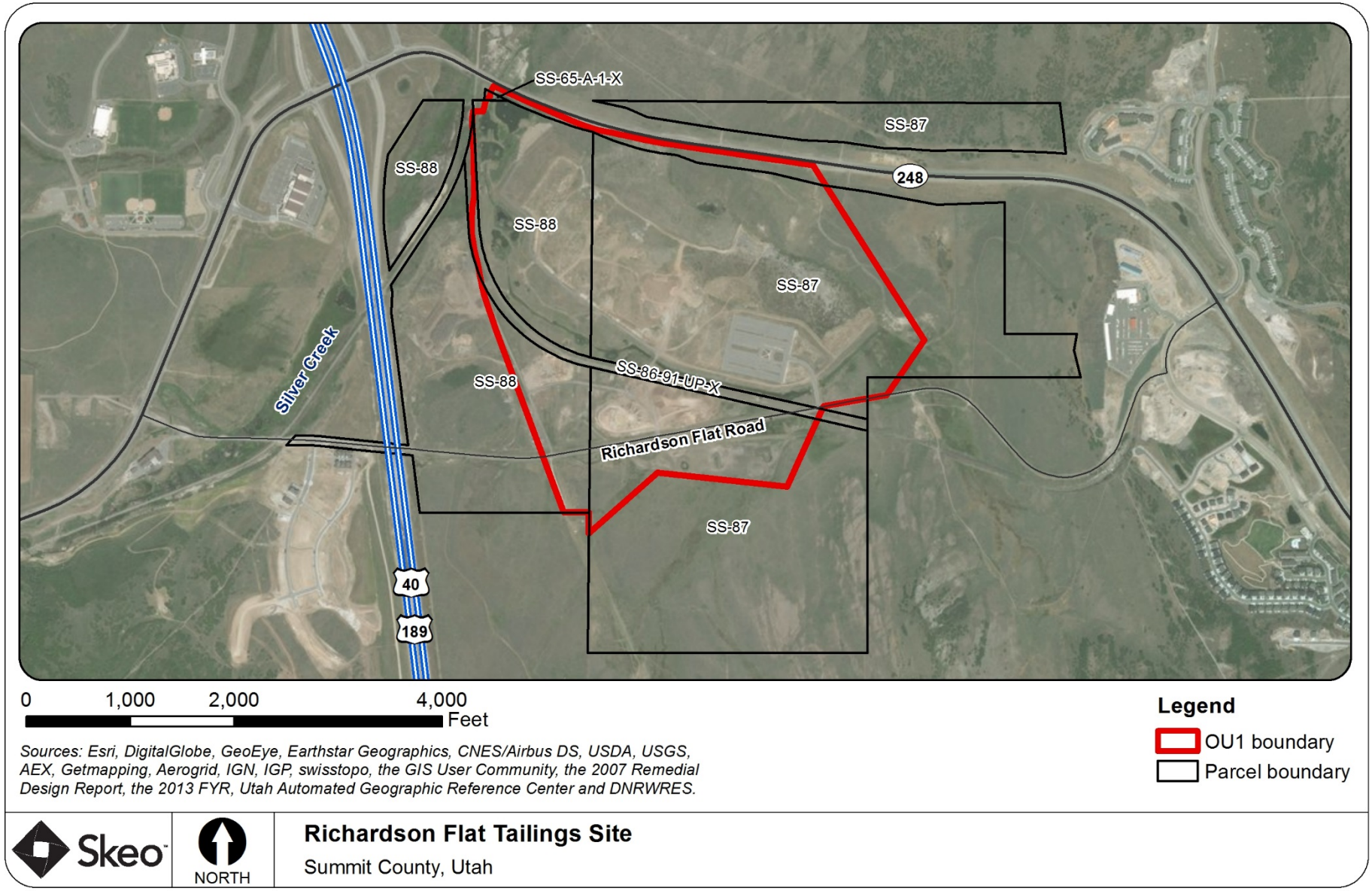
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 µg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below µg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

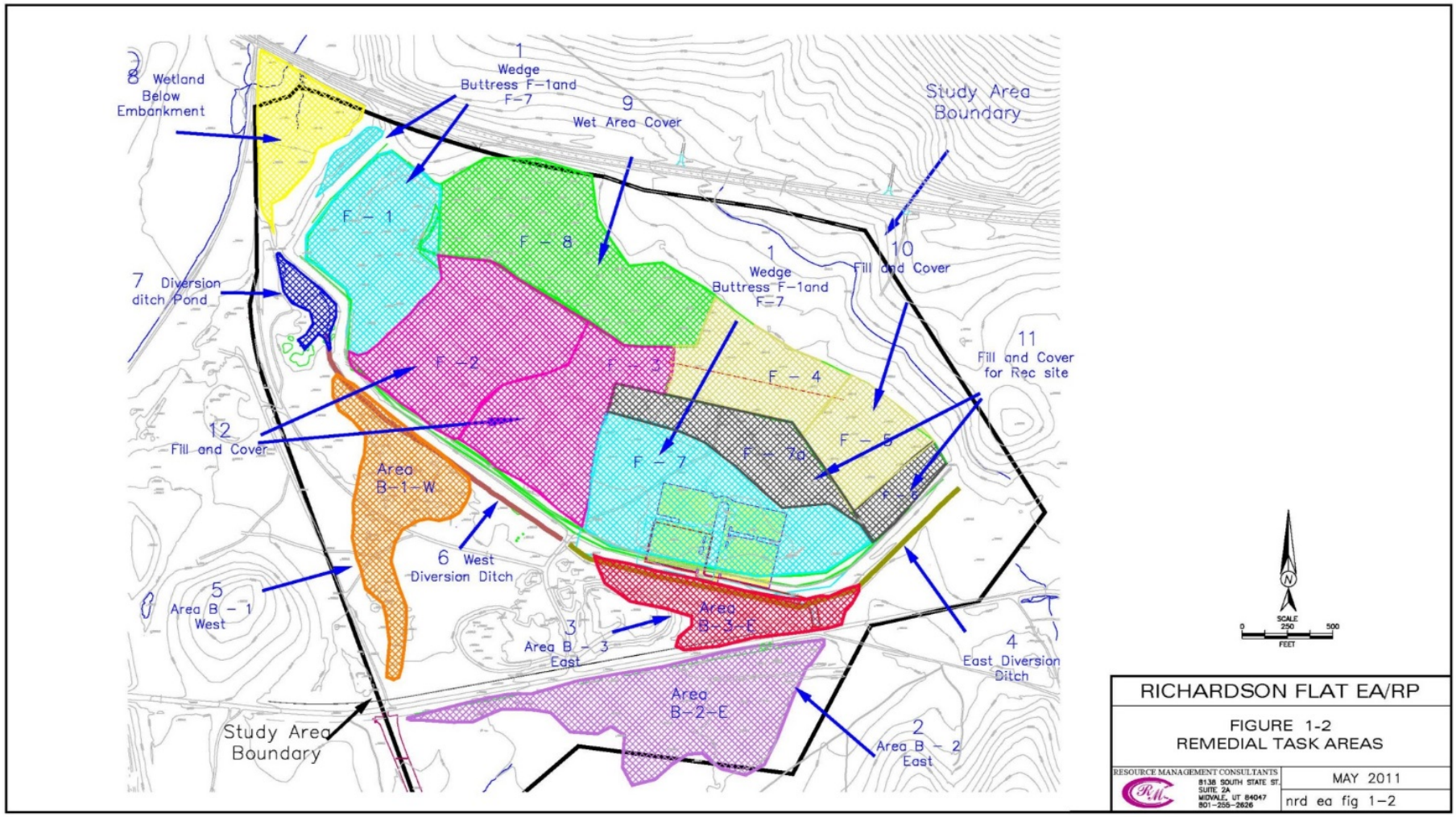


Figure C-2: 2008 Phase 2 Completion Map

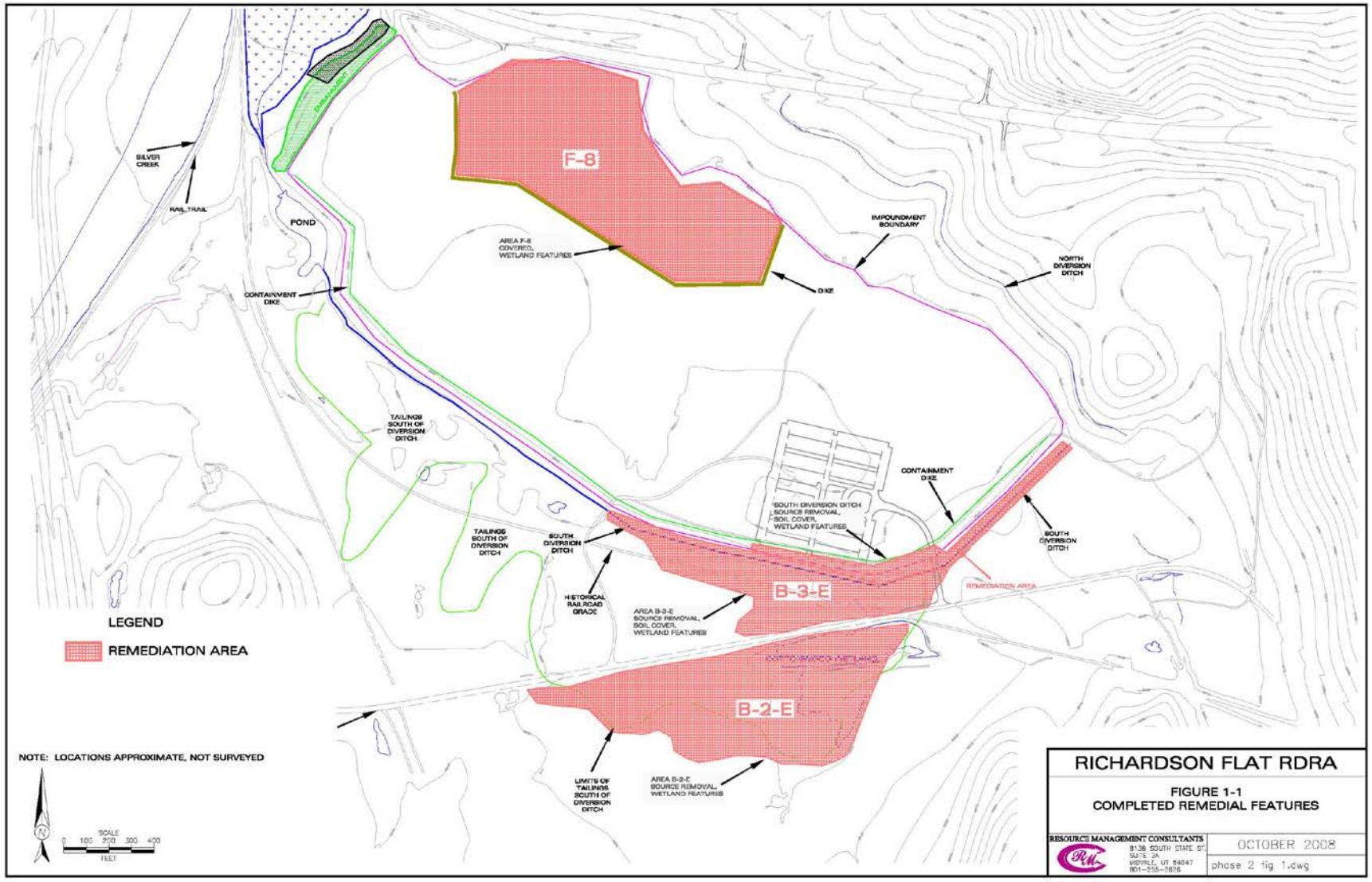


Figure C-3: 2009 Phase 3 Completion Map

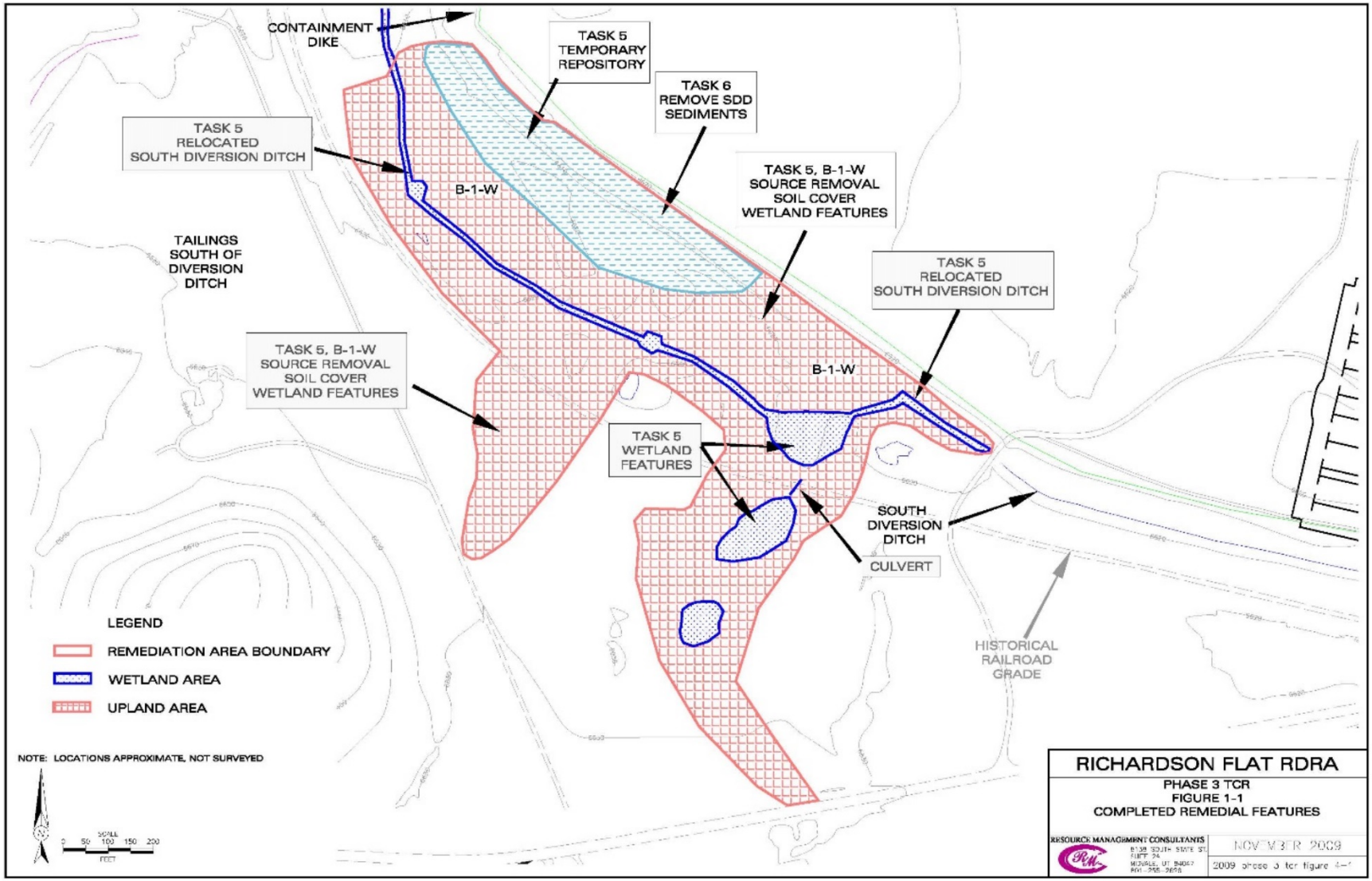


Figure C-4: 2010 Phase 4 Completion Map

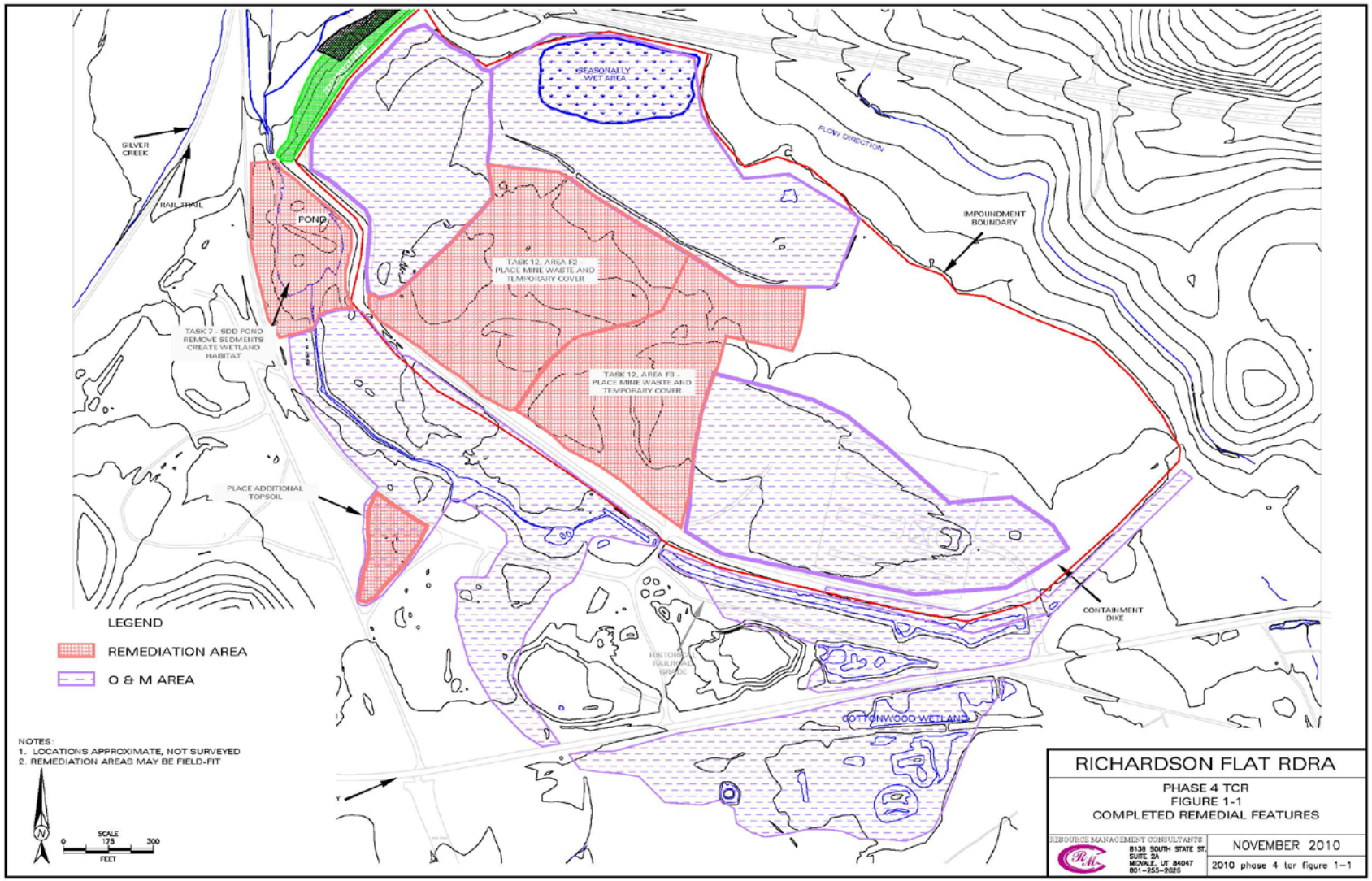
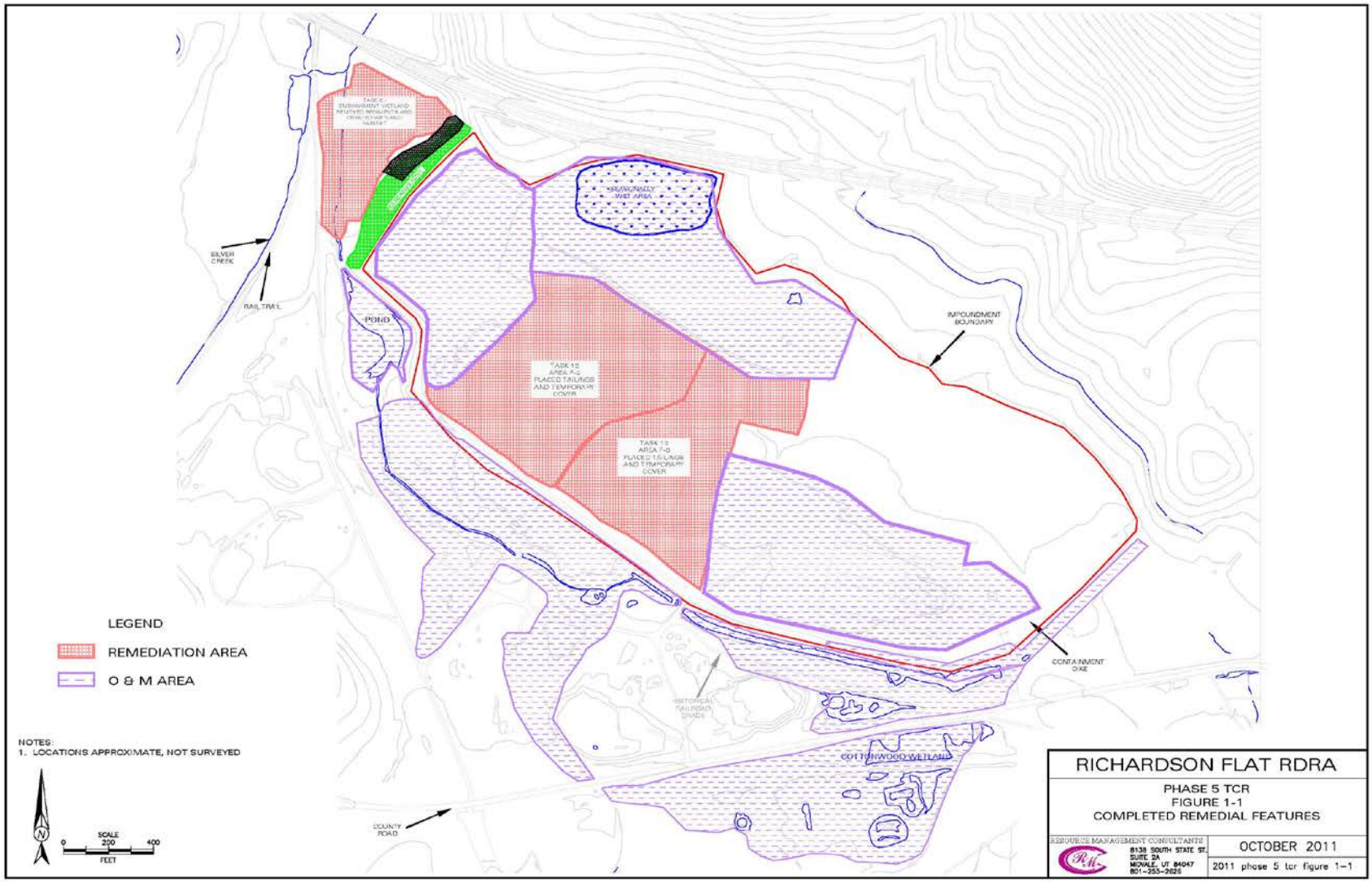


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE



The U.S. Environmental Protection Agency, Region 8 Announces the Second Five-Year Review for the Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jami Brackin **Affiliation:** Summit County
Subject Contact Information:
Time: 2:30 p.m. **Date:** 09/21/2017
Interview Location: Park City Library

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____	_____	_____	_____	
	Name	Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☒ Erosion not evident
Arial extent: _____ Depth: _____
Remarks: _____

4. **Holes** ☐ Location shown on site map ☒ Holes not evident
Arial extent: _____ Depth: _____
Remarks: _____

5. **Vegetative Cover** ☒ Grass ☒ Cover properly established
☐ No signs of stress ☐ Trees/shrubs (indicate size and locations on a diagram)
Remarks: _____

6. **Alternative Cover** (e.g., armored rock, concrete) ☒ N/A
Remarks: _____

7. **Bulges** ☐ Location shown on site map ☒ Bulges not evident
Arial extent: _____ Height: _____
Remarks: _____

8. **Wet Areas/Water Damage** ☒ Wet areas/water damage not evident

☐ Wet areas	☐ Location shown on site map	Arial extent: _____
☐ Ponding	☐ Location shown on site map	Arial extent: _____
☐ Seeps	☐ Location shown on site map	Arial extent: _____
☐ Soft subgrade	☐ Location shown on site map	Arial extent: _____

Remarks: _____

9. **Slope Instability** ☐ Slides ☐ Location shown on site map
☒ No evidence of slope instability
Arial extent: _____
Remarks: _____

B. Benches ☐ Applicable ☒ N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

2. **Bench Breached** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

3. **Bench Overtopped** ☐ Location shown on site map ☐ N/A or okay
Remarks: _____

C. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A
Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**
☐ Flaring ☐ Thermal destruction ☐ Collection for reuse
☐ Good condition ☐ Needs maintenance
Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**
☐ Good condition ☐ Needs maintenance
Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)
☐ Good condition ☐ Needs maintenance ☐ N/A
Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A
Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A
Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A
☐ Siltation not evident
Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____
☐ Erosion not evident
Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A
Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A
Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident
Horizontal displacement: _____ Vertical displacement: _____
Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.



Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom
NOTARY PUBLIC

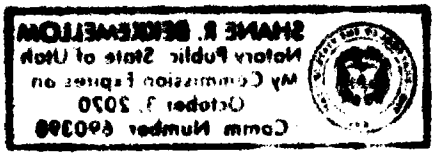
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

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APPENDIX F

STATEMENT OF QUALIFICATIONS



MARK **LARSEN, P.G., E.P.**

GEOLOGIST | ENVIRONMENTAL PROFESSIONAL

CONTACT

mark.larsen@cmtlaboratories.com

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Vineyard, Utah 84057

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cmtlaboratories.com

EDUCATION

Bachelor of Science Geology,
University of Utah, Salt Lake City,
1997

PROFESSIONAL LICENSES

Professional Geologist,
State of Utah,
License # 5293214-2250
Expires 3/3/19

AFFILLIATIONS

Association of Environmental and
Engineering Geologists (AEG)
Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



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CONTACT

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EDUCATION

Bachelor of Arts, Interior Design,
Utah State University,
2009

ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel SS-87-B-X

E-SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14716

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property is located east-southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-87-B-X. In total, the parcel comprises approximately 22.85 acres. The target property is currently undeveloped land on gently to moderately sloping hilly terrain. Unpaved roads/trails cross the northwest and central portions of the target property. An unpaved road/trail crosses the southeast portion of the target property. The target property has historically remained undeveloped land.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified one regulated site/facility on or within the required search radii of the target property (Sections 8.1 and 8.2). Based on the nature of the database listing, site/facility conditions, elevation, and/or distance from the target property, the identified, regulated site/facility does not appear to represent an REC in relation to the target property at the time of this assessment. Based on the observations, research, and interviews conducted while performing this assessment, we did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted. With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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APPENDICES

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Appendix C: Radius Report
Appendix D: City Directory Report/Water Well Report/Oil Gas Report/Physical Settings
Appendix E: Supporting Documentation
Appendix F: Statement of Qualifications

1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel SS-87-B-X in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.678388° N and Longitude: -111.437693° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1900 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located east-southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-87-B-X. In total, the parcel comprises approximately 22.85 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.



FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently undeveloped land on gently to moderately sloping hilly terrain. Unpaved roads/trails cross the northwest and central portions of the target property. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: S.R. 248 Highway with undeveloped land and residential development beyond to the north.

East: Undeveloped hill slope followed by commercial development.

South: Undeveloped hill slope.

West: Undeveloped hill slopes and meadows.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

A buried natural gas pipeline crosses the northern half of the property from southeast to northwest. No odors associated with natural gas were noticed during our reconnaissance and the pipeline is not considered to be an REC.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

No solid waste was observed on the target property.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	0	0	1	NS	NS	1
Water Wells	0.5000	0	0	0	3	NS	NS	3
Total		**0**	**0**	**0**	**4**	**0**	**0**	**4**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
SS-87-B-X	Null	22.85	Jordanelle Special Service District

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that the target property and adjacent properties were undeveloped land. An unpaved road/trail is visible crossing the northwest portion of the property. Other unpaved roads/trails are visible beyond to the east, south, and west and a railroad grade is visible beyond to the east and south.

1953: An apparent pipeline easement (natural gas?) is visible crossing the northern half of the parcel from southeast to northwest. The pipeline easement is visible in all subsequent photos. The aerial shows no other significant change from the previous imagery.

1962: S.R. 248 is visible to the north of the target property. The aerial shows no other significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: The aerial shows no significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: An unpaved trail is visible crossing the property from northwest to southeast. The aerial shows no other significant change from the previous imagery.

1993: The aerial shows no significant change from the previous imagery.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows no significant change from the previous imagery.

2004: The aerial shows no significant change from the previous imagery.

2006: The aerial shows the commercial development at the base of a slope to the east in progress . The aerial shows no other significant change from the previous imagery.

2009: The aerial shows additional commercial development to the east. Richardson Flat Road beyond to the south had been paved. The aerial shows no other significant change from the previous imagery.

2011: Residential development to the northeast, on the north side of S.R. 248 was in progress. The aerial shows no other significant change from the previous imagery.

2014: The aerial shows no significant change from the previous imagery.

2016: Additional commercial development to the east and residential development to the northeast was in progress. The aerial shows no other significant change from the previous imagery.

2018: Additional commercial development to the east and southeast, and residential development to the northeast had been completed or was in progress. The aerial shows no other significant change from the previous imagery.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey,

"Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1900, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: No development or improvements are mapped on the target property. Roads are mapped to the north, east, south, and west.

1955: The map shows a natural gas pipeline crossing the northern half of the property from southeast to northwest. The map shows S.R. 248 to the north of the property and an unpaved Richardson Flat Road and railroad grade beyond to the south and east. An unpaved road/trail is mapped crossing the northwest portion of the property. The Richardson Flat Tailings Pond is mapped down-slope and beyond to the west.

1999: The map shows the Richardson Flat Tailings Pond beyond to the west to be gone. No other significant changes are shown on or adjacent to the property.

2014: The map shows streets associated with the existing commercial and residential development to the east and northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,720 and 6,840 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene

The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** on the following page.

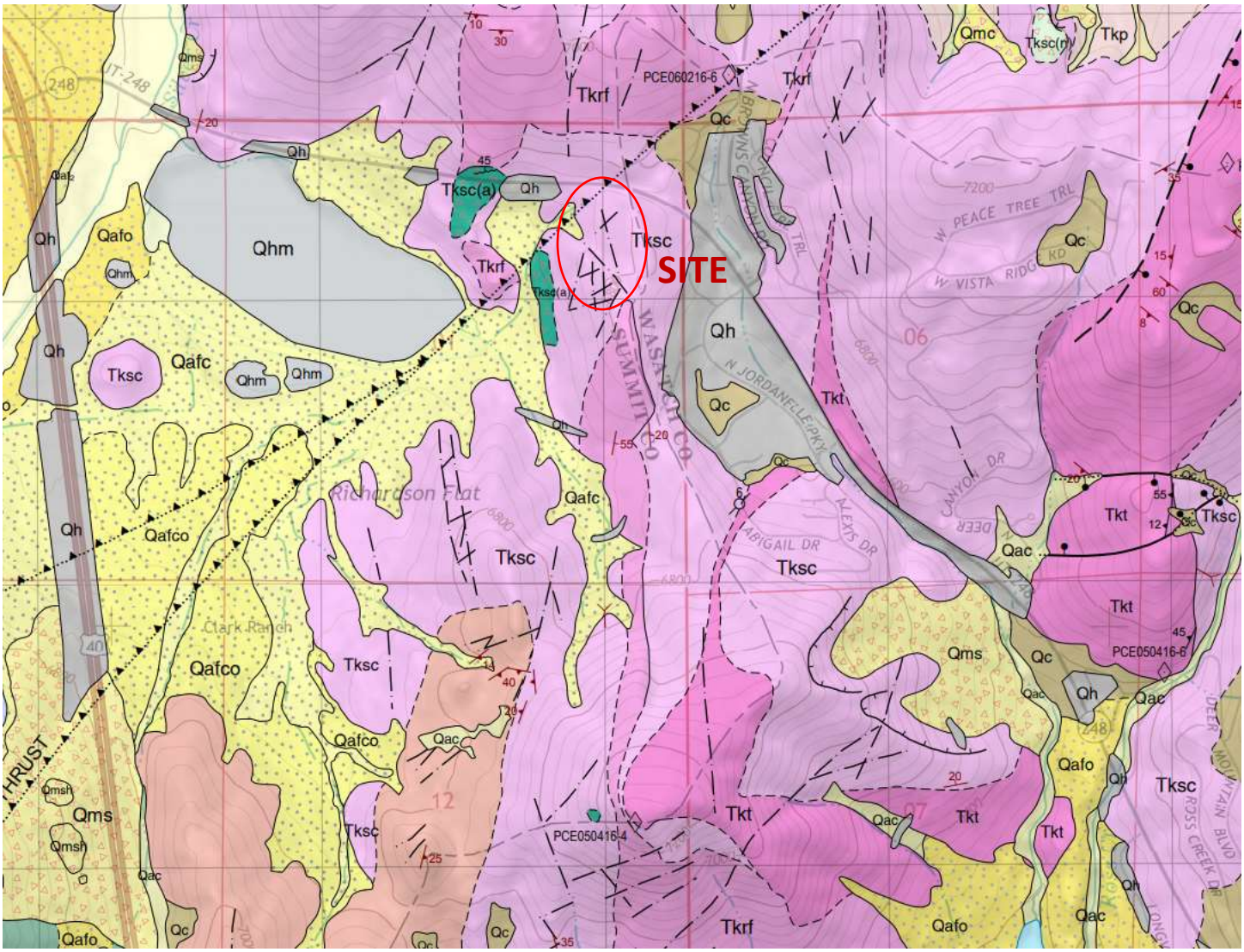

FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the west and northwest at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

No regulated sites or facilities were identified within the boundary of the target property.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
PNPL	Richardson Flat Tailings	Summit County	0.146	W	No
RODS	Richardson Flat Tailings	Summit County	0.146	W	No
CERCLIS	Richardson Flat Tailings	Summit County	0.146	W	No
SEMS	Richardson Flat Tailings	Summit County	0.146	W	No
MSHA	Mountain Valley Stone, Inc.	3 miles east of Park City, Utah	0.213	E	No

No orphan sites were identified within the Radius Map Report.

The following site history for the Richardson Flat Tailings is from the U.S. EPA: (https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**.

The target property is more than 700 feet from the RFTS and is up-gradient. Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property and do not represent an REC.

The Mountain Valley Stone, Inc. site identified in the MSHA database is mapped to the east of the site on the east side of S.R. 248. However, our review of historical aerial photographs (Section 6.3) and topographic maps (Section 6.4) do not indicate any existing or historical mining activity at the mapped location. CMT believes that the site is likely mapped incorrectly in the GeoSearch Radius Map Report.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS, no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs, HRECs, or CRECs as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. No current Land Use Covenants (LUCs) and associated Activity and Use Limitations (AULs) associated with the target property or surrounding properties were identified at the time of this assessment. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician



Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website:
https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT ENGINEERING LABORATORIES

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel SS-87-B-X Site #_____ CMT Job #14716

Property Address: ESE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Jordanelle Special Service Dist. Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description:_____

Site is open, undeveloped hill slopes with gentle to moderate grades. Vegetation is scrub oak, sage brush, grasses and weeds. An unpaved road/trail crosses the NW and central portion of the site. Gas pipeline crosses the north half of property.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel SS-87-B-X

NORTH

Name: SR 248, Undeveloped land, Residential Dev.

Address:

Description: State highway

Observed usage: X Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: open hillsides, Commericial dev.

Address:

Description:

Observed usage: ___ Residential X Commercial ___ Industrial ___ Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows, fields

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel SS-87-B-X

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Solid Waste:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Transformers:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-87-B-X

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-87-B-X

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel SS-87-B-X

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel SS-87-B-X

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel SS-87-B-X

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View of the target property, looking southeast.



Photo 2 View of the target property, looking south.



Photo 3 Commercial development to the east of the target property, looking west. Target property lies beyond the crest of the slope beyond the pictured buildings.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
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Historical Aerial Photographs

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355316
Project #: 14716
Date: 6/5/2020

Target Property Summary

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.439195262, 40.680091185), (-111.439205990, 40.676633155), (-111.436706172, 40.676625019), (-111.436792002, 40.677048129), (-111.435901509, 40.678195393), (-111.436523781, 40.679863368), (-111.436802731, 40.679920322), (-111.437156783, 40.679985413), (-111.437564478, 40.680050504), (-111.438036547, 40.680074913), (-111.438465701, 40.680091185), (-111.438809023, 40.680099322)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/10/1967	ASCS	1" = 1320'	PI-3
08/01/1962	ASCS	1" = 500'	3-22
07/03/1953	USGS	1" = 500'	1-42
08/03/1937	ASCS	1" = 500'	U79

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N

Page 1034

Richardson Flats Parcel SS87-B-X
USDA
2018

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2016

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2014

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2011

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2009

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2006

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2004

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USDA
2003

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USGS
07/08/1997

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USGS
08/23/1993

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USGS
09/18/1987

GeoSearch

JOB #: 355316 - 06/05/2020



N

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Richardson Flats Parcel SS87-B-X
USGS
09/05/1983

GeoSearch

JOB #: 355316 - 06/05/2020



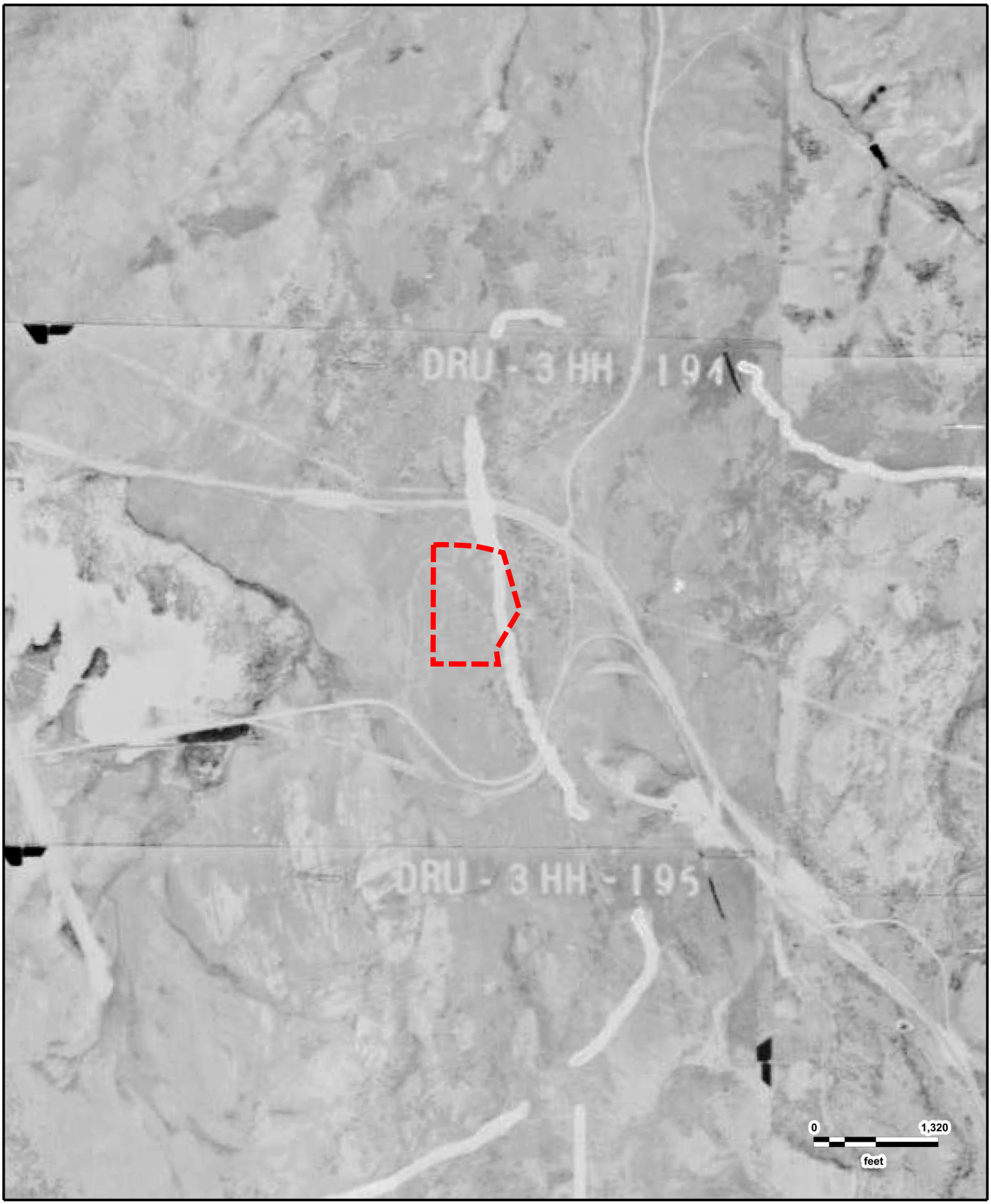
N

Page 1046

Richardson Flats Parcel SS87-B-X
USGS
08/24/1976

GeoSearch

JOB #: 355316 - 06/05/2020



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Richardson Flats Parcel SS87-B-X
ASCS
07/10/1967

GeoSearch

JOB #: 355316 - 06/05/2020



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Richardson Flats Parcel SS87-B-X
ASCS
08/01/1962

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Richardson Flats Parcel SS87-B-X
USGS
07/03/1953

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N

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Richardson Flats Parcel SS87-B-X
ASCS
08/03/1937

GeoSearch

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Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel SS87-B-X

Near 1185 W LORI LN , Heber, Summit, Utah, 84060

Prepared For:

CMT Engineering Laboratories

Order #: 147778

Job #: 355319

Project #: 14716

Date #: 06/05/20

GeoSearch FIM

Date: 06/05/20

GS Job Number: 147778

Company Name: CMT Engineering Laboratories

Project Number: 14716

Site Information: Richardson Flats Parcel SS87-B-X

Near 1185 W LORI LN , Heber, Summit, Utah, 84060

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355315
Project #: 14716
Date: 6/4/2020

Target Property Summary

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.439195262, 40.680091185), (-111.439205990, 40.676633155), (-111.436706172, 40.676625019), (-111.436792002, 40.677048129), (-111.435901509, 40.678195393), (-111.436523781, 40.679863368), (-111.436802731, 40.679920322), (-111.437156783, 40.679985413), (-111.437564478, 40.680050504), (-111.438036547, 40.680074913), (-111.438465701, 40.680091185), (-111.438809023, 40.680099322)

Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1900	COALVILLE, UT	1" = 10420'

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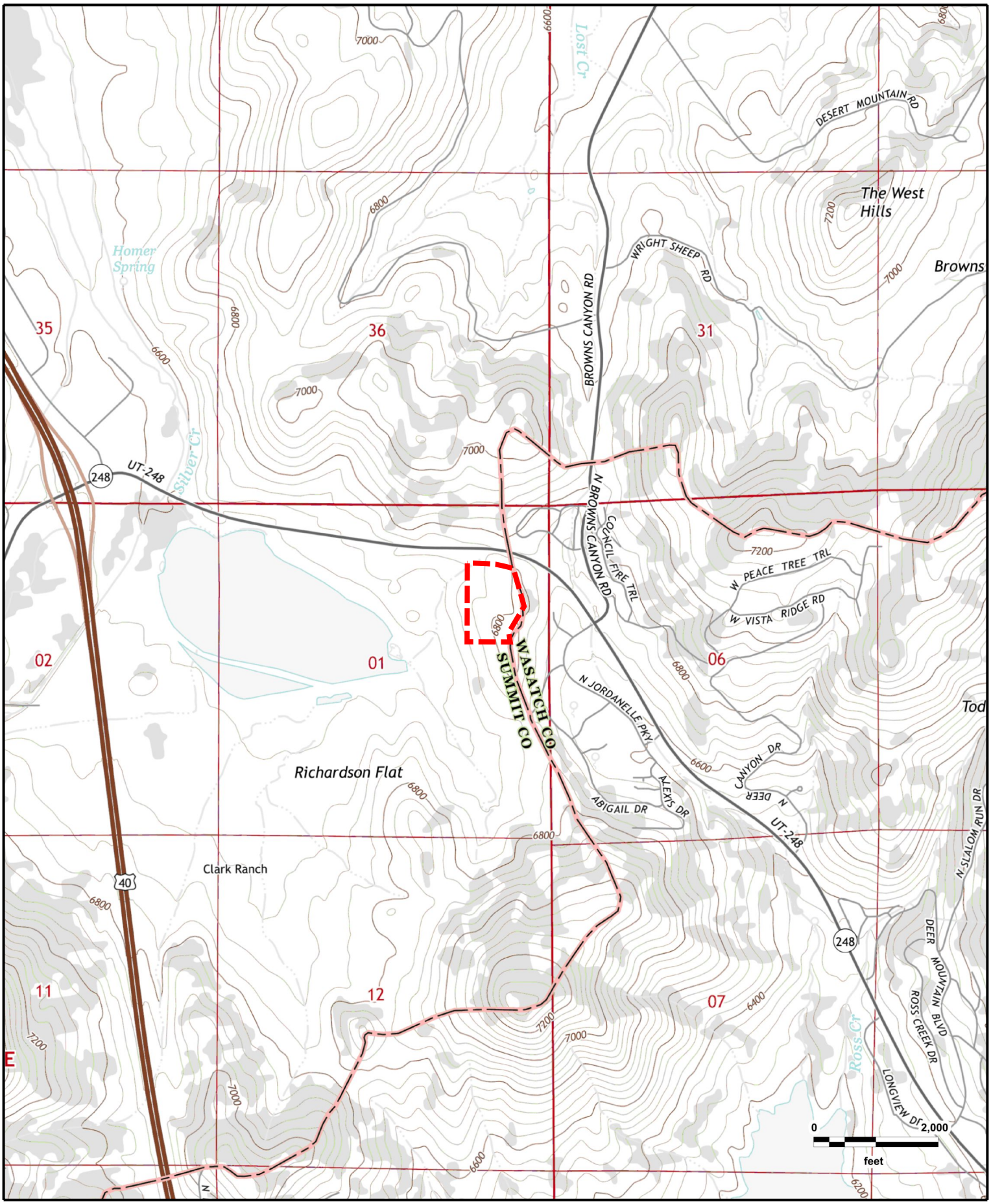
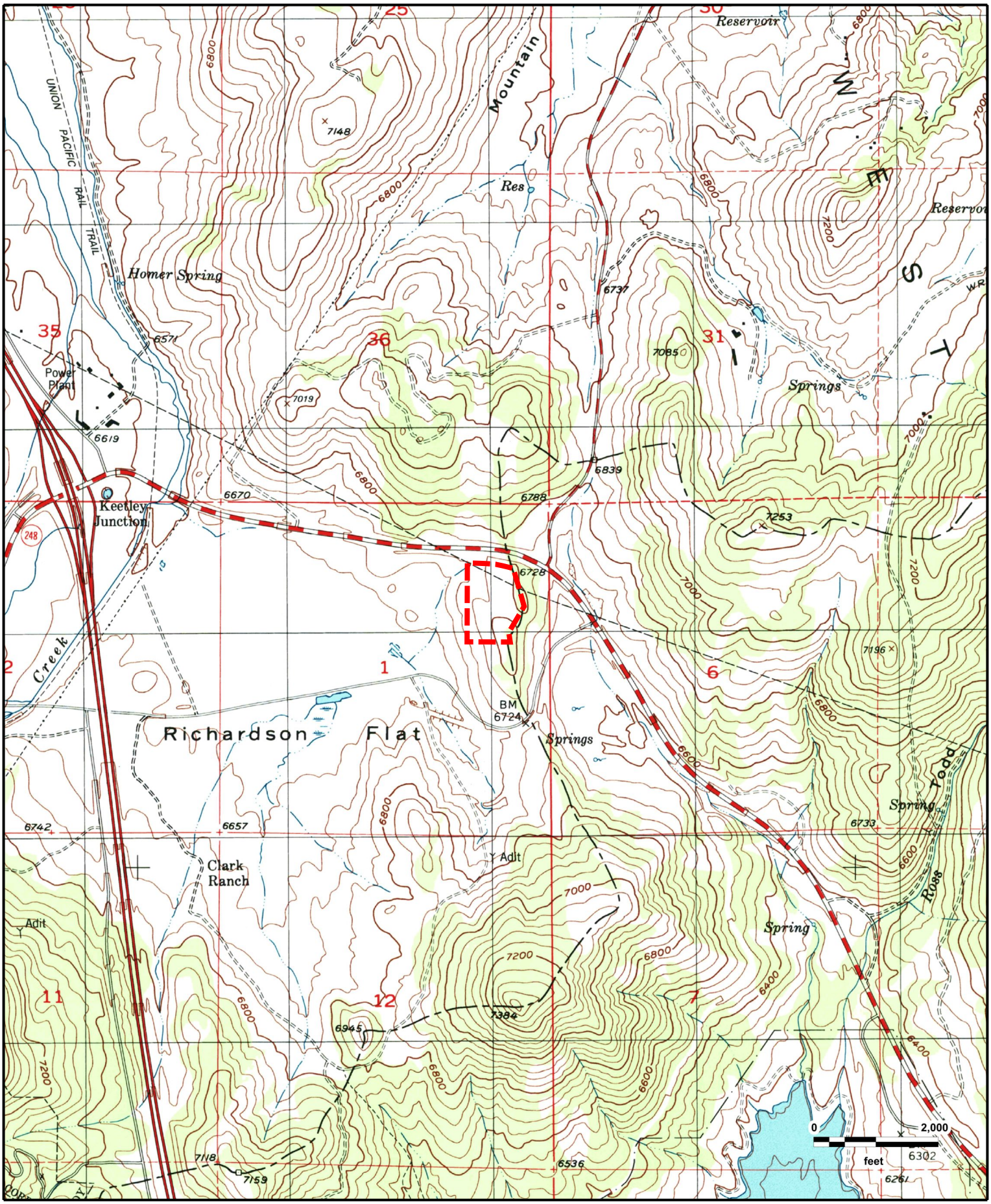


Richardson Flats Parcel SS87-B-X
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355315 - 06/04/2020



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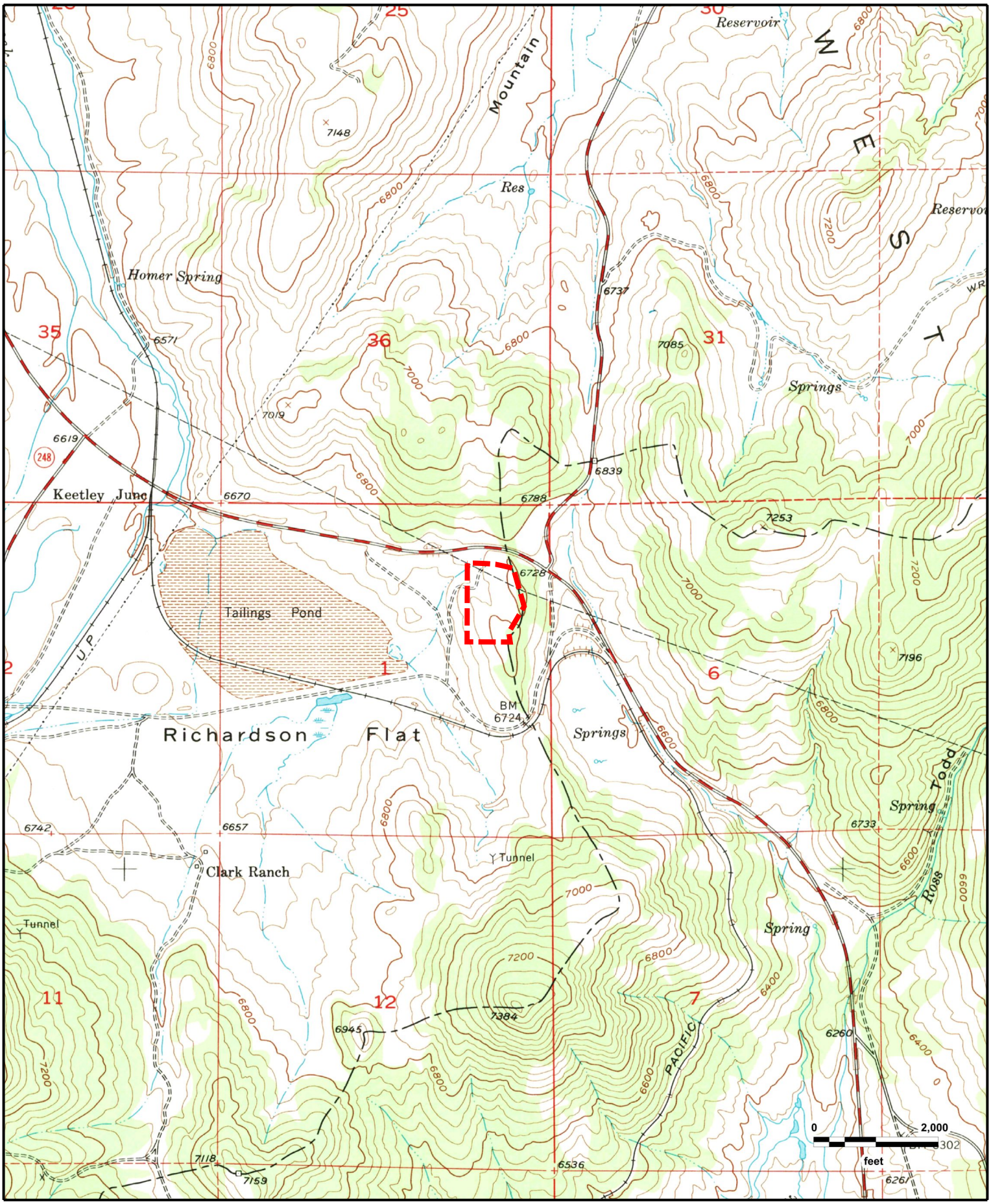
Richardson Flats Parcel SS87-B-X
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355315 - 06/04/2020



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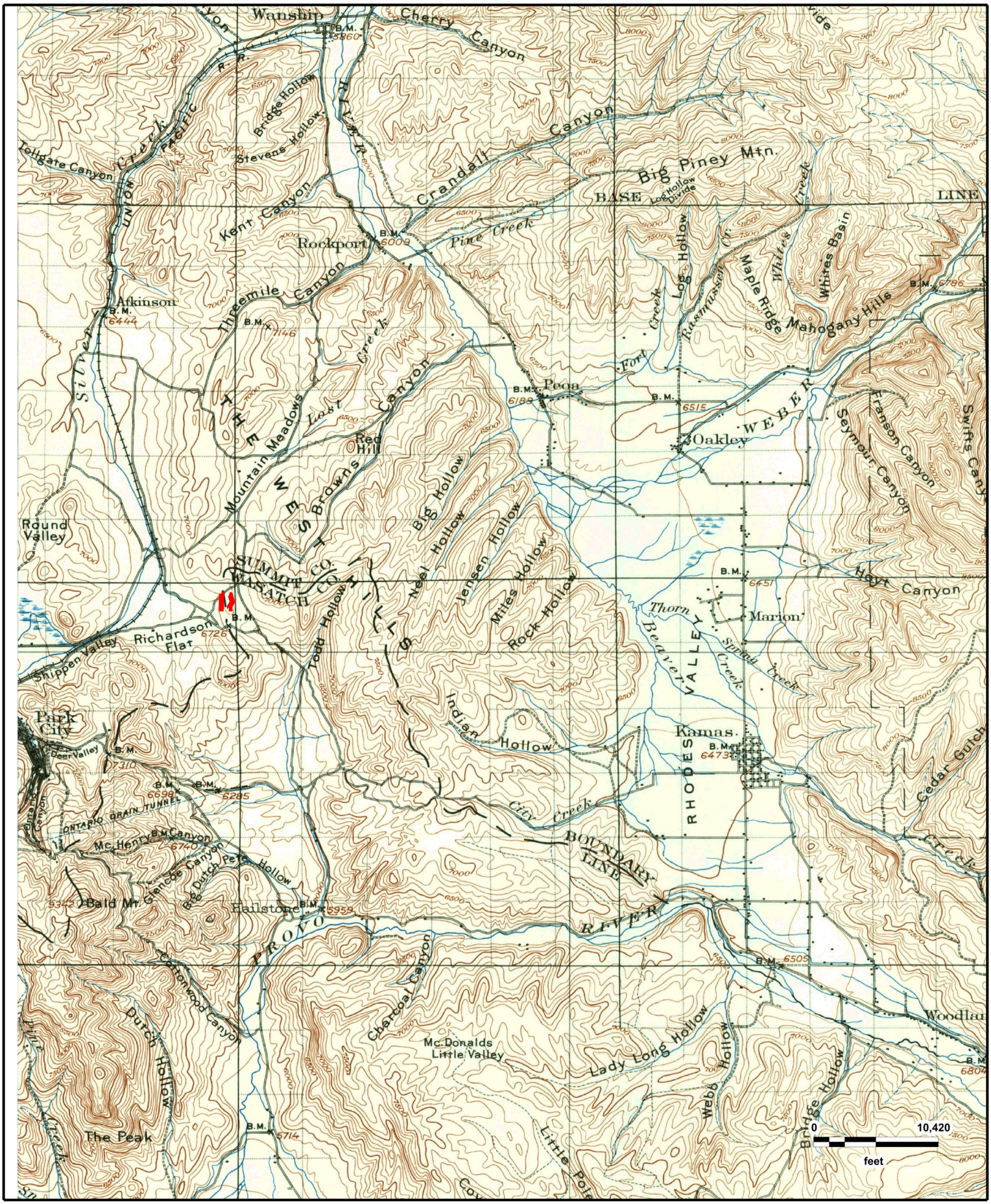
Richardson Flats Parcel SS87-B-X
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355315 - 06/04/2020



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Richardson Flats Parcel SS87-B-X
COALVILLE, UT (1900)

GeoSearch

JOB #: 355315 - 06/04/2020

GeoSearch
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FIM Abstract

Satellite view

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355319
Project #: 14716
PO #: 14716
Date: 06/05/2020

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Target Property Summary 1

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

Located Sites Summary

No Records Found.

APPENDIX C

RADIUS MAP
REPORT

GeoSearch
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Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355313
Project #: 14716
PO #: 14716
Date: 06/04/2020

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43777, 40.6783638)
6,771 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060, 84098
Peoa UT: 84061

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	1	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		2	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	1	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	0	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		2	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	1	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	

TOTAL		5	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	1	NS	NS	NS	1
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**0**	**0**	**1**	**0**	**NS**	**NS**	**1**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**1**	**0**	**0**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	1	0	0	NS	1
SUB-TOTAL		0	0	4	0	0	0	4

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**0**	**0**	**1**	**0**	**NS**	**NS**	**1**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**

SUB-TOTAL		0	0	1	0	0	0	1

Database Radius Summary

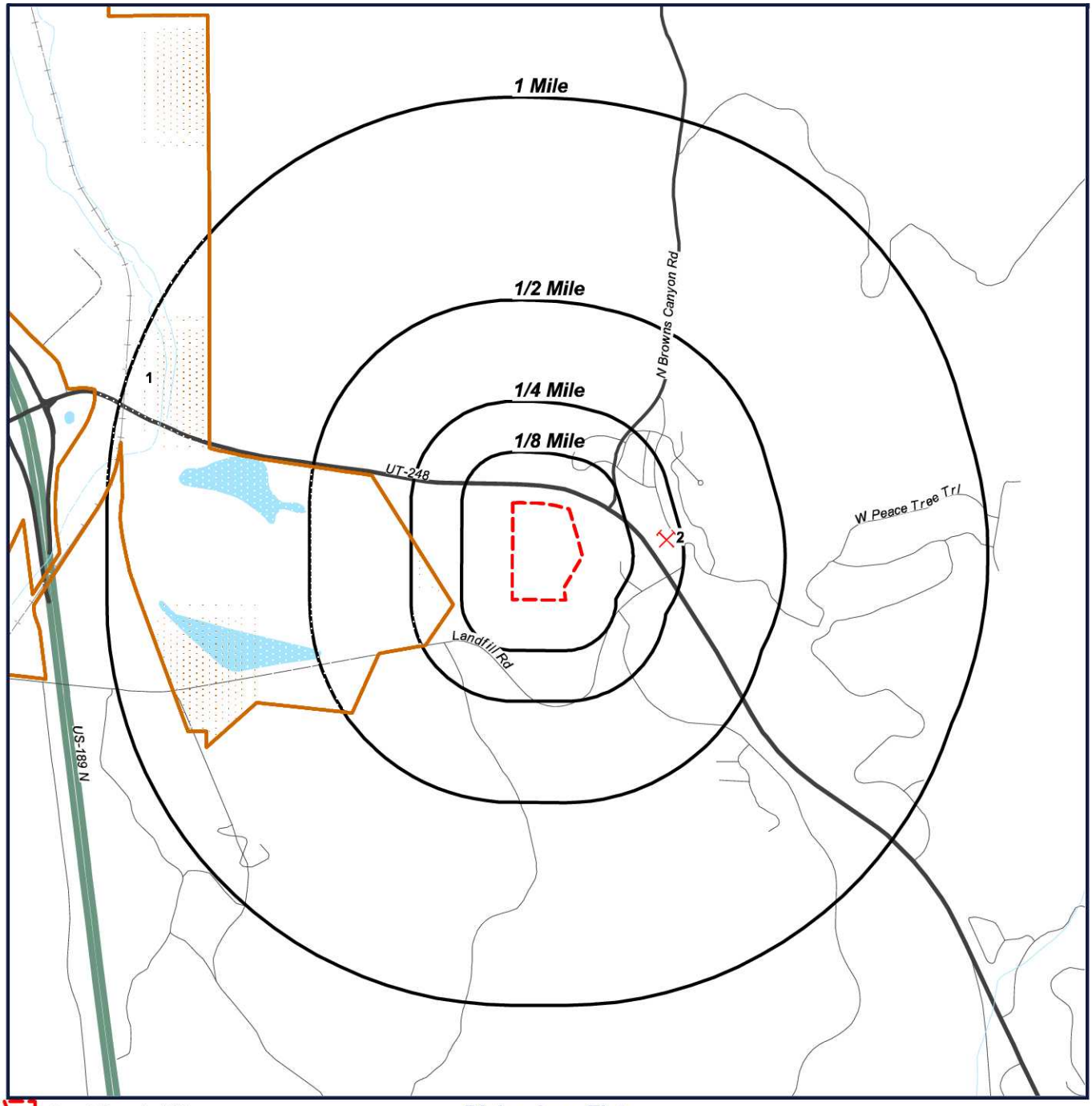
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	5	0	0	0	5

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



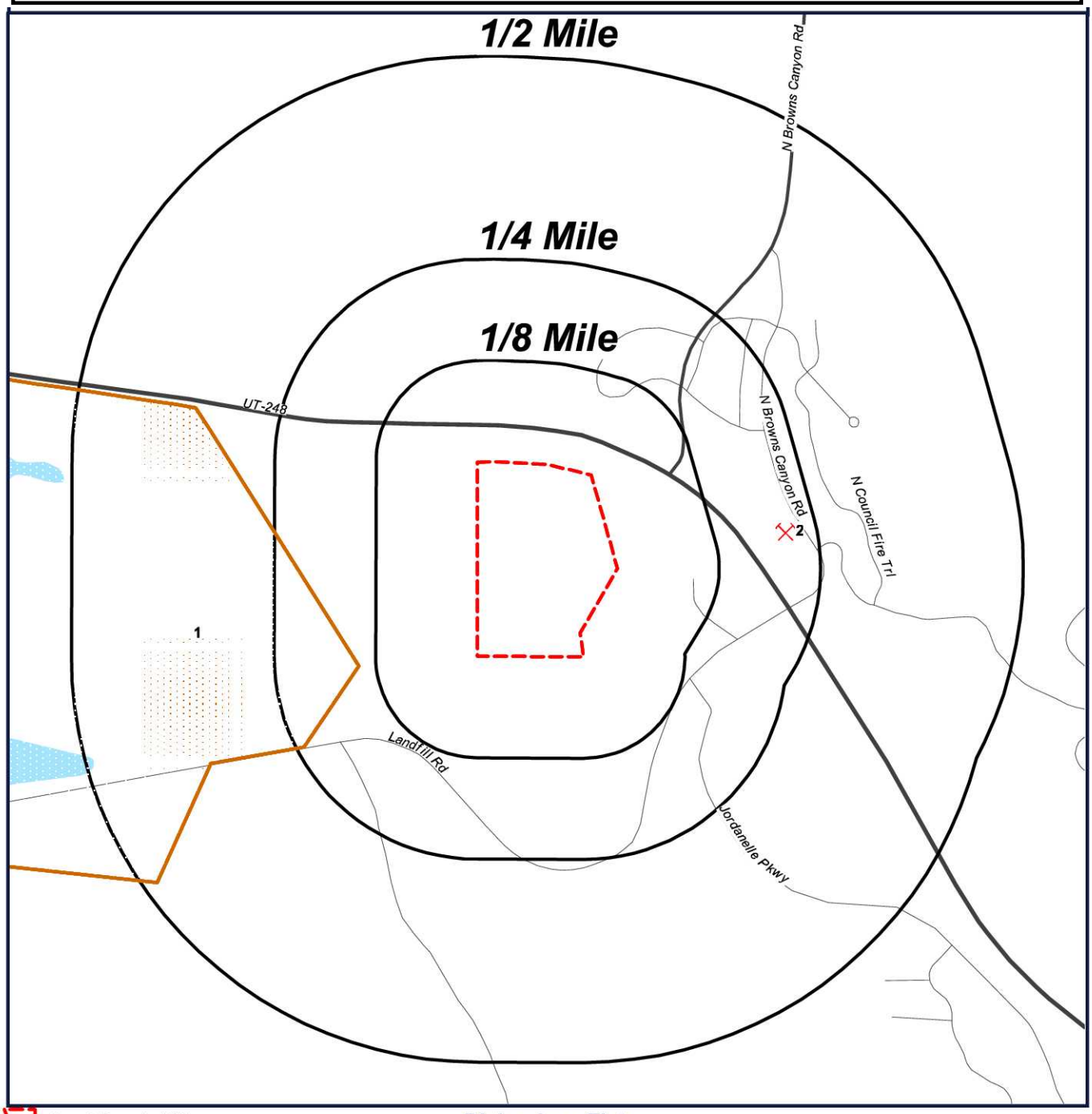
Target Property (TP)
MSHA
CERCLIS
SEMS
RODS

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



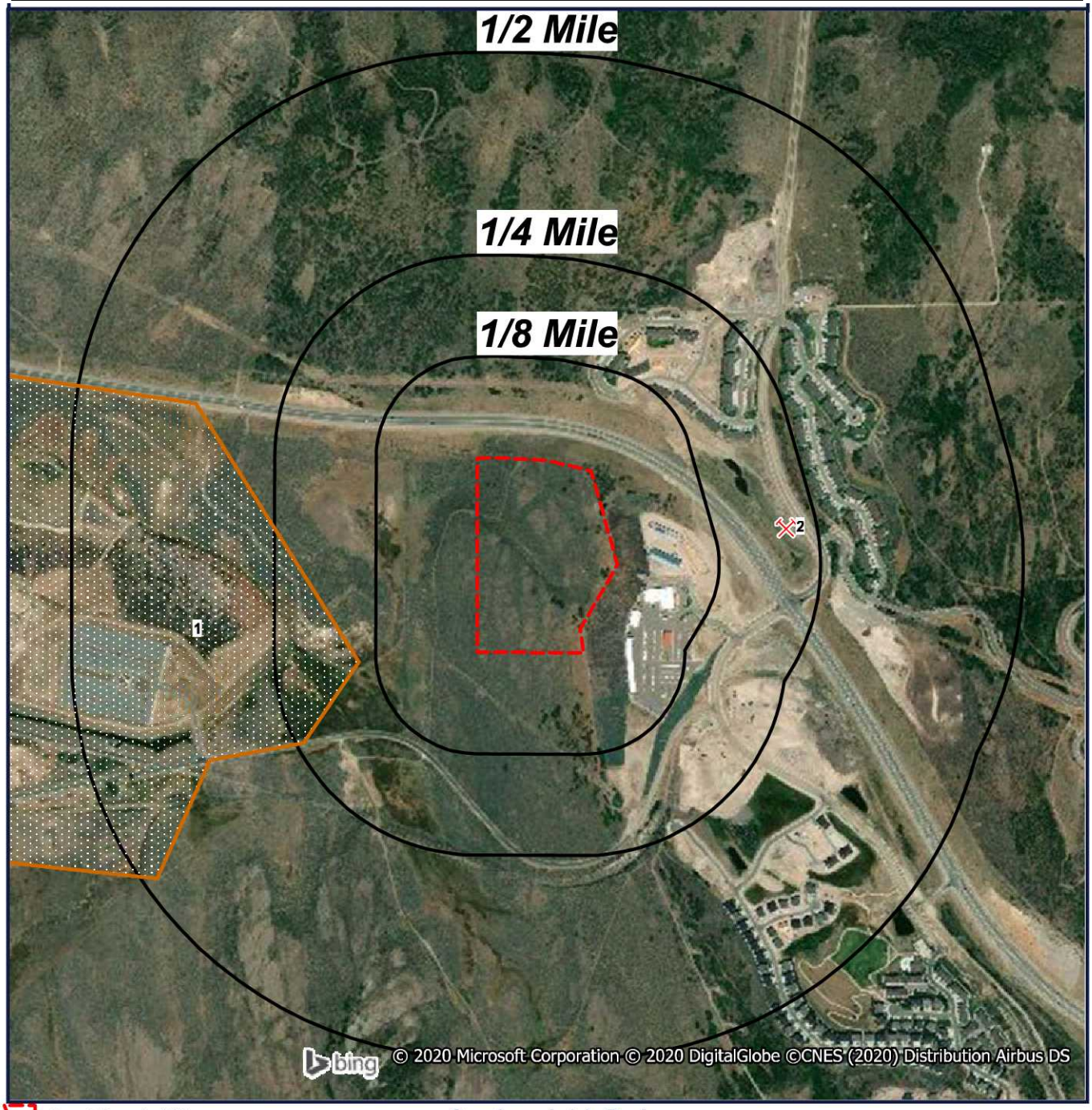
Target Property (TP)
PNPL
CERCLIS
SEMS
RODS
MSHA

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Ortho Map



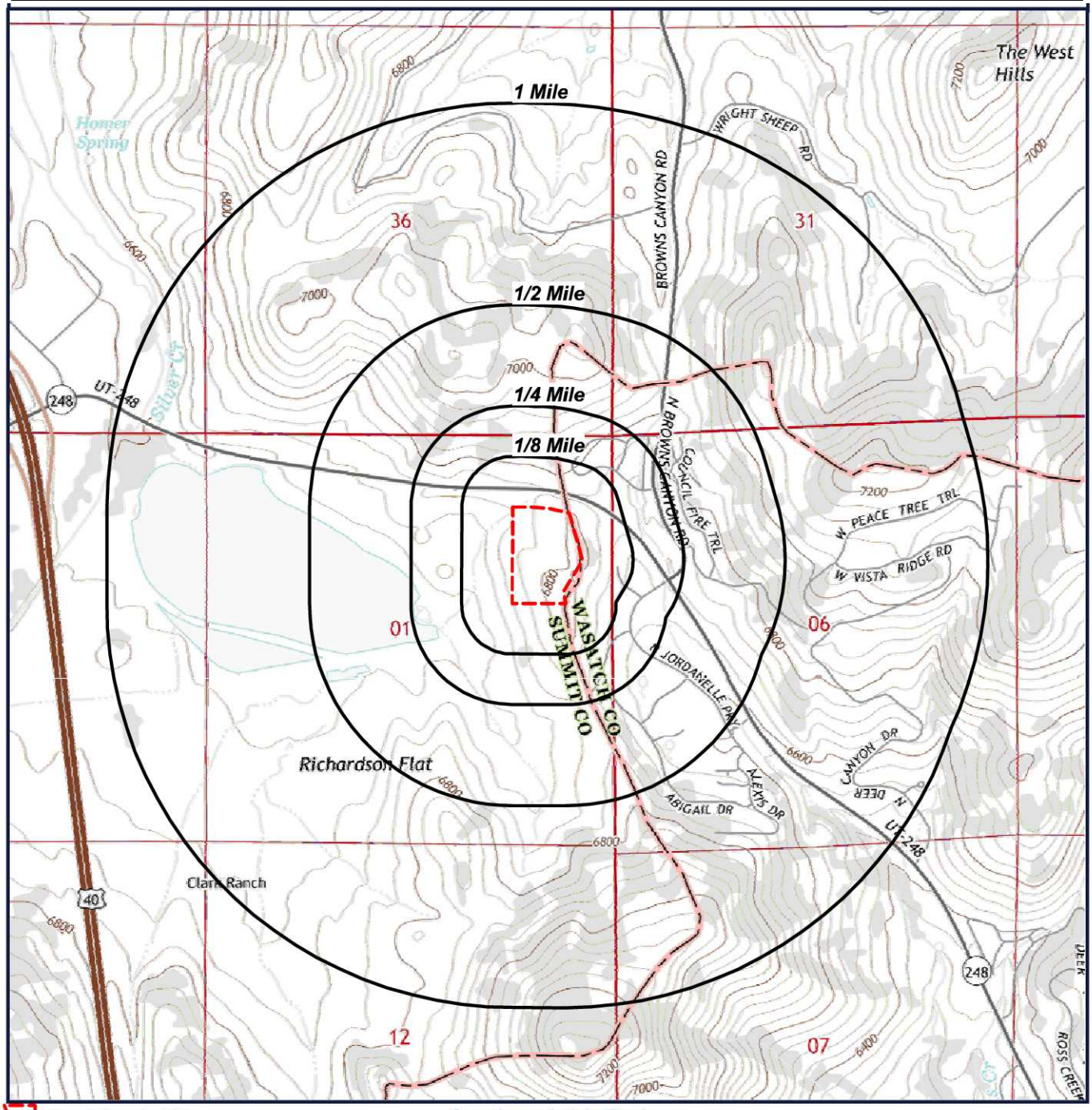
Target Property (TP)
PNPL
CERCLIS
SEMS
RODS
MSHA

Quadrangle(s): Park City East Richardson Flats
Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Topographic Map



Target Property (TP)

Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats
Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	***17***
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
1	RODS	UTD980952840	Lower (6,494 ft.)	0.146 mi. W (771 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28
1	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***29***
2	MSHA	4202121	Lower (6,705 ft.)	0.213 mi. E (1125 ft.)	MOUNTAIN VALLEY STONE INC	3 MILES EAST OF PARK CITY, UTAH, HEBER, UT	43

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	***CERCLIS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***
2	MSHA	4202121	Lower (6,705 ft.)	0.213 mi. E (1125 ft.)	MOUNTAIN VALLEY STONE INC	3 MILES EAST OF PARK CITY, UTAH, HEBER, UT
1	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
1	RODS	UTD980952840	Lower (6,494 ft.)	0.146 mi. W (771 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060
1	***SEMS***	***UTD980952840***	***Lower (6,494 ft.)***	***0.146 mi. W (771 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6771 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	***CERCLIS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***3.5 MI NE OF PARK CITY, PARK CITY, UT 84060***	***17***
1	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
1	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28
1	***SEMS***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***29***
2	MSHA	6,705 ft.	MOUNTAIN VALLEY STONE INC	3 MILES EAST OF PARK CITY, UTAH, HEBER, UT	43

MAP ID# 1

Distance from Property: 0.146 mi. (771 ft.) W
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **UTD980952840**
DERR ID: **UTD980952840**
CIMID: **490000015295**
SITE DESCRIPTION: **CERCLA**
FACILITY NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **3.5 MI NE OF PARK CITY**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
PROJECT MANAGER: **MO SLAM**
CONTACT PHONE: **8015364178**
PROJECT DESCRIPTION: **THE RICHARDSON FLAT TAILINGS SITE CONSISTS OF 160 ACRES. FROM 1975 UNTIL 1981, MINE TAILINGS FROM THE KEETLY ONTARIO MINE AND OTHER MINING OPERATIONS IN THE AREA WERE DISPOSED OF AT THE SITE AND CURRENTLY RANGE UP TO 10 FEET IN DEPTH. UNTIL 1987, MINE TAILINGS WERE REMOVED FROM THE SITE AND USED AS BACKFILL FOR SEWER CONSTRUCTION PROJECTS. CURRENTLY, MINE TAILINGS AT THE SITE ARE BEING COVERED BY SOIL EXCAVATED FROM ON-SITE AREAS. SITE FEATURES INCLUDE A POND THAT COVERS THE NORTHEASTERN CORNER OF THE SITE AND IS CONTAINED BY A DAM AT THE NORTHWESTERN CORNER, AND A DITCH IN THE CENTRAL PORTION OF THE SITE.**
EMERGENCY RESPONSE BRANCH: **NO**
NATIONAL PRIORITY LIST: **NO**
PROPOSED FOR NPL: **YES**
ARCHIVED FOR CERCLIS: **NO**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.146 mi. (771 ft.) W
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

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AREA OF SITE FOUND (OU):

Back to Report Summary

MAP ID# 1

Distance from Property: 0.146 mi. (771 ft.) W
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

MAP ID# 1

Distance from Property: 0.146 mi. (771 ft.) W
Elevation: 6,494 ft. (Lower than TP)

FACILITY INFORMATION

EPA ID#: **UTD980952840**
SITE ID#: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060
COUNTY: **SUMMIT**
FEDERAL FACILITY: **NO - NOT A FEDERAL FACILITY**
NPL: **PROPOSED FOR NPL**
NON NPL STATUS: **NOT REPORTED**

Below information was gathered from the prior CERCLIS update completed in 10/2013 update:
NON-NPL STATUS DATE: **NOT REPORTED**
PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MINES/TAILINGS**

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
06/24/1988	**53**	**23988**	**PROPOSED TO THE FINAL NPL**	**39.13000**
02/11/1991	**56**	**5598**	**REMOVED FROM PROPOSED TO THE NPL**	**50.20000**
02/07/1992	**57**	**4824**	**PROPOSED TO THE FINAL NPL**	**39.13000**

SITE DESCRIPTION

THE RICHARDSON FLAT TAILINGS (RFT) SITE (SITE) IS LOCATED 1.5 MILES NORTHEAST OF PARK CITY, UTAH, AND IS PART OF A 650 ACRE PROPERTY OWNED BY UNITED PARK CITY MINES (UPCM) COMPANY. THE SITE IS A TAILINGS IMPOUNDMENT THAT COVERS 160 ACRES IN THE NORTHWEST CORNER OF THE PCM PROPERTY, A SMALL PORTION OF THE MUCH LARGER UPPER SILVER CREEK WATERSHED. SILVER CREEK IS THE PRIMARY SURFACE WATER SOURCE FOUND IN THE AREA AND IS COMPRISED OF RUNOFF FROM THREE SIGNIFICANT DRAINAGES IN THE WATERSHED, INCLUDING ONTARIO CANYON, EMPIRE CANYON AND DEER VALLEY. SILVER CREEK IS CURRENTLY LISTED ON UTAH'S 303(D) LIST FOR ZINC AND CADMIUM AND IS TARGETED FOR TOTAL MAXIMUM DAILY LOAD (TMDL) DEVELOPMENT. HISTORIC MINING ACTIVITIES IN THE CANYONS LEFT BEHIND SIX ACTIVE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS) SITES, INCLUDING EMPIRE CANYON, SILVER CREEK TAILINGS, AND SILVER MAPLE CLAIMS, EACH ONE IMPACTING SILVER CREEK IN SOME WAY. WHILE ZINC AND CADMIUM ARE THE PRIMARY HEAVY METALS FOUND IN SILVER CREEK, LEAD AND ARSENIC ARE THE MAIN CONTAMINANTS IN THE SEDIMENTS AND SOILS OF THE WATERSHED. BECAUSE OF THE VOLUME OF MINING ACTIVITY THROUGHOUT THE DISTRICT AND THE DYNAMICS OF THE WATERSHED HYDROGEOLOGY, IT IS DIFFICULT TO TARGET ANY ONE SITE AS THE MAIN SOURCE OF CONTAMINATION AFFECTING SILVER CREEK AND THE ENVIRONMENTAL MEDIA WITHIN THE WATERSHED. THE OVERALL REMEDIAL GOAL FOR THE WATERSHED IS TO CLEAN UP THE SURROUNDING SITES, INCLUDING THE SITE, THEREBY ELIMINATING CURRENT AND FUTURE HAZARDS TO HUMAN HEALTH AND WELFARE AND THE SURROUNDING ENVIRONMENT.

THE RFT SITE IS A GEOMETRICALLY CLOSED BASIN, BOUND BY HIGHWAY 248 TO THE NORTH, A MAIN EMBANKMENT TO THE WEST, AND DIVERSION DITCHES TO THE SOUTH AND THE NORTHEAST. SILVER CREEK CAN BE FOUND ON THE NORTHWEST BORDER OF THE SITE, SEPARATED FROM THE SITE BY A SMALL STRETCH OF WETLANDS AND RIPARIAN VEGETATION. THE IMPOUNDMENT WAS USED AS A MINE TAILINGS RESERVOIR PRIOR TO 1950. THE SITE NOW HOUSES APPROXIMATELY SEVEN MILLION TONS OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING ZINC, SILVER, LEAD, AND OTHER METALS. USE OF THE SITE BY UPCM ENDED IN 1982. TO DATE, THE SITE IS NOT LISTED ON THE NATIONAL PRIORITIES LIST (NPL). THE SITE WAS CONSIDERED FOR LISTING IN BOTH 1988 AND 1992. UPCM, THE PRIMARY POTENTIALLY RESPONSIBLE PARTY (PRP), HAS TAKEN RESPONSIBILITY FOR FUNDING THE MAJORITY OF THE REMEDIAL

ACTION AT THE SITE.

THE SITE, AND MUCH OF THE SURROUNDING AREA, IS PRIVATELY OWNED BY UPCM. UPCM HAS CONSISTENTLY INDICATED A DESIRE TO RETAIN TITLE AND LIMIT FUTURE USE TO RECREATIONAL ACTIVITIES AT THE SITE. WHILE NO FINAL DECISION HAS BEEN MADE, USES THAT RANGE FROM OPEN SPACE WILDLIFE HABITAT TO ATHLETIC FIELDS ARE CURRENTLY BEING DISCUSSED. ANY TYPE OF RECREATIONAL USE IS CONSISTENT WITH SURROUNDING LAND USES, AND BOTH PARK CITY AND SUMMIT COUNTY HAVE INDICATED GENERAL AGREEMENT WITH RECREATIONAL PROPOSALS. PARK CITY IS PROACTIVE IN OBTAINING AND PRESERVING OPEN SPACE. THERE IS NO INDICATION THAT HIGHER USES OF THE LAND, SUCH AS RESIDENTIAL, ARE REASONABLY FORESEEABLE.

THE SURFACE WATER FEATURES AT THE SITE, INCLUDING THE SOUTH DIVERSION DITCH, THE WETLANDS AREA BELOW THE EMBANKMENT, THE SITE POND AND SILVER CREEK ARE USED AS HABITAT BY A LIMITED NUMBER OF VEGETATIVE SPECIES, FISH, AND WILDLIFE. ALL OF THE SURFACE WATER AND SHALLOW GROUND WATER ON THE SITE EVENTUALLY DISCHARGES TO SILVER CREEK. SILVER CREEK IS CLASSIFIED BY THE STATE OF UTAH AS A POTENTIAL DRINKING WATER SOURCE, A RECREATIONAL USE FEATURE, A COLD WATER FISHERY, AND A POTENTIAL IRRIGATION SOURCE. AT PRESENT, SILVER CREEK IS USED FOR IRRIGATION AND RECREATIONAL FISHING ONLY, AND NO CHANGES ARE EXPECTED. THE STATE OF UTAH IS CONSIDERING ISSUING AN ADVISORY AGAINST FISHING DUE TO ELEVATED METAL LEVELS IN SILVER CREEK. SILVER CREEK IS LISTED ON THE STATE'S CLEAN WATER ACT SECTION 303(D) LIST OF IMPAIRED WATER BODIES BECAUSE ZINC AND CADMIUM LEVELS EXCEED CHRONIC STANDA RDS FOR PROTECTION OF AQUATIC WILDLIFE.

SILVER CREEK HAS BEEN IMPACTED BY THE LEGACY OF MINING ACTIVITIES, THOUGH THE REMEDIAL INVESTIGATION CONFIRMED THAT THE SITE IS NOT, AT PRESENT, A SIGNIFICANT CONTRIBUTOR OF METALS TO THE CREEK. THE GOAL IS TO REMEDIATE THE ENTIRE WATERSHED, IMPROVING THE ECOLOGICAL QUALITY OF THE AREA, THEREBY ALLOWING FOR CONTINUED BENEFICIAL USE OF THE WATERSHED AND THE SITE BY A VARIETY OF LIVING ORGANISMS.

GROUND WATER IN THE IMMEDIATE AREA IS USED ONLY FOR PRIVATE WELLS, AND NO WELLS ARE KNOWN TO BE LOCATED WITHIN A HALF MILE OF THE SITE. MOST AREA DRINKING WATER WELLS ARE FINISHED IN THE DEEPER CONSOLIDATED SEDIMENTARY ROCKS THAT CAN SUSTAIN AQUIFERS AND PRODUCE SUFFICIENT YIELDS FOR CULINARY WELLS. IN THE SITE AREA, THESE FORMATIONS ARE VERY DEEP AND ARE COVERED BY THE KEETLEY VOLCANICS.

THE VOLCANIC ROCKS ARE GENERALLY NOT SUITABLE TO SUSTAIN AQUIFERS AND SERVE AS MORE OF A CONFINING UNIT. THE SHALLOW GROUND WATER AT THE SITE IS GENERALLY ASSOCIATED WITH THE ALLUVIAL SYSTEM OF SILVER CREEK. THIS WATER IS VERY HIGH IN SOLIDS AND IS ALSO OFTEN CONTAMINATED DUE TO WATER QUALITY IN SILVER CREEK AND TAILINGS THAT ARE PRESENT ALONG THE CREEK IN MANY AREAS. THERE ARE NO KNOWN USES FOR THIS WATER AT THIS TIME.

IN 1953, UPCM WAS FORMED THROUGH THE CONSOLIDATION OF SILVER KING COALITION MINES COMPANY AND PARK UTAH CONSOLIDATED MINES COMPANY. AT THAT TIME, THE SITE WAS ALREADY BEING USED AS AN IMPOUNDMENT FOR MINE TAILINGS CONSISTING PRIMARILY OF SAND-SIZED CARBONACEOUS PARTICLES AND MINERALS CONTAINING LEAD, ZINC, SILVER AND OTHER METALS. ADDITIONALLY, TAILINGS WERE TRANSPORTED TO AND PLACED IN SEVERAL DISTINCT LOW ELEVATION AREAS IN THE SOUTHEAST PORTION OF THE SITE JUST OUTSIDE OF THE MAIN IMPOUNDMENT.

IN 1970, WITH RENEWED MINING ACTIVITY IN THE AREA, PARK CITY VENTURES (PCV), A JOINT VENTURE PARTNERSHIP BETWEEN ANACONDA COPPER COMPANY AND AMERICAN SMELTING COMPANY (ASARCO), ENTERED INTO A LEASE AGREEMENT WITH UPCM. THIS AGREE MENT ALLOWED PCV TO DEPOSIT ADDITIONAL MINE TAILINGS AT THE SITE; HOWEVER, THE SITE HAD TO BE PARTIALLY RECONSTRUCTED. DESIGN, CONSTRUCTION AND OPERATION SPECIFICATIONS WERE APPROVED BY THE STATE OF UTAH. THESE SPECIFICATIONS INCLUDED INSTALLATION OF A LARGE EMBANKMENT ALONG THE WESTERN EDGE OF THE IMPOUNDMENT, AND CONSTRUCTION OF CONTAINMENT DIKE STRUCTURES ALONG THE SOUTHERN AND EASTERN BOARDERS OF THE SITE FOR ADDITIONAL TAILINGS STORAGE. PCV ALSO CREATED A DIVERSION DITCH SYSTEM ALONG THE HIGHER SLOPES NORTH OF THE IMPOUNDMENT AND OUTSIDE

OF THE CONTAINMENT DIKES ALONG THE EAST AND SOUTH PERIMETERS OF THE IMPOUNDMENT TO COLLECT SURFACE RUN OFF. AS PART OF THE APPROVAL PROCESS FOR THE RENEWED USE OF THE SITE, THE STATE OF UTAH REQUIRED INSTALLATION OF GROUNDWATER MONITORING WELLS NEAR THE BASE OF THE MAIN EMBANKMENT.

OVER THE COURSE OF PVC'S USE OF THE SITE, ABOUT 450,000 TONS OF TAILINGS WERE DEPOSITED AT THE SITE THROUGH A SLURRY PIPELINE THAT ORIGINATED AT THEIR MILL FACILITY. IT WAS RECOMMENDED THAT THE TAILINGS BE DEPOSITED AROUND THE PERIMETER OF THE SITE, MOVING TOWARDS THE CENTER OF THE SITE OVER TIME. HOWEVER, PVC CHOSE TO DEPOSIT THE TAILINGS FROM THE SLURRY PIPELINE IN ONE CONSTANT AREA IN THE CENTER OF THE IMPOUNDMENT, CREATING A STEEP, CONE-LIKE STRUCTURE IN THE MIDDLE OF THE IMPOUNDMENT. AFTER PVC DISCONTINUED THEIR USE OF THE SITE IN 1982, HIGH WINDS CAUSED TAILINGS FROM THE CONE-SHAPED FEATURE TO BECOME AIRBORNE, CREATING A POTENTIALLY SIGNIFICANT EXPOSURE PATHWAY. THESE OPERATIONS SHAPED THE TOPOGRAPHY OF THE IMPOUNDMENT WHICH STILL EXISTS TODAY.

FROM 1980 TO 1982, NORANDA MINING, INC. LEASED THE MINING AND MILLING OPERATIONS AND PLACED AN ADDITIONAL 70,000 TONS OF TAILINGS AT THE SITE. SINCE THEN NO FURTHER USE OF THE SITE HAS OCCURRED, BUT UPCM BEGAN TAKING ACTIONS AIMED AT IMPROVING ENVIRONMENTAL CONDITIONS OF THE SITE ALMOST IMMEDIATELY AFTER OPERATIONS STOPPED. THIS WORK CONTINUED INTERMITTENTLY THROUGH THE MID-1990S.

EPA BECAME AWA RE OF THE SITE IN THE MID-1980S. AFTER INITIAL SITE ASSESSMENT WORK, EPA PROPOSED THE SITE FOR LISTING ON THE NPL IN 1988. AFTER CONSIDERING PUBLIC COMMENT, EPA DID NOT PURSUE THE SITE FOR LISTING ON THE NPL. BY 1992, THE HAZARD RANKING SYSTEM (HRS) HAD BEEN REVISED AND EPA AGAIN PROPOSED THE SITE FOR LISTING ON THE NPL. ULTIMATELY, EPA DECIDED NOT TO PURSUE FINAL LISTING ON THE NPL, AND THE SITE REMAINS PROPOSED FOR THE NPL AT THIS TIME.

SUBSEQUENT TO THE SECOND NPL PROPOSAL, THE EPA REGION 8 SUPERFUND EMERGENCY RESPONSE BRANCH CONDUCTED AN INVESTIGATION UNDER THE "MAKE SITES SAFE" INITIATIVE IN 1993. THIS INVESTIGATION CONCLUDED THAT CONDITIONS OF THE SITE DID NOT WARRANT EMERGENCY REMOVAL ACTIONS, BUT MAY PRESENT UNACCEPTABLE RISKS TO HUMAN HEALTH AND THE ENVIRONMENT AND SHOULD BE ADDRESSED THROUGH LONG-TERM REMEDIAL ACTION.

THROUGHOUT THE 1990S, EPA AND THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY (UDEQ) WERE HOPING UPCM WOULD ADDRESS THE SITE THROUGH THE UTAH VOLUNTARY CLEANUP PROGRAM. UPCM DECIDED AGAINST THIS, BUT AT THE SAME TIME CONTINUED TO VOLUNTARILY TAKE STEPS TO IMPROVE ENVIRONMENTAL CONDITIONS AT THE SITE. ADDITIONALLY, UPCM BEGAN COLLECTING HYDROGEOLOGIC DATA, WHICH WAS USED TO BETTER UNDERSTAND THE GROUNDWATER FLOW AND DEPTH OF TAILINGS AT THE SITE. IN 1999, EPA, UDEQ, UPCM, PARK CITY MUNICIPAL CORPORATION, AND OTHER STAKEHOLDERS FORMED THE UPPER SILVER CREEK WATERSHED STAKEHOLDER'S GROUP (USCWSG). THIS COMMUNITY-BASED ORGANIZATION WAS FORMED TO HELP EPA ADDRESS SUPERFUND-RELATED ENVIRONMENTAL ISSUES IN THE PARK

CITY AREA IN A COOPERATIVE FASHION, INCLUDING ISSUES RELATED TO THE SITE. THE USCWSG HAS BEEN VERY SUCCESSFUL AND SEVERAL INVESTIGATIONS AND CLEANUPS HAVE OCCURRED IN PARK CITY AS A RESULT. EARLY IN USCWSG'S HISTORY, UPCM AND EPA AGREED TO ADDRESS THE SITE AS AN "NPL EQUIVALENT" SITE, USING THE SAME PROCESS FOR INVESTIGATION AND CLEANUP THAT IS REQUIRED FOR A NPL SITE.

EPA AND UPCM SIGNED AN ADMINISTRATIVE ORDER ON CONSENT (AOC) ON SEPTEMBER 28, 2000 WHICH CALLED FOR UPCM TO CONDUCT A REMEDIAL INVESTIGATION/ FOCUSED FEASIBILITY STUDY (RI/FFS) FOR THE SITE. EPA AND UPCM HAVE CONTINUOUSLY WORKED WELL TOGETHER SINCE THE INCEPTION OF THE USCWSG, AND BECAUSE OF THIS, EPA WAS ABLE TO EMPLOY INCREASINGLY REDUCED OVERSIGHT FOR THE RI/FFS AS IT PROGRESSED.

EPA CONDUCTED TWO POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCHES FOR THE SITE THAT IDENTIFIED SEVERAL PARTIES THAT MAY HAVE SOME LIABILITY FOR CLEANUP OF THE SITE. THE SITE OWNER, UPCM, HAS CONDUCTED THE

RI/FFS PURSUANT TO AN ADMINISTRATIVE ORDER ON CONSENT (AOC). EPA HAS BEEN FACILITATING THE ALLOCATION OF COSTS OF INVESTIGATION AND CLEANUP BETWEEN THE PRP'S AND UPCM HAS INDICATED ITS WILLINGNESS TO ENTER INTO A CONSENT DECREE (CD) WITH EPA FOR CONDUCT OF REMEDIAL DESIGN AND REMEDIAL ACTION.

THE SITE IS LOCATED IN A RURAL AREA WITHIN A BROAD VALLEY OF MOSTLY UNDEVELOPED RANGELAND WITHIN THE SILVER CREEK WATERSHED, APPROXIMATELY TWO MILES OUTSIDE THE PARK CITY LIMITS. THE DEER VALLEY AND PARK CITY SKI RESORTS SIT AT THE TOP OF THE WATERSHED AND SERVE AS RECREATIONAL USE AREAS FOR SKIERS IN THE WINTER AND BIKERS/HIKERS IN THE WARMER MONTHS. AS SILVER CREEK PASSES THROUGH PARK CITY AND INTO THE SURROUNDING SUBURBAN AREAS, THE LAND USE IS PRIMARILY RESIDENTIAL AND COMMERCIAL, CHANGING TO RECREATIONAL AND AGRICULTURAL IN THE AREAS SURROUNDING RICHARDSON FLAT.

MOST OF THE LAND AROUND THE SITE IS UNDEVELOPED OPEN SPACE. MINING ACTIVITIES AT THE SITE CEASED IN 1982. SINCE THAT TIME, THE SITE HAS NOT BEEN USED AND HAS REMAINED OPEN SPACE. A SMALL RECREATIONAL TRAIL SKIRTS THE SITE ALONG SILVER CREEK. THERE ARE A FEW SMALL INDUSTRIAL OPERATIONS IN THE VICINITY OF THE SITE, INCLUDING A CONCRETE PLANT ON A NEARBY PARCEL. PARK CITY AND OTHER RESORT-LIKE RESIDENTIAL DEVELOPMENTS ARE EXPANDING IN THE GENERAL AREA, BUT NONE ARE CLOSER THAN ONE MILE AWAY.

A RECORD OF DECISION (ROD) ADDRESSING OPERABLE UNIT (OU) 1 WAS COMPLETED ON JULY 6, 2005.

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

TYPE: **NR - REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/11/1991**
ACTION TYPE DEFINITION:
SITE REMOVED FROM THE PROPOSED LIST BEFORE ACHIEVING FINAL STATUS, OR REMOVED FROM THE FINAL LIST.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/24/1988**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **03/13/2009**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **08/28/2007**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**

ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/05/2006**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/13/1987**
COMPLETION DATE: **07/14/1988**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/15/1991**
ACTION TYPE DEFINITION:
A NUMERIC ESTIMATE OF THE RELATIVE SEVERITY OF A HAZARDOUS SUBSTANCE RELEASE OR POTENTIAL RELEASE BASED ON: (1) THE RELATIVE POTENTIAL OF SUBSTANCES TO CAUSE HAZARDOUS SITUATIONS; (2) THE LIKELIHOOD AND RATE AT WHICH THE SUBSTANCES MAY AFFECT HUMAN AND ENVIRONMENTAL RECEPTORS; AND (3) THE SEVERITY AND MAGNITUDE OF POTENTIAL EFFECTS. THE SCORE IS COMPUTED USING THE HAZARD RANKING SYSTEM (HRS).

TYPE: **SG - SPECIAL NOTICE ISSUED**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/10/1989**
ACTION TYPE DEFINITION:
ISSUANCE UNDER CERCLA SECTION 122 OF A SPECIAL NOTICE LETTER TO POTENTIALLY RESPONSIBLE PARTIES (PRPS). THE ISSUANCE OF A SPECIAL NOTICE LETTER BY EPA TRIGGERS A NEGOTIATION MORATORIUM. SPECIAL NOTICE LETTERS CAN BE ISSUED FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS.

TYPE: **JF - ECOLOGICAL RISK ASSESSMENT**
START DATE: **05/01/2001**
COMPLETION DATE: **01/30/2004**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO ECOLOGICAL RECEPTORS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **08/23/1991**
COMPLETION DATE: **12/07/1992**
ACTION TYPE DEFINITION:

THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **11/20/2008**
COMPLETION DATE: **09/30/2009**
ACTION TYPE DEFINITION:
THE NATIONAL PRIORITY LIST (NPL) POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS USED TO IDENTIFY PRPS AT A FINAL NPL OR PROPOSED NPL SITE. ACTIONS TYPICALLY INCLUDE TITLE SEARCH, FINANCIAL ASSESSMENTS, AND REVIEW OF APPLICABLE RECORDS. THE NPL PRP SEARCH SHOULD BEGIN UPON COMPLETION OF THE SCREENING SITE INVESTIGATION AND SHOULD BE CONDUCTED CONCURRENT WITH THE NATIONAL PRIORITIES LISTING PROCESS.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **12/01/1984**
ACTION TYPE DEFINITION:
COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

TYPE: **FN - REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
START DATE: **06/07/2000**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
DISCUSSIONS BETWEEN EPA AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) ON LIABILITY FOR AND CONDUCT OF A REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **08/30/1990**
COMPLETION DATE: **08/30/1990**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT**
START DATE: **04/26/1996**
COMPLETION DATE: **08/15/2001**
ACTION TYPE DEFINITION:
FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: **SI - SITE INSPECTION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/03/1992**
ACTION TYPE DEFINITION:
THE PROCESS OF COLLECTING SITE DATA AND SAMPLES TO CHARACTERIZE THE SEVERITY OF THE HAZARD FOR THE

HAZARD RANKING SCORE AND/OR ENFORCEMENT SUPPORT.

TYPE: **SV - SECTION 107 LITIGATION**
START DATE: **12/09/2005**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL REFERRAL UNDER S107 TO RECOVERY FROM POTENTIALLY RESPONSIBLE PARTIES (PRPS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **01/04/2007**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **07/24/2008**
COMPLETION DATE: **01/20/2009**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **09/25/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RO - RECORD OF DECISION**
START DATE: **NOT REPORTED**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
THE FINAL RECORD OF DECISION (ROD) IS SIGNED BY THE APPROPRIATE AGENCY INDICATING THAT THE AGENCY HAS CHOSEN THE REMEDY FOR SITE REMEDIATION. ROD SIGNATURE IS SIGNIFIED BY THE COMPLETE DATE.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
START DATE: **02/07/2008**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL ACTION (RA), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/07/1992**

ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/28/2000**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/29/2009**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NOT REPORTED**
COMPLETION DATE: **02/19/2013**
ACTION TYPE DEFINITION:
A VOLUNTARY AND ENFORCEABLE AGREEMENT PURSUANT TO CERCLA, SIGNED BY EPA AND POTENTIALLY RESPONSIBLE PARTIES (PRPS), WHEREBY THE PRPS AGREE TO PERFORM AND/OR PAY FOR SOME OR ALL OF THE RESPONSE COSTS INVOLVED IN SITE CLEANUP. THE ORDER DESCRIBES THE PRP RESPONSE TO BE TAKEN AT A SITE, STIPULATED PENALTIES, INDEMNIFICATION, EFFECTIVE DATE, AND MAY BE SUBJECT TO PUBLIC COMMENT. IT CAN BE FOR REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), REMEDIAL DESIGN (RD), AND REMEDIAL ACTION (RA),PRE-SARA; BUT ONLY REMOVAL AND RI/FS, POST-SARA.

TYPE: **AD - ALTERNATIVE DISPUTE RESOLUTION**
START DATE: **03/06/2006**
COMPLETION DATE: **12/08/2006**
ACTION TYPE DEFINITION:
DECISION TO TAKE COST RECOVERY ACTION BY USE OF ALTERNATIVE DISPUTE RESOLUTION (ADR) INCLUDING MEDIATION, ARBITRATION AND MINI-TRIAL.

TYPE: **AN - REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
START DATE: **03/21/2006**

COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
DISCUSSIONS AND INFORMATION EXCHANGE BETWEEN POTENTIALLY RESPONSIBLE PARTIES (PRPS) AND EPA (OR STATE) OVER THE LIABILITY OF THE PRP, WILLINGNESS, AND ABILITY TO CONDUCT THE REMEDIAL DESIGN AND/OR THE REMEDIAL ACTION AS IDENTIFIED IN THE RECORD OF DECISION (ROD).

TYPE: **AS - AERIAL SURVEY**
START DATE: **06/30/1991**
COMPLETION DATE: **06/30/1991**
ACTION TYPE DEFINITION:
PROVIDE AERIAL PHOTOGRAPHY, MULTISPECTRAL SCANNER (MSS), FORWARD LOOKING INFRARED (FLIR), AND HISTORICAL AERIAL PHOTOGRAPHS WITH ANALYSES SUPPORT FOR REGIONAL OFFICES AND OERR REQUIREMENTS FOR PRE-REMEDIAL AND REMEDIAL ACTIONS. THE AERIAL SURVEY SUPPORT PROVIDES FOUR TYPES OF REMOTE SENSING PROJECTS: (1) EMERGENCY RESPONSE PROJECTS FOR RAPID ACQUISITION AND ASSESSMENT, (2) SINGLE DATE PROJECTS TO ACQUIRE CURRENT DATA, (3) INTENSIVE SITE ANALYSES TO ACQUIRE IMAGERY OVER A PERIOD OF TIME USINGHISTORICAL AERIAL PHOTOGRAPHS DATING BACK AS FAR AS 1920, (4) WASTE SITE INVENTORIES TO ESTABLISH BASELINE REFERENCE OVER LARGE AREAS. CERCLA HAZARDOUS WASTE SITES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/1989**
COMPLETION DATE: **07/01/1992**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/28/2000**
COMPLETION DATE: **07/06/2005**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **10/26/2012**
COMPLETION DATE: **03/14/2013**
ACTION TYPE DEFINITION:
A REVIEW THAT IS CONDUCTED AT A MINIMUM OF EVERY FIVE YEARS TO DETERMINE IF THE IMPLEMENTATION AND PERFORMANCE OF A REMEDY IS PROTECTIVE OR WILL BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

TYPE: **BE - POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**

START DATE: **08/07/2007**
COMPLETION DATE: **02/07/2008**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL DESIGN (RD), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

TYPE: **CB - CLAIM IN BANKRUPTCY PROCEEDING**
START DATE: **06/27/2006**
COMPLETION DATE: **06/05/2009**
ACTION TYPE DEFINITION:
LEGAL ACTION PERFORMED BY EPA REGIONAL ATTORNEYS TO ESTABLISH EPA AS A CREDITOR WHEN POTENTIALLY RESPONSIBLE PARTY (PRP) HAS FILED FOR BANKRUPTCY.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/10/2006**
COMPLETION DATE: **11/28/2006**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **08/07/2007**
COMPLETION DATE: **10/04/2007**
ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CD - CONSENT DECREE**
START DATE: **03/13/2009**
COMPLETION DATE: **06/05/2009**

ACTION TYPE DEFINITION:
JUDICIAL AGREEMENT BETWEEN THE FEDERAL GOVERNMENT AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) FULLY OR PARTIALLY SETTLING A CLAIM UNDER CERCLA. THIS AGREEMENT MAY SETTLE LITIGATION OR MAY BE PRESENTED CONCURRENTLY WITH THE COMPLAINT (ACHIEVED THROUGH NEGOTIATIONS). THE AGREEMENT MAY BE FOR RESPONSE WORK, COST RECOVERY, OR BOTH.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **07/21/2003**
COMPLETION DATE: **09/28/2004**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **01/08/2007**
COMPLETION DATE: **07/01/2007**
ACTION TYPE DEFINITION:
THE COMMUNITY RELATIONS ACTIVITIES, I.E., PLAN, IMPLEMENTATION AND RESPONSIVENESS SUMMARY THAT MUST BE COMPLETED AT A SITE TO ADDRESS COMMUNITY CONCERNS.

TYPE: **DS - DISCOVERY**
START DATE: **NOT REPORTED**
COMPLETION DATE: **10/01/1984**
ACTION TYPE DEFINITION:
THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

TYPE: **ED - RISK/HEALTH ASSESSMENT**
START DATE: **10/09/2001**
COMPLETION DATE: **03/15/2003**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO HUMAN HEALTH.

TYPE: **EE - ENGINEERING EVALUATION/COST ANALYSIS**
START DATE: **04/11/2013**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
STUDY TO IDENTIFY THE OBJECTIVES OF A REMOVAL ACTION AND TO ANALYZE THE COST EFFECTIVENESS AND IMPLEMENTABILITY OF THE VARIOUS ALTERNATIVES THAT MAY BE USED TO SATISFY THESE OBJECTIVES.

TYPE: **BD - POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **09/29/2009**
COMPLETION DATE: **NOT REPORTED**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMEDIAL

INVESTIGATION/FEASIBILITY STUDY (RI/FS), INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF THE RESPONSIBLE PARTIES TO DETERMINE WHETHER SUCH PERFORMANCE IS CONSISTENT WITH THE REQUIREMENTS OF THE ADMINISTRATIVE ORDERS ON CONSENT, UNILATERAL ADMINISTRATIVE ORDERS, CONSENT DECREES, JUDICIAL DECREES, INFORMATION AGREEMENTS, AND COMPLIANCE SCHEDULES.

CONTAMINANTS

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **310 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **179 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2559 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6520 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6.2 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **97 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **44560 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **32700 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM (METAL)**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2400 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5900 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **85 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL/TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **33800 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **750 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **46.3 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **260 UG/L**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **83000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT **- NOT AN INSTITUTIONAL CONTROL SITE -**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.213 mi. (1,125 ft.) E
Elevation: 6,705 ft. (Lower than TP)

FACILITY INFORMATION

MINE ID: **4202121**
MINE NAME: **MOUNTAIN VALLEY STONE INC**
DIRECTIONS TO MINE: **3 MILES EAST OF PARK CITY, UTAH**
NEAREST TOWN: **HEBER**
STATE: **UT**
COUNTY: **SUMMIT**

FACILITY DETAILS

MINE TYPE: **SURFACE**
MINE STATUS: **ACTIVE**
STATUS DATE: **01/08/2002**
COAL OR METAL\NON-METAL MINE: **METAL**
CONTROLLER ID: **M12860**
CONTROLLER NAME: **ROBERT J HICKEN; PAUL R BALLIF**
CONTROLLER BEGIN DATE: **06/01/1999**
OPERATOR ID: **L17996**
OPERATOR NAME: **MOUNTAIN VALLEY STONE, INC.**
COMPANY TYPE: **CORPORATION**
PRIMARY SIC CODE: **141100**
PRIMARY SIC DESCRIPTION: **DIMENSION STONE NEC**
SECONDARY SIC CODE: **NOT REPORTED**
SECONDARY SIC DESCRIPTION: **NOT REPORTED**
PRIMARY CANVASS: **STONE**
SECONDARY CANVASS: **NOT REPORTED**
AVERAGE MINE HEIGHT: **NOT REPORTED**
MINE GAS CATEGORY: **NOT REPORTED**
METHANE LIBERATION: **NOT REPORTED**
NUMBER OF PRODUCING PITS: **NOT REPORTED**
NUMBER OF NON-PRODUCING PITS: **NOT REPORTED**
NUMBER OF TAILING PONDS: **0**
PILLAR RECOVERY USED: **NO**
HIGHWALL MINER USED: **NO**
MULTIPLE PITS: **NO**

Optional business information that can be used for this address association to allow a different name than the Legal Entity Name

BUSINESS NAME: **MOUNTAIN VALLEY STONE, INC.**
ADDRESS: **2276 SOUTH DANIELS ROAD**
HEBER, UT 84032
COUNTRY: **USA**
PROVINCE: **NOT REPORTED**
POSTAL CODE: **NOT REPORTED**

VIOLATION DETAILS

EVENT NUMBER	VIOLATION NUMBER	VIOLATION ISSUE DATE	VIOLATION OCCUR DATE	TYPE OF CITATION	NUMBER OF PEOPLE AFFECTED	PROPOSED PENALTY	DOCKET NUMBER

0606890	6273122	06/05/2002	06/05/2002	CITATION	1	$55	NOT REPORTED
1072635	6273398	10/09/2002	10/09/2002	CITATION	1	$55	NOT REPORTED
0531265	7909385	07/26/2001	07/26/2001	CITATION	1	$55	NOT REPORTED
0531265	7909387	07/26/2001	07/26/2001	CITATION	1	$140	NOT REPORTED
1073156	6275097	04/29/2003	04/29/2003	CITATION	1	$60	NOT REPORTED
0606890	6273123	06/05/2002	06/05/2002	CITATION	1	$131	NOT REPORTED
1073156	6275098	04/30/2003	04/30/2003	CITATION	1	$60	NOT REPORTED
0509790	7909413	01/19/2000	01/19/2000	CITATION	1	$113	NOT REPORTED
0531265	7909391	07/26/2001	07/26/2001	CITATION	1	$55	NOT REPORTED
1073156	6275099	04/30/2003	04/30/2003	CITATION	1	$60	NOT REPORTED
0531265	7909390	07/26/2001	07/26/2001	CITATION	1	$55	NOT REPORTED
0606890	6273121	06/05/2002	06/05/2002	ORDER	11	$347	NOT REPORTED
0531265	7909386	07/26/2001	07/26/2001	CITATION	1	$173	NOT REPORTED
0531265	7909392	07/30/2001	07/30/2001	CITATION	1	$173	NOT REPORTED
0531265	7909389	07/26/2001	07/26/2001	CITATION	1	$55	NOT REPORTED
0509790	7909412	01/19/2000	01/19/2000	CITATION	8	$55	NOT REPORTED
0531265	7909388	07/26/2001	07/26/2001	CITATION	1	$55	NOT REPORTED
1072635	6273396	10/09/2002	10/09/2002	CITATION	1	$55	NOT REPORTED
1072635	6273395	10/09/2002	10/09/2002	CITATION	1	$55	NOT REPORTED
1072635	6273397	10/09/2002	10/09/2002	CITATION	1	$55	NOT REPORTED
0606890	6273124	06/05/2002	06/05/2002	CITATION	1	$55	NOT REPORTED
1073156	6275096	04/29/2003	04/29/2003	CITATION	1	$60	NOT REPORTED
0531265	7909393	08/01/2001	08/01/2001	CITATION	1	$55	NOT REPORTED
0606890	6273125	06/05/2002	06/05/2002	CITATION	1	$55	NOT REPORTED
1081597	6276544	09/14/2004	09/14/2004	CITATION	0	$60	NOT REPORTED
1096884	6319224	03/15/2007	03/15/2007	CITATION	0	$60	NOT REPORTED
1082268	6317085	02/02/2005	02/02/2005	CITATION	1	$165	NOT REPORTED
1096884	6319225	03/15/2007	03/15/2007	CITATION	1	$60	NOT REPORTED
1082268	6317087	02/02/2005	02/02/2005	CITATION	1	$165	NOT REPORTED
1082268	6317080	02/01/2005	02/01/2005	CITATION	0	$60	NOT REPORTED
1081597	6276543	09/14/2004	09/14/2004	CITATION	0	$60	NOT REPORTED
1082268	6317081	02/01/2005	02/01/2005	CITATION	0	$60	NOT REPORTED
1082268	6317086	02/02/2005	02/02/2005	CITATION	1	$165	NOT REPORTED
1081597	6276541	09/14/2004	09/14/2004	CITATION	1	$60	NOT REPORTED
1082268	6276067	02/01/2005	02/01/2005	CITATION	1	$203	NOT REPORTED
1082268	6276068	02/01/2005	02/01/2005	CITATION	0	$60	NOT REPORTED
1082268	6317084	02/02/2005	02/02/2005	CITATION	1	$165	NOT REPORTED
1082268	6317082	02/01/2005	02/01/2005	CITATION	0	$60	NOT REPORTED
1081597	6276542	09/14/2004	09/14/2004	CITATION	1	$60	NOT REPORTED
1082268	6317083	02/01/2005	02/01/2005	CITATION	0	$60	NOT REPORTED
1111247	6424984	01/27/2010	01/27/2010	CITATION	1	$100	NOT REPORTED
1111631	6581072	08/09/2010	07/15/2010	CITATION	1	$2000	WEST 2010-1871M
1097725	6319981	07/21/2008	07/02/2008	CITATION	1	$100	NOT REPORTED
1111654	6581132	12/06/2010	11/10/2010	ORDER	0	$	NOT REPORTED
1111618	6581051	07/06/2010	06/03/2010	CITATION	1	$150	NOT REPORTED

1111247	6424982	01/27/2010	01/27/2010	CITATION	1	$100	NOT REPORTED
1111618	6581052	07/06/2010	06/03/2010	CITATION	1	$150	NOT REPORTED
1111247	6424983	01/27/2010	01/27/2010	CITATION	1	$150	NOT REPORTED
1097725	6319980	07/21/2008	07/02/2008	CITATION	1	$100	NOT REPORTED
1111247	6424981	01/27/2010	01/27/2010	CITATION	1	$100	NOT REPORTED
1111654	6581131	12/06/2010	11/10/2010	ORDER	0	$	NOT REPORTED
1111108	6424760	06/30/2009	06/30/2009	CITATION	1	$100	NOT REPORTED
1111618	6581032	05/27/2010	05/27/2010	CITATION	1	$100	NOT REPORTED
6551566	6590687	06/29/2011	06/29/2011	CITATION	1	$100	NOT REPORTED
6556876	8593047	05/09/2012	05/09/2012	CITATION	1	$100	NOT REPORTED
6611299	6591376	02/25/2013	02/25/2013	CITATION	1	$100	NOT REPORTED
6611299	6591377	02/26/2013	02/26/2013	ORDER	0	$	NOT REPORTED
6551566	6590691	06/30/2011	06/30/2011	CITATION	1	$100	NOT REPORTED
6616587	8756407	07/01/2013	07/01/2013	CITATION	1	$100	NOT REPORTED
6551566	6590689	06/30/2011	06/30/2011	CITATION	1	$100	NOT REPORTED
6619965	8594113	01/07/2014	01/07/2014	CITATION	1	$100	NOT REPORTED
6551566	6590685	06/29/2011	06/29/2011	CITATION	1	$100	NOT REPORTED
6551566	6590690	06/30/2011	06/30/2011	CITATION	1	$100	NOT REPORTED
6616587	8756409	07/01/2013	07/01/2013	CITATION	1	$100	NOT REPORTED
6619992	8594174	05/12/2014	05/12/2014	CITATION	1	$100	NOT REPORTED
6551566	6590686	06/29/2011	06/29/2011	CITATION	1	$100	NOT REPORTED
6556857	6580944	12/21/2011	12/21/2011	CITATION	1	$100	NOT REPORTED
6556857	6580945	12/21/2011	12/21/2011	CITATION	1	$100	NOT REPORTED
6616587	8756408	07/01/2013	07/01/2013	CITATION	1	$100	NOT REPORTED
6556876	8593046	05/09/2012	05/09/2012	CITATION	1	$100	NOT REPORTED
6556876	8593048	05/09/2012	05/09/2012	CITATION	1	$499	NOT REPORTED
6556857	6580943	12/21/2011	12/21/2011	CITATION	1	$127	NOT REPORTED
6619992	8594172	05/12/2014	05/12/2014	CITATION	1	$150	NOT REPORTED
6611299	6591378	02/26/2013	02/26/2013	CITATION	1	$828	NOT REPORTED
6551566	6590688	06/30/2011	06/30/2011	CITATION	0	$100	NOT REPORTED
6619992	8594175	05/12/2014	05/12/2014	CITATION	1	$108	NOT REPORTED
6551566	6590692	06/30/2011	06/30/2011	CITATION	1	$100	NOT REPORTED
6619992	8594173	05/12/2014	05/12/2014	CITATION	1	$150	NOT REPORTED
6697381	8930499	05/16/2016	05/16/2016	CITATION	1	$100	NOT REPORTED
6620108	8825167	02/18/2015	02/18/2015	CITATION	1	$100	NOT REPORTED
6620108	8825160	02/18/2015	02/18/2015	CITATION	1	$100	NOT REPORTED
6620108	8825164	02/18/2015	02/18/2015	CITATION	0	$100	NOT REPORTED
6781809	9309807	11/20/2018	11/20/2018	CITATION	1	$118	NOT REPORTED
6781850	9470106	07/17/2019	07/17/2019	CITATION	1	$121	NOT REPORTED
6781265	9309141	03/26/2018	03/26/2018	ORDER	0	$	NOT REPORTED
6697381	8930498	05/16/2016	05/16/2016	CITATION	1	$100	NOT REPORTED
6693085	8756762	07/29/2015	07/29/2015	CITATION	1	$100	NOT REPORTED
6781850	9470107	07/18/2019	03/22/2019	CITATION	0	$121	NOT REPORTED
6781850	9470108	07/18/2019	04/09/2019	CITATION	0	$121	NOT REPORTED
6620108	8825166	02/18/2015	02/18/2015	CITATION	1	$100	NOT REPORTED

6781202	8837407	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6781631	9309410	07/31/2018	07/31/2018	CITATION	1	$118	NOT REPORTED
6620108	8825165	02/18/2015	02/18/2015	CITATION	1	$100	NOT REPORTED
6781265	9309143	03/27/2018	03/27/2018	CITATION	1	$151	NOT REPORTED
6781809	9309806	11/20/2018	11/20/2018	CITATION	1	$118	NOT REPORTED
6781202	8837409	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6781202	8837412	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6620108	8825161	02/18/2015	02/18/2015	CITATION	0	$100	NOT REPORTED
6693085	8756761	07/29/2015	07/29/2015	CITATION	1	$100	NOT REPORTED
6620108	8825169	02/19/2015	02/19/2015	CITATION	0	$100	NOT REPORTED
6781202	8837408	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6620108	8825162	02/18/2015	02/18/2015	CITATION	1	$243	NOT REPORTED
6772158	8837314	08/25/2017	08/25/2017	CITATION	0	$116	NOT REPORTED
6781202	8837411	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6781265	9309142	03/26/2018	03/26/2018	CITATION	1	$1146	NOT REPORTED
6781202	8837410	03/06/2017	03/06/2017	CITATION	1	$116	NOT REPORTED
6772158	8837311	08/24/2017	08/24/2017	CITATION	1	$116	NOT REPORTED
6781850	9470105	07/17/2019	07/17/2019	CITATION	1	$121	NOT REPORTED
6772158	8837312	08/24/2017	08/24/2017	CITATION	1	$116	NOT REPORTED
6693085	8756760	07/29/2015	07/29/2015	CITATION	1	$100	NOT REPORTED
6781809	9309808	11/21/2018	11/21/2018	CITATION	1	$118	NOT REPORTED
6781809	9309805	11/20/2018	11/20/2018	CITATION	1	$118	NOT REPORTED
6772158	8837313	08/25/2017	08/25/2017	CITATION	1	$116	NOT REPORTED
6781265	9309144	03/27/2018	03/27/2018	CITATION	1	$208	NOT REPORTED
6620108	8825168	02/18/2015	02/18/2015	CITATION	1	$100	NOT REPORTED
6693398	8930253	02/23/2016	02/23/2016	CITATION	1	$100	NOT REPORTED
6620108	8825163	02/18/2015	02/18/2015	CITATION	1	$243	NOT REPORTED

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14716

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14716

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoSearch
On time. On target. In touch.™

GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355317
Project #: 14716
PO #: 14716
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43777, 40.6783638)
6,771 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	0	1	NS	NS	1
SUB-TOTAL		0	0	0	1	0	0	1

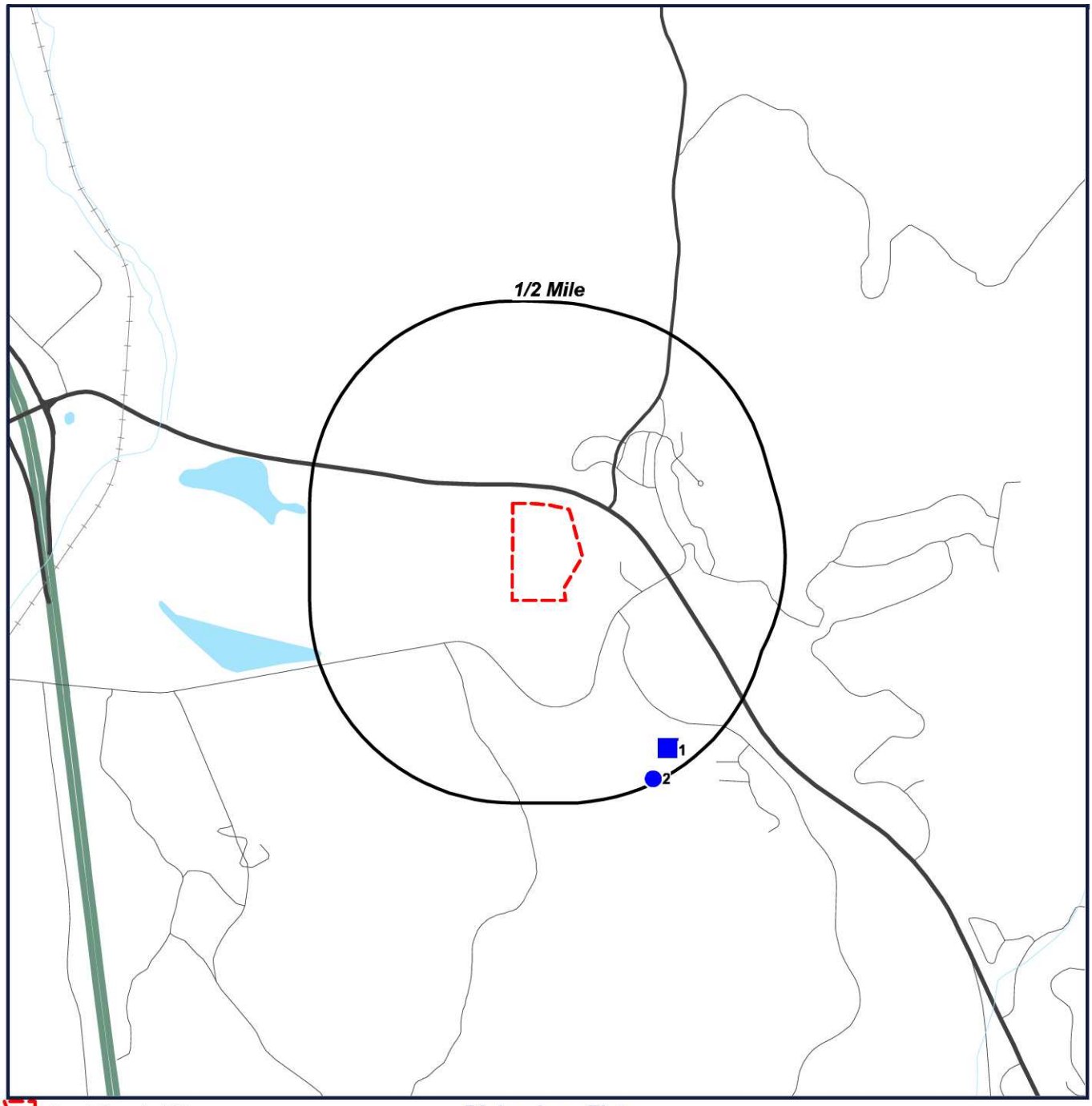
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	0	0	3	NS	NS	3
SUB-TOTAL		0	0	0	3	0	0	3
TOTAL		0	0	0	4	0	0	4

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
NWIS
WW

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.445 mi. SE (2350 ft.)	(D- 2- 5) 6CCA-S1		8
2	WW	1775292344	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
2	WW	4022998451	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	996892433	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	11

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.445 mi. SE (2350 ft.)	(D- 2- 5) 6CCA-S1	
2	WW	1775292344	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	4022998451	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	996892433	Lower (6,713 ft.)	0.487 mi. SSE (2571 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6771 ft.

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	NWIS	6,636 ft.	(D- 2- 5) 6CCA-S1		8
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	11

United States Geological Survey National Water Information System (NWIS)

MAP ID# 1

Distance from Property: 0.445 mi. (2,350 ft.) SE
Elevation: 6,636 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404017111255201**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404017111255201**
STATION NAME: **(D- 2- 5) 6CCA-S1**
SITE TYPE: **SP**
LATITUDE: **40.671339400**
LONGITUDE: **-111.431859400**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESWSWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1983-08-31**
WATER-QUALITY DATA END DATE: **1983-08-31**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**
SITE-VISIT DATA BEGIN DATE: **1983-08-31**
SITE-VISIT DATA END DATE: **1983-08-31**
SITE-VISIT DATA COUNT: **1**

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.487 mi. (2,571 ft.) SSE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **1775292344**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER, INTERESTED PARTY**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.487 mi. (2,571 ft.) SSE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **4022998451**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **SOUTH KAMAS IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.487 mi. (2,571 ft.) SSE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **996892433**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355318
Project #: 14716
PO #: 14716
Date: 06/04/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43777, 40.6783638)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

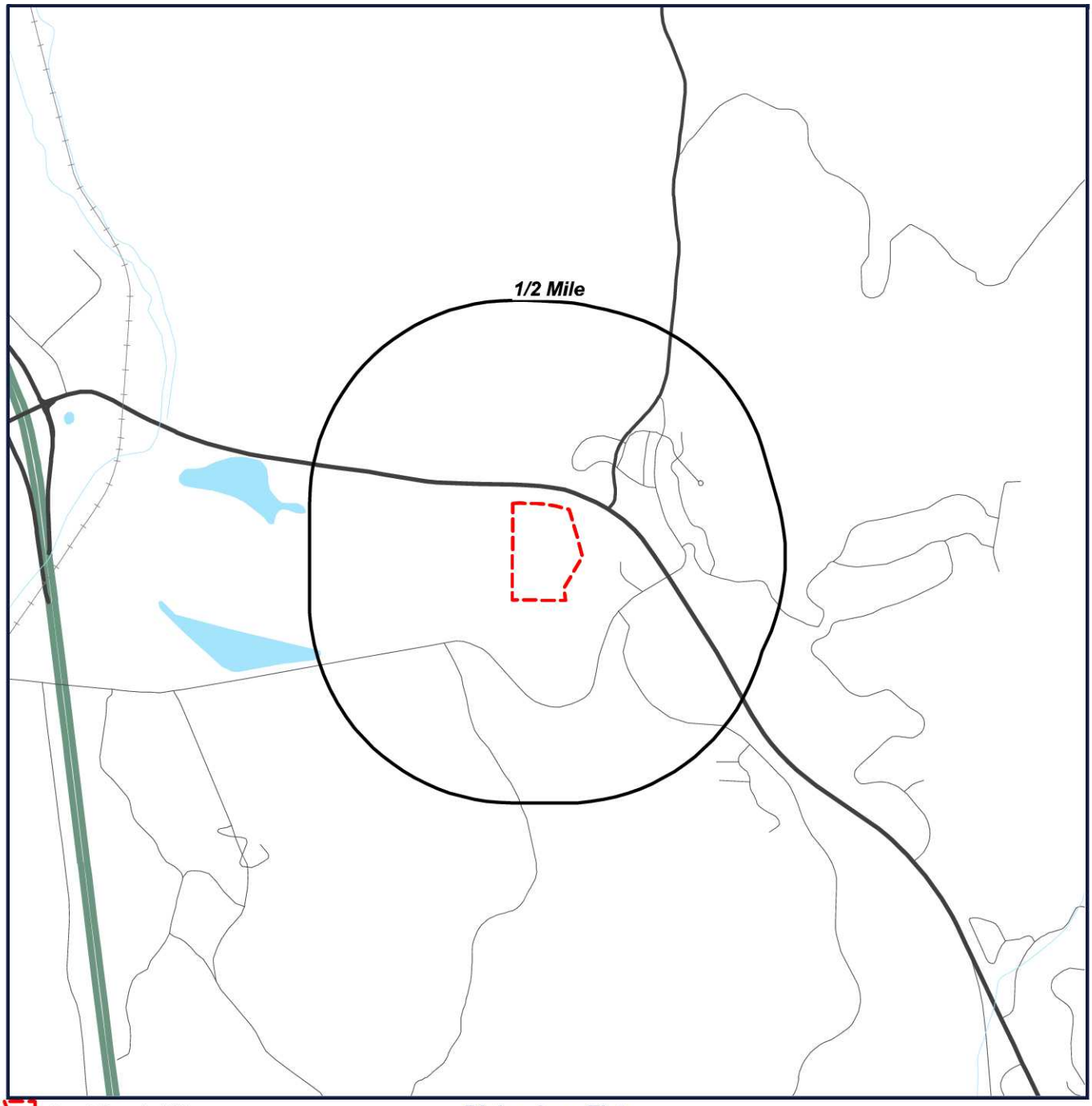
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Target Property (TP)

Well Location

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoSearch
On time. On target. In touch.™

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147778
Job #: 355320
Project #: 14716
PO #: 14716
Date: 06/04/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah 84060

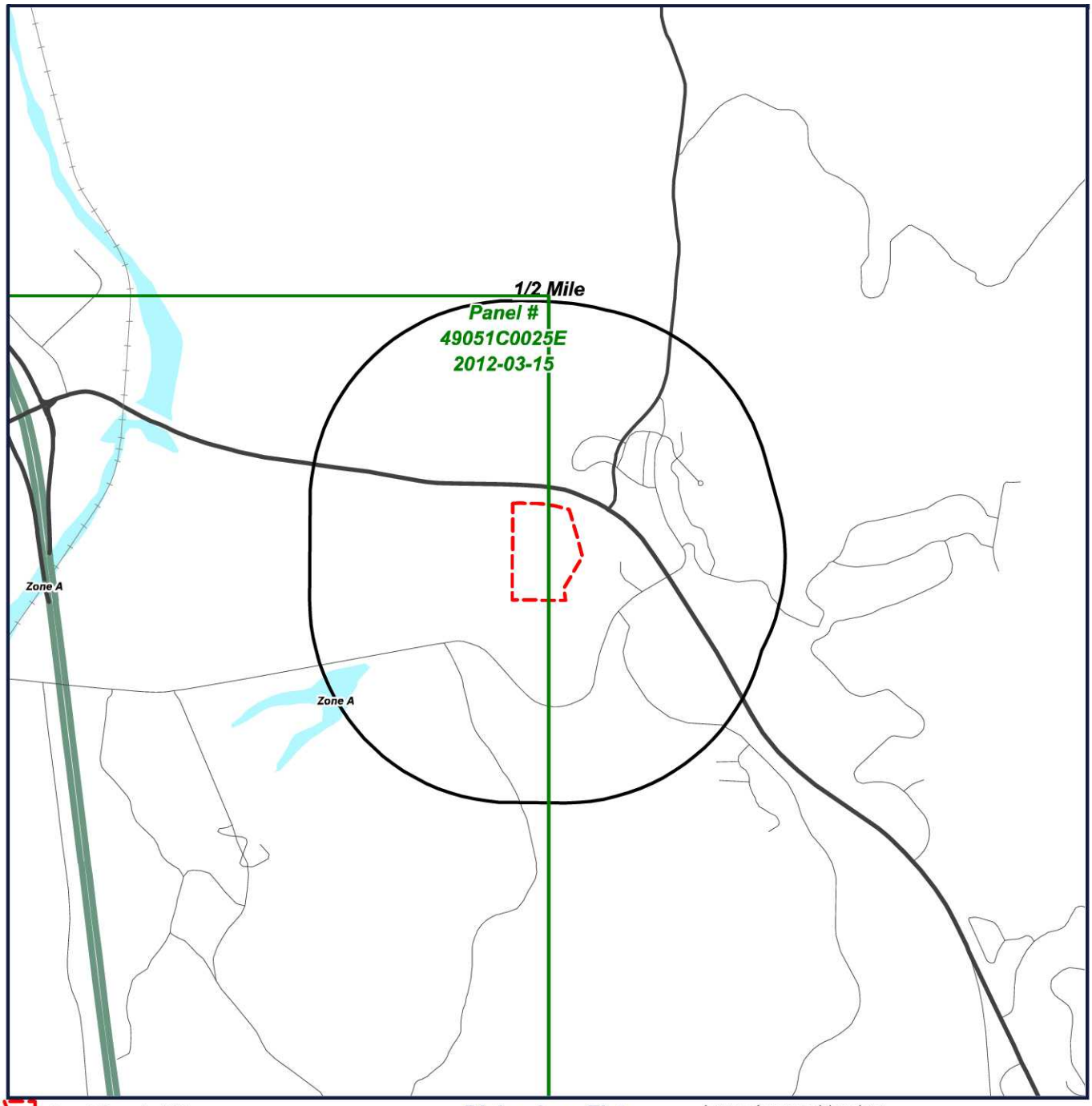
Coordinates
Area centroid (-111.43777, 40.6783638)
6,771 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Hazard - Zone X

Area with Flood Risk due to Levee - Zone D

Digital Data Not Available

Richardson Flats
Parcel SS87-B-X
Near 1185 W LORI LN
Heber, Utah
84060

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

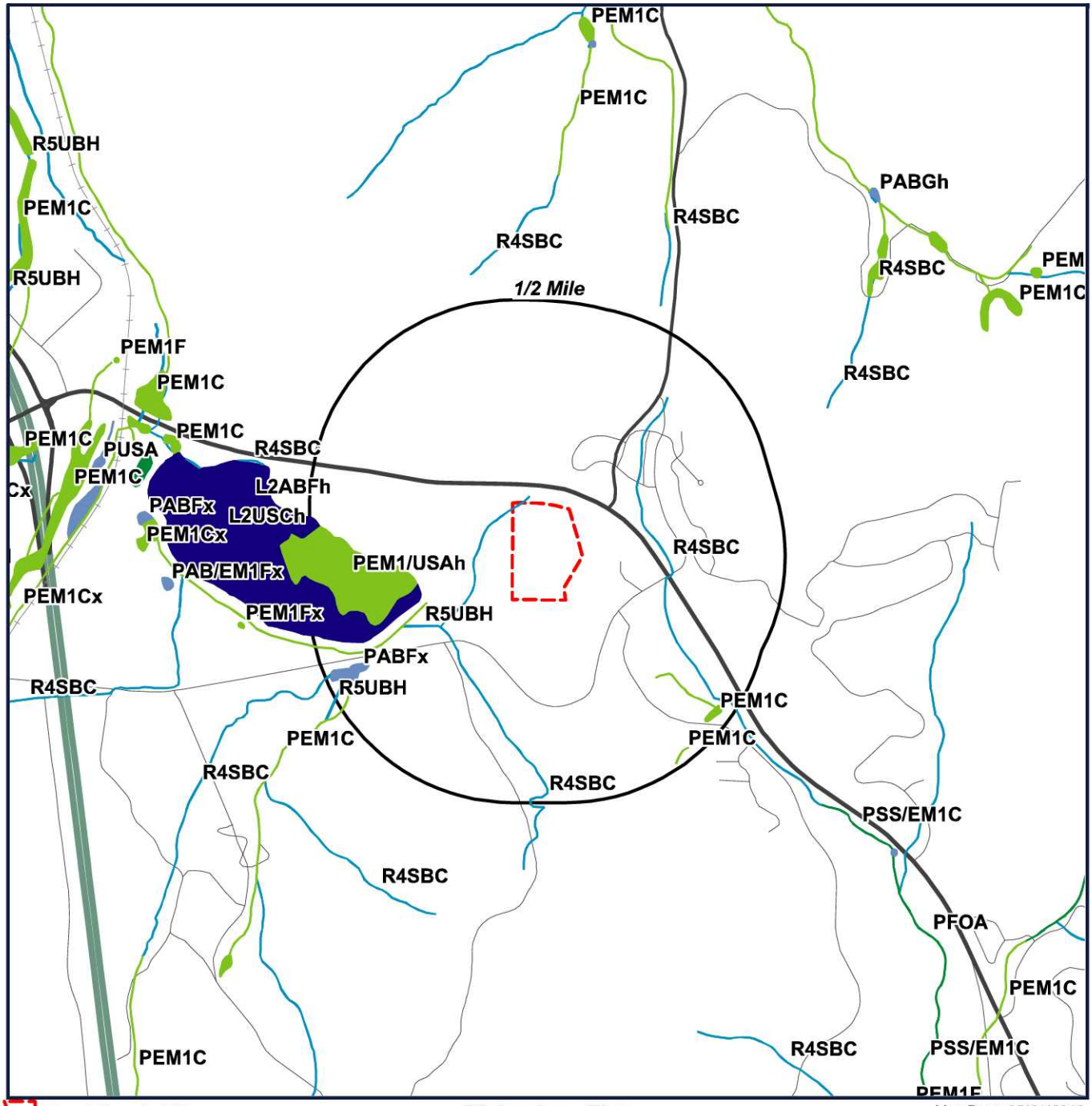
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

ESTUARINE AND MARINE DEEPWATER

ESTUARINE AND MARINE WETLAND

FRESHWATER EMERGENT WETLAND

FRESHWATER FORESTED/ SHRUB WETLAND

LAKE

OTHER

RIVERINE

NOT AVAILABLE

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

Map Date: 05/01/2018

N
W E
S

0' 1000' 2000' 3000'

SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

R4SBC

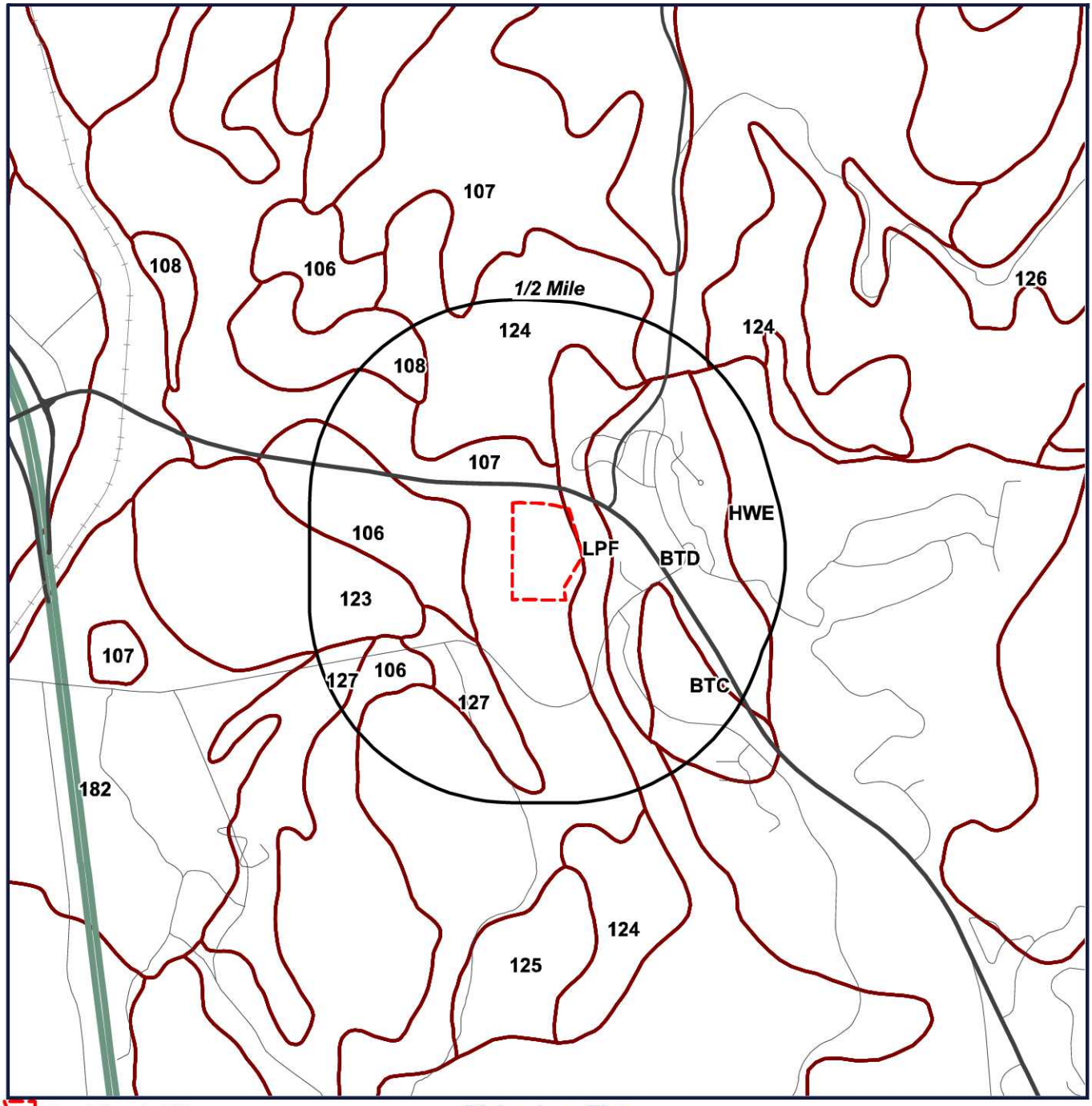
SYSTEM: **RIVERINE**

SUBSYSTEM: **INTERMITTENT**

CLASS: **STREAMBED**

WATER REGIME: **SEASONALLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLET

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

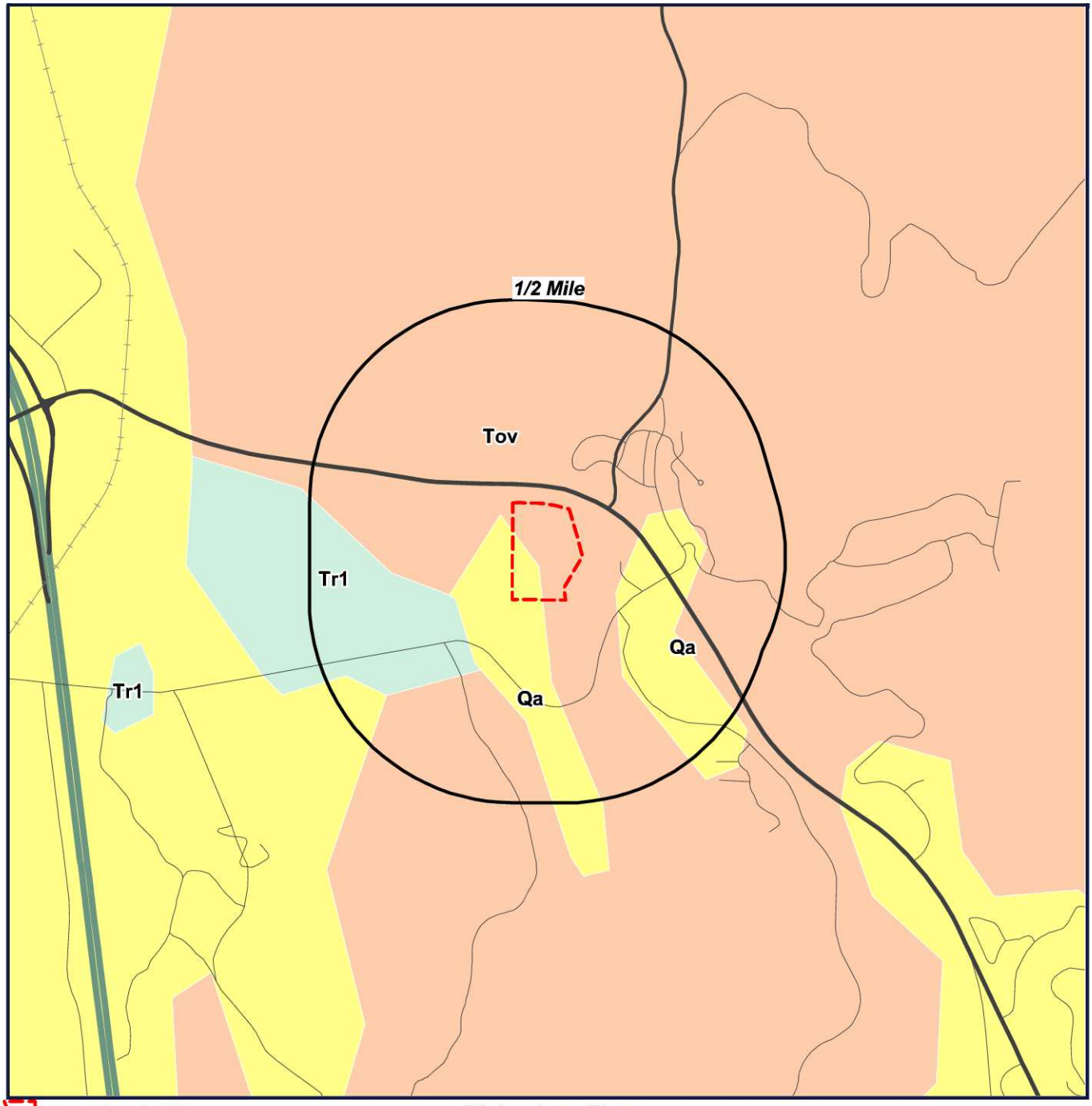
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes

Geology Map



Target Property (TP)

Richardson Flats
Parcel SS87-
B-X
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

APPENDIX E

SUPPORTING DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

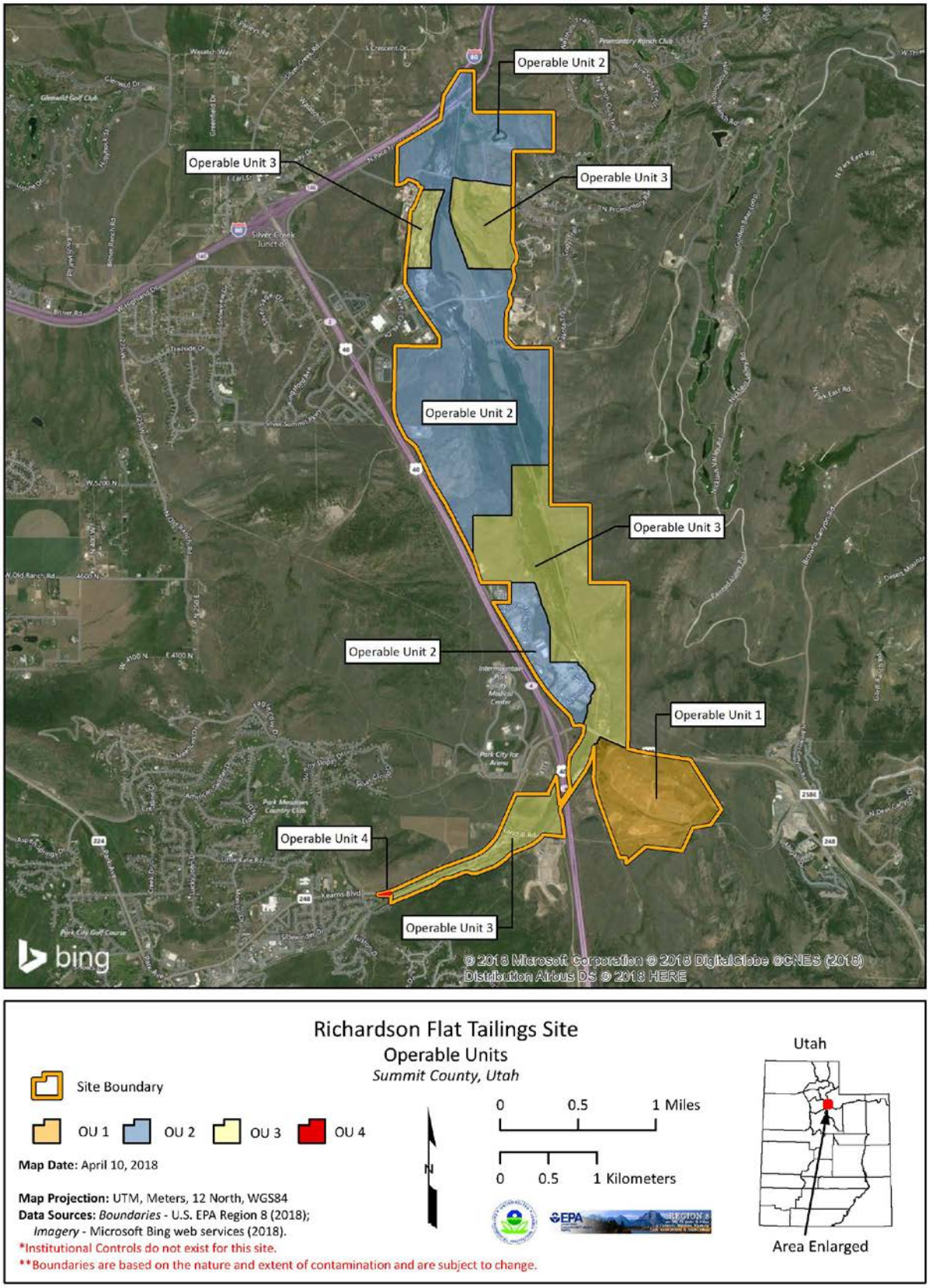
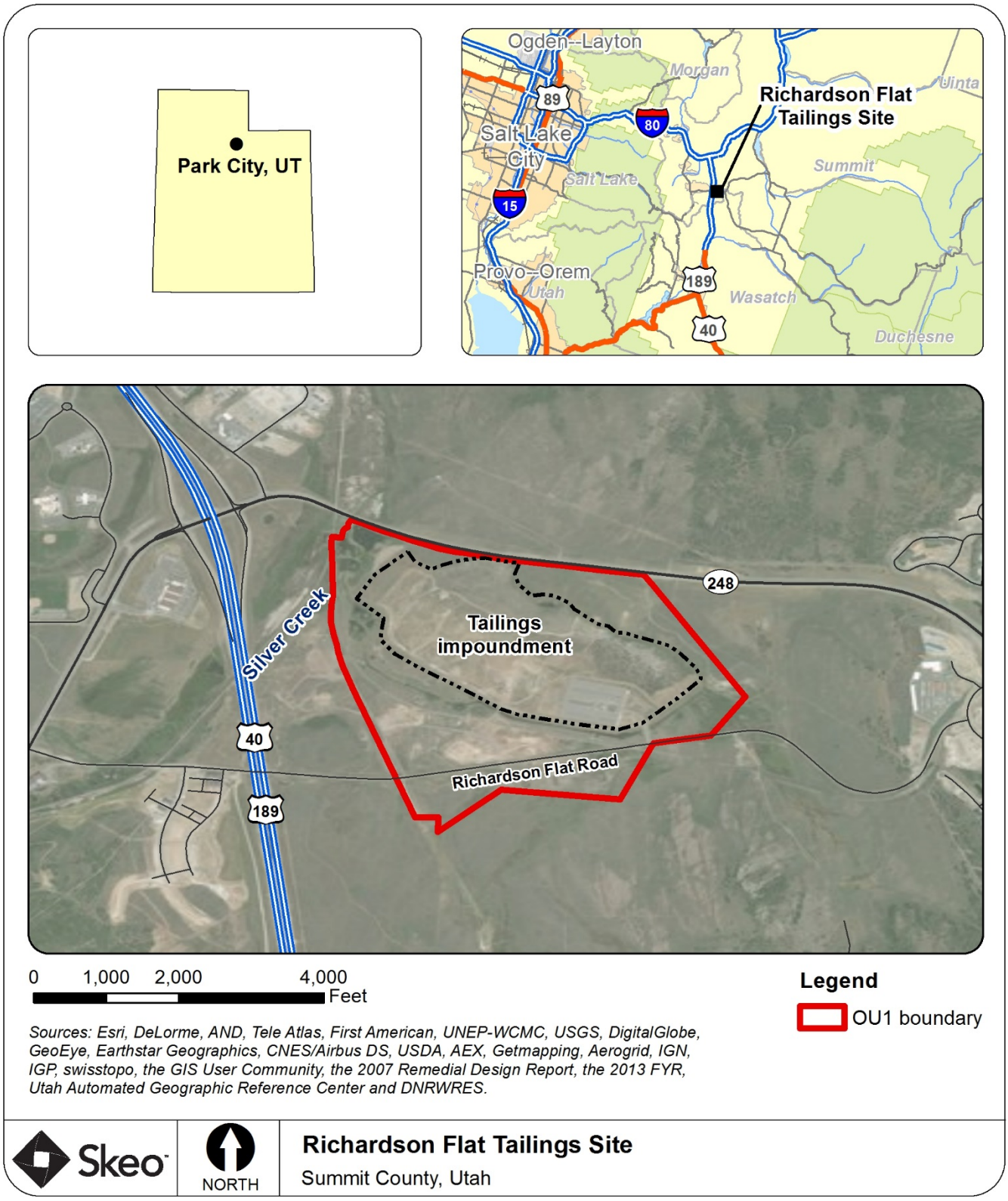


Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

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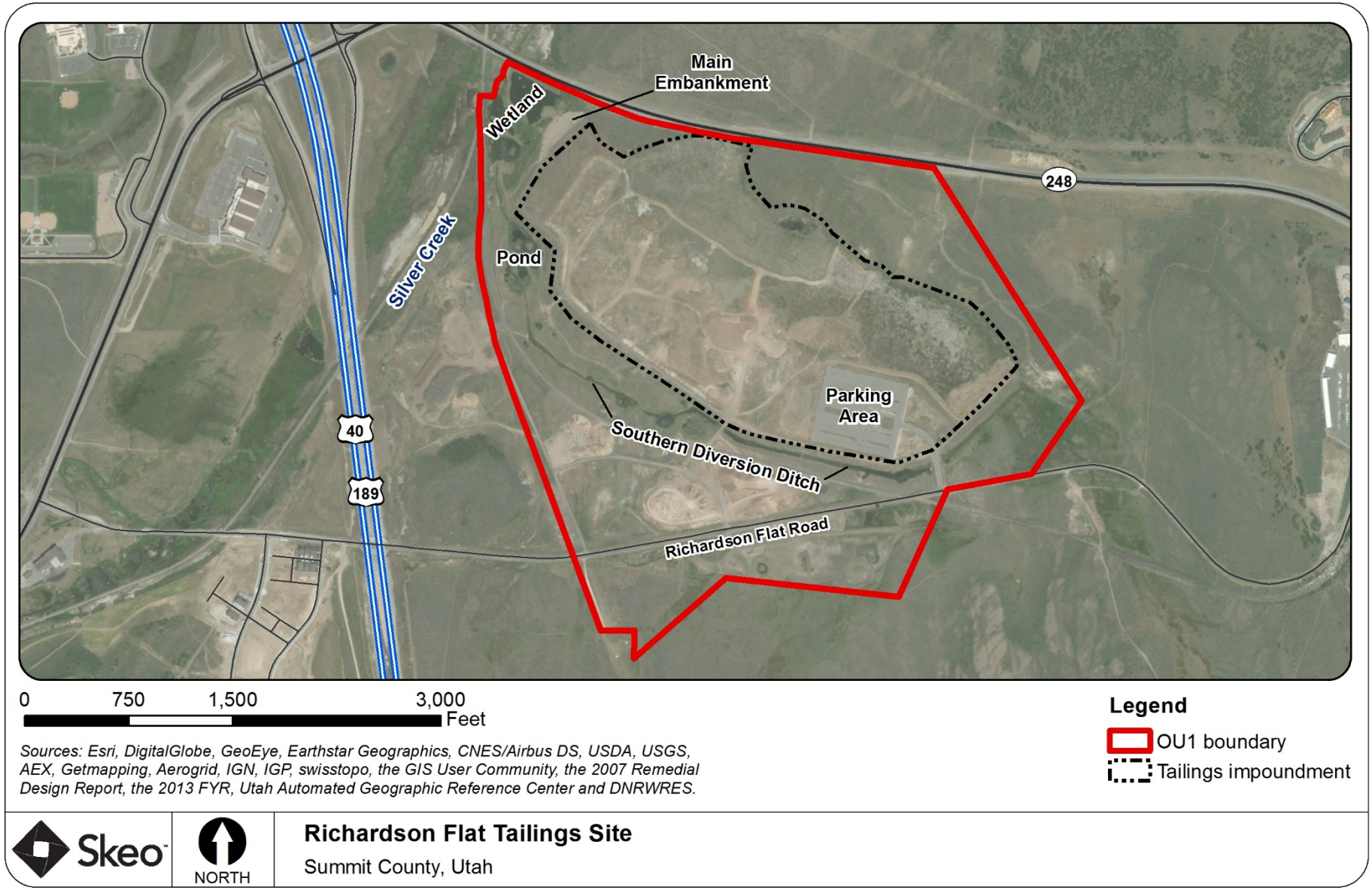
Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

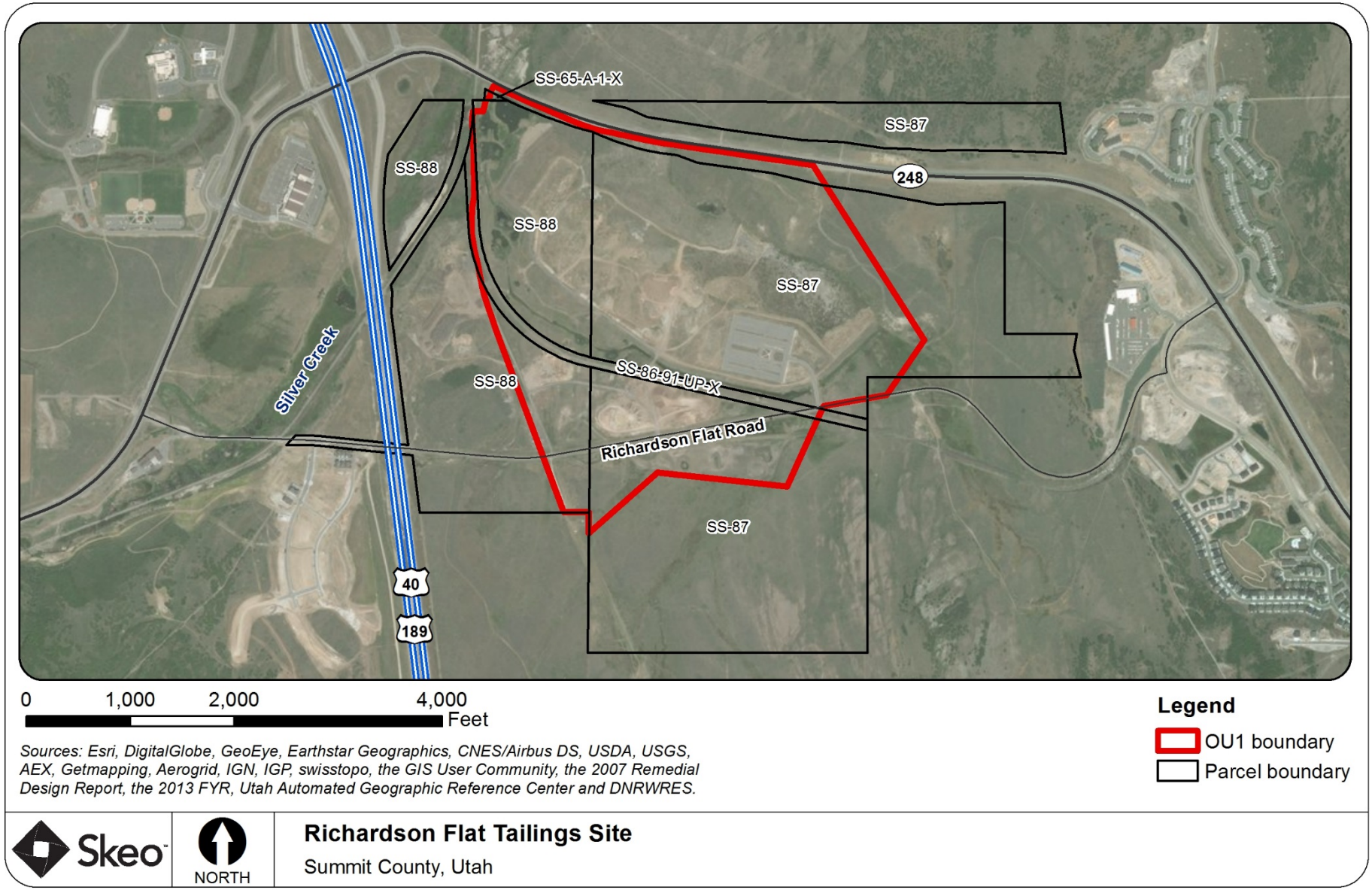
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 µg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below µg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

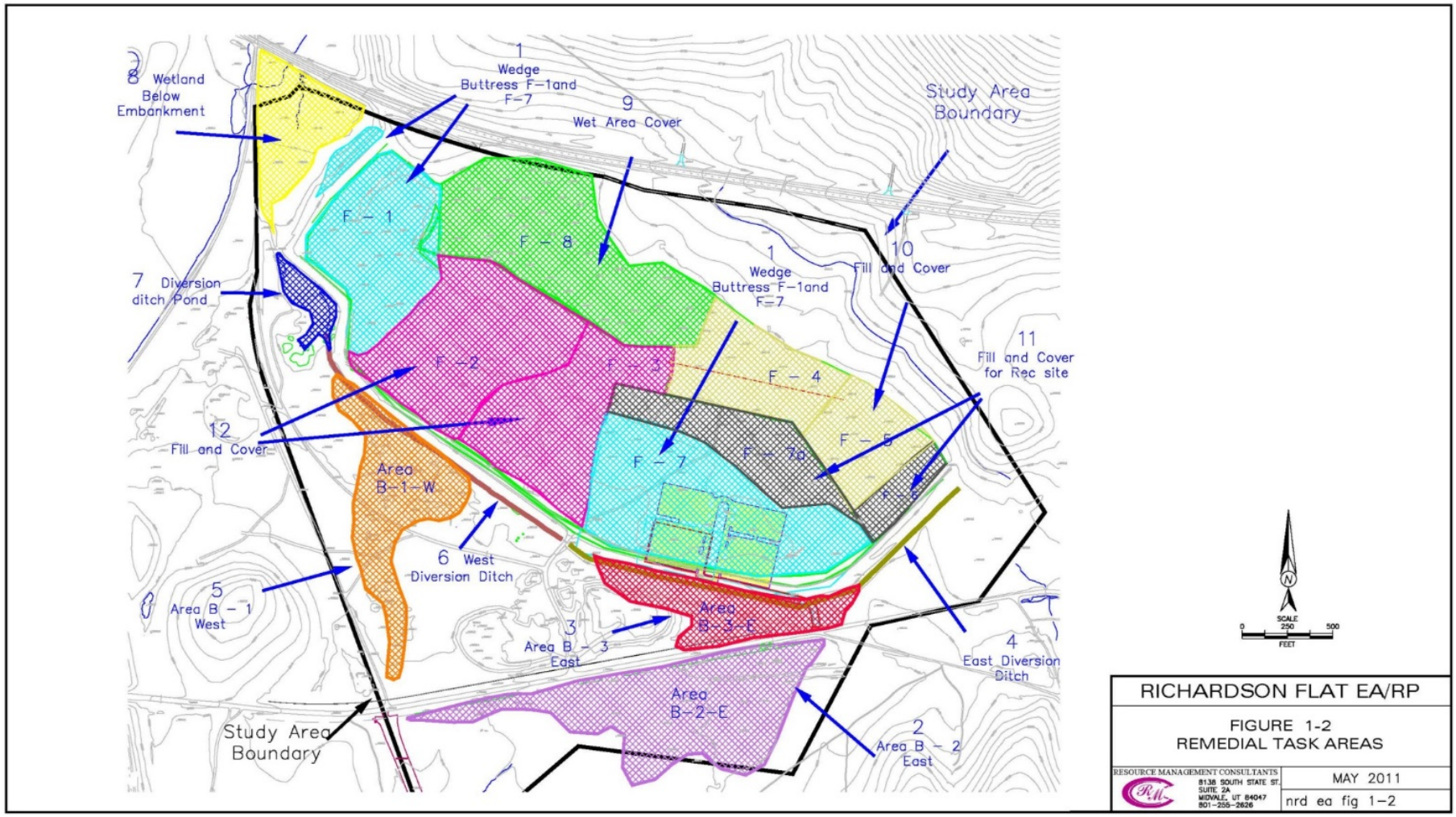


Figure C-2: 2008 Phase 2 Completion Map

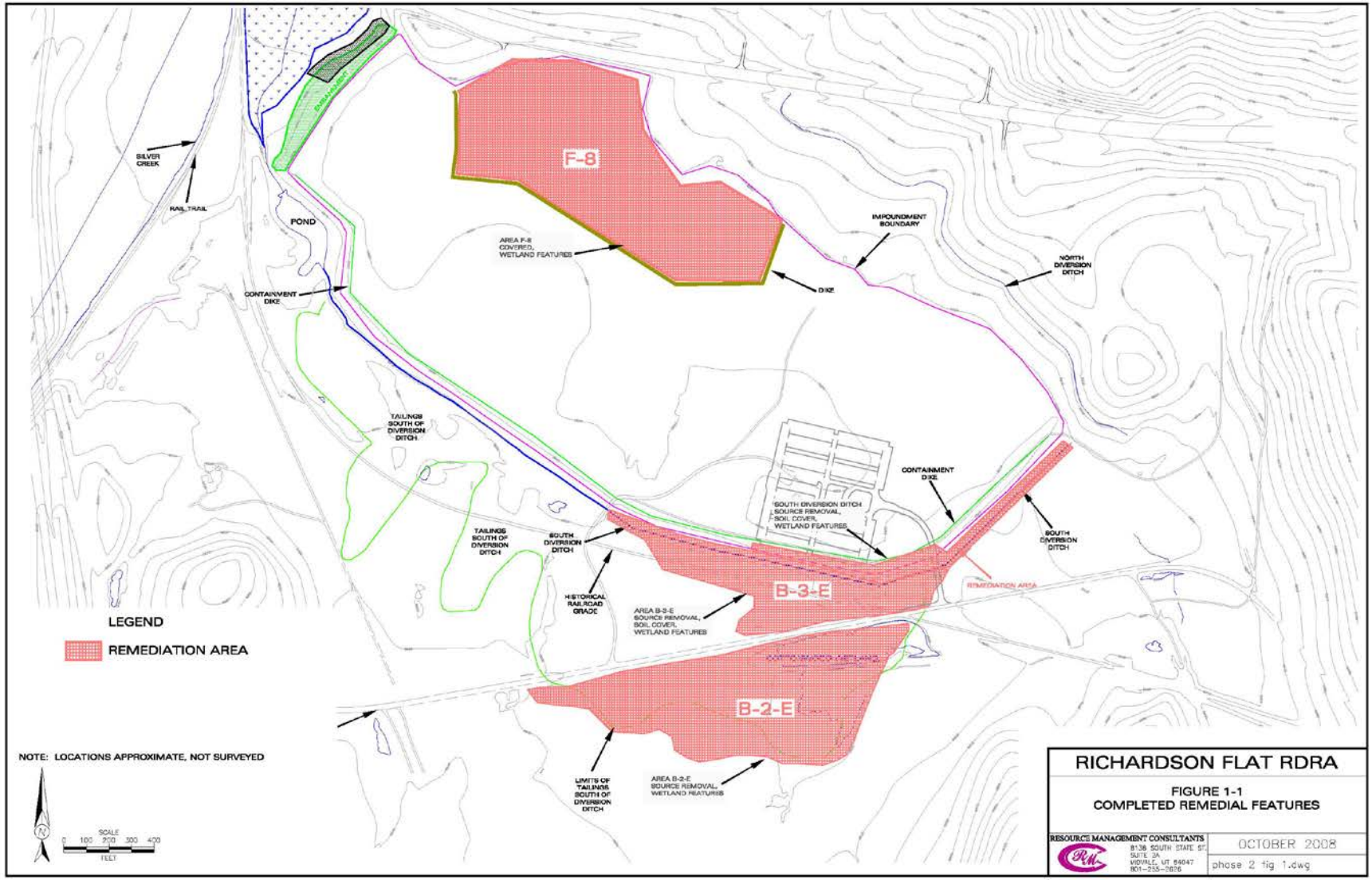


Figure C-3: 2009 Phase 3 Completion Map

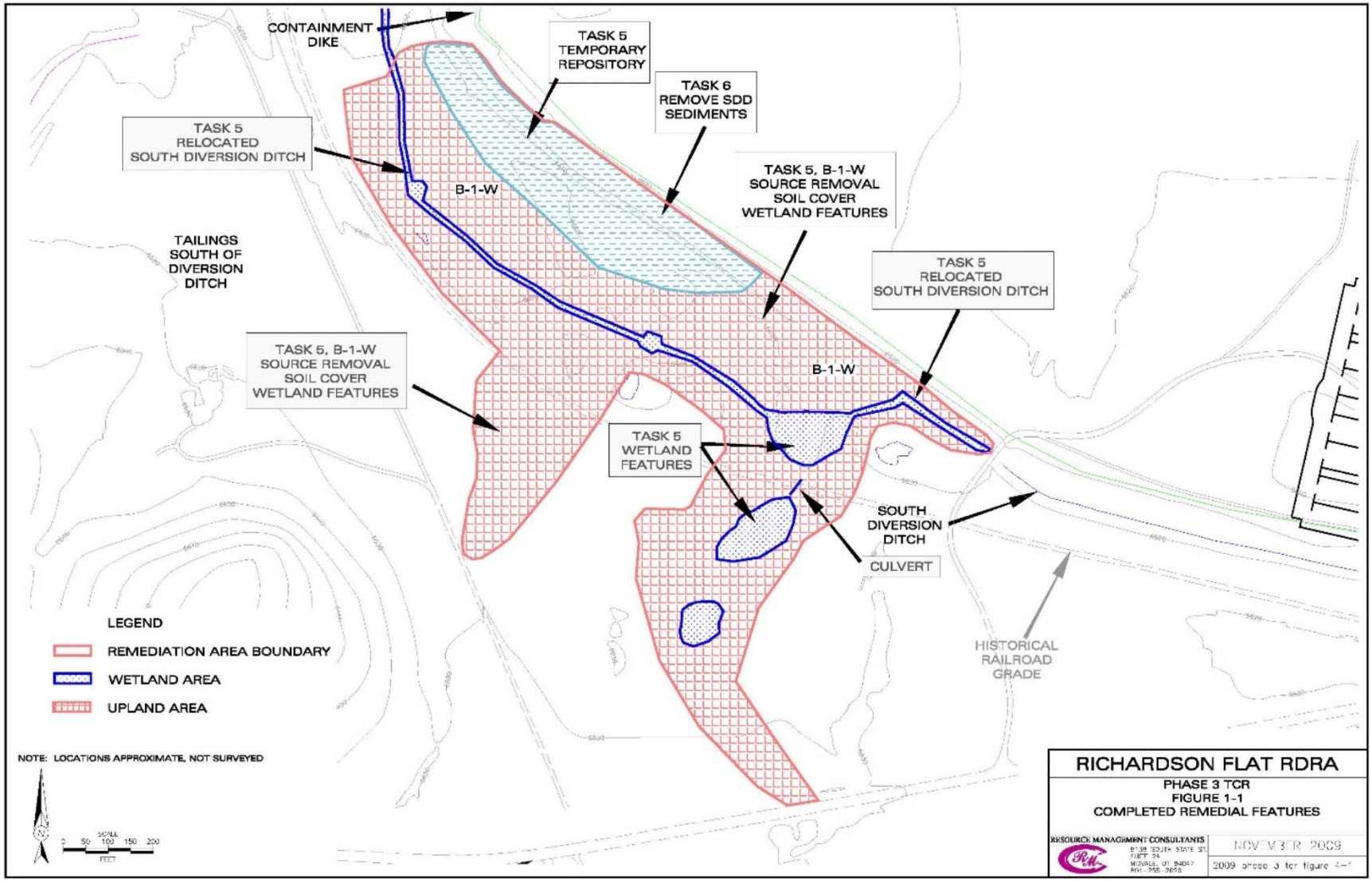


Figure C-4: 2010 Phase 4 Completion Map

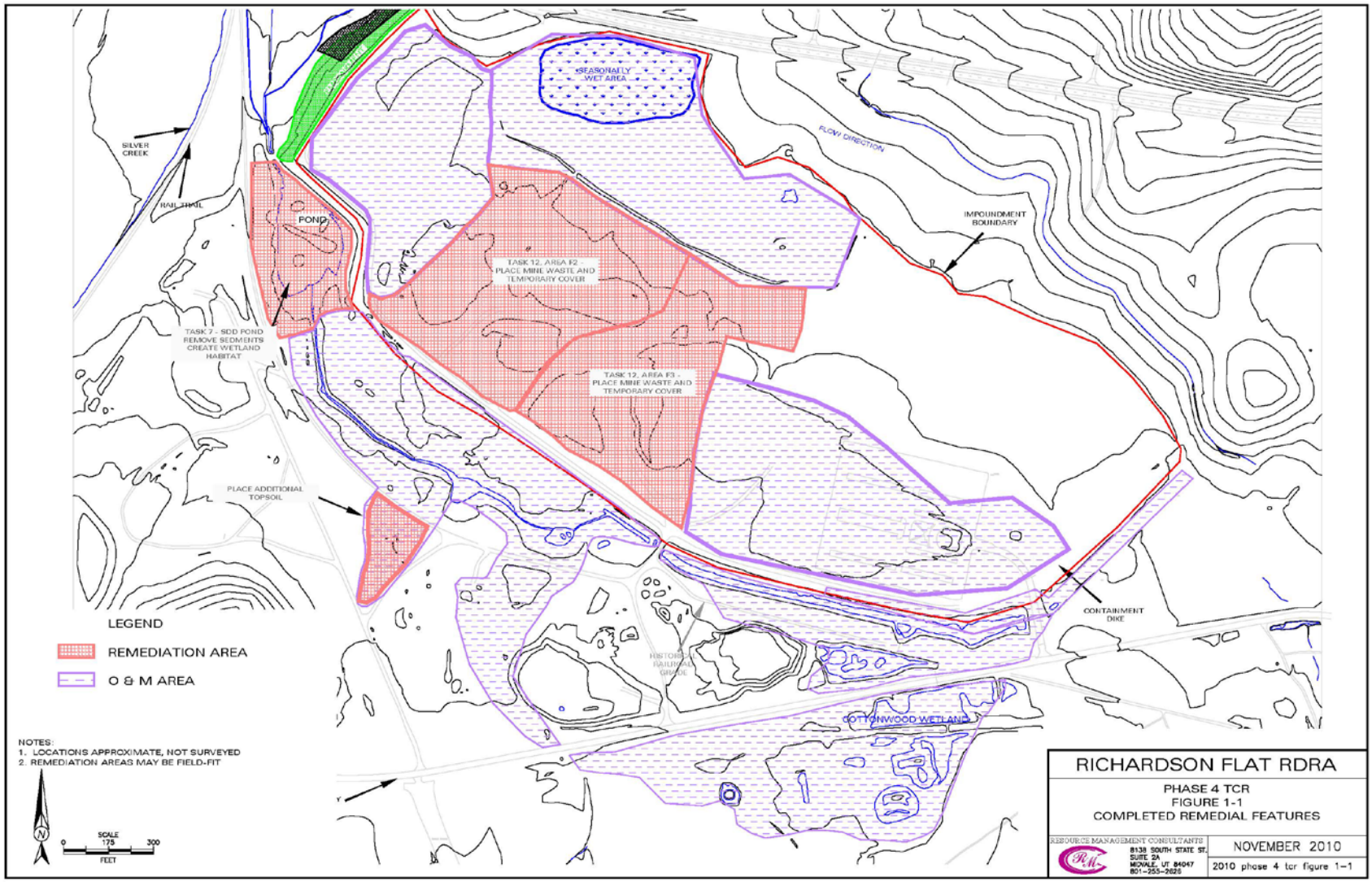
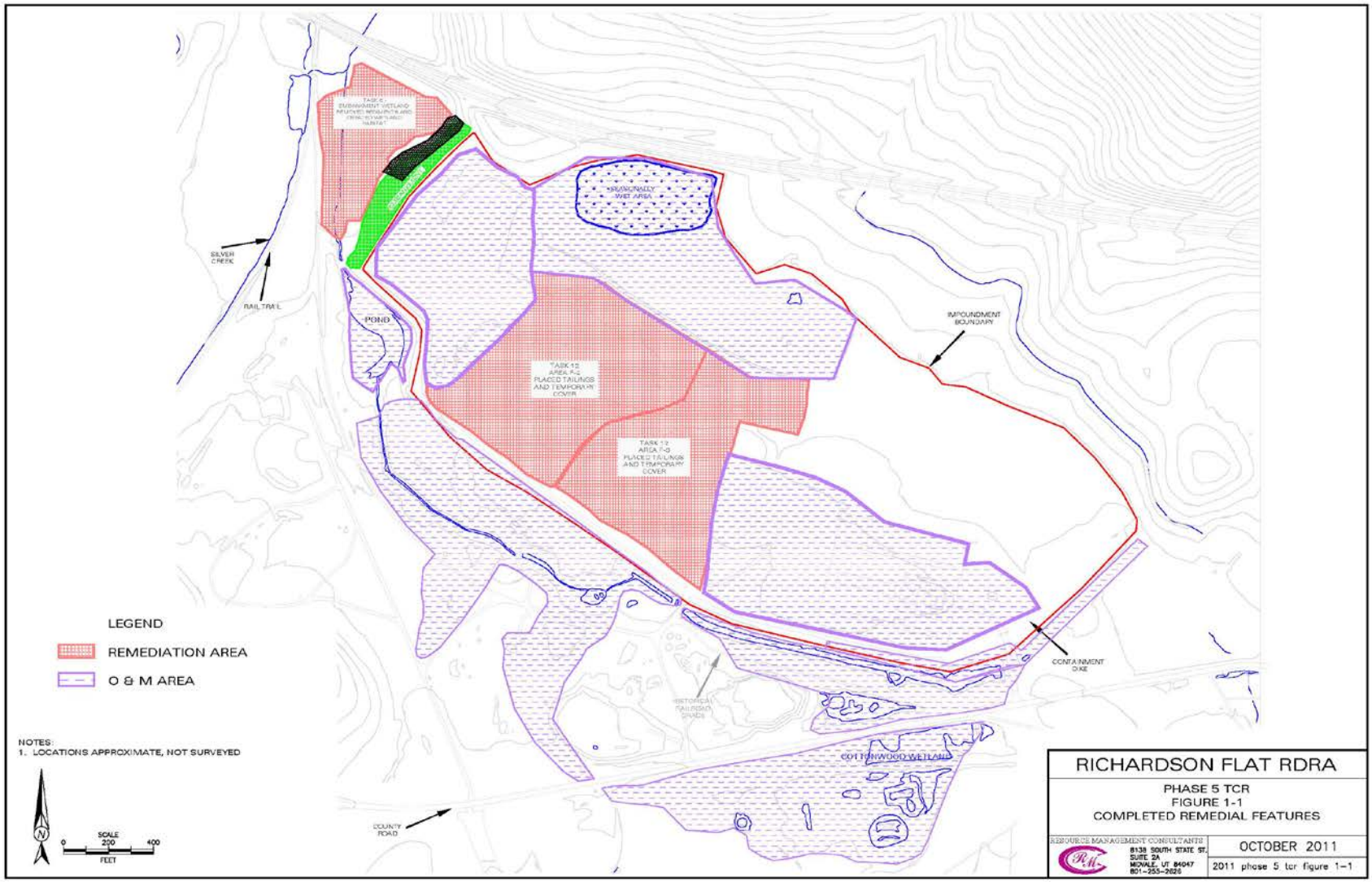


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE

United States Environmental Protection Agency

The U.S. Environmental Protection Agency, Region 8 Announces the Second Five-Year Review for the Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jami Brackin **Affiliation:** Summit County
Subject Contact Information:
Time: 2:30 p.m. **Date:** 09/21/2017
Interview Location: Park City Library

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____	_____	_____	_____	
	Name	Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

	Remarks: _____		
3.	**Erosion**	☐ Location shown on site map	☒ Erosion not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
4.	**Holes**	☐ Location shown on site map	☒ Holes not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
5.	**Vegetative Cover**	☒ Grass	☒ Cover properly established
	☐ No signs of stress	☐ Trees/shrubs (indicate size and locations on a diagram)	
	Remarks: _____		
6.	**Alternative Cover** (e.g., armored rock, concrete)		☒ N/A
	Remarks: _____		
7.	**Bulges**	☐ Location shown on site map	☒ Bulges not evident
	Arial extent: _____		Height: _____
	Remarks: _____		
8.	**Wet Areas/Water Damage**	☒ Wet areas/water damage not evident	
	☐ Wet areas	☐ Location shown on site map	Arial extent: _____
	☐ Ponding	☐ Location shown on site map	Arial extent: _____
	☐ Seeps	☐ Location shown on site map	Arial extent: _____
	☐ Soft subgrade	☐ Location shown on site map	Arial extent: _____
	Remarks: _____		
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map
	☒ No evidence of slope instability		
	Arial extent: _____		
	Remarks: _____		
B. Benches		☐ Applicable ☒ N/A	
	(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)		
1.	**Flows Bypass Bench**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
2.	**Bench Breached**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
3.	**Bench Overtopped**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
C. Letdown Channels		☐ Applicable ☒ N/A	
	(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side		

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☐ Erosion not evident

Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.


Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom
NOTARY PUBLIC

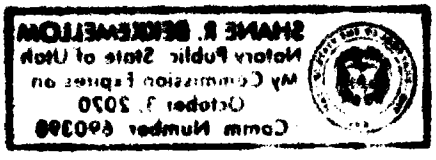
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

0486087 PCH-1-1
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486094 PCH-1-2
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486102 PCH-1-3
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486119 PCH-1-4
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486126 PCH-1-5
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486133 PCH-1-6
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486140 PCH-1-7
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486157 PCH-1-8
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486164 PCH-1-9
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486171 PCH-1-10
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486188 PCH-1-11
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

0486195 PCH-1-12
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SALT LAKE CITY, UT 84117

0486203 PCH-1-13
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SALT LAKE CITY, UT 84117

0486210 PCH-1-14
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0486227 PCH-1-15
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0486234 PCH-1-16
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0486241 PCH-1-17
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0486258 PCH-1-18
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0486265 PCH-1-19
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0486272 PCH-1-20
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0486289 PCH-1-21
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0486296 PCH-1-22
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0486304 PCH-1-23
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0486311 PCH-1-24
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0486328 PCH-1-25
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0486335 PCH-1-26
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0486342 PCH-1-27
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0486359 PCH-1-28
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0486366 PCH-1-29
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0486373 PCH-1-30
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0486380 PCH-1-31
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0486397 PCH-1-32
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0486405 PCH-1-33
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0486412 PCH-1-34
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0486429 PCH-1-35
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0486436 PCH-1-36
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0486443 PCH-1-37
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0486450 PCH-1-38
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0486467 PCH-1-39
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0486474 PCH-1-40
IVORY DEVELOPMENT LLC
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0486481 PCH-1-41
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

0486498 PCH-1-42
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486506 PCH-1-43
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486513 PCH-1-44
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486520 PCH-1-45
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

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APPENDIX F

STATEMENT OF QUALIFICATIONS



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EDUCATION

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AFFILLIATIONS

Association of Environmental and
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Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



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EDUCATION

Bachelor of Arts, Interior Design,
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ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah

Richardson Flat Development

Traffic Analysis

Prepared for:
Nate Brockbank

May 2020

UT20-2201

FEHR PEERS

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1. Executive Summary

This study provides a summary of the potential transportation-related impacts from the proposed Richardson Flat development located on Richardson Flat Road between US-40 and Jordanelle Parkway in Summit County, Utah. This study analyzes the traffic operations and impacts for 2020, 2025, and 2040 background and plus project conditions at key intersections. The plus project analysis includes project trips generated from the proposed project.

1.1 Traffic Conditions

1.1.1 Study Intersections

The following intersections were included in this study:

1) SR-248 & Richardson Flat Road – Side-street stop controlled
2) Jordanelle Parkway & Richardson Flat Road – Side-street stop controlled
3) SR-248 & Jordanelle Parkway/Brown's Canyon Road – Side-street stop controlled

1.1.2 Traffic Volumes

Fehr & Peers collected traffic counts at the study intersections to establish a baseline of existing conditions and operations for the area. Weekday peak period traffic counts were recorded from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on January 15, 2020 at all study intersections.

1.1.3 2020 Background Conditions

The intersections at SR-248 & Richardson Flat Road and at SR-248 & Brown's Canyon Road both operate at failing levels of service in the AM and PM peak hours due to few gaps available for left-turn movements from minor roadways. Summit County has identified both of these intersections as locations for future traffic signal implementations due to existing failing conditions. No additional mitigations aside from those identified by Summit County are recommended as part of this analysis.

1.1.4 2025 Background Conditions

Due to Summit County's plans to signalize the intersections at SR-248 & Richardson Flat Road and at SR-248 & Brown's Canyon Road, those intersections were assumed to be signalized for all future conditions analyses. Due to the signalization of those intersections, all study intersections operated within acceptable levels of delay during the AM and PM peak hour analyses.

1.1.5 Project Conditions

The proposed mixed use site will be located between the intersections of SR-248 & Richardson Flat Road and Richardson Flat Road & Jordanelle Parkway. The Richardson Flat development spans across both sides of SR-248, with the majority of land uses being south of SR-248, while a smaller plot to the north of provides space for a multi-family housing complex. Trip generation for the project was computed using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, 2017, and Fehr & Peers' mixed-use development (MXD+) methodology via MainStreet, a Fehr & Peers web application that captures the traffic benefits of developments by looking at interactions among the mixture of land uses and patron usage of alternative modes (i.e. transit, bicycling, and/or walking).

Based on UDOT's current access category classification of SR-248, both driveways that connected to SR-248 were assumed to be placed at least 1,000 feet apart, and were assumed to provide right and left turn acceleration and deceleration lanes. In existing conditions, the location of the westbound driveway does not have a center median lane; Fehr & Peers recommends that the center median lane be extended past the west driveway to allow for left turning vehicles to perform two-stage left-turns out of the development.

The development is expected to generate 2,956 project gross trips in the AM peak hour and 4,278 project gross trips in the PM peak hour. With the nature of a multi-use development, some generated trips travel only internally. Based on the results of the MXD+ analysis, the site is expected to generate 2,510 net external trips in the AM peak hour and 3,481 net external trips in the PM peak hour.

1.1.6 2025 plus Project Conditions

Of the three existing study intersections, only SR-248 & Brown's Canyon Road continued to operate at acceptable levels of service in the AM and PM peak hours of the 2025 plus project conditions analysis. With the addition of project trips, the intersection at SR-248 & Richardson Flat Road and at Jordanelle Parkway & Richardson Flat Road began to experience unacceptable levels of delay. Fehr & Peers recommends widening the east leg of SR-248 & Richardson Flat Road to allow for two left turn lanes to mitigate delay caused by large left turn volumes from the project site. Fehr & Peers also recommends converting the intersection at Jordanelle Parkway & Richardson Flat Road to a roundabout to reduce delay at that intersection to acceptable levels.

Approximately one-half mile west of the intersection at SR-248 & Brown's Canyon Road, westbound SR-248 merges down to one lane. As westbound traffic begins to exceed the capacity of the single westbound lane along SR-248, Fehr & Peers recommends extending the five-lane cross-section of SR-248 past the West Driveway. The five-lane cross-section will then likely need to be reduced down to the existing two-lane cross section by the Historic Rail Trail crossing.

Furthermore, due to heavy east-west through movements along SR-248, the proposed project driveways were observed to operate at failing levels of service if all movements are allowed at the driveways. Fehr & Peers recommends prohibiting northbound left turns out of the development at the east driveway and westbound left turns into the development at the west driveway. The restriction of left turn movements limited the failing levels of service to only the northbound left turn movement at the west driveway. It should be noted that all excessive delay was kept on the project driveway and did not impact the state facility on SR-248. All other movements at the project driveways operate at acceptable levels of service.

1.1.7 2040 Background Conditions

Assuming only the mitigations introduced in the 2025 background conditions, the three existing study intersections were observed to operate at acceptable levels of service in the AM and PM peak hours of the 2040 background conditions analysis.

1.1.8 2040 plus Project Conditions

As background traffic continues to grow delay at the project driveways is likely to increase. Fehr & Peers recommends signalizing that intersection when the volumes warrant signalization.

It should be noted that SR-248 is currently a Category 2: System-priority rural importance roadway throughout the project area. Category 2 roadways require one mile of space between signalized intersections. However, as the project develops and vehicle trips to and from the driveways increase, and the area becomes more urban. Fehr & Peers recommends coordinating with UDOT to apply to reassign the segment of SR-248 within the project to be a Category 3: System priority-urban importance roadway. Re-categorizing the roadway to Category 3 will allow for half-mile spacing between signalized intersections, which means that signalizing the west driveway will meet UDOT's access management requirements. Currently the segment of SR-248 just to the west (near the US-40 interchange) is already Category 3, so the Category 3 classification could be extended from its current extent to the east to Browns Canyon.

The volumes forecasted for the 2040 plus project model indicate that the west driveway would likely warrant signalization. With the signalizing of the west driveway, left turn restrictions could be lifted at the west driveway. Fehr & Peers recommends continuing to restrict left turns into the east driveway as outlined in the 2025 plus project conditions analysis. With these mitigations, all existing and proposed study intersections were observed operate at acceptable levels of service in the AM and PM peak hours of the 2040 plus project conditions analysis..

1.1.9 Recommended Mitigations

The Summit County Comprehensive Plan identifies the intersections of SR-248 and Richardson Flat Road as well as SR-248 & Brown's Canyon Road as planned for upgrade from stop-control to signalized intersections. Planned growth from other developments in the area is projected to generate sufficient traffic to warrant traffic signals in future years. As the project develops and background traffic increases, Fehr & Peers further recommends widening the east leg of SR-248 & Richardson Flat Road to allow for two left turn lanes to mitigate delay caused by large left turn volumes. Fehr & Peers also recommends converting the intersection at Jordanelle Parkway & Richardson Flat Road to a roundabout to reduce delay at that intersection to acceptable levels.

Approximately one-half mile west of the intersection at SR-248 & Brown's Canyon Road, westbound SR-248 merges down to one lane. As westbound traffic begins to exceed the capacity of the single westbound lane along SR-248, Fehr & Peers recommends extending the five-lane cross-section of SR-248 past the West Driveway. The five-lane cross-section will then likely need to be reduced down to the existing two-lane cross section by the Historic Rail Trail crossing.

Ultimately, Fehr & Peers recommends signalizing the west driveway as volumes at the intersection begin to warrant signalization and as the UDOT's access category requirements allow. However, until the intersection warrants signalization, Fehr & Peers recommends prohibiting northbound left turns out of the development at the east driveway and westbound left turns into the development at the west driveway. These restrictions are recommended to improve traffic flow and reduce the likelihood of queueing overlap along the median left-turn lane.

1.2 Conclusion

Currently, the intersections of SR-248 & Richardson Flat Road as well as SR-248 & Brown's Canyon Road experience unacceptable delays on the side-street turning movements. Because of this, Summit County plans to install traffic signals at these intersections to bring delay to an acceptable level. With these planned signals, the study intersections were observed to operate at an acceptable level of delay during peak hours in the 2025 background and 2040 background analyses.

However, projected 2025 and 2040 future conditions suggest that without mitigation, the project driveways will operate at unacceptable levels of service during the peak hours. The analysis described in this report shows that implementing the recommended mitigations will alleviate most of the impact from the proposed development and allow the study intersections to operate at acceptable levels of service during the AM and PM peak hours out to the 2040 plus project scenario.

1.2.1 LOS Summary

Table 1 reports LOS at each existing study intersection as well as future project intersections. For signalized intersections, average vehicular delay and LOS are reported. For unsignalized intersections, the worst movement delay and LOS are reported. Detailed descriptions of the intersection operations can be found in the subsequent chapters. The column for 2020 background conditions reflect conditions with current lane configurations and no mitigations. All columns for future conditions incorporate planned improvements and mitigations.

Table 1: AM and PM Peak Hour Level of Service Summary

Intersection			2020 Background	2025 Background	2025 plus Project	2040 Background	2040 plus Project
ID	Location	Period	LOS & Sec/Veh	LOS & Sec/Veh	LOS & Sec/Veh	LOS & Sec/Veh	LOS & Sec/Veh
1	SR-248 & Richardson Flat Road[1,2]	AM	**F / 52 (WBL)**	A / 8	B / 16	A / 9	B / 14
		PM	**F / 153 (WBL)**	A / 6	D / 47	A / 7	D / 42
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	A / 9 (EBT)	A / 9 (EBT)	A / 6*	A / 9 (EBT)	A / 6*
		PM	A / 9 (EBT)	A / 9 (EBT)	A / 7*	A / 9 (EBT)	A / 7*
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	**F / 55 (EBL)**	B / 18	C / 26**	C / 22	C / 30**
		PM	**F / 52 (EBL)**	B / 16	C / 25**	B / 18	C / 26**
4	East Driveway & SR-248[2]	AM	-	-	B / 11 (NBR)	-	B / 11 (NBR)
		PM	-	-	B / 13 (WBL)	-	C / 16 (NBR)
5	West Driveway & SR-248[2]	AM	-	-	D / 33 (SBL)	-	B / 14**
		PM	-	-	**F / 65 (NBL)**	-	A / 7**

1. Intersection average LOS and delay for signalized and roundabout intersections.
2. Worst movement LOS and delay for unsignalized intersections.

* This intersection was assumed to be converted to a roundabout in at least one plus project conditions analysis.

** This intersection was assumed to be signalized in at least one plus project conditions analysis.

Source: Fehr & Peers.

2. Introduction

2.1 Purpose

This study provides a summary of the potential transportation-related impacts from the multi-use site located on Richardson Flat Road between the intersections of SR-248 & Richardson Flat Road and Richardson Flat Road & Jordanelle Parkway in Richardson Flat, Utah. **Figure 1** for a project location map (source: LDG).

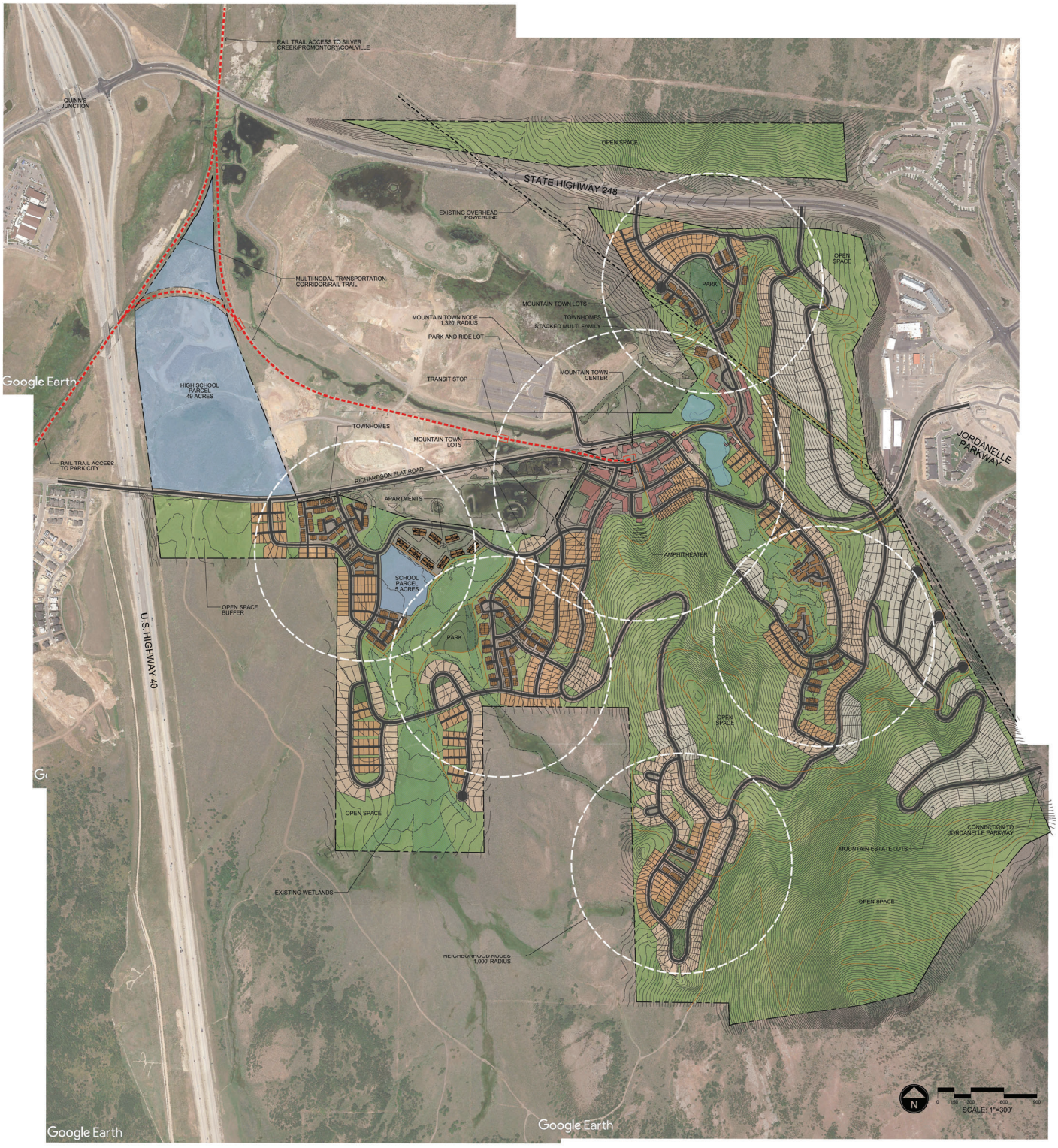
This study analyzes the traffic operations and impacts for 2020 background, 2025 background, 2025 plus project, 2040 background, and 2040 plus project conditions at key intersections, described below in the Scope section. The plus project analysis includes project trips generated from the proposed multi-use site. For each of the evaluation periods, mitigation (roadway geometry changes or operational improvements) actions, if needed, were recommended.

2.2 Scope

This study analyzes the traffic impacts of the project in conjunction with adjacent intersections. Impacts are specifically addressed at the following study intersections:

The following intersections were included in this study:

1) SR-248 & Richardson Flat Road – Side-street stop controlled
2) Jordanelle Parkway & Richardson Flat Road - Side-street stop controlled
3) SR-248 & Jordanelle Parkway/Brown's Canyon Road



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COMMUNITY MASTER PLAN

2.3 Analysis Methodology

LOS is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. Table 2 provides a brief description of each LOS letter designation and an accompanying average delay per vehicle for both signalized and unsignalized intersections. The Highway Capacity Manual, 6th Edition (HCM 6) methodology was used in this study to remain consistent with "state of the practice" professional standards. This methodology has different quantitative evaluations for signalized and unsignalized intersections. For signalized intersections, the LOS is provided for the overall intersection (weighted average of all approach delays).

Table 2: Level of Service Descriptions

LOS	Description	Signalized Intersections	Unsignalized Intersections
		Avg. Delay (sec/veh)[1]	Avg. Delay (sec/veh)[2]
A	*Free Flow / Insignificant Delay* Extremely favorable progression. Individual users are virtually unaffected by others in the traffic stream.	< 10.0	< 10.0
B	*Stable Operations / Minimum Delays* Good progression. The presence of other users in the traffic stream becomes noticeable.	> 10.0 to 20.0	> 10.0 to 15.0
C	*Stable Operations / Acceptable Delays* Fair progression. The operation of individual users is affected by interactions with others in the traffic stream	> 20.0 to 35.0	> 15.0 to 25.0
D	*Approaching Unstable Flows / Tolerable Delays* Marginal progression. Operating conditions are noticeably more constrained.	> 35.0 to 55.0	> 25.0 to 35.0
E	*Unstable Operations / Significant Delays Can Occur* Poor progression. Operating conditions are at or near capacity.	> 55.0 to 80.0	> 35.0 to 50.0
F	*Forced, Unpredictable Flows / Excessive Delays* Unacceptable progression with forced or breakdown of operating conditions.	> 80.0	> 50.0

1. Overall intersection LOS and average delay (seconds/vehicle) for all approaches.
2. Worst approach LOS and delay (seconds/vehicle) only.

Source: Fehr & Peers descriptions, based on *Highway Capacity Manual, 6th Edition*.

3. Existing 2020 Background Conditions

3.1 Purpose

The 2020 existing conditions analysis examines the pertinent intersections and roadways during the peak travel periods of the day under existing traffic and geometric conditions. Through this analysis, existing traffic operational deficiencies can be identified and potential mitigation measures recommended.

3.2 Roadway System

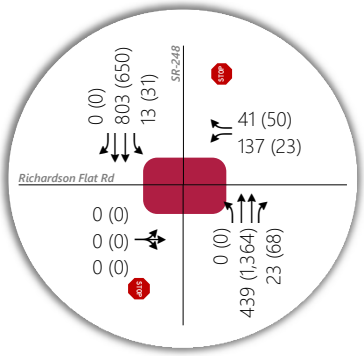
The primary roadways that will provide access to the project are described below.

- **SR-248** is a state-owned highway in Summit County that connects Park City with Kamas, Utah. From Wyatt Earp Way to Richardson Flat Road, SR-248 has one travel lane in each direction with a two-way left-turn lane and a speed limit of 50 miles per hour. From the US-40 to the intersection at Brown's Canyon Road, SR-248 widens to have two travel lanes in each direction with a two-way left-turn lane and a speed limit of 65 miles per hour.
- **Richardson Flat Road** has a posted speed limit of 35 mph and is classified as a minor collector road. Richardson Flat Road has a two-lane cross section with one travel lane in each direction throughout the project area.
- **Jordanelle Parkway / Brown's Canyon Road** has a posted speed limit of 30 mph and is classified as a major collector road. It has a two-lane cross-section with one travel lane in each direction near the project area, except for near the intersection at SR-248, where it widens out to include left and right turn storage lanes.

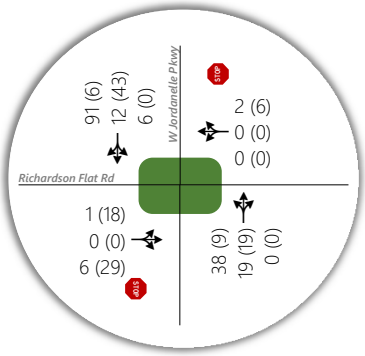
3.3 Traffic Volumes

Fehr & Peers collected traffic counts at the study intersections to establish a baseline of existing conditions and operations for the area. AM peak period traffic counts were recorded from 7:00 AM to 9:00 AM and PM peak period traffic counts were recorded from 4:00 PM to 6:00 PM on January 15, 2020 at all study intersections. No monthly or daily adjustment factors were applied to the counts. The existing background weekday peak hour volumes are shown in **Figure 2** and in the Appendix.

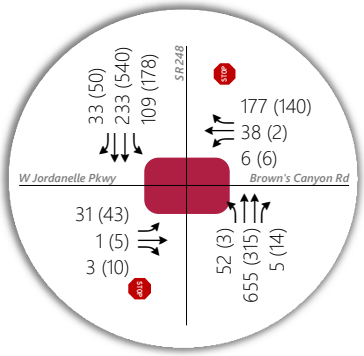




1. SR-248/ Richardson Flat Rd



2. W Jordanelle Pkwy/ Richardson Flat Rd



3. SR 248/W Jordanelle Pkwy/ Brown's Canyon Rd

LEGEND

AM (PM)	**Peak Hour Traffic Volume**
	Lane Configuration
STOP	**Stop Sign**
	Signalized
	Traffic Circle

AM / PM — A B C D E F

Figure 2

Existing Conditions

3.4 Level of Service Analysis

Using Synchro software and the HCM 2016 delay thresholds provided in the Introduction, the existing background AM and PM peak hour LOS were computed for each study intersection. The results of this analysis for the AM and PM peak hours are reported in **Table 3** (see Appendix for the detailed LOS report). These results serve as a base for the analysis of the impacts of the proposed mixed use development.

Table 3: Existing 2020 Background Conditions AM & PM Peak Hour Level of Service

Intersection				Worst Movement[1]			Overall Intersection[2]	
ID	Location	Period	Control	Movement[3]	Delay Sec/Veh	LOS	Avg. Delay Sec/Veh	LOS
1	SR-248 & Richardson Flat Road[1,2]	AM	EB/WB Stop	WBL	52	F	-	-
		PM		WBL	153	F	-	-
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	EB/WB Stop	EBT	9	A	-	-
		PM		EBT	9	A	-	-
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	EB/WB Stop	EBL	55	F	-	-
		PM		EBL	52	F	-	-

1. This represents the worst approach LOS and delay (seconds/vehicle) and is only reported for unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds/vehicle) and is only reported for signalized intersections.
3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Source: Fehr & Peers.

As shown in **Table 3**, the intersections at SR-248 & Richardson Flat Road and at SR-248 & Brown's Canyon Road both operate at failing levels of service in the AM and PM peak hours due to few gaps available for left-turn movements from minor roadways. The intersection at Jordanelle Parkway & Richardson Flat Road operated at acceptable levels of service.

3.5 Mitigation Measures

Summit County has identified both of these intersections as locations for future traffic signal implementations due to existing failing conditions. The heavy volumes in the project area indicate that those signals are likely needed and should be implemented as they are warranted.

These mitigations are assumed to be implemented for all 2025 and 2040 analysis configurations since initial analyses without those mitigations showed that the intersections would likely experience failing conditions without them. No additional mitigations aside from those identified by Summit County are recommended as part of this analysis.

4. Future 2025 Background Conditions

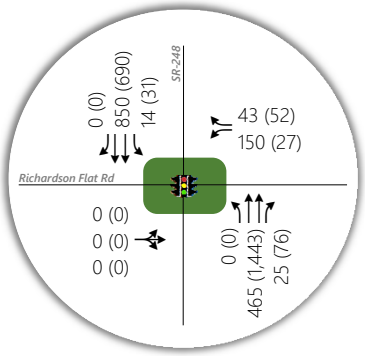
4.1 Purpose

The purpose of the future 2025 background conditions analysis is to evaluate the study intersections during the peak travel periods of the day under projected 2025 traffic volumes. This analysis provides a baseline condition for the year 2025, which can be used to determine future project impacts. This analysis also assumes the mitigations recommended in Section 3.5 were implemented.

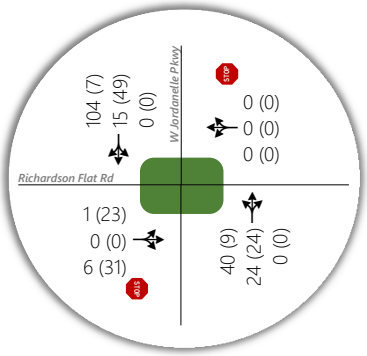
4.2 Traffic Volumes

Fehr & Peers projected 2025 volumes using linear annual growth rates based on Summit County Travel Demand Model and modifications based on observations of the area. The increase in projected volume between the 2019 and 2040 Summit County models indicated between 1.1% and 2.9% growth per year, depending on the segment of road in the study area. The growth rates were applied to the existing 2020 background volumes to formulate the traffic volumes for the future 2025 background conditions. The projected 2025 background peak hour traffic volumes are shown in **Figure 3**.

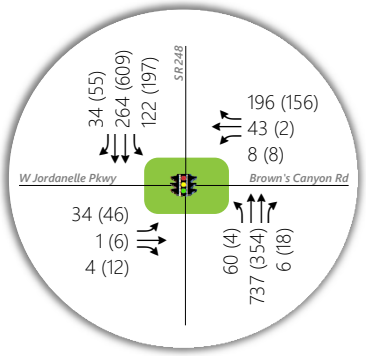




1. SR-248/ Richardson Flat Rd



2. W Jordanelle Pkwy/ Richardson Flat Rd



3. SR 248/W Jordanelle Pkwy/ Brown's Canyon Rd

LEGEND

AM (PM)	**Peak Hour Traffic Volume**
	Lane Configuration
STOP	**Stop Sign**
	Signalized
	Traffic Circle

AM / PM — A B C D E F

Figure 3

2025 Background

4.3 Level of Service Analysis

Using Synchro software and the HCM 2016 delay thresholds provided in the Introduction, future 2020 background peak hour LOS was computed for each study intersection. The results of this analysis for the AM and PM peak hours are reported in **Table 4** (see Appendix for the detailed LOS report).

Table 4: Future 2025 Background Conditions AM & PM Peak Hour Level of Service

Intersection				Worst Movement[1]			Overall Intersection[2]	
ID	Location	Period	Control	Movement[3]	Delay Sec/Veh	LOS	Avg. Delay Sec/Veh	LOS
1	SR-248 & Richardson Flat Road[1,2]	AM	Signal	-	-	-	8	A
		PM		-	-	-	6	A
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	EB/WB Stop	EB TH	9	A	-	-
		PM		EB TH	9	A	-	-
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	Signal	-	-	-	18	B
		PM		-	-	-	16	B

1. This represents the worst approach LOS and delay (seconds/vehicle) and is only reported for unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds/vehicle).
3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Source: Fehr & Peers.

4.4 Mitigation Measures

All intersections operate at acceptable overall levels of service assuming the mitigation measures recommended in the existing conditions analysis, therefore no further traffic operation mitigation measures for future 2025 conditions are recommended.

5. Project Conditions

5.1 Purpose

The project conditions analysis explains the type and intensity of development. This provides the basis for trip generation, distribution, and assignment of project trips to the surrounding study intersections defined in the Introduction.

5.2 Project Description

The proposed mixed use site will be located between the intersections of SR-248 & Richardson Flat Road and Richardson Flat Road & Jordanelle Parkway and will consist of single-family, multi-family, and second home residential along with some general office, retail, and restaurant uses. The full list of land uses and area occupied by each use is listed in **Table 5**. The Richardson Flat development spans across both sides of SR-248, with the majority of land uses being south of SR-248, while a smaller plot to the north of provides space for a multi-family housing complex. The development proposes two driveway access locations that tie into SR-248.

Based on UDOT's access category classification of SR-248, both driveways that connected to SR-248 were assumed to be placed at least 1,000 feet apart, and were assumed to provide right and left turn acceleration and deceleration lanes. In existing conditions, the location of the westbound driveway does not have a center median lane; Fehr & Peers recommends that the center median lane be extended past the west driveway to allow for left turning vehicles to perform two-stage left-turns out of the development.

5.3 Trip Generation

Trip generation for the project was computed using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*, 2017, and Fehr & Peers' mixed-use development (MXD+) methodology via MainStreet, a Fehr & Peers web application that captures the traffic benefits of developments by looking at interactions among the mixture of land uses and patron usage of alternative modes (i.e. transit, bicycling, and/or walking).

The gross and net external vehicle trips expected to be generated by the mixed use development, along with the vehicle trip reduction rates (that account for trips that are internal to the site, as well as trips that shift to transit or walk/bike modes) are shown in **Table 5**.

Table 5: Mixed use development Trip Generation

ITE Land Use	ITE Code	Units	Quantity	Daily Total	AM In	AM Out	AM Total	PM In	PM Out	PM Total
(Custom) - Second Home	0	Dwelling Units	364	2220	33	109	142	112	66	178
(Custom) - Second Home	0	Dwelling Units	195	1190	46	30	76	38	58	96
(Custom) - Second Home	0	Dwelling Units	184	1,122	43	29	72	36	54	90
(Custom) - Second Home	0	Dwelling Units	61	372	6	18	24	19	11	30
(Custom) - Second Home	0	Dwelling Units	93	567	8	28	36	29	17	46
(Custom) - Second Home	0	Dwelling Units	17	104	2	5	7	6	2	8
(Custom) - Second Home	0	Dwelling Units	40.25	1,100	26	15	41	123	72	198
Single-Family Detached Housing	210	Dwelling Units	456	4,305	84	253	337	284	167	451
Single-Family Detached Housing	210	Dwelling Units	341	3219	63	189	252	213	125	338
Single-Family Detached Housing	210	Dwelling Units	62	585	12	35	46	38	23	61
Multifamily Housing Low Rise	220	Dwelling Units	848	6,207	90	300	390	299	176	475
Multifamily Housing Low Rise	220	Dwelling Units	218	1596	23	77	100	77	45	122
Multifamily Housing Mid-Rise	221	Dwelling Units	920	5,005	86	245	331	247	158	405
Mid-Rise Residential with 1st-Floor Commercial	231	Dwelling Units	39	134	3	9	12	10	4	14
Assisted Living	254	1,000 Sq. Ft	207.09	868	63	18	81	30	69	99
General Office Building	710	1,000 Sq. Ft	256.59	2,499	256	42	298	47	248	295
Shopping Center (Adj Street, 7-9A, 4-6P)	820	1,000 Sq. Ft	206.413	7,792	120	74	194	377	409	786
High-Turnover (Sit-Down) Restaurant	932	1,000 Sq. Ft	10.924	1225	60	49	109	66	41	107
Gasoline/Service Station with Convenience Market	945	1,000 Sq. Ft	5.4	7,776	209	201	410	243	234	477
Sub Total				47,886	1233	1726	2958	2294	1979	4276
Internal Capture				*4,020*	*149*	*209*	*358*	*356*	*307*	*664*
Shift to Transit				*797*	*33*	*46*	*78*	*67*	*58*	*125*
Shift to Walk/Bike				*93*	*4*	*6*	*10*	*4*	*4*	*8*
TOTAL				**43,773**	**1,080**	**1,511**	**2,590**	**1,933**	**1,668**	**3,604**

Source: Fehr & Peers.

5.4 Trip Distribution and Assignment

Project traffic was assigned to the roadway network based on the proximity to major streets and freeways, roadway network, high population densities, and regional trip attractions. Existing travel patterns observed during data collection also provided helpful guidance to establish these distribution percentages, especially in close proximity to the site.

Overall, the project-generated trips were distributed to and from these directions in the project conditions analyses, in the corresponding percentages:

- 35% South (using SR-248 from Richardson Flat Road)
- 20% North (using SR-248 from Richardson Flat Road)
- 20% West (using SR-248 from the proposed driveways and Brown's Canyon Road)
- 5% East (using Brown's Canyon Road)
- 5% South (using SR-248 from the proposed driveways and Brown's Canyon Road)

These trip distribution assumptions were used to distribute project-generated traffic to the study area intersections.

6. Future 2025 plus Project Conditions

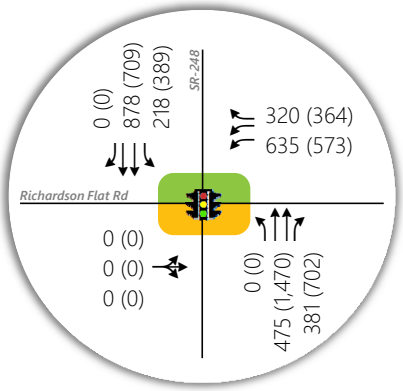
6.1 Purpose

The purpose of the 2025 plus project conditions analysis is to evaluate the impact of the proposed development traffic on the surrounding roadway network. In order to analyze this impact, the peak hour 2025 background traffic volumes were combined with volumes generated by the proposed project at its peak hour. Intersection LOS analyses were then performed and compared to the results of the background traffic volumes. This comparison shows the impact of the proposed project.

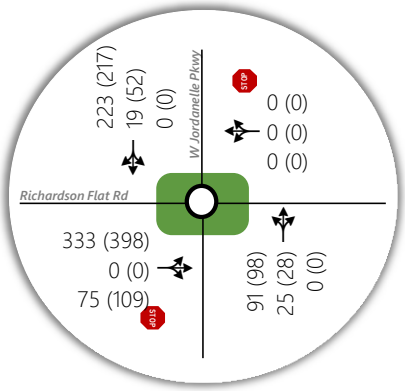
6.2 Traffic Volumes

Project-generated traffic was added to the projected 2025 volumes to yield 2025 future plus project peak hour volumes. The AM and PM peak hour traffic volumes at the study intersections are shown in **Figure 4**.

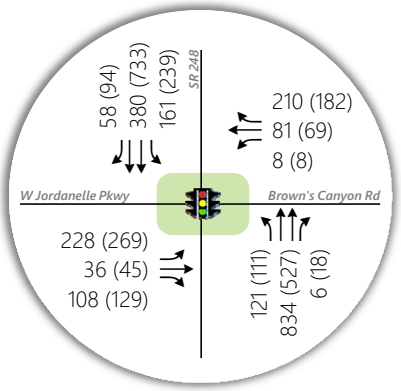




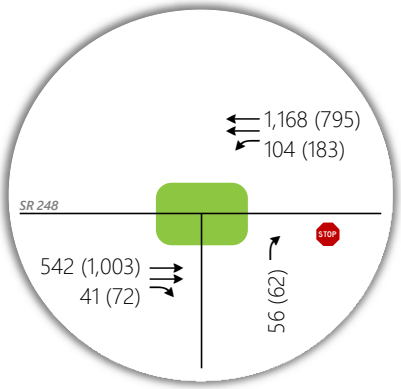
1. SR-248/ Richardson Flat Rd



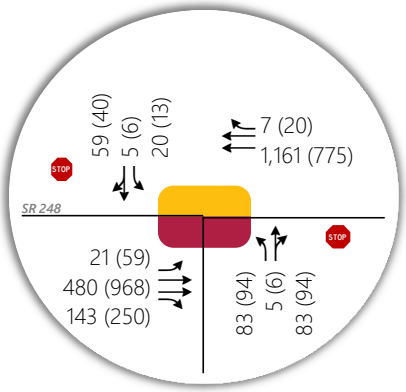
2. W Jordanelle Pkwy/ Richardson Flat Rd



3. SR 248/W Jordanelle Pkwy/ Brown's Canyon Rd



4. East Driveway/ SR 248



5. West Driveway/ SR 248

LEGEND

AM (PM)	**Peak Hour Traffic Volume**
	Lane Configuration
STOP	**Stop Sign**
	Signalized
	Traffic Circle

AM PM A B C D E F

Figure 4

2025+ Project

6.3 Level of Service Analysis

Using Synchro 10 software and the HCM 2016 delay thresholds provided in the Introduction, 2025 plus project AM and PM peak hour LOS was computed for each study intersection for the conceptual site development. The results of this analysis for the AM and PM peak hours are reported in **Table 6** (see Appendix for the detailed LOS report).

Table 6: Future 2025 Plus Project Conditions AM & PM Peak Hour Level of Service

Intersection				Worst Movement[1]			Overall Intersection[2]	
ID	Location	Period	Control	Movement[3]	Delay Sec/Veh	LOS	Avg. Delay Sec/Veh	LOS
1	SR-248 & Richardson Flat Road[1,2]	AM	Signal	-	-	-	16	B
		PM		-	-	-	47	D
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	Roundabout	-	-	-	6	A
		PM		-	-	-	7	A
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	Signal	-	-	-	26	C
		PM		-	-	-	25	C
4	SR-248 & East Driveway	AM	NB Stop	NB RT	11	B	-	-
		PM		WB LT	13	B	-	-
5	SR-248 & West Driveway	AM	NB Stop	NB LT	28	D	-	-
		PM		NB LT	65	F	-	-

1. This represents the worst approach LOS and delay (seconds/vehicle) and is only reported for unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds/vehicle).
3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Source: Fehr & Peers.

6.4 Mitigation Measures

Of the three existing study intersections, only SR-248 & Brown's Canyon Road continued to operate at acceptable levels of service in the AM and PM peak hours of the 2025 plus project conditions analysis. With the addition of project trips, the intersection at SR-248 & Richardson Flat Road and at Jordanelle Parkway & Richardson Flat Road began to experience unacceptable levels of delay. Fehr & Peers recommends widening the east leg of SR-248 & Richardson Flat Road to allow for two left turn lanes to mitigate delay caused by large left turn volumes from the project site. Fehr & Peers also recommends converting the intersection at Jordanelle Parkway & Richardson Flat Road to a roundabout to reduce delay at that intersection to acceptable levels.

Approximately one-half mile west of the intersection at SR-248 & Brown's Canyon Road, westbound SR-248 merges down to one lane. As westbound traffic begins to exceed the capacity of the single westbound lane along SR-248, Fehr & Peers recommends extending the five-lane cross-section of SR-248 past the West Driveway. The five-lane cross-section will then likely need to be reduced down to the existing two-lane cross section by the Historic Rail Trail crossing.

Furthermore, due to heavy east-west through movements along SR-248, the proposed project driveways were observed to operate at failing levels of service if all movements are allowed at the driveways. Fehr & Peers recommends prohibiting northbound left turns out of the development at the east driveway and westbound left turns into the development at the west driveway. The restriction of left turn movements limited the failing levels of service to only the northbound left turn movement at the west driveway. It should be noted that all excessive delay was kept on the project driveway and did not impact the state facility on SR-248. All other movements at the project driveways operate at acceptable levels of service.

7. Future 2040 Background Conditions

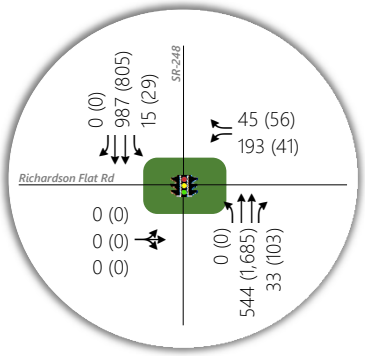
7.1 Purpose

The purpose of the future 2040 background conditions analysis is to evaluate the study intersections during the peak travel periods of the day under projected 2040 traffic volumes. This analysis provides a baseline condition for the year 2040, which can be used to determine future project impacts.

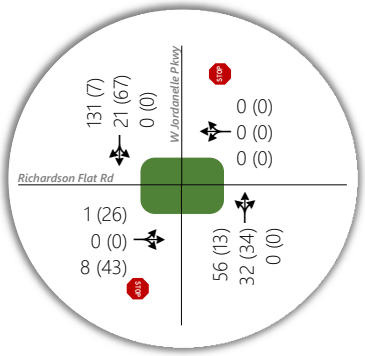
7.2 Traffic Volumes

Fehr & Peers projected 2040 volumes using linear annual growth rates based on Summit County Travel Demand Model and modifications based on observations of the area. The increase in projected volume between the 2019 and 2040 Summit County models indicated between 1.1% and 2.9% growth per year, depending on the segment of road in the study area. The growth rates were applied to the existing 2020 background volumes to formulate the traffic volumes for the future 2040 background conditions. The projected 2040 background peak hour traffic volumes are shown in **Figure 5**.

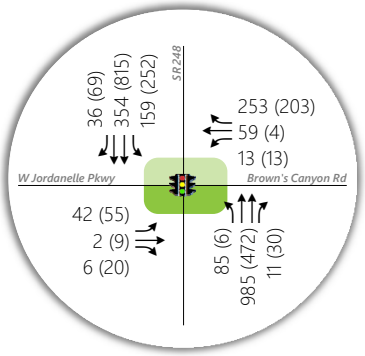




1. SR-248/ Richardson Flat Rd



2. W Jordanelle Pkwy/ Richardson Flat Rd



3. SR 248/W Jordanelle Pkwy/ Brown's Canyon Rd

LEGEND

AM (PM)	**Peak Hour Traffic Volume**
	Lane Configuration
STOP	**Stop Sign**
	Signalized
	Traffic Circle

AM PM A B C D E F

Figure 5

2040 Background

7.3 Level of Service Analysis

Using Synchro software and the HCM 2016 delay thresholds provided in the Introduction, future 2040 background weekday peak hour LOS was computed for each study intersection. The results of this analysis for the AM & PM peak hour are reported in **Table 7** (see Appendix for the detailed LOS report).

Table 7: Future 2040 Background Conditions AM & PM Peak Hour Level of Service

Intersection				Worst Movement[1]			Overall Intersection[2]	
ID	Location	Period	Control	Movement[3]	Delay Sec/Veh	LOS	Avg. Delay Sec/Veh	LOS
1	SR-248 & Richardson Flat Road[1,2]	AM	Signal	-	-	-	9	A
		PM		-	-	-	7	A
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	EB/WB Stop	EB TH	9	A	-	-
		PM		EB TH	9	A	-	-
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	Signal	-	-	-	22	C
		PM		-	-	-	18	B

1. This represents the worst approach LOS and delay (seconds/vehicle) and is only reported for unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds/vehicle).
3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Source: Fehr & Peers.

7.4 Mitigation Measures

All study intersections operate at acceptable overall levels of service assuming the mitigation measures recommended in the existing conditions analysis, therefore no further traffic operation mitigation measures for future 2040 conditions are recommended.

8. Future 2040 plus Project Conditions

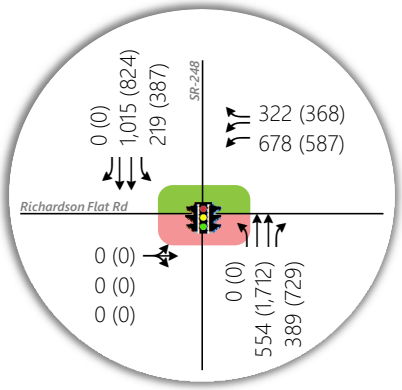
8.1 Purpose

The purpose of the future 2040 plus project conditions analysis is to evaluate the impact of the proposed development traffic on the surrounding roadway network in the year 2040. In order to analyze this impact, the projected 2040 AM and PM peak hour background traffic volumes were combined with volumes generated by the conceptual development for the AM and PM peak hour. Intersection LOS analyses were then performed and compared to the results of the background traffic volumes. This comparison shows the impact of the conceptual project in 2040.

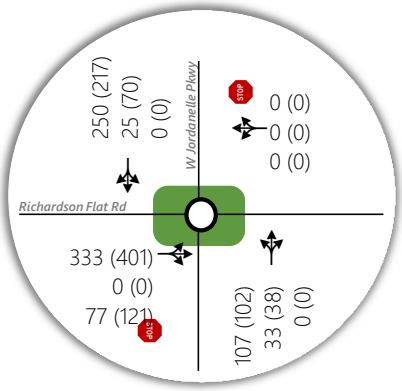
8.2 Traffic Volumes

Project-generated traffic was added to the future 2040 background volumes (**Figure 5**) to yield "future 2040 plus project" AM and PM peak hour traffic volumes at the study intersections (**Figure 6**).

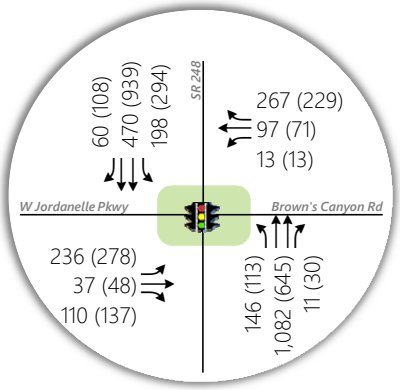




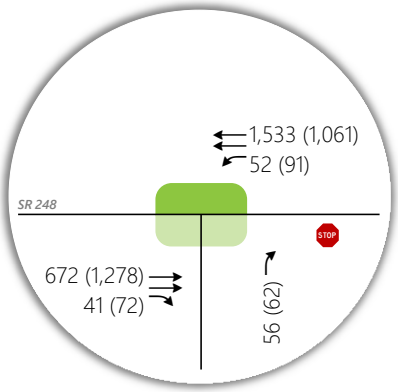
1. SR-248/ Richardson Flat Rd



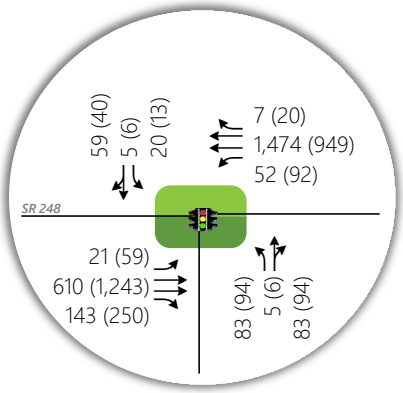
2. W Jordanelle Pkwy/ Richardson Flat Rd



3. SR 248/W Jordanelle Pkwy/ Brown's Canyon Rd



4. East Driveway/ SR 248



5. West Driveway/ SR 248

LEGEND

AM (PM)	**Peak Hour Traffic Volume**
	Lane Configuration
STOP	**Stop Sign**
	Signalized
	Traffic Circle

AM PM A B C D E F

Figure 6

2040 + Project

8.3 Level of Service Analysis

Using Synchro software and the HCM 2016 delay thresholds provided in the Introduction, future 2040 plus project AM and PM peak hour LOS was computed for each study intersection for the conceptual site development. During the analysis, initial results indicated that the northbound left turning movement on the west driveway would fail due to the heavy westbound through movement along SR-248. Based on this analysis, Fehr & Peers recommends signalizing the west driveway intersection. This recommendation was assumed for the 2040 plus project analysis. The results of this analysis for the AM and PM peak hours are reported in **Table 8** (see Appendix for the detailed LOS report).

Table 8: Future 2040 plus Project Conditions AM & PM Peak Hour Level of Service

Intersection				Worst Movement[1]			Overall Intersection[2]	
ID	Location	Period	Control	Movement[3]	Delay Sec/Veh	LOS	Avg. Delay Sec/Veh	LOS
1	SR-248 & Richardson Flat Road[1,2]	AM	Signal	-	-	-	14	B
		PM		-	-	-	42	D
2	Jordanelle Parkway & Richardson Flat Road[2]	AM	Roundabout	-	-	-	6	A
		PM		-	-	-	7	A
3	SR-248 & Jordanelle Parkway/Brown's Canyon Road[1,2]	AM	Signal	-	-	-	30	C
		PM		-	-	-	26	C
4	SR-248 & East Driveway	AM	NB Stop	NB RT	11	B	-	-
		PM		WB LT	16	C	-	-
5	SR-248 & West Driveway	AM	Signal	-	-	-	14	B
		PM		-	-	-	7	A

1. This represents the worst approach LOS and delay (seconds/vehicle) and is only reported for unsignalized intersections.
2. This represents the overall intersection LOS and delay (seconds/vehicle).
3. NB=Northbound, SB=Southbound, EB=Eastbound, WB=Westbound

Source: Fehr & Peers.

8.4 Mitigation Measures

As background traffic continues to grow delay at the project driveways is likely to increase. Fehr & Peers recommends signalizing that intersection when the volumes warrant signalization.

It should be noted that SR-248 is currently a Category 2: System-priority rural importance roadway throughout the project area. Category 2 roadways require one mile of space between signalized intersections. However, as the project develops and vehicle trips to and from the driveways increase, and the area becomes more urban. Fehr & Peers recommends coordinating with UDOT to apply to reassign the

segment of SR-248 within the project to be a Category 3: System priority-urban importance roadway. Re-categorizing the roadway to Category 3 will allow for half-mile spacing between signalized intersections, which means that signalizing the west driveway will meet UDOT's access management requirements. Currently the segment of SR-248 just to the west (near the US-40 interchange) is already Category 3, so the Category 3 classification could be extended from its current extent to the east to Browns Canyon.

The volumes forecasted for the 2040 plus project model indicate that the west driveway would likely warrant signalization. With the signalizing of the west driveway, left turn restrictions could be lifted at the west driveway. Fehr & Peers recommends continuing to restrict left turns into the east driveway as outlined in the 2025 plus project conditions analysis. With these mitigations, all existing and proposed study intersections were observed operate at acceptable levels of service in the AM and PM peak hours of the 2040 plus project conditions analysis.

9. Conclusion

In the existing conditions analyses, the intersections at SR-248 & Richardson Flat Road and at SR-248 & Brown's Canyon Road both operate at failing levels of service in the AM and PM peak hours due to few gaps available for left-turn movements from minor roadways. Furthermore, the proposed project accesses along SR-248 are projected to operate at failing levels of service without mitigation.

Fehr & Peers recommends signalizing the intersections at SR-248 & Richardson Flat Road and at SR-248 & Brown's Canyon Road as outlined in the Summit County Comprehensive Plan. Converting the intersection of Jordanelle Parkway & Richardson Flat Road to a roundabout will also improve traffic flow at that location. It is also recommended to extending the five-lane cross-section of SR-248 west of Brown's Canyon Road as the proposed development is built, at least past the west project driveway. As traffic volumes and delays increase, Fehr & Peers also recommends signalizing the west driveway when it is warranted and as the UDOT's access category requirements allow. However, until the intersection warrants signalization, it is recommended to prohibit northbound left turns out of the development at the east driveway and westbound left turns into the development at the west driveway. These restrictions are recommended to improve traffic flow and reduce the likelihood of queueing overlap along the median left-turn lane.

The analysis described in this report shows that the proposed mixed use development and the surrounding proposed housing development would impact vehicle level of service and delay at intersections within the immediate vicinity. However, implementing the recommended mitigations will alleviate most of the impact from the proposed development and maintain acceptable levels of service at all of the study intersections.

Appendix

Turning Movement Counts

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File Name : SR-248 and Richardson Flat Road 0700-0900
Site Code : 00000000
Start Date : 1/15/2020
Page No : 1

Groups Printed- TMC

	SR-248 From North					Richardson Flat Road From East					SR-248 From South					Richardson Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	292	5	0	297	3	0	12	0	15	6	56	0	0	62	0	0	0	0	0	374
07:15 AM	0	238	13	0	251	6	0	32	0	38	4	100	0	0	104	0	0	0	0	0	393
07:30 AM	0	213	1	0	214	6	0	29	0	35	8	137	0	0	145	0	0	0	0	0	394
07:45 AM	0	206	3	0	209	12	0	33	0	45	2	106	0	0	108	0	0	0	0	0	362
Total	0	949	22	0	971	27	0	106	0	133	20	399	0	0	419	0	0	0	0	0	1523
08:00 AM	0	201	3	0	204	8	0	38	0	46	7	81	0	0	88	0	0	0	0	0	338
08:15 AM	0	183	6	0	189	15	0	37	0	52	6	115	0	0	121	0	0	0	0	0	362
08:30 AM	0	232	4	0	236	4	0	43	0	47	3	88	0	0	91	0	0	0	0	0	374
08:45 AM	0	228	1	0	229	3	0	43	0	46	3	96	0	0	99	0	0	0	0	0	374
Total	0	844	14	0	858	30	0	161	0	191	19	380	0	0	399	0	0	0	0	0	1448
Grand Total	0	1793	36	0	1829	57	0	267	0	324	39	779	0	0	818	0	0	0	0	0	2971
Apprch %	0	98	2	0		17.6	0	82.4	0		4.8	95.2	0	0		0	0	0	0		
Total %	0	60.4	1.2	0	61.6	1.9	0	9	0	10.9	1.3	26.2	0	0	27.5	0	0	0	0	0	

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	SR-248 From North					Richardson Flat Road From East					SR-248 From South					Richardson Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	155	4	0	159	17	0	1	0	18	19	297	0	0	316	0	0	0	0	0	493
04:15 PM	0	146	4	0	150	10	0	10	0	20	13	346	0	0	359	0	0	0	0	0	529
04:30 PM	0	160	3	0	163	10	0	7	0	17	11	315	0	0	326	0	0	0	0	0	506
04:45 PM	0	161	5	0	166	20	0	6	0	26	19	309	0	0	328	0	0	0	0	0	520
Total	0	622	16	0	638	57	0	24	0	81	62	1267	0	0	1329	0	0	0	0	0	2048
05:00 PM	0	159	7	0	166	6	0	3	0	9	12	355	0	0	367	0	0	0	0	0	542
05:15 PM	0	169	10	0	179	15	0	7	0	22	21	345	0	0	366	0	0	0	0	0	567
05:30 PM	0	161	9	0	170	9	0	7	0	16	16	355	0	0	371	0	0	0	0	0	557
05:45 PM	0	161	8	0	169	7	0	8	0	15	16	261	0	0	277	0	0	0	0	0	461
Total	0	650	34	0	684	37	0	25	0	62	65	1316	0	0	1381	0	0	0	0	0	2127
Grand Total	0	1272	50	0	1322	94	0	49	0	143	127	2583	0	0	2710	0	0	0	0	0	4175
Apprch %	0	96.2	3.8	0		65.7	0	34.3	0		4.7	95.3	0	0		0	0	0	0		
Total %	0	30.5	1.2	0	31.7	2.3	0	1.2	0	3.4	3	61.9	0	0	64.9	0	0	0	0	0	

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	Jordanelle Parkway From North					Richardson Flat Road From East					Jordanelle Parkway From South					Richardson Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	2	1	0	8	0	0	0	0	0	0	7	3	0	10	1	0	0	0	1	19
07:15 AM	16	1	1	0	18	1	0	0	0	1	0	4	5	0	9	2	0	2	0	4	32
07:30 AM	15	2	0	0	17	2	0	0	0	2	0	5	7	0	12	0	0	1	0	1	32
07:45 AM	30	4	1	0	35	0	0	0	0	0	0	5	6	0	11	3	0	0	0	3	49
Total	66	9	3	0	78	3	0	0	0	3	0	21	21	0	42	6	0	3	0	9	132
08:00 AM	27	3	1	0	31	0	0	0	0	0	0	6	16	0	22	2	0	0	0	2	55
08:15 AM	19	3	4	0	26	0	0	0	1	1	0	3	9	1	13	1	0	0	0	1	41
08:30 AM	28	4	3	0	35	0	0	0	0	0	1	3	8	0	12	0	0	4	0	4	51
08:45 AM	35	5	5	0	45	2	0	0	0	2	0	7	9	0	16	0	0	1	0	1	64
Total	109	15	13	0	137	2	0	0	1	3	1	19	42	1	63	3	0	5	0	8	211
Grand Total	175	24	16	0	215	5	0	0	1	6	1	40	63	1	105	9	0	8	0	17	343
Apprch %	81.4	11.2	7.4	0		83.3	0	0	16.7		1	38.1	60	1		52.9	0	47.1	0		
Total %	51	7	4.7	0	62.7	1.5	0	0	0.3	1.7	0.3	11.7	18.4	0.3	30.6	2.6	0	2.3	0	5	

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Page No : 1

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	Jordanelle Parkway From North					Richardson Flat Road From East					Jordanelle Parkway From South					Richardson Flat Road From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	8	0	0	9	0	0	0	0	0	0	2	2	0	4	10	0	2	0	12	25
04:15 PM	1	11	2	0	14	1	0	0	0	1	0	4	7	0	11	7	0	2	0	9	35
04:30 PM	3	12	0	0	15	1	0	0	0	1	0	3	0	0	3	3	0	2	0	5	24
04:45 PM	1	10	0	0	11	4	0	0	0	4	0	6	2	0	8	4	0	4	0	8	31
Total	6	41	2	0	49	6	0	0	0	6	0	15	11	0	26	24	0	10	0	34	115
05:00 PM	2	10	0	0	12	1	0	0	0	1	0	3	1	2	6	6	0	5	0	11	30
05:15 PM	2	12	0	0	14	1	0	0	0	1	0	3	4	0	7	13	0	4	0	17	39
05:30 PM	1	11	0	0	12	0	0	0	0	0	0	7	2	0	9	6	0	5	0	11	32
05:45 PM	1	11	0	0	12	0	0	0	0	0	0	4	5	0	9	7	0	1	0	8	29
Total	6	44	0	0	50	2	0	0	0	2	0	17	12	2	31	32	0	15	0	47	130
Grand Total	12	85	2	0	99	8	0	0	0	8	0	32	23	2	57	56	0	25	0	81	245
Apprch %	12.1	85.9	2	0		100	0	0	0		0	56.1	40.4	3.5		69.1	0	30.9	0		
Total %	4.9	34.7	0.8	0	40.4	3.3	0	0	0	3.3	0	13.1	9.4	0.8	23.3	22.9	0	10.2	0	33.1	

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	Brown's Canyon Road From North					SR-248 From East					Jordanelle Parkway From South					SR-248 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	35	4	1	0	40	0	112	2	0	114	0	0	7	0	7	6	37	13	0	56	217
07:15 AM	36	5	1	0	42	2	116	9	0	127	0	1	4	0	5	6	54	22	0	82	256
07:30 AM	36	6	1	0	43	2	196	12	0	210	0	0	9	0	9	2	50	21	0	73	335
07:45 AM	52	14	1	0	67	1	163	16	0	180	2	0	9	0	11	10	56	28	0	94	352
Total	159	29	4	0	192	5	587	39	0	631	2	1	29	0	32	24	197	84	0	305	1160
08:00 AM	43	8	1	0	52	0	157	14	0	171	1	1	5	0	7	12	62	30	0	104	334
08:15 AM	46	10	3	0	59	2	139	10	0	151	0	0	8	0	8	9	65	30	0	104	322
08:30 AM	47	5	1	0	53	0	132	17	0	149	1	1	8	0	10	23	60	11	0	94	306
08:45 AM	50	7	3	0	60	3	110	8	0	121	1	0	13	0	14	30	64	29	0	123	318
Total	186	30	8	0	224	5	538	49	0	592	3	2	34	0	39	74	251	100	0	425	1280
Grand Total	345	59	12	0	416	10	1125	88	0	1223	5	3	63	0	71	98	448	184	0	730	2440
Apprch %	82.9	14.2	2.9	0		0.8	92	7.2	0		7	4.2	88.7	0		13.4	61.4	25.2	0		
Total %	14.1	2.4	0.5	0	17	0.4	46.1	3.6	0	50.1	0.2	0.1	2.6	0	2.9	4	18.4	7.5	0	29.9	

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Site Code : 00000000
Start Date : 1/15/2020
Page No : 1

Groups Printed- TMC

	Brown's Canyon Road From North					SR-248 From East					Jordanelle Parkway From South					SR-248 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	24	1	0	0	25	1	86	1	0	88	2	1	6	0	9	13	95	38	0	146	268
04:15 PM	50	0	1	0	51	0	103	4	0	107	5	2	9	0	16	14	106	32	0	152	326
04:30 PM	23	0	0	0	23	0	111	2	0	113	2	1	5	0	8	9	132	43	0	184	328
04:45 PM	43	0	0	0	43	3	70	2	0	75	2	1	13	0	16	13	120	41	0	174	308
Total	140	1	1	0	142	4	370	9	0	383	11	5	33	0	49	49	453	154	0	656	1230
05:00 PM	30	0	4	0	34	6	100	1	0	107	1	2	9	0	12	12	133	43	0	188	341
05:15 PM	33	1	1	0	35	3	64	0	0	67	4	1	8	0	13	13	144	46	0	203	318
05:30 PM	34	1	1	0	36	2	81	0	0	83	3	1	13	0	17	12	143	48	0	203	339
05:45 PM	31	1	3	0	35	1	76	1	0	78	2	0	8	0	10	12	145	44	0	201	324
Total	128	3	9	0	140	12	321	2	0	335	10	4	38	0	52	49	565	181	0	795	1322
Grand Total	268	4	10	0	282	16	691	11	0	718	21	9	71	0	101	98	1018	335	0	1451	2552
Apprch %	95	1.4	3.5	0		2.2	96.2	1.5	0		20.8	8.9	70.3	0		6.8	70.2	23.1	0		
Total %	10.5	0.2	0.4	0	11.1	0.6	27.1	0.4	0	28.1	0.8	0.4	2.8	0	4	3.8	39.9	13.1	0	56.9	

Detailed Level of Service Reports

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	137	0	41	0	439	23	13	803	0
Future Vol, veh/h	0	0	0	137	0	41	0	439	23	13	803	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	100	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	149	0	45	0	477	25	14	873	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1140	1403	437	942	-	239	873	0	0	502	0	0
Stage 1	901	901	-	477	-	-	-	-	-	-	-	-
Stage 2	239	502	-	465	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	156	139	567	218	0	762	768	-	-	1059	-	-
Stage 1	299	355	-	538	0	-	-	-	-	-	-	-
Stage 2	743	540	-	547	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	145	137	567	216	-	762	768	-	-	1059	-	-
Mov Cap-2 Maneuver	145	137	-	216	-	-	-	-	-	-	-	-
Stage 1	299	350	-	538	-	-	-	-	-	-	-	-
Stage 2	700	540	-	540	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	42.4	0	0.1
HCM LOS	A	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	768	-	-	-	216	762	1059	-	-
HCM Lane V/C Ratio	-	-	-	-	0.689	0.058	0.013	-	-
HCM Control Delay (s)	0	-	-	0	52.1	10	8.4	-	-
HCM Lane LOS	A	-	-	A	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	4.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	0	6	0	0	2	38	19	0	6	12	91
Future Vol, veh/h	1	0	6	0	0	2	38	19	0	6	12	91
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	8	0	0	3	48	24	0	8	15	114

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	211	209	73	214	266	26	129	0	0	25	0	0
Stage 1	88	88	-	121	121	-	-	-	-	-	-	-
Stage 2	123	121	-	93	145	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	746	688	989	743	640	1050	1457	-	-	1589	-	-
Stage 1	920	822	-	883	796	-	-	-	-	-	-	-
Stage 2	881	796	-	914	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	721	660	988	714	614	1048	1457	-	-	1587	-	-
Mov Cap-2 Maneuver	721	660	-	714	614	-	-	-	-	-	-	-
Stage 1	890	817	-	853	769	-	-	-	-	-	-	-
Stage 2	849	769	-	901	772	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	8.4	5	0.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1457	-	-	938	1048	1587	-	-
HCM Lane V/C Ratio	0.033	-	-	0.009	0.002	0.005	-	-
HCM Control Delay (s)	7.6	0	-	8.9	8.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	1	3	6	38	177	52	655	5	109	233	33
Future Vol, veh/h	31	1	3	6	38	177	52	655	5	109	233	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	90	90	-	-	140	-	245	145	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	1	3	6	40	186	55	689	5	115	245	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	950	1279	123	1152	1309	345	280	0	0	694	0	0
Stage 1	475	475	-	799	799	-	-	-	-	-	-	-
Stage 2	475	804	-	353	510	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	215	165	905	153	158	651	1280	-	-	897	-	-
Stage 1	539	556	-	345	396	-	-	-	-	-	-	-
Stage 2	539	394	-	637	536	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	138	905	132	132	651	1280	-	-	897	-	-
Mov Cap-2 Maneuver	103	138	-	132	132	-	-	-	-	-	-	-
Stage 1	516	485	-	330	379	-	-	-	-	-	-	-
Stage 2	329	377	-	552	467	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	50.7	18.6	0.6	2.8
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1280	-	-	103	138	905	132	132	651	897	-	-
HCM Lane V/C Ratio	0.043	-	-	0.317	0.008	0.003	0.048	0.303	0.286	0.128	-	-
HCM Control Delay (s)	7.9	-	-	55.4	31.3	9	33.6	43.7	12.7	9.6	-	-
HCM Lane LOS	A	-	-	F	D	A	D	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0	0	0.1	1.2	1.2	0.4	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	23	0	50	0	1364	68	31	650	0
Future Vol, veh/h	0	0	0	23	0	50	0	1364	68	31	650	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	0	-	100	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	24	0	52	0	1421	71	32	677	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1452	2233	339	1824	-	711	677	0	0	1492	0	0
Stage 1	741	741	-	1421	-	-	-	-	-	-	-	-
Stage 2	711	1492	-	403	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	92	42	657	48	0	375	911	-	-	446	-	-
Stage 1	374	421	-	143	0	-	-	-	-	-	-	-
Stage 2	390	185	-	595	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	39	657	45	-	375	911	-	-	446	-	-
Mov Cap-2 Maneuver	75	39	-	45	-	-	-	-	-	-	-	-
Stage 1	374	391	-	143	-	-	-	-	-	-	-	-
Stage 2	336	185	-	552	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	59.5	0	0.6
HCM LOS	A	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	911	-	-	-	45	375	446	-	-
HCM Lane V/C Ratio	-	-	-	-	0.532	0.139	0.072	-	-
HCM Control Delay (s)	0	-	-	0	153.7	16.1	13.7	-	-
HCM Lane LOS	A	-	-	A	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	2	0.5	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	0	29	0	0	6	9	19	0	0	43	6
Future Vol, veh/h	18	0	29	0	0	6	9	19	0	0	43	6
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	35	0	0	7	11	23	0	0	52	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	105	103	58	122	106	25	59	0	0	25	0	0
Stage 1	56	56	-	47	47	-	-	-	-	-	-	-
Stage 2	49	47	-	75	59	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	875	787	1008	853	784	1051	1545	-	-	1589	-	-
Stage 1	956	848	-	967	856	-	-	-	-	-	-	-
Stage 2	964	856	-	934	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	865	780	1006	815	777	1049	1545	-	-	1586	-	-
Mov Cap-2 Maneuver	865	780	-	815	777	-	-	-	-	-	-	-
Stage 1	949	848	-	958	848	-	-	-	-	-	-	-
Stage 2	951	848	-	900	846	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	8.5	2.4	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	947	1049	1586	-	-
HCM Lane V/C Ratio	0.007	-	-	0.06	0.007	-	-	-
HCM Control Delay (s)	7.3	0	-	9	8.5	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

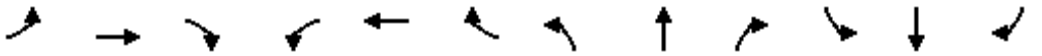
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	5	10	6	2	140	3	315	14	178	540	50
Future Vol, veh/h	43	5	10	6	2	140	3	315	14	178	540	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	90	90	-	-	140	-	245	145	-	460
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	5	10	6	2	146	3	328	15	185	563	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1104	1282	282	988	1319	164	615	0	0	343	0	0
Stage 1	933	933	-	334	334	-	-	-	-	-	-	-
Stage 2	171	349	-	654	985	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	166	164	715	201	156	852	961	-	-	1213	-	-
Stage 1	286	343	-	653	642	-	-	-	-	-	-	-
Stage 2	814	632	-	422	324	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	138	715	170	132	852	961	-	-	1213	-	-
Mov Cap-2 Maneuver	120	138	-	170	132	-	-	-	-	-	-	-
Stage 1	285	291	-	651	640	-	-	-	-	-	-	-
Stage 2	670	630	-	346	274	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43	11.1	0.1	2
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	961	-	-	120	138	715	170	132	852	1213	-	-
HCM Lane V/C Ratio	0.003	-	-	0.373	0.038	0.015	0.037	0.016	0.171	0.153	-	-
HCM Control Delay (s)	8.8	-	-	51.9	32.1	10.1	27	32.7	10.1	8.5	-	-
HCM Lane LOS	A	-	-	F	D	B	D	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.5	0.1	0	0.1	0	0.6	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	0	43	0	465	25	14	850	0
Future Volume (veh/h)	0	0	0	150	0	43	0	465	25	14	850	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	163	0	47	0	505	27	15	924	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	6	0	451	0	0	407	1018	454	409	1705	760
Arrive On Green	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.29	0.29	0.02	0.48	0.00
Sat Flow, veh/h	0	-102870	0	1781	163		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	163	13.7		0	505	27	15	924	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	B		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	2.8			0.0	3.7	0.4	0.2	5.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.8			0.0	3.7	0.4	0.2	5.8	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	6	0	451			407	1018	454	409	1705	760
V/C Ratio(X)	0.00	0.00	0.00	0.36			0.00	0.50	0.06	0.04	0.54	0.00
Avail Cap(c_a), veh/h	0	1064	0	1888			682	7020	3131	740	7188	3206
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	13.2			0.0	9.4	8.2	6.9	5.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5			0.0	0.4	0.1	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.9			0.0	0.8	0.1	0.0	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	13.7			0.0	9.8	8.2	6.9	6.1	0.0
LnGrp LOS	A	A	A	B			A	A	A	A	A	A
Approach Vol, veh/h		0						532			939	
Approach Delay, s/veh		0.0						9.7			6.1	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	6.1	16.1	9.5	0.0	0.0	22.2
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0
Max Green Setting (Gmax), s	6.5	62.5	29.5	18.0	5.0	64.0
Max Q Clear Time (g_c+I1), s	2.2	5.7	4.8	0.0	0.0	7.8
Green Ext Time (p_c), s	0.0	3.3	0.4	0.0	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

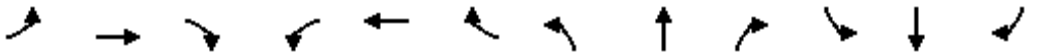
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	0	6	0	0	0	40	24	0	0	15	104
Future Vol, veh/h	1	0	6	0	0	0	40	24	0	0	15	104
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	8	0	0	0	50	30	0	0	19	130

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	215	215	85	220	280	32	149	0	0	31	0	0
Stage 1	84	84	-	131	131	-	-	-	-	-	-	-
Stage 2	131	131	-	89	149	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	742	683	974	736	628	1042	1432	-	-	1582	-	-
Stage 1	924	825	-	873	788	-	-	-	-	-	-	-
Stage 2	873	788	-	918	774	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	721	658	973	709	605	1040	1432	-	-	1580	-	-
Mov Cap-2 Maneuver	721	658	-	709	605	-	-	-	-	-	-	-
Stage 1	891	825	-	841	759	-	-	-	-	-	-	-
Stage 2	841	759	-	910	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	0	4.8	0
HCM LOS	A	A		

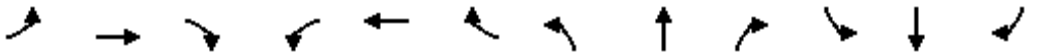
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1432	-	-	927	-	1580	-	-
HCM Lane V/C Ratio	0.035	-	-	0.009	-	-	-	-
HCM Control Delay (s)	7.6	0	-	8.9	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1	4	8	43	196	60	737	6	122	264	34
Future Volume (veh/h)	34	1	4	8	43	196	60	737	6	122	264	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	1	4	8	45	206	63	776	6	128	278	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	370	314	382	319	271	518	1120	500	342	1191	531
Arrive On Green	0.04	0.20	0.20	0.01	0.17	0.17	0.05	0.32	0.32	0.07	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	36	1	4	8	45	206	63	776	6	128	278	36
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.0	0.0	0.1	0.2	1.2	7.3	1.4	11.2	0.2	2.8	3.3	0.9
Cycle Q Clear(g_c), s	1.0	0.0	0.1	0.2	1.2	7.3	1.4	11.2	0.2	2.8	3.3	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	370	314	382	319	271	518	1120	500	342	1191	531
V/C Ratio(X)	0.10	0.00	0.01	0.02	0.14	0.76	0.12	0.69	0.01	0.37	0.23	0.07
Avail Cap(c_a), veh/h	521	975	826	592	975	826	648	3764	1679	711	4311	1923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	18.8	18.9	19.7	20.6	23.1	12.1	17.6	13.8	13.0	14.0	13.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.2	4.4	0.1	0.8	0.0	0.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.1	0.5	2.8	0.4	3.6	0.1	0.9	1.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	18.8	18.9	19.7	20.8	27.5	12.2	18.3	13.8	13.7	14.1	13.3
LnGrp LOS	B	B	B	B	C	C	B	B	B	B	B	B
Approach Vol, veh/h		41			259			845			442	
Approach Delay, s/veh		18.8			26.1			17.8			13.9	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	25.5	6.1	17.1	8.7	26.6	7.7	15.5
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0	5.5	5.5
Max Green Setting (Gmax), s	16.5	62.0	7.5	30.5	7.5	71.0	7.5	30.5
Max Q Clear Time (g_c+I1), s	4.8	13.2	2.2	2.1	3.4	5.3	3.0	9.3
Green Ext Time (p_c), s	0.2	5.3	0.0	0.0	0.0	1.7	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	27	0	52	0	1443	76	31	690	0
Future Volume (veh/h)	0	0	0	27	0	52	0	1443	76	31	690	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	28	0	54	0	1503	79	32	719	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	3	0	186	0	0	579	2163	965	296	2640	1178
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.61	0.61	0.04	0.74	0.00
Sat Flow, veh/h	0	-102870	0	1781	28		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	28	26.7		0	1503	79	32	719	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	C		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.9			0.0	15.9	1.1	0.3	3.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9			0.0	15.9	1.1	0.3	3.6	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	0	186			579	2163	965	296	2640	1178
V/C Ratio(X)	0.00	0.00	0.00	0.15			0.00	0.69	0.08	0.11	0.27	0.00
Avail Cap(c_a), veh/h	0	607	0	708			737	4807	2144	411	4840	2159
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	26.3			0.0	7.4	4.5	6.1	2.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4			0.0	0.4	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.4			0.0	3.0	0.2	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	26.7			0.0	7.8	4.5	6.3	2.4	0.0
LnGrp LOS	A	A	A	C			A	A	A	A	A	A
Approach Vol, veh/h		0						1582			751	
Approach Delay, s/veh		0.0						7.6			2.5	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	7.4	40.7	7.3	0.0	0.0	48.2
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0
Max Green Setting (Gmax), s	5.5	75.0	18.0	18.0	5.0	75.5
Max Q Clear Time (g_c+I1), s	2.3	17.9	2.9	0.0	0.0	5.6
Green Ext Time (p_c), s	0.0	15.8	0.0	0.0	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	23	0	31	0	0	0	9	24	0	0	49	7
Future Vol, veh/h	23	0	31	0	0	0	9	24	0	0	49	7
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	37	0	0	0	11	29	0	0	59	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	114	116	65	137	120	31	67	0	0	31	0	0
Stage 1	63	63	-	53	53	-	-	-	-	-	-	-
Stage 2	51	53	-	84	67	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	863	774	999	834	770	1043	1535	-	-	1582	-	-
Stage 1	948	842	-	960	851	-	-	-	-	-	-	-
Stage 2	962	851	-	924	839	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	859	767	997	796	763	1041	1535	-	-	1579	-	-
Mov Cap-2 Maneuver	859	767	-	796	763	-	-	-	-	-	-	-
Stage 1	941	842	-	951	843	-	-	-	-	-	-	-
Stage 2	955	843	-	888	839	-	-	-	-	-	-	-

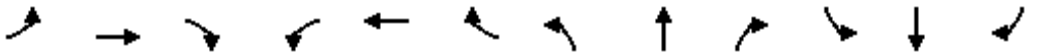
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	0	2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1535	-	-	933	-	1579	-	-
HCM Lane V/C Ratio	0.007	-	-	0.07	-	-	-	-
HCM Control Delay (s)	7.4	0	-	9.1	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	6	12	8	2	156	4	354	18	197	609	55
Future Volume (veh/h)	46	6	12	8	2	156	4	354	18	197	609	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	6	12	8	2	162	4	369	19	205	634	57
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	333	282	366	260	220	280	653	291	470	1089	486
Arrive On Green	0.05	0.18	0.18	0.01	0.14	0.14	0.01	0.18	0.18	0.13	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	48	6	12	8	2	162	4	369	19	205	634	57
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.1	0.1	0.3	0.2	0.0	4.6	0.1	4.4	0.5	3.9	7.1	1.2
Cycle Q Clear(g_c), s	1.1	0.1	0.3	0.2	0.0	4.6	0.1	4.4	0.5	3.9	7.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	333	282	366	260	220	280	653	291	470	1089	486
V/C Ratio(X)	0.12	0.02	0.04	0.02	0.01	0.74	0.01	0.56	0.07	0.44	0.58	0.12
Avail Cap(c_a), veh/h	757	1412	1197	707	1333	1129	630	3174	1416	1360	4686	2090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.9	16.0	17.1	17.5	19.4	15.5	17.5	15.8	11.6	13.8	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	4.7	0.0	0.8	0.1	0.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.1	0.1	0.0	1.8	0.0	1.4	0.2	1.1	2.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	16.0	16.1	17.1	17.5	24.1	15.5	18.2	15.9	12.3	14.3	11.8
LnGrp LOS	B	B	B	B	B	C	B	B	B	B	B	B
Approach Vol, veh/h		66			172			392			896	
Approach Delay, s/veh		16.0			23.7			18.1			13.7	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	15.6	6.0	13.9	5.8	21.4	7.8	12.0
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0	5.5	5.5
Max Green Setting (Gmax), s	29.5	42.0	9.5	35.5	9.5	62.0	11.5	33.5
Max Q Clear Time (g_c+I1), s	5.9	6.4	2.2	2.3	2.1	9.1	3.1	6.6
Green Ext Time (p_c), s	0.5	2.2	0.0	0.0	0.0	4.3	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	635	0	320	0	475	381	218	878	0
Future Volume (veh/h)	0	0	0	635	0	320	0	475	381	218	878	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	661	0	333	0	495	397	227	915	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	3	0	865	0	0	320	1168	521	456	1917	855
Arrive On Green	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.33	0.33	0.11	0.54	0.00
Sat Flow, veh/h	0	-112222	0	3456	661		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	661	22.9		0	495	397	227	915	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1728	C		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	11.0			0.0	6.7	13.9	4.7	9.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.0			0.0	6.7	13.9	4.7	9.9	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	0	865			320	1168	521	456	1917	855
V/C Ratio(X)	0.00	0.00	0.00	0.76			0.00	0.42	0.76	0.50	0.48	0.00
Avail Cap(c_a), veh/h	0	545	0	2181			461	2358	1052	744	3048	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	21.5			0.0	16.2	18.6	10.7	8.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.4			0.0	0.2	2.3	0.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.2			0.0	2.3	4.8	1.5	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.9			0.0	16.4	20.9	11.6	9.0	0.0
LnGrp LOS	A	A	A	C			A	B	C	B	A	A
Approach Vol, veh/h		0						892			1142	
Approach Delay, s/veh		0.0						18.4			9.5	
Approach LOS								B			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	13.0	27.3	21.5	0.0	0.0	40.3
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0
Max Green Setting (Gmax), s	17.0	41.0	39.0	18.0	5.0	53.0
Max Q Clear Time (g_c+I1), s	6.7	15.9	13.0	0.0	0.0	11.9
Green Ext Time (p_c), s	0.4	4.4	2.5	0.0	0.0	6.7

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	5.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	491	0	140	292
Demand Flow Rate, veh/h	501	0	143	297
Vehicles Circulating, veh/h	23	552	409	112
Vehicles Exiting, veh/h	386	0	115	440
Ped Vol Crossing Leg, #/h	0	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.2	0.0	5.6	5.1
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	501	0	143	297
Cap Entry Lane, veh/h	1348	786	909	1231
Entry HV Adj Factor	0.980	1.000	0.982	0.982
Flow Entry, veh/h	491	0	140	292
Cap Entry, veh/h	1321	786	893	1208
V/C Ratio	0.372	0.000	0.157	0.241
Control Delay, s/veh	6.2	4.6	5.6	5.1
LOS	A	A	A	A
95th %tile Queue, veh	2	0	1	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	36	108	8	81	210	121	834	6	161	380	58
Future Volume (veh/h)	228	36	108	8	81	210	121	834	6	161	380	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	238	38	112	8	84	219	126	869	6	168	396	60
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	542	460	311	313	266	441	1122	500	301	1192	532
Arrive On Green	0.13	0.29	0.29	0.01	0.17	0.17	0.07	0.32	0.32	0.09	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	238	38	112	8	84	219	126	869	6	168	396	60
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.8	1.2	4.5	0.3	3.3	11.2	4.0	18.6	0.2	5.2	7.0	2.2
Cycle Q Clear(g_c), s	8.8	1.2	4.5	0.3	3.3	11.2	4.0	18.6	0.2	5.2	7.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	542	460	311	313	266	441	1122	500	301	1192	532
V/C Ratio(X)	0.52	0.07	0.24	0.03	0.27	0.82	0.29	0.77	0.01	0.56	0.33	0.11
Avail Cap(c_a), veh/h	626	822	697	420	533	452	470	2364	1054	484	2744	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	21.7	22.8	28.6	30.5	33.8	17.4	26.1	19.8	19.4	20.9	19.3
Incr Delay (d2), s/veh	0.9	0.1	0.3	0.0	0.5	6.4	0.4	1.2	0.0	1.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.5	1.7	0.1	1.5	4.7	1.5	7.1	0.1	2.0	2.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	21.7	23.1	28.6	31.0	40.2	17.8	27.3	19.8	21.0	21.1	19.4
LnGrp LOS	C	C	C	C	C	D	B	C	B	C	C	B
Approach Vol, veh/h		388			311			1001			624	
Approach Delay, s/veh		23.1			37.4			26.0			20.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	33.6	6.9	30.4	11.7	35.3	17.2	20.1
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	16.0	56.0	6.0	37.0	7.0	65.0	19.0	24.0
Max Q Clear Time (g_c+I1), s	7.2	20.6	2.3	6.5	6.0	9.0	10.8	13.2
Green Ext Time (p_c), s	0.3	5.9	0.0	0.6	0.0	2.6	0.4	0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	542	41	104	1168	0	56
Future Vol, veh/h	542	41	104	1168	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	565	43	108	1217	0	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	608	0	-	283
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	966	-	0	714
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	966	-	-	714
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	714	-	-	966	-
HCM Lane V/C Ratio	0.082	-	-	0.112	-
HCM Control Delay (s)	10.5	-	-	9.2	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.4	-

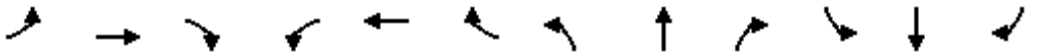
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	480	143	0	1161	7	83	5	83	20	5	59
Future Vol, veh/h	21	480	143	0	1161	7	83	5	83	20	5	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	300	-	-	300	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	500	149	0	1209	8	86	5	86	22	5	64

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1217	0	0	-	-	0	1153	1763	250	1508	1904	605
Stage 1	-	-	-	-	-	-	546	546	-	1209	1209	-
Stage 2	-	-	-	-	-	-	607	1217	-	299	695	-
Critical Hdwy	4.14	-	-	-	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	-	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	569	-	-	0	-	-	152	83	750	83	68	441
Stage 1	-	-	-	0	-	-	490	516	-	194	254	-
Stage 2	-	-	-	0	-	-	450	252	-	685	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	569	-	-	-	-	-	123	80	750	69	65	441
Mov Cap-2 Maneuver	-	-	-	-	-	-	239	173	-	150	172	-
Stage 1	-	-	-	-	-	-	470	495	-	186	254	-
Stage 2	-	-	-	-	-	-	376	252	-	575	424	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	19.8	20.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	239	626	569	-	-	-	-	150	393
HCM Lane V/C Ratio	0.362	0.147	0.04	-	-	-	-	0.145	0.177
HCM Control Delay (s)	28.4	11.7	11.6	-	-	-	-	33	16.1
HCM Lane LOS	D	B	B	-	-	-	-	D	C
HCM 95th %tile Q(veh)	1.6	0.5	0.1	-	-	-	-	0.5	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	573	0	364	0	1470	702	389	709	0
Future Volume (veh/h)	0	0	0	573	0	364	0	1470	702	389	709	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	597	0	379	0	1531	731	405	739	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	2	0	649	0	0	393	1627	726	409	2487	1109
Arrive On Green	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.46	0.46	0.19	0.70	0.00
Sat Flow, veh/h	0	-112222	0	3456	597		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	597	64.3		0	1531	731	405	739	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1728	E		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	19.6			0.0	47.5	53.0	21.7	9.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	19.6			0.0	47.5	53.0	21.7	9.1	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2	0	649			393	1627	726	409	2487	1109
V/C Ratio(X)	0.00	0.00	0.00	0.92			0.00	0.94	1.01	0.99	0.30	0.00
Avail Cap(c_a), veh/h	0	291	0	657			469	1627	726	409	2487	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	46.1			0.0	29.9	31.4	38.1	6.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	18.1			0.0	11.2	35.2	42.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	9.9			0.0	20.9	26.3	15.2	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	64.3			0.0	41.1	66.5	80.1	6.6	0.0
LnGrp LOS	A	A	A	E			A	D	F	F	A	A
Approach Vol, veh/h		0						2262			1144	
Approach Delay, s/veh		0.0						49.3			32.7	
Approach LOS								D			C	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	28.0	60.0	27.7	0.0	0.0	88.0
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0
Max Green Setting (Gmax), s	22.0	53.0	22.0	18.0	5.0	70.0
Max Q Clear Time (g_c+I1), s	23.7	55.0	21.6	0.0	0.0	11.1
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	46.8
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	6.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	611	0	152	324
Demand Flow Rate, veh/h	624	0	155	330
Vehicles Circulating, veh/h	64	645	490	120
Vehicles Exiting, veh/h	386	0	198	525
Ped Vol Crossing Leg, #/h	0	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.9	0.0	6.3	5.5
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	624	0	155	330
Cap Entry Lane, veh/h	1293	715	837	1221
Entry HV Adj Factor	0.979	1.000	0.983	0.981
Flow Entry, veh/h	611	0	152	324
Cap Entry, veh/h	1266	715	823	1198
V/C Ratio	0.483	0.000	0.185	0.270
Control Delay, s/veh	7.9	5.0	6.3	5.5
LOS	A	A	A	A
95th %tile Queue, veh	3	0	1	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	45	129	8	69	182	111	527	18	239	733	94
Future Volume (veh/h)	269	45	129	8	69	182	111	527	18	239	733	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	280	47	134	8	72	190	116	549	19	249	764	98
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	508	561	476	296	285	242	282	806	359	407	1036	462
Arrive On Green	0.16	0.30	0.30	0.01	0.15	0.15	0.07	0.23	0.23	0.13	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	280	47	134	8	72	190	116	549	19	249	764	98
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	9.4	1.4	4.9	0.3	2.6	8.8	3.7	10.8	0.7	7.8	14.8	3.6
Cycle Q Clear(g_c), s	9.4	1.4	4.9	0.3	2.6	8.8	3.7	10.8	0.7	7.8	14.8	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	508	561	476	296	285	242	282	806	359	407	1036	462
V/C Ratio(X)	0.55	0.08	0.28	0.03	0.25	0.79	0.41	0.68	0.05	0.61	0.74	0.21
Avail Cap(c_a), veh/h	742	982	832	442	614	520	438	1959	874	774	2612	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	19.1	20.4	26.8	28.4	31.1	20.9	26.9	23.1	18.6	24.4	20.4
Incr Delay (d2), s/veh	0.9	0.1	0.3	0.0	0.5	5.6	1.0	1.0	0.1	1.5	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.6	1.8	0.1	1.2	3.6	1.4	4.1	0.3	2.8	5.5	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	19.2	20.7	26.9	28.9	36.6	21.9	28.0	23.1	20.1	25.4	20.6
LnGrp LOS	C	B	C	C	C	D	C	C	C	C	C	C
Approach Vol, veh/h		461			270			684			1111	
Approach Delay, s/veh		20.7			34.3			26.8			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	24.3	6.8	28.9	11.3	29.2	18.0	17.6
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	42.0	7.0	40.0	12.0	56.0	22.0	25.0
Max Q Clear Time (g_c+I1), s	10.8	12.8	2.3	6.9	5.7	16.8	11.4	10.8
Green Ext Time (p_c), s	0.6	3.3	0.0	0.7	0.1	5.4	0.6	0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1003	72	183	795	0	62
Future Vol, veh/h	1003	72	183	795	0	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1045	75	191	828	0	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1120	0	-	523
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	619	-	0	499
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	619	-	-	499
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	499	-	-	619	-
HCM Lane V/C Ratio	0.129	-	-	0.308	-
HCM Control Delay (s)	13.3	-	-	13.4	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	1.3	-

Intersection	
Int Delay, s/veh	4

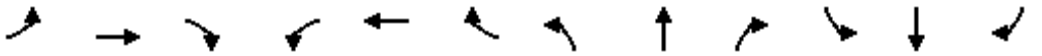
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	968	250	0	775	20	94	6	94	13	6	40
Future Vol, veh/h	59	968	250	0	775	20	94	6	94	13	6	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	300	-	-	300	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	1008	260	0	807	22	98	7	98	14	7	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	829	0	0	-	-	0	1543	1965	504	1443	2203	404
Stage 1	-	-	-	-	-	-	1136	1136	-	807	807	-
Stage 2	-	-	-	-	-	-	407	829	-	636	1396	-
Critical Hdwy	4.14	-	-	-	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	-	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	798	-	-	0	-	-	~ 78	62	513	93	44	596
Stage 1	-	-	-	0	-	-	215	275	-	341	392	-
Stage 2	-	-	-	0	-	-	592	383	-	433	206	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	798	-	-	-	-	-	~ 65	57	513	68	40	596
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	154	-	174	133	-
Stage 1	-	-	-	-	-	-	198	253	-	314	392	-
Stage 2	-	-	-	-	-	-	540	383	-	314	190	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	39.3	17.8
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	448	798	-	-	-	-	174	410
HCM Lane V/C Ratio	0.648	0.233	0.08	-	-	-	-	0.081	0.122
HCM Control Delay (s)	64.7	15.5	9.9	-	-	-	-	27.5	15
HCM Lane LOS	F	C	A	-	-	-	-	D	C
HCM 95th %tile Q(veh)	3.6	0.9	0.3	-	-	-	-	0.3	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	193	0	45	0	544	33	15	987	0
Future Volume (veh/h)	0	0	0	193	0	45	0	544	33	15	987	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	210	0	49	0	591	36	16	1073	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	5	0	478	0	0	351	1186	529	392	1788	797
Arrive On Green	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.33	0.33	0.02	0.50	0.00
Sat Flow, veh/h	0	-102870	0	1781	210		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	210	15.4		0	591	36	16	1073	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	B		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.1			0.0	4.9	0.6	0.2	8.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.1			0.0	4.9	0.6	0.2	8.0	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	5	0	478			351	1186	529	392	1788	797
V/C Ratio(X)	0.00	0.00	0.00	0.44			0.00	0.50	0.07	0.04	0.60	0.00
Avail Cap(c_a), veh/h	0	910	0	1278			635	6678	2979	668	6726	3000
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	14.7			0.0	9.8	8.4	7.2	6.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6			0.0	0.3	0.1	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.4			0.0	1.1	0.1	0.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	15.4			0.0	10.2	8.5	7.2	6.9	0.0
LnGrp LOS	A	A	A	B			A	B	A	A	A	A
Approach Vol, veh/h		0						627			1089	
Approach Delay, s/veh		0.0						10.1			6.9	
Approach LOS								B			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	6.3	19.3	11.4	0.0	0.0	25.6
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0
Max Green Setting (Gmax), s	6.5	69.5	22.5	18.0	6.0	70.0
Max Q Clear Time (g_c+I1), s	2.2	6.9	6.1	0.0	0.0	10.0
Green Ext Time (p_c), s	0.0	4.0	0.5	0.0	0.0	8.7

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

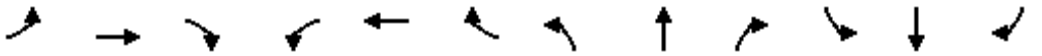
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	0	8	0	0	0	56	32	0	0	21	131
Future Vol, veh/h	1	0	8	0	0	0	56	32	0	0	21	131
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	10	0	0	0	70	40	0	0	26	164

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	289	289	109	295	371	42	190	0	0	41	0	0
Stage 1	108	108	-	181	181	-	-	-	-	-	-	-
Stage 2	181	181	-	114	190	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	663	621	945	657	559	1029	1384	-	-	1568	-	-
Stage 1	897	806	-	821	750	-	-	-	-	-	-	-
Stage 2	821	750	-	891	743	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	636	588	944	623	529	1027	1384	-	-	1567	-	-
Mov Cap-2 Maneuver	636	588	-	623	529	-	-	-	-	-	-	-
Stage 1	850	806	-	777	710	-	-	-	-	-	-	-
Stage 2	778	710	-	881	743	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	0	4.9	0
HCM LOS	A	A		

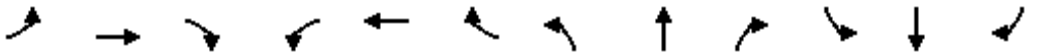
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1384	-	-	896	-	1567	-	-
HCM Lane V/C Ratio	0.051	-	-	0.013	-	-	-	-
HCM Control Delay (s)	7.7	0	-	9.1	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	2	6	13	59	253	85	985	11	159	354	36
Future Volume (veh/h)	42	2	6	13	59	253	85	985	11	159	354	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	2	6	14	62	266	89	1037	12	167	373	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	343	415	352	402	373	316	518	1350	602	305	1449	646
Arrive On Green	0.04	0.22	0.22	0.02	0.20	0.20	0.05	0.38	0.38	0.08	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	44	2	6	14	62	266	89	1037	12	167	373	38
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.5	0.1	0.2	0.5	2.2	12.7	2.3	20.1	0.4	4.4	5.5	1.1
Cycle Q Clear(g_c), s	1.5	0.1	0.2	0.5	2.2	12.7	2.3	20.1	0.4	4.4	5.5	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	343	415	352	402	373	316	518	1350	602	305	1449	646
V/C Ratio(X)	0.13	0.00	0.02	0.03	0.17	0.84	0.17	0.77	0.02	0.55	0.26	0.06
Avail Cap(c_a), veh/h	397	654	554	497	654	554	569	2982	1330	555	3479	1552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	23.8	23.9	24.3	26.1	30.3	13.3	21.4	15.2	16.3	15.4	14.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.2	6.0	0.2	0.9	0.0	1.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.2	1.0	5.2	0.8	7.1	0.1	1.5	1.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	23.8	23.9	24.4	26.3	36.3	13.5	22.3	15.3	17.8	15.5	14.2
LnGrp LOS	C	C	C	C	C	D	B	C	B	B	B	B
Approach Vol, veh/h		52			342			1138			578	
Approach Delay, s/veh		23.6			34.0			21.5			16.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	36.9	6.8	23.0	9.8	39.1	8.6	21.2
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0	5.5	5.5
Max Green Setting (Gmax), s	17.5	66.0	5.5	27.5	6.5	77.0	5.5	27.5
Max Q Clear Time (g_c+I1), s	6.4	22.1	2.5	2.2	4.3	7.5	3.5	14.7
Green Ext Time (p_c), s	0.3	7.8	0.0	0.0	0.0	2.3	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	41	0	56	0	1685	103	29	805	0
Future Volume (veh/h)	0	0	0	41	0	56	0	1685	103	29	805	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	43	0	58	0	1755	107	30	839	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	3	0	178	0	0	543	2358	1052	245	2758	1230
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.66	0.66	0.03	0.78	0.00
Sat Flow, veh/h	0	-102870	0	1781	43		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	43	32.8		0	1755	107	30	839	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	C		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	1.6			0.0	22.4	1.7	0.3	4.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.6			0.0	22.4	1.7	0.3	4.7	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	0	178			543	2358	1052	245	2758	1230
V/C Ratio(X)	0.00	0.00	0.00	0.24			0.00	0.74	0.10	0.12	0.30	0.00
Avail Cap(c_a), veh/h	0	493	0	549			671	3983	1777	319	3983	1777
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	32.1			0.0	7.6	4.1	7.6	2.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7			0.0	0.5	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.7			0.0	4.6	0.4	0.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	32.8			0.0	8.1	4.2	7.8	2.3	0.0
LnGrp LOS	A	A	A	C			A	A	A	A	A	A
Approach Vol, veh/h		0						1862			869	
Approach Delay, s/veh		0.0						7.9			2.5	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	7.7	52.3	8.3	0.0	0.0	60.0
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0
Max Green Setting (Gmax), s	5.0	76.5	17.0	18.0	5.0	76.5
Max Q Clear Time (g_c+I1), s	2.3	24.4	3.6	0.0	0.0	6.7
Green Ext Time (p_c), s	0.0	20.9	0.0	0.0	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

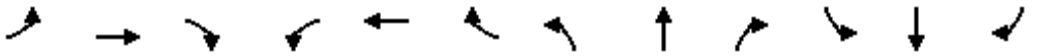
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	0	43	0	0	0	13	34	0	0	67	7
Future Vol, veh/h	26	0	43	0	0	0	13	34	0	0	67	7
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	0	52	0	0	0	16	41	0	0	81	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	158	160	87	188	164	43	89	0	0	43	0	0
Stage 1	85	85	-	75	75	-	-	-	-	-	-	-
Stage 2	73	75	-	113	89	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	808	732	971	772	729	1027	1506	-	-	1566	-	-
Stage 1	923	824	-	934	833	-	-	-	-	-	-	-
Stage 2	937	833	-	892	821	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	802	722	969	722	720	1025	1506	-	-	1563	-	-
Mov Cap-2 Maneuver	802	722	-	722	720	-	-	-	-	-	-	-
Stage 1	913	824	-	922	822	-	-	-	-	-	-	-
Stage 2	927	822	-	843	821	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	0	2.1	0
HCM LOS	A	A		

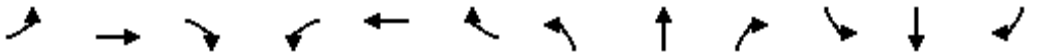
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1506	-	-	899	-	1563	-	-
HCM Lane V/C Ratio	0.01	-	-	0.092	-	-	-	-
HCM Control Delay (s)	7.4	0	-	9.4	0	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	9	20	13	4	203	6	472	30	252	815	69
Future Volume (veh/h)	55	9	20	13	4	203	6	472	30	252	815	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	9	21	14	4	211	6	492	31	262	849	72
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	386	327	394	321	272	234	764	341	469	1263	563
Arrive On Green	0.05	0.21	0.21	0.02	0.17	0.17	0.01	0.21	0.21	0.15	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	57	9	21	14	4	211	6	492	31	262	849	72
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.5	0.2	0.6	0.4	0.1	7.2	0.1	7.2	0.9	5.9	11.5	1.7
Cycle Q Clear(g_c), s	1.5	0.2	0.6	0.4	0.1	7.2	0.1	7.2	0.9	5.9	11.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	386	327	394	321	272	234	764	341	469	1263	563
V/C Ratio(X)	0.14	0.02	0.06	0.04	0.01	0.78	0.03	0.64	0.09	0.56	0.67	0.13
Avail Cap(c_a), veh/h	622	1101	933	598	1035	878	454	2748	1226	1191	4247	1894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	18.0	18.2	18.9	19.6	22.5	17.3	20.4	17.9	13.1	15.5	12.4
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	4.7	0.0	0.9	0.1	1.0	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.2	0.1	0.0	2.8	0.1	2.5	0.3	1.8	3.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	18.0	18.2	18.9	19.6	27.3	17.4	21.3	18.0	14.2	16.2	12.5
LnGrp LOS	B	B	B	B	B	C	B	C	B	B	B	B
Approach Vol, veh/h		87			229			529			1183	
Approach Delay, s/veh		18.0			26.6			21.0			15.5	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	19.2	6.5	17.2	6.0	27.2	8.5	15.3
Change Period (Y+Rc), s	5.5	7.0	5.5	5.5	5.5	7.0	5.5	5.5
Max Green Setting (Gmax), s	31.5	44.0	7.5	33.5	7.5	68.0	9.5	31.5
Max Q Clear Time (g_c+I1), s	7.9	9.2	2.4	2.6	2.1	13.5	3.5	9.2
Green Ext Time (p_c), s	0.7	3.0	0.0	0.1	0.0	6.2	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	678	0	322	0	554	389	219	1015	0
Future Volume (veh/h)	0	0	0	678	0	322	0	554	389	219	1015	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	706	0	335	0	577	405	228	1057	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	3	0	1004	0	0	312	1342	599	500	2062	920
Arrive On Green	0.00	0.00	0.00	0.29	0.00	0.01	0.00	0.38	0.38	0.14	0.58	0.00
Sat Flow, veh/h	0	-74814	0	3456	706		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	706	20.5		0	577	405	228	1057	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1728	C		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	11.3			0.0	7.5	13.2	4.3	11.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.3			0.0	7.5	13.2	4.3	11.0	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	0	1004			312	1342	599	500	2062	920
V/C Ratio(X)	0.00	0.00	0.00	0.70			0.00	0.43	0.68	0.46	0.51	0.00
Avail Cap(c_a), veh/h	0	605	0	2290			511	2584	1153	772	3216	1434
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	19.6			0.0	14.3	16.1	9.0	7.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9			0.0	0.2	1.3	0.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.2			0.0	2.4	4.3	1.2	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.5			0.0	14.5	17.4	9.6	8.0	0.0
LnGrp LOS	A	A	A	C			A	B	B	A	A	A
Approach Vol, veh/h		0						982			1285	
Approach Delay, s/veh		0.0						15.7			8.3	
Approach LOS								B			A	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	12.5	27.4	22.0	0.0	0.0	39.9
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0
Max Green Setting (Gmax), s	16.0	42.0	39.0	18.0	5.0	53.0
Max Q Clear Time (g_c+I1), s	6.3	15.2	13.3	0.0	0.0	13.0
Green Ext Time (p_c), s	0.4	5.1	2.7	0.0	0.0	8.2

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	494	0	169	331
Demand Flow Rate, veh/h	504	0	173	338
Vehicles Circulating, veh/h	31	582	409	132
Vehicles Exiting, veh/h	439	0	126	450
Ped Vol Crossing Leg, #/h	0	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.3	0.0	5.9	5.6
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	504	0	173	338
Cap Entry Lane, veh/h	1337	762	909	1206
Entry HV Adj Factor	0.980	1.000	0.978	0.980
Flow Entry, veh/h	494	0	169	331
Cap Entry, veh/h	1310	762	889	1182
V/C Ratio	0.377	0.000	0.190	0.280
Control Delay, s/veh	6.3	4.7	5.9	5.6
LOS	A	A	A	A
95th %tile Queue, veh	2	0	1	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	37	110	13	97	267	146	1082	11	198	470	60
Future Volume (veh/h)	236	37	110	13	97	267	146	1082	11	198	470	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	246	39	115	14	101	278	152	1127	11	206	490	62
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	490	597	506	392	396	336	483	1362	608	308	1438	641
Arrive On Green	0.14	0.32	0.32	0.04	0.21	0.21	0.09	0.38	0.38	0.11	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	246	39	115	14	101	278	152	1127	11	206	490	62
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	10.5	1.5	5.6	0.6	4.7	17.6	5.3	30.0	0.5	7.0	10.0	2.5
Cycle Q Clear(g_c), s	10.5	1.5	5.6	0.6	4.7	17.6	5.3	30.0	0.5	7.0	10.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	490	597	506	392	396	336	483	1362	608	308	1438	641
V/C Ratio(X)	0.50	0.07	0.23	0.04	0.25	0.83	0.31	0.83	0.02	0.67	0.34	0.10
Avail Cap(c_a), veh/h	593	714	605	449	464	393	546	1560	696	639	2170	968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	24.8	26.2	29.9	34.4	39.5	16.9	29.2	20.1	22.1	21.5	19.3
Incr Delay (d2), s/veh	0.8	0.0	0.2	0.0	0.3	12.0	0.4	3.4	0.0	2.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.7	2.1	0.3	2.2	7.9	2.0	12.2	0.2	2.8	3.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	24.9	26.4	30.0	34.7	51.5	17.3	32.6	20.1	24.6	21.7	19.4
LnGrp LOS	C	C	C	C	C	D	B	C	C	C	C	B
Approach Vol, veh/h		400			393			1290			758	
Approach Delay, s/veh		25.4			46.4			30.7			22.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	44.2	7.7	37.4	13.3	46.4	18.9	26.2
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	29.0	43.0	5.0	38.0	11.0	61.0	19.0	24.0
Max Q Clear Time (g_c+I1), s	19.0	32.0	2.6	7.6	7.3	12.0	12.5	19.6
Green Ext Time (p_c), s	0.5	5.2	0.0	0.6	0.1	3.2	0.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

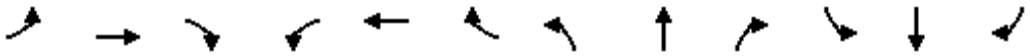
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	672	41	52	1533	0	56
Future Vol, veh/h	672	41	52	1533	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	700	43	54	1597	0	58

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	743	0	-	350
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	860	-	0	646
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	860	-	-	646
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.1
HCM LOS			B

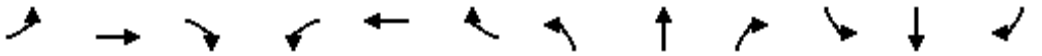
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	646	-	-	860	-
HCM Lane V/C Ratio	0.09	-	-	0.063	-
HCM Control Delay (s)	11.1	-	-	9.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	610	143	52	1474	7	83	5	83	20	5	59
Future Volume (veh/h)	21	610	143	52	1474	7	83	5	83	20	5	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	635	149	54	1535	8	86	5	86	22	5	64
Peak Hour Factor	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	2034	907	400	2034	907	487	29	502	465	39	494
Arrive On Green	0.57	0.57	0.57	0.55	0.57	0.57	0.33	0.33	0.30	0.33	0.33	0.30
Sat Flow, veh/h	336	3554	1585	690	3554	1585	1332	88	1511	1306	116	1487
Grp Volume(v), veh/h	23	635	149	54	1535	8	86	0	91	22	0	69
Grp Sat Flow(s),veh/h/ln	336	1777	1585	690	1777	1585	1332	0	1598	1306	0	1603
Q Serve(g_s), s	4.7	7.8	3.7	3.9	27.4	0.2	4.1	0.0	3.5	1.0	0.0	2.6
Cycle Q Clear(g_c), s	32.0	7.8	3.7	11.7	27.4	0.2	6.7	0.0	3.5	4.6	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.93
Lane Grp Cap(c), veh/h	169	2034	907	400	2034	907	487	0	532	465	0	533
V/C Ratio(X)	0.14	0.31	0.16	0.14	0.75	0.01	0.18	0.00	0.17	0.05	0.00	0.13
Avail Cap(c_a), veh/h	391	4390	1958	857	4390	1958	487	0	532	465	0	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.6	9.4	8.5	13.5	13.5	7.7	22.0	0.0	20.9	21.6	0.0	20.6
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.2	0.6	0.0	0.8	0.0	0.7	0.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.3	1.0	0.5	8.3	0.0	1.3	0.0	1.4	0.3	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	9.5	8.6	13.7	14.1	7.7	22.8	0.0	21.6	21.7	0.0	21.1
LnGrp LOS	C	A	A	B	B	A	C	A	C	C	A	C
Approach Vol, veh/h		807			1597			177			91	
Approach Delay, s/veh		9.8			14.1			22.2			21.3	
Approach LOS		A			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		52.2		32.0		52.2				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		25.0		102.0		25.0		102.0				
Max Q Clear Time (g_c+I1), s		8.7		34.0		6.6		29.4				
Green Ext Time (p_c), s		0.6		5.2		0.3		16.8				

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	587	0	368	0	1712	729	387	824	0
Future Volume (veh/h)	0	0	0	587	0	368	0	1712	729	387	824	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	611	0	383	0	1783	759	403	858	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	0	2	0	685	0	0	391	1838	820	387	2604	1161
Arrive On Green	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.52	0.52	0.18	0.73	0.00
Sat Flow, veh/h	0	-74814	0	3456	611		1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	611	59.2		0	1783	759	403	858	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1728	E		1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	20.0			0.0	56.4	51.5	21.0	9.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	20.0			0.0	56.4	51.5	21.0	9.9	0.0
Prop In Lane	0.00		0.00	1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2	0	685			391	1838	820	387	2604	1161
V/C Ratio(X)	0.00	0.00	0.00	0.89			0.00	0.97	0.93	1.04	0.33	0.00
Avail Cap(c_a), veh/h	0	322	0	685			497	1838	820	387	2604	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	45.3			0.0	27.1	25.9	40.0	5.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	14.0			0.0	14.5	16.3	56.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	9.8			0.0	24.7	21.8	16.1	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	59.2			0.0	41.7	42.2	96.6	5.5	0.0
LnGrp LOS	A	A	A	E			A	D	D	F	A	A
Approach Vol, veh/h		0						2542			1261	
Approach Delay, s/veh		0.0						41.8			34.6	
Approach LOS								D			C	

Timer - Assigned Phs	1	2	3	4	5	6
Phs Duration (G+Y+Rc), s	25.0	64.0	27.0	0.0	0.0	89.0
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0
Max Green Setting (Gmax), s	19.0	57.0	21.0	18.0	5.0	71.0
Max Q Clear Time (g_c+I1), s	23.0	58.4	22.0	0.0	0.0	11.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	629	0	169	345
Demand Flow Rate, veh/h	642	0	172	352
Vehicles Circulating, veh/h	86	665	493	125
Vehicles Exiting, veh/h	391	0	235	540
Ped Vol Crossing Leg, #/h	0	1	1	1
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.4	0.0	6.6	5.7
Approach LOS	A	-	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	642	0	172	352
Cap Entry Lane, veh/h	1264	700	835	1215
Entry HV Adj Factor	0.980	1.000	0.983	0.981
Flow Entry, veh/h	629	0	169	345
Cap Entry, veh/h	1238	700	820	1191
V/C Ratio	0.508	0.000	0.206	0.290
Control Delay, s/veh	8.4	5.1	6.6	5.7
LOS	A	A	A	A
95th %tile Queue, veh	3	0	1	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	48	137	13	71	229	113	645	30	294	939	108
Future Volume (veh/h)	278	48	137	13	71	229	113	645	30	294	939	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	290	50	143	14	74	239	118	672	31	306	978	112
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	552	609	516	380	366	310	297	1061	473	460	1330	593
Arrive On Green	0.17	0.33	0.33	0.04	0.20	0.20	0.09	0.30	0.30	0.16	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	290	50	143	14	74	239	118	672	31	306	978	112
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	10.9	1.7	6.1	0.6	3.0	13.0	4.0	14.9	1.3	10.0	21.6	4.3
Cycle Q Clear(g_c), s	10.9	1.7	6.1	0.6	3.0	13.0	4.0	14.9	1.3	10.0	21.6	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	552	609	516	380	366	310	297	1061	473	460	1330	593
V/C Ratio(X)	0.53	0.08	0.28	0.04	0.20	0.77	0.40	0.63	0.07	0.67	0.74	0.19
Avail Cap(c_a), veh/h	663	822	696	449	534	453	398	1795	801	778	2498	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	21.3	22.8	26.9	30.7	34.7	20.7	27.6	22.9	18.0	24.6	19.2
Incr Delay (d2), s/veh	0.8	0.1	0.3	0.0	0.3	4.8	0.9	0.6	0.1	1.7	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.7	2.3	0.2	1.4	5.3	1.6	5.8	0.5	3.7	8.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	21.3	23.0	27.0	30.9	39.5	21.5	28.3	22.9	19.7	25.4	19.3
LnGrp LOS	C	C	C	C	C	D	C	C	C	B	C	B
Approach Vol, veh/h		483			327			821			1396	
Approach Delay, s/veh		21.9			37.0			27.1			23.7	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	31.2	7.5	33.6	11.8	38.1	19.3	21.8
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0
Max Green Setting (Gmax), s	29.0	43.0	5.0	38.0	11.0	61.0	19.0	24.0
Max Q Clear Time (g_c+I1), s	12.0	16.9	2.6	8.1	6.0	23.6	12.9	15.0
Green Ext Time (p_c), s	0.8	4.2	0.0	0.7	0.1	7.4	0.5	0.8

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

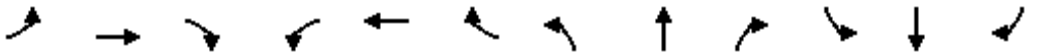
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1278	72	91	1061	0	62
Future Vol, veh/h	1278	72	91	1061	0	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1331	75	95	1105	0	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1406	0	-	666
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	-	481	-	0	402
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	481	-	-	402
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	402	-	-	481	-
HCM Lane V/C Ratio	0.161	-	-	0.197	-
HCM Control Delay (s)	15.7	-	-	14.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.7	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	1243	250	92	949	20	94	6	94	13	6	40
Future Volume (veh/h)	59	1243	250	92	949	20	94	6	94	13	6	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1295	260	96	989	22	98	7	98	14	7	43
Peak Hour Factor	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	427	2385	1064	272	2385	1064	347	20	286	294	43	267
Arrive On Green	0.67	0.67	0.67	0.64	0.67	0.67	0.19	0.19	0.14	0.19	0.19	0.14
Sat Flow, veh/h	558	3554	1585	332	3554	1585	1355	107	1495	1289	227	1393
Grp Volume(v), veh/h	64	1295	260	96	989	22	98	0	105	14	0	50
Grp Sat Flow(s),veh/h/ln	558	1777	1585	332	1777	1585	1355	0	1601	1289	0	1620
Q Serve(g_s), s	3.4	11.0	3.8	13.1	7.4	0.3	3.8	0.0	3.4	0.6	0.0	1.6
Cycle Q Clear(g_c), s	10.8	11.0	3.8	24.1	7.4	0.3	5.4	0.0	3.4	4.0	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.93	1.00		0.86
Lane Grp Cap(c), veh/h	427	2385	1064	272	2385	1064	347	0	307	294	0	310
V/C Ratio(X)	0.15	0.54	0.24	0.35	0.41	0.02	0.28	0.00	0.34	0.05	0.00	0.16
Avail Cap(c_a), veh/h	1049	6348	2831	642	6348	2831	739	0	770	667	0	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.8	5.0	3.8	12.5	4.4	3.2	21.9	0.0	21.6	22.2	0.0	20.7
Incr Delay (d2), s/veh	0.2	0.2	0.1	0.8	0.1	0.0	0.4	0.0	0.7	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	0.4	0.7	0.9	0.0	1.2	0.0	1.3	0.2	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.0	5.1	3.9	13.2	4.5	3.2	22.3	0.0	22.3	22.2	0.0	21.0
LnGrp LOS	A	A	A	B	A	A	C	A	C	C	A	C
Approach Vol, veh/h		1619			1107			203			64	
Approach Delay, s/veh		5.0			5.2			22.3			21.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.2		43.1		15.2		43.1				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		25.0		102.0		25.0		102.0				
Max Q Clear Time (g_c+I1), s		7.4		13.0		6.0		26.1				
Green Ext Time (p_c), s		0.8		14.9		0.2		11.0				

Intersection Summary												
HCM 6th Ctrl Delay			6.6									
HCM 6th LOS			A									

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel SS-125

SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14717

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-125. In total, the parcel comprises approximately 10.0 acres. The target property is currently undeveloped land on a relatively steep, east-facing hillside. The target property has historically remained undeveloped land.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified two regulated sites/facilities on or within the required search radii of the target property (Sections 8.1 and 8.2). Based on the nature of the database listing, site/facility conditions, elevation, and/or distance from the target property, the identified, regulated sites/facilities do not appear to represent an REC in relation to the target property at the time of this assessment. Based on the observations, research, and interviews conducted while performing this assessment, we did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted. With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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FIGURES

Figure 1: Vicinity Map
Figure 2: Site Map
Figure 3: Geologic Map

APPENDICES

Appendix A: Site Inspection Checklist / Site Photographs
Appendix B: Historical Aerials Package / Historical Topographic Maps / FIM Report
Appendix C: Radius Report
Appendix D: City Directory Report/Water Well Report/Oil Gas Report/Physical Settings
Appendix E: Supporting Documentation
Appendix F: Statement of Qualifications

1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel SS-125 in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.669316° N and Longitude: -111.433682° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1903 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-125. In total, the parcel comprises approximately 10.0 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.

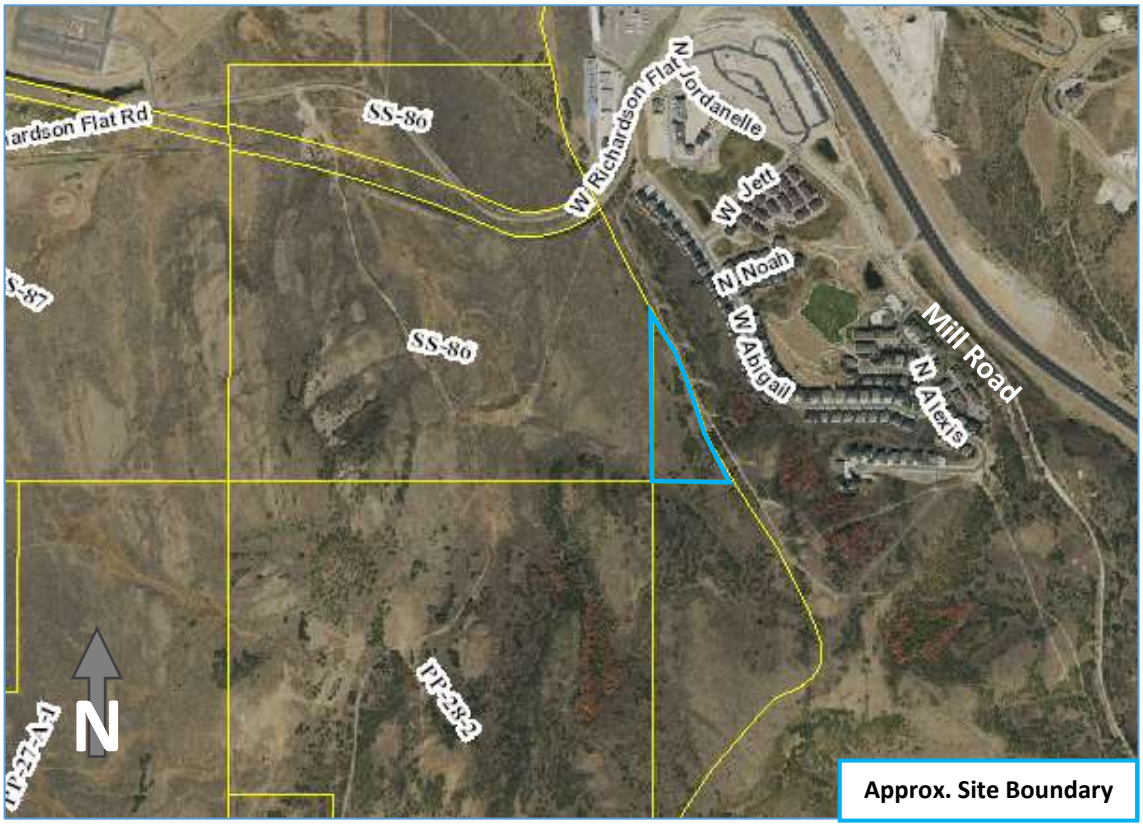

FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently undeveloped land comprised of a relatively steep, east-facing hillside. The property is vegetated with oak brush, sage brush, grasses, and weeds. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: Undeveloped hill slopes.

East: Undeveloped hill slopes with residential development beyond to the east and northeast.

South: Undeveloped hill slopes.

West: Undeveloped hill slopes.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

No solid waste was observed on the target property.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	1	0	1	NS	NS	2
Water Wells	0.5000	0	14	0	1	NS	NS	15
Total		**0**	**15**	**0**	**2**	**0**	**0**	**17**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
SS-125	Null	10.0	Stichting Mayflower Mountain Fonds

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that the target property and adjacent properties were undeveloped land.

1953: The aerial shows no significant change from the previous imagery.

1962: The aerial shows no significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: The aerial shows no significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: The aerial shows no significant change from the previous imagery.

1993: The aerial shows no significant change from the previous imagery.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows an overhead power line easement adjacent to and paralleling the eastern boundary of the target property. The aerial shows no other significant change from the previous imagery.

2004: The aerial shows no significant change from the previous imagery.

2006: The aerial shows no significant change from the previous imagery.

2009: The aerial shows residential development to the east and northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2011: The aerial shows no significant change from the previous imagery.

2014: The aerial shows additional residential development to the east and northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2016: The aerial shows additional residential development to the east and northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2018: The aerial shows additional residential development to the east, north, and northeast of the property had been completed. The aerial shows no other significant change from the previous imagery.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey, "Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1903, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: No development or improvements are mapped on or adjacent to the target property.

1955: The map shows no changes from the previous mapping.

1999: The map shows no changes from the previous mapping.

2014: The map shows streets associated with the existing commercial and residential development to the east and northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,740 and 6,840 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Tkt	Lava Flows of Todd Hollow (Keetley Volcanics)	lower Oligocene to upper Eocene

Map Unit	Description	Age
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene
Tksh	Lava flows and volcanic mudflow breccia of Sage Hen Hollow (Keetley Volcanics)	Upper Eocene

The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** on the following page.

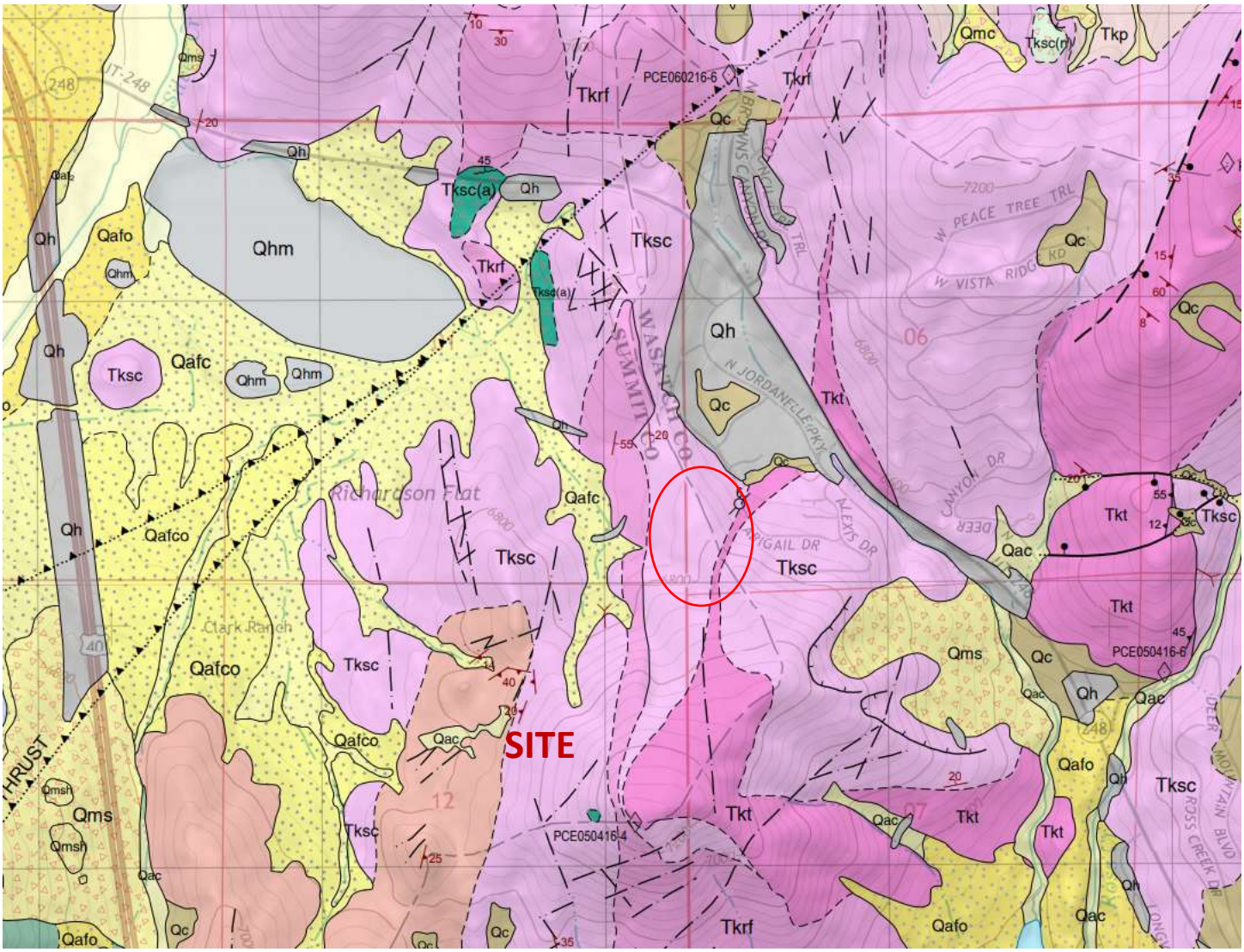

FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the east at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

No regulated sites or facilities were identified within the boundary of the target property.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
PNPL	Richardson Flat Tailings	Summit County	0.543	WNW	No
RODS	Richardson Flat Tailings	Summit County	0.543	WNW	No
MRDS	Unknown Tunnel	Summit County	0.187	W	No

No orphan sites were identified within the Radius Map Report.

The following site history for the Richardson Flat Tailings is from the U.S. EPA: (https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**.

The target property is more than 1/2 of a mile from the RFTS and is up-gradient. Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property and do not represent an REC.

The unknown tunnel identified in the USMRDS database is mapped to the west of the target property. CMT did not observed the tunnel or any related spoils or tailings at the time of our site reconnaissance or in our aerial photograph review. The mapped tunnel does not represent an REC in relation to the target property.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS, no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs, HRECs, or CRECs as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. No current Land Use Covenants (LUCs) and associated Activity and Use Limitations (AULs) associated with the target property or surrounding properties were identified at the time of this assessment. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history,

and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician

LICENSED PROFESSIONAL GEOLOGIST
No. 5293214
MARK CURTIS LARSEN
6/18/2020
STATE OF UTAH

Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website:
https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT ENGINEERING LABORATORIES

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel SS-125 Site #_____ CMT Job #14717

Property Address: SE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Stichting Mayflower Mountain Fonds Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description: The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Site is an undeveloped, east-facing hill slope. Vegetation is scrub oak, sage brush, grasses and weeds.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel SS-125

NORTH

Name: Undevelopd land, residential dev.

Address:

Description:

Observed usage: X Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: Undeveloped land, residential dev.

Address:

Description: undevelped land

Observed usage: X Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel SS-125

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Solid Waste:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Transformers:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-125

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-125

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel SS-125

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel SS-125

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel SS-125

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View looking west, up-slope toward the target property from the residential subdivision to the east.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355548
Project #: 14717
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit, Utah 84032

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434229171, 40.671124948), (-111.434207713, 40.668219825), (-111.432383811, 40.668211687), (-111.433027541, 40.669049873), (-111.433392321, 40.669798535)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/11/1967	ASCS	1" = 1320'	PI-3
08/01/1962	ASCS	1" = 500'	3-22
07/03/1953	USGS	1" = 500'	1-42
1937	ASCS	1" = 500'	U79

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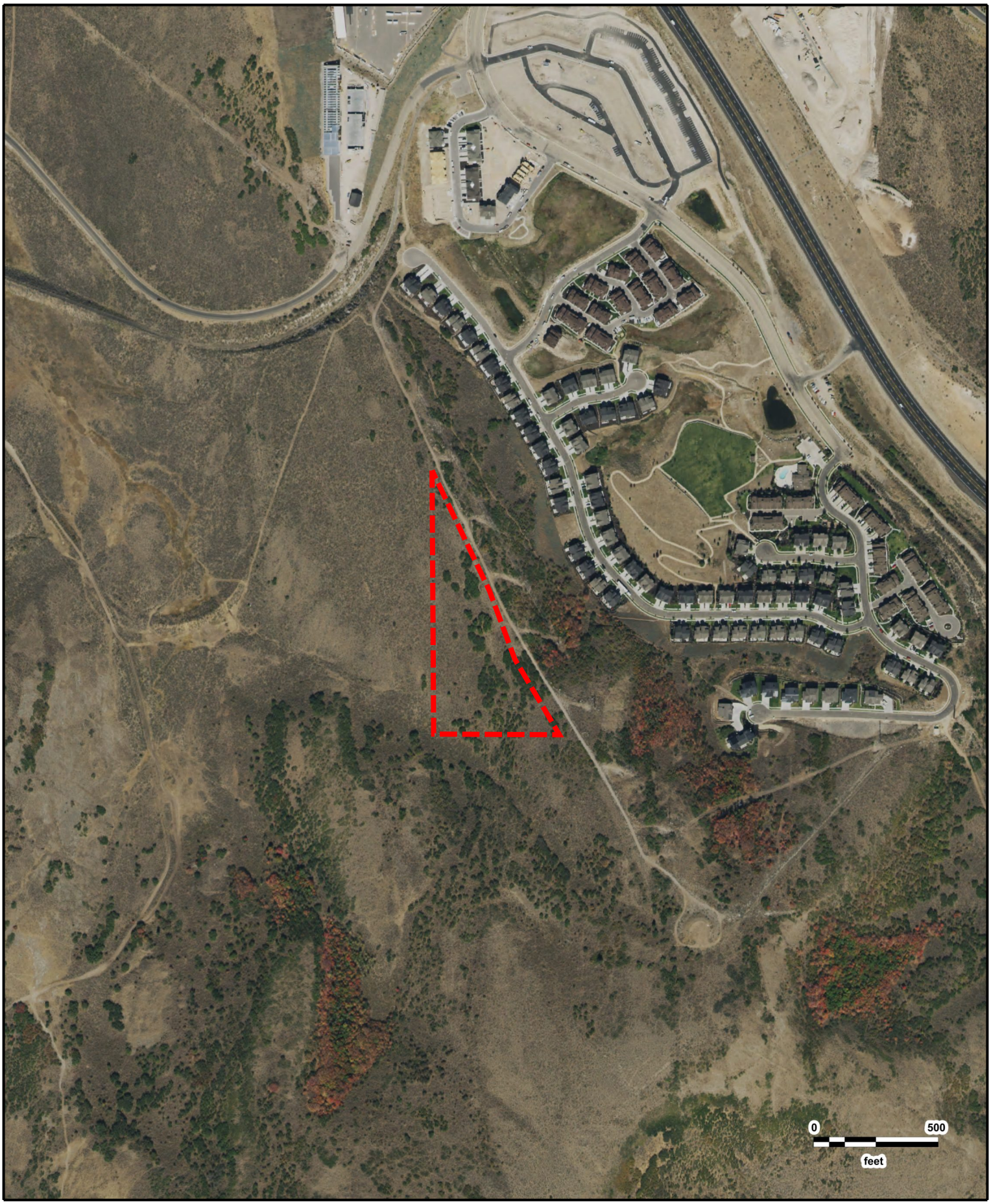


N

Page 1360

Richardson Flats Parcel SS-125
USDA
2018

GeoSearch

JOB #: 355548 - 06/08/2020



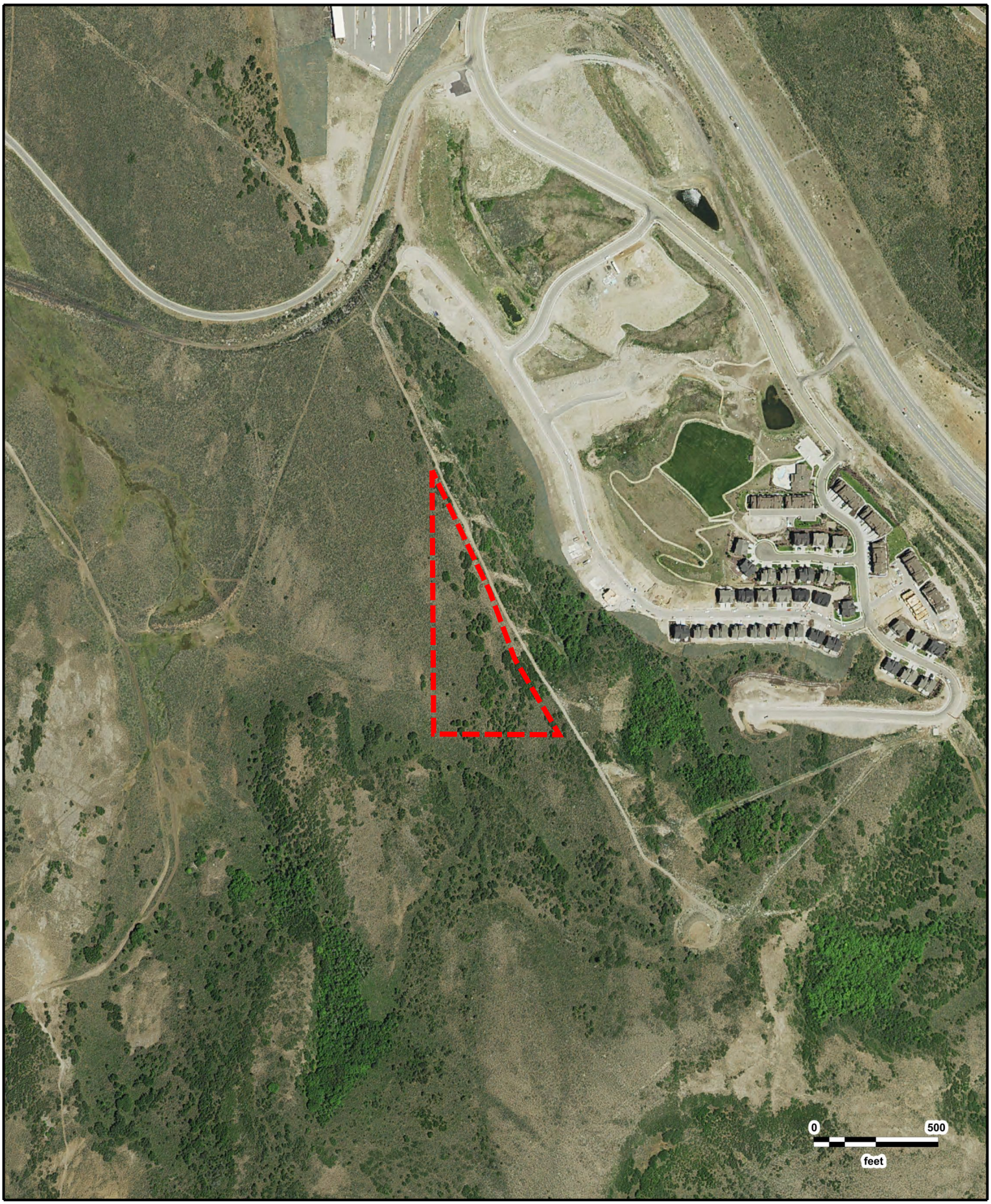
N

Page 1361

Richardson Flats Parcel SS-125
USDA
2016

GeoSearch

JOB #: 355548 - 06/08/2020



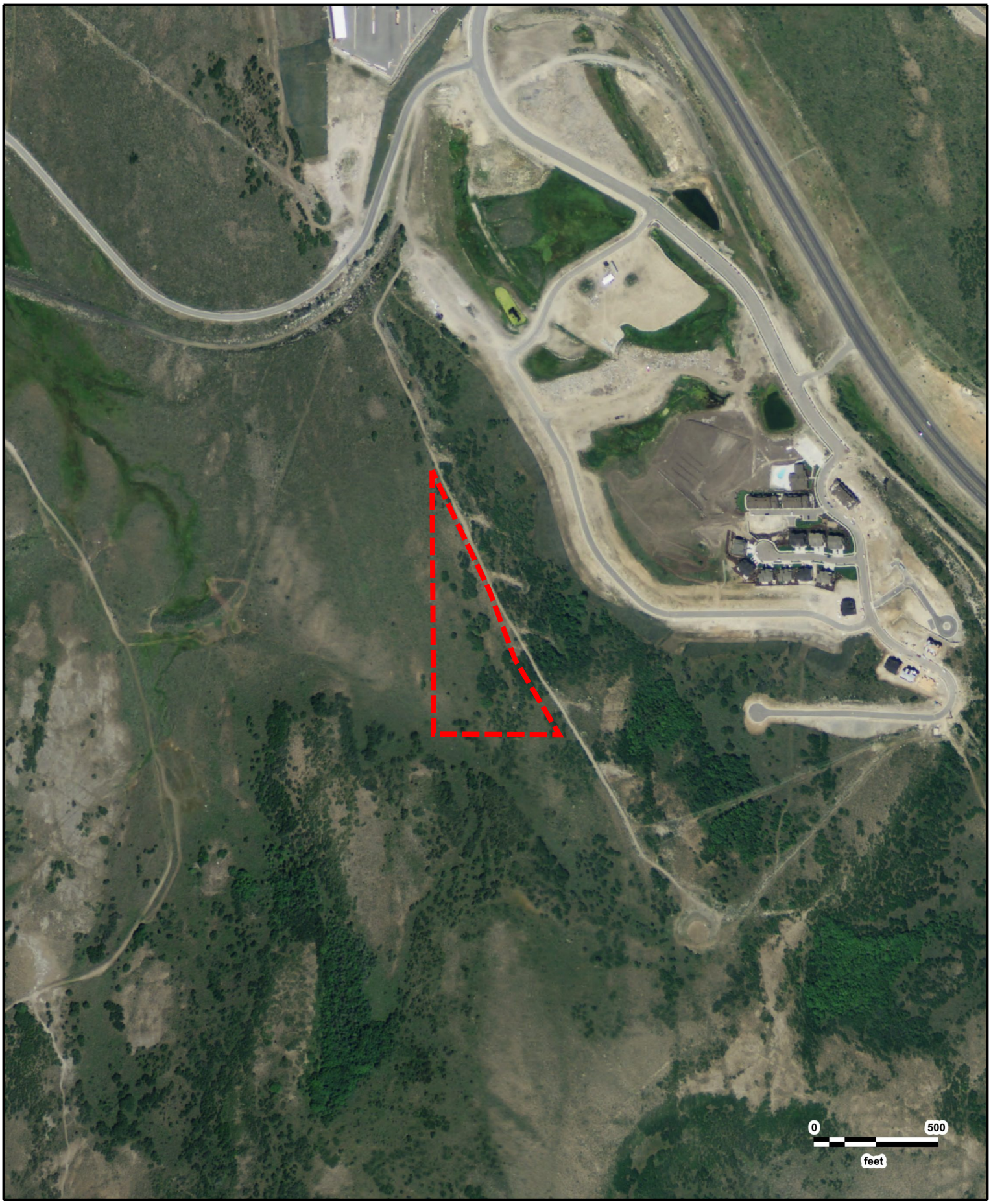
N

Page 1362

Richardson Flats Parcel SS-125
USDA
2014

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1363

Richardson Flats Parcel SS-125
USDA
2011

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1364

Richardson Flats Parcel SS-125
USDA
2009

GeoSearch

JOB #: 355548 - 06/08/2020



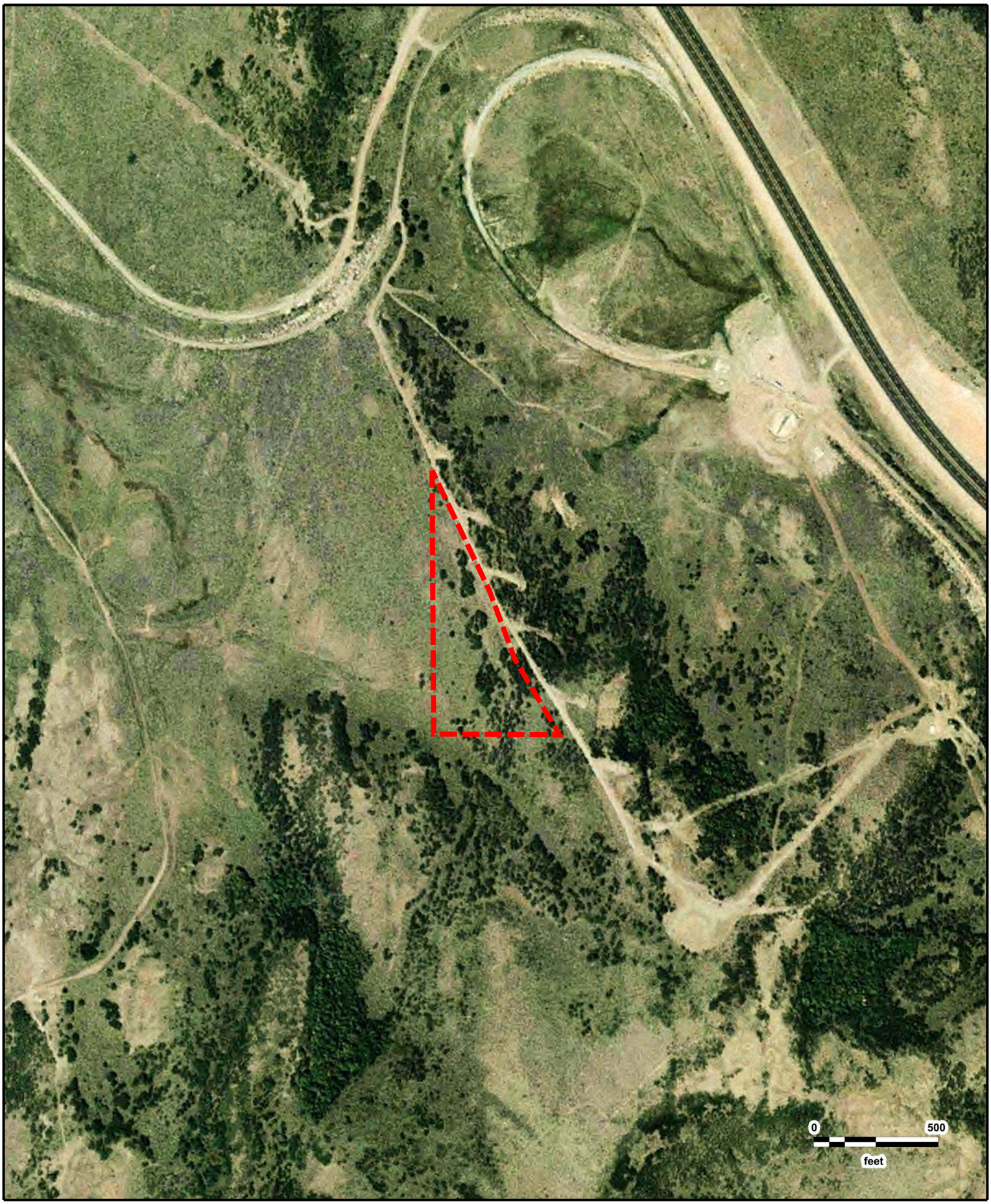
N

Page 1365

Richardson Flats Parcel SS-125
USDA
2006

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1366

Richardson Flats Parcel SS-125
USDA
2004

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1367

Richardson Flats Parcel SS-125
USDA
2003

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1368

Richardson Flats Parcel SS-125
USGS
07/08/1997

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1369

Richardson Flats Parcel SS-125
USGS
08/23/1993

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1370

Richardson Flats Parcel SS-125
USGS
09/18/1987

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1371

Richardson Flats Parcel SS-125
USGS
09/05/1983

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1372

Richardson Flats Parcel SS-125
USGS
08/24/1976

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1373

Richardson Flats Parcel SS-125
ASCS
07/11/1967

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1374

Richardson Flats Parcel SS-125
ASCS
08/01/1962

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1375

Richardson Flats Parcel SS-125
USGS
07/03/1953

GeoSearch

JOB #: 355548 - 06/08/2020



N

Page 1376

Richardson Flats Parcel SS-125
ASCS
1937

GeoSearch

JOB #: 355548 - 06/08/2020

GeoSearch
On time. On target. In touch.™

Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355547
Project #: 14717
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit, Utah 84032

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434229171, 40.671124948), (-111.434207713, 40.668219825), (-111.432383811, 40.668211687), (-111.433027541, 40.669049873), (-111.433392321, 40.669798535)

Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1903	COALVILLE, UT	1" = 10420'

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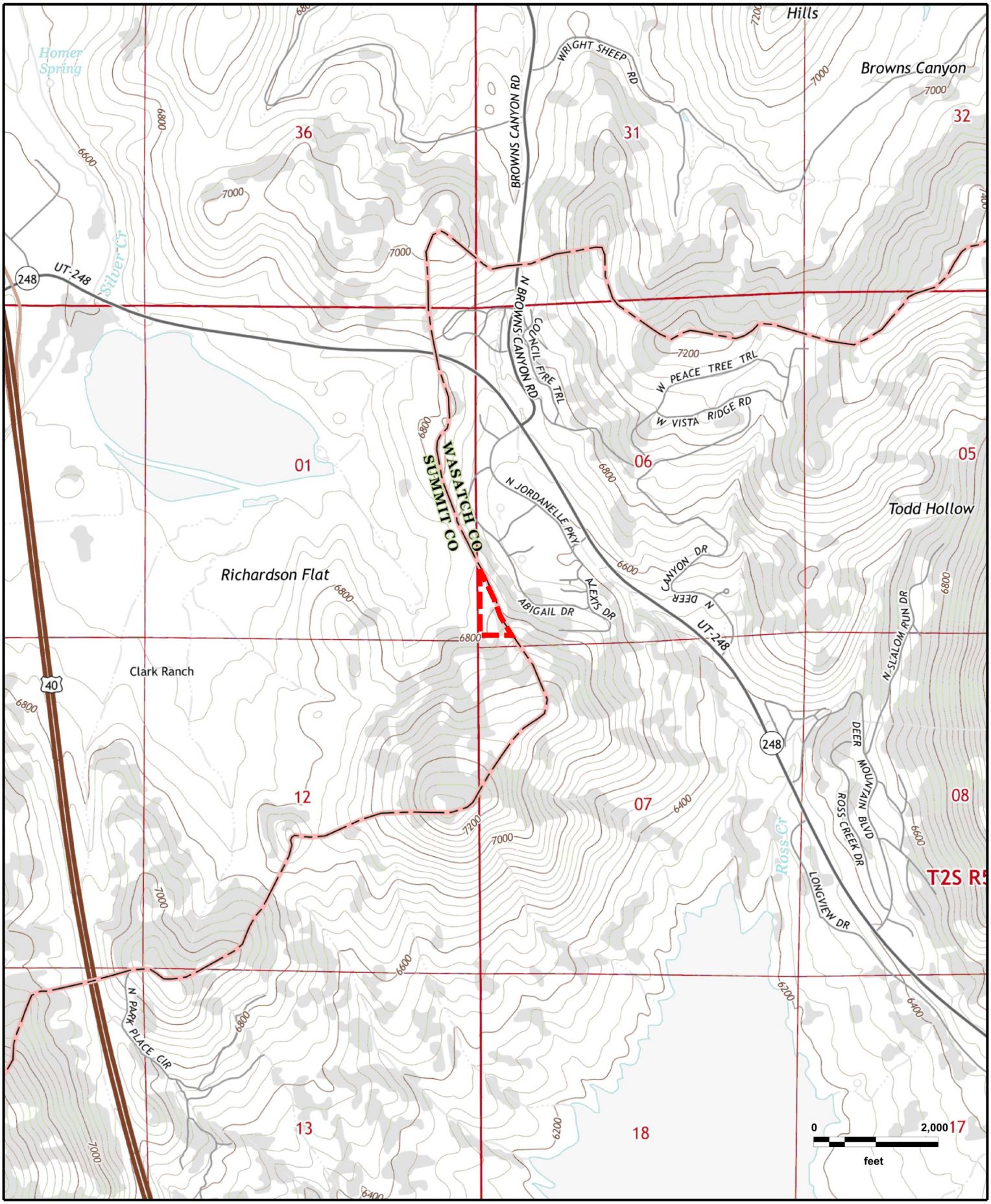

N

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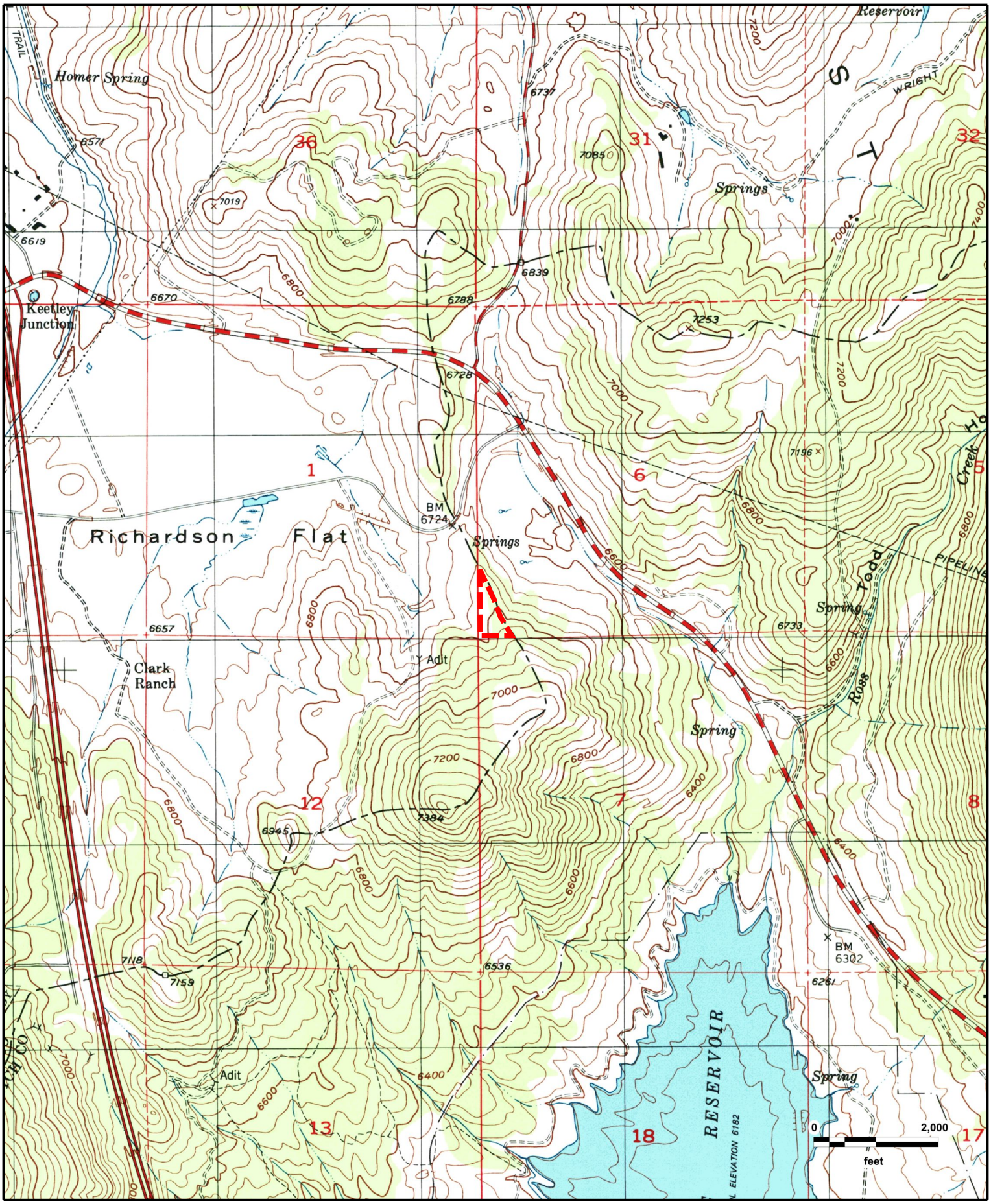
Richardson Flats Parcel SS-125
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355547 - 06/08/2020



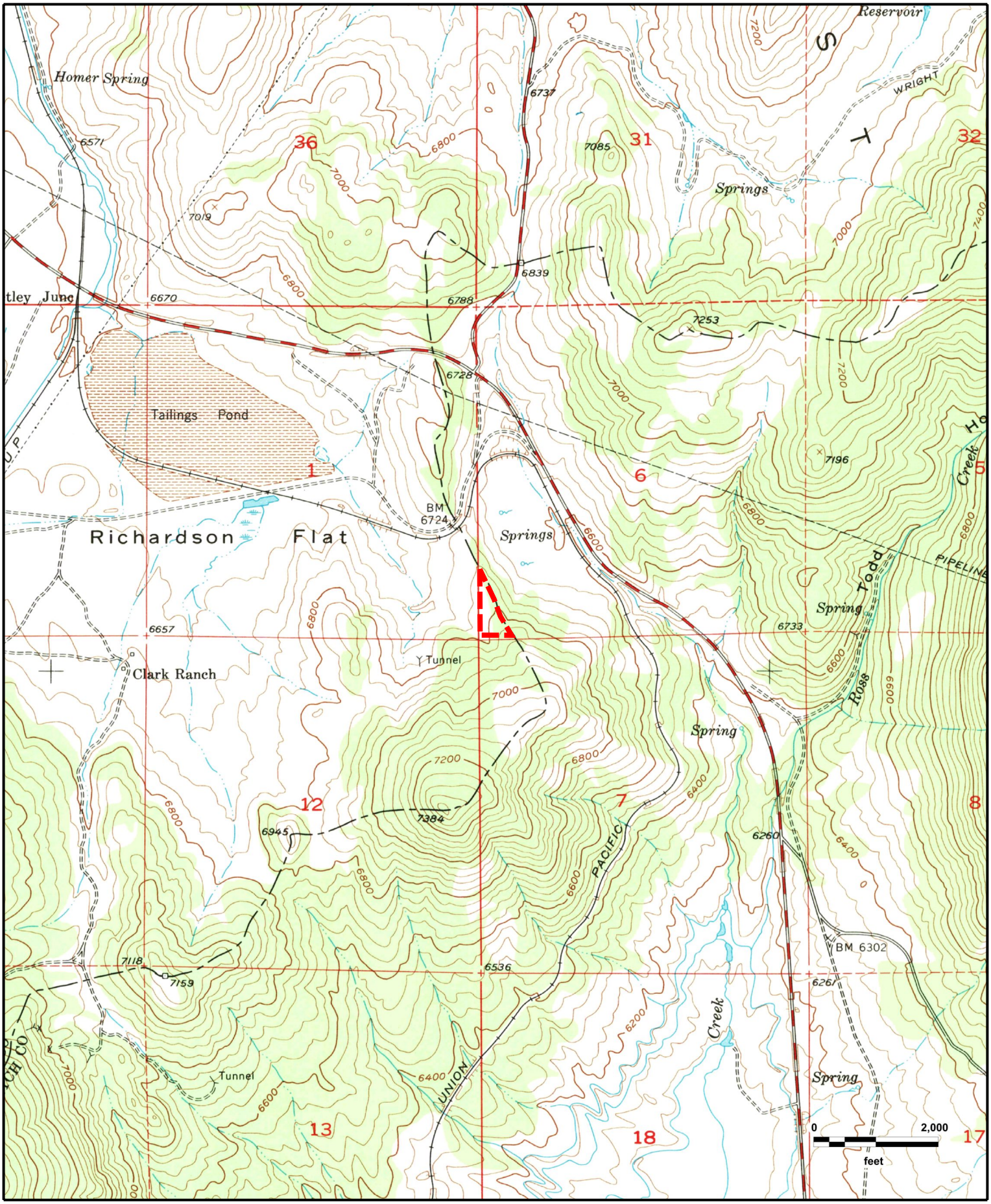
N

Page 1381

Richardson Flats Parcel SS-125
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355547 - 06/08/2020



Page 1382

Richardson Flats Parcel SS-125
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355547 - 06/08/2020



N

Page 1383

Richardson Flats Parcel SS-125
COALVILLE, UT (1903)

GeoSearch

JOB #: 355547 - 06/08/2020

GeoSearch
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Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit County, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355551
Project #: 14717
PO #: 14717
Date: 06/08/2020

Fire Insurance Map Research Results

Date: 06/08/2020
GS Job Number: 147851
Company Name: CMT Engineering Laboratories-Utah
Project Number: 14717
Site Information: Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Utah 84032

Research Results: No Coverage Available

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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APPENDIX C

RADIUS MAP
REPORT

GeoSearch
On time. On target. In touch.™

Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit County, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355545
Project #: 14717
PO #: 14717
Date: 06/05/2020

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Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Utah 84032

Coordinates
Area centroid (-111.43363, 40.6691901)
6,804 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	1	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000

SUB-TOTAL		2	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	0	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		3	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	1	NS	NS	NS	1
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**0**	**0**	**1**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	0	0	1	NS	1
SUB-TOTAL		0	0	1	0	2	0	3

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**

SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

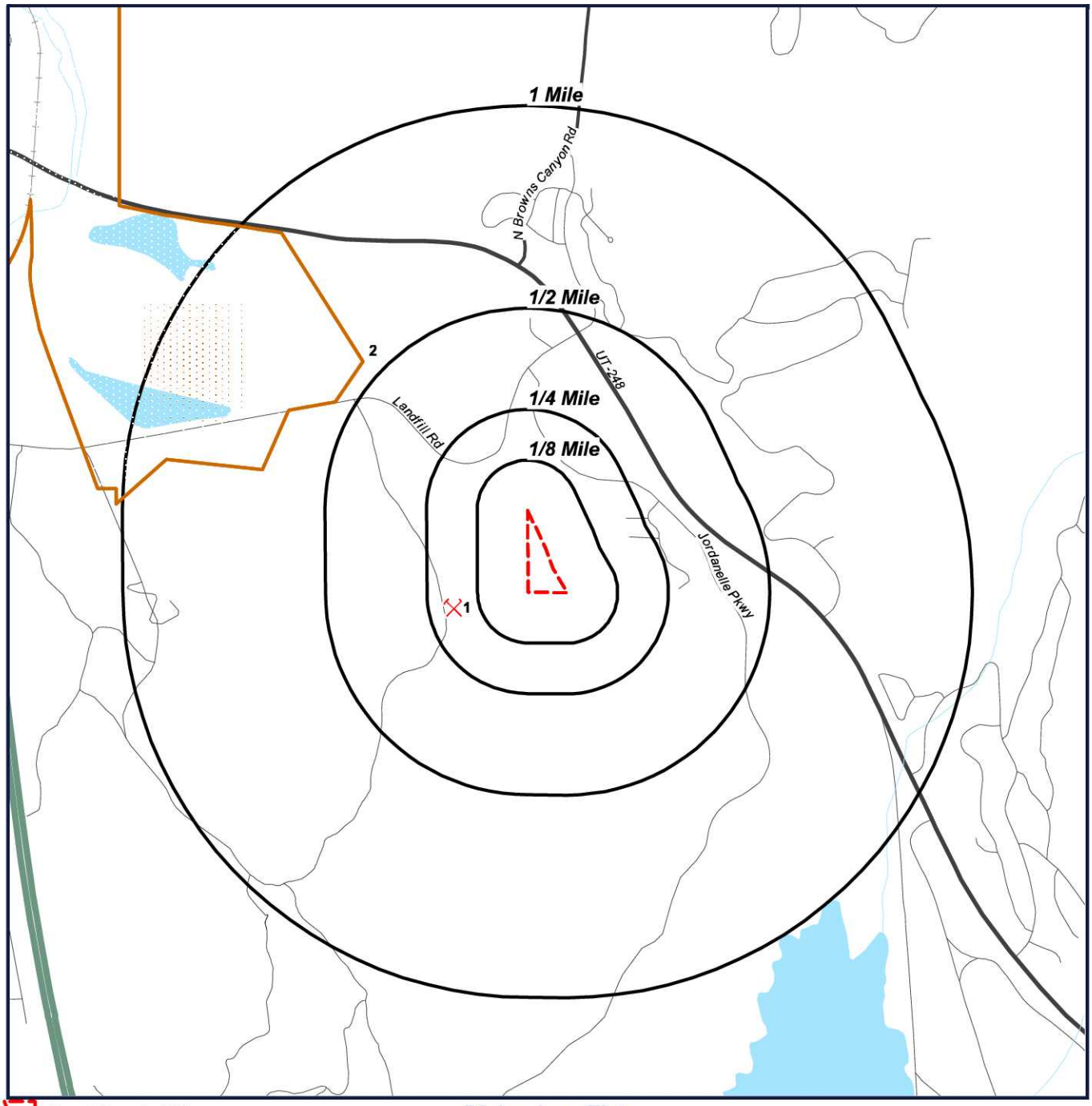
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	1	0	2	0	3

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



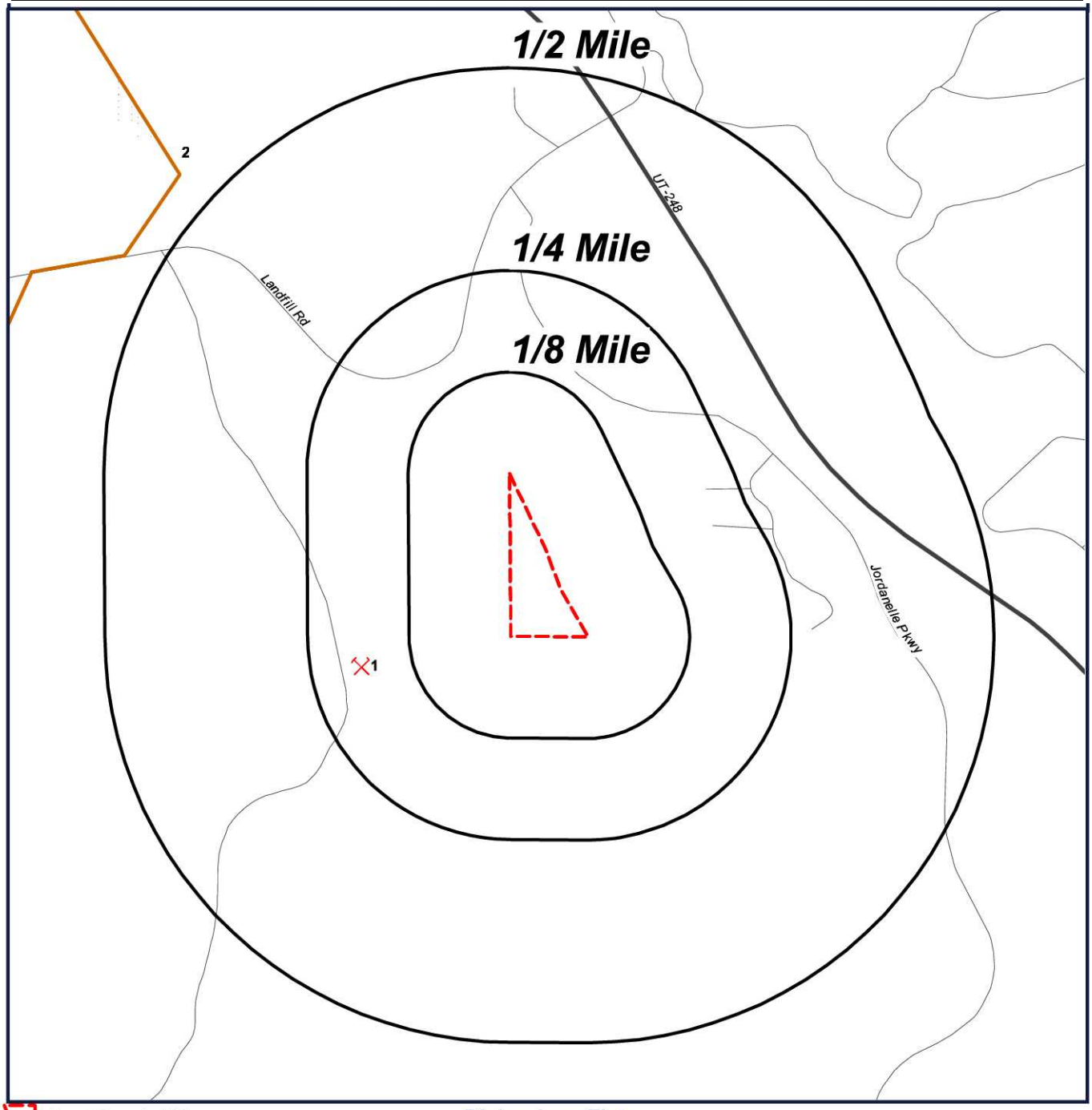
Target Property (TP)
MRDS
PNPL
RODS

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



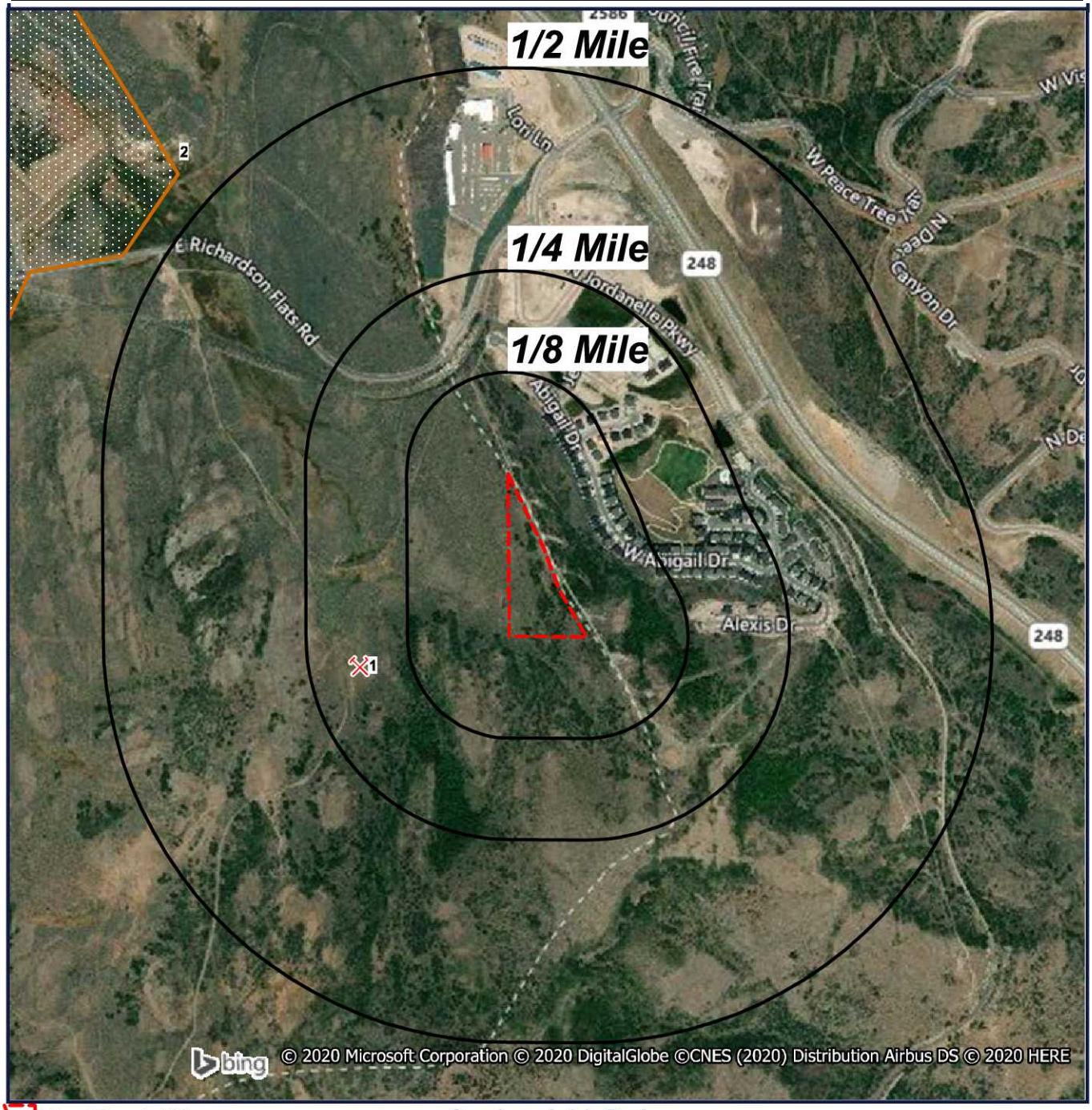
Target Property (TP)
MRDS
PNPL
RODS

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Ortho Map



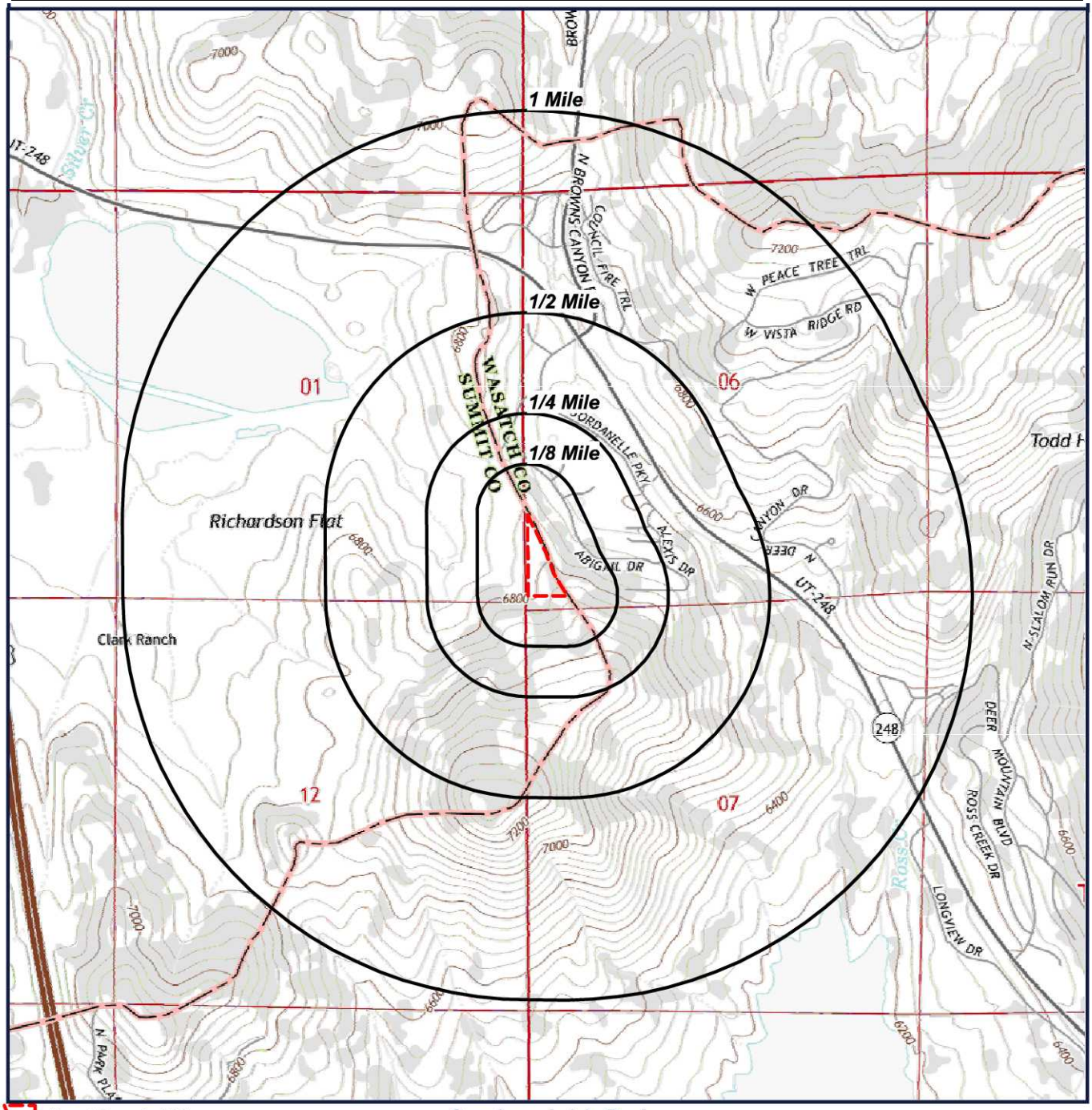
Target Property (TP)
MRDS
PNPL
RODS

Quadrangle(s): Park City East Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 500' 1000' 1500'
SCALE: 1" = 1000'

Topographic Map



Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	MRDS	10011508	Lower (6,733 ft.)	0.187 mi. W (987 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.543 mi. WNW (2867 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.543 mi. WNW (2867 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	MRDS	10011508	Lower (6,733 ft.)	0.187 mi. W (987 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.543 mi. WNW (2867 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.543 mi. WNW (2867 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6804 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	MRDS	6,733 ft.	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
2	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28

MAP ID# 1

Distance from Property: 0.187 mi. (987 ft.) W
Elevation: 6,733 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **10011508**
DEP ID: **10011508**
MINE NAME: **UNKNOWN TUNNEL**
ADDRESS: **SUMMIT COUNTY**
PARK CITY, UT 84060
DEVELOPMENT STATUS: **OCCURRENCE**

COMMODITY DETAILS

COMMODITY: **SILVER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **SILVER**
IMPORTANCE: **PRIMARY**

COMMODITY: **LEAD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **LEAD**
IMPORTANCE: **PRIMARY**

COMMODITY: **ZINC**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **ZINC**
IMPORTANCE: **PRIMARY**

COMMODITY: **GOLD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **GOLD**
IMPORTANCE: **SECONDARY**

COMMODITY: **COPPER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **COPPER**
IMPORTANCE: **SECONDARY**

MATERIAL DETAILS

NO MATERIAL DETAILS REPORTED

NAME DETAILS

SITE NAME: **UNKNOWN TUNNEL**
STATUS: **CURRENT**
SITE NAME: **NEW PARK GROUP**
STATUS: **PREVIOUS**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.543 mi. (2,867 ft.) WNW
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

cas #: \CONTAMINANT NAME: \CONTAMINATED MEDIA:
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AREA OF SITE FOUND (OU):

Back to Report Summary

MAP ID# 2

Distance from Property: 0.543 mi. (2,867 ft.) WNW
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

Environmental Records Definitions - FEDERAL

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14717

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14717

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoSearch
On time. On target. In touch.™

GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit County, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355549
Project #: 14717
PO #: 14717
Date: 06/05/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Utah 84032

Coordinates
Area centroid (-111.43363, 40.6691901)
6,804 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	1	0	1	NS	NS	2
SUB-TOTAL		0	1	0	1	0	0	2

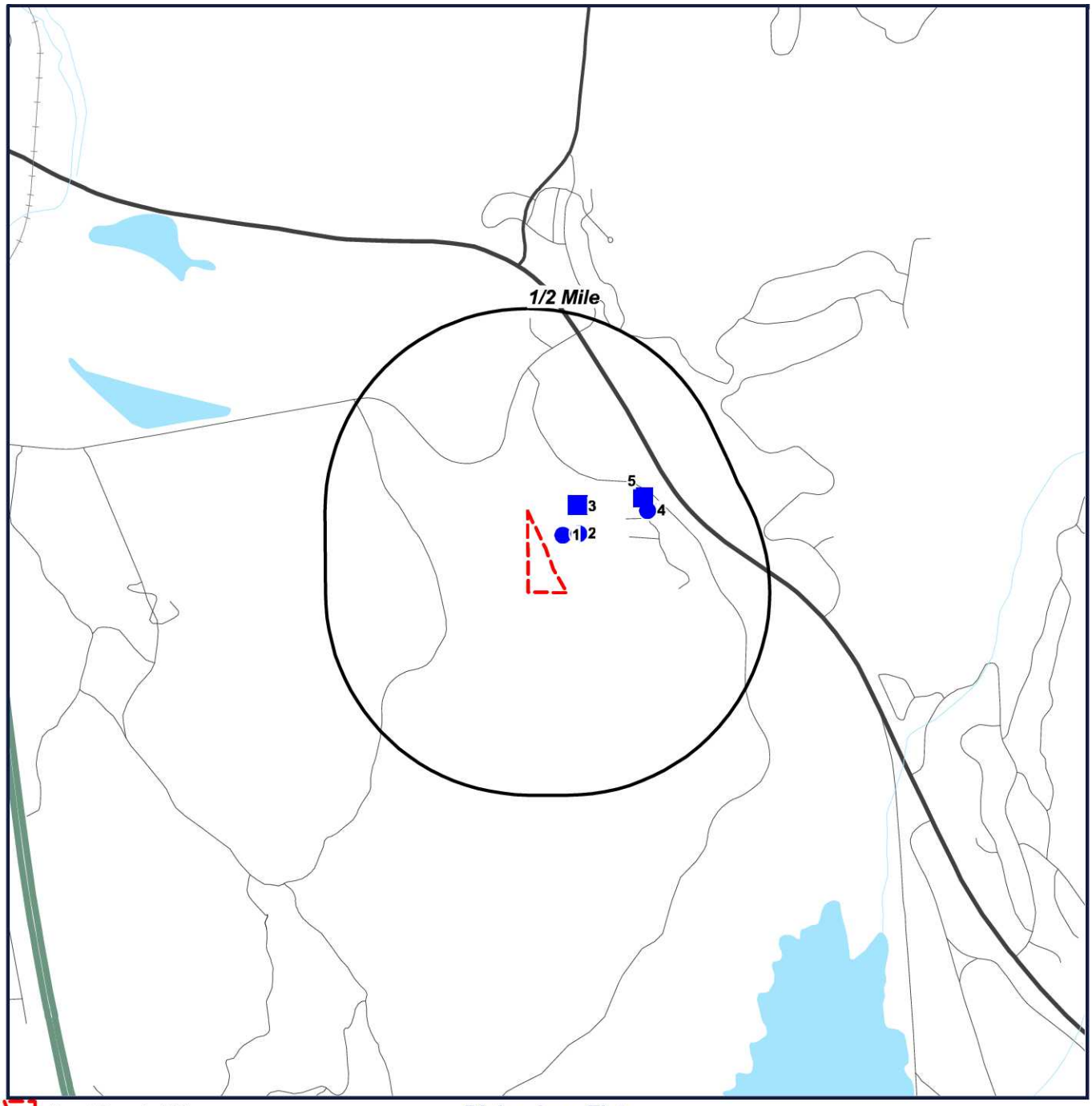
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	14	0	1	NS	NS	15
SUB-TOTAL		0	14	0	1	0	0	15
TOTAL		0	15	0	2	0	0	17

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
WW
NWIS

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	WW	1775292344	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	4022998451	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	996892433	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	0000259	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	0142688	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	0146214	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	0146425	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	0147535	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	0147540	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	0148159	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	0148573	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	0166100	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	0166641	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	0177179	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
3	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.118 mi. ENE (623 ft.)	(D- 2- 5) 6CCA-S1		22
4	WW	0072204	Lower (6,619 ft.)	0.269 mi. ENE (1420 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	23
5	NWIS	USGS_404018111254101	Lower (6,619 ft.)	0.271 mi. ENE (1431 ft.)	(D- 2- 5) 6CDB- 1		24

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
3	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.118 mi. ENE (623 ft.)	(D- 2- 5) 6CCA-S1	
5	NWIS	USGS_404018111254101	Lower (6,619 ft.)	0.271 mi. ENE (1431 ft.)	(D- 2- 5) 6CDB- 1	
1	WW	1775292344	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	4022998451	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	996892433	Lower (6,713 ft.)	0.053 mi. ENE (280 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	0000259	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0142688	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146214	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146425	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147535	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147540	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148159	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148573	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166100	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166641	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0177179	Lower (6,713 ft.)	0.090 mi. ENE (475 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0072204	Lower (6,619 ft.)	0.269 mi. ENE (1420 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 6804 ft.

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
3	NWIS	6,636 ft.	(D- 2- 5) 6CCA-S1		22
4	WW	6,619 ft.		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	23
5	NWIS	6,619 ft.	(D- 2- 5) 6CDB- 1		24

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.053 mi. (280 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **1775292344**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER, INTERESTED PARTY**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.053 mi. (280 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **4022998451**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **SOUTH KAMAS IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.053 mi. (280 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **996892433**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0000259**
WRNUM: **0055003P00**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **KRISTIN MCLACHLAN FOR JORDANELLE SPECIAL SERVICE DIST**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0142688**
WRNUM: **55-11203**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DIST., INTERESTED PARTY**
SOURCE: **ONTARIO DRAIN TUNNEL AND PROVO RIVER**
USE: **IRRIGATION, MUNICIPAL, OTHER, STOCKWATERING**
PRIORITY DATE: **20000508**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146214**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146425**
WRNUM: **55-9544**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20001213**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147535**
WRNUM: **55-9631**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (5)**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147540**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148159**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020718**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148573**
WRNUM: **55-9699**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20021108**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166100**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166641**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.090 mi. (475 ft.) ENE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0177179**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20070124**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 3

Distance from Property: 0.118 mi. (623 ft.) ENE
Elevation: 6,636 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404017111255201**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404017111255201**
STATION NAME: **(D- 2- 5) 6CCA-S1**
SITE TYPE: **SP**
LATITUDE: **40.671339400**
LONGITUDE: **-111.431859400**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESWSWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1983-08-31**
WATER-QUALITY DATA END DATE: **1983-08-31**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**
SITE-VISIT DATA BEGIN DATE: **1983-08-31**
SITE-VISIT DATA END DATE: **1983-08-31**
SITE-VISIT DATA COUNT: **1**

Back to Report Summary

MAP ID# 4

Distance from Property: 0.269 mi. (1,420 ft.) ENE
Elevation: 6,619 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0072204**
WRNUM: **55-3097**
LOCATION: **N1140 E1570 SW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **CHEVRON U.S.A. INC.**
SOURCE: **UNDERGROUND WATER WELL**
USE: **OTHER**
PRIORITY DATE: **19651011**
SUMMARY STATUS: **PERFECTED: PROOF FILED, RIGHT CERTIFICATED**
DRILLING METHOD: **CABLE TOOL**
TOTAL DEPTH (FT.): **480.00000**
FINISH DEPTH (FT.): **310.00000**
SCREEN DEPTH (FT.): **150.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 5

Distance from Property: 0.271 mi. (1,431 ft.) ENE
Elevation: 6,619 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404018111254101**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404018111254101**
STATION NAME: **(D- 2- 5) 6CDB- 1**
SITE TYPE: **GW**
LATITUDE: **40.671617190**
LONGITUDE: **-111.428803700**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWSESWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **01/01/1965**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **NOT REPORTED**
WELL DEPTH: **260 FEET**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **O**
PROJECT NUMBER: **464915800**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1967-05-17**
WATER-QUALITY DATA END DATE: **1967-05-17**
WATER-QUALITY DATA COUNT: **2**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit County, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355550
Project #: 14717
PO #: 14717
Date: 06/05/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Utah 84032

Coordinates
Area centroid (-111.43363, 40.6691901)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

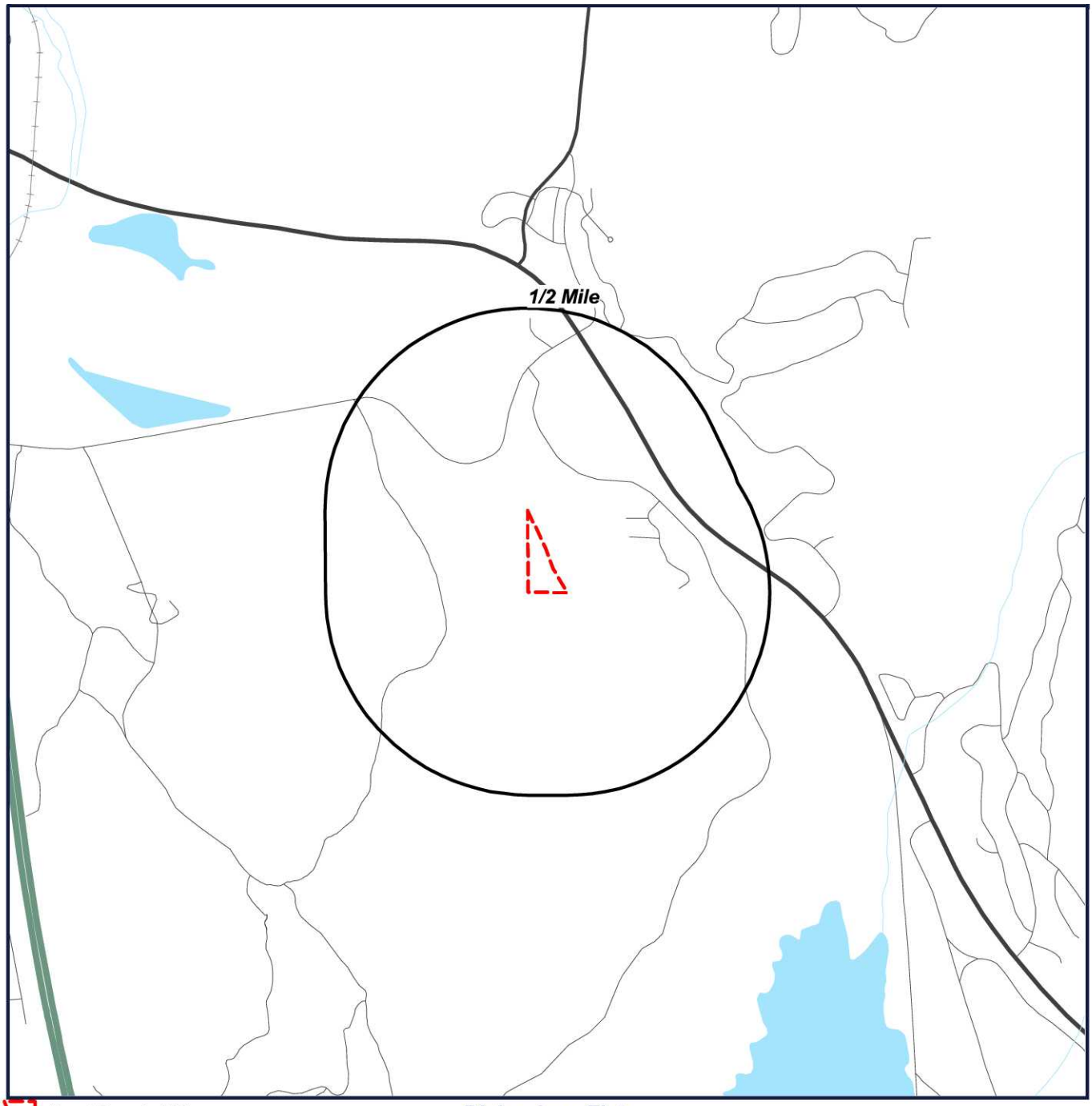
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Target Property (TP)

Well Location

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoSearch
On time. On target. In touch.™

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Summit County, Utah 84032

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147851
Job #: 355552
Project #: 14717
PO #: 14717
Date: 06/05/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125
Near 1185 W LORI LN
Heber, Utah 84032

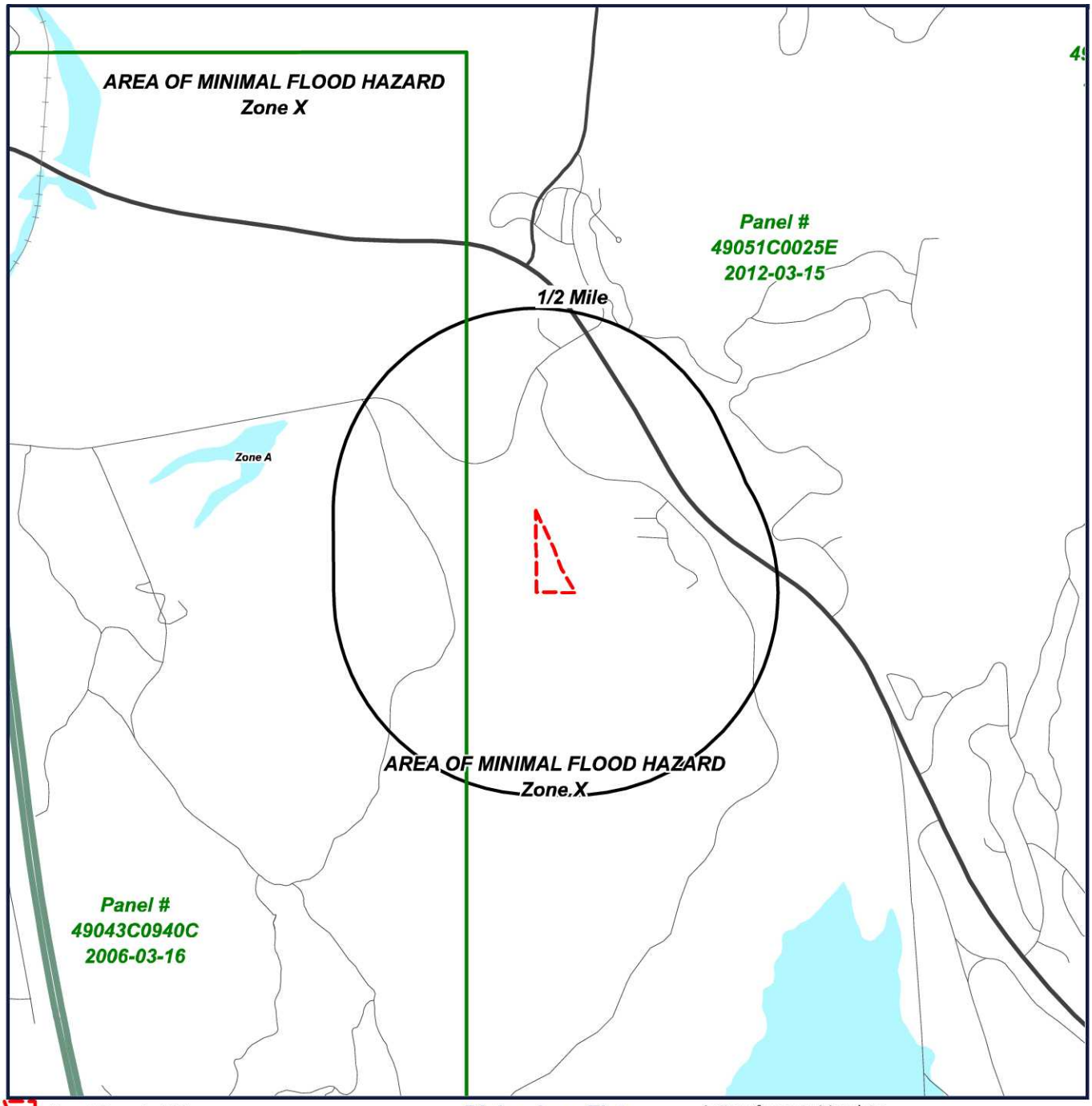
Coordinates
Area centroid (-111.43363, 40.6691901)
6,804 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

N
W E
S

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Hazard - Zone X

Area with Reduced Flood Risk due to Levee - Zone X

Area with Flood Risk due to Levee - Zone D

Digital Data Not Available

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

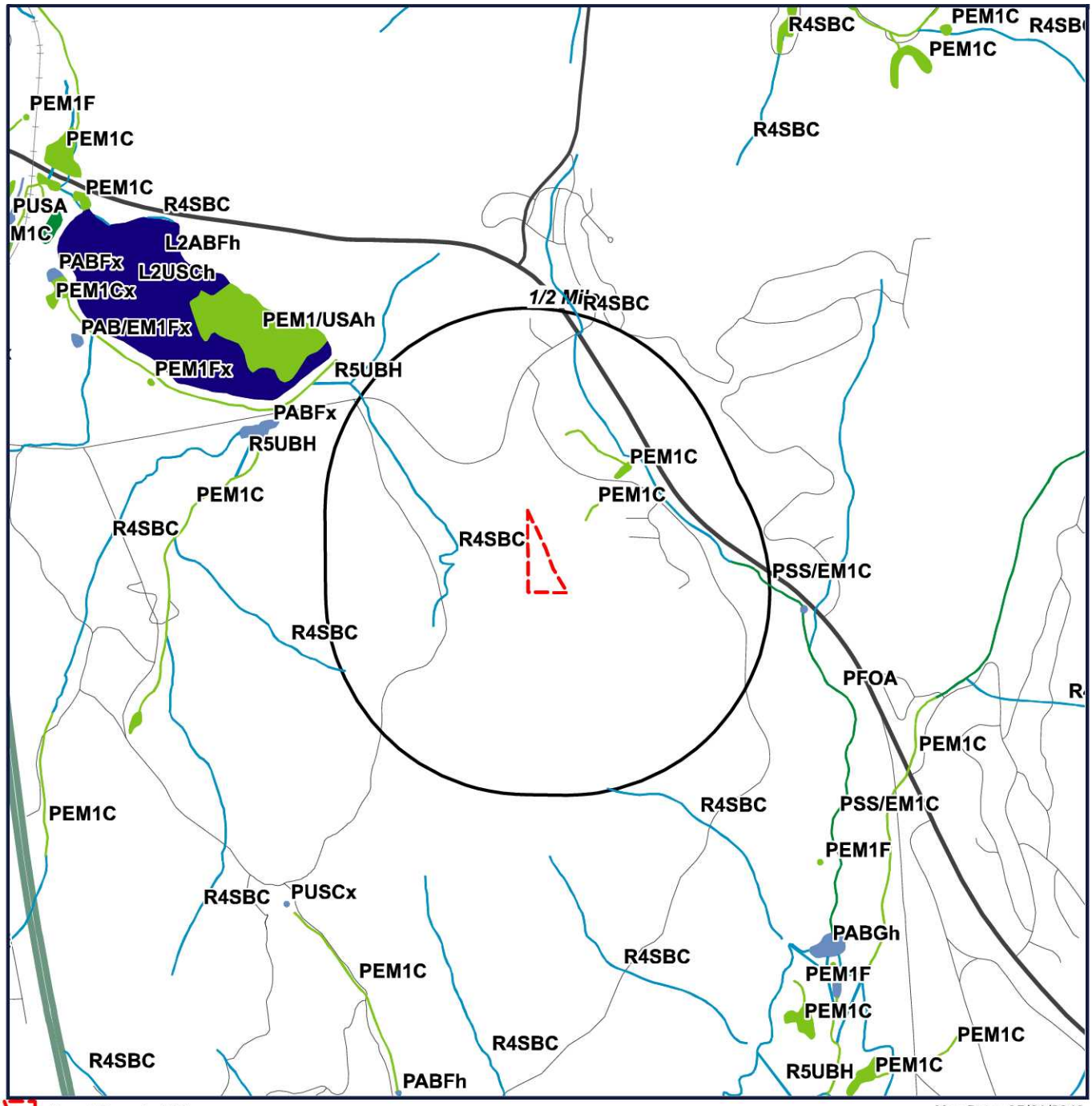
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map



Target Property (TP)

Map Date: 05/01/2018

ESTUARINE AND MARINE DEEPWATER
ESTUARINE AND MARINE WETLAND
FRESHWATER EMERGENT WETLAND
FRESHWATER FORESTED/ SHRUB WETLAND
LAKE
OTHER
RIVERINE
FRESHWATER POND
NDA - DIGITAL DATA NOT AVAILABLE

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

PEM1C

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

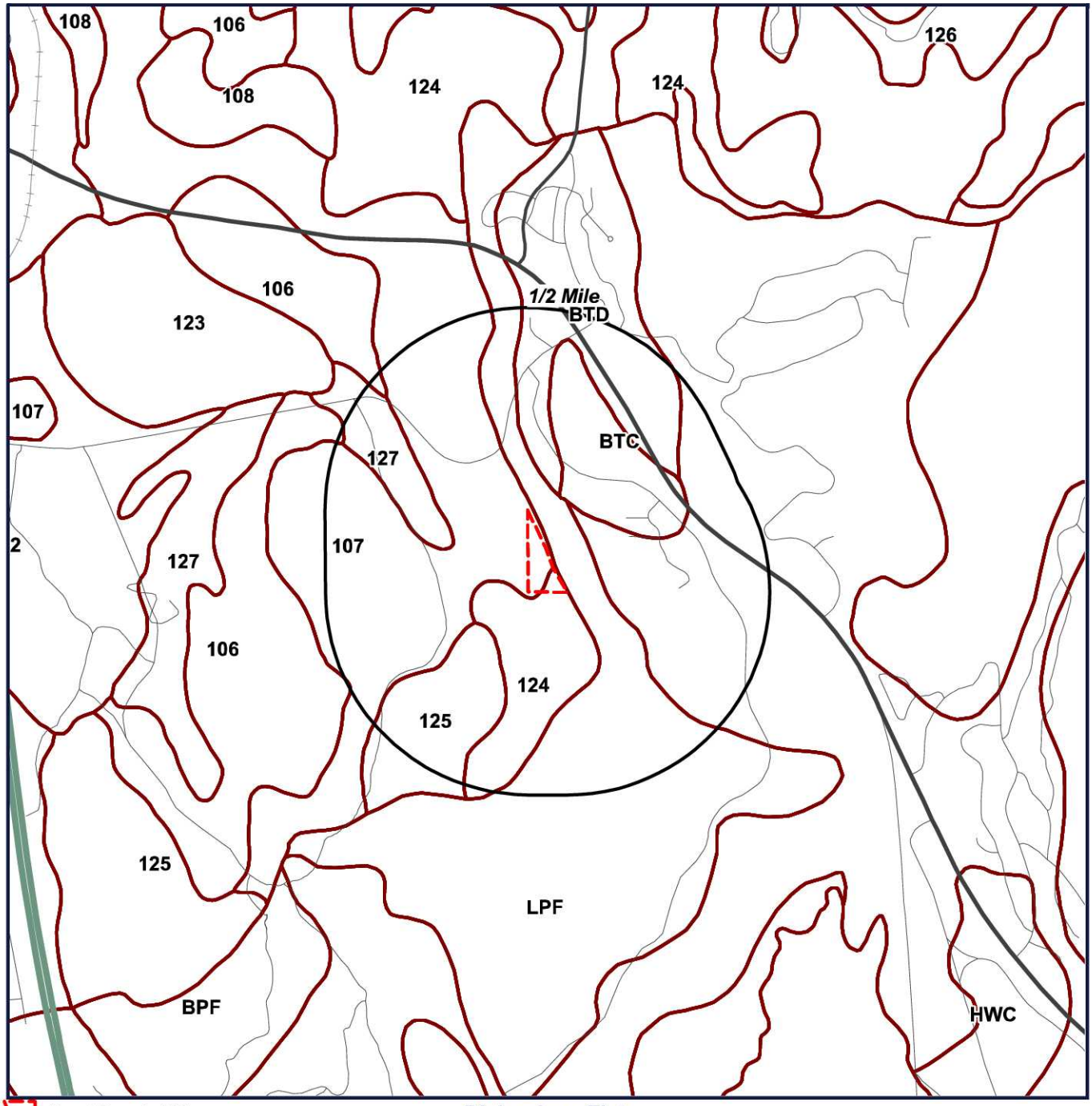
PSS/EM1C

SYSTEM: **PALUSTRINE**
CLASS: **SCRUB-SHRUB**
WATER REGIME: **SEASONALLY FLOODED/SATURATED**

R4SBC

SYSTEM: **RIVERINE**
SUBSYSTEM: **INTERMITTENT**
CLASS: **STREAMBED**
WATER REGIME: **SEASONALLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLET

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

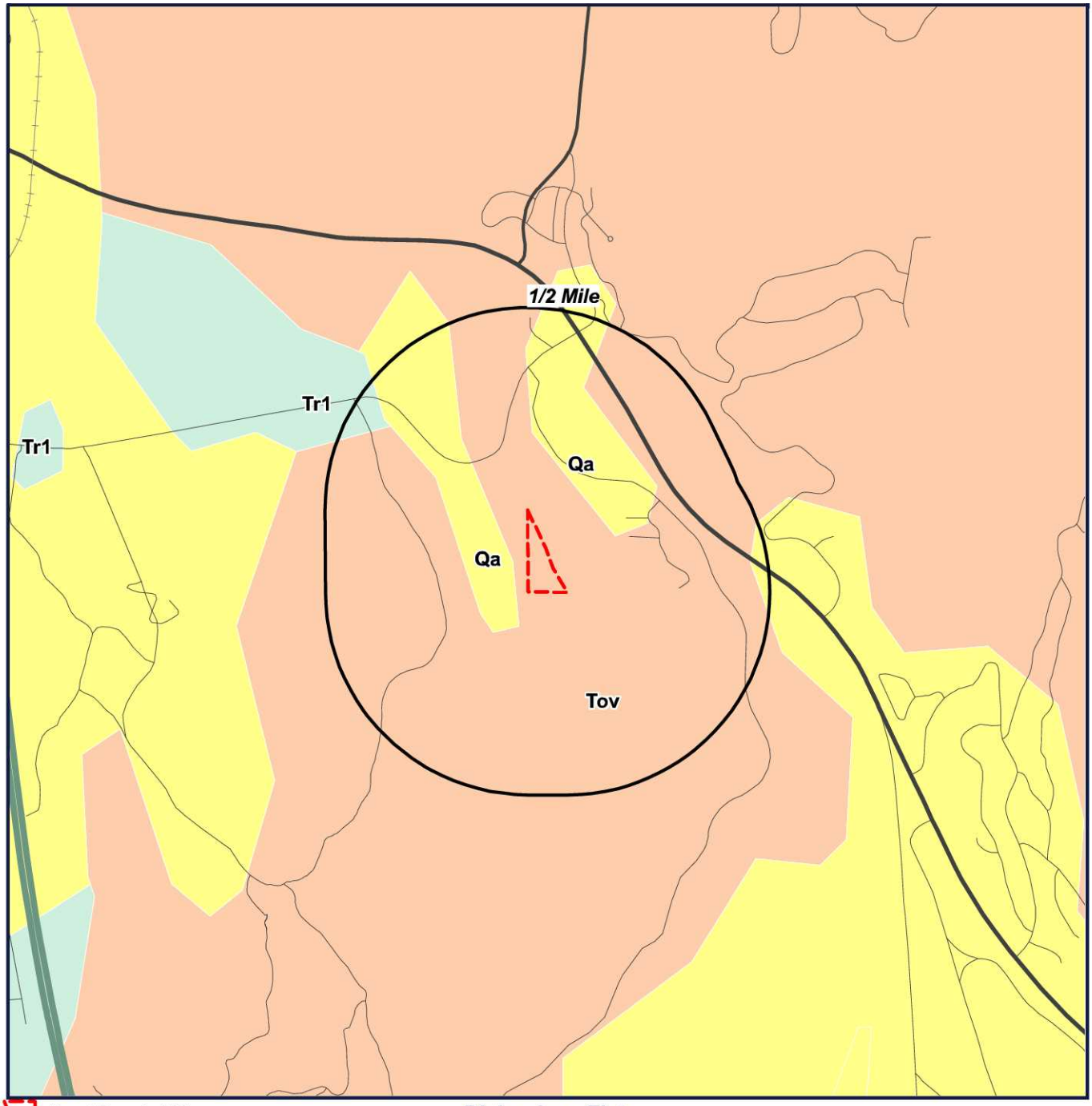
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

BTC	Broadhead soils, 6 to 15 percent slopes
BTD	Broadhead soils, 15 to 25 percent slopes
HWE	Horrocks-Broadhead association, steep
LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
106	Ayoub cobbly loam, 2 to 15 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes
125	Dunford-Ayoub-Melling complex, 30 to 60 percent slopes
124	Dunford-Ayoub-Melling complex, 15 to 30 percent slopes
127	Echocreek-Kovich loams, 0 to 10 percent slopes

Geology Map



Target Property (TP)

Richardson Flats
Parcel SS-125
Near 1185 W LORI LN
Heber, Utah
84032

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Qao**
UNIT NAME: **Older Quaternary alluvial deposits**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

GEOLOGY SYMBOL: **Tr1**
UNIT NAME: **Triassic (1) sedimentary rocks in Salt Lake City-Coalville-Randolph region**
UNIT AGE: **Early Triassic**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
tidal flat to shallow marine
ROCKTYPE/S: **mudstone; limestone; siltstone; sandstone; evaporite**

APPENDIX E

SUPPORTING DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

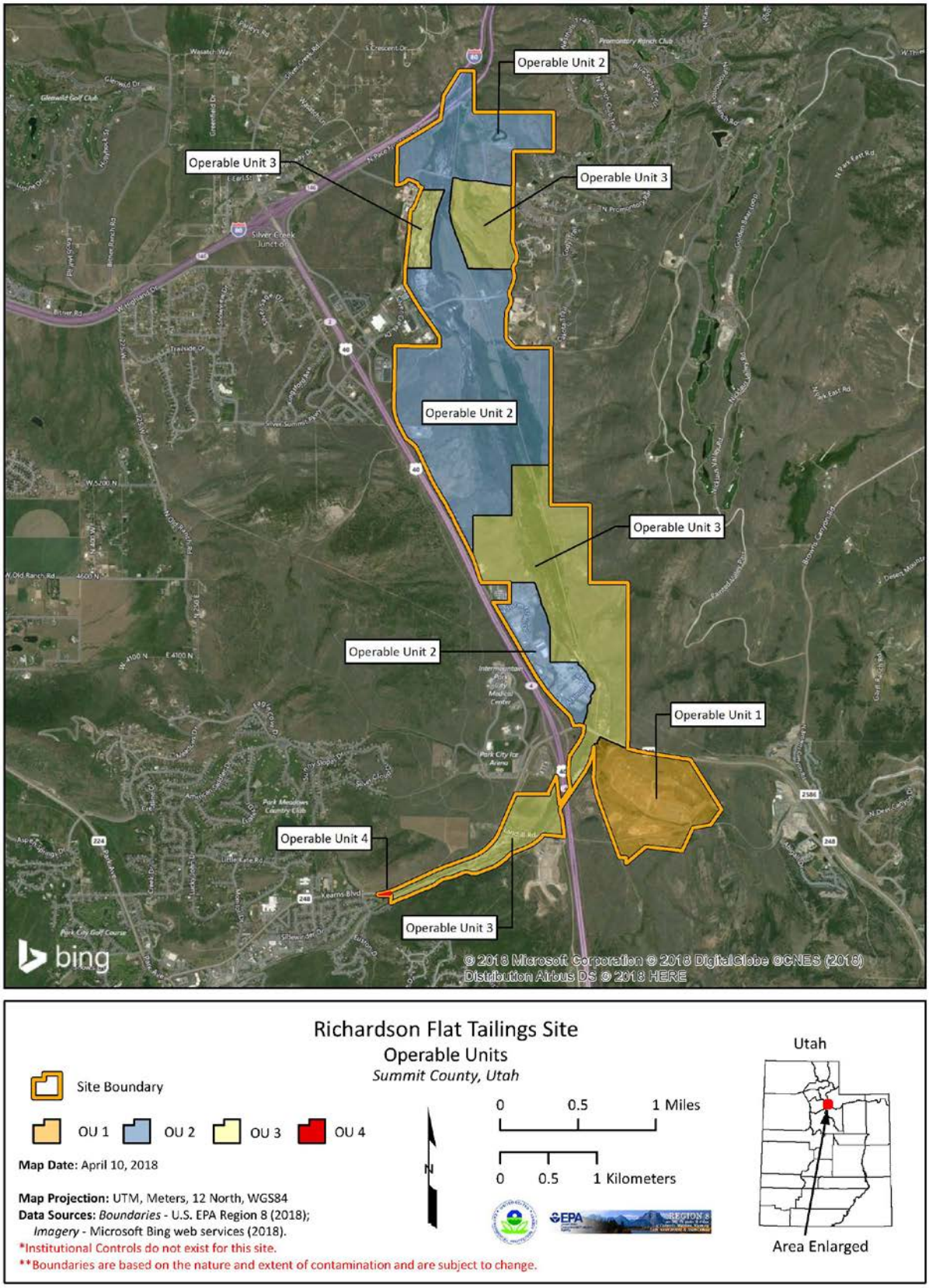
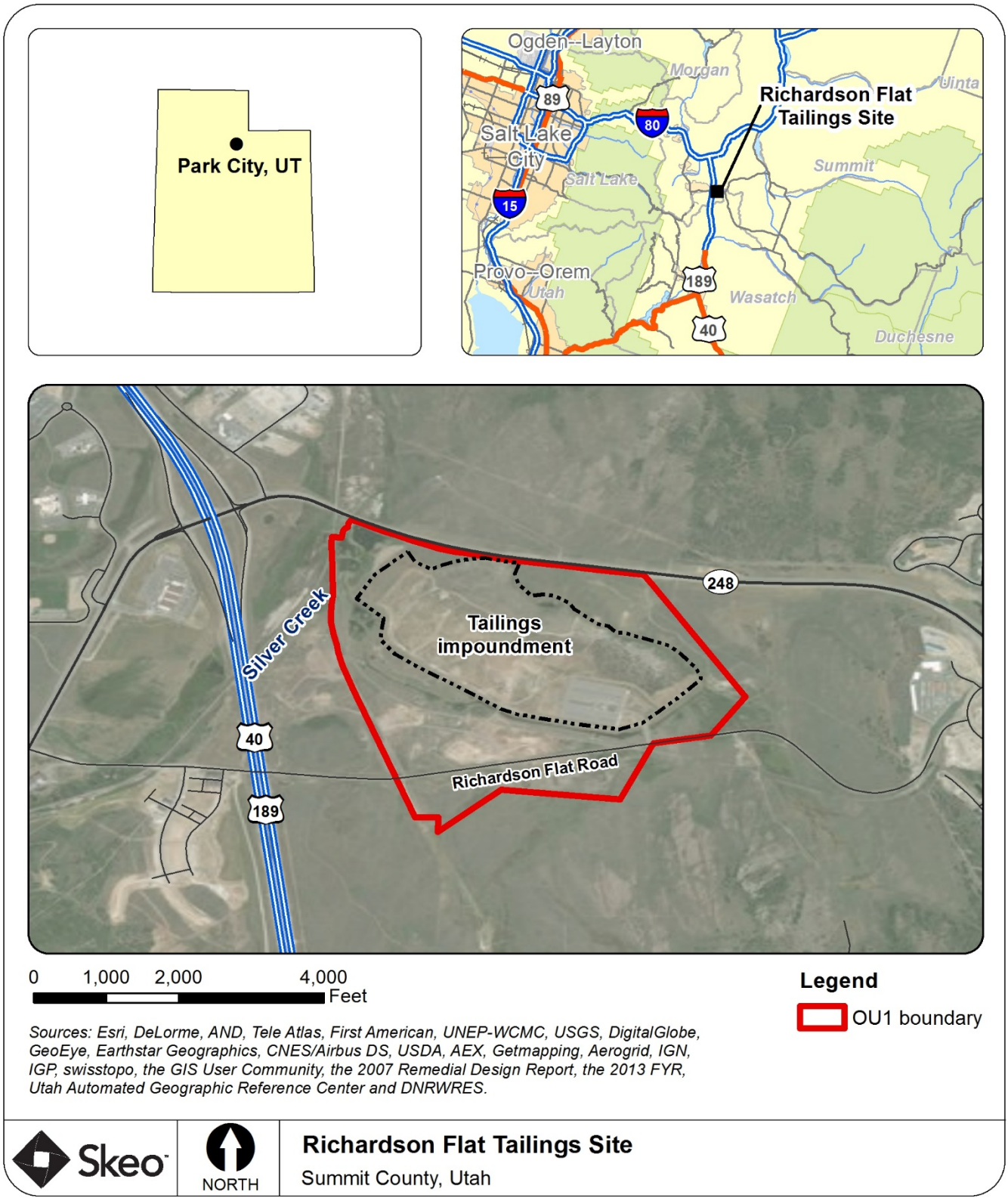


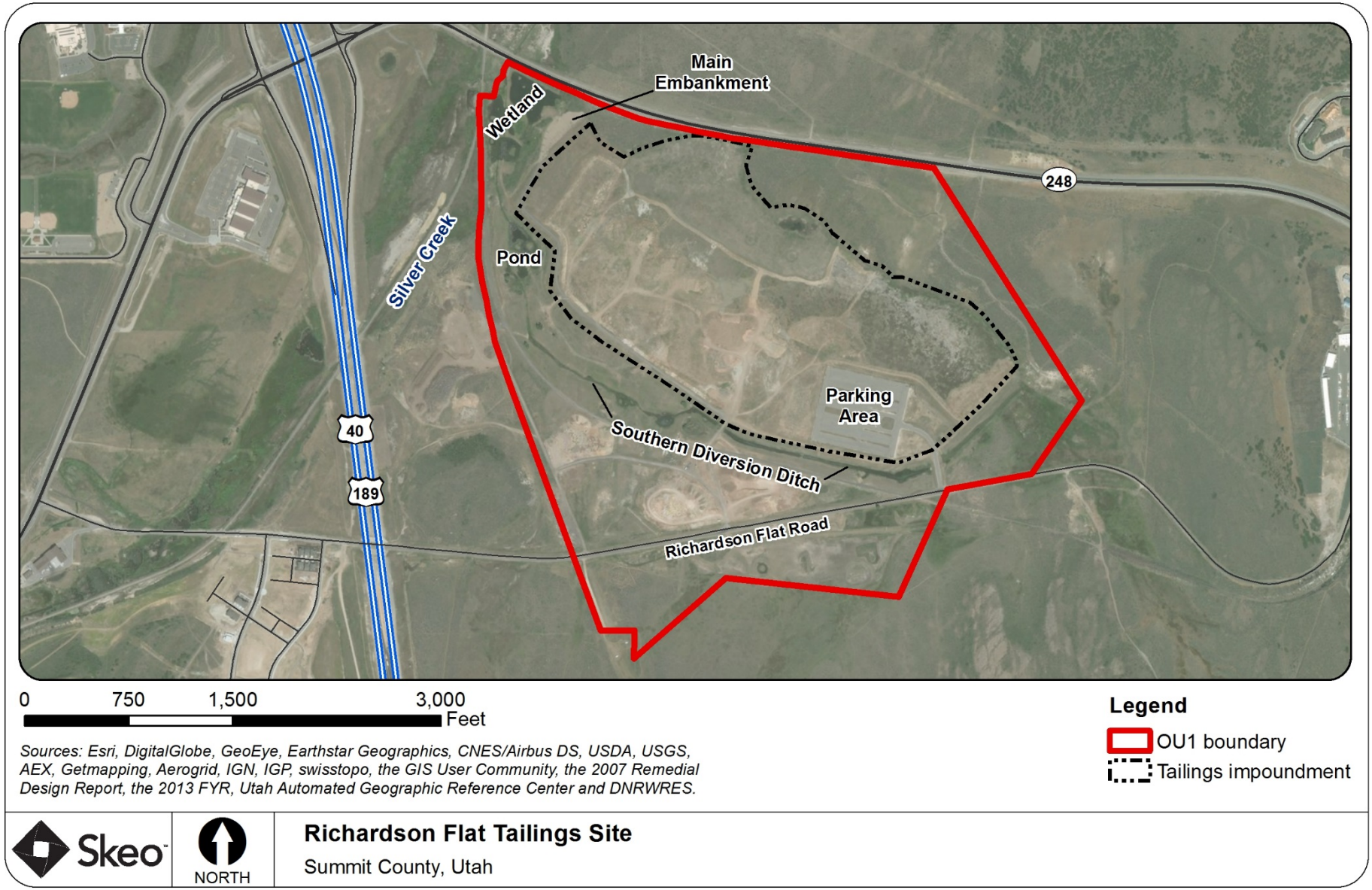
Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

.

Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

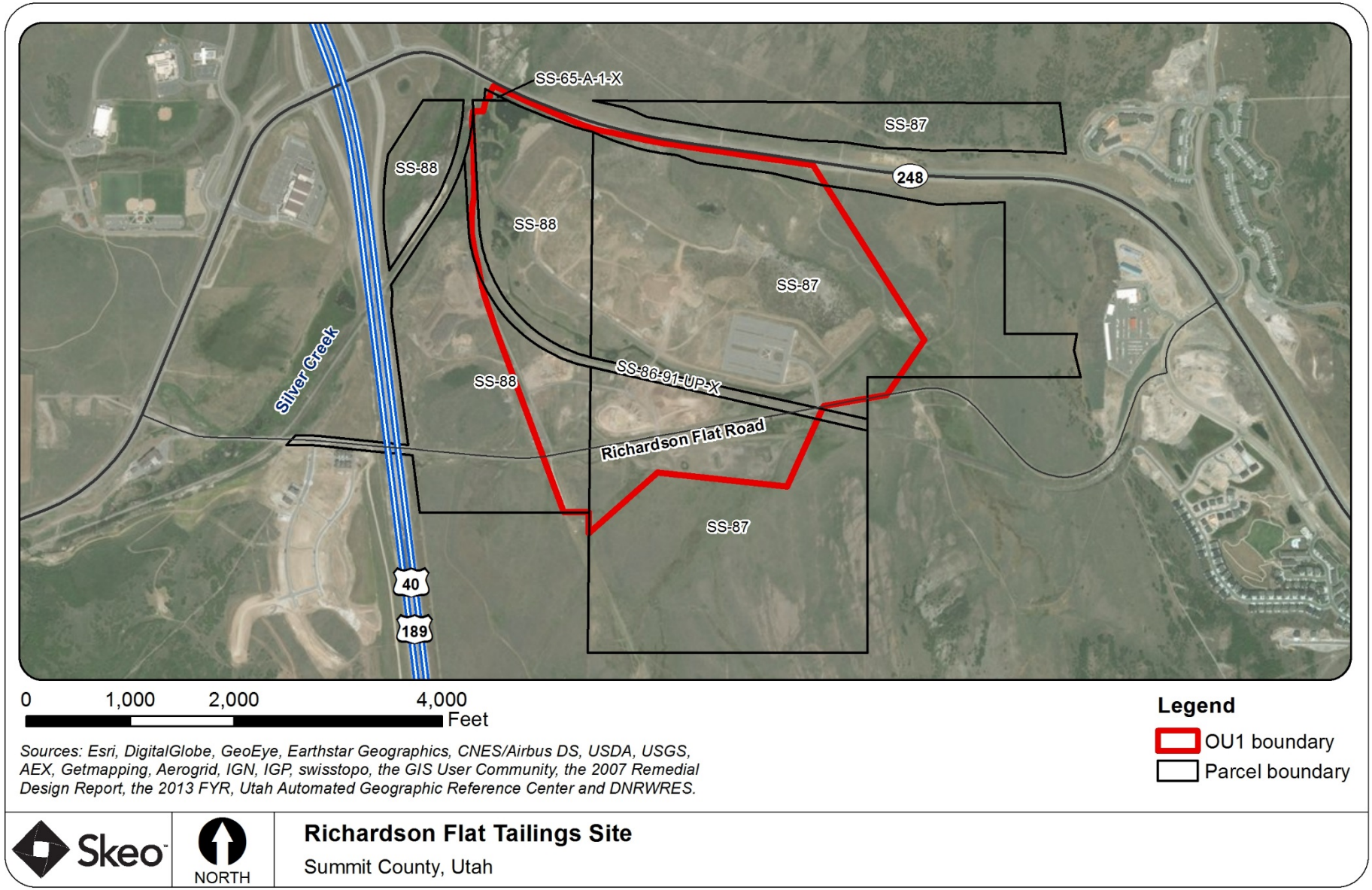
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 µg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below µg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

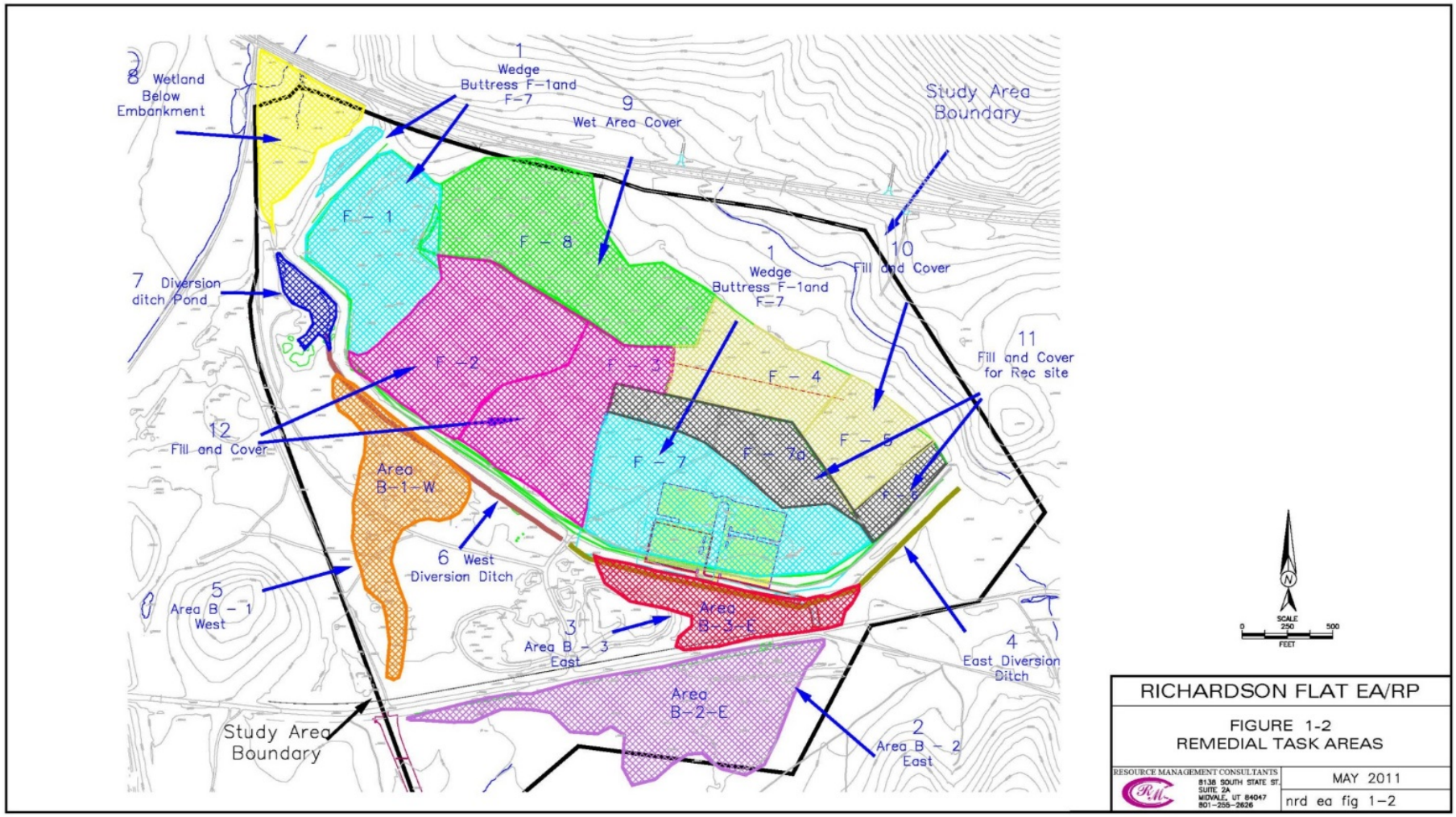


Figure C-2: 2008 Phase 2 Completion Map

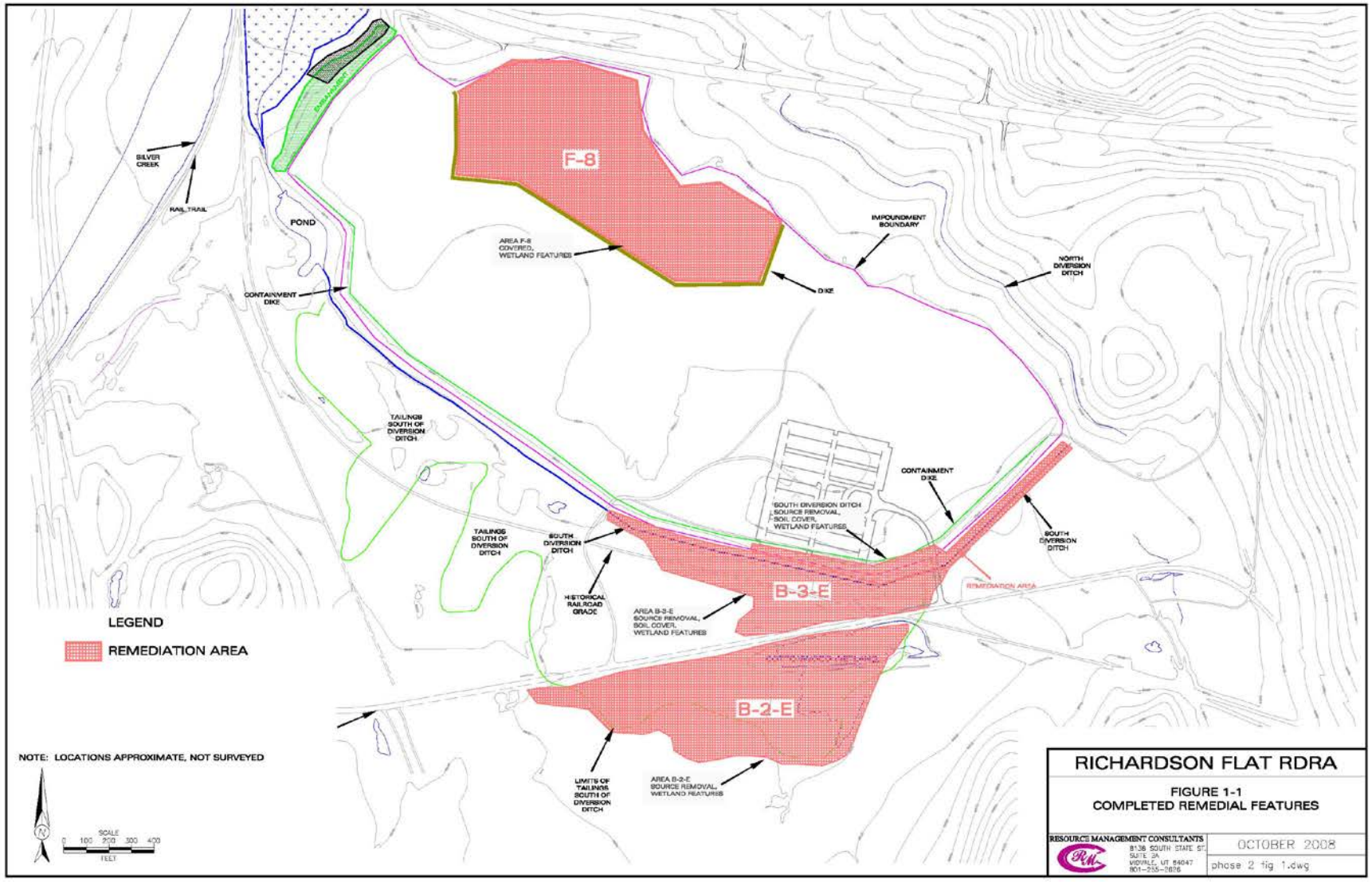


Figure C-3: 2009 Phase 3 Completion Map

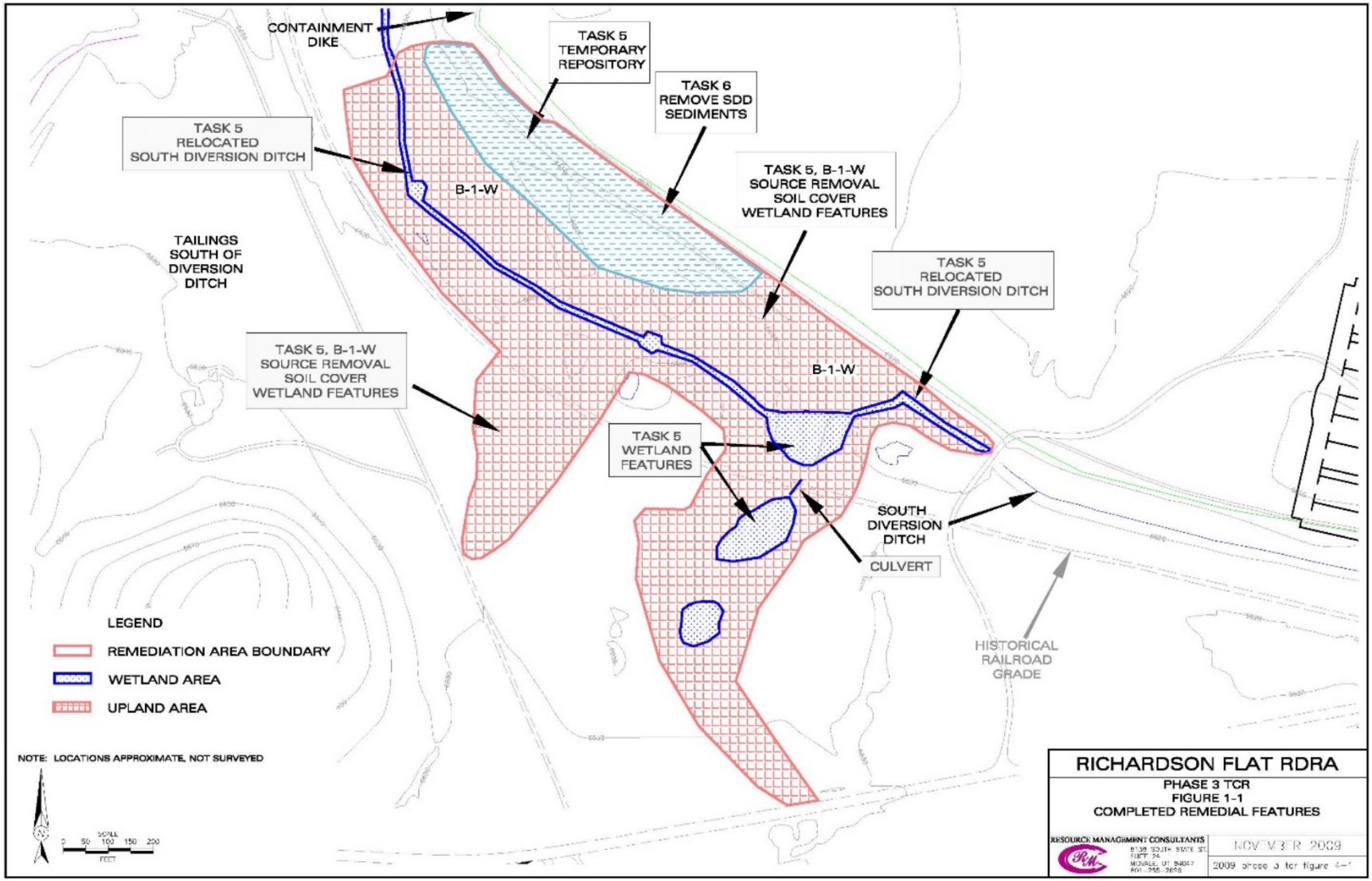


Figure C-4: 2010 Phase 4 Completion Map

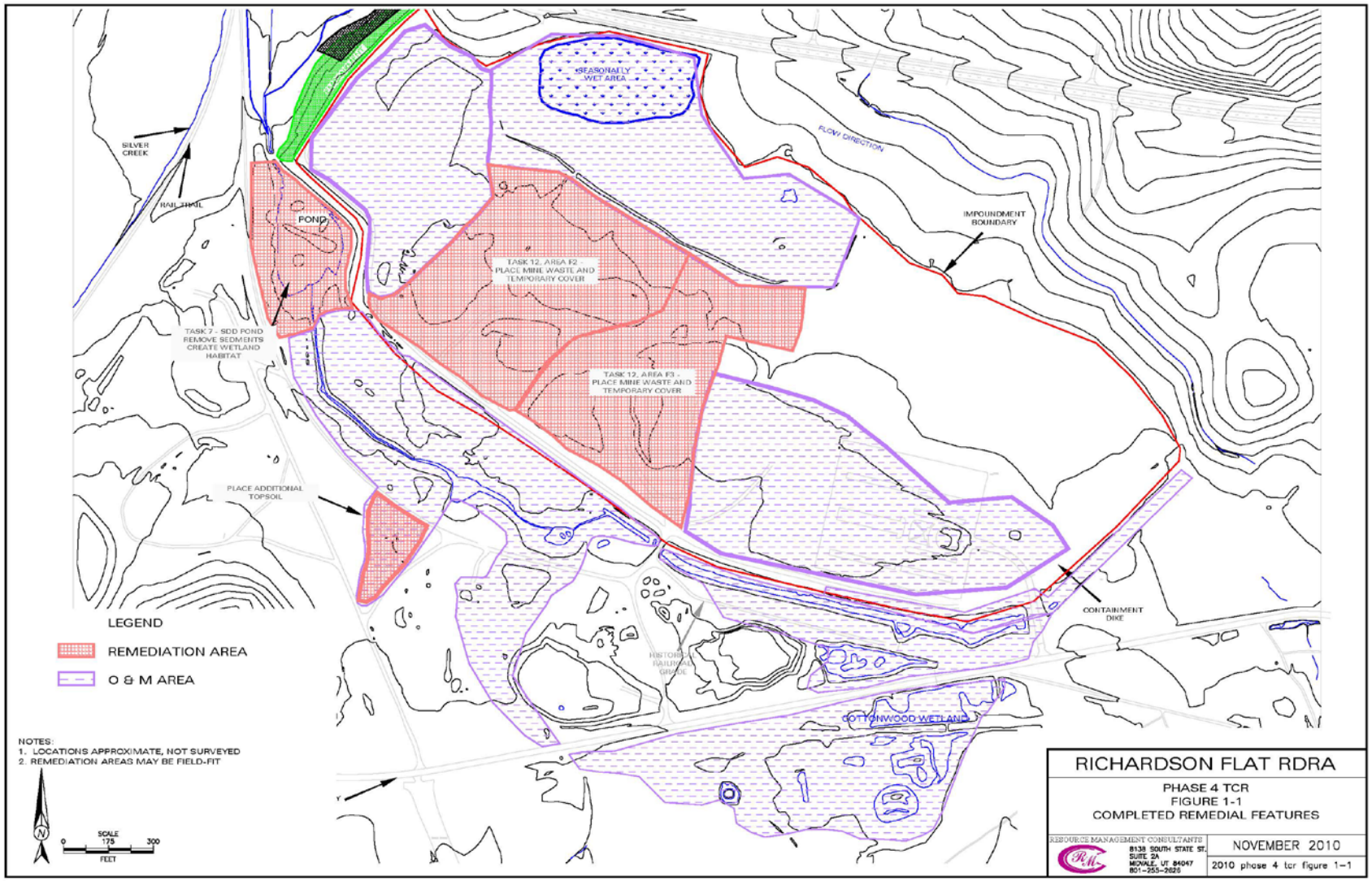
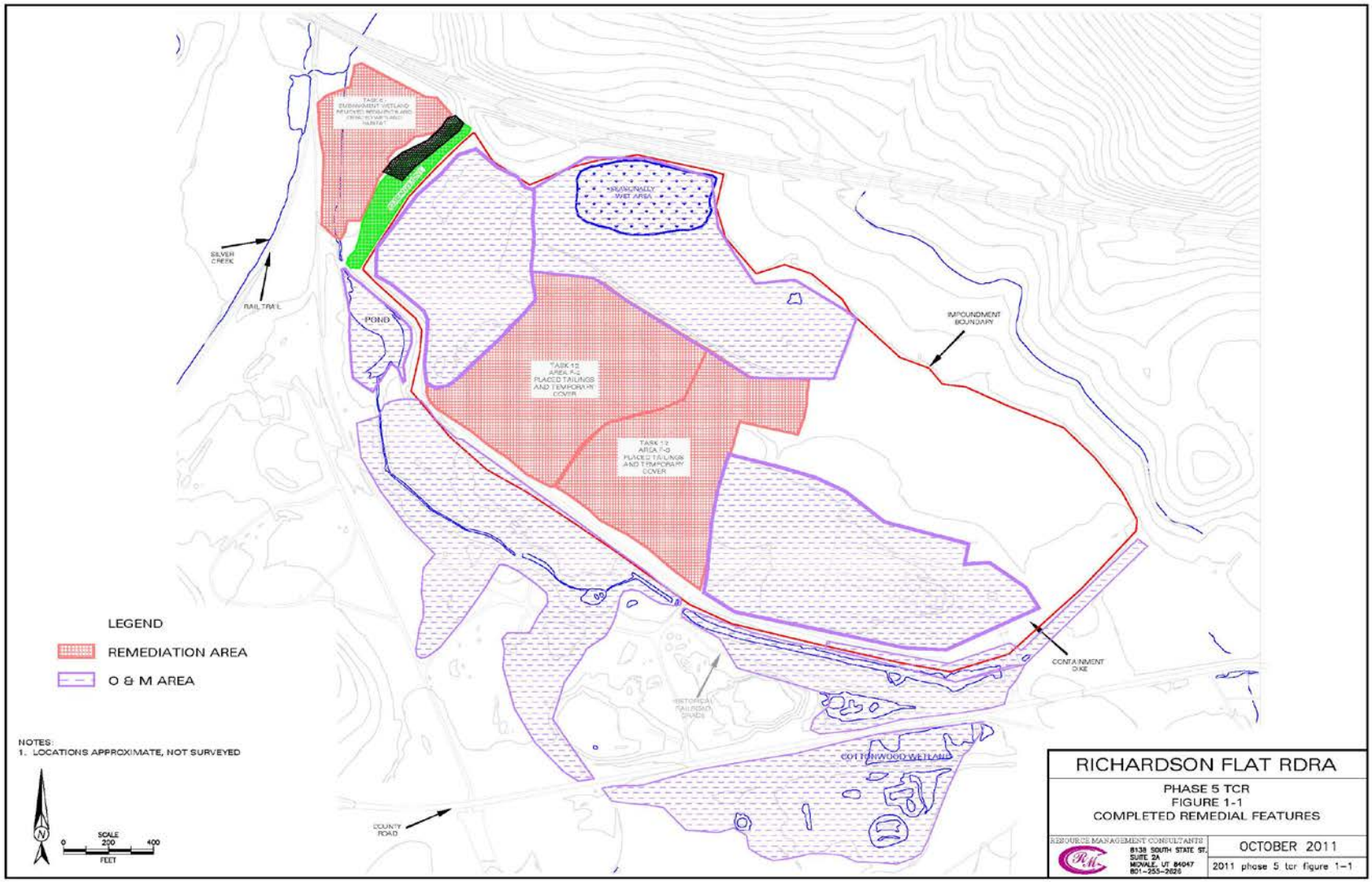


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE

United States Environmental Protection Agency

The U.S. Environmental Protection Agency, Region 8 Announces the Second Five-Year Review for the Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jami Brackin **Affiliation:** Summit County
Subject Contact Information:
Time: 2:30 p.m. **Date:** 09/21/2017
Interview Location: Park City Library

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____	_____	_____	_____	
	Name	Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

	Remarks: _____		
3.	**Erosion**	☐ Location shown on site map	☒ Erosion not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
4.	**Holes**	☐ Location shown on site map	☒ Holes not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
5.	**Vegetative Cover**	☒ Grass	☒ Cover properly established
	☐ No signs of stress	☐ Trees/shrubs (indicate size and locations on a diagram)	
	Remarks: _____		
6.	**Alternative Cover** (e.g., armored rock, concrete)		☒ N/A
	Remarks: _____		
7.	**Bulges**	☐ Location shown on site map	☒ Bulges not evident
	Arial extent: _____		Height: _____
	Remarks: _____		
8.	**Wet Areas/Water Damage**	☒ Wet areas/water damage not evident	
	☐ Wet areas	☐ Location shown on site map	Arial extent: _____
	☐ Ponding	☐ Location shown on site map	Arial extent: _____
	☐ Seeps	☐ Location shown on site map	Arial extent: _____
	☐ Soft subgrade	☐ Location shown on site map	Arial extent: _____
	Remarks: _____		
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map
	☒ No evidence of slope instability		
	Arial extent: _____		
	Remarks: _____		
B. Benches		☐ Applicable ☒ N/A	
	(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)		
1.	**Flows Bypass Bench**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
2.	**Bench Breached**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
3.	**Bench Overtopped**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
C. Letdown Channels		☐ Applicable ☒ N/A	
	(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side		

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☐ Erosion not evident

Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.


Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom
NOTARY PUBLIC

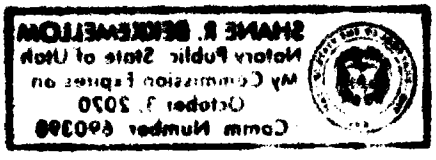
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

0486087 PCH-1-1
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486094 PCH-1-2
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

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SALT LAKE CITY, UT 84117

0486854 PCH-1-T3
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486861 PCH-1-T4
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486878 PCH-1-T5
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486885 PCH-1-T6
IVORY DEVELOPMENT LLC
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0486892 PCH-1-T7
IVORY DEVELOPMENT LLC
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0486900 PCH-1-T8
IVORY DEVELOPMENT LLC
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0486917 PCH-1-T9
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0486955 PCH-1-T13
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0487011 PCH-1-T19
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0487028 PCH-1-T20
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0487035 PCH-1-T21
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0487042 PCH-1-T22
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0487073 PCH-1-T25
IVORY DEVELOPMENT LLC
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0487080 PCH-1-T26
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0487097 PCH-1-T27
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0487105 PCH-1-T28
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

APPENDIX F

STATEMENT OF QUALIFICATIONS



MARK **LARSEN, P.G., E.P.**

GEOLOGIST | ENVIRONMENTAL PROFESSIONAL

CONTACT

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EDUCATION

Bachelor of Science Geology,
University of Utah, Salt Lake City,
1997

PROFESSIONAL LICENSES

Professional Geologist,
State of Utah,
License # 5293214-2250
Expires 3/3/19

AFFILLIATIONS

Association of Environmental and
Engineering Geologists (AEG)
Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



LINDSEY **BRADSHAW**

ENVIRONMENTAL SPECIALIST | FULL SERVICE | MARKETING

CONTACT

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801.864.9702

cmtlaboratories.com

EDUCATION

Bachelor of Arts, Interior Design,
Utah State University,
2009

ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah

CMT ENGINEERING LABORATORIES



ENGINEERING • ENVIRONMENTAL (ESA I & II)
MATERIALS TESTING • SPECIAL INSPECTIONS
ORGANIC CHEMISTRY

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Summit County Parcel SS-125-C

SE of S.R. 248 and U.S. Highway 40
Summit County, Utah
CMT Project No. 14718

FOR:
Mr. Nate Brockbank
Western States Ventures
362 West Pierpont Avenue
Salt Lake City, Utah 84101

June 18, 2020

EXECUTIVE SUMMARY

CMT Engineering Laboratories has completed a Phase I Environmental Site Assessment for the target property located in Summit County, Utah. This Phase I Environmental Site Assessment was performed in general conformance with the scope and limitations of ASTM Standard E 1527-13. The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-125-C. In total, the parcel comprises approximately 32.29 acres. The target property is currently undeveloped land on a relatively steep, north-northeast-facing hillside. The target property has historically remained undeveloped land.

Our review of current State and Federal environmental databases, engineering control registries, and institutional control registries, and a Radius Map Report prepared by GeoSearch, identified two regulated sites/facilities on or within the required search radii of the target property (Sections 8.1 and 8.2). Based on the nature of the database listing, site/facility conditions, elevation, and/or distance from the target property, the identified, regulated sites/facilities do not appear to represent an REC in relation to the target property at the time of this assessment. Based on the observations, research, and interviews conducted while performing this assessment, we did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted. With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

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Appendix B: Historical Aerials Package / Historical Topographic Maps / FIM Report
Appendix C: Radius Report
Appendix D: City Directory Report/Water Well Report/Oil Gas Report/Physical Settings
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1.0-INTRODUCTION

CMT Engineering Laboratories was retained by Western States Ventures to conduct a Phase I Environmental Site Assessment (ESA) for Summit County Parcel SS-125-C in Summit County, Utah. The site will be referred to herein as the target property.

The purpose of the Phase I ESA is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties.

Recognized environmental conditions are defined by the American Society for Testing and Materials' (ASTM) Standard E 1527-13 as "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions inductive of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions"

As defined in the ASTM Standard, a de minimis condition is "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

ASTM Standard E 1527-13 also includes the designation of Controlled REC (CREC). As defined in the ASTM Standard a CREC is "A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

Historical RECs (HRECs) are defined in the ASTM Standard as "A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a

regulatory authority, without subjecting the property to environmental controls. The final decision on whether a past release is an HREC rests with the environmental professional (EP), and will be influenced by the current impact of the past release to the Site."

The Phase I ESA meets the requirements of the United States Environmental Protection Agency's (US EPA) Appropriate Inquiries (AAI) Rule (2005) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (1980) (Also known as Superfund). Meeting the requirements of the AAI Rule allows for qualification of landowner liability protection (LLP) under the CERCLA Brownfield Amendments (2002). The American Society for Testing and Materials (ASTM) has published the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* as Standard Designation E 1527-13. This standard meets the AAI requirements which became effective on November 6, 2013.

The target property is found at Latitude: 40.665836° N and Longitude: -111.432117° W. The location of the target property is shown on **Figure 1,** on the following page.



FIGURE 1, VICINITY MAP

2.0-OBJECTIVES

2.1 Scope of Work

The purpose of the Phase I Environmental Site Assessment (ESA) is to evaluate the conditions on the target property and adjoining properties related to current or historical site uses in order to identify the presence or likely presence of any Recognized Environmental Conditions (RECs) in connection with the property or adjoining properties. At a minimum, the Phase I ESA typically includes a review of publicly available, reasonably ascertainable, and practically reviewable environmental records and historical data, a reconnaissance of the target property and surrounding properties, interviews with property owners, site managers, and/or occupants, and interviews with pertinent government officials to assess the presence or the potential presence of recognized environmental conditions at the target property.

This Phase I ESA is generally consistent with the current ASTM Standard (ASTM E 1527-13) and industrial accepted standards as defined within the following scope-of-work:

1. Conduct an on-site, non-intrusive/non-analytical reconnaissance of the target property and a limited reconnaissance of adjoining, surrounding properties. The reconnaissance is performed by a qualified and experienced geologist or engineer from CMT Engineering Laboratories.

2. Review and interpret a limited number of historical aerial photographs, historical topographic maps, and, when available, city directories, and historical fire insurance maps that include the location of the target property in order to evaluate historical site usage.

3. Research available geological and hydrological data for the location of the target property and vicinity.

4. Conduct a comprehensive review of the most recent Federal and State environmental databases and control registries relative to the target property and surrounding properties within the ASTM E 1527-13 recommended search radius from the target property. CMT Engineering Laboratories contracts with GeoSearch to conduct searches of Federal and State environmental databases and control registries and to provide a radius map report of the search findings. CMT also performs searches of available State and Federal databases through various State of Utah Department of Environmental Quality (DEQ) and Federal Environmental Protection Agency (EPA) internet sites. At a minimum, Federal National Priorities Lists (NPL); Target property, 1-mile radius of property, and the following databases and control registries are reviewed:

- Comprehensive Environmental Response Compensation and Liability Index System (CERCLIS) lists; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 1-mile radius of property

- Resource Conservation and Recovery Act (RCRA) non-Corrective Action Report (non-CORRACTS) Treatment, Storage, Disposal facilities (TSD) list; Target property and 0.5-mile radius of property

- Resource Conservation and Recovery Act (RCRA) Generators list; Target property and 0.25-mile radius of property
- Utah Landfill Inventory List; Target property and 0.5-mile radius of property
- Utah Underground Storage Tank (UST) and Above Ground Storage Tank (AST) Sites lists; Target property and 0.25-mile radius
- Utah Leaking Underground Storage Tank (LUST) and Leaking Above Ground Storage Tank (LAST) Sites lists; Target property and 0.5-mile radius of property
- Utah SPILLS (reported petroleum and hazardous materials releases) list; Target property

A number of other databases and control registries are reviewed for the target property and surrounding properties within required search distances as part of the GeoSearch Radius Report. A complete list of the databases and control registries reviewed is included in the GeoSearch Radius Report in **Appendix C**.

5. Conduct an assessment of potential vapor migration/ encroachment at the target property.

6. Conduct interviews of current and/or past property owners, managers, or occupants concerning the present and past site usage, conditions, and events at the target property.

7. Conduct interviews of, or submit information requests to, pertinent government and regulatory officials, agencies, and departments concerning present and past site usage, conditions, and events at the target property and surrounding areas.

8. Provide a summary of the findings of our assessment and any pertinent conclusions and opinions pertaining to our findings.

2.2 Limitations of Assessment

CMT Engineering Laboratories has performed this assessment with the usual care and thoroughness of a consulting professional based on the scope-of-work, limits of time, cost, and publicly available, reasonably ascertainable, and practically reviewable information. We have made no attempt to determine the marketability of the target property or its suitability for any particular use, and such a determination should not be inferred based solely on this report. The information and findings presented in this report is not, and should not be, considered a warranty regarding the presence or non-presence of recognized environmental conditions in connection with the target property.

The presence of RECs in connection with the subject property may warrant additional investigation or studies to better evaluate and classify target property conditions and determine potential environmental liabilities on property owners, occupants, or operators.

The historical information sources researched for this Phase I Environmental Site Assessment revealed the uses of the target property from the present back to 1937 (historical aerial photographs) and 1903 (historical topographic maps). This meets the 1940- minimum research limit per the ASTM Standard E 1527-05 § 8.3.2.

The Phase I ESA does not address the following Non-ASTM E 1527-13 scope items:

- Asbestos-containing building materials
- Lead based paint
- Naturally occurring radon
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historical resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality
- Biological agents
- Mold
- PCB Light Ballasts
- Environmental Lien Search
- Chain of Title Report

The evaluation of any of the above listed considerations is beyond the scope of this assessment and would require additional assessment by an appropriate, qualified professional.

This assessment has been non-intrusive and non-analytical in nature which is typical of a Phase I Environmental Site Assessment. Therefore, CMT Engineering Laboratories makes no claims relative to surficial or subsurface conditions in relation to the target property or in relation to conditions which would require analytical testing to evaluate. It is understood that a Phase I ESA, such as the one reported herein, does not and cannot eliminate all of the environmental risks and liabilities associated with the target property. This report consists of our professional opinions made in accordance with the procedures and principles as outlined in ASTM E1527-13. This warranty is in lieu of all other warranties either expressed or implied.

2.3 Reliance

A Phase I ESA performed in accordance with ASTM E1527-13 and completed less than 180 days prior to the date of acquisition or date of intended transaction is presumed to be valid. After 180 days, or if additional

information becomes known, or if significant, pertinent changes occur to the conditions of the target property, then all or portions of the environmental site assessment may need to be updated prior to the date of acquisition or date of intended transaction. After one year of the date of this report, the assessment should be considered void and should not be relied upon. After one year of the date of this report, a new Environmental Site Assessment of the target property would be required.

This report is prepared for the sole use and benefit of Western States Ventures and its duly-authorized representatives, affiliates, and assigns, and may not be relied upon by any other person or entity without the written authorization (reliance letter) of CMT Engineering Laboratories.

2.4 Commonly Used Acronyms

The Following list contains some of the commonly used acronyms used in this report and supporting documentation. The list is not considered to be all inclusive.

AST	Above Ground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	CERCLA Information System
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
DERR	Division of Environmental Remediation and Response (UDEQ)
ERNA	Emergency Response Notification System
EWA	Enforceable Written Assurances
FINDS	Facility Index System/Facility Registry System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FTTS	FIFRA/TSCA Tracking System
HIST FTTS	Historical FTTS
HREC	Historical Recognized Environmental Condition
ICIS	Integrated Compliance Information System
NPDES	National Pollutant Discharge Elimination System
LUST	Leaking Underground Storage Tank
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RCRA-CESQG	RCRA Conditionally Exempt Small Quantity Generator
RCRA-NONGEN	RCRA Non-Generator
RCRA-SQG	RCRA Small Quantity Generator
RCRA-LQG	RCRA Large Quantity Generator
RCRA TSDF	RCRA Treatment, Storage and Disposal Facilities
REC	Recognized Environmental Condition
TRIS	Toxic Chemical Release Inventory System

TSCA	Toxic Substance Control Act
UDEQ	Utah Department of Environmental Quality
U.S. EPA	United States Environmental Protection Agency
UST	Underground Storage Tank

3.0-PREVIOUS REPORTS

CMT Engineering was not provided copies of any previous environmental assessment reports for the target property and we are not aware of any such reports.

4.0-SITE DESCRIPTION

4.1 Location

The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. The location of the target property is shown on **Figure 1**. The target property consists of 1 parcel with the following Summit County Parcel ID Number: SS-125-C. In total, the parcel comprises approximately 32.29 acres. The approximate boundaries of the entire target property are shown on **Figure 2** below.

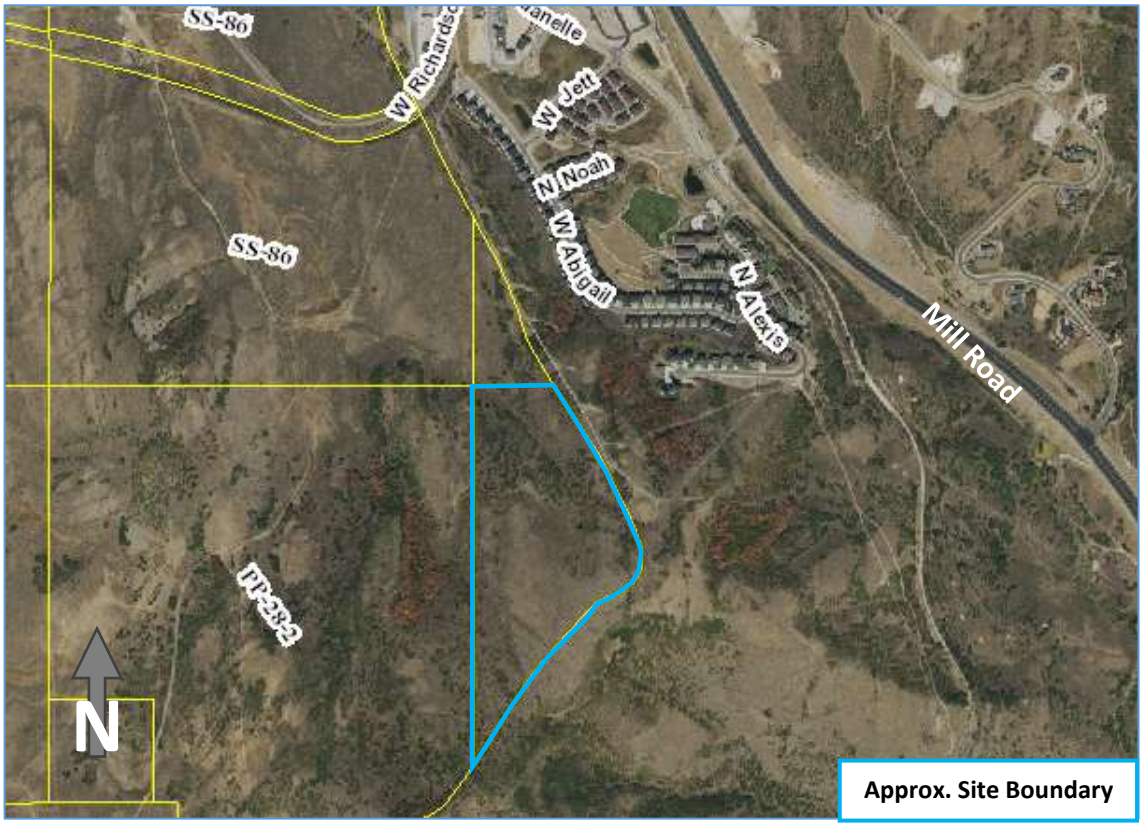

FIGURE 2, SITE MAP

4.3 Current Property Use

The target property is currently undeveloped land comprised of a relatively steep, north-northeat-facing hillside. The property is vegetated with oak brush, sage brush, grasses, and weeds. Several photographs of the target property and adjacent areas are included in **Appendix A**.

4.4 Structural Description

There are no existing permanent structures on the target property.

4.5 Neighboring Properties

The current uses of the surrounding, adjacent properties is as follows:

North: Undeveloped hill slopes with residential development beyond to the northeast.

East: Undeveloped hill slopes.

South: Undeveloped hill slopes.

West: Undeveloped hill slopes.

5.0-SITE RECONNAISSANCE

5.1 Methodology

A reconnaissance of the target property and adjacent, surrounding properties was conducted on June 5, 2020. The weather conditions at the time of the reconnaissance were mostly clear with a temperature of approximately 75 to 80 degrees (F). The purpose of the reconnaissance was to visually observe the target property and adjacent properties for evidence of potential or actual recognized environmental conditions (RECs). The reconnaissance was non-intrusive and non-analytical in nature. A summary of the observed conditions on the target property and adjacent, surrounding properties was documented in an inspection checklist which is included in **Appendix A**.

5.2 Observations

5.2.1 Proposed Construction and Materials

CMT is not aware of specific, future development plans for the target property.

5.2.2 Utilities

There are no existing structures on the target property. It is anticipated that any future development on the target property will be serviced by municipal and private utility providers who provide sanitary sewer, culinary water, electric power, natural gas and communication utilities in the area.

5.2.3 Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed on the target property.

5.2.4 Staining

No surficial staining was observed on the target property.

5.2.5 Storage Tanks

No evidence of an underground storage tank (UST) or an above ground storage tank (AST) was observed during the site reconnaissance or within the Utah Department of Environmental Quality's (UDEQ) interactive UST data map. See Section 8.1, On-Site Environmental Conditions, for more details.

5.2.6 Asbestos Containing Materials (ACMs)

No structures that could contain ACMs were observed on the target property.

5.2.7 Odors

No unusual odors that could be attributed to hazardous substances or petroleum products were encountered at the target property.

5.2.8 Pools, drains, or Sumps

No pools, drains, or sumps were observed on or adjacent to the target property.

5.2.9 Unidentified Substance Containers

No unidentified containers of any type were observed on or adjacent to the target property.

5.2.10 Polychlorinated Biphenyls (PCBs)

No potential sources that could contain PCBs were observed on or adjacent to the target property.

5.2.11 Pits, Ponds, or Lagoons

No pits, ponds, or lagoons were observed on or adjacent to the target property.

5.2.12 Stressed Vegetation

No stressed vegetation was observed on or adjacent to the target property.

5.2.13 Solid Waste

No solid waste was observed on the target property.

5.2.14 Water Wells and Water Service

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Federal USGS Wells	0.5000	0	0	1	1	NS	NS	2
Water Wells	0.5000	0	0	14	2	NS	NS	16
Total		**0**	**0**	**15**	**3**	**0**	**0**	**18**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Water Well Report is included in **Appendix D.**

5.2.15 Oil and Gas Wells

Acronym	Search Radius (miles)	TP/AP	1/8 Mile (>TP/AP)	1/4 Mile (>1/8)	1/2 Mile (>1/4)	1 Mile (>1/2)	>1 Mile	Total
Oil and Gas Wells	0.5000	0	0	0	0	NS	NS	0
Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**

NS = Not Searched
TP/AP = Target Property/Adjacent Property
The GeoPlus Oil and Gas Report is included in **Appendix D.**

5.2.16 Septic Systems

No evidence of a septic system was observed on the property.

6.0-PAST SITE LAND USE

The history of the target property has been assessed by reviewing a limited number of historic aerial photographs, historical topographic maps, historic city directories, Sanborn Fire Insurance Maps, and a review of Summit County Parcel assessor's maps where available.

6.1 Property Information

The target property is comprised of 1 parcel. The parcel information below was identified on the Utah County parcel assessor's website:

PARCEL NO	ADDRESS	ACRES	OWNER
SS-125-C	Null	32.29	Stichting Mayflower Mountain Fonds

6.2 Fire Insurance Maps

A Fire Insurance Map Report prepared by GeoSearch indicates that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information. Sanborn fire insurance maps were typically produced from the late 1800s to the 1950s and, in some areas, more recently. When no mapping is available for a location, it typically indicates that the location had sparse to no development at the time the mapping was completed. The target property is an unmapped property. A copy of the Fire Insurance Map Report prepared by GeoSearch is included in **Appendix B**.

6.3 Aerial Photographs

An aerial photo decade package was provided by GeoSearch. The following historical aerial photograph years that include the location of the target property were reviewed: 1937, 1953, 1962, 1967, 1976, 1983, 1987, 1993, 1997, 2003, 2004, 2006, 2009, 2011, 2014, 2016 and 2018. Our observations and interpretations of the photographs are summarized below:

1937: The aerial indicates that the target property and adjacent properties were undeveloped land.

1953: The aerial shows no significant change from the previous imagery.

1962: The aerial shows no significant change from the previous imagery.

1967: The aerial shows no significant change from the previous imagery.

1976: The aerial shows no significant change from the previous imagery.

1983: The aerial shows no significant change from the previous imagery.

1987: The aerial shows no significant change from the previous imagery.

1993: The aerial shows no significant change from the previous imagery.

1997: The aerial shows no significant change from the previous imagery.

2003: The aerial shows an overhead power line easement adjacent to and paralleling the eastern boundary of the target property. The aerial shows no other significant change from the previous imagery.

2004: The aerial shows no significant change from the previous imagery.

2006: The aerial shows no significant change from the previous imagery.

2009: The aerial shows residential development to the northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2011: The aerial shows no significant change from the previous imagery.

2014: The aerial shows additional residential development to the northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2016: The aerial shows additional residential development to the northeast of the property in progress. The aerial shows no other significant change from the previous imagery.

2018: The aerial shows additional residential development to the northeast of the property had been completed. The aerial shows no other significant change from the previous imagery.

The GeoSearch Historical Aerials Package reviewed for this assessment is included in **Appendix B**.

6.4 Topographic Maps

CMT Engineering Laboratories reviewed and interpreted readily available historical topographic maps that include the location of the target property and surrounding areas. The maps reviewed include the U.S. Geological Survey, "Coalville, Utah" and "Park City East, Utah" Topographic Maps dated 1903, 1955, 1999, and 2014. A summary of the observations of the reviewed maps is provided below.

1903: No development or improvements are mapped on or adjacent to the target property.

1955: The map shows no changes from the previous mapping.

1999: The map shows no changes from the previous mapping.

2014: The map shows streets associated with the existing commercial and residential development to the northeast of the target property as well as other existing roads and highways in the area.

The GeoSearch Historical Topographic Maps reviewed for this assessment are included in **Appendix B**.

6.5 City Directories

A search was made by GeoSearch in the City Directories for the site and surrounding vicinity. No listings for the target property were identified within the City Directories. Several listings for properties in the vicinity were identified in the City Directories. A copy of the City Directories Report prepared by GeoSearch is included in **Appendix D**.

7.0-GEOLOGIC AND HYDROLOGIC EVALUATION

7.1 Subsurface

The target property is located in the Richardson Flat area of southwest Summit County, Utah. The area is bound by the Wasatch Mountain Range to the west and the West Hills and Uinta Mountains beyond to the east and is part of the Wasatch Hinterlands section of the Middle Rocky Mountain Physiographic Province of north-central Utah. The Wasatch Hinterlands are described by Stokes (1986) as "a belt of mixed, moderately rugged topography" located between the Wasatch Mountains to the west and the Uinta Mountains to the east. Stokes further describes the area as having "varied and unorganized topography with hilly areas dominating valley areas." The target property sits at an elevation ranging between approximately 6,800 and 7,160 feet above sea level.

The geology of the Park City East 7.5 minute quadrangle, including the location of the target property, has been mapped by Biek (2017). The surficial geology over the location of the site and adjacent properties is relatively complex as shown on the included portion of the referenced geologic map in **Figure 3** on the following page. The following table summarizes the geologic units mapped at the target property and adjacent areas.

Geologic Units Mapped on and Adjacent to Site

Map Unit	Description	Age
Qafc	Fan alluvium and colluvium	Holocene to upper Pleistocene
Tkt	Lava Flows of Todd Hollow (Keetley Volcanics)	lower Oligocene to upper Eocene

Map Unit	Description	Age
Tkrf	Lava flows of Richardson Flat (Keetley Volcanics)	lower Oligocene to upper Eocene
Tksc	Volcanic mudflow breccia of Silver Creek (Keetley Volcanics)	Lower Oligocene to upper Eocene
Tksh	Lava flows and volcanic mudflow breccia of Sage Hen Hollow (Keetley Volcanics)	Upper Eocene

The surficial geology and general topography of the target property and surrounding area is shown on **Figure 3** on the following page.

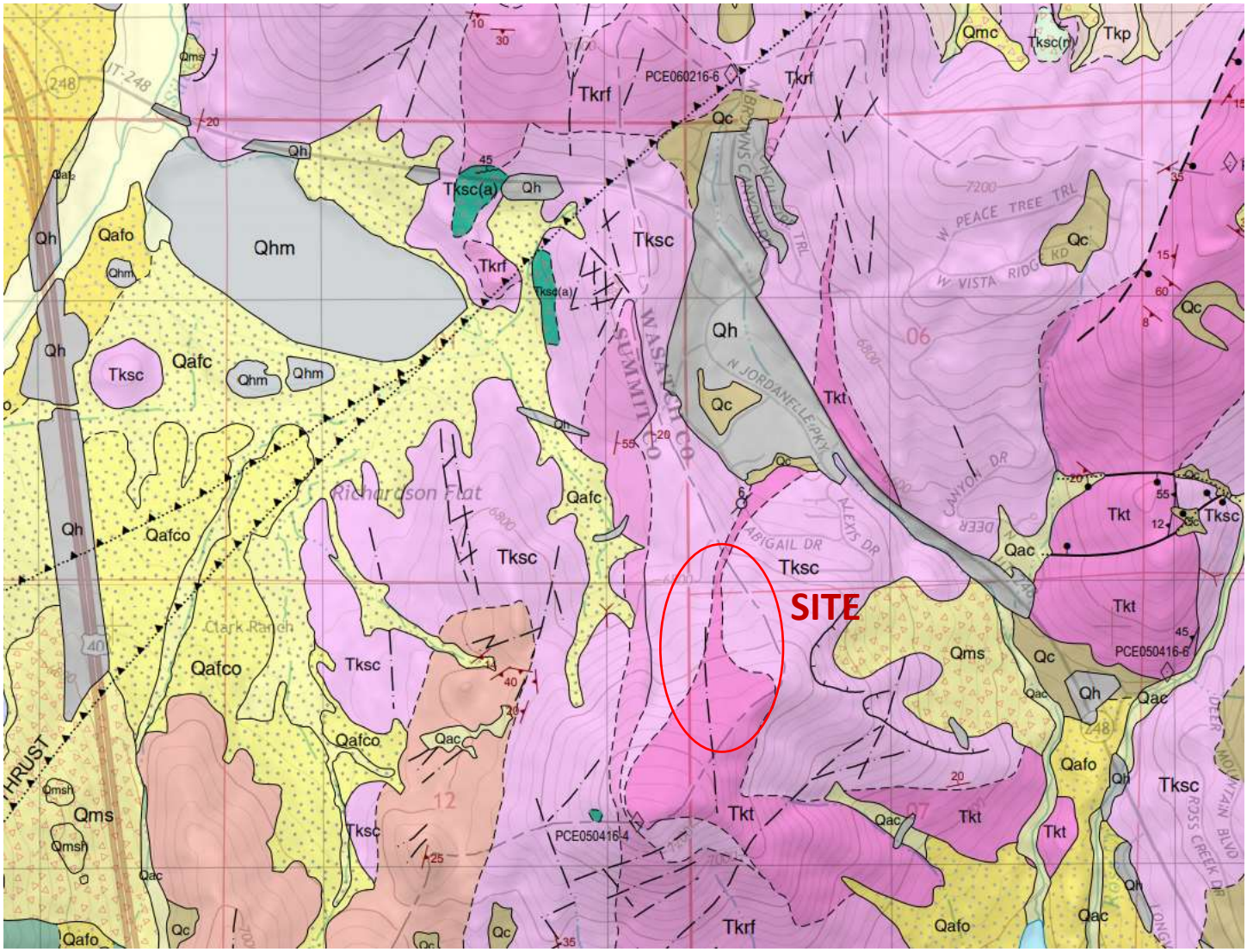

FIGURE 3, GEOLOGIC MAP

7.3 Hydrology

An investigation of groundwater levels and flow direction at the target property is beyond the scope of this assessment. Regional groundwater flow is inferred to be generally toward the north-northeast at the location of the property based on topography. However, regional and local groundwater flow directions and elevations are likely significantly influenced by precipitation, irrigation, surface drainage, variations in topography, and variations in subsurface geology. There is a potential for seasonal fluctuations in groundwater flow directions and groundwater levels at the location of the target property.

8.0-FEDERAL AND STATE DATABASE REVIEW

Current Federal and State environmental databases, engineering control registries, and institutional control registries, including: NPL, CERCLIS, RCRA, LUST, UST, and Utah Landfill Inventory, were reviewed in order to assess potential environmental liabilities associated with the target property and/or properties within a specified search radius. For a comprehensive summary of findings refer to GeoSearch Radius Report in **Appendix C**. Detailed explanations of the databases and control registries searched are also included in the Radius Report. In addition to the GeoSearch Radius Report, CMT Engineering conducted a search of available Utah DEQ databases through their internet web site.

The following sections list the mapped, regulated sites/facilities that were found during the search of available ("reasonably ascertainable") environmental and control registry records either on the target property or within the required ASTM E1527-13 search radius from the target property.

8.1 On-Site Environmental Conditions

No regulated sites or facilities were identified within the boundary of the target property.

8.2 Off-Site Environmental Conditions

The table below lists the regulated sites or facilities that were identified within the required search radii of the target property.

ACRONYM	FACILITY	STREET	DISTANCE (miles)	DIRECTION	REC
PNPL	Richardson Flat Tailings	Summit County	0.667	NW	No
RODS	Richardson Flat Tailings	Summit County	0.667	NW	No
MRDS	Unknown Tunnel	Summit County	0.183	W	No

No orphan sites were identified within the Radius Map Report.

The following site history for the Richardson Flat Tailings is from the U.S. EPA: (https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0800705#bkground)

"The Richardson Flat Tailings site is located near Park City, Utah. The site is comprised of multiple Operable Units, or areas, including a tailings impoundment that holds about seven million tons of tailings (Richardson Flat tailings impoundment – OU1), an approximately six-mile-long reach of Silver Creek with an unknown amount of upland, riparian and instream tailings deposits, and draining water from a second tailings impoundment (Prospector Square tailings impoundment). EPA proposed the site for listing on the Superfund Program's National Priorities List (NPL) in 1988, but ultimately decided not to pursue final listing on the NPL. EPA and two potentially responsible parties (PRPs) are currently evaluating the Silver Creek tailings deposits and the water draining from the second tailings impoundment. For these portions of the site, EPA and the PRPs are currently collecting environmental data to understand the nature and extent of contamination and to inform remedy selection.

The Richardson Flat tailings impoundment (OU1) consists of a tailings dam and an impoundment area. Historic aerial photos show that a tailings pile existed as early as 1953. The most recent tailings disposal in the area took place from 1975 to 1981, when United Park City Mines (UPMC) leased its mining operations to Noranda Mining and Park City Ventures. The location of the tailings impoundment is owned by UPCM. In 1989, EPA and State of Utah officials observed mine tailings at the site sinking into an on-site diversion ditch and Silver Creek. During the 1990s, UPCM did some voluntary work at the site, including covering most of the tailings pile with clean, low-permeability soil and reseeding the site. The diversion ditch was also improved.

Remedy construction at OU1 was completed by UPCM, with EPA oversight, included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removal of sediments within the wetland area. All of these actions are complete. The Richardson Flat tailings impoundment is to be capped after remedial actions are completed at other portions of the site, which may affect the tailings impoundment.

EPA and the Utah Department of Environmental Quality (UDEQ) are conducting a five-year review of the Operable Unit 1 (Richardson Flat tailings impoundment) remedy for the Richardson Flat Tailings site. The purpose of the five-year review is to make sure that selected cleanup actions effectively protect human health and the environment. This is the second five-year review for the site. It will be completed in summer 2018."

CMT has reviewed the referenced 2018 Five-year Review of the Richardson Flat Tailings site (RFTS) and a copy of the Five-year Review is included in **Appendix E**.

The target property is 2/3 of a mile from the RFTS and is up-gradient. Based on our research and understanding, we conclude that the RFTS OU1 area, as well as all other OUs within the RFTS do not pose a significant environmental risk to the target property and do not represent an REC.

The unknown tunnel identified in the USMRDS database is mapped to the west of the target property. CMT did not observed the tunnel or any related spoils or tailings at the time of our site reconnaissance or in our aerial photograph review. The mapped tunnel does not represent an REC in relation to the target property.

8.2.1 RCRA Sites

The RCRA Generators database is searched within a one-quarter mile radius of the site. The RCRA database lists facilities that have notified the EPA of hazardous waste activity. There are 3 categories of hazardous waste generators:

1. Generators of no more than 100 kilograms per month (kg/mo), known as conditionally exempt small-quantity generators (CESQG).
2. Generators of 100 to 1,000 kg/mo, known as small-quantity generators (SQG).
3. Generators of 1,000 kg or more in a month, known as large-quantity generators (LQG).

No RCRA sites were identified within the required search distance of the target property.

8.2.2 Underground Storage Tank Sites

No underground storage tanks sites were identified within the required search distance of the target property.

8.2.3 National Priority List Sites

Other than the previously discussed RFTS, no other NPL or CERCLIS sites were identified within the required search distance of the target property.

8.2.4 Vapor Migration

No sites/facilities that could pose a significant risk of subsurface vapor migration and related building vapor encroachment at the target property were found in our search of the referenced databases and control registries.

9.0-INTERVIEWS

9.1 Owners

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

9.2 Government Agencies and Officials

CMT submitted a records request under the Government Records Access and Management Act (GRAMA) to Summit County and any other pertinent government entities in the area for any available records pertaining to potential recognized environmental conditions or potential environmentally detrimental events on or in the immediate vicinity of the target property. Park City responded to the request on June 10, 2020 with information pertaining to Park City Heights VCP site. However, this site does not appear to be on or adjacent to the target property and does not represent an REC. At the time of submittal of this report, no other government officials or agencies have responded to the records request. If any responses are received following the submittal of this report which change the findings and conclusions of the ESA for the target property, an addendum will be submitted.

9.3 Others Familiar with the Target Property

No other individuals or entities familiar with the target property were interviewed at the time of this assessment.

10.0-DATA GAPS

The current owners of the target property, nor their representatives, responded to a site assessment questionnaire within the timeframe of this assessment. If a response is received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

With the exception of Park City, no other government officials or departments responded to a records request within the timeframe of this assessment. If any responses are received after this Phase I ESA is submitted which changes the conclusion of this report, an addendum will be submitted.

No other significant data gaps that would alter the findings and conclusions of this report where encountered.

11.0-FINDINGS

Based on the observations, research, and interviews conducted while performing this Phase I Environmental Site Assessment for the target property, no RECs, HRECs, or CRECs as defined by ASTM Standard E 1527-13 were identified in connection with the target property or adjacent, surrounding properties. No current Land Use Covenants (LUCs) and associated Activity and Use Limitations (AULs) associated with the target property or surrounding properties were identified at the time of this assessment. No known sources of potential vapor migration or intrusion at the target property were identified in this assessment.

12.0-CONCLUSIONS

CMT Engineering has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard E 1527-13 for the target property. This assessment did not identify any RECs, HRECs, or CRECs in connection with the Target property or adjacent, surrounding properties.

13.0-STATEMENT OF QUALIFICATIONS

The reviews of state and federal environmental regulatory agency records (institution and engineering control registries), and available historical records, completed for this study were conducted by a qualified member of our engineering staff. The interviews/records requests of property owners/managers, government officials, and other pertinent individuals were conducted by a qualified member of our engineering staff. The qualifications of the environmental professional(s) who conducted this assessment are presented in **Appendix F**.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of this part (40 CFR Part 312, All Appropriate Inquiries Rule). We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

14.0-GENERAL INFORMATION AND CONDITIONS

The Phase I Environmental Assessment provided by CMT Engineering for the target property was performed in accordance with presently accepted practices of the engineering consulting profession in this area. The degree of care exercised in preparing this report is consistent with other local consulting firms. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained during this study. Changes in the conditions of the target property and surrounding properties can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Accordingly, the findings of this report may be invalidated wholly or partially by changes beyond our control. The information obtained from the record research and the interviews pertaining to the target property is considered to be reliable. However, CMT Engineering does not warrant or guarantee that the information provided by referenced sources is accurate and/or complete.

15.0-CLOSURE

We appreciate the opportunity to be of service to you on this project. If you have any questions, please call.

CMT Engineering Laboratories

Lindsey Bradshaw
Environmental Technician



Mark C. Larsen, P.G.
Engineering Geologist

16.0-REFERENCES

Biek, R.F., 2017*, Interim Geologic Map of the Park City East Quadrangle, Summit and Wasatch Counties, Utah;* USGS Open File Report 677, Scale 1:24,000.

Stokes, W.L., 1986, *Geology of Utah*; Utah Museum of Natural History, University of Utah, and Utah Geological and Mineral Survey, Department of Natural Resources, p. 243

Summit County Land Records Website:
https://summitcounty.maps.arcgis.com/apps/webappviewer/index.html?id=85c6c55514ae4d4f9218202e364fec73

Utah Department of Environmental Quality internet site: http://www.deq.utah.gov/.

Historical Aerials Package, Radius Report, Oil and Gas Report, Physical Setting Report, Water Well Report, Fire Insurance Map Report, City Directories Report, and Historical Topographic Maps Report
Prepared By: GeoSearch
PO Box 60789
Colorado Springs, CO 80960
Toll Free: 866-962-7772
www.geosearch.com

APPENDIX A

SITE INSPECTION CHECKLIST

SITE PHOTOGRAPHS

CMT ENGINEERING LABORATORIES

CMT Phase I ESA Inspection Checklist

SITE DATA

Site Name: Summit County Parcel SS-125-C Site #_____ CMT Job #14718

Property Address: SE of SR 248 and US Hwy 40

City:_____ County: Summit County State: UT Zip:_____

Date of Inspection: 6/5/20 Prepared For: Western States Ventures

Environmental Inspector: Mark Larsen, P.G.

PROPERTY DESCRIPTION AND USE

Owner: Stichting Mayflower Mountain Fonds Phone Number:_____

Address:_____

Contact:_____ Phone Number:_____

Occupant:_____ Phone Number:_____

Site Description: The target property is located southeast of the intersection of S.R. 248 and U.S. Highway 40 in the Richardson Flat area of the southwest portion of Summit County, Utah. Site is an undeveloped, North-northeast-facing hill slope. Vegetation is scrub oak, sage brush, grasses and weeds.

Current Property Use: Undeveloped land

Past Property Use: Undeveloped land

SITE INSPECTION - NEIGHBORING PROPERTIES

Date: 6/5/20 Subject Property: Summit Co. Parcel SS-125-C

NORTH

Name: Undevelopd land, residential dev.

Address:

Description:

Observed usage: X Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

EAST

Name: Undeveloped land, residential dev.

Address:

Description: undevelped land

Observed usage: X Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

SOUTH

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

WEST

Name: Undeveloped land

Address:

Description: open hills, meadows

Observed usage: ___ Residential ___ Commercial ___ Industrial X Vacant

Observed hazards: None

Site Name: Summit Co. Parcel SS-125-C

GENERAL FIELD OBSERVATIONS

Undeground Storage Tanks: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Oily Sheens on Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Discarded Batteries: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Surface Water: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Solid Waste:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Transformers:____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Drums/Containers: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Odors: ____ Yes x ____ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-125-C

GENERAL FIELD OBSERVATIONS CONTINUED

Above Ground Storage Tanks: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Wells: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Floor Drains and Floor Slumps: Yes No Unknown / Interior Exterior
No site structures

Urea Formaldehyde Insulation: ____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Lead Paint:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stained Soil/Pavement:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Stressed Vegetation:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Pits/Ponds/Lagoons:____ Yes x ___ No____ Unknown / ____Interior _____ Exterior

Site Name: Summit Co. Parcel SS-125-C

GENERAL FIELD OBSERVATIONS CONTINUED

Radon: ____ Yes____ Nox___ Unknown / ____Interior _____ Exterior

Stains or Corrosion (floors, walls, ceiling):____ Yesx___ No____ Unknown/ ____Interior _____ Exterior

Heating/Cooling (gas,electric,etc):____ Yesx___ No____ Unknown / ____Interior _____ Exterior

–

Comments: No site structures

PREVIOUS ENVIRONMENTAL ACTIVITY

Environmental Documentation:_____ Solid Waste Disposal_____

Environmental Site Assessment_____ Hazardous Waste Disposal_____

Environmental Audit_____ Waste Water (NPDES)_____

Permits_____

Comments:_____

Site Name: Summit Co. Parcel SS-125-C

CHEMICAL, GAS & MINERAL INSPECTION

UREA FORMALDEHYDE FOAM INSULATION UFFI

Yes	No	Unknown	
☐	☑	☐	Was any evidence of formaldehyde Foam Insulation observed on the property?

LEAD PAINT

Yes	No	Unknown	
☐	☑	☐	Was any visible evidence peeling, cracking or flaking paint observed?
☐	☑	☐	Was any visible evidence of lead paint on the ceilings, walls or floors of any structures observed on the property?

PESTICIDES | HERBICIDES

Yes	No	
☐	☑	Does it appear pesticides or herbicides have been used in excess of normal household use?
☐	☑	Is the property used for agricultural purpose?
☐	☑	Are there any noticeable pesticide odors?

POLYCHLORINATED BIPHENYL (PCBs)

Yes	No	
☐	☑	Were any transformers, electrical devices or hydraulic equipment observed on the property labeled as containing PCB's?
☐	☑	Was there evidence of PCB contamination to the soil or groundwater observed on the property?
☐	☑	Were there any fluorescent lights ballasts labeled as containing PCB's observed?

RADON

Yes	No	Unknown	
☐	☐	☑	Is there reason to suspect that radon may be a problem in the dwelling or the immediate property's locality?
☐	☐	☑	Has radon screening been conducted which indicates that the property may have elevated levels of radon?

Name: Mark Larsen, P.G.

Signature: _____

Date: 6/5/20

Site Name: Summit Co. Parcel SS-125-C

SITE INSPECTION - SKETCHES - INTERIOR

Site Name: Summit Co. Parcel SS-125-C

SITE INSPECTION - SKETCHES - EXTERIOR



Photo 1 View looking southwest, up-slope toward the target property from the residential subdivision to the northeast.

APPENDIX B

HISTORICAL AERIALS PACKAGE
HISTORICAL TOPOGRAPHIC MAPS
FIM REPORT

GeoSearch
On time. On target. In touch.™

Historical Aerial Photographs

***NEW:** GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355556
Project #: 14718
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434241310, 40.668222828), (-111.432363763, 40.668214690), (-111.431591287, 40.667270701), (-111.431312337, 40.666945184), (-111.430614963, 40.665887244), (-111.430325284, 40.665268749), (-111.430443302, 40.664943222), (-111.430625692, 40.664715353), (-111.430958286, 40.664577003), (-111.431441083, 40.664414239), (-111.434230581, 40.661606486), (-111.434219852, 40.665447788)

Aerial Research Summary

Date	Source	Scale	Frame
2018	USDA	1" = 500'	N/A
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2011	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
07/08/1997	USGS	1" = 500'	N/A
08/23/1993	USGS	1" = 500'	N/A
09/18/1987	USGS	1" = 500'	322-28
09/05/1983	USGS	1" = 500'	747-35
08/24/1976	USGS	1" = 500'	2-186
07/11/1967	ASCS	1" = 1320'	PI-3
08/01/1962	ASCS	1" = 500'	3-22
07/03/1953	USGS	1" = 500'	1-42
1937	ASCS	1" = 500'	U79

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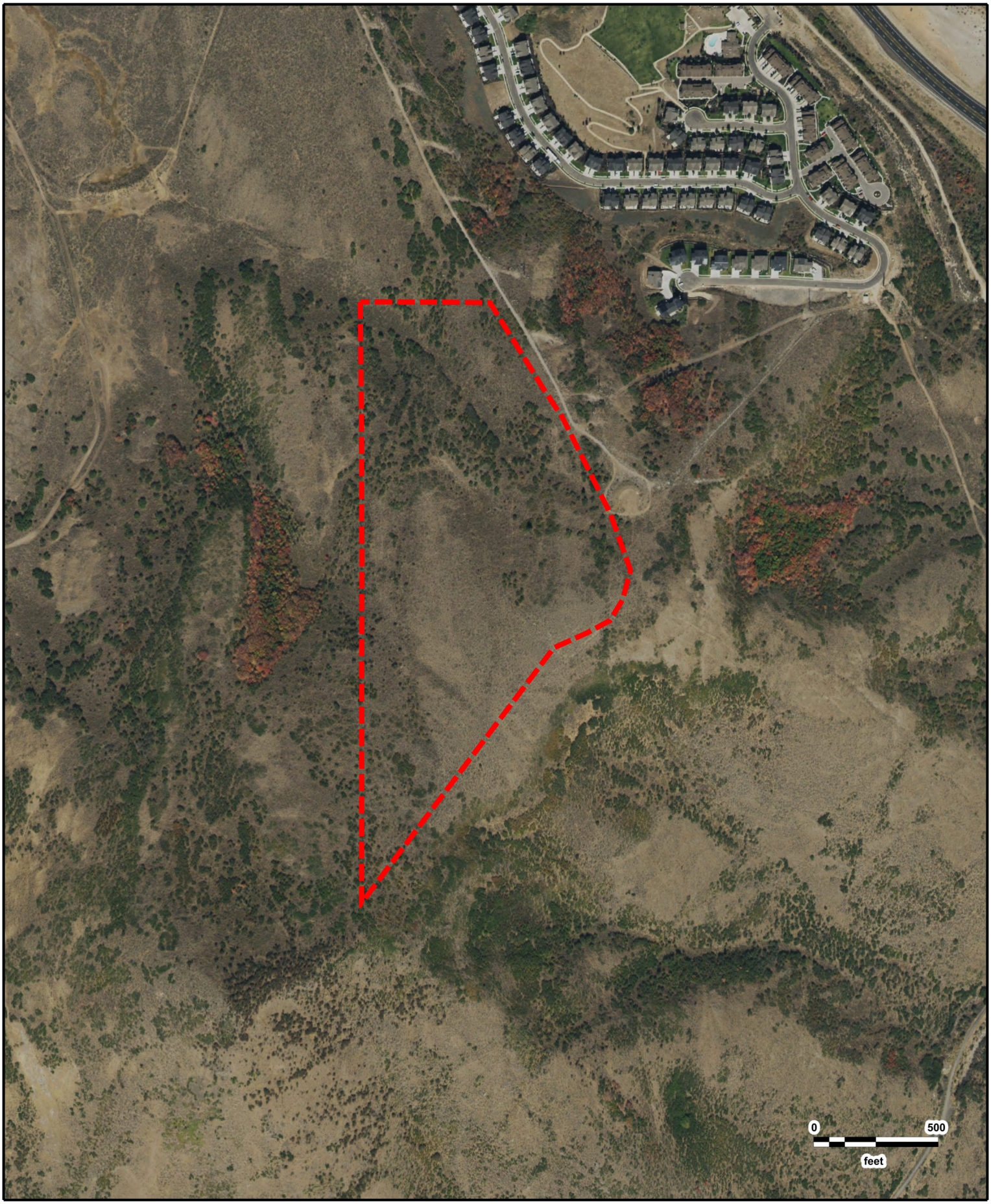


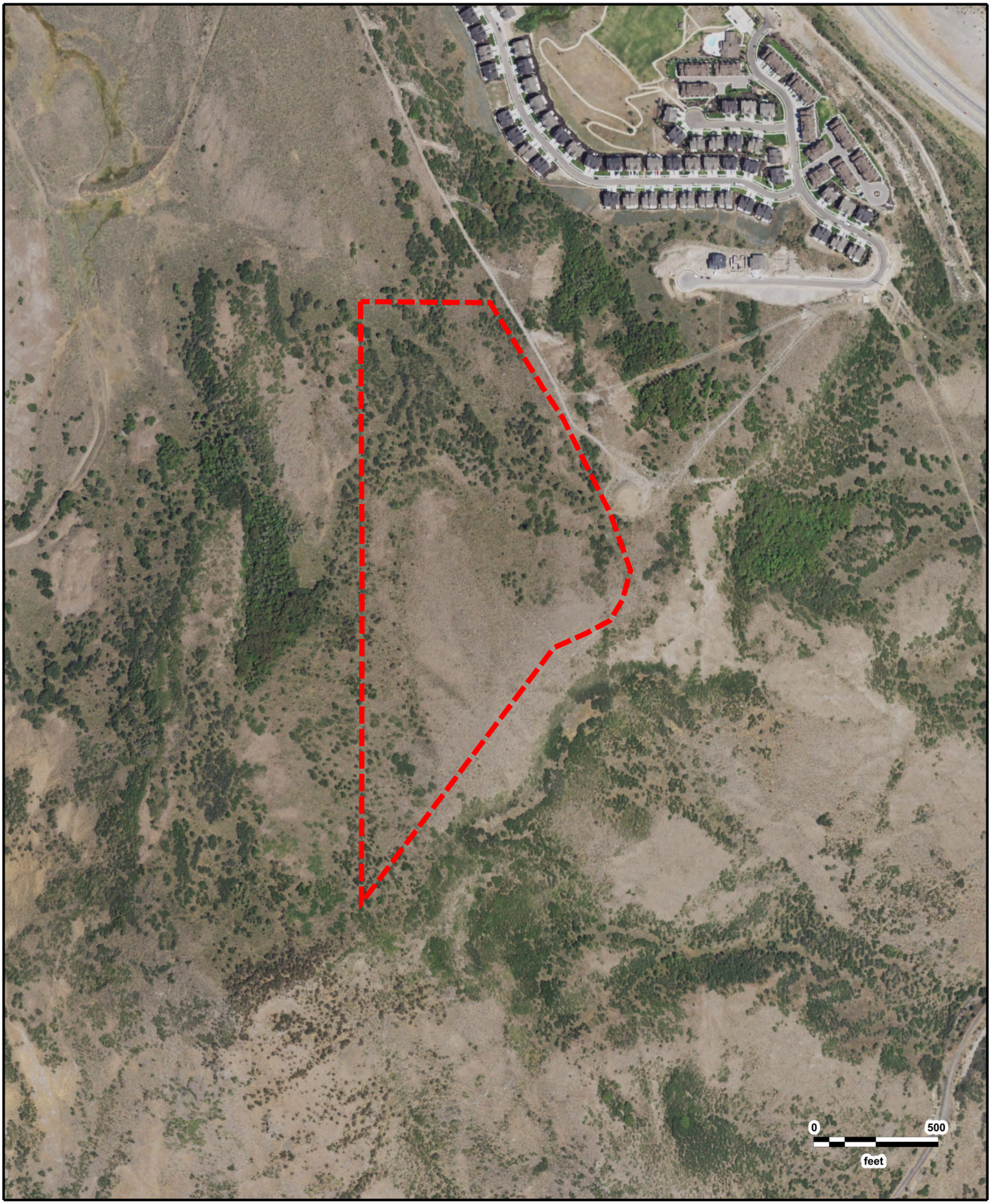
N

Page 1598

Richardson Flats Parcel SS-125-C
USDA
2018

GeoSearch

JOB #: 355556 - 06/08/2020



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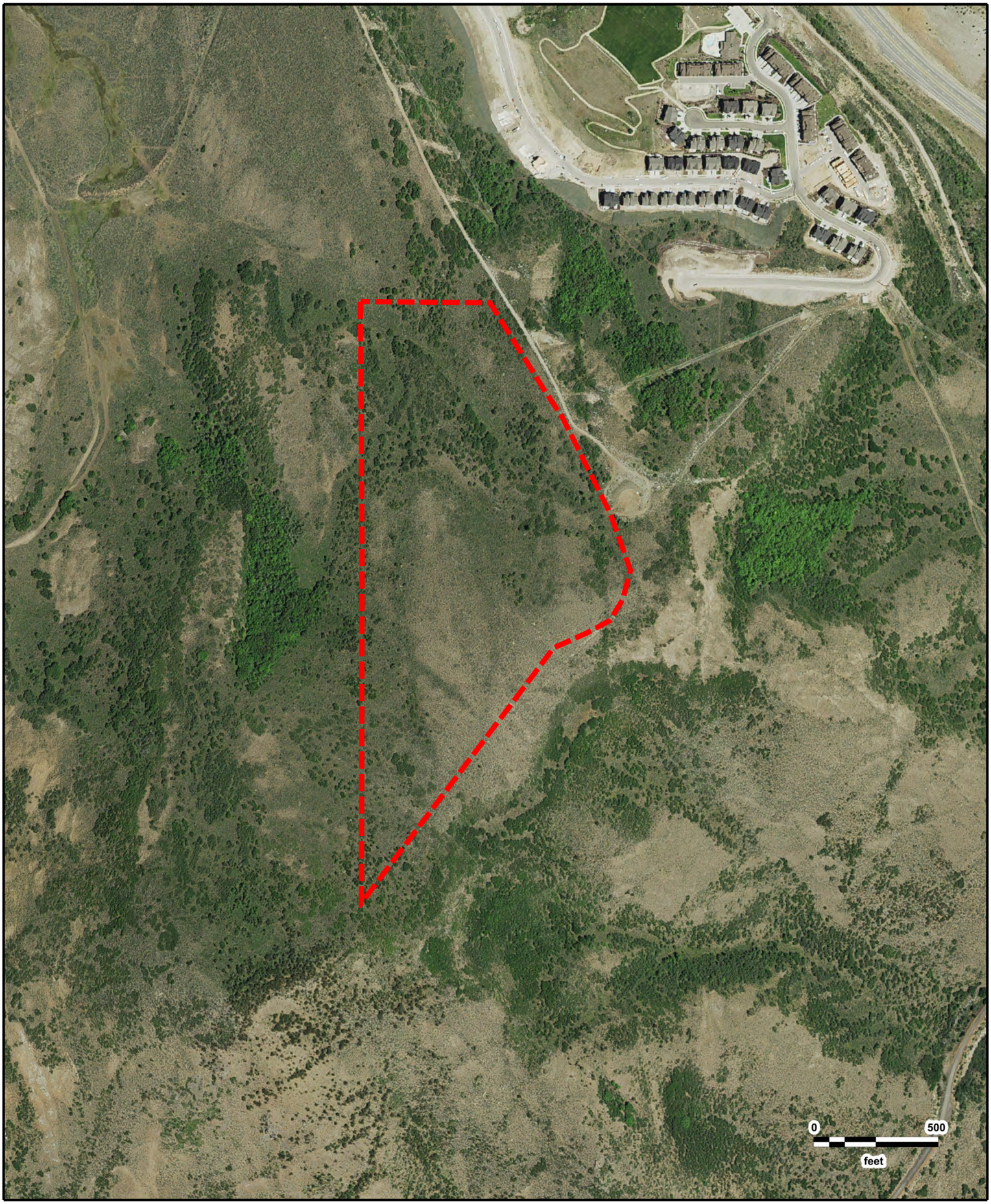
Page 1599

Richardson Flats Parcel SS-125-C
USDA
2016

GeoSearch

JOB #: 355556 - 06/08/2020



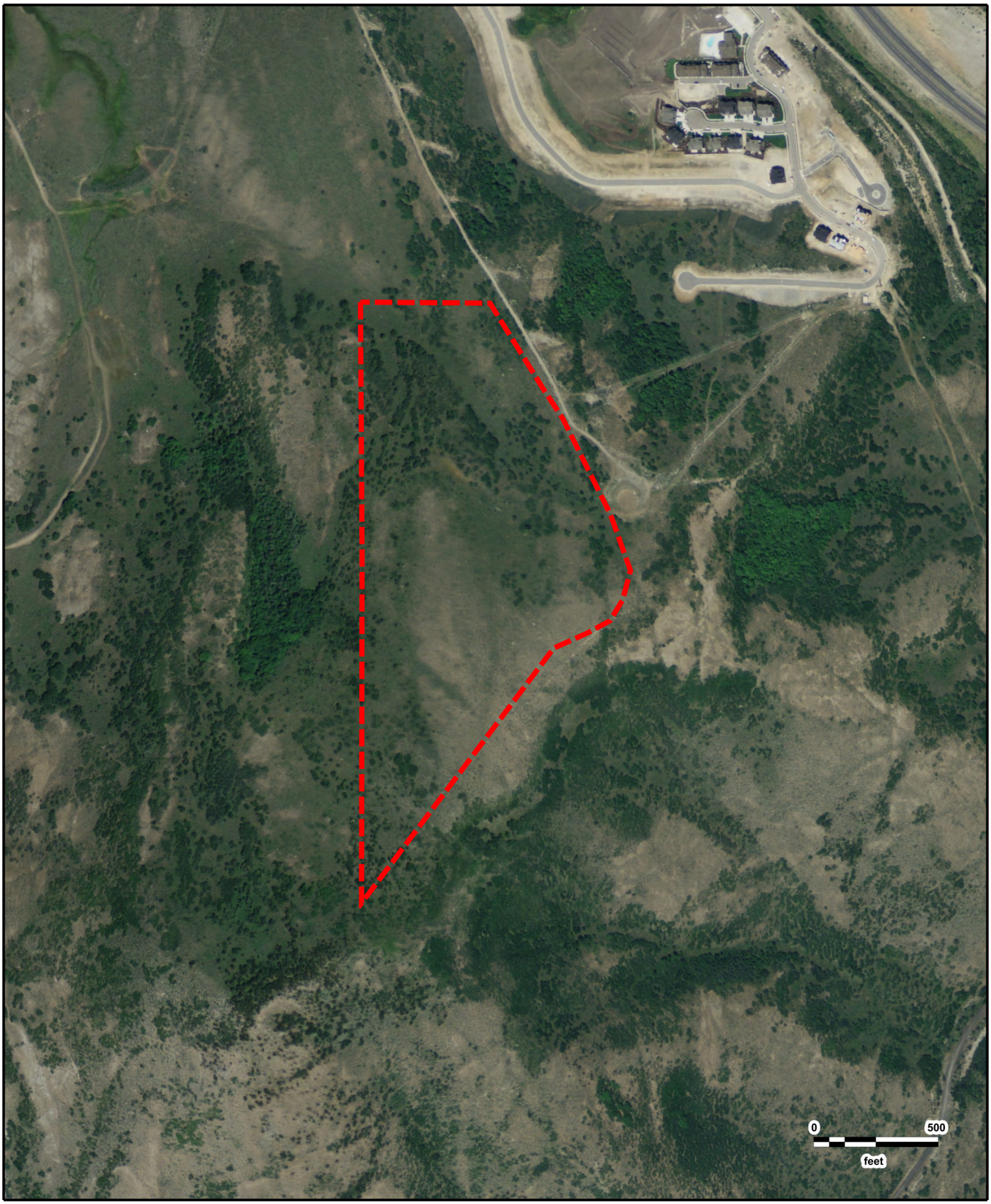
N

Page 1600

Richardson Flats Parcel SS-125-C
USDA
2014

GeoSearch

JOB #: 355556 - 06/08/2020



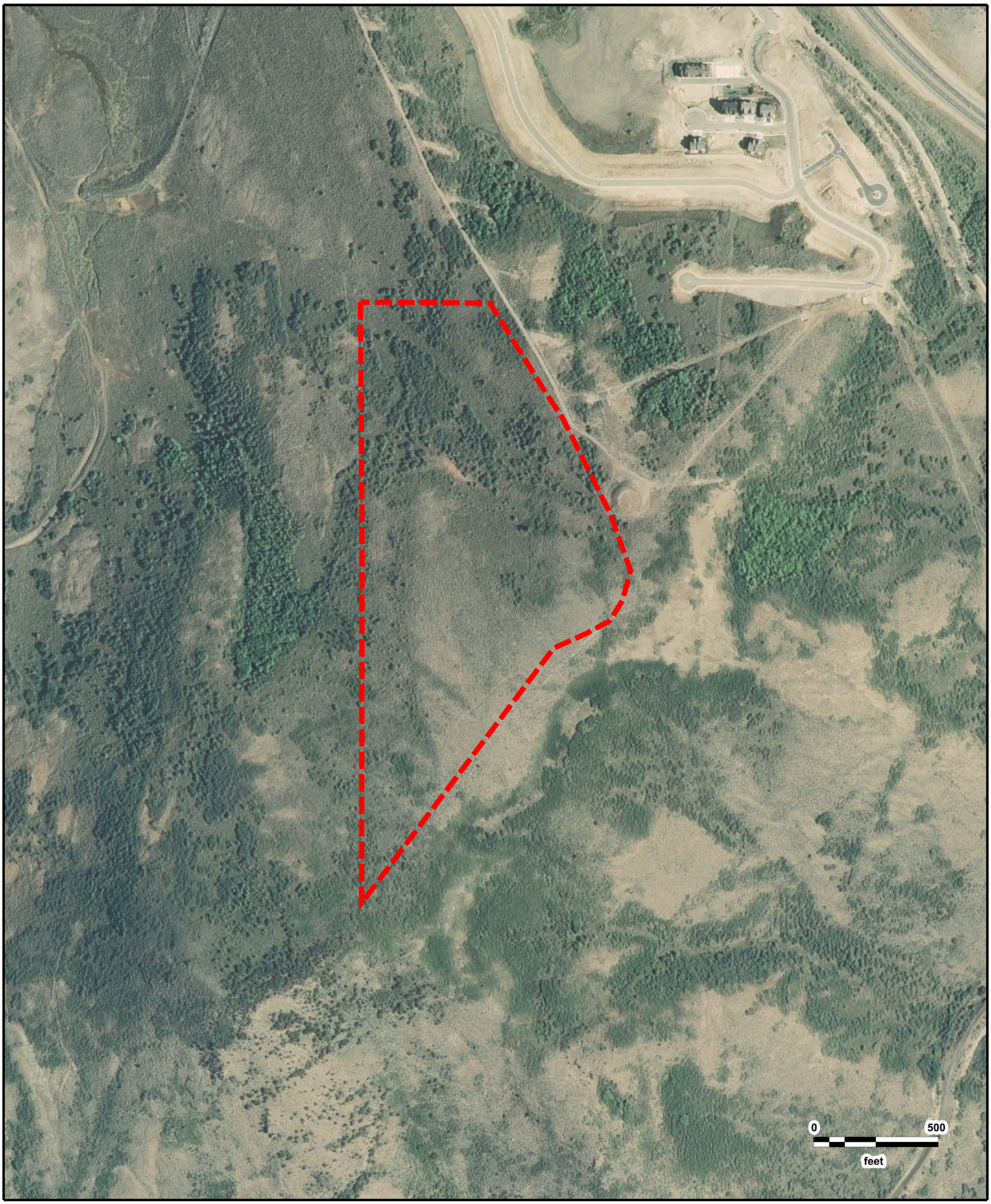
N

Page 1601

Richardson Flats Parcel SS-125-C
USDA
2011

GeoSearch

JOB #: 355556 - 06/08/2020



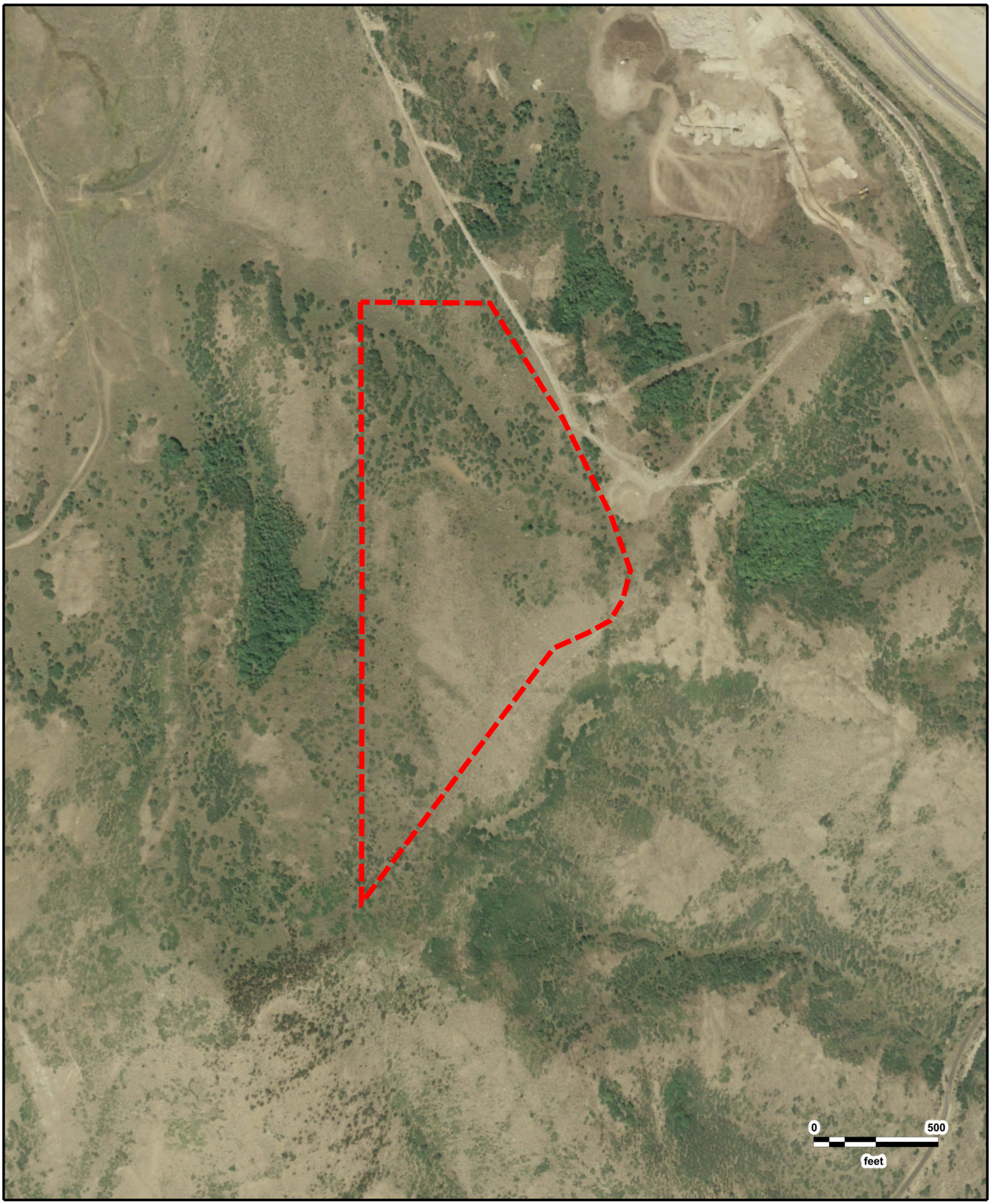
N

Page 1602

Richardson Flats Parcel SS-125-C
USDA
2009

GeoSearch

JOB #: 355556 - 06/08/2020



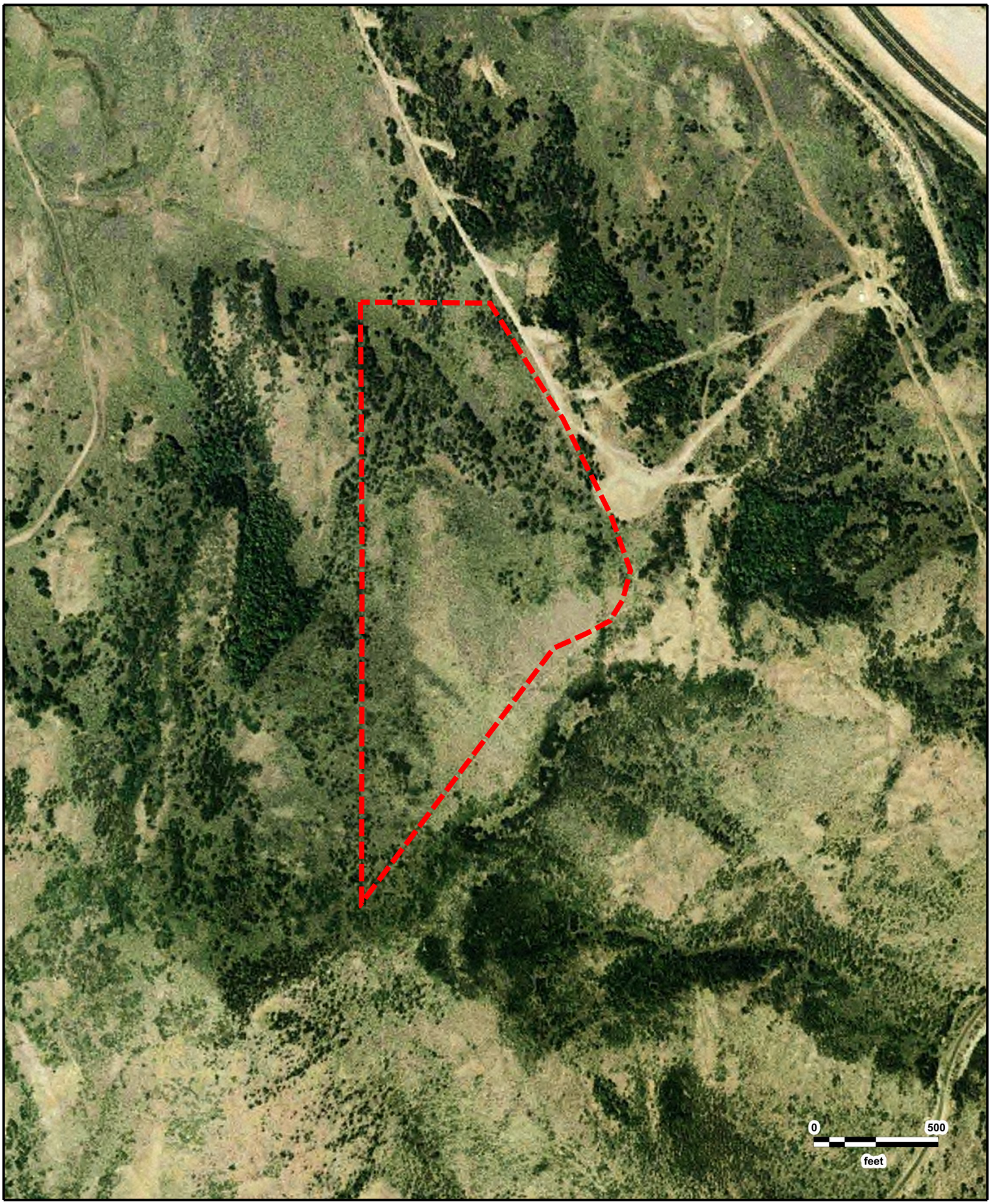
N

Page 1603

Richardson Flats Parcel SS-125-C
USDA
2006

GeoSearch

JOB #: 355556 - 06/08/2020



N

Page 1604

Richardson Flats Parcel SS-125-C
USDA
2004

GeoSearch

JOB #: 355556 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
USDA
2003

GeoSearch

JOB #: 355556 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
USGS
07/08/1997

GeoSearch

JOB #: 355556 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
USGS
08/23/1993

GeoSearch

JOB #: 355556 - 06/08/2020



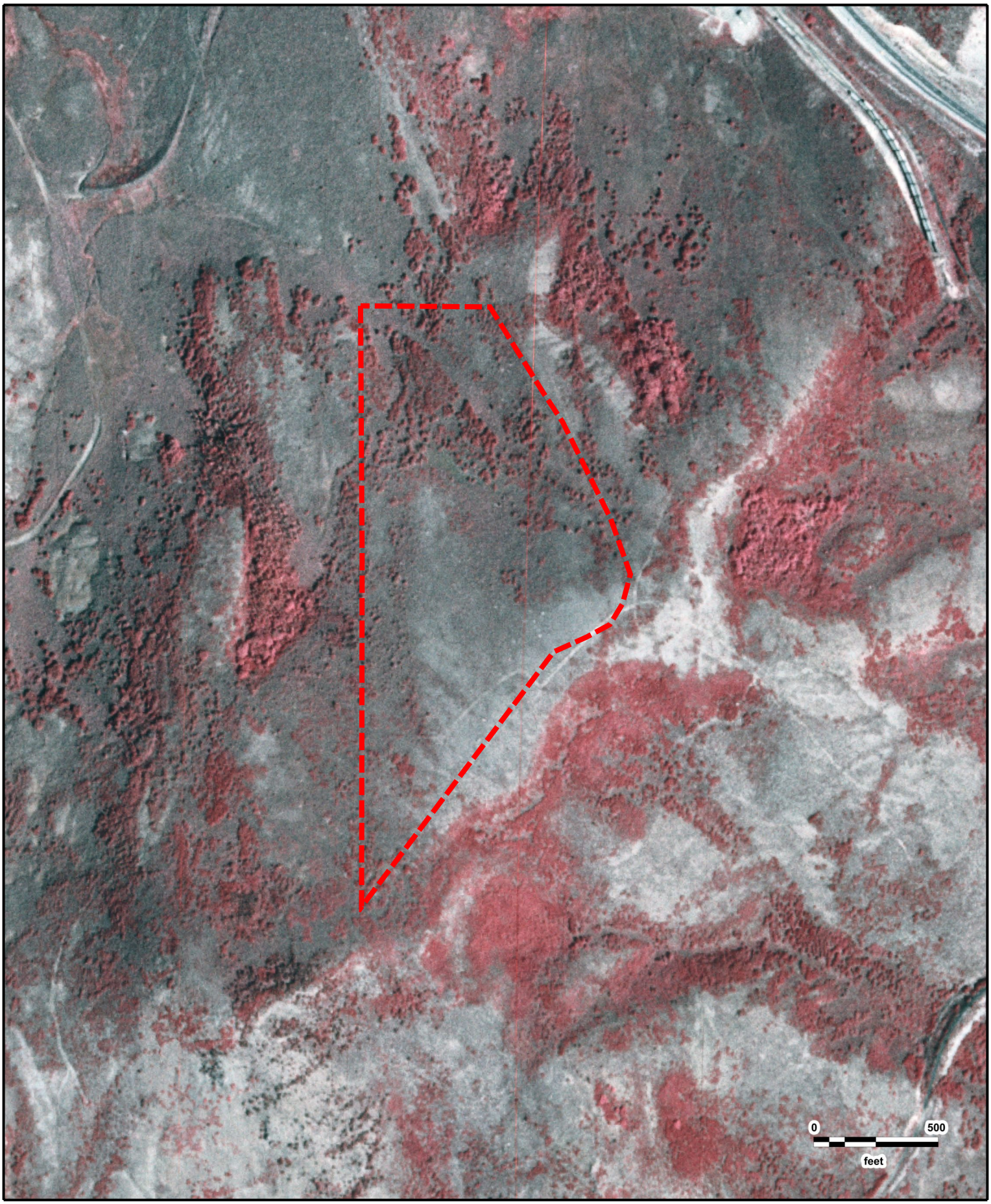
N

Page 1608

Richardson Flats Parcel SS-125-C
USGS
09/18/1987

GeoSearch

JOB #: 355556 - 06/08/2020



N

Page 1609

Richardson Flats Parcel SS-125-C
USGS
09/05/1983

GeoSearch

JOB #: 355556 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
USGS
08/24/1976

GeoSearch

JOB #: 355556 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
ASCS
07/11/1967

GeoSearch

JOB #: 355556 - 06/08/2020



N

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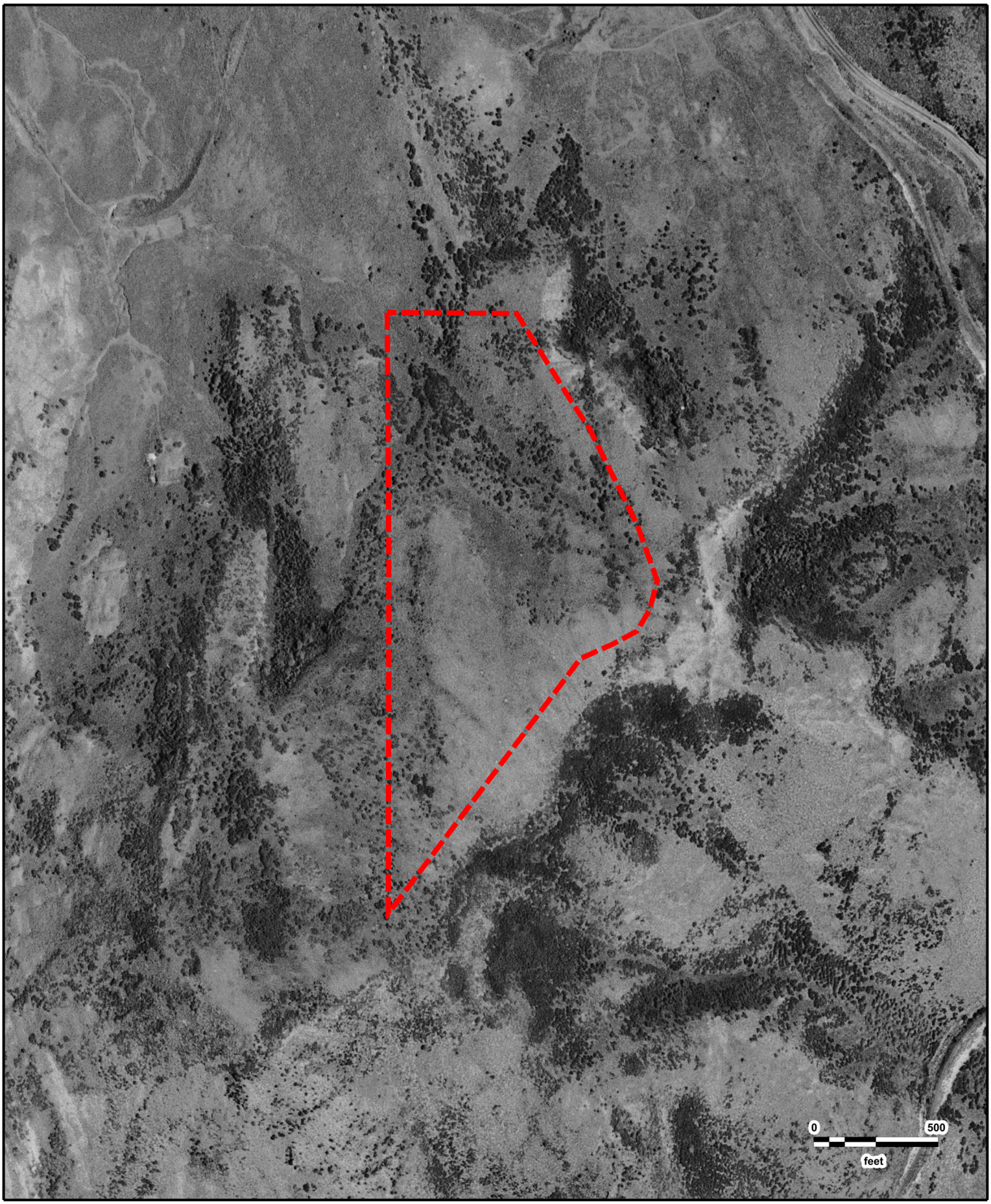
Richardson Flats Parcel SS-125-C
ASCS
08/01/1962

GeoSearch

JOB #: 355556 - 06/08/2020



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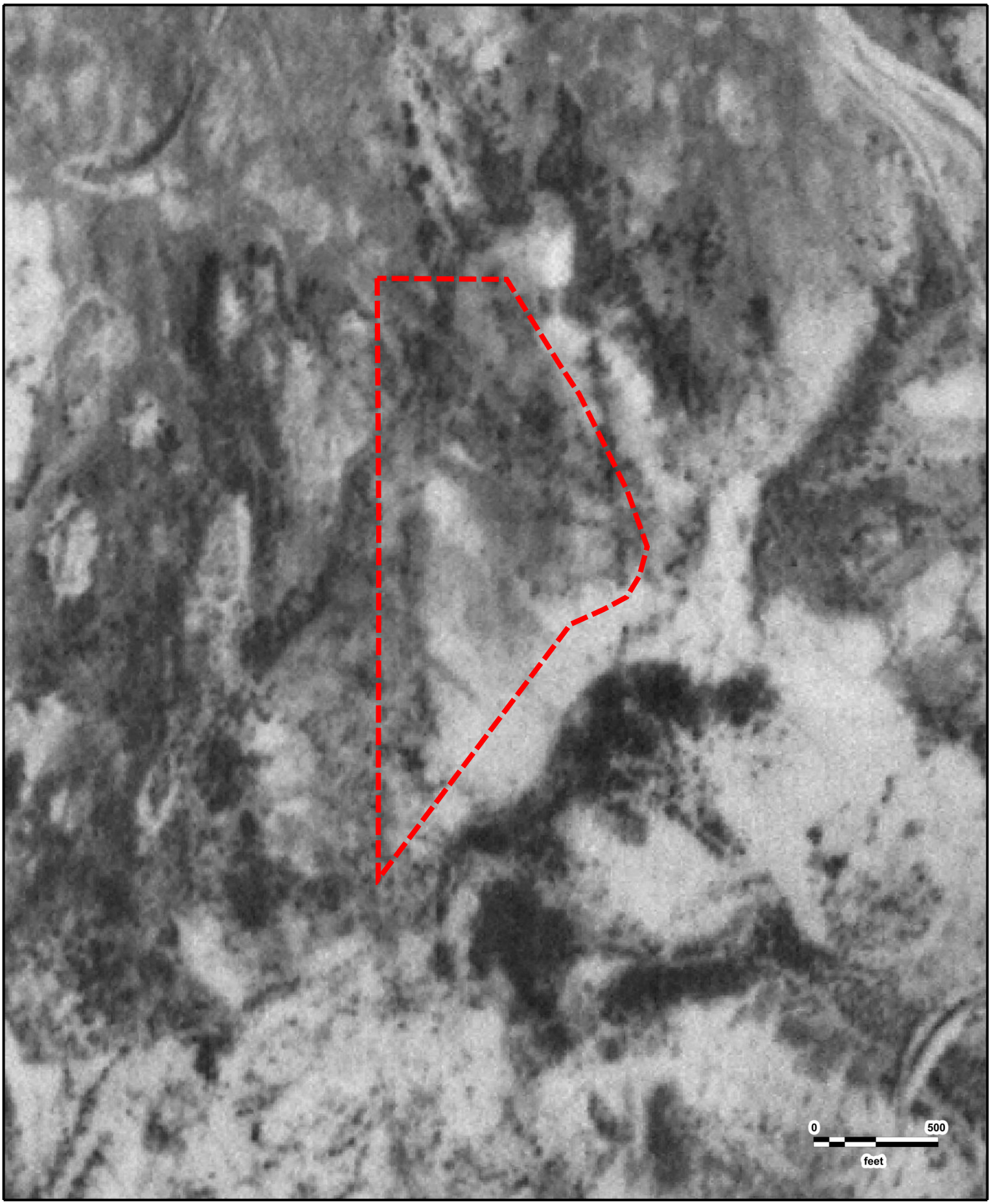
Page 1613

Richardson Flats Parcel SS-125-C
USGS
07/03/1953

GeoSearch

JOB #: 355556 - 06/08/2020



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Richardson Flats Parcel SS-125-C
ASCS
1937

GeoSearch

JOB #: 355556 - 06/08/2020

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Fire Insurance Map Abstract

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355559
Project #: 14718
PO #: 14718
Date: 06/08/2020

Fire Insurance Map Research Results

Date: 06/08/2020
GS Job Number: 147852
Company Name: CMT Engineering Laboratories-Utah
Project Number: 14718
Site Information: Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah 84060

Research Results: No Coverage Available

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress
University Publications of America
Other Libraries (universities, state, local, etc.).

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Historical Topographic Maps

NEW: *GeoLens by Geosearch*

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355555
Project #: 14718
Date: 6/8/2020

Target Property Summary

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit, Utah 84060

USGS Quadrangle: ***Park City East***
Target Property Geometry: ***Area***

Target Property Longitude(s)/Latitude(s):
(-111.434241310, 40.668222828), (-111.432363763, 40.668214690), (-111.431591287, 40.667270701), (-111.431312337, 40.666945184), (-111.430614963, 40.665887244), (-111.430325284, 40.665268749), (-111.430443302, 40.664943222), (-111.430625692, 40.664715353), (-111.430958286, 40.664577003), (-111.431441083, 40.664414239), (-111.434230581, 40.661606486), (-111.434219852, 40.665447788)

Topographic Map Summary

Date	Quadrangle	Scale
2014	PARK CITY EAST, UT	1" = 2000'
1999	PARK CITY EAST, UT	1" = 2000'
1955	PARK CITY EAST, UT	1" = 2000'
1903	COALVILLE, UT	1" = 10420'

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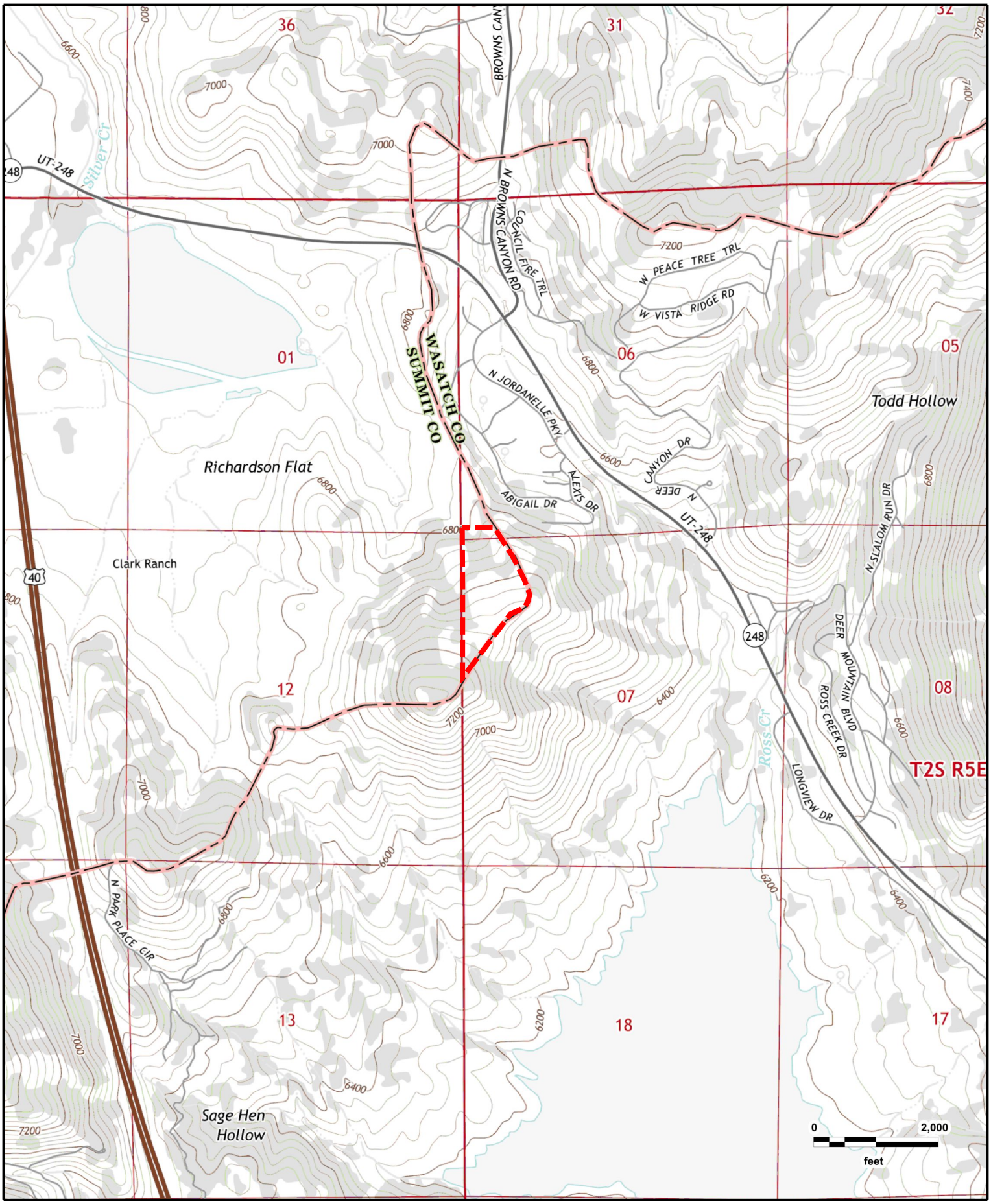

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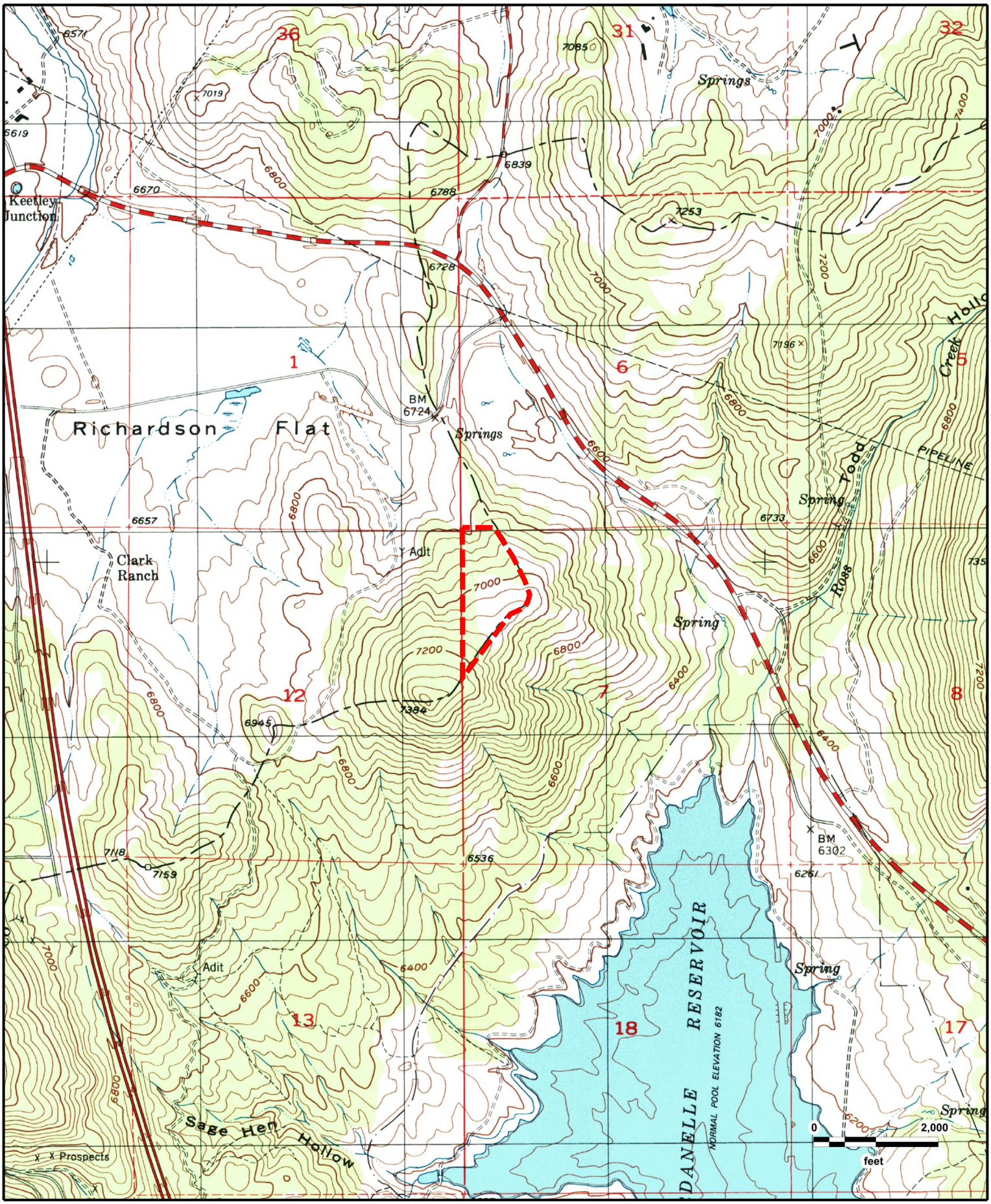
Richardson Flats Parcel SS-125-C
PARK CITY EAST, UT (2014)

GeoSearch

JOB #: 355555 - 06/08/2020



N

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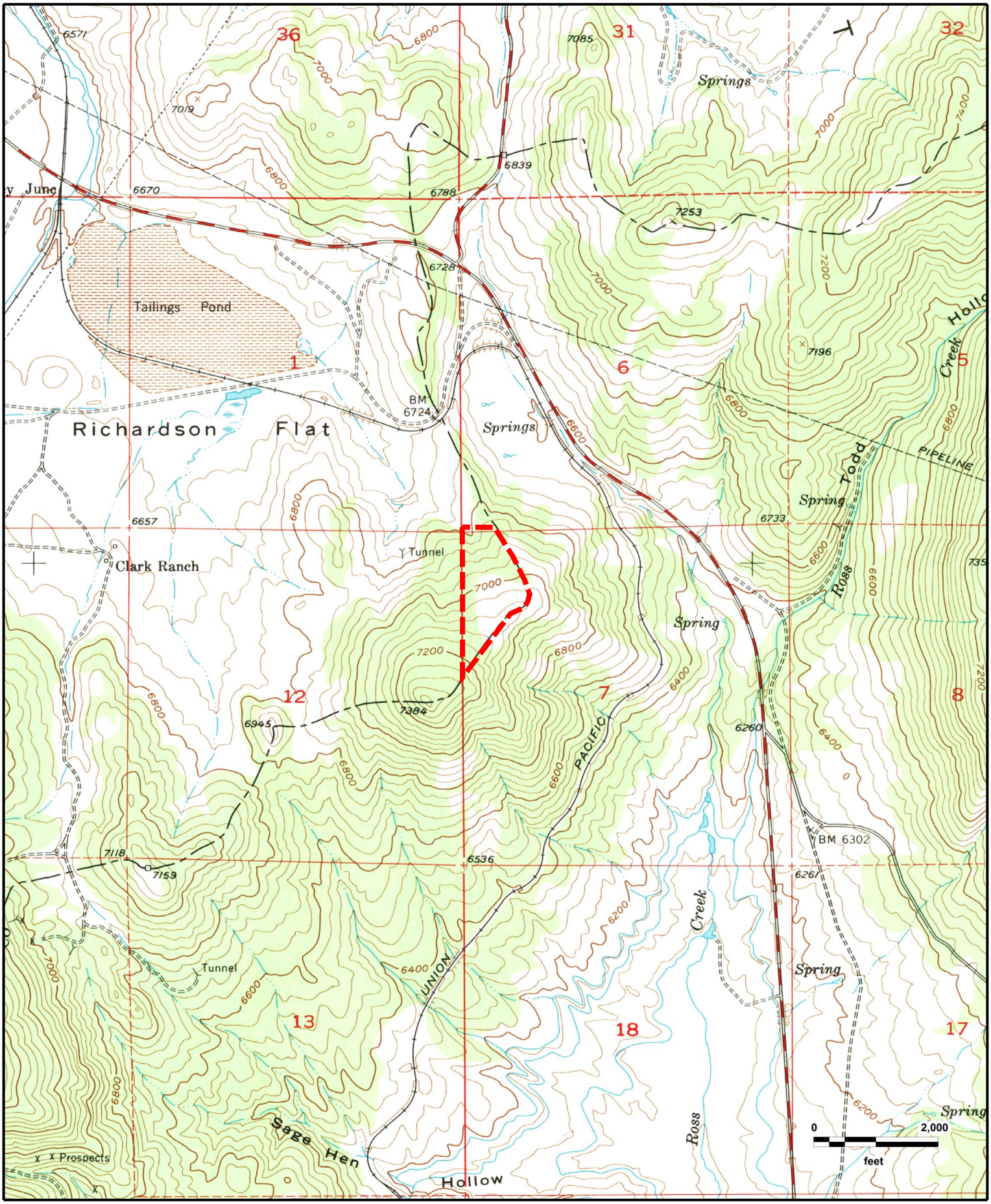
Richardson Flats Parcel SS-125-C
PARK CITY EAST, UT (1999)

GeoSearch

JOB #: 355555 - 06/08/2020



N

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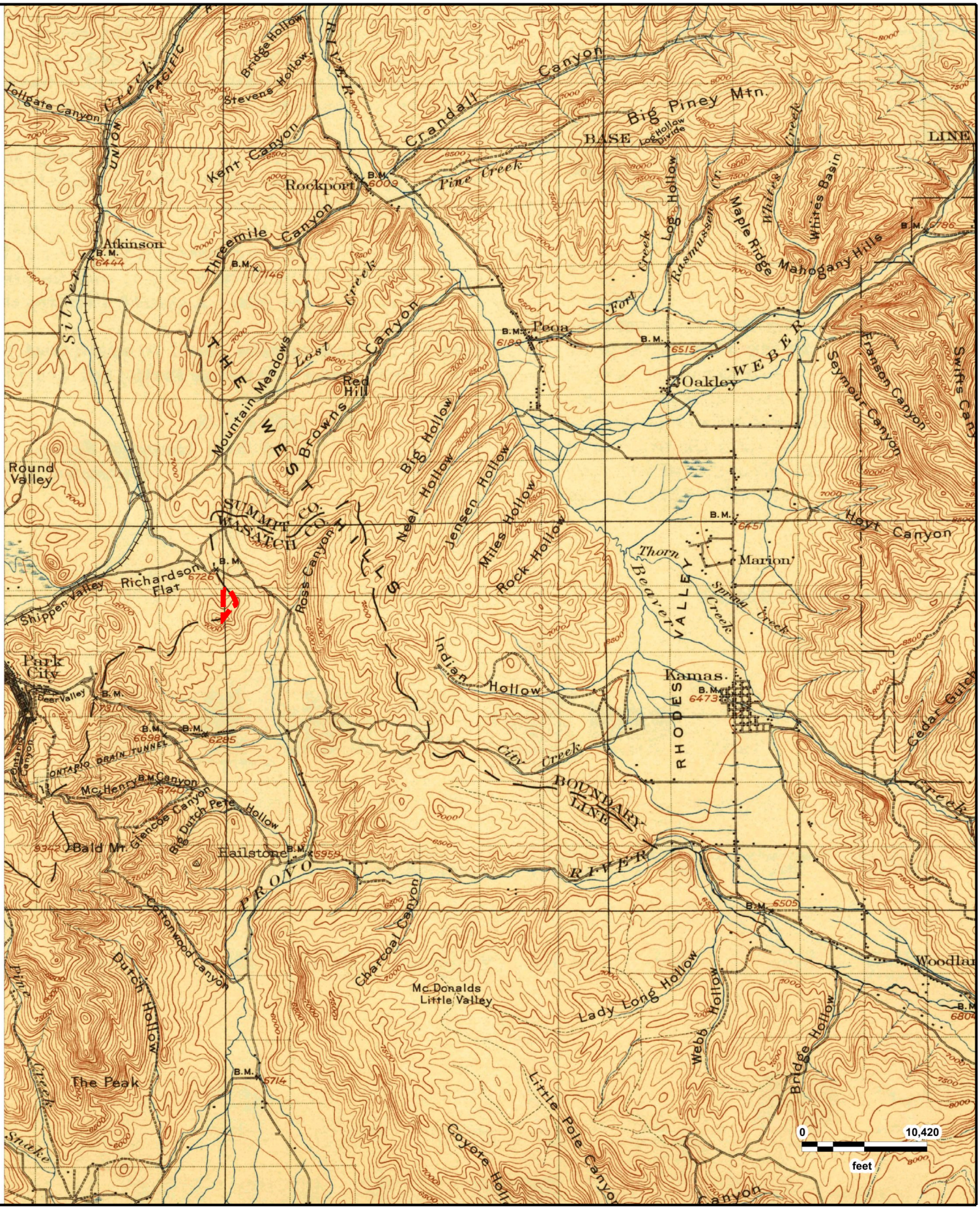
Richardson Flats Parcel SS-125-C
PARK CITY EAST, UT (1955)

GeoSearch

JOB #: 355555 - 06/08/2020



N

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Richardson Flats Parcel SS-125-C
COALVILLE, UT (1903)

GeoSearch

APPENDIX C

RADIUS MAP
REPORT

GeoSearch
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Radius Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355553
Project #: 14718
PO #: 14718
Date: 06/05/2020

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Unlocated Sites Summary 29

Environmental Records Definitions 30

Unlocatable Report . . . . . See Attachment

Zip Report . . . . . See Attachment

Disclaimer

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR ï¿½312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal,state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR ï¿½312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43277, 40.6654763)
7,023 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Coalville UT: 84017
Heber City UT: 84032
Kamas UT: 84036
Park City UT: 84060

Database Summary

FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSUT	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	RCRASC	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR08	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR	RCRANGR08	0	0	0.1250
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	SEMS	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	SEMSARCH	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	1	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	RCRASUBC	0	0	1.0000

SUB-TOTAL		1	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	BRS	0	0	TP/AP
CERCLIS LIENS	SFLIENS	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR08	0	0	TP/AP
FACILITY REGISTRY SYSTEM	FRSUT	0	0	TP/AP

Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	0	0	TP/AP
HAZARDOUS WASTE COMPLIANCE DOCKET FACILITIES	HWCD	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR08	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	PADS	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR08	0	0	TP/AP
SEMS LIEN ON PROPERTY	SEMSLIENS	0	0	TP/AP
SSEHRI PFAS CONTAMINATION SITES	SSEHRIPFAS	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	TP/AP
TOXICS RELEASE INVENTORY	TRI	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	ALTFUELS	0	0	0.2500
FEMA OWNED STORAGE TANKS	FEMAUST	0	0	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	MSHA	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	MRDS	1	0	0.2500
OPEN DUMP INVENTORY	ODI	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	SMCRA	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	USUMTRCA	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	NMS	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	FUSRAP	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	1	0	1.0000
SUB-TOTAL		2	0	

Database Summary

STATE (UT) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INSTITUTIONAL ENGINEERING CONTROLS REGISTRY	ICEC	0	0	TP/AP
REGISTERED UNDERGROUND STORAGE TANKS	RUST	0	0	0.2500
BROWNFIELD PROPERTIES	BF	0	0	0.5000
CERCLIS SITES	CERCLIS	0	0	0.5000
LANDFILL AND SOLID WASTE DISPOSAL SITES	LFSWDS	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	LUST	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM SITES	VCP	0	0	0.5000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
SPILLS LISTING	SPILLS	0	0	TP/AP
TIER II FACILITIES	TIERII	0	0	TP/AP
SUB-TOTAL		0	0	

Database Summary

TRIBAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR08	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR08	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		3	0	

Database Radius Summary

FEDERAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
ECHOR08	0.0200	0	NS	NS	NS	NS	NS	0
ERNSUT	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
FRSUT	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR08	0.0200	0	NS	NS	NS	NS	NS	0
HWCD	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR08	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR08	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSEHRIPFAS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
RCRANGR08	**0.1250**	**0**	**0**	**NS**	**NS**	**NS**	**NS**	**0**
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	0	0	0	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	1	NS	NS	NS	1
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
DNPL	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NLRRCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**

Database Radius Summary

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ODI	0.5000	0	0	0	0	NS	NS	0
RCRAT	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SEMSARCH	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
NMS	1.0000	0	0	0	0	0	NS	0
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
PNPL	**1.0000**	**0**	**0**	**0**	**0**	**1**	**NS**	**1**
RCRAC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RCRASUBC	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**
RODS	1.0000	0	0	0	0	1	NS	1
SUB-TOTAL		0	0	1	0	2	0	3

Database Radius Summary

STATE (UT) LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ICEC	**0.0200**	**0**	**NS**	**NS**	**NS**	**NS**	**NS**	**0**
SPILLS	0.0200	0	NS	NS	NS	NS	NS	0
TIERII	0.0200	0	NS	NS	NS	NS	NS	0
RUST	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
BF	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
CERCLIS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LFSWDS	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
LUST	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
VCP	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
NPL	**1.0000**	**0**	**0**	**0**	**0**	**0**	**NS**	**0**

SUB-TOTAL		0	0	0	0	0	0	0

Database Radius Summary

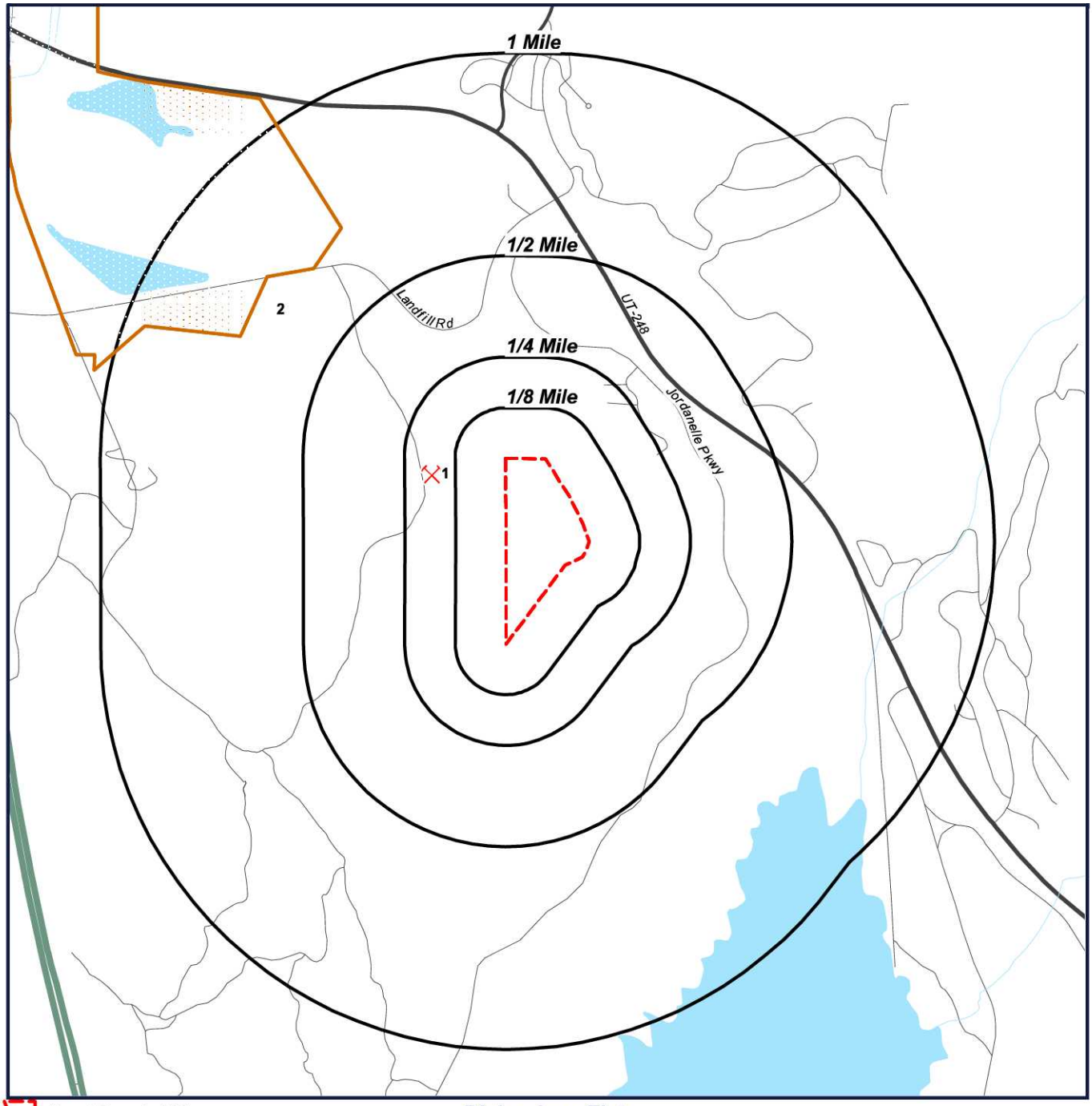
TRIBAL LISTING

*Standard environmental records are displayed in **bold**.*

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	**0.2500**	**0**	**0**	**0**	**NS**	**NS**	**NS**	**0**
LUSTR08	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
ODINDIAN	**0.5000**	**0**	**0**	**0**	**0**	**NS**	**NS**	**0**
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	1	0	2	0	3

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Radius Map 1



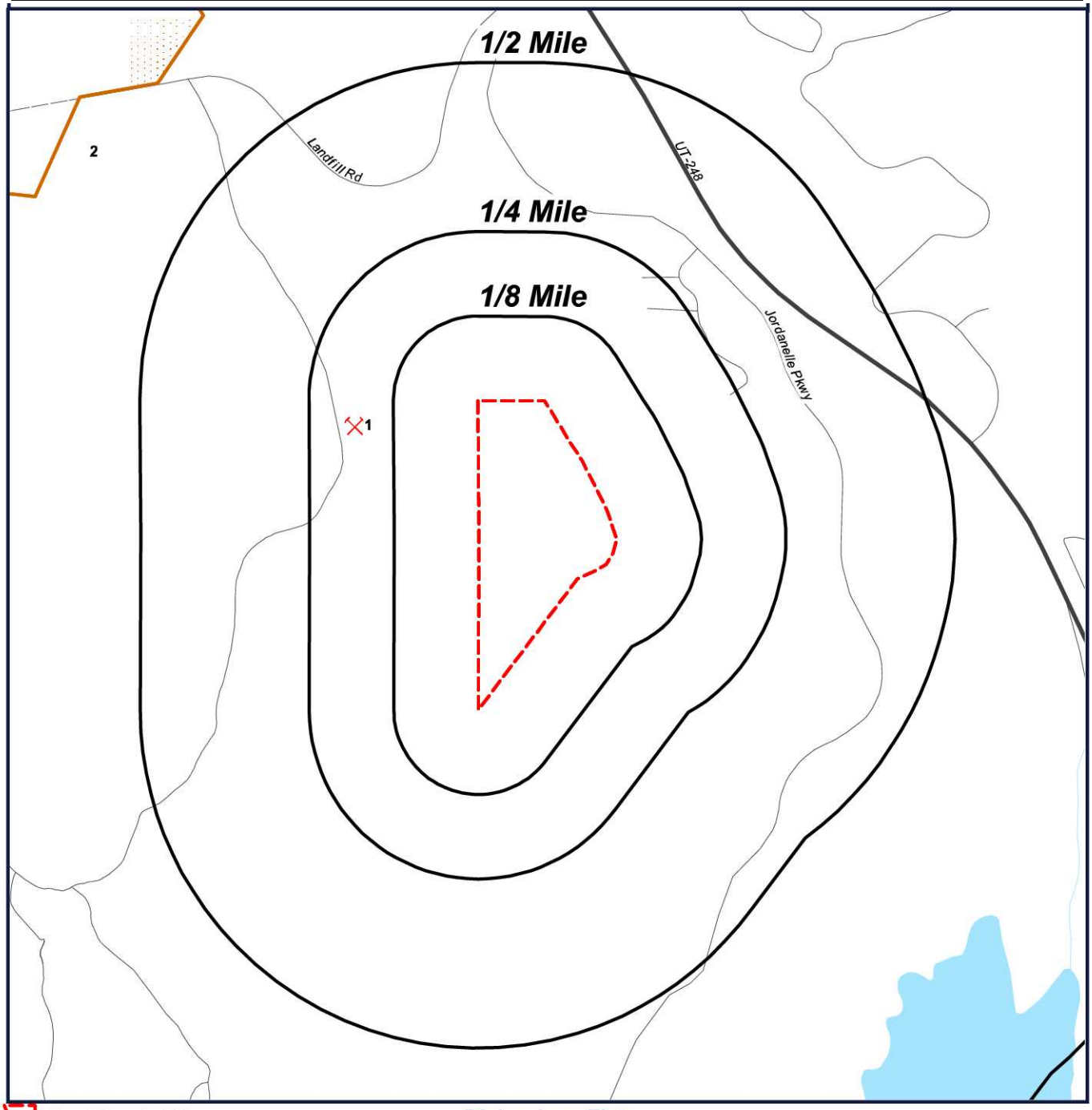
Target Property (TP)
MRDS
PNPL
RODS

Richardson Flats
Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Radius Map 2



Target Property (TP)
MRDS
PNPL
RODS

Richardson Flats
Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 600' 1200' 1800'
SCALE: 1" = 1200'

Ortho Map



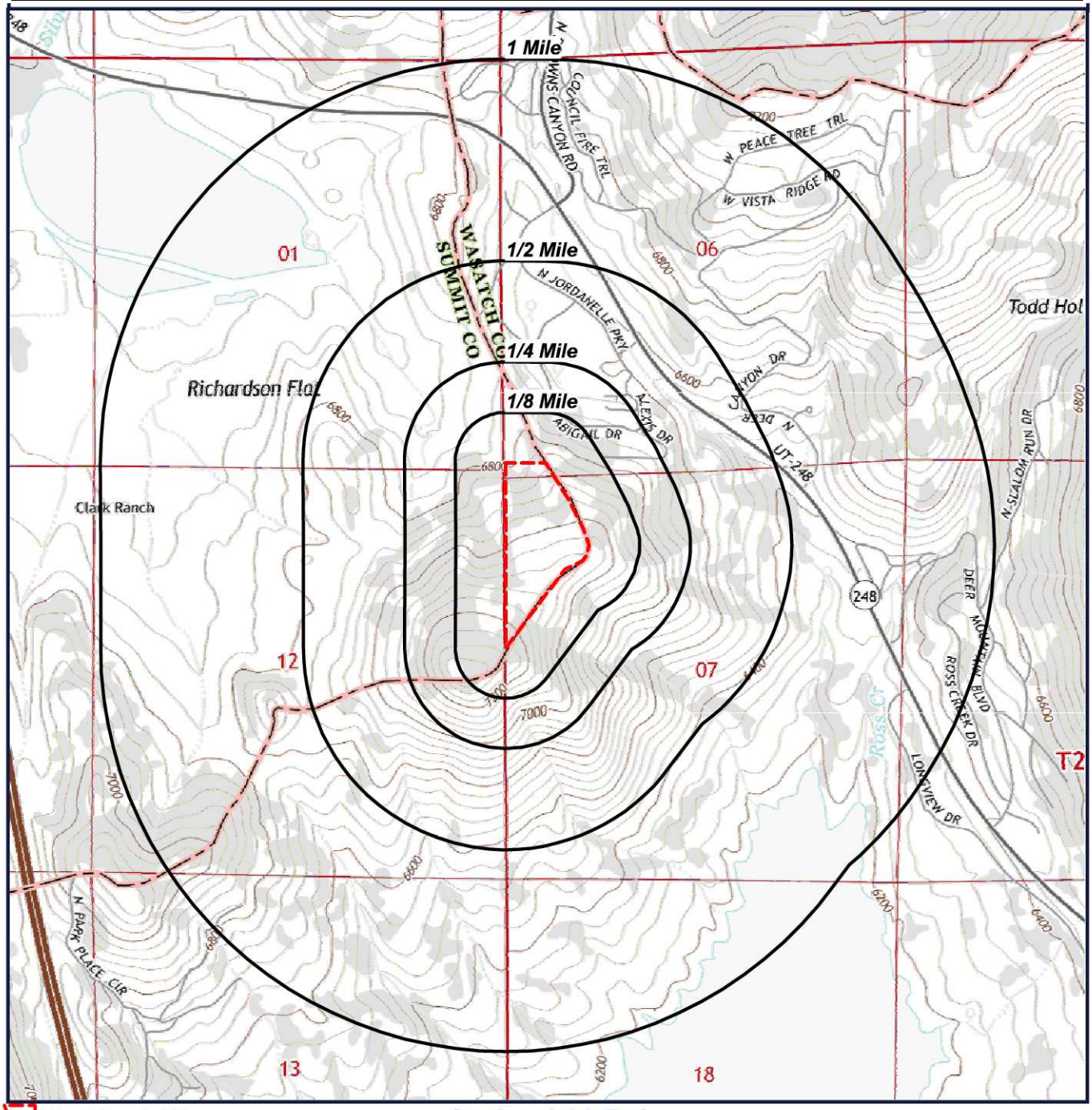
Target Property (TP)
MRDS
PNPL
RODS

Quadrangle(s): Park City East Richardson Flats
Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 600' 1200' 1800'
SCALE: 1" = 1200'

Topographic Map



Target Property (TP)

Quadrangle(s): Park City East
Source: USGS, 02/13/2014
Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	MRDS	10011508	Lower (6,733 ft.)	0.183 mi. W (966 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.667 mi. NW (3522 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.667 mi. NW (3522 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28

Site Summary By Database

*NOTE: Standard environmental records are displayed in **bold**.*

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
1	MRDS	10011508	Lower (6,733 ft.)	0.183 mi. W (966 ft.)	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060
2	***PNPL***	***UTD980952840***	***Lower (6,494 ft.)***	***0.667 mi. NW (3522 ft.)***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***
2	RODS	UTD980952840	Lower (6,494 ft.)	0.667 mi. NW (3522 ft.)	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 7023 ft.

*NOTE: Standard environmental records are displayed in **bold**.*

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	MRDS	6,733 ft.	UNKNOWN TUNNEL	SUMMIT COUNTY, PARK CITY, UT 84060	17
2	***PNPL***	***6,494 ft.***	***RICHARDSON FLAT TAILINGS***	***1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060***	***18***
2	RODS	6,494 ft.	RICHARDSON FLAT TAILINGS	1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060	28

MAP ID# 1

Distance from Property: 0.183 mi. (966 ft.) W
Elevation: 6,733 ft. (Lower than TP)

FACILITY INFORMATION

GEOSEARCH ID: **10011508**
DEP ID: **10011508**
MINE NAME: **UNKNOWN TUNNEL**
ADDRESS: **SUMMIT COUNTY**
PARK CITY, UT 84060
DEVELOPMENT STATUS: **OCCURRENCE**

COMMODITY DETAILS

COMMODITY: **SILVER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **SILVER**
IMPORTANCE: **PRIMARY**

COMMODITY: **LEAD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **LEAD**
IMPORTANCE: **PRIMARY**

COMMODITY: **ZINC**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **ZINC**
IMPORTANCE: **PRIMARY**

COMMODITY: **GOLD**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **GOLD**
IMPORTANCE: **SECONDARY**

COMMODITY: **COPPER**
COMMODITY TYPE: **METALLIC**
COMMODITY GROUP: **COPPER**
IMPORTANCE: **SECONDARY**

MATERIAL DETAILS

NO MATERIAL DETAILS REPORTED

NAME DETAILS

SITE NAME: **UNKNOWN TUNNEL**
STATUS: **CURRENT**
SITE NAME: **NEW PARK GROUP**
STATUS: **PREVIOUS**

Back to Report Summary

MAP ID# 2

Distance from Property: 0.667 mi. (3,522 ft.) NW
Elevation: 6,494 ft. (Lower than TP)

SITE INFORMATION

EPA ID #: **UTD980952840**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E**
PARK CITY, UT 84060 SUMMIT
EPA REGION: **REGION 8**
FEDERAL FACILITY INDICATOR: **NO**
NPL STATUS: **NOT REPORTED**
NON-NPL STATUS: **NOT REPORTED**
PROPOSED DATE: **2/7/1992**
SITE SCORE: **50.23**

ACTIONS

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **FIVE-YEAR REVIEW**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/26/2012**
ACTION COMPLETION DATE: **3/14/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/19/2013**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **11/20/2008**
ACTION COMPLETION DATE: **9/30/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/29/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CLAIM IN BANKRUPTCY PROCEEDING**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/27/2006**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/13/2009**
ACTION COMPLETION DATE: **6/5/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **3/13/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/24/2008**
ACTION COMPLETION DATE: **1/20/2009**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **8/7/2007**

ACTION COMPLETION DATE: **2/7/2008**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/7/2007**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/21/2006**
ACTION COMPLETION DATE: **10/4/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **8/28/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/8/2007**
ACTION COMPLETION DATE: **7/1/2007**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ALTERNATIVE DISPUTE RESOLUTION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **3/6/2006**

ACTION COMPLETION DATE: **12/8/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SECTION 107 LITIGATION**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **12/9/2005**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **CONSENT DECREE**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/10/2006**
ACTION COMPLETION DATE: **11/28/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **LODGED BY DOJ**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/5/2006**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/28/2000**
ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RECORD OF DECISION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/6/2005**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **COMMUNITY INVOLVEMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **7/21/2003**
ACTION COMPLETION DATE: **9/28/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **ECOLOGICAL RISK ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **5/1/2001**
ACTION COMPLETION DATE: **1/30/2004**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **RISK/HEALTH ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **10/9/2001**
ACTION COMPLETION DATE: **3/15/2003**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **REMEDIAL INVESTIGATION/FEASIBILITY STUDY NEGOTIATIONS**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **6/7/2000**
ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **ADMINISTRATIVE ORDER ON CONSENT**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **9/28/2000**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/23/1991**
ACTION COMPLETION DATE: **12/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **SITE INSPECTION**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **9/3/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/1989**
ACTION COMPLETION DATE: **7/1/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/7/1992**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **HAZARD RANKING SYSTEM PACKAGE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**

ACTION COMPLETION DATE: **7/15/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **AERIAL SURVEY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **6/30/1991**
ACTION COMPLETION DATE: **6/30/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/11/1991**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **REMOVAL ASSESSMENT**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **8/30/1990**
ACTION COMPLETION DATE: **8/30/1990**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **SPECIAL NOTICE ISSUED**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **2/10/1989**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
LEAD: **FEDERAL ENFORCEMENT**
ACTION START DATE: **8/13/1987**

ACTION COMPLETION DATE: **7/14/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PROPOSAL TO NATIONAL PRIORITIES LIST**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **6/24/1988**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **PRELIMINARY ASSESSMENT**
LEAD: **STATE, FUND FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **12/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **DISCOVERY**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **NOT AVAILABLE**
ACTION COMPLETION DATE: **10/1/1984**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **LOWER SILVER CREEK (02)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **9/29/2009**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **2/7/2008**

ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **RICHARDSON FLAT (01)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **1/4/2007**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SILVER CREEK TAILINGS (04)**
ACTION NAME: **ENGINEERING EVALUATION/COST ANALYSIS**
LEAD: **RESPONSIBLE PARTY**
ACTION START DATE: **4/11/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

AREA OF SITE ADDRESSED (OU): **SITEWIDE (00)**
ACTION NAME: **TECHNICAL ASSISTANCE**
LEAD: **EPA FUND-FINANCED**
ACTION START DATE: **9/25/2013**
ACTION COMPLETION DATE: **NOT REPORTED**
CONTACT TITLE: **REMEDIAL PROJECT MANAGER (RPM)**
CONTACT NAME: **KATHRYN HERNANDEZ**
CONTACT PHONE NUMBER: **(303) 312-6101**

CONTAMINANTS

cas #: \CONTAMINANT NAME: \CONTAMINATED MEDIA:
AREA OF SITE FOUND (OU):

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cas #: \CONTAMINANT NAME: \CONTAMINATED MEDIA:
AREA OF SITE FOUND (OU):

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AREA OF SITE FOUND (OU):

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AREA OF SITE FOUND (OU):

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Back to Report Summary

Record of Decision System (RODS)

MAP ID# 2

Distance from Property: 0.667 mi. (3,522 ft.) NW
Elevation: 6,494 ft. (Lower than TP)

EPA ID: **UTD980952840**
SITE ID: **0800705**
NAME: **RICHARDSON FLAT TAILINGS**
ADDRESS: **1 MILE E. OF TOWN NEAR US 40 NW 1/4 SEC 1 T2S R 4E, PARK CITY, UT 84060**
COUNTY: **SUMMIT**
REGION: **08**

FACILITY DETAIL(S)

SEQ ID: **1**
OPERABLE UNIT NAME: **RICHARDSON FLAT**
ACTION NAME: **GOVT ROD FOR PRP REMEDY**
ACTUAL COMPLETION DATE: **7/6/2005**
NPL STATUS: **PROPOSED**
NON NPL STATUS: **NOT REPORTED**

Back to Report Summary

Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

No Records Found

AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance. Enforcement and Compliance History Online (ECHO) Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014, the EPA retired this system for Clean Air Act stationary sources.

BRS Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 02/25/20

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 05/22/20

This database includes site locations where Engineering and/or Institutional Controls have been identified as part of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. The data displays remedy component information for Superfund decision documents issued in fiscal years 1982-2017, and it includes final and deleted NPL sites as well as sites with a Superfund Alternative Approach (SAA) agreement in place. The only sites included that are not on the NPL, proposed for NPL, or removed from proposed NPL, are those with an SAA Agreement in place. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR08 Enforcement and Compliance History Information

VERSION DATE: 10/27/19

The U.S. Environmental Protection Agency's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSUT Emergency Response Notification System

VERSION DATE: 04/05/20

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSUT Facility Registry System

VERSION DATE: 04/05/20

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 05/20/20

The HMIRS database contains unintentional hazardous materials release information reported to the U.S.

Department of Transportation located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

HWCD Hazardous Waste Compliance Docket Facilities

VERSION DATE: 04/29/19

This list of the Federal Agency Hazardous Waste Compliance Docket Facilities is maintained by the United States Environmental Protection Agency (EPA). According to the EPA, Section 120(c) of CERCLA requires EPA to establish a listing, known as the Federal Facility Hazardous Waste Compliance Docket (Docket), of Federal facilities which are managing or have managed hazardous waste; or have had a release of hazardous waste. Thus, the Docket identifies all Federal facilities that must be evaluated to determine whether they pose a risk to human health and the environment and it makes this information available to the public. In order for the Docket to remain current and accurate it requires periodic updating.

ICIS Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 03/28/20

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 04/26/20

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database is provided by the U.S. Environmental Protection Agency.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States

Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

NPDESR08 National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from the U.S. Environmental Protection Agency (EPA) from December 2002 through April 2007. Refer to the ICIS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

PADS PCB Activity Database System

VERSION DATE: 10/09/19

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of Polychlorinated Biphenyls (PCB) who are required to notify the U.S. Environmental Protection Agency of such activities.

PCSR08 Permit Compliance System

VERSION DATE: 08/01/12

The historic Permit Compliance System tracked enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. This database includes permitted facilities located in EPA Region 8 states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. This system has since been modernized by United States Environmental Protection Agency and is now integrated into the Integrated Compliance Information System (ICIS). Please refer to the ICIS database as the current source for this data.

RCRASC RCRA Sites with Controls

VERSION DATE: 05/14/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS SEMS Lien on Property

VERSION DATE: 03/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete. Please refer to the SEMSLIENS database as source of current data.

SSEHRIPFAS SSEHRI PFAS Contamination Sites

VERSION DATE: 12/12/19

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Please access the following source link for the most current information: https://pfasproject.com/pfas-contamination-site-tracker/

SSTS Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

TRI Toxics Release Inventory

VERSION DATE: 12/31/18

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA Toxic Substance Control Act Inventory

VERSION DATE: 12/31/16

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency (EPA) authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site. The EPA has collected Chemical Data Reporting (CDR) data since in 1986 (as Inventory Update Reporting). Collections occur approximately every four years and reporting requirements changed from collection to collection.

RCRAGR08 Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA

Region 8 includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ALTFUELS Alternative Fueling Stations

VERSION DATE: 04/30/20

Nationwide list of alternative fueling stations made available by the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Bio-diesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS Integrated Compliance Information System Drycleaners

VERSION DATE: 03/28/20

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The U.S. Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments. The following Primary SIC Codes are included in this data: 7211, 7212, 7213, 7215, 7216, 7217, 7218, and/or 7219; the following Primary NAICS Codes are included in this data: 812320, 812331, and/or 812332.

MRDS Mineral Resource Data System

VERSION DATE: 03/15/16

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA Mine Safety and Health Administration Master Index File

VERSION DATE: 09/20/19

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF Brownfields Management System

VERSION DATE: 04/09/20

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL Delisted National Priorities List

VERSION DATE: 04/22/20

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/23/20

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI Open Dump Inventory

VERSION DATE: 06/01/85

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

SEMS Superfund Enterprise Management System

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/23/20

The U.S. Environmental Protection Agency’s (EPA) Superfund Enterprise Management System Archived Site Inventory (List 8R Archived) replaced the CERCLIS NFRAP reporting system in 2015. This listing reflects sites at which the EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program.

SMCRA Surface Mining Control and Reclamation Act Sites

VERSION DATE: 11/26/19

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

USUMTRCA Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste,

environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS Formerly Used Defense Sites

VERSION DATE: 12/31/18

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/23/20

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

NMS Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL National Priorities List

VERSION DATE: 04/22/20

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL Proposed National Priorities List

VERSION DATE: 04/22/20

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

RCRASUBC Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/23/20

The Resource Conservation and Recovery Act (RCRA) gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS Record of Decision System

VERSION DATE: 04/22/20

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

ICEC Institutional Engineering Controls Registry

VERSION DATE: 03/12/20

This list of institutional/engineering controls is maintained by the Utah Department of Environmental Quality (DEQ). This list is a compilation of four lists: 1) UST Branch: Facilities with Environmental Institutional Controls; 2) CERCLA Branch: Superfund Environmental Covenants; 3) CERCLA Branch: Voluntary Cleanup Program: Certificate of Completion; 4) CERCLA Branch: Voluntary Cleanup Program: Environmental Covenant. The DEQ is required to maintain a record of the properties subject to environmental covenants/institutional controls established under Utah Code, Title 19, Chapter 10. This lists Leaking Underground Storage Tank sites, CERCLA/Superfund Branch Sites, and Voluntary Cleanup sites that have environmental controls established under this statute and pursuant to Utah Code Ann. §§ 57-25-101 et seq and controls established prior to the enactment of this statute. The controls have been recorded by the owner of the real property in the county recorder's office in the county where the real property is located.

SPILLS Spills Listing

VERSION DATE: 04/15/20

This list of environmental incidents is maintained by the Utah Department of Environmental Quality. Data also includes chemical spilled and media impacted.

TIERII Tier II Facilities

VERSION DATE: 05/20/20

This list is a compilation of two Tier II databases. The first database is maintained by the Utah Department of Environmental Quality (DEQ) Division of Environmental Response and Remediation (DERR). The second database is maintained by the Utah Automated Geographic Reference Center (AGRC), containing locations of Tier II facilities under the Emergency Planning and Community Right-to-Know Act (EPCRA). Qualifying facilities report on hazardous and toxic chemicals and are labeled either tier I or tier II. Locations are based on coordinates derived from maps and GPS data. These locations represent sites, not contaminated areas.

RUST Registered Underground Storage Tanks

VERSION DATE: 05/18/20

This is a compilation of two statewide lists of open and closed underground storage tanks managed by the Utah Department of Environmental Quality Division of Environmental Response & Remediation. The first list is obtained from the Underground Storage Tanks (UST) Program. The UST Program staff oversees: UST notification, installation, inspection, removal, and compliance with State and Federal UST regulations concerning release prevention and remediation. The second list is obtained from the Division of Environmental Response & Remediation's FACILITYUST geodatabase.

BF Brownfield Properties

VERSION DATE: 03/24/20

This database of brownfields (targeted) and other brownfield (non-targeted) properties is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

CERCLIS CERCLIS Sites

VERSION DATE: 03/24/20

This database of Comprehensive Environmental Response, Compensation, and Liability System sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). The CERCLA Branch of the DERR performs site investigations of potentially contaminated sites within the State of Utah to determine whether or not they pose a threat to human health and the environment and should be included on the Federal Superfund National Priorities List. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

LFSWDS Landfill and Solid Waste Disposal Sites

VERSION DATE: 05/07/20

This list of permitted solid waste facilities is maintained by the Utah Department of Environmental Quality Solid Waste Program. The Solid Waste Program administers permitting and compliance programs for non-hazardous solid waste treatment, storage and disposal facilities throughout the State.

LUST Leaking Underground Storage Tanks

VERSION DATE: 05/18/20

This list of leaking underground storage tanks (LUST) is provided by the Utah Department of Environmental Quality Division of Environmental Response & Remediation Underground Storage Tanks Branch. The Leaking Underground Storage Tank section oversees remediation of contamination from USTs.

VCP Voluntary Cleanup Program Sites

VERSION DATE: 03/24/20

This list of Voluntary Cleanup Program sites is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). In 1997, the Utah Voluntary Cleanup Program (VCP) was created to promote the voluntary cleanup of contaminated sites. The VCP is intended to encourage redevelopment of Brownfields and other impacted sites by providing a streamlined cleanup program. This database also includes some Voluntary Cleanup information from the Utah Automated Geographic Reference Center (AGRC) for informational purposes. Locations are based on coordinates derived from maps and GPS data. The DERR assumes no responsibility or liability for the accuracy of the location of these facilities.

NPL National Priorities List

VERSION DATE: 03/24/20

The National Priorities List (NPL) is maintained by the Utah Department of Environmental Quality's Division of Environmental Response and Remediation (DERR). Before a cleanup of a hazardous waste site can take place under Superfund, it must be included on the National Priority List. The NPL is a published list of hazardous waste sites that are eligible for extensive, long-term cleanup action under the Superfund program. When no responsible party can be found, listing on the NPL allows EPA and the State to access the Superfund Trust fund to pay for site cleanup. Sites are extracted from the Utah Environmental Interactive Map. The DERR assumes no responsibility or liability for the accuracy of the location of these properties.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

LUSTR08 Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/03/19

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

ODINDIAN Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

INDIANRES Indian Reservations

VERSION DATE: 09/27/17

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

APPENDIX D

CITY DIRECTORY REPORT
WATER WELL REPORT
OIL GAS REPORT
PHYSICAL SETTINGS REPORT

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Hwy 248,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14718

Date: 6/4/2020

City Directory Historical by Street Number

1 Hwy 248	No Listing (1990-1995); Street Begins (2001-2006); No Listing (2008-2019)
12200 Hwy 248	No Listing (1990-1995); Marilyn Henderson (2001); No Listing (2006-2019)
2903 Hwy 248	No Listing (1990-1995); Dustin M Sexton (2001-2006); No Listing (2008-2019)
2990 Hwy 248	No Listing (1990-2001); Alex G Peterson (2006); No Listing (2008-2019)
2995 Hwy 248	No Listing (1990-1995); Michael Phillips (2001); Gary Hulon (2006); Mac Financial (2006); No Listing (2008-2019)
3000 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3095 Hwy 248	No Listing (1990-1995); Gregory S Myers (2001-2006); No Listing (2008-2019)
3500 Hwy 248	No Listing (1990-2001); No Current Listing (2006); No Listing (2008-2019)
3650 Hwy 248	No Listing (1990-1995); David Cummings (2001); Dc Excavating (2001); Dc Equipment Llc (2006); Dc Land & Livestock Lc (2006); No Listing (2008-2019)
3800 Hwy 248	No Listing (1990-2001); Craig D Cummings (2006); No Listing (2008-2019)
3880 Hwy 248	No Listing (1990-1995); Celtron Rsrch&Dev (2001); No Listing (2006-2019)
3900 Hwy 248	No Listing (1990-1995); Dave Cummings (2001); D Trnsprt&Excavtg (2001); No Listing (2006-2019)
4188 Hwy 248	No Listing (1990-2001); Duff Berg (2006); No Listing (2008-2019)
439 Hwy 248	No Listing (1990-2001); Albert & Louise Wagstaff (2006); Jr Wagsraff (2006); No Listing (2008-2019)
4700 Hwy 248	No Listing (1990-1995); Robert Mcfartane (2001); No Listing (2006-2019)
4820 Hwy 248	No Listing (1990-2001); Jim Conway (2006); No Listing (2008-2019)
493 Hwy 248	No Listing (1990-2001); Karl Bartell (2006); No Listing (2008-2019)
499 Hwy 248	No Listing (1990-2001); Debbie L Wagstaff (2006); Karl Willie Wagstaff (2006); Wagstaff Mow & Trim (2006); No Listing (2008-2019)
500 Hwy 248	No Listing (1990-2001); William Woolf (2006); No Listing (2008-2019)
545 Hwy 248	No Listing (1990-2001); Jim L Yost (2006); No Listing (2008-2019)

Comments: Hwy 248 is also listed as W Hwy 248 and State Rd 248.

GeoSearch
On time. On target. In touch.™

Historical By Street Number

Target Property:

Richardson Flat Rd,

Heber City, UT 84060

Prepared For:
CMT Engineering Laboratories-Utah

Order #: 147778

Project #: 14718

Date: 6/4/2020

City Directory Historical by Street Number

1 Richardson Flat Rd	No Listing (2001-2019)

Comments:

GeoSearch
On time. On target. In touch.™

GeoPlus Water Well Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355557
Project #: 14718
PO #: 14718
Date: 06/05/2020

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Environmental Records Definitions 26

Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43277, 40.6654763)
7,023 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

Database Radius Summary

FEDERAL LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
NWIS	0.5000	0	0	1	1	NS	NS	2
SUB-TOTAL		0	0	1	1	0	0	2

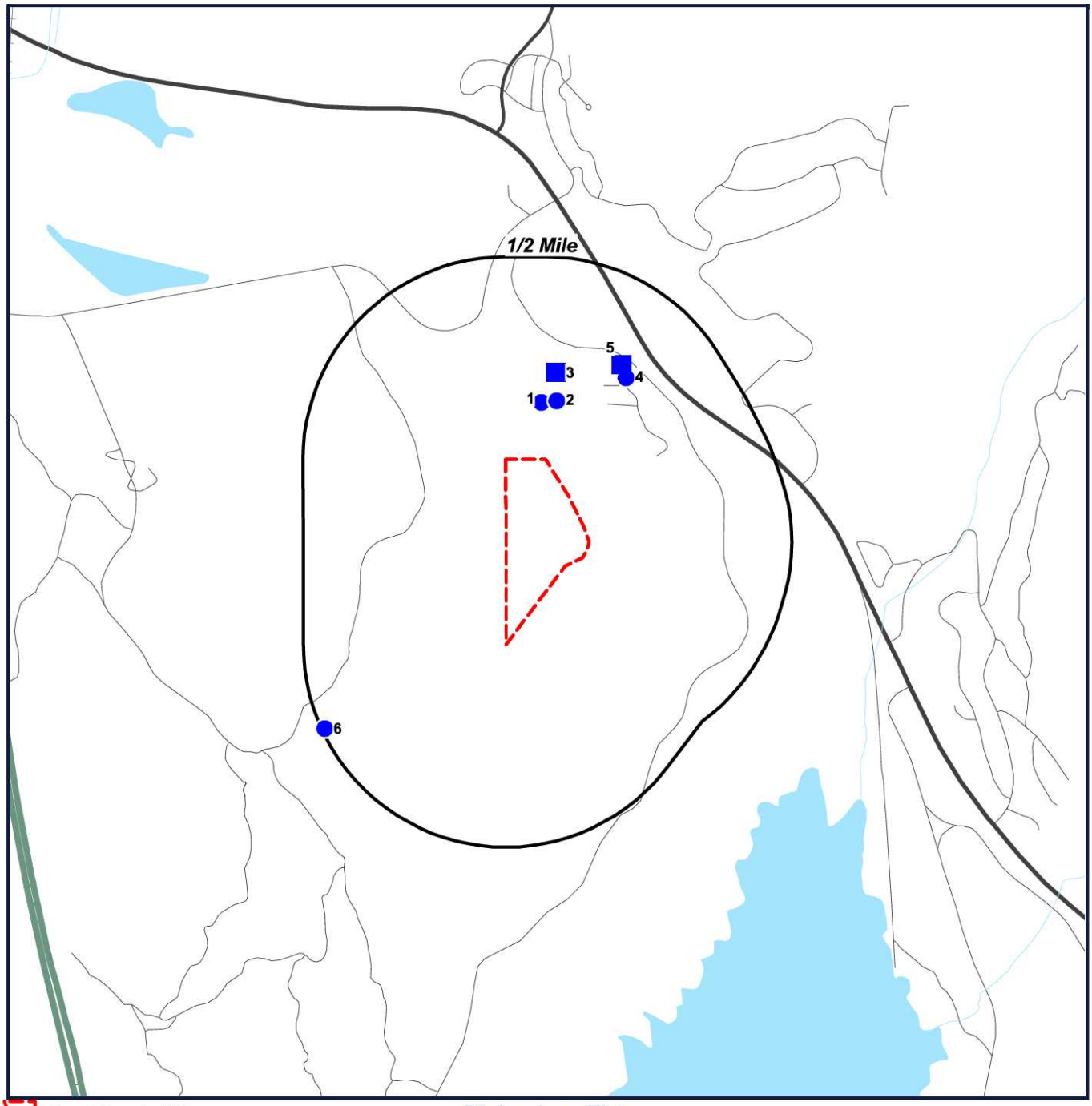
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
WW	0.5000	0	0	14	2	NS	NS	16
SUB-TOTAL		0	0	14	2	0	0	16
TOTAL		0	0	15	3	0	0	18

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

Waterwell Map



Target Property (TP)
WW
NWIS

Richardson Flats
Parcel SS-
125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W
E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address	PAGE #
1	WW	1775292344	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	4022998451	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	996892433	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	0000259	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	0142688	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	0146214	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	0146425	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	0147535	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	0147540	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	0148159	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	0148573	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	0166100	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	0166641	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	0177179	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
3	NWIS	USGS_4040171 11255201	Lower (6,636 ft.)	0.217 mi. N (1146 ft.)	(D- 2- 5) 6CCA-S1		22
4	WW	0072204	Lower (6,619 ft.)	0.285 mi. NE (1505 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	23
5	NWIS	USGS_4040181 11254101	Lower (6,619 ft.)	0.300 mi. NE (1584 ft.)	(D- 2- 5) 6CDB- 1		24
6	WW	0007181	Lower (6,824 ft.)	0.492 mi. WSW (2598 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	25

Site Summary By Database

Map ID#	Database Name	Site ID#	Relative Elevation	Distance From Site	Site Name	Address
3	NWIS	USGS_404017111255201	Lower (6,636 ft.)	0.217 mi. N (1146 ft.)	(D- 2- 5) 6CCA-S1	
5	NWIS	USGS_404018111254101	Lower (6,619 ft.)	0.300 mi. NE (1584 ft.)	(D- 2- 5) 6CDB- 1	
1	WW	1775292344	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	4022998451	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
1	WW	996892433	Lower (6,713 ft.)	0.145 mi. N (766 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032
2	WW	0000259	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0142688	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146214	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0146425	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147535	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0147540	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148159	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0148573	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166100	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0166641	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
2	WW	0177179	Lower (6,713 ft.)	0.151 mi. NNE (797 ft.)		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032
4	WW	0072204	Lower (6,619 ft.)	0.285 mi. NE (1505 ft.)		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032
6	WW	0007181	Lower (6,824 ft.)	0.492 mi. WSW (2598 ft.)		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060

Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 7023 ft.

EQUAL/HIGHER ELEVATION

No Records Found

LOWER ELEVATION

Map ID#	Database Name	Elevation	Site Name	Address	Page #
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	8
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	9
1	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY, UT 84032	10
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	11
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	12
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	13
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	14
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	15
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	16
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	17
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	18
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	19
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	20
2	WW	6,713 ft.		S4500 E650 NW 06 2S 5E SL, HEBER CITY 84032	21
3	NWIS	6,636 ft.	(D- 2- 5) 6CCA-S1		22
4	WW	6,619 ft.		N1140 E1570 SW 06 2S 5E SL, HEBER CITY 84032	23
5	NWIS	6,619 ft.	(D- 2- 5) 6CDB- 1		24
6	WW	6,824 ft.		S3500 E3000 SE 02 2S 4E SL, PARK CITY 84060	25

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.145 mi. (766 ft.) N
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **1775292344**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER, INTERESTED PARTY**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.145 mi. (766 ft.) N
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **4022998451**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **SOUTH KAMAS IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

Water Wells (WW)

MAP ID# 1

Distance from Property: 0.145 mi. (766 ft.) N
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **996892433**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **WESTERN STATES WATER**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: NOT REPORTED

Back to Report Summary

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0000259**
WRNUM: **0055003P00**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **KRISTIN MCLACHLAN FOR JORDANELLE SPECIAL SERVICE DIST**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0142688**
WRNUM: **55-11203**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DIST., INTERESTED PARTY**
SOURCE: **ONTARIO DRAIN TUNNEL AND PROVO RIVER**
USE: **IRRIGATION, MUNICIPAL, OTHER, STOCKWATERING**
PRIORITY DATE: **20000508**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146214**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0146425**
WRNUM: **55-9544**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20001213**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147535**
WRNUM: **55-9631**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (5)**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0147540**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20011029**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148159**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020718**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **FLOODED REVERSE CIRCULATION**
TOTAL DEPTH (FT.): **20.00000**
FINISH DEPTH (FT.): **20.00000**
SCREEN DEPTH (FT.): **20.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0148573**
WRNUM: **55-9699**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20021108**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166100**
WRNUM: **55-9443**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **EXTENSION IRRIGATION COMPANY**
SOURCE: **UNDERGROUND WATER WELLS (32)**
USE: **MUNICIPAL**
PRIORITY DATE: **20000911**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0166641**
WRNUM: **55-9669**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (6)**
USE: **MUNICIPAL**
PRIORITY DATE: **20020910**
SUMMARY STATUS: **TERMINATED: ADJUDICATION TERM; RIGHT MOST LIKELY HAS BEEN CONSOLIDATED INTO ANOTHER OR RENUMBERED.**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

Water Wells (WW)

MAP ID# 2

Distance from Property: 0.151 mi. (797 ft.) NNE
Elevation: 6,713 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0177179**
WRNUM: **55-9632**
LOCATION: **S4500 E650 NW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **JORDANELLE SPECIAL SERVICE DISTRICT**
SOURCE: **UNDERGROUND WATER WELLS (4) EXISTING/OTHER APPLS.**
USE: **MUNICIPAL**
PRIORITY DATE: **20070124**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **NOT REPORTED**
TOTAL DEPTH (FT.): **NOT REPORTED**
FINISH DEPTH (FT.): **NOT REPORTED**
SCREEN DEPTH (FT.): **NOT REPORTED**
WELL DOC LINK: *Click Here*

Back to Report Summary

United States Geological Survey National Water Information System (NWIS)

MAP ID# 3

Distance from Property: 0.217 mi. (1,146 ft.) N
Elevation: 6,636 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404017111255201**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404017111255201**
STATION NAME: **(D- 2- 5) 6CCA-S1**
SITE TYPE: **SP**
LATITUDE: **40.671339400**
LONGITUDE: **-111.431859400**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NESWSWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **NOT REPORTED**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **PARK CITY VOLCANICS**
WELL DEPTH: **NOT REPORTED**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **NOT REPORTED**
PROJECT NUMBER: **NOT REPORTED**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1983-08-31**
WATER-QUALITY DATA END DATE: **1983-08-31**
WATER-QUALITY DATA COUNT: **1**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **--**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **0**
SITE-VISIT DATA BEGIN DATE: **1983-08-31**
SITE-VISIT DATA END DATE: **1983-08-31**
SITE-VISIT DATA COUNT: **1**

Back to Report Summary

MAP ID# 4

Distance from Property: 0.285 mi. (1,505 ft.) NE
Elevation: 6,619 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0072204**
WRNUM: **55-3097**
LOCATION: **N1140 E1570 SW 06 2S 5E SL**
TYPE: **UNDERGROUND**
OWNER NAME: **CHEVRON U.S.A. INC.**
SOURCE: **UNDERGROUND WATER WELL**
USE: **OTHER**
PRIORITY DATE: **19651011**
SUMMARY STATUS: **PERFECTED: PROOF FILED, RIGHT CERTIFICATED**
DRILLING METHOD: **CABLE TOOL**
TOTAL DEPTH (FT.): **480.00000**
FINISH DEPTH (FT.): **310.00000**
SCREEN DEPTH (FT.): **150.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

MAP ID# 5

Distance from Property: 0.300 mi. (1,584 ft.) NE
Elevation: 6,619 ft. (Lower than TP)

GEOSEARCH ID: **USGS_404018111254101**
REPORTING AGENCY: **US GEOLOGICAL SURVEY**
SITE IDENTIFICATION NUMBER: **404018111254101**
STATION NAME: **(D- 2- 5) 6CDB- 1**
SITE TYPE: **GW**
LATITUDE: **40.671617190**
LONGITUDE: **-111.428803700**
DISTRICT CODE: **49**
STATE CODE: **49**
COUNTY CODE: **051**
COUNTRY CODE: **US**
LAND NET LOCATION DESCRIPTION: **NWSESWS06 T**
NAME OF LOCATION MAP: **NOT REPORTED**
SCALE OF LOCATION MAP: **NOT REPORTED**
DATE OF FIRST CONSTRUCTION: **01/01/1965**
DATE SITE ESTABLISHED OR INVENTORIED: **NOT REPORTED**
LOCAL AQUIFER: **NOT REPORTED**
WELL DEPTH: **260 FEET**
HOLE DEPTH: **NOT REPORTED**
SOURCE OF DEPTH DATA: **O**
PROJECT NUMBER: **464915800**
PEAK-STREAMFLOW DATA BEGIN DATE: **--**
PEAK-STREAMFLOW DATA END DATE: **--**
PEAK-STREAMFLOW DATA COUNT: **0**
WATER-QUALITY DATA BEGIN DATE: **1967-05-17**
WATER-QUALITY DATA END DATE: **1967-05-17**
WATER-QUALITY DATA COUNT: **2**
FIELD WATER-LEVEL MEASUREMENTS BEGIN DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS END DATE: **1965-11-01**
FIELD WATER-LEVEL MEASUREMENTS COUNT: **1**
SITE-VISIT DATA BEGIN DATE: **--**
SITE-VISIT DATA END DATE: **--**
SITE-VISIT DATA COUNT: **0**

Back to Report Summary

MAP ID# 6

Distance from Property: 0.492 mi. (2,598 ft.) WSW
Elevation: 6,824 ft. (Lower than TP)

FACILITY INFORMATION

UNIQUE ID: **0007181**
WRNUM: **1255007M00**
LOCATION: **S3500 E3000 SE 02 2S 4E SL**
TYPE: **ABANDONED WELL**
OWNER NAME: **IVORY DEVELOPMENT**
SOURCE: **NON-PRODUCTION WELL: TEST**
USE: **NOT REPORTED**
PRIORITY DATE: **NOT REPORTED**
SUMMARY STATUS: **APPROVED**
DRILLING METHOD: **HSA**
TOTAL DEPTH (FT.): **8.00000**
FINISH DEPTH (FT.): **0.00000**
SCREEN DEPTH (FT.): **0.00000**
WELL DOC LINK: *Click Here*

Back to Report Summary

NWIS United States Geological Survey National Water Information System

VERSION DATE: 01/02/20

The U.S. Geological Survey (USGS) National Water Information System (NWIS) includes water inventory data originating from all 50 states, plus border and territorial sites, including data from as early as 1899. This database includes selected site types limited to Groundwater Sites and Spring Sites from the 1.5 million plus sites within NWIS. Surface-Water, Atmospheric, and Other Site types are excluded. Disclaimer: Water Data for the Nation is the USGS public web interface to much of the data stored and managed within NWIS. It is not, however, configured to present all NWIS data and users may need to contact local Water Science Centers to obtain some information. NWIS data is updated on a regularly scheduled basis, and current condition data is generally updated upon receipt at local Water Science Centers.

WW Water Wells

VERSION DATE: 03/18/20

This list of water wells is a compilation of two databases maintained by the Utah Division of Water Rights. The first database is extracted from the Utah Division of Water Rights PUBDUMP Well database Well Features table. The second database is extracted from the Utah Division of Water Rights WRPOD (water right point of diversion) shapefile. This database is a complete record of water point of diversion locations created from data in the Utah Division of Water Rights database. The database is a complete record with the following exceptions: (1) The Division's point of diversion referencing policy includes a provision which allows some point of diversion locations to be described more as areas than discrete points. (2) Utah State Law required applications to divert surface water to be filed with the State Engineer after 1903 and groundwater after 1935. There may be existing diversions which began prior to those dates which are not included in the Division of Water Right records. (3) Data in the Division of Water Rights database was entered over an eight year period from paper files maintained by the office. Data entered in the database has been subsequently verified by staff. However, errors are occasionally detected in the database as a result of entry operations either from current staff activities or the original entry project. The Division makes an ongoing effort to maintain the database free of errors and omissions; however users of the data are responsible to verify it is suitable for their purpose.

GeoPlus Oil & Gas Report

GeoLens by GeoSearch

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355558
Project #: 14718
PO #: 14718
Date: 06/05/2020

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Disclaimer

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah 84060

Coordinates
Area centroid (-111.43277, 40.6654763)

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

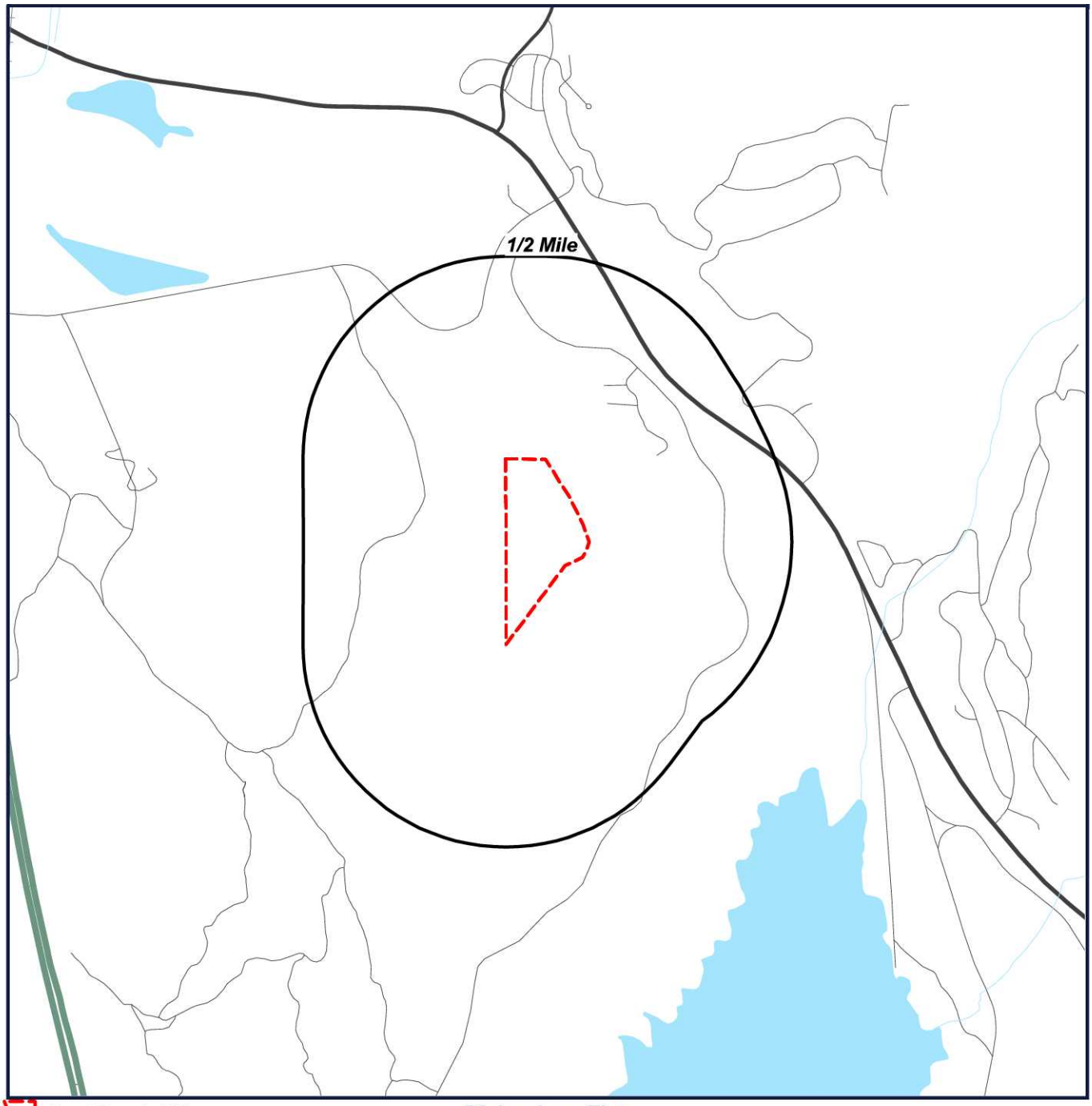
Database Radius Summary

STATE (UT) LISTING

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
OG	0.5000	0	0	0	0	NS	NS	0
SUB-TOTAL		0	0	0	0	0	0	0
TOTAL		0	0	0	0	0	0	0

NOTES:
NS = NOT SEARCHED
TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

OIL & GAS WELL MAP



Target Property (TP)

Well Location

Richardson Flats
Parcel SS-
125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

Located Sites Summary

No Records Found.

Site Summary By Database

No Records Found.

OG Oil and Gas Wells

VERSION DATE: 05/10/20

This list of Oil and Gas Wells is maintained by the Utah Automated Geographic Reference Center. This list is a combination of 5 datasets. These datasets depict oil and gas well surface points, units and fields polygons from the Utah Department of Natural Resources, Oil, Gas and Mining Division. On June 1, 2017, the Utah Division of Oil, Gas and Mining retired 5 old databases and went online with a new database. This prompted many changes to the data field names and content previously provided in the AGRC files. This new database was developed by contractors sponsored in part by the U.S. Department of Energy and the Ground Water Protection Council and provides the opportunity for the Division to collect more descriptive down-hole information for each wellbore permitted and drilled. Initially, much of the down-hole information will not be available because there was no place to save it in the previous databases. Eventually, as new wells are drilled and old legacy data is entered, more descriptive data will become available for the wells in Utah.

GeoSearch
On time. On target. In touch.™

GeoPlus Physical Setting Maps

Target Property:

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Summit County, Utah 84060

Prepared For:

CMT Engineering Laboratories-Utah

Order #: 147852
Job #: 355560
Project #: 14718
PO #: 14718
Date: 06/05/2020

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Target Property Summary

Target Property Information

Richardson Flats Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah 84060

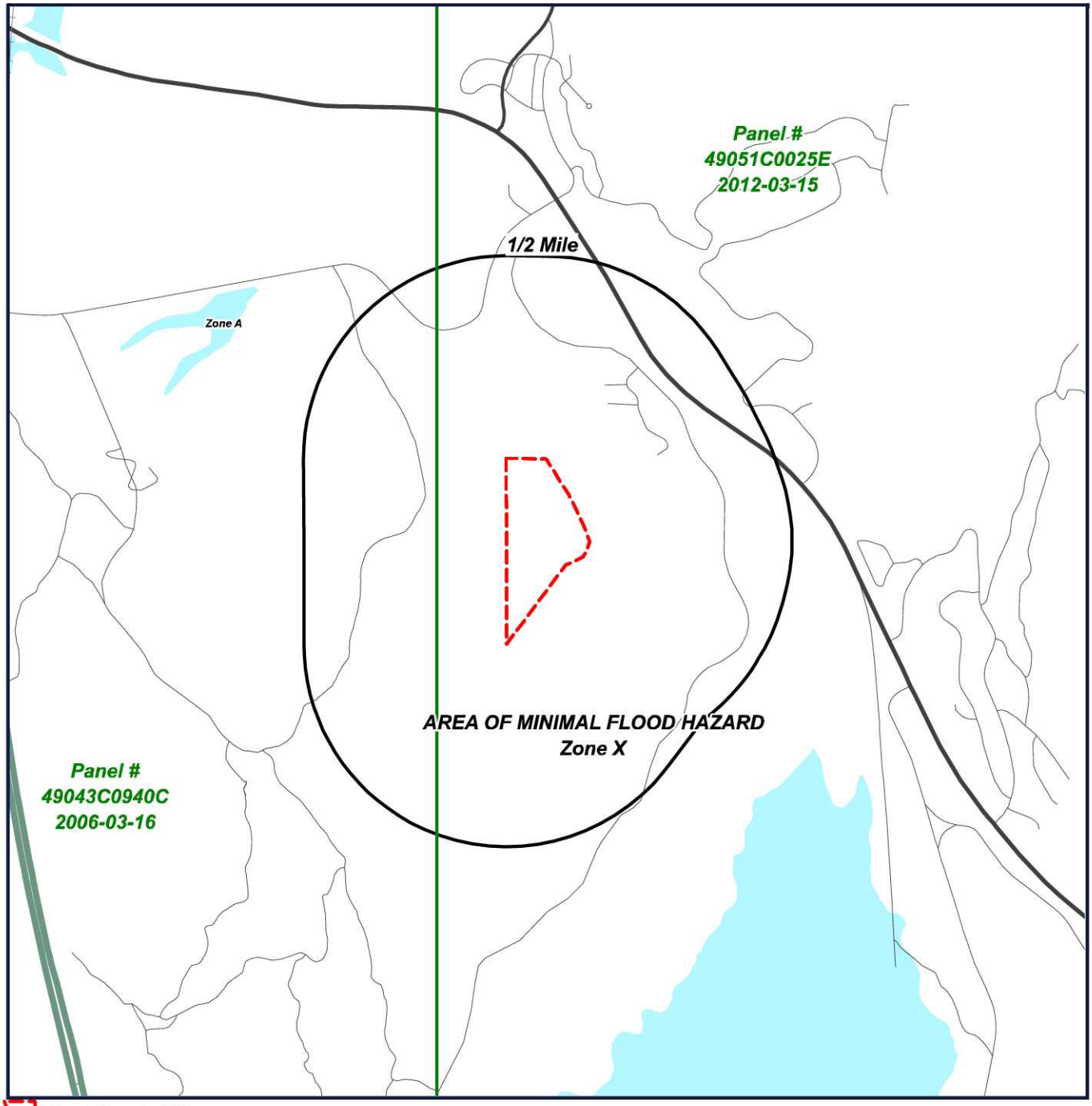
Coordinates
Area centroid (-111.43277, 40.6654763)
7,023 feet above sea level

USGS Quadrangle
Park City East, UT

Geographic Coverage Information

County/Parish: Summit (UT) , Wasatch (UT)
ZipCode(s):
Kamas UT: 84036
Park City UT: 84060

FEMA Map



Target Property (TP)

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile - Zone X

Future Conditions 1% Annual Chance Flood Hazard - Zone X

Area with Reduced Flood Risk due to Levee - Zone X

Area with Flood Risk due to Levee - Zone

Digital Data Not Available

Letter of map revision date:
8/15/2019
Latest study effective date:
12/07/2017

Richardson Flats
Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

FEMA Report

FEMA - Federal Emergency Management Agency

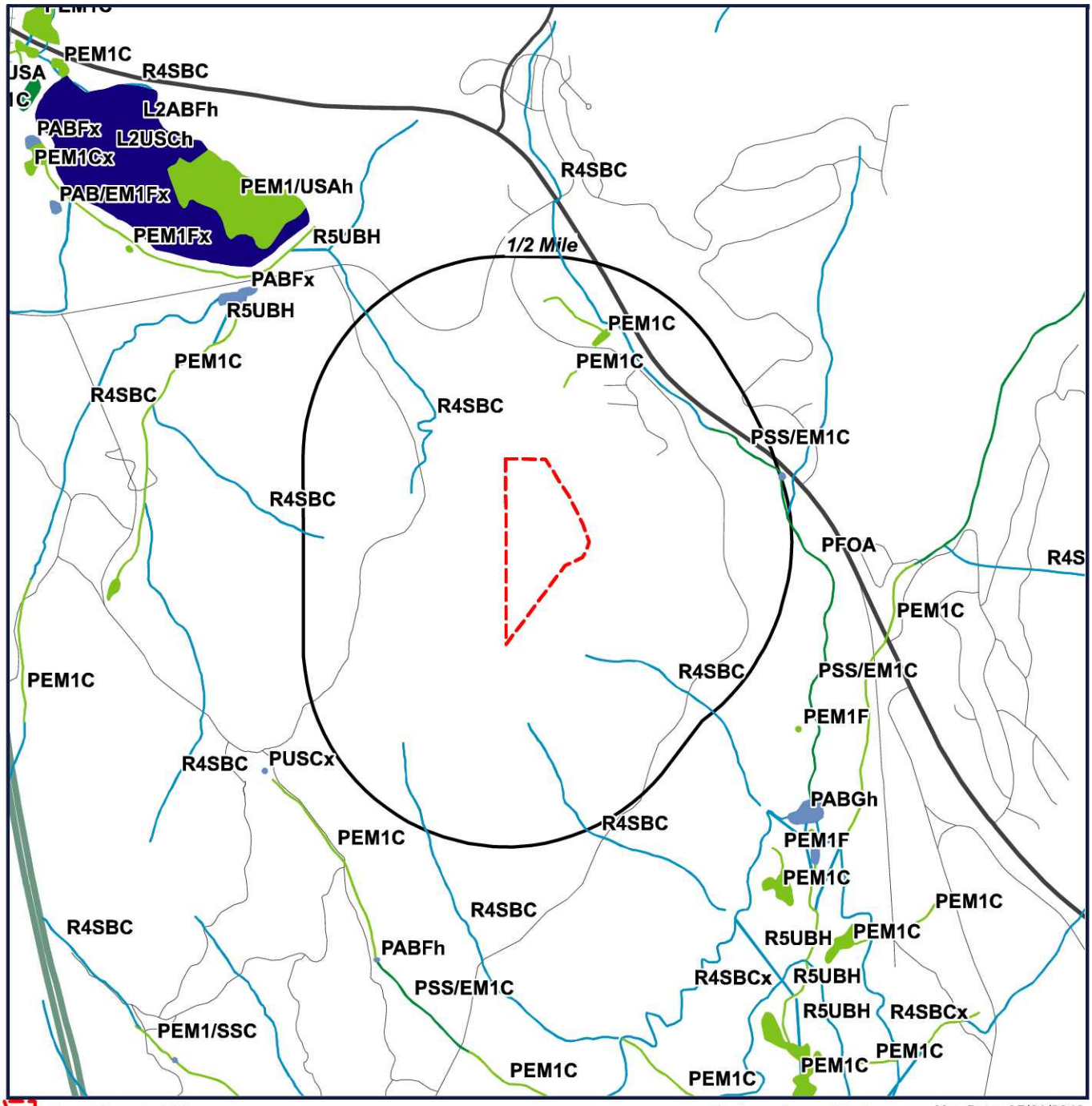
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information.

FEMA Flood Zone Definitions within Search Radius

Zone X	Zone X

An area that is determined to be outside the 100 and 500 year floodplains.

NWI Map


PEM1C
R4SBC
L2ABFh
PABFx
L2USCh
PEM1Cx
PAB/EM1Fx
PEM1/USAh
PEM1Fx
R5UBH
1/2 Mile
PABFx
R5UBH
PEM1C
PEM1C
PEM1C
R4SBC
R4SBC
R4SBC
PSS/EM1C
PFOA
R4S
PEM1C
PEM1C
R4SBC
PSS/EM1C
PEM1F
R4SBC
PUSCx
PABGh
R4SBC
PEM1C
PEM1F
PEM1C
PEM1C
R4SBC
R4SBC
R5UBH
PEM1C
PABFh
R4SBCx
R5UBH
PSS/EM1C
R5UBH
R4SBCx
PEM1/SSC
PEM1C
PEM1C
PEM1C
Target Property (TP)
ESTUARINE AND MARINE DEEPWATER
ESTUARINE AND MARINE WETLAND
FRESHWATER EMERGENT WETLAND
FRESHWATER FORESTED/ SHRUB WETLAND
LAKE
OTHER
RIVERINE
FRESHWATER POND
NDA - DIGITAL DATA NOT AVAILABLE
Richardson Flats
Parcel SS-125-C
Near 1185 W LORI LN
Heber, Utah
84060
Map Date: 05/01/2018
N
W
E
S
0'
1000'
2000'
3000'
SCALE: 1" = 2000'

NWI Report

NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

NWI Definitions within Search Radius

PABGh

SYSTEM: **PALUSTRINE**
CLASS: **AQUATIC BED**
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

PEM1C

SYSTEM: **PALUSTRINE**
CLASS: **EMERGENT**
SUBCLASS: **BROAD-LEAVED DECIDUOUS**
WATER REGIME: **SEASONALLY FLOODED**

PFOA

SYSTEM: **PALUSTRINE**
CLASS: **FORESTED**

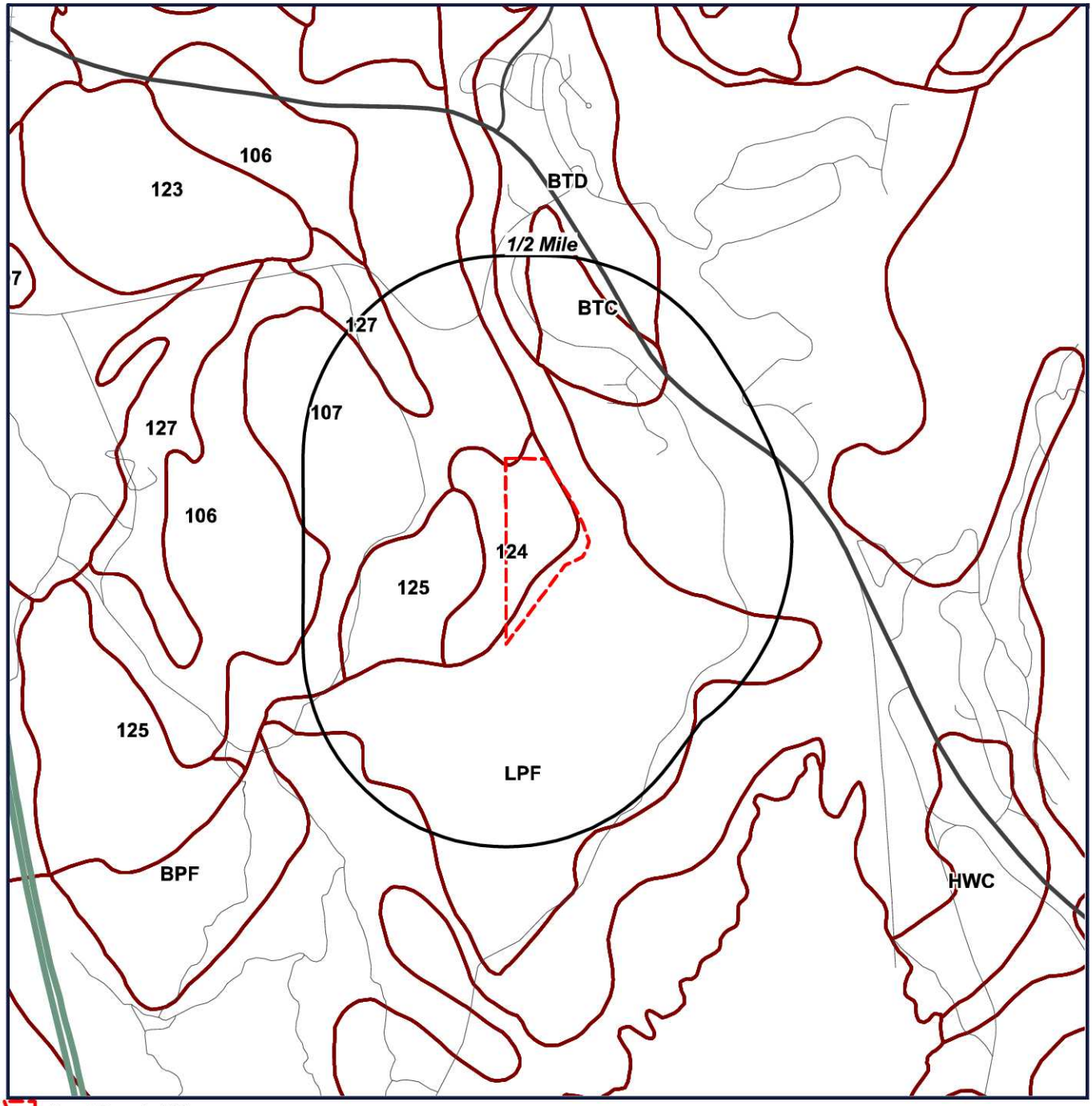
PSS/EM1C

SYSTEM: **PALUSTRINE**
CLASS: **SCRUB-SHRUB**
WATER REGIME: **SEASONALLY FLOODED/SATURATED**

R4SBC

SYSTEM: **RIVERINE**
SUBSYSTEM: **INTERMITTENT**
CLASS: **STREAMBED**
WATER REGIME: **SEASONALLY FLOODED**

Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Richardson Flats
Parcel SS-
125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

SOIL Report

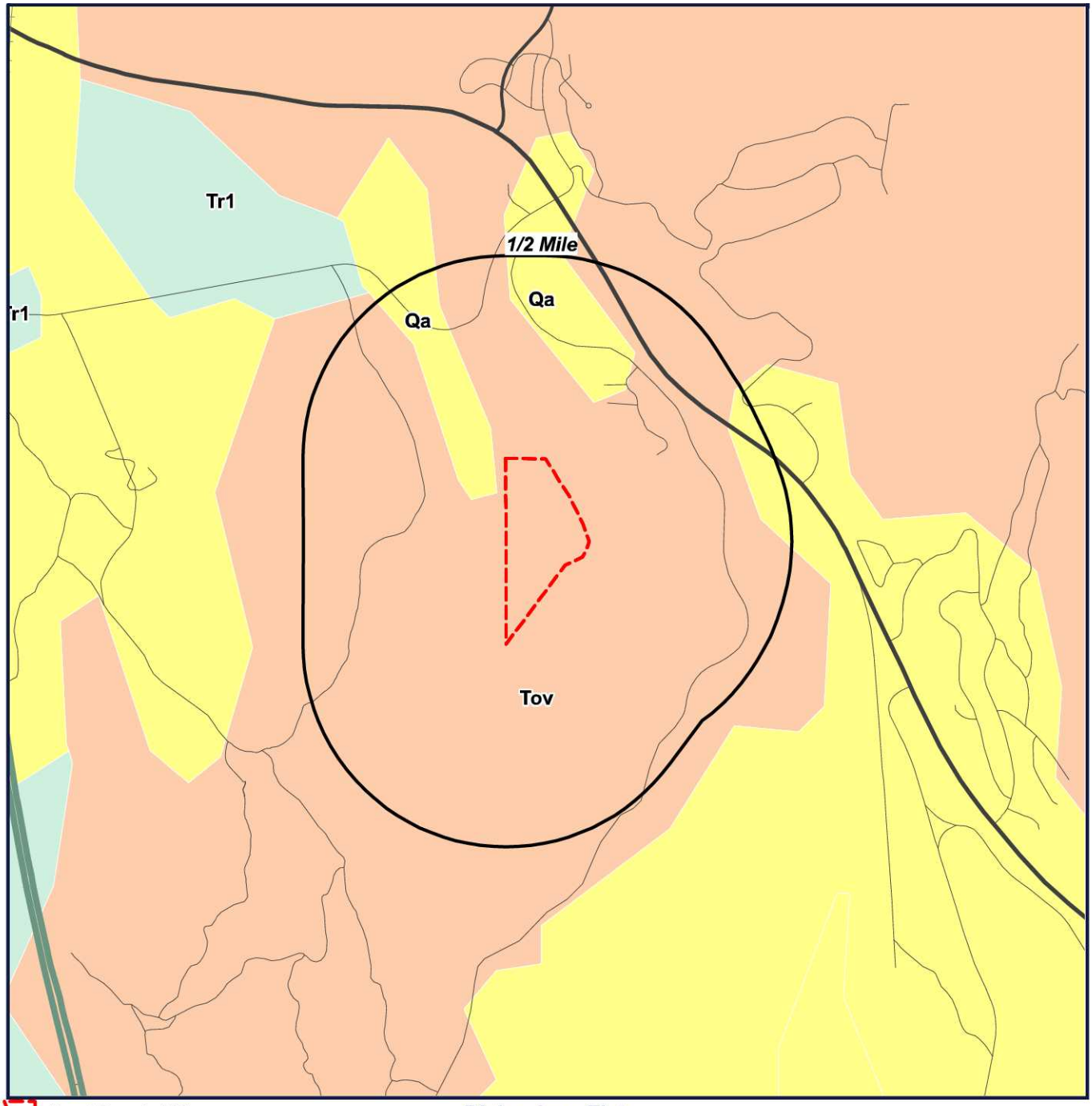
Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

SOIL Code Definitions within Search Radius

BTC	Broadhead soils, 6 to 15 percent slopes
BTD	Broadhead soils, 15 to 25 percent slopes
HWE	Horrocks-Broadhead association, steep
LPF	Little Pole very cobbly sandy clay loam, 40 to 60 percent slopes
106	Ayoub cobbly loam, 2 to 15 percent slopes
107	Ayoub-Dunford-Melling complex, 15 to 30 percent slopes
125	Dunford-Ayoub-Melling complex, 30 to 60 percent slopes
124	Dunford-Ayoub-Melling complex, 15 to 30 percent slopes
127	Echocreek-Kovich loams, 0 to 10 percent slopes

Geology Map



Target Property (TP)

Richardson Flats
Parcel SS-
125-C
Near 1185 W LORI LN
Heber, Utah
84060

N
W E
S

0' 1000' 2000' 3000'
SCALE: 1" = 2000'

GEOLOGY Report

US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **Qa**
UNIT NAME: **Quaternary alluvium and colluvium**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium; colluvium;**

GEOLOGY SYMBOL: **Qao**
UNIT NAME: **Older Quaternary alluvial deposits**
UNIT AGE: **Quaternary**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **alluvium**

GEOLOGY SYMBOL: **Tov**
UNIT NAME: **Oligocene volcanic rocks**
UNIT AGE: **Late Eocene to Oligocene**
UNIT DESCRIPTION:
NOT REPORTED
ADDITIONAL UNIT INFORMATION:
NOT REPORTED
ROCKTYPE/S: **dacite; rhyolite; andesite; basalt**

APPENDIX E

SUPPORTING DOCUMENTATION

100005323

SECOND FIVE-YEAR REVIEW REPORT FOR RICHARDSON FLAT TAILINGS SUPERFUND SITE SUMMIT COUNTY, UTAH

Prepared by

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

8/10/18
Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CD	Consent Decree
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
IC	Institutional Control
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCMC	Park City Municipal Corporation
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RI	Remedial Investigation
ROD	Record of Decision
RPM	Remedial Project Manager
UPCM	United Park City Mines
USFWS	United States Fish and Wildlife Service
UTDEQ	Utah Department of Environmental Quality
UU/UE	Unlimited Use and Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP) (40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Richardson Flat Tailings Site (the Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site is located in and around Park City, within Summit County, Utah, in the Silver Creek watershed. Mining activities began in the upgradient mining district in the late 1860s. The Site, located in and around Silver Creek, downstream of the mining district, has been impacted by mining waste. The Site consists of four operable units (OUs) (Figure 1). This FYR addresses OU1, the Richardson Flat tailings impoundment (Figure 2). Remedial action has occurred at OU1, as discussed in Section II. Site characterization investigations are ongoing at the remaining OUs. OU2 encompasses approximately 1,216 acres along Lower Silver Creek north and east of Highway 40. OU3 encompasses approximately 856 acres located east of Park City in areas along Silver Creek. These two OUs are comprised of mine tailings that have come to be located in the Lower Silver Creek floodplain. Investigations are ongoing to determine the nature and extent of contamination within the flood plain and upland areas. OU4 is an ongoing discharge known as Prospector Drain. The drain was installed during the 1970s to lower the water table in order to develop Prospector Park and Prospector Square (a park and housing development) on tailings material. In 2008, Park City Municipal Corporation (PCMC) constructed a biocell to reduce the concentrations of cadmium and zinc in the water captured by the drain. Supplemental flow that is not processed through the biocell is bypassed to Silver Creek. Investigations are ongoing to determine the nature and extent of contamination at OU4.

EPA remedial project manager (RPM) Robert Parker led the FYR. Participants included Mo Slam from the Utah Department of Environmental Quality (UTDEQ), EPA community involvement coordinator (CIC) Katherine Jenkins, and Ryan Burdge and Treat Suomi of Skeo. The review began on 5/31/2017.

Site Background

OU1 consists of approximately 258 acres of land, including a tailings impoundment that covers approximately 160 acres of land. The impoundment was a mine tailings reservoir created prior to 1950. It is now the location of approximately 7 million tons of sand-sized carbonaceous particles and minerals containing zinc, silver, lead and other metals. Appendix A and B include a list of relevant site documents and site chronology.

According to the Remedial Investigation (RI) report, few details are known about the original embankment along the western area of OU1, but it is believed to have been constructed as part of the original tailings impoundment. In the 1970s, to accommodate additional tailings, an operator constructed a large earth embankment along the western edge of the impoundment, perimeter containment dikes along the southern and eastern borders of the impoundment and a diversion ditch system north of the impoundment and along the southern and eastern containment dikes. The impoundment was last used as a repository for new tailings in 1982. Currently, most of OU1 is a covered tailings impoundment bounded by containment dikes with the main embankment to the northwest (Figure 3). A parking area is located at the eastern end of OU1.

Silver Creek flows along the northwest border of the OU, separated from OU1 by a small stretch of wetlands and

riparian vegetation. Most of the land around OU1 is undeveloped open space, although there is development interest in the Silver Creek valley in the general area of OU1. OU1 lies within a 650 acre parcel owned by United Park City Mines (UPCM), a potentially responsible party (PRP). While no final decision has been made on future use at OU1, potential uses range from open space wildlife habitat to athletic fields. Currently, a recreation trail passes through the Site alongside Silver Creek.

Surface water features at OU1 include the south diversion ditch, the wetlands area below the embankment and a pond. All the surface water and shallow groundwater at OU1 eventually discharge to Silver Creek, which is classified by the State as a potential drinking water source, a recreational use feature, a cold-water fishery and a potential irrigation source.

A 12-square mile downgradient well inventory conducted during the RI determined that all wells are deeper than 150 feet and there are no known wells located within a half mile of OU1. The shallow groundwater at OU1 is generally associated with the alluvial system of Silver Creek. The Silver Creek alluvial aquifer is very high in total dissolved solids and is often contaminated due to water quality in Silver Creek and tailings that are present along the creek in many areas. The OU1 RI concluded that OU1 does not present a risk to the Silver Creek alluvial aquifer due to the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the alluvial groundwater. The potential for impacts to the Silver Creek alluvial aquifer by OU1 should be re-evaluated in future FYRs due to future OU 2 and 3 remediation efforts. There are no known current uses for the shallow aquifer.

Figure 1: Site Operable Units

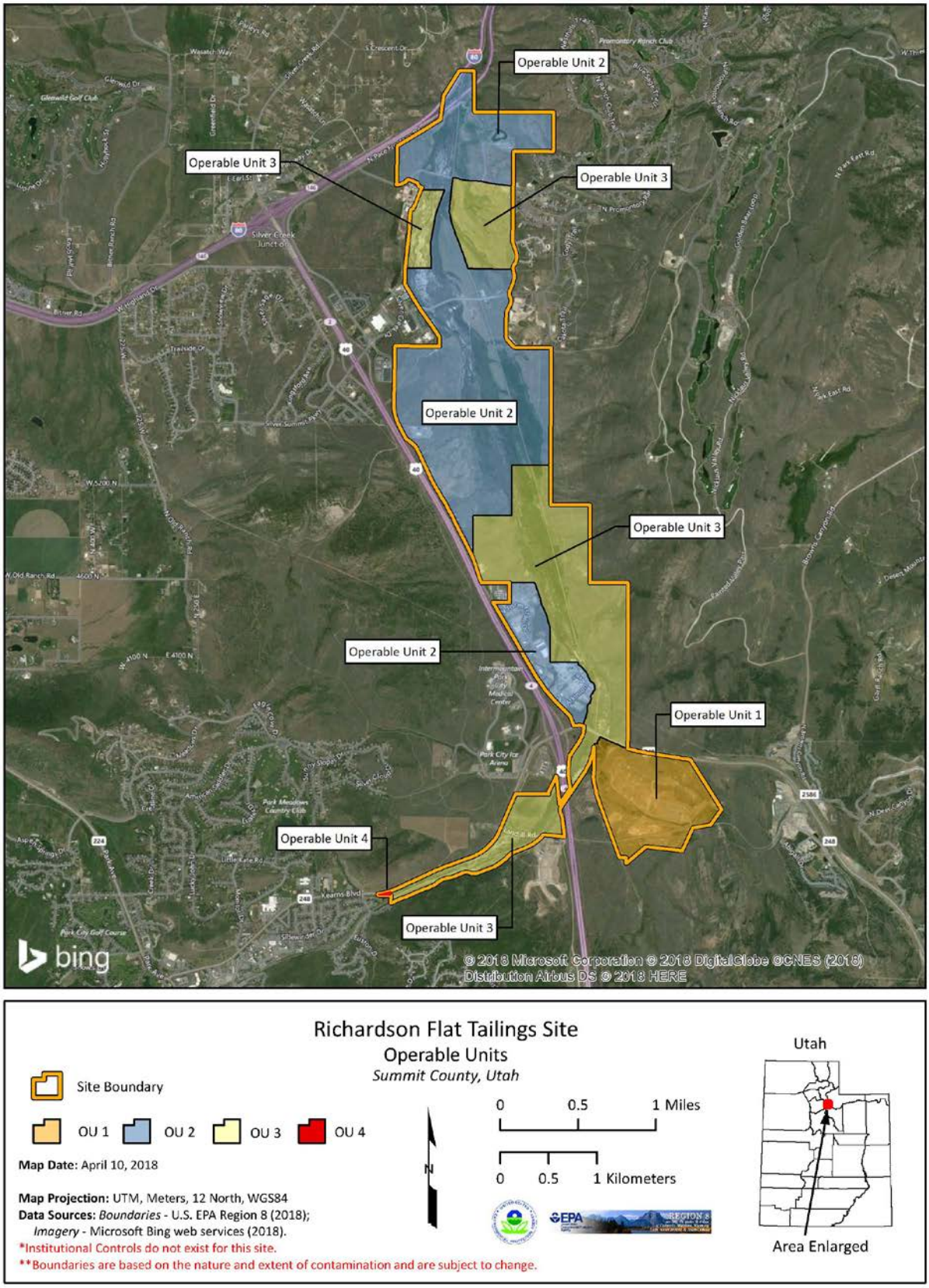
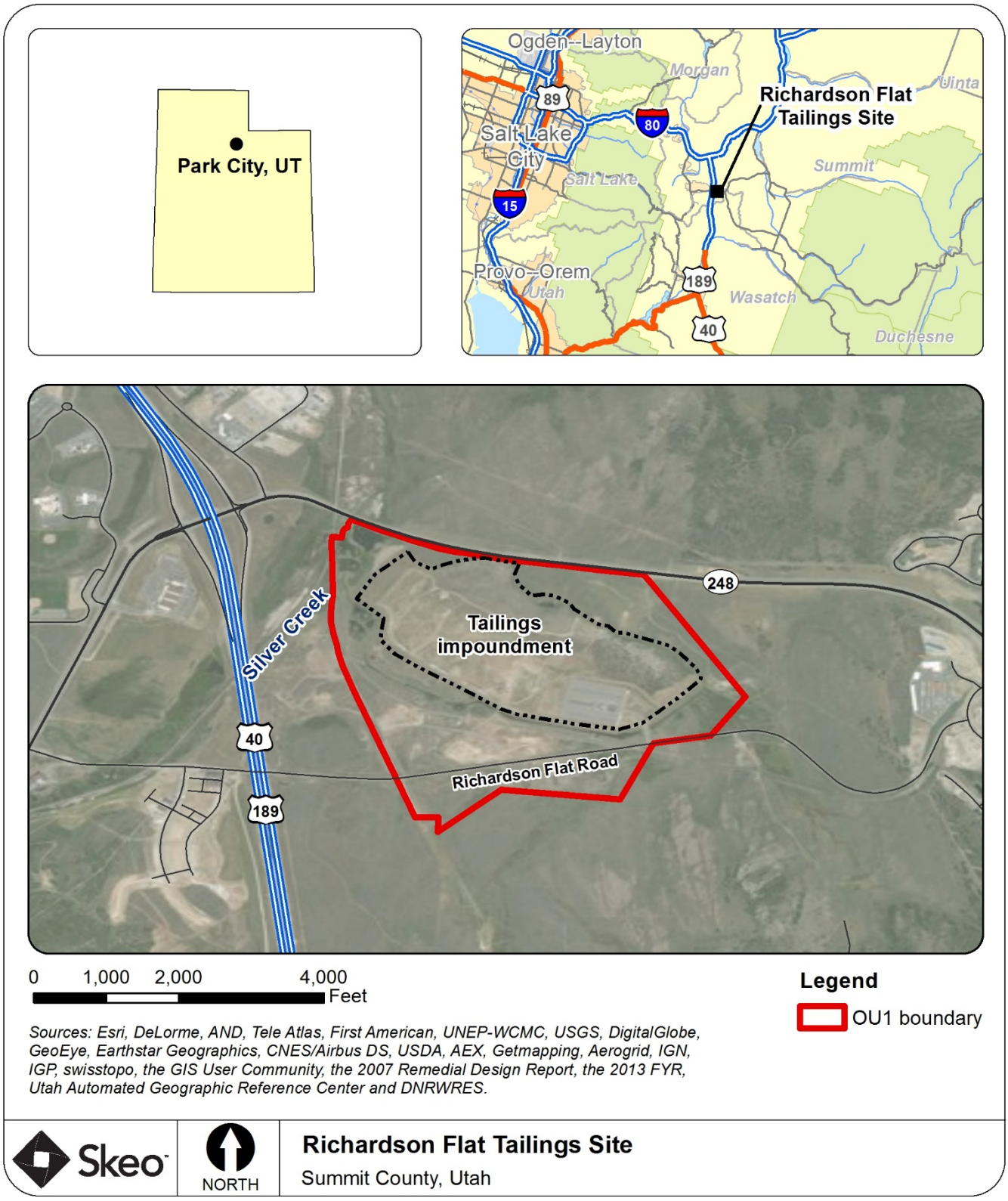


Figure 2: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site

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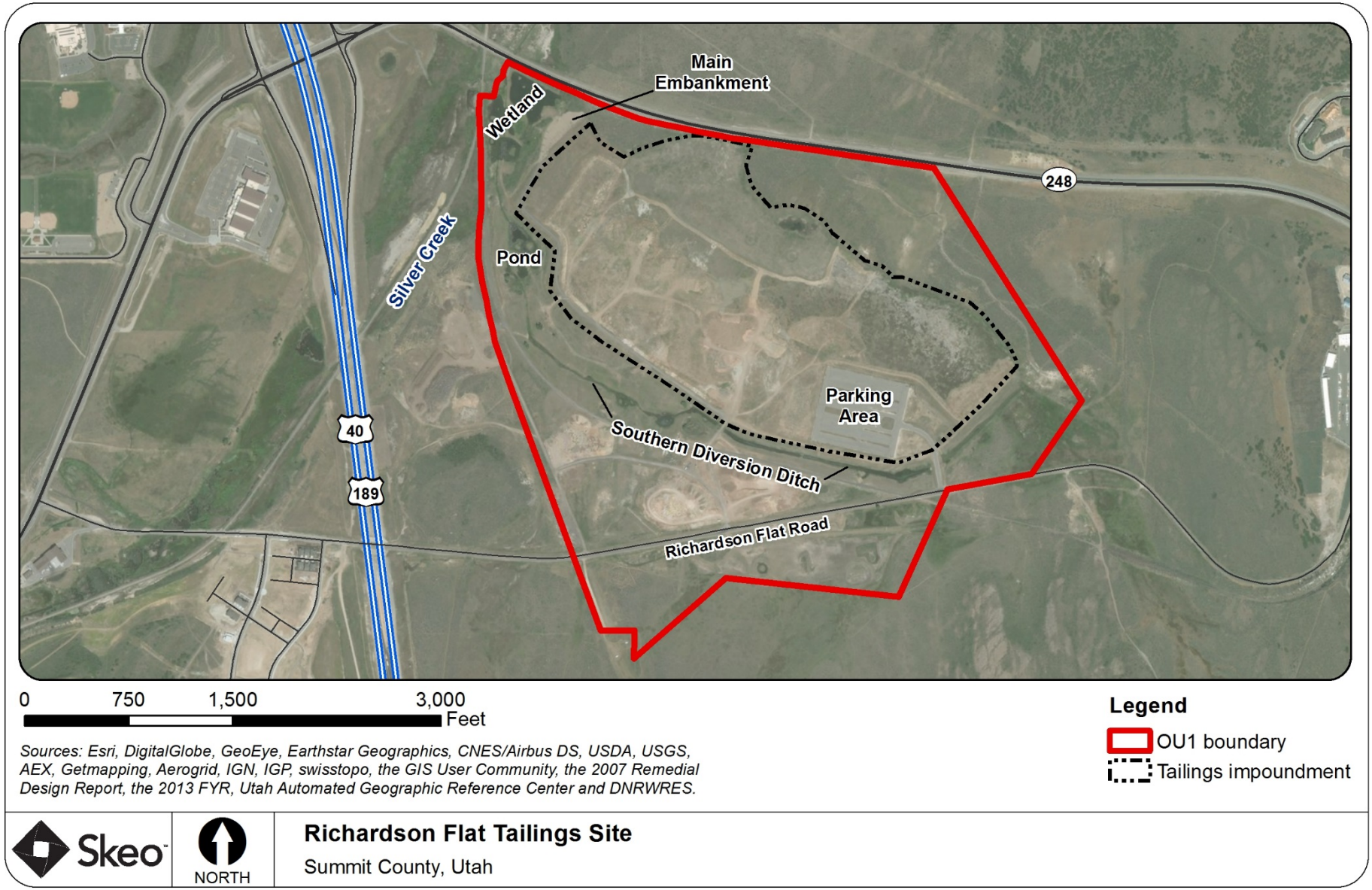
Figure 3: Detailed Map of OU1



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Richardson Flat Tailings		
EPA ID: UTD980952840		
Region: 8	**State:** Utah	**City/County:** Park City/Summit
SITE STATUS		
NPL Status: Proposed		
Multiple OUs? Yes	**Has the Site achieved construction completion?** No	
REVIEW STATUS		
Lead agency: EPA		
Author name: Rob Parker with contractor support provided by Skeo		
Author affiliation: EPA Region 8 and Skeo		
Review period: 5/31/2017 – 3/14/2018		
Date of site inspection: 9/21/2017		
Type of review: Statutory		
Review number: 2		
Triggering action date: 3/14/2013		
Due date *(five years after triggering action date)*: 3/14/2018		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA began initial site assessments in 1984. High-volume air sampling at OU1 in 1986 found that arsenic, cadmium, lead and zinc had been released to the air. EPA originally proposed the Site for listing on the National Priorities List (NPL) in 1988. After considering public comment, EPA removed the Site from NPL consideration in 1991. By 1992, the Hazard Ranking System (HRS) had been revised, and EPA again proposed the Site for listing on the NPL. Ultimately, EPA decided not to pursue final listing on the NPL, and the Site remains proposed for the NPL.

On September 28, 2000, EPA and UPCM signed an Administrative Order on Consent requiring UPCM to conduct a remedial investigation/focused feasibility study for OU1. Sampling confirmed contamination with heavy metals, primarily zinc, lead and arsenic, in the sediments and surface water of the south diversion ditch, the on-site wetland and Silver Creek. OU1's 2003 baseline human health risk assessment determined there were potential future risks from lead and arsenic to recreational users, the targeted use population. EPA deemed remedial action

was necessary to maintain and improve the soil cover placed on the tailings and to prevent disturbances to the soil cover that could allow for exposure to the underlying tailings.

The ecological risk assessment identified substantial risks to ecological receptors at OU1 from exposure to zinc, cadmium, lead and arsenic found in environmental media at the Site. Exposure pathways included direct contact with the sediments in the south diversion ditch and the wetlands area. These exposure areas also presented risks to ecological receptors through contact or ingestion of surface water and sediment porewater found at the Site.

Response Actions

During the 1990s, prior to the Record of Decision (ROD), UPCM completed voluntary work at OU1, including covering most of the tailings pile with clean, low-permeability soil and reseeding the Site. UPCM also improved the diversion ditch.

EPA selected the final OU1 remedy in the Site's 2005 ROD. To address existing and potential risks, as well as to accommodate the anticipated future recreational and ecological use of OU1, EPA developed nine remedial action objectives (RAOs):

- Reduce risks to wildlife receptors in the wetland area and south diversion ditch such that hazard indexes for lead are less than or equal to 1.
- Ensure that recreational users, including children, continue to have no more than a 5 percent chance of exceeding a blood lead level of 10 micrograms per deciliter from exposure to lead in soils.
- Ensure that recreational users, including children, continue to have no more than 1×10^{-4} chance of contracting cancer from exposure to arsenic in soils.
- Eliminate the risk of catastrophic failure of the tailings impoundment.
- Ensure that surface water discharged from the Site meets applicable Utah water quality standards.
- Eliminate the possibility of future groundwater use and withdrawal at the Site.
- Allow for a variety of future recreational uses.
- Allow for future disposal of mine tailings from the Park City area within the tailings impoundment until the remedy is complete.
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls that ensure any necessary disturbance at the Site follows prescribed methods.

The selected remedy addressed mine tailings located in several areas of OU1, including the main impoundment, a section south of the diversion ditch, and the wetlands below the embankment. Other media addressed through the selected remedy were sediments and surface water located within the OU1 boundary.

Major components of the remedy include:

- Excavate tailings in critical areas outside the impoundment and place tailings inside the impoundment.
- Augment the soil cover to achieve a depth of at least 18 inches of soil (containing less than 500 mg/kg lead) above tailings.
- Allow for placement of additional mine waste from the Silver Creek watershed within the impoundment which, upon completion, will require 18 inches of cover.
- Cover sediments in diversion ditch with clean fill.
- Excavate contaminated sediments and soils in the wetland below the embankment and place sediments inside the impoundment. A sediment remediation goal of 310 milligrams per kilogram (mg/kg) lead was established.
- Fortify the existing embankment to prevent catastrophic failure.
- Implement institutional controls (easements and land use restrictions) to protect soil cover and prevent groundwater use.

- Monitor surface water. Water quality samples were collected at the mouth of the diversion ditch quarterly for two years after construction was completed to ensure that discharges into Silver Creek met applicable water quality standards. (See Appendix H)

As discussed previously, the OU1 ROD contemplated the consolidation of mine wastes at OU1 from other cleanup locations in the Silver Creek watershed. Certain areas of OU1, including F-2 and F-3, have a temporary 6 inch soil cover to facilitate further consolidation while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material. Furthermore, the OU1 Consent Decree (CD) authorized, until EPA issues the Certificate of Completion, UPCM to accept mine waste, subject to EPA written approval. EPA last provided this approval in 2010. Appropriate cover material, as required by the ROD, will be placed prior to issuance of a Certificate of Completion. As part of a separate, EPA lead time critical removal action at a nearby school, additional off-site lead-contaminated materials were placed and covered in the impoundment in 2016. Additional soils that have been brought on-site to be used as future cover or fill material have been screened at 500 mg/kg lead, if originating from potentially contaminated areas, to ensure compliance with the ROD.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater that limits migration to deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site. Regardless, on-site shallow groundwater contains metals at concentrations that exceed drinking water standards. Groundwater use at the Site will be restricted through institutional controls to ensure no unacceptable exposures.

Status of Implementation

UPCM initiated the OU1 remedial design on August 7, 2007, and completed it on October 7, 2007. Remedial action began on February 7, 2008. Remedy construction at OU1 was completed by UPCM, with EPA oversight, and included consolidating tailings material within the main impoundment, installing a wedge buttress to support the main embankment, and removing sediments in the wetland area. The remedial activities occurred in a phased approach, based on the tasks described in the remedial design (Figure C-1). In 2011, UPCM completed planned construction activities for OU1, except for the additional cover material in certain locations where only temporary cover currently exists. Additional cover material will be needed in these locations once it is determined consolidation of mine waste material is complete or no longer necessary.

The main embankment fortification consisted of constructing a wedge buttress in 2008, in accordance with a 2001 slope stability evaluation. From 2008-2011, all tailings in critical areas outside the impoundment were excavated and moved inside the impoundment (see Appendix C for maps of removal areas). Approximately 46,000 cubic yards of contaminated material were removed from the embankment wetland. Wetland restoration consisted of grading and revegetation with appropriate plant species. As required by the Remedial Design/Remedial Action Plan, confirmation sampling verified that soils remaining in each source removal area and soils placed as cover contain less than 500 mg/kg lead and 100 mg/kg arsenic. Lead concentrations for source removal in the embankment wetland were set at 500 mg/kg for soils and 310 mg/kg for sediments. Sediment sampling results from 23 source removal lead confirmation samples collected in the embankment wetland area averaged 43.1 mg/kg, ranging from 33 to 126 mg/kg. Post-construction measurements of the impoundment indicated that all areas measured contain at least 18 inches of clean fill material, with the exception of areas F-2 and F-3. Tailings excavated from the embankment area and additional regional sources were placed in impoundment areas F-2 and F-3 and covered with a temporary 6-inch soil cover while EPA continues OU2 and OU3 site characterization to determine if additional material will be brought to these areas prior to placing the full 18 inch cover material.

Surface water monitoring was performed to monitor migration of metals from the Site. The results of all samples were significantly below the TMDL limits for the Silver Creek Watershed. (See Appendix H)

Institutional Control (IC) Review

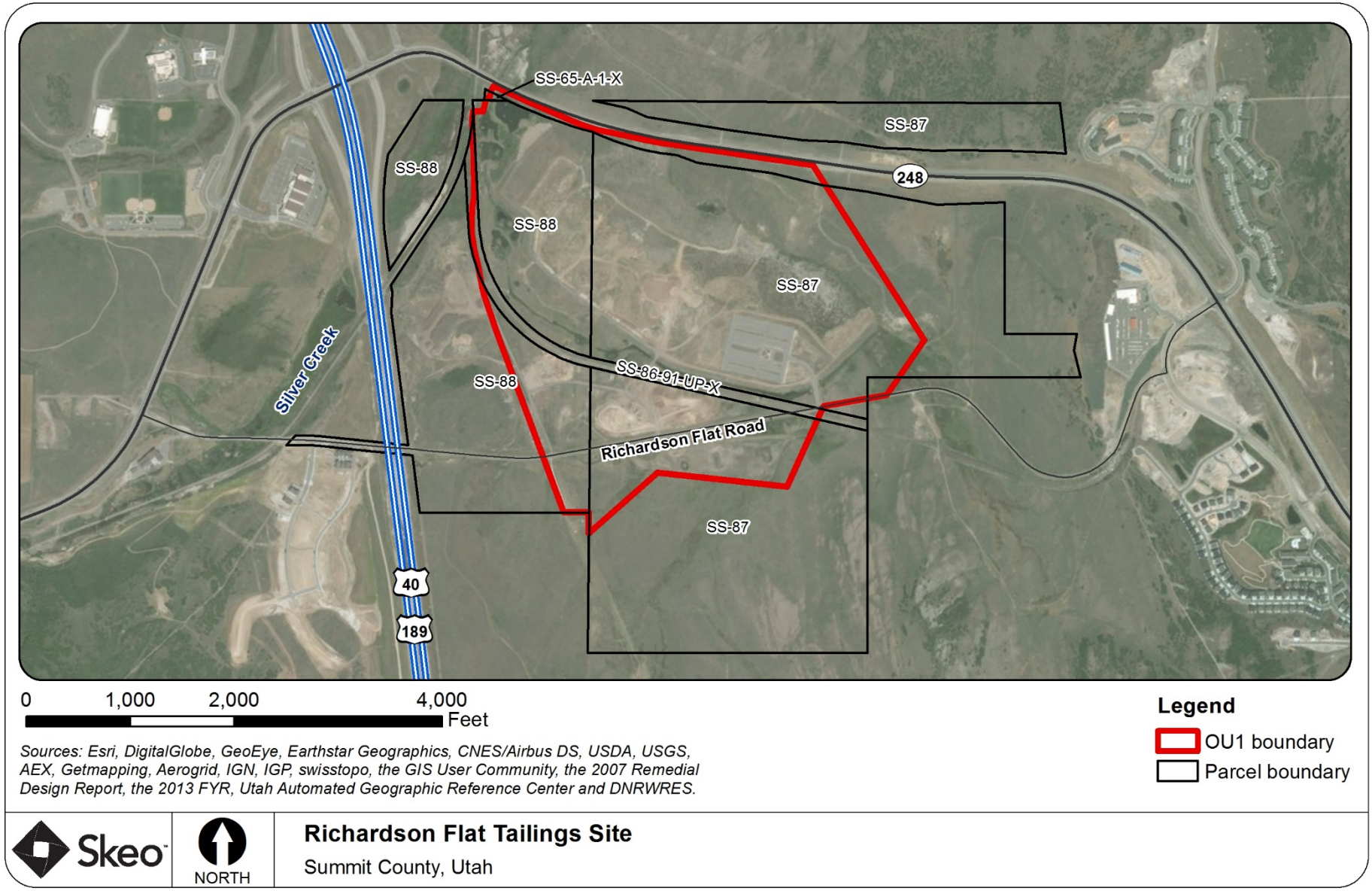
Institutional controls called for in the ROD are not yet in place (Table 1). The property is currently zoned as rural residential. The ROD states that two primary institutional controls will be implemented to mitigate potential risks and ensure the long-term protectiveness of the remedy:

- *Groundwater use restrictions within the site boundary:* the goal is to preclude any use of shallow groundwater, as well as eliminate any significant alteration of the existing hydrogeologic system, such as mixing of aquifers.
- *Land use restrictions within the site boundary:* the goal is to preclude non-recreational uses and to ensure that the soil cover, or similar protections, are maintained.

Table 1: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas That Do Not Support UU/UE Based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently restrict new groundwater well installation and use of shallow groundwater within the impoundment area.	To be determined
Soils	Yes	Yes	Site area within Parcels SS-87 and SS-88	Permanently limit the land use to open space with wildlife habitat and non-motorized recreational use. Permanently preserve the low-permeability tailings cap and specify the ongoing erosion control and maintenance requirements. Permanently prohibit unauthorized excavation at the Site and of the cap material.	To be determined

Figure 4: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation and Maintenance (O&M)

OU1 is still in remedial action pending additional cover material in areas where future consolidation may occur. Some O&M activities are underway, including monitoring of site conditions, erosion, vegetation condition, water runoff and invasive plant management, as needed. Long-term surface water monitoring is not required pursuant to the ROD.

III. PROGRESS SINCE THE PREVIOUS REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2013 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Short-term Protective	The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings have been contained through capping with clean soil and surface waters exiting the Site meet existing water quality standards. However, in order for the remedy to be protective in the long term, the following action needs to be taken: implementation of institutional controls that include restrictions on future land and groundwater use.

Table 3: Status of Recommendations from the 2013 FYR

Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
Institutional controls called for in the ROD are not yet in place.	Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used. EPA and the PRP will identify the appropriate control instrument and the PRP will be responsible for implementation.	Under Discussion	EPA is working with the PRP to develop an institutional control plan.	NA

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Community Involvement and Site Interviews

A public notice was published in the *Park Record* newspaper, on10/25/2017 (Appendix D). It stated that the FYR was underway and invited the public to submit any comments to the EPA. The results of the review and the report will be made available at the Site's information repository, Park City Public Library, located at 255 Park Avenue, Park City, Utah 84060.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy implemented to date**.** The interviews are summarized below and included in Appendix E.

Mo Slam, UDEQ: Mr. Slam is the project manager for UTDEQ. He believes the PRPs have done a good job with the remedy construction and maintenance to date. However, he noted the long-term use and maintenance of the Site need to be clarified.

Chris Cline, U.S. Fish and Wildlife Service (USFWS): Ms. Cline is responsible for the Natural Resource Damage Assessment and Restoration for the Silver Creek watershed. She indicated the Site looks good, notably the established native vegetation and erosion controls. However, she expressed concern that not all areas of the Site were adequately sampled during the remedial design and that the potential for ecological exposure remains on unexcavated areas of the Site.

Jim Blankenau, Park City: Mr. Blankenau is the Environmental Regulatory Program Manager for Park City. He is aware of the Site. He is not aware of any issues.

Kerry Gee, UPCM: Mr. Gee is the project manager for UPCM. He believes the remedy is performing as intended and that quality habitat is now established on-site. He reported no issues at the Site.

Jami Brackin, Summit County: Ms. Brackin is the Summit County Deputy Attorney. She has been aware of the Site since 2004 and is not aware of any issues. She noted that, in the absence of institutional controls, current zoning does not prevent development at the Site.

Data Review

Surface Water
UPCM collected surface water samples annually from 2008 to 2013 and again in 2015 as part of OU2 and OU3 investigations to determine the effects of remediation on surface water quality. Surface water samples were collected primarily from the main flow of the embankment wetland, as well as at various points of the southern diversion ditch. The results of all samples were consistently below the surface water standards for the Silver Creek watershed (Appendix H).

Review of Cover Material Sampling
During her interview regarding the Site, Ms. Cline expressed concern that not all areas of the Site were adequately sampled during the remedial design, specifically a seasonal wet area on the northern portion of the impoundment. Subsequent to the interview with Ms. Cline, EPA reviewed the Phase 2 Task Completion Report, which included an evaluation of cover material in the area referenced by Ms. Cline. As reported in the Phase 2 TCR, UPCM collected samples at 6, 12 and 18 inches from 20 locations within area F-8. All samples were analyzed with XRF and reported to be below 500 mg/kg lead.

Site Inspection

The Site inspection for OU1 took place on 9/21/2017. Participants included EPA RPM Robert Parker, EPA CIC Katherine Jenkins, Mo Slam, Doug Bacon and Dave Allison from UTDEQ, Chris Cline from the USFWS, Alan Jones from the Bureau of Land Management, Jim Blankenau from Park City, Kerry Gee from UPCM, and Ryan Burdge and Treat Suomi from EPA FYR contractor Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The Site inspection checklist and photographs are included in appendices F and G.

Site inspection participants drove and walked relevant portions of the OU, including the stormwater diversion features, capped areas, the tailings impoundment and buttress, the wetland area, and the parking area. All areas were in good condition. Vegetation in the cover areas and wetlands appeared to be well established. The PRP reported no issues related to erosion or trespassing, but noted that invasive plants are increasingly present and increasingly challenging to manage.

Following the Site inspection, Skeo staff visited the designated document repository at the Park City Public Library. Site documents were unavailable at the time, but will be provided following completion of this FYR.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes, the OU1 remedy is performing as intended. Tailings outside of the impoundment have been excavated and placed under clean fill in the impoundment and the main embankment has been stabilized. Revegetation growth on remediated areas has performed well and the constructed wetland areas support healthy vegetation. Flora and fauna have recovered to levels that indicate that some natural resource services have been restored to the Site. Sampling indicated surface water exiting the Site is below Silver Creek water quality parameters.

The OU1 RI concluded that OU1 does not present a risk to off-site groundwater due to a confining layer below contaminated groundwater to protect deeper aquifers and the relative contaminant concentrations between shallow groundwater present at OU1 and higher concentrations present in the nearby Silver Creek alluvial groundwater. The potential for contaminant contribution from OU1 to Silver Creek alluvial groundwater should be re-evaluated in future FYRs due to ongoing remediation efforts within OU2 and OU3 at the Site.

Institutional controls to protect the soil cover and restrict groundwater use have not yet been implemented. The property is currently zoned as rural residential, which limits but does not prohibit residential development. However, the Site is owned by the PRP and public access is restricted through fencing, signage and an on-site presence. Recorded and legally enforceable restrictions as called for in the ROD are necessary to ensure no potential exposures in the future.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes. The exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the OU1 remedy selection are still valid. The surface water exiting OU1 has consistently been below the relevant Silver Creek water quality standards.

The cleanup goal for lead of 500 mg/kg is based on anticipated recreational use. The remedy anticipated a future recreational use of the Site and public access to the Site is currently restricted to the paved parking area.

The human health cleanup levels for the Site were based on EPA guidance which recommended 10 µg/dL as the blood lead level of concern. In December 2016, EPA issued a memorandum which recommended that EPA consider the current scientific literature that suggests adverse health effects may be associated with blood lead levels below µg/dL. EPA Region 8 will continue to use the current EPA policy, until the Agency finalizes and update its policy."

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR:
None

Issues and Recommendations Identified in the FYR:				
OU(s):	**Issue Category: Institutional Controls**			
	Issue: Institutional controls called for in the ROD are not yet in place.			
	Recommendation: Implement necessary institutional controls to ensure the soil cover is protected and the shallow groundwater is not used.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Party Responsible**	**Oversight Party**	**Milestone Date**
No	Yes	PRP	EPA	5/31/2019

OTHER FINDINGS

An additional recommendation was identified during the FYR. This recommendation does not affect current and/or future protectiveness.

- Although some maintenance activities are performed, a final O&M plan has not been prepared for OU1.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)		
Operable Unit: OU1	*Protectiveness Determination:* Short-term Protective	*Planned Addendum Completion Date:*
Protectiveness Statement: The remedy at OU1 currently protects human health and the environment because tailings and sediments have been excavated, tailings are contained through capping with clean soil and surface waters exiting the Site are below water quality standards. However, for the remedy to be protective in the long term, the following action needs to be taken: implement institutional controls that include restrictions on future land and groundwater use.		

VIII. NEXT REVIEW

The next FYR Report for the Richardson Flat Tailings Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

2005. United States Environmental Protection Agency, Record of Decision, Richardson Flat Tailings, EPA ID UT980952840.

2007. Resource Management Consultants, Inc., Remedial Design/Remedial Action Plan (RD/RA), Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Field Construction Plan for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2007. Resource Management Consultants, Inc., Phase 1 Task Completion Report, Richardson Flat, Site ID Number: UT980952840.

2008. Resource Management Consultants, Inc., Phase 2 Task Completion Report for 2008 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2009. Resource Management Consultants, Inc., Phase 3 Task Completion Report for 2009 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2010. Resource Management Consultants, Inc., Phase 4 Task Completion Report for 2010 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Phase 5 Task Completion Report for 2011 Construction Season, Richardson Flat, Site ID Number: UT980952840.

2011. Resource Management Consultants, Inc., Task Area Map, Richardson Flat, Site ID Number: UT980952840.

2012-2017. United Park City Mines Quarterly Status Reports, Richardson Flat, Site ID Number: UT980952840

2013. United States Environmental Protection Agency, Five-Year Review, Richardson Flat Tailings, EPA ID UT980952840.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination	October 1, 1984
PRP UPCM initiated the Site's remedial investigation/feasibility study	September 29, 1989
EPA proposed the Site for listing on the NPL	February 7, 1992
PRP UPCM completed the Site's remedial investigation/feasibility study	July 1, 1992
The EPA signed the Site's ROD for OU1	July 6, 2005
PRP UPCM initiated the Site's remedial design for OU1	August 7, 2007
PRP UPCM completed the Site's remedial design for OU1	
PRP UPCM initiated the remedial action for OU1	February 7, 2008
PRP UPCM and the EPA signed an administrative settlement agreement and order on consent for a remedial investigation/focused feasibility study for OU2	September 29, 2009
EPA approved completion of construction activities outlined in the remedial design	November 2011
EPA signed the Site's first FYR Report	March 14, 2013

APPENDIX C – SITE MAPS

Figure C-1: Remedial Design Task Areas

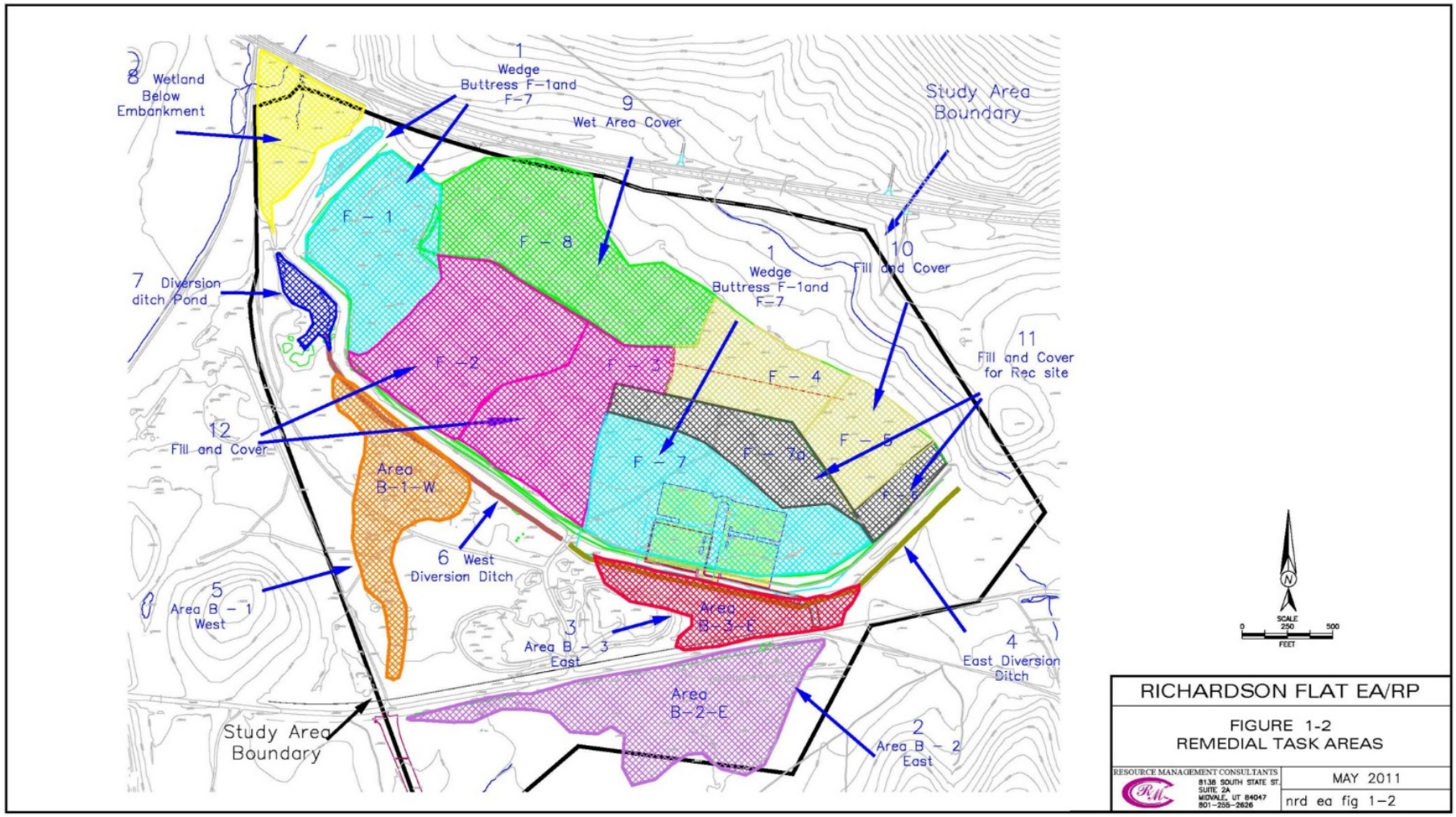


Figure C-2: 2008 Phase 2 Completion Map

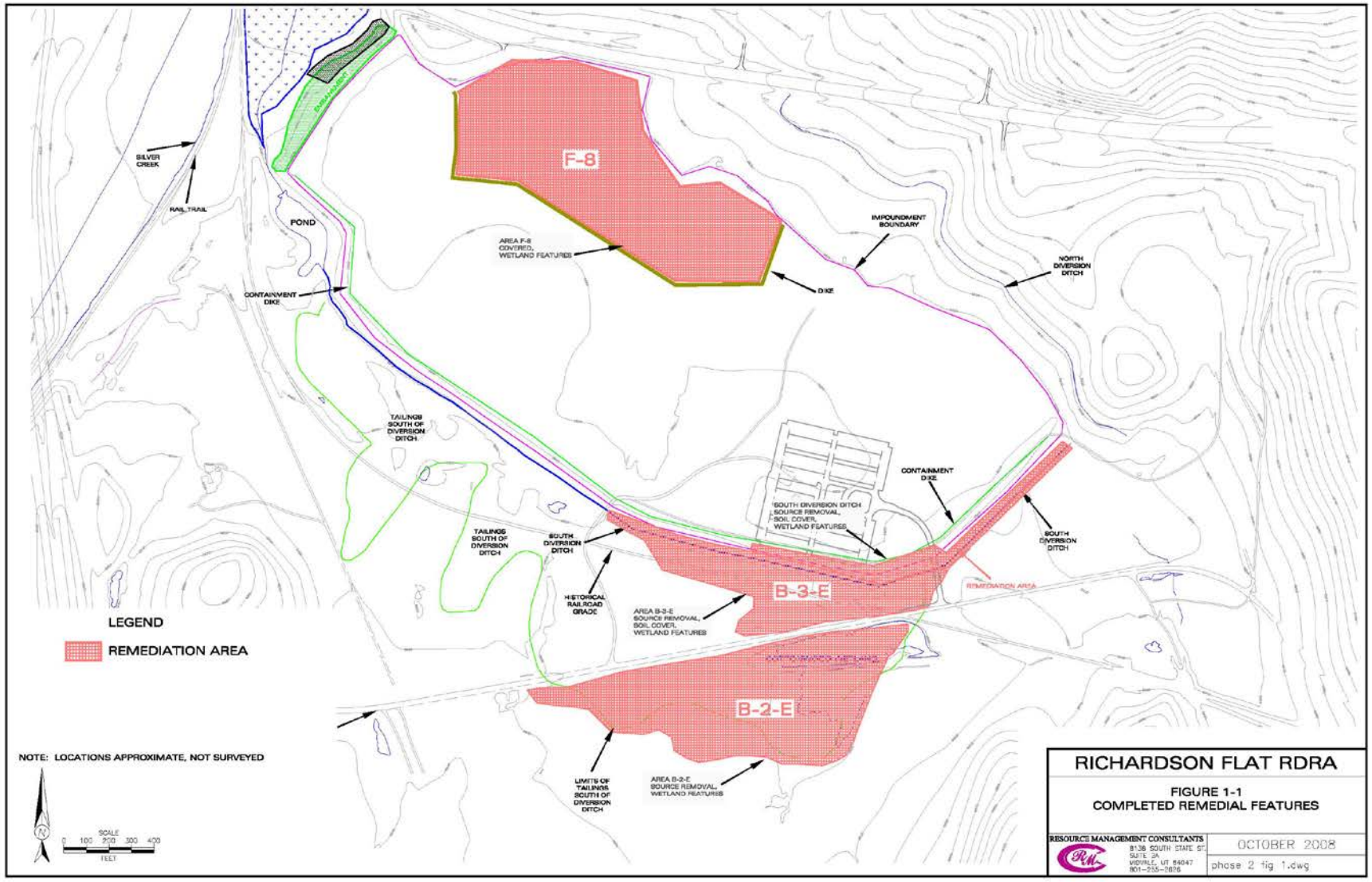


Figure C-3: 2009 Phase 3 Completion Map

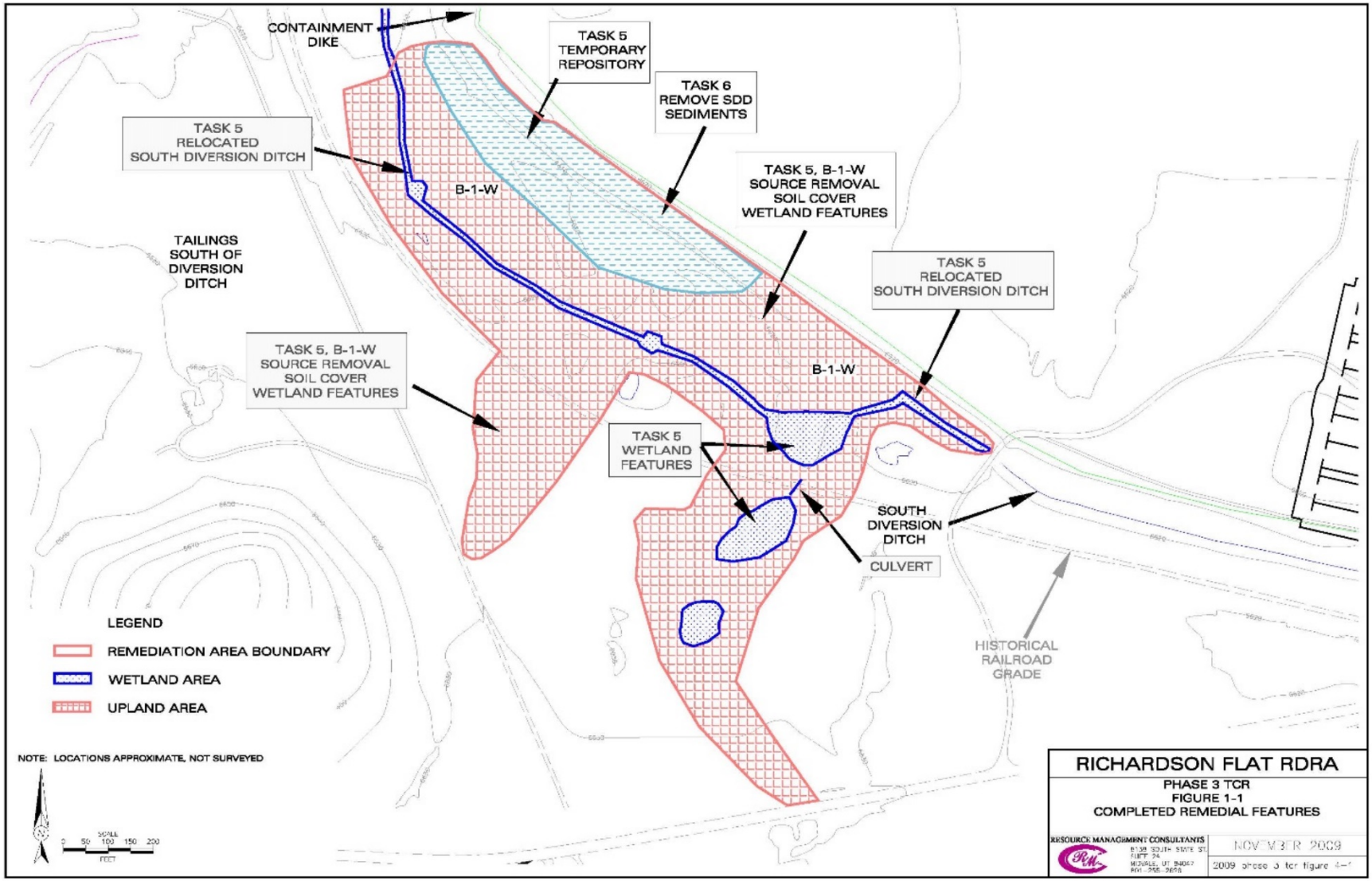


Figure C-4: 2010 Phase 4 Completion Map

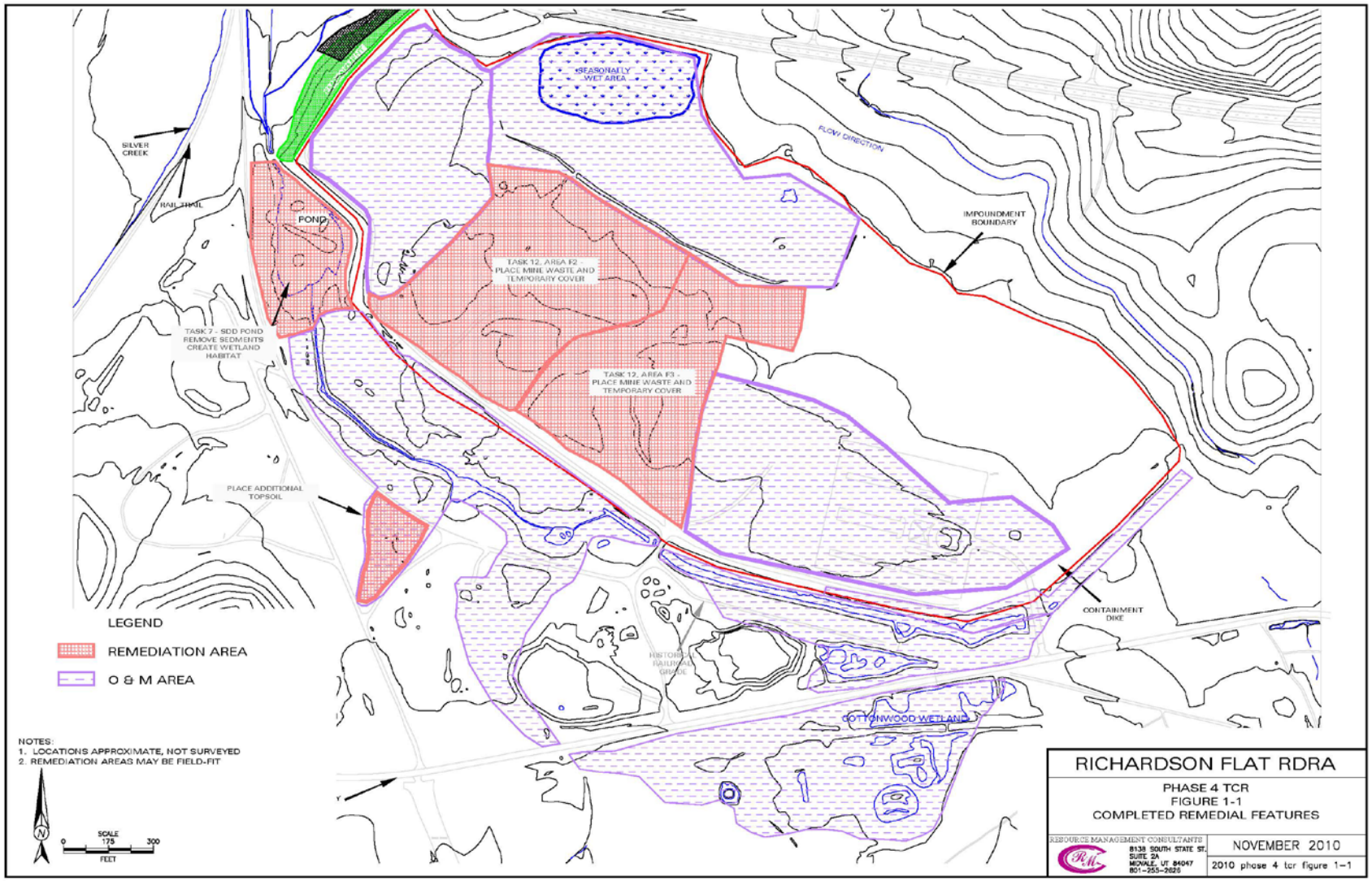
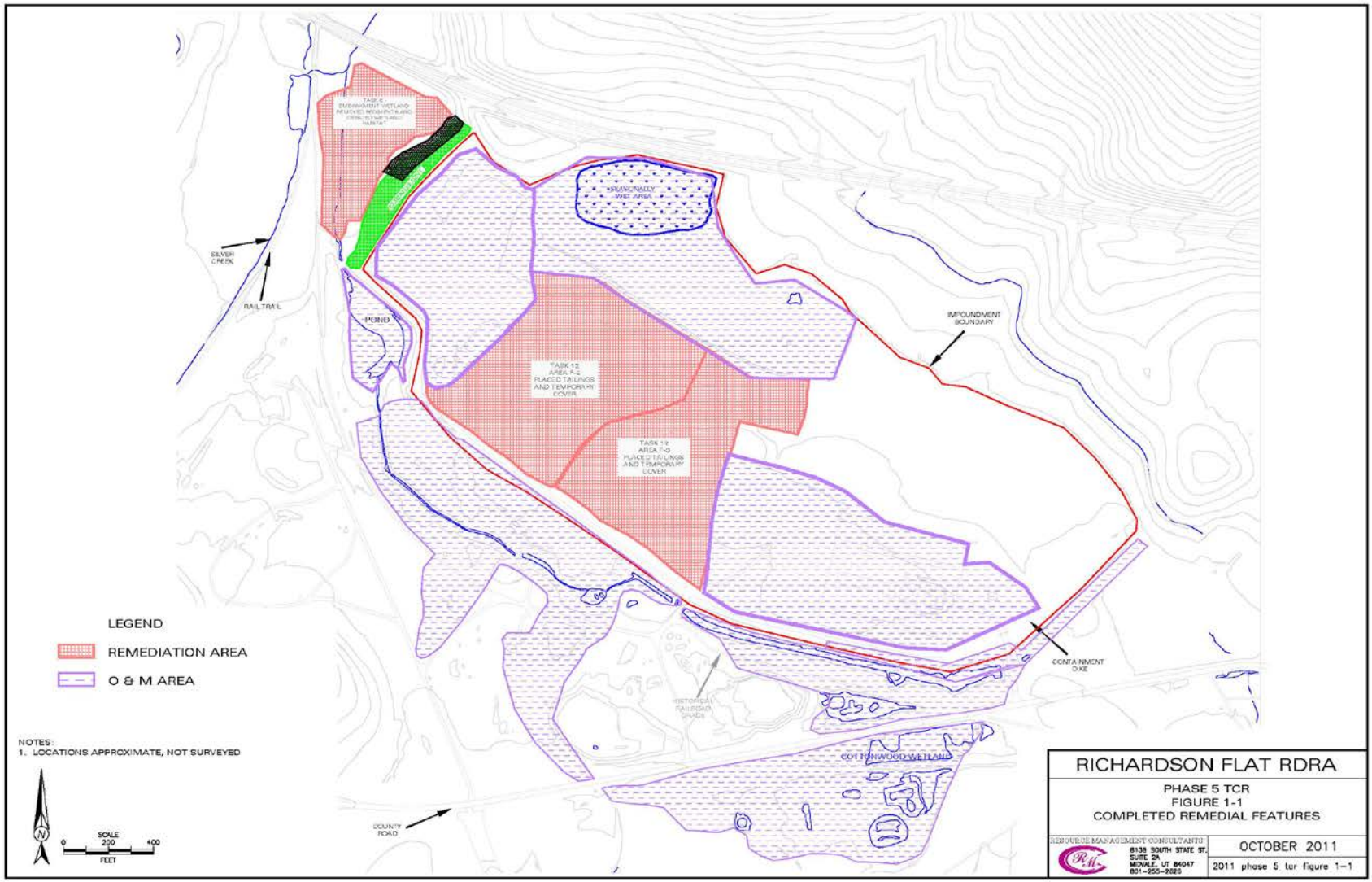


Figure C-5: 2011 Phase 5 Completion Map



APPENDIX D – PRESS NOTICE

EPA United States Environmental Protection Agency

The U.S. Environmental Protection Agency, Region 8
Announces the Second Five-Year Review for the
Richardson Flat Tailings Superfund Site, Park City, Utah

The U.S. Environmental Protection Agency (EPA), in cooperation with the Utah Department of Environmental Quality (UTDEQ), is conducting the second five-year review for operable unit 1 (OU1) of the Richardson Flat Tailings Superfund site in Park City, Utah. The purpose of the five-year review is to make sure that the cleanup actions completed to date are adequately protecting human health and the environment. The five-year review for OU1 is scheduled to be completed by February 2018.

The 160-acre site is located southeast of the intersection of State Highway 248 and U.S. Highway 40 approximately 2 miles northeast of Park City, Utah. EPA proposed the Site for listing on the National Priorities List (NPL) in 1992.A tailings dam and impoundment on site were used to capture and hold mill tailings from 1953 until 1981, resulting in contamination of soil, groundwater, surface water and air.

EPA and UTDEQ selected a remedy in a 2005 Record of Decision (ROD). Cleanup activities at OU1 include excavation, containment, future disposal of mine tailings from the Park City area within the tailings impoundment, placement of restrictions on future land and groundwater use, and surface water monitoring.

We want to hear from you! Community members are always encouraged to share information that may help EPA and UTDEQ make determinations regarding the protectiveness and effectiveness of the remedies at the site. Please contact Katherine Jenkins if you would like to send your comments or be interviewed.

Share input with us by mail or email:

Katherine Jenkins, EPA Community Involvement Coordinator
Phone: 303-312-6351 • Email: jenkins.katherine@epa.gov
Mailing Address: U.S. EPA Region 8 (EPR-SR)
1595 Wynkoop Street, Denver, CO 80202-1129

Additional site information is available at:

EPA Superfund Records Center
1595 Wynkoop Street
Denver, CO 80202-1129
303-312-7273

Or online at: https://www.epa.gov/superfund/richardson-flat

2013 Five-Year Review:

https://semspub.epa.gov/work/08/1260303.pdf

2005 Record of Decision:

https://semspub.epa.gov/work/08/2035008.pdf

APPENDIX E – INTERVIEW FORMS

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Kerry Gee **Affiliation:** UPCM
Subject Contact Information:
Time: 12:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Potentially Responsible Parties (PRPs), Property Owner**

1. What is your overall impression of EPA oversight on the remedial activities at the Richardson Flat tailings impoundment?
   EPA oversight at OU1 is fine. There is not very much to reference as this is the current RPM's second trip to the Site. There is not much is going on, so the oversight is adequate.

2. What have been the effects of the Richardson Flat tailings impoundment on the surrounding community, if any?
   For last five years, we have not brought out any waste except for EPA's waste from the middle school. That was an impact. At one point the community relied on Richardson Flat as a place to dump various soil wastes, but that stopped in 2010. I believe that ending was a major impact.

3. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   I think the remedy is fine. It is working and the Site provides good habitat. This was the first year that we had a significant winter precipitation and the on-site vegetation was hearty this spring. We observed a lot of waterfowl and birds this year. We continue to need to address beaver activity and invasive plants.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?
   No.

5. What is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision?
   Current land use is UPCM dealing with granular materials coming into the Site that are not contaminated. The RDRA has a closure plan, including financial assurance, about $1 million to close it out as a repository.

6. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   We always trespassing issues, mostly kids motorbiking south of the road when the water is low. In the past we have caught those people. A sheepherder south of the road informs us about any trespassing issues.

7. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.
   No, we do not have a continuous O&M actions. We have a single O&M staff who is there once per week and sprays invasive plants when she can. If there were a program, we would have to hire people to do that. I am on-site one time per week. The soil loader is there pretty much every day.

8. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.
   We do not have anybody out there all the time. We have not sampled since 2015 for the OU2/3.

9. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA better convey site-related information in the future?
   No. I would like to be informed when the RPM is going to be in town.

10. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?
    We need more staff but are currently unable to hire right now.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Mo Slam **Affiliation:** UT DEQ
Subject Contact Information:
Time: 1:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   It is fairly good. So far they have done a good job. They have done the maintenance so far, but we do not yet know the reuse

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   It is currently protective of human health and the environment.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, none at all.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   The RPM and I have ongoing communications. The results are favorable.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   There are no state changes.

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   UPCM is managing the Site property and controls well. There is a gate, fence, signs. No one is getting on site and being exposed.

7. Are you aware of any changes in projected land use(s) at the Site?
   The plans are not concrete. The Site is a work in progress, so the reuse is not and cannot yet be known. It is all still ongoing.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   I have concerns about long-term O&M. UPCM has done good so far, but now they are having financial problems. Because of this, we do not know how they will manage long-term. Maintenance could be in limbo and it is not clear what will happen in the future.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Chris Cline **Affiliation:** USFWS
Subject Contact Information:
Time: 1:30 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Government Agency

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?
   Overall impression is it is doing pretty well for limping along on three legs. Going out there today, we saw there is the revegetation and erosion controls part of the remedy, which overlaps with the restoration. I am impressed with the veg and overall lack of weeds. Good cover of native vegetation throughout. Seems like with the limited resources, from the NRD value standpoint, it looks pretty good. Site is starting to get thru first stage of succession, indicating the Site is stable enough. But I am concerned about the future.

   I have been involved in NRDA with UPCM. OU1 outstanding issue: we were in negotiations for NRDA, but the PRP went ahead and did what they wanted to. They did good work and now want credit for it, said they went above and beyond requirement, so did a "desktop assessment" and made an economic model. Earned a credit, but they need to maintain and were supposed to develop a monitoring plan but did not. The model assumed perpetuity for restoration. USFWS needs something saying it is perpetuity, but UPCM wants to reserve right to develop. UPCM was supposed to get back with a map of what would not be developed. In theory, they have and want the credits, but FWS not willing to give it yet. In the future, it depends not only on UPCM, but also City and County. Who owns, who maintains, etc.

2. What is your assessment of the current performance of the remedy in place at the Richardson Flat tailings impoundment?
   In the parts that are covered and vegetated, it looks pretty good. I am still concerned about area of possible future impoundment, fact it is little cover and a depression and seasonal wetland that was never sampled. The samplers did not want to get feet wet, so it was not sampled during the remedial investigation. That area is used by wildlife during spring when there is water, so there is a potential exposure. The idea seemed to be it was ok because it was to be filled and covered, but that has yet to happen. Silver Creek is pretty well segregated from the wetland, which is good. Visually looks good.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?
   No, but I am not in that loop. In the past, kite-skiing. ATV use has been an issue in the past.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.
   I have no broad communication with community. I participated in some stakeholder meetings with the previous RPM and spoke about Richardson Flat as an example of restoration for OU2/3. Did some Rich Flat fact sheets that give history of site, cleanup process, restoration, etc. The community meeting was probably four years ago.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No. I would be a lot more concerned about local zoning requirements

6. Are you comfortable with the status of the institutional controls at the Richardson Flat tailings impoundment? If not, what are the associated outstanding issues?
   No. Long-term oversight and ownership/management. Security is a secondary concern. Also concerned lack of sufficient cap in some areas.

7. Are you aware of any changes in projected land use(s) at the Site?
   I am aware there may be changes, but it is not clear where it is headed.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Richardson Flat tailings impoundment's remedy?
   Not really. The endpoints of the remedy, should continue. For site management, invasive species are starting to come in, but the PRP are financially limited. They may need to be handled differently.

Richardson Flat Tailings Site **Five-Year Review Interview Form**

Site Name: **Richardson Flat Tailings** **EPA ID No.:** **UTD980952840**

Interviewer Name: **Katherine Jenkins** **Affiliation:** **EPA**
Subject Name: **Jami Brackin** **Affiliation:** **Summit County**
Subject Contact Information:
Time: **2:30 p.m.** **Date:** **09/21/2017**
Interview Location: **Park City Library**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Local Government**

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes. My role began 2004 with the assessment of Lower Silver Creek, and I became aware of the OU1. I became a go-to person for the county. We have monitored the cleanup, capacity, and restoration. As of 2010, we thought we knew the remaining capacity, EPA sent a letter in 2010 saying UPCM could take XX yards, but not more. The County is interested in expanding the overall acreage of UPCM property. We all want a way for Park City to not have to bring soils to Tooele. Summit County has capacity for OU2/3. As long as we all have capacity, then it is ok. All needs to be considered since they are related.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   EPA has been good about keeping us informed. I refer people to the EPA webpage. It is helpful. People can find info, the orders, sampling, etc.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Current zoning is 1 [residence] per 20 [acres]. So, it is developable, in theory. But, the current county general plan there is the potential for some multimodal development in the western corner [outside the repository] to transfer people out near that intersection. The total property is 640 acres for UPCM.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   There are a lot of ideas. Map in the general plan that shows the Site.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   No, actually OU1 has not had issues. No complaints for that property.
6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   Not that I'm aware.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   For the activities on site, info is so. For county, I just ask UPCM. It would be great if the webpage had all the info

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

Richardson Flat Tailings Site — Five-Year Review Interview Form

Site Name: Richardson Flat Tailings **EPA ID No.:** UTD980952840

Interviewer Name: Katherine Jenkins **Affiliation:** EPA
Subject Name: Jim Blankenau **Affiliation:** Park City
Subject Contact Information:
Time: 2:00 p.m. **Date:** 09/21/2017
Interview Location: City Hall

Interview Format (circle one): **In Person** Phone Mail Other:

Interview Category: Local Government

1. Are you aware of the former environmental issues at the Richardson Flat tailings impoundment (Site)and the cleanup activities that have taken place to date?
   Yes.

2. Do you feel well-informed regarding the Richardson Flat tailings impoundment activities and remedial progress? If not, how might EPA convey site-related information in the future?
   I feel much more informed more recently, especially since recent site visits. The website has been updated, which is helpful for me. The OSC website is nice, because it has the documents. I do point people to the website, especially the OSC site. If someone is doing a Phase 1 assessment and Richardson Flat comes up, it helps them to close out the environmental condition.

3. Are you aware of the current land use of the Richardson Flat tailings impoundment? If so, what is the current land use and does it compare to the anticipated land use, specifically open space and recreational use, anticipated in the remedy decision.
   Yes, I am aware of the current land use and the City knows about chance of expansion. I am aware of the parking facility.

4. Are you aware of any changes in projected land use(s) at the Richardson Flat tailings impoundment?
   Not aware of any specific land use changes. County may have more information.

5. Have there been any problems with unusual or unexpected activities at the Richardson Flat tailings impoundment, such as emergency response, vandalism or trespassing?
   Not that I am aware of. We did have to move our telemetry system from the parking area and had to add a repeater due to the taller mounds of staged dirt.

6. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Richardson Flat tailings impoundment remedy?
   No, I am not aware of any.

7. Has EPA kept involved parties and surrounding neighbors informed of activities at the Richardson Flat tailings impoundment? How can EPA best provide site-related information in the future?
   The website is good. Continued active communication. City owns property in OU2/3, which is different. We do get a lot of questions about the dirt piles, including "why can't I take my dirt there." City council would love short videos, and the City could maybe promote it.

8. Do you have any comments, suggestions or recommendations regarding the project?
   No.

APPENDIX F – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site Name: Richardson Flat Tailings	**Date of Inspection:** 09/21/2017
Location and Region: Park City, Utah, EPA Region 8	**EPA ID: UTD980952840**
Agency, Office or Company Leading the Five-Year Review: EPA Region 8	**Weather/Temperature:** 40 degrees, sunny

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☐ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☐ Other: _____
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (check all that apply)

1. **O&M Site Manager** Kerry Gee _____ _____
   Name Title Date
   Interviewed ☐ at site ☒ at office ☐ by phone Phone: _____
   Problems, suggestions ☐ Report attached: _____

2. **O&M Staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone: _____
   Problems/suggestions ☐ Report attached: _____

3. **Local Regulatory Authorities and Response Agencies** (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply.

   Agency UTDEQ
   Contact Mo Slam Project Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency USFWS
   Contact Chris ClineName _____ _____ _____
   Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Park City
   Contact Jim Blankeneau Environmental Regulatory Program Manager _____ _____
   Name Title Date Phone No.
   Problems/suggestions ☐ Report attached: _____

   Agency Summit County
   Contact Jamie Brackin Deputy _____ _____

	Name	Attorney Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
	Agency _____ Contact _____	_____	_____	_____	
	Name	Title	Date	Phone No.	
	Problems/suggestions ☐ Report attached: _____				
4.	**Other Interviews** (optional) ☐ Report attached: _____				
	III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)				
1.	**O&M Documents**				
	☐ O&M manual	☐ Readily available	☐ Up to date	☐ N/A	
	☒ As-built drawings	☐ Readily available	☒ Up to date	☐ N/A	
	☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A	
	Remarks: _____				
2.	**Site-Specific Health and Safety Plan**	☒ Readily available	☐ Up to date	☐ N/A	
	☐ Contingency plan/emergency response plan	Readily available	☐ Up to date	N/A	
	Remarks: _____				
3.	**O&M and OSHA Training Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
4.	**Permits and Service Agreements**				
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Other permits: _____	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				
9.	**Discharge Compliance Records**				
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A	
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A	
	Remarks: _____				

10. **Daily Access/Security Logs** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

IV. O&M COSTS

1. **O&M Organization**

☐ State in-house ☐ Contractor for state

☒ PRP in-house ☐ Contractor for PRP

☐ Federal facility in-house ☐ Contractor for Federal facility

☐ _____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☒ Unavailable

Original O&M cost estimate: _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached
From: _____ Date	To: _____ Date	_____ Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs during Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing Damaged** ☒ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: _____

B. Other Access Restrictions

1. **Signs and Other Security Measures** ☐ Location shown on site map ☐ N/A

Remarks: "No trespassing" signs are posted.

C. Institutional Controls (ICs)

1. **Implementation and Enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☒ No ☐ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☒ No ☐ N/A

Type of monitoring (e.g., self-reporting, drive by): _____

Frequency: _____

Responsible party/agency: _____

Contact _____ _____ _____ _____

Name Title Date Phone no.

Reporting is up to date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☒ No ☐ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☒ ICs are inadequate ☒ N/A

Remarks: Current access restrictions prevent unacceptable exposures. Long-term land use and groundwater restictions are called for in the ROD. However, they are not yet implemented.

D. General

1. **Vandalism/Trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land Use Changes On Site** ☒ N/A

Remarks: _____

3. **Land Use Changes Off Site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. **Roads Damaged** ☐ Location shown on site map ☐ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: Native vegetation is well established.

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1. **Settlement** (low spots) ☐ Location shown on site map ☒ Settlement not evident

Arial extent: _____ Depth: _____

Remarks: _____

2. **Cracks** ☐ Location shown on site map ☒ Cracking not evident

Lengths: _____ Widths: _____ Depths: _____

	Remarks: _____		
3.	**Erosion**	☐ Location shown on site map	☒ Erosion not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
4.	**Holes**	☐ Location shown on site map	☒ Holes not evident
	Arial extent: _____		Depth: _____
	Remarks: _____		
5.	**Vegetative Cover**	☒ Grass	☒ Cover properly established
	☐ No signs of stress	☐ Trees/shrubs (indicate size and locations on a diagram)	
	Remarks: _____		
6.	**Alternative Cover** (e.g., armored rock, concrete)		☒ N/A
	Remarks: _____		
7.	**Bulges**	☐ Location shown on site map	☒ Bulges not evident
	Arial extent: _____		Height: _____
	Remarks: _____		
8.	**Wet Areas/Water Damage**	☒ Wet areas/water damage not evident	
	☐ Wet areas	☐ Location shown on site map	Arial extent: _____
	☐ Ponding	☐ Location shown on site map	Arial extent: _____
	☐ Seeps	☐ Location shown on site map	Arial extent: _____
	☐ Soft subgrade	☐ Location shown on site map	Arial extent: _____
	Remarks: _____		
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map
	☒ No evidence of slope instability		
	Arial extent: _____		
	Remarks: _____		
B. Benches		☐ Applicable ☒ N/A	
	(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)		
1.	**Flows Bypass Bench**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
2.	**Bench Breached**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
3.	**Bench Overtopped**	☐ Location shown on site map	☐ N/A or okay
	Remarks: _____		
C. Letdown Channels		☐ Applicable ☒ N/A	
	(Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side		

slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement
   Arial extent: _____ Depth: _____
   Remarks: _____

2. **Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation
   Material type:_____ Arial extent: _____
   Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ No evidence of erosion
   Arial extent: _____ Depth: _____
   Remarks: _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
   Arial extent: _____ Depth: _____
   Remarks: _____

5. **Obstructions** Type: _____ ☐ No obstructions
   ☐ Location shown on site map Arial extent: _____
   Size: _____
   Remarks: _____

6. **Excessive Vegetative Growth** Type: _____
   ☐ No evidence of excessive growth
   ☐ Vegetation in channels does not obstruct flow
   ☐ Location shown on site map Arial extent: _____
   Remarks: _____

D. Cover Penetrations ☐ Applicable ☒ N/A

1. **Gas Vents** ☐ Active ☐ Passive
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

2. **Gas Monitoring Probes**
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A
   Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent: _____ Depth: _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2. **Erosion** Area extent: _____ Depth: _____

☐ Erosion not evident

Remarks: _____

3. **Outlet Works** ☐ Functioning ☐ N/A

Remarks: _____

4. **Dam** ☐ Functioning ☐ N/A

Remarks: _____

H. Retaining Walls ☐ Applicable ☒ N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident

Horizontal displacement: _____ Vertical displacement: _____

Rotational displacement: _____

Remarks: _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident

Remarks: _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable ☒ N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A

☐ Vegetation does not impede flow

Area extent: _____ Type: _____

Remarks: _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident

Area extent: _____ Depth: _____

Remarks: _____

4. **Discharge Structure** ☐ Functioning ☐ N/A

Remarks: _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable ☒ N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident

Area extent: _____ Depth: _____

Remarks: _____

2. **Performance Monitoring** Type of monitoring: _____

☐ Performance not monitored

Frequency: _____ ☐ Evidence of breaching

Head differential: _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater Extraction Wells, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing and Electrical**

☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances**

☐ Good condition ☐ Needs maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps and Pipelines ☐ Applicable ☐ N/A

1. **Collection Structures, Pumps and Electrical**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances**

   ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Spare Parts and Equipment**

   ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

   Remarks: _____

C. Treatment System ☐ Applicable ☐ N/A

1. **Treatment Train** (check components that apply)

   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation

   ☐ Air stripping ☐ Carbon adsorbers

   ☐ Filters: _____

   ☐ Additive (e.g., chelation agent, flocculent): _____

   ☐ Others: _____

   ☐ Good condition ☐ Needs maintenance

   ☐ Sampling ports properly marked and functional

   ☐ Sampling/maintenance log displayed and up to date

   ☐ Equipment properly identified

   ☐ Quantity of groundwater treated annually: _____

   ☐ Quantity of surface water treated annually: _____

   Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

   ☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance

   Remarks: _____

4. **Discharge Structure and Appurtenances**

   ☐ N/A ☐ Good condition ☐ Needs maintenance

   Remarks: _____

5. **Treatment Building(s)**

   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

   ☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☐ Is of acceptable quality

2. **Monitoring Data Suggests:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs maintenance ☐ N/A

Remarks: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions).

Most construction specified in the remedial design has been completed. Vegetation is well established and erosion is not an issue. Two areas of the impoundment received regionally sourced mine waste and covered with a temporary 6-inch soil cover while EPA determines if additional material will be brought to these areas prior to placing the full 18 inch fill material.

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

Regular inspections assess vegetation, invasives, erosion and general site conditions. Maintenance is performed as needed.

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

None noted.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

APPENDIX G – SITE INSPECTION PHOTOS



"No trespassing" sign near public trail and on-site wetland.


Off-site public trail near wetland.



Embankment wetland and wedge buttress (right, background).



Staged clean fill.



Pond in low-lying area.



West-facing view across the parking area.



Restored diversion ditch.



Parking area.

APPENDIX H – SURFACE WATER MONITORING DATA

Table H-1: Surface Water Data

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
Main Flow from OU1 Embankment Wetland	11/10/2011	RF-13	<0.00018	<0.00018	0.0298	0.0263
	4/4/2012	OU1-MF	<0.00018	<0.00018	0.0294	0.0334
	5/17/2012	OU1-MF	<0.00018	<0.00018	0.0153	<0.005
	7/18/2012	OU1-MF	<0.0005	<0.0005	0.00688	<0.005
	4/4/2013	OU1-MF	<0.0005	<0.0005	0.337	0.28
	3/13/2015	OU1-0-SW-PFOU1	<0.0005	<0.0005	0.0143	0.0106
	5/28/2015	OU1-0-SW-PFOU2	<0.0005	<0.0005	0.00578	<0.005
	9/1/2015	OU1-0-SW-PFOU3	<0.0005	<0.0005	0.00522	<0.005
	10/9/2015	OU1-0-SW-PFOU4	<0.0005	<0.0005	<0.005	<0.005
Channel downstream of south diversion ditch pond and upstream of embankment wetland at OU1	8/24/2011	RF 6-2	<0.00018	<0.00018	0.0126	0.0066
	11/10/2011	RF 6-2	<0.00018	<0.00018	0.0788	0.0372
Small seep channel on west side of OU1 embankment wetland	11/10/2011	SC-3a	<0.00018	<0.00018	0.187	0.118
Embankment Wetland	8/18/2011	1	Not sampled	Not sampled	0.0822	0.073

Sample Location	Sample Date	Sample ID	Total Cadmium (mg/L)	Dissolved Cadmium (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)
			TMDL = 0.0008 mg/L		TMDL = 0.39 mg/L	
	8/18/2011	2	Not sampled	Not sampled	0.0397	0.0215
	8/18/2011	3	Not sampled	Not sampled	0.101	0.0555
	8/18/2011	4	Not sampled	Not sampled	0.0765	0.0606
	8/18/2011	5	Not sampled	Not sampled	0.0351	0.0134
	4/4/2012	OU1-LP	0.000323	<0.00018	0.0446	0.0276
	4/4/2012	OU1-TS	<0.00018	<0.00018	0.147	0.0834
	7/18/2012	OU1-HWY Pond	<0.0005	<0.0005	0.0094	0.00672
Southern Diversion Ditch	7/18/2012	OU1-RF4	<0.0005	<0.0005	0.0162	0.0144

June 10, 2020

Charlotte Irvine
707 24th Street
Ogden, Utah 84401

Re: GRAMA Request

Dear Ms. Irvine:

Park City Municipal has received your GRAMA request dated June 3, 2020, for fire, health, planning/recording records with regard to environmental incidents for 4225 Countryside Circle.

Based on your request, we are providing the following documents:

1. Park City Heights VCP Certificate of Completion Document (attached)
2. Voluntary Cleanup Program- Completed Sites. (Elizabeth Palmer, Project Manager for Park City Heights)
http://eqedocs.utah.gov/SpecialSrchs.aspx?SSName=DERR_CERCLA_CofC

Pursuant to Municipal Code 5-5-1, you may appeal this decision to the City Manager by filing a notice of appeal within 30 days of the date of this letter. The appeal must include the following: (1) Your name, mailing address, and daytime phone number; (2) relief sought; and (3) a short statement of facts, reasons, and legal authority in support of the appeal. The City Manager will make determination within 5 business days of receipt of the appeal. If the City Manager fails to make a determination within this period, this shall be considered the equivalent of an order denying the appeal.

Sincerely,

Michelle Kellogg, MMC
Park City Recorder
445 Marsac Avenue
Park City, UT 84060
(435)615-5007

Phase I Environmental Site Assessment (ESA)

Due 6/17/2020
Submitted 6/3/2020, 14:50
Received 6/3/2020, 15:02

Open Records Portal Request

Requestor	Agency
Charlotte Irvine	Park City
charlotte.irvine@cmtlaboratories.com 801-927-8745 707 24th Street Ogden, Utah 84401	Marsac Municipal Bldg P.O. Box 1480 Park City, UT 84060 Michelle Kellogg Matthew Dias

Main Request

Hello,

I am conducting a Phase I Environmental Site Assessment (ESA) for the adjoining properties listed below:

Address: Near 4225 Countryside Cir, Park City, Utah 84060

Summit County Parcel #s â PP-28-1, PP-28-2, SS-86, SS87-B-X, SS-125 and SS-125-C

FIRE: Are there any records of environmental incidents or potentially environmentally detrimental events on or in the immediate vicinity of the property?

HEALTH: Are there any records of environmental incidents, releases, or violations involving the use, storage, transport, release, and/or disposal of hazardous materials and/or petroleum products on or in the immediate vicinity of the property?

PLANNING/RECORDING: Are there any records or knowledge or any recognized environmental conditions or environmentally detrimental events on, or in the immediate vicinity of the property?

Please let me know if you have any questions.

Charlotte Irvine
801.927-8745
Charlotte.Irvine@cmtlaboratories.com

Date range of requested records: *1/1/1940 - 6/2/2020*

Additional Details

Requester is the authorized representative of the subject of the record
Requester would like to view or inspect the records only

ENTRY NO. 01058682
11/23/2016 10:22:05 AM B: 2385 P: 0574
Certificate PAGE 1/6
MARY ANN TRUSSELL, SUMMIT COUNTY RECORDER
FEE 0.00 BY UTAH DEPARTMENT OF ENVIROMENTAL QUALITY

When recorded return to:
Utah Department of Environmental Quality
Division of Environmental Response and Remediation
Attention: Voluntary Program Coordinator
Post Office Box 144840
Salt Lake City, Utah 84114-4840

RECEIVED
DEC 13 2016
Environmental Response & Remediation

RE: Park City Heights Voluntary Cleanup Program Site (VCP #C077)
Park City, Summit County, Utah

CERTIFICATE OF COMPLETION

1. Compliance with Terms of Voluntary Cleanup Program

The Executive Director of the Utah Department of Environmental Quality ("UDEQ"), through his undersigned designee below, has determined that Ivory Development LLC, hereinafter referred to as "Applicant," has completed a UDEQ supervised voluntary cleanup of the real property described in Attachment A ("Property or "Site"), in accordance with sections 19-8-108 and 19-8-110 of the Utah Code Annotated and the Voluntary Cleanup Agreement entered into on July 16, 2012 and amended on February 13, 2014. The Applicant is granted this Certificate of Completion ("COC") pursuant to section 19-8-111, subject to the conditions set forth in paragraph three below.

2. Acknowledgment of Protection from Liability

This COC acknowledges protection from liability provided by section 19-8-113 of the Utah Code Annotated to an Applicant who is not responsible for the contamination under the provisions listed in subsection 19-8-113(1)(b) at the time the Applicant applies to enter into a Voluntary Cleanup Agreement, and to future owners who acquire the Property covered by this COC, and to lenders who make loans secured by the Property covered by the COC.

As set forth in section 19-8-113, this release of liability is not available to an owner or lender who was originally responsible for a release of contamination, or to an owner or lender who changes the land use from the use specified in Section 3 of the COC, if the changed use or uses may reasonably be expected to result in increased risks to human health or the environment, or to an owner or lender who causes further releases on the Property. Also, there is no release from liability if the COC is obtained by fraud, misrepresentation, or the knowing failure to disclose material information.

Finally, protection from liability is limited to contamination identified in the documents related to the investigation and cleanup of the Property.

SCANNED
DERR-2016-016307

3. Specified Land Use for Certificate of Completion

The Property will be developed for residential use, and common and green space. The Property may be used for these purposes subject to the Site Management Plan ("SMP") dated March 10, 2016, as may be amended from time to time, and that certain Environmental Covenant ("EC") recorded with the Summit County Recorder on September 6, 2016, Book 2371, pages 0550 – 0558.

This COC is issued based on compliance with the SMP and EC. Among other requirements, the SMP or EC or both require:

a. Park City Heights Phase I Subdivision, Parcel H, shall remain designated as open space and be limited to use as a repository, as set forth in the SMP. Inspections and reporting shall be conducted in accordance with the SMP;
b. The concrete wall between Richardson Flat Operable Unit 3 and the Property shall be maintained and inspected;
c. Groundwater shall not be accessed for drinking water, bathing, or irrigation purposes;
d. Workers will be notified and follow health and safety requirements if they come in contact with impacted soil;
e. Continued reimbursement to the UDEQ for its oversight of the EC and SMP; and
f. Continued consent to access by the UDEQ to monitor compliance with the EC and SMP.

4. Unavailability of Release of Liability

Use of the Property that is not consistent with Section 3 including failure to comply with the SMP and/or EC and provisions of this COC shall constitute a change in land use expected to result in increased risks to human health and the environment making the release of liability in Section 2 above unavailable.

5. Amended Certificate of Completion

There is no expectation that compliance with the SMP and EC will cease to be a condition of this COC so long as contaminated soils remain on the Site above levels protective for unrestricted land use. Further remediation under the VCP would be needed to qualify for a new or amended COC that does not include compliance with the SMP and EC as a condition of land use.

6. Availability of Records

All documents discussed in this COC are on file and may be reviewed at the UDEQ/Division of Environmental Response and Remediation ("DERR") office located at 195 North 1950 West, Salt Lake City, Utah.

7. Final Signature for Ivory Development LLC Certificate of Completion

Dated this 10th day of November 2016.

Brent H. Everett

Brent H. Everett, Director
Division of Environmental Response and Remediation
And Authorized Representative of the
Executive Director of the Utah
Department of Environmental Quality

STATE OF UTAH)

:ss.

COUNTY OF SALT LAKE)

On this 10th day of November, 2016, personally appeared before me, Brent H. Everett who duly acknowledged that he signed the above Certificate of Completion as an authorized representative of the Executive Director of the Utah Department of Environmental Quality.

SHANE R. BEKKEMELLOM
Notary Public State of Utah
My Commission Expires on:
October 3, 2020
Comm. Number: 690398

Shane R. Bekkemellom

NOTARY PUBLIC

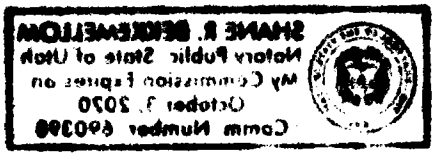
Residing At: Cottonwood Heights, Utah

My Commission Expires October 3, 2020

Attachment A: Legal Property Description

ATTACHMENT A

Ivory Development LLC
Legal Property Description



PCA-92 PCA-SS-122 PCA-PP-S-46 PCH-1-lot

Tax ID#: 22-06-103-014, 22-06-103-015, 22-06-103-016, 22-06-103-017, and 22-06-103-018

Legal Property Description

Park City Heights Subdivision

A parcel of land located in the South Half of Section 2 and portions of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian, said parcel being more particularly described as follows:

Beginning at a Park City Boundary Aluminum Cap marking the West Quarter Corner of Section 11, Township 2 South, Range 4 East, Salt Lake Base and Meridian; and running

thence North 00°19'41" East 1,474.01 feet along the West Section Line of said Section 11, also being along the Easterly Boundary Line of the Hidden Meadows Subdivision Annexation Plat recorded as Entry No. 425892 in the Office of the Summit County Recorder;

thence North 63°17'52" East 344.36 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 75°52'07" East 1,501.92 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 38°46'13" West 606.70 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat;

thence North 39°40'23" West 214.68 feet along the Easterly Boundary Line of said Hidden Meadows Subdivision Annexation Plat to the North Section Line of said Section 11;

thence South 88°46'45" East 89.54 feet along the North Section Line of said Section 11 to the 1/16 Corner of said Section 2;

thence North 00°00'41" East 1,415.34 feet along the 1/16th Section Line of said Section 2 to the Southerly Right-of-Way Line of the abandoned Union Pacific Railroad Property;

thence North 68°35'10" East 611.63 feet along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property;

thence Northeasterly 622.07 feet along the arc of a 1,532.69 foot radius curve to the left (center bears North 21°24'50" West and the chord bears North 56°57'32" East 617.81 feet with a central angle of 23°15'16") along the Southerly Right-of-Way Line of said abandoned Union Pacific Railroad Property to the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 89°20'19" East 143.65 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence Southeasterly 252.20 feet along the arc of a 2,814.90 foot radius curve to the right (center bears South 00°39'41" West and the chord bears South 86°46'19" East 252.11 feet with a central angle of 05°08'00") along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B);

thence South 84°12'19" East 300.22 feet along the Southerly Right-of-Way Line of Richardson Flat Road (UDOT FAP 93-B) to the Westerly Right-of-Way Line of State Highway 40;

thence South 07°02'52" East 965.75 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 07°03'48" East 1,299.91 feet along the Westerly Right-of-Way Line of said State Highway 40;

thence South 42°31'04" West 3,012.86 feet;

thence South 103.66 feet to the projection of the Northerly Boundary Line of the Morning Star Estates Subdivision recorded as Entry No. 376621 in the Office of the Summit County Recorder;

thence North 89°30'31" West 1,368.96 feet along the Northerly Boundary Line of said Morning Star Estates Subdivision and its projections thereof to the point of beginning.

Contains 8,518,648 Square Feet or **195.561 Acres**

0486087 PCH-1-1
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486094 PCH-1-2
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486102 PCH-1-3
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486119 PCH-1-4
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486126 PCH-1-5
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486133 PCH-1-6
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486140 PCH-1-7
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486157 PCH-1-8
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486164 PCH-1-9
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486171 PCH-1-10
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486188 PCH-1-11
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486195 PCH-1-12
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486203 PCH-1-13
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486210 PCH-1-14
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486227 PCH-1-15
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486234 PCH-1-16
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486241 PCH-1-17
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486258 PCH-1-18
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978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486265 PCH-1-19
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0486272 PCH-1-20
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SALT LAKE CITY, UT 84117

0486289 PCH-1-21
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SALT LAKE CITY, UT 84117

0486296 PCH-1-22
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SALT LAKE CITY, UT 84117

0486304 PCH-1-23
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486311 PCH-1-24
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486328 PCH-1-25
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486335 PCH-1-26
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978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486342 PCH-1-27
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

0486359 PCH-1-28
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0486366 PCH-1-29
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SALT LAKE CITY, UT 84117

0486373 PCH-1-30
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SALT LAKE CITY, UT 84117

0486380 PCH-1-31
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SALT LAKE CITY, UT 84117

0486397 PCH-1-32
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0486405 PCH-1-33
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

0486412 PCH-1-34
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0486429 PCH-1-35
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SALT LAKE CITY, UT 84117

0486436 PCH-1-36
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486443 PCH-1-37
IVORY DEVELOPMENT LLC
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SALT LAKE CITY, UT 84117

0486450 PCH-1-38
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486467 PCH-1-39
IVORY DEVELOPMENT LLC
978 E WOODOAK LN
SALT LAKE CITY, UT 84117

0486474 PCH-1-40
IVORY DEVELOPMENT LLC
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APPENDIX F

STATEMENT OF QUALIFICATIONS



MARK **LARSEN, P.G., E.P.**

GEOLOGIST | ENVIRONMENTAL PROFESSIONAL

CONTACT

mark.larsen@cmtlaboratories.com

496 East 1750 North, Suite B,
Vineyard, Utah 84057

801.492.4132

cmtlaboratories.com

EDUCATION

Bachelor of Science Geology,
University of Utah, Salt Lake City,
1997

PROFESSIONAL LICENSES

Professional Geologist,
State of Utah,
License # 5293214-2250
Expires 3/3/19

AFFILLIATIONS

Association of Environmental and
Engineering Geologists (AEG)
Associated Member

PROFESSIONAL EXPERIENCE

Mr. Larsen is an engineering geologist in the CMT Vineyard, Utah office. Mr. Larsen is responsible for procuring new geologic and environmental site assessment work and ensuring that the work is completed in a responsive, responsible, and professional manner. Mr. Larsen also assists the engineers in our geotechnical division with the geologic aspects of geotechnical projects.

Mr. Larsen's experience includes all aspects of geologic site classification and geologic hazards evaluation for all sizes of projects from single-family residential to multi-story commercial structures. In his 20 years of experience, Mr. Larsen has served as a project engineering geologist for a variety of private residential, commercial, industrial, and government projects. These include surface fault rupture hazard studies, landslide/slope stability studies, rock fall hazard studies, and debris flow/alluvial fan flooding hazard studies. This work includes preparing the geologic study programs, overseeing and conducting the field work, geologic analysis, report preparation, and consultation with project geotechnical engineers, site owners/managers, and construction managers.

CAPABILITIES

Geologic Hazards Assessment, Environmental Site Assessment, Geologic Site Characterization, Geotechnical Engineering Field Sampling

RELATED PROJECT EXPERIENCE

Mr. Larsen has performed numerous Phase I Environmental Site Assessments throughout the State of Utah.



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801.864.9702

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EDUCATION

Bachelor of Arts, Interior Design,
Utah State University,
2009

ASTM Phase I &II ESA Class,
Las Vegas,
2014

ACCOMPLISHMENTS

Conducted, written, and managed over 500 Environmental Site Assessments

PROFESSIONAL EXPERIENCE

Ms. Bradshaw is an environmental specialist with more than 6 years of experience, mostly along the Wasatch Front and Rocky Mountain region. She joined CMT May 1, 2017 as an environmental specialist working in our Vineyard Office in Utah County.

Ms. Bradshaw has served as a project environmental specialist manager for a variety of commercial, industrial and government projects. These include hotels, stores, schools, storage facilities, multi-tenant and single-family residential development, industrial warehouses, gas stations, and banks. As a project manager, she has successfully implemented the scope of work, managed labor and material costs, and prepared useful Phase I and II Environmental Site Assessment reports.

RELATED PROJECT EXPERIENCE

- Phase I, II, and III ESA, Maple Hills Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, Terrace Hill Residential Subdivision, West Jordan, Utah
- Phase I, II, and III ESA, 9th and 9th Development, Salt Lake City, Utah
- Phase I, II, and III ESA, Pilgrims Loop Office Building, Lehi, Utah
- Phase I, II, and III ESA, Proposed Retail Development, Morgan, Utah
- Phase I and II ESA, Apollo Road Warehouse Structures, Salt Lake City, Utah
- Phase I and II ESA, Existing Gas Station & Convenient Store, Riverdale, Utah
- Phase I and II ESA, Existing Gas Station and Convenient Store, Logan, Utah
- Phase I and II ESA, Medical Building & Parking Structure, Murray, Utah
- Phase I and II ESA, Proposed Office Structures, Millcreek, Utah
- Phase I and II ESA, Proposed Retail Development, Sandy, Utah
- Phase I and II ESA, Gun Range Development, Murray, Utah
- Phase I and II ESA, Semi-Truck and Trailer Facility, Salt Lake City, Utah
- Phase I and II ESA, Proposed Industrial Development, North Salt Lake, Utah
- Phase I and II ESA, Existing Retail Shops, Sandy, Utah
- Phase I and II ESA, Proposed Industrial Development, Salt Lake City, Utah