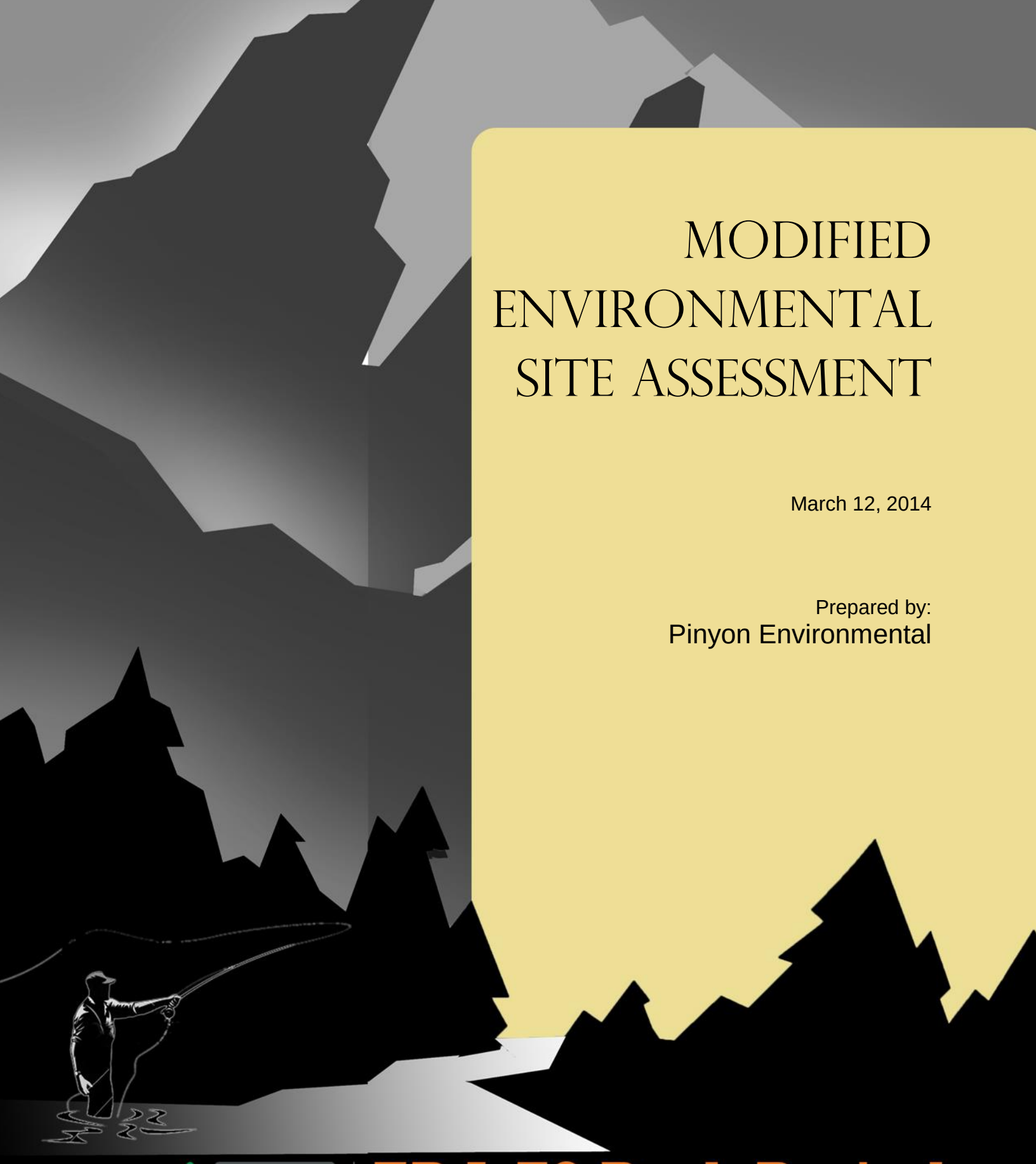


MODIFIED ENVIRONMENTAL SITE ASSESSMENT

March 12, 2014

Prepared by:
Pinyon Environmental

EB I-70 Peak Period Shoulder Lane
CATEGORICAL EXCLUSION

Pinyon Environmental, Inc.

Corporate Headquarters
9100 West Jewell Avenue, Suite 200 Lakewood, CO 80232
TEL 303 980 5200 FAX 303 980 0089
www.pinyon-env.com

March 12, 2014

Modified Environmental Site Assessment

I-70 Eastbound Peak Period Shoulder Lane

Empire Junction to Idaho Springs
Clear Creek County, Colorado

Prepared For:

HDR Engineering, Inc.
1670 Broadway
Suite 3400
Denver, Colorado 80202

Pinyon Project No.:

1/13-191-01.8001

CDOT Project No.:

NHPP 0703-401 (19474)

Pinyon Environmental, Inc.
Corporate Headquarters
9100 West Jewell Avenue, Suite 200 Lakewood, CO 80232
TEL 303 980 5200 FAX 303 980 0089
www.pinyon-env.com

March 12, 2014

Modified Environmental Site Assessment

I-70 Eastbound Peak Period Shoulder Lane

Empire Junction to Idaho Springs
Clear Creek County, Colorado

Prepared For:

HDR Engineering, Inc.
1670 Broadway
Suite 3400
Denver, Colorado 80202

Pinyon Project No.:

1/13-191-01.8001

CDOT Project No.:

NHPP 0703-401 (19474)

Prepared by:

Timothy Grenier, E.I.T.
Environmental Engineer

Reviewed by:

Lauren E. Evans, P.E.
President

Table of Contents

Table of Contents (continued)

Tables

Figures

Appendices

1. Introduction

1.1 Site Location (see also Section 2.0)

Site: I-70 Eastbound Peak Period Shoulder Lane

Address: Empire Junction to Idaho Springs (Figures 1 and 2)

City, State: Clear Creek County, Colorado

1.2 Purpose and Scope of Services

The purpose of this assessment was to perform an evaluation for the potential presence of hazardous and/or toxic materials (otherwise known as "Recognized Environmental Conditions" or "Controlled Recognized Environmental Conditions")[1] at the Site. This report is made pursuant to all appropriate inquiry into the prior ownership and uses of the Site, consistent with good commercial and customary practices appropriate to a commercial purchaser or fee owner of real property, and is intended to permit the user to satisfy one of the requirements to qualify for landowner liability protection.

This Modified Environmental Site Assessment (MESA) generally meets the requirements of the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-13)*, with the deviations noted in Section 7.1, and the Colorado Department of Transportation (CDOT), *Modified Environmental Site Assessment (M-ESA) Guidance*. The report was formatted for reading ease and does not follow the suggested ASTM format.

The scope of services for the project included the following:

1. Records Review.

- An evaluation of historical Site use, by reviewing the following sources:
    - Aerial photographs reasonably available from public sources;
    - Historical United States Geological Survey (USGS) topographic maps;
    - Fire insurance maps;
    - Property tax files; and
    - Zoning and land use records.

[1] Recognized environmental (RECs) are defined conditions by ASTM 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. A controlled recognized environmental condition (CREC) is defined by ASTM as a REC 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 controls. The terms REC and CREC, do not include *de minimis* conditions that do not present a threat to human health or the environment and that would not be the subject of an enforcement action if brought to the attention of appropriate environmental agencies.

- A review of the compliance history of the Site, and of any adjacent sites, as identified by the regulatory database survey (Appendix A).

- A review of records reasonably available from appropriate federal, state and local regulatory agencies for documented soil and/or groundwater contamination investigations conducted at the Site and the vicinity, as defined by the CDOT MESA Guidelines.

- A review of available documents from local agencies (Table 1) to evaluate development of the Site and, where reasonably available or relevant to the Site, the adjacent properties.

- A review of information regarding the physical settings of the Site, including:

    - The current USGS 7.5-minute topographic map;

    - Geology information published by the USGS;

    - National Resource and Conservation Service (NRCS) soil surveys; and

    - Groundwater information published by the USGS.

2. **Site Reconnaissance.** A reconnaissance survey of the Site and surrounding areas was completed on September 24, 2013, to evaluate present conditions.

3. **Interviews.** The owner interview was not conducted as part of this Modified ESA as most, if not all, work will be completed within CDOT right of way.

4. **Additional Services.** A limited Phase II ESA was completed concurrently with this Modified ESA (Section 3.3.2).

Report. Presentation of the aforementioned services in this report.

Qualifications. The environmental site assessment activities described herein were conducted in accordance with generally accepted standards, practices, and procedures (expressed or implied) in effect at the time of the project, relative to the All Appropriate Inquiry (as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 USC Section 9601, et. Seq.). Numerous individuals were contacted for information about the Site and surrounding areas (Table 1). Relevant information was also obtained from published sources (referenced in Section 6.0).

The project was completed by an Environmental Professional, or conducted under the supervision or responsible charge of an Environmental Professional. At a minimum, the Environmental Professional was involved in planning the Site reconnaissance and interviews, and reviewed and interpreted the information used in developing the conclusions. Pinyon declares that, to the best of our professional knowledge and belief, the Environmental Professionals involved met the definition as defined in §312.1 of 40CFR 312. Other persons involved are qualified individuals, and have the training and experience necessary to complete their assigned tasks. These personnel have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property (Site). Pinyon has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes of the personnel involved in this project are included as Appendix B.

2. Project and Site Information

2.1 Project Overview

Date of Task Order: September 5, 2013

Work Authorized By: Tammy Heffron, HDR Engineering, Inc.

Purpose of Modified ESA:

The purpose of the Modified ESA is to evaluate the potential for soil and/or groundwater contamination at the Site, due to a release of hazardous substances or petroleum products. This Modified ESA is being performed at the request of HDR in order to fulfill CDOT requirements for a National Environmental Policy Act (NEPA) study of a proposed corridor project (CDOT Project # NHPP 0703-401 [19474]).

Proposed Action:

The purpose of the I-70 PPSL project is to provide short-term eastbound operational improvements to relieve traffic congestion during periods when traffic volumes are highest. This segment is the most congested stretch of the entire I-70 Mountain Corridor. During both the summer and winter peak season, traffic volumes are highest on weekends when recreational travelers comprise more than 90 percent of traffic. In 2010, drivers experienced speeds of less than 20 miles per hour for 35 percent of the time on Sundays, which have the highest volume. Some motorists divert to the frontage road along I-70, which affects its ability to function as a local access county road.

The Proposed Action would add a peak period shoulder lane between the US 40/I-70 interchange and east Idaho Springs. This managed lane would be used during peak periods, defined as Saturdays, Sundays, and holidays, improving travel times and operations. The project extends from milepost 230 to milepost 243, with improvements proposed as follows:

- Milepost 230 to milepost 232: signage improvements only. Signage would notify motorists of the status of the managed lane, entrance and exit points, and cost.
- Milepost 232 to milepost 242: roadway improvements, including: up to 3.5 feet of widening in select areas to accommodate the managed lane, up to 14 feet of widening at the SH 103 on ramp and 4 feet to 8 feet of widening at all other on-ramps in the corridor, replacement of the existing SH 103 bridge, bridge replacement and interchange improvements at Exit 241, improvements to Water Wheel Park, signage, rock cuts in two locations, and construction of 11 retaining walls.
- Milepost 242 to milepost 243: signage improvements only.

The managed lane, which would be tolled, would operate up to, but not exceed, 20 percent of the annual days or 7.5 percent of the time, and connect to the three-lane section provided by the Twin Tunnels project, east of Idaho Springs, thereby capitalizing on that investment.

The improvements will be consistent with the I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS) Record of Decision (ROD), I-70 Mountain Corridor Context Sensitive Solutions process, and other commitments of the PEIS. The Proposed Action fits within the definition of "expanded use of existing transportation infrastructure in and adjacent to the corridor" as an element of the Preferred Alternative Minimum Program.

2.2 General Site Information and Current Conditions

Site Location (Figures 1 and 2):

Address:	Empire Junction to Idaho Springs
City, State:	Clear Creek County, Colorado
County:	Clear Creek
Intersections:	US-40 interchange; the I-70 interchange exits of Lawson, Downieville, Dumont, and Fall River Road; the I-70 interchange with SH-103; and the east Idaho Springs interchange.
Other Roads:	None

Site Information:

Assessor's Number:	The Site is comprised of publicly owned right of way (ROW) and easement areas with no associated parcel numbers.
Current Site Owner:	Not Applicable
Status:	Developed as publicly owned ROW
Current Zoning:	Not Applicable

Site Reconnaissance Information:

Date of Site Visit:	September 24, 2013
Personnel:	Mr. Tim Grenier, Pinyon
Escorts:	None
Methodology:	The Site was walked along the perimeter, where possible. The immediately adjacent properties were observed from the Site and surrounding roads. Notes regarding Site conditions were made on field aerial photographs and in a field notebook. The Site was observed entirely from public ROW.
Inaccessible Areas:	None
Limiting Conditions:	Due to the fact that the Site is an active interstate highway, it was not possible to walk a vast majority of the Site.

Current Site Use and Conditions:

Buildings/Structures on Site:

None

Parking Area(s):

None

Other Use(s):

US-40 Interchange ROW; I-70 and Lawson interchange ROW; I-70 and Downieville Interchange ROW; I-70 and Dumont Interchange ROW; I-70 and Fall River Road Interchange ROW; I-70 business loop ROW; I-70 and SH-103 interchange ROW; east Idaho Springs interchange; and the west Idaho Springs interchange and utility easements.

Site Description and Former Uses:

Exterior:

The Site is located within the ROW of I-70, the US-40 interchange, the I-70 interchange exits of Lawson, Downieville, Dumont, and Fall River Road, the I-70 interchange with SH-103 and the east Idaho Springs interchange. The Site does not include any private property. These areas are currently utilized as roadway which serves as access to multiple types of properties. The ROW is generally vacant with the exception of existing interstate improvements (e.g., roadway and associated embankment, culverts, shoulders, medians, above-ground utilities, and below-grade utilities).

Interior:

Building structures were not present on the Site.

Past Uses if Visible:

None.

Photographs of the Site are provided in Appendix C. General Site observations required by the ASTM standard practice are summarized in Section 3.2. A glossary of terms is included as Appendix D.

3. Site Description

3.1 Physical Setting

3.1.1 Topography

The topography of the Site is variable, as the project is located in a mountainous region. Generally, I-70 follows Clear Creek, with the areas to the north and south of the roadway sloping towards Clear Creek. The general topographic gradient for the area is towards the east (Figure 1).

3.1.2 Elevation

The elevation of the Site ranges from approximately 8,280 feet above mean sea level (msl) at the western project boundary to 7,480 feet above msl at the eastern boundary (USGS, 2013 and 2011).

3.1.3 Surficial Soil

Surficial soils within the project area consist of 16 different soil units (Table 3-1) present on cliffs, ridges, mountain slopes, terraces, drainage ways and alluvial fans (USDA, 2013). The soils were mostly derived from the weathering of igneous and metamorphic rocks; however, mine spoils and earthy fill have also been mapped within the Site. The soil units are present in various combinations at the Site.

Table 3-1 Soil Units

Soil Unit Descriptions	Parent Type
Arents Description Somewhat excessively drained, occurs on mountain slopes and talus slopes. *Typical soil profile* 0 to 24 inches: Very cobbly loamy coarse sand 24 to 28 inches: Gravelly sandy loam 28 to 60 inches: Extremely cobbly loamy sand	Mine spoil, earthy fill, or acidic mine spoil
Bendemeere Description Well drained, occurs on mountain slopes *Typical soil profile* 0 to 1 inches: Slightly decomposed plant material 1 to 3 inches: Very gravelly sandy loam 3 to 10 inches: Gravelly coarse sandy loam 10 to 21 inches: Very cobbly coarse sandy loam 21 to 30 inches: Very gravelly loamy coarse sand 30 to 42 inches: Very gravelly loamy sand 42 to 50 inches: Gravelly loamy sand 50 to 62 inches: Very gravelly coarse sandy loam	Micaceous colluvium derived from igneous and metamorphic rock
Breece Description Well drained, occurs on alluvial fans and drainage ways *Typical soil profile* 0 to 7 inches: Gravelly sandy loam 7 to 20 inches: Gravelly sandy loam 20 to 42 inches: Gravelly coarse sandy loam 42 to 72 inches: Gravelly sandy loam	Alluvium and slope alluvium derived from igneous and metamorphic rock

Soil Unit Descriptions	Parent Type
Cathedral Description Well-drained, occurs on mountain slopes and ridges Typical soil profile 0 to 3 inches: Very cobbly coarse sandy loam 3 to 11 inches: Very gravelly sandy loam 11 to 15 inches: Unweathered bedrock	Weathered igneous and metamorphic rock
Cumulic Cryaquolls Poorly drained, occurs on drainage ways *Typical soil profile* 0 to 21 inches: Loam 21 to 64 inches: Very gravelly sand	Alluvium derived from igneous and metamorphic rock
Dumps, Mines Description *Typical profile* 0 to 60 inches: Fragmented material	Acidic mine spoil or earthy fill derived from igneous and metamorphic rock
Kataka Description Well-drained, occurs on mountain slopes and ridges *Typical soil profile* 0 to 5 inches: Very gravelly loam 5 to 10 inches: Very gravelly sandy loam 10 to 18 inches: Very cobbly clay loam 18 to 31 inches: Extremely stony clay loam 31 to 38 inches: Weathered bedrock	Micaceous colluvium derived from igneous and metamorphic rock
Lininger Description Well drained, occurs on ridges *Typical soil profile* 0 to 9 inches: Gravelly sandy loam 9 to 39 inches: Sandy clay loam 39 to 43 inches: Weathered bedrock	Micaceous colluvium and/or slope alluvium over residuum weathered from igneous and metamorphic rock
Lone Rock Description Somewhat excessively drained, occurs on alluvial fans and terraces. *Typical soil profile* 0 to 9 inches: Gravelly sandy loam 9 to 28 inches: Very gravelly loamy sand 28 to 60 inches: Extremely gravelly sand	Alluvium derived from igneous and metamorphic rock
Mammoth description Well-drained, occurs on mountain slopes. *Typical soil profile* 0 to 1 inches: Slightly decomposed plant material 1 to 10 inches: Very gravelly sandy loam 10 to 16 inches: Gravelly loam 16 to 22 inches: Very gravelly loamy sand 22 to 59 inches: Very gravelly sandy loam 59 to 67 inches: Stony loamy coarse sand	Igneous and metamorphic rock

Soil Unit Descriptions	Parent Type
Ohman Description Well-drained, occurs on mountain slopes and ridges. *Typical soil profile* 0 to 2 inches: Slightly decomposed plant material 2 to 5 inches: Very stony sandy loam 5 to 21 inches: Very gravelly sandy loam 21 to 35 inches: Extremely gravelly sandy loam 35 to 39 inches: Weathered bedrock	Igneous and metamorphic rock
Resort Description Somewhat excessively drained, occurs on mountain slopes and ridges *Typical soil profile* 0 to 1 inches: Slightly decomposed plant material 1 to 6 inches: Very stony sandy loam 6 to 14 inches: Extremely cobbly loamy sand 14 to 18 inches: Weathered bedrock	Micaceous sandy residuum weathered from igneous and metamorphic rock
Rock Outcrop Description Occurs on cliffs, mountain slopes, and ridges *Typical soil profile* 0 to 60 inches: Unweathered bedrock	Igneous and metamorphic rock
Tolland Description Well drained, occurs on mountain slopes *Typical soil profiles* 0 to 1 inches: Slightly decomposed plant material 1 to 2 inches: Moderately decomposed plant material 2 to 5 inches: Very gravelly sandy loam 5 to 11 inches: Very gravelly coarse sandy loam 11 to 50 inches: Extremely gravelly loamy coarse sand 50 to 69 inches: Extremely cobbly loamy coarse sand	Micaceous sandy colluvium derived from igneous and metamorphic rock
Trag Description Well drained, occurs on mountain slopes *Typical soil profile* 0 to 4 inches: Gravelly sandy loam 4 to 14 inches: Gravelly sandy clay loam 14 to 27 inches: Cobbly sandy clay loam 27 to 45 inches: Cobbly clay loam 45 to 60 inches: Gravelly sandy clay loam	Alluvium and/or slope alluvium derived from igneous and metamorphic rock
Typic Cryaquents Poorly drained, occurs on oxbows and floodplains *Typical soil profile* 0 to 3 inches: Fine sandy loam 3 to 18 inches: Cobbly sand 18 to 29 inches: Loam 29 to 32 inches: Clay loam 32 to 44 inches: Sand 44 to 60 inches: Very gravelly sand	Alluvium derived from igneous and metamorphic rock

3.1.4 Geology

Surficial units in the project area mainly consist of alluvium, colluvium, glacial materials, and debris sheets from the Quaternary period. The Idaho Springs area also consists of a significant amount of outwash deposits of Wisconsin glacial stage from the Pleistocene epoch. The Site is also built onto a small portion of Bostonite and Quartz Monzonite groups on the north side of I-70, east of the town of Dumont. The Bostonite group includes quartz bostonite porphyry, trachytic granite porphyry, and bostonite porphyry from the Tertiary epoch. The Quartz Monzonit group includes alaskite porphyry, granite porphyry, and quartz monzonite porphyry from the Tertiary epoch (Bastin and Hill, 1917) (Sims, 1964) (Braddock, 1969).

The bedrock underlying the Site is classified as Precambrian feldspar-rich, fine- to medium-grained gneiss, characterized by conspicuous foliation and interlayered with hornblend and amplibolite gneisses. Fine layering is evident in some of the gneiss, expressed by interlamination of biotite-rich and biotite-poor layers (Sheridan and Marsh, 1976).

3.1.5 Nearest Surface Water Body

The closest surface water body to the Site is Clear Creek, which parallels I-70 on either the north or south side throughout the Site (Figure 1). The elevation of this feature is 8,280 feet above msl at the western portion of the Site and is 7,480 feet above msl at the eastern portion of the Site.

3.1.6 Groundwater Conditions

The Site is in an area where the water table conditions predominate in the unconsolidated alluvial deposits near and within the Clear Creek floodplain. Based on soil borings completed on-Site (Section 3.3.2), the groundwater elevation at the Site is expected to be generally 10 to 20 feet below ground surface (bgs), and flow direction would likely mimic the flow direction of Clear Creek (toward the east). Tributaries to Clear Creek are also present in the Site; the main tributaries are Soda Creek, Trail Creek, Mill Creek, Fall River, and Chicago Creek (which runs parallel to SH-103 and flows into Clear Creek near SH-103 bridge structure F-14-E).

3.2 General Site Environmental Conditions

During the Site visit, Site uses and conditions, as defined by the ASTM Standard (ASTM, 2005, Section 9), were noted (Table 3-2). Where observations indicated the potential presence of environmental conditions, additional discussion is presented in the sections immediately the following the table.

Table 3-2 Summary of General Site Observations

Potential Environmental Concern	Observed Present?	Section for Additional Information	Potential Environmental Concern	Observed Present?	Section for Additional Information
Hazardous substances and petroleum products	No	--	Drains and Sumps	No	--
Hazardous substance and product containers	No	--	Pits, Ponds and Lagoons	No	--

Potential Environmental Concern	Observed Present?	Section for Additional Information	Potential Environmental Concern	Observed Present?	Section for Additional Information
Storage Tanks	No	--	Stained Soil or Pavement	No	--
Odors	No	--	Stressed Vegetation	No	--
Pools of Liquid	No	--	Solid Waste	No	--
Drums	No	--	Fill Material	Yes	3.2.2
PCBs	Yes	3.2.1	Waste Water	No	--
Heating and Cooling	No	--	Wells	No	--
Stains and Corrosion	No	--	Septic System	No	--

3.2.1 PCBs

Transformers

No electric transformers were identified on the Site; however, 17 pole-mounted electric transformers were identified in the vicinity of the Site. Due to the fact that the Site is an active interstate and the surrounding properties were mainly private property, it was not possible to walk a vast majority of the Site. Therefore, it was not possible to get an exact count on the number of transformers located within vicinity of the Site. The transformers that were observed appeared to be in good condition with no obvious signs of staining.

3.2.2 Improper Waste/Debris Disposal/Fill Material

The United States Department of Agriculture (USDA) maps indicate that surficial soils in two areas within the Site are potentially derived from mine-related waste (Figure 2). One is located at the east end of Idaho Springs and the other is located in the town of Dumont (Section 4.2).

The majority of I-70 has been constructed on embankment fill, which was confirmed during geotechnical investigations completed by Yeh and Associates (Yeh) in support of this CDOT project. Geotechnical investigations have been completed in support of this CDOT project, which included drilling of numerous vertical soil borings in locations where structural elements are anticipated (e.g., retaining walls and new bridge abutments). During those drilling activities, Pinyon personnel collected representative soil samples of fill material to evaluate potential environmental conditions. Detailed discussion of the sampling methods, analytical methods, and sampling results is included in this Modified ESA report in Section 3.3.2.

3.3 Other Environmental Conditions

In addition to features defined by the ASTM Standard, Pinyon evaluated several non-scope issues, as discussed below.

3.3.1 Asbestos Containing Building Materials (ACBMs)

Asbestos-containing utilities may be encountered during the construction of this project. Asbestos-containing transite pipes and magnesia block-insulated utilities are occasionally found unexpectedly during excavation activities that involve existing known or unknown buried utilities. There is a possibility that asbestos-containing materials (ACM) may be encountered associated with buried utilities within the study area.

Additionally, a Pre-Demolition/Renovation Asbestos and Lead-Paint Survey Inspection Report was completed for the bridge structure carrying SH-103 over I-70 (F-14-E) (Walsh, 2013), and the East Idaho Springs Interchange (F-14-Y) (Walsh, 2014). On bridge structure F-14-E, a total of five suspected asbestos-containing materials were identified and sampled. The results of the samples collected indicated that asbestos was not detected. On bridge structure F-14-Y, one suspected asbestos-containing material was identified and sampled. The results of the sample collected indicated that asbestos was not detected.

3.3.2 Lead Paint

CDOT requires that painted structures proposed for removal and/or demolition at projects (e.g., signal poles, bridges, and concrete abutments) be evaluated for lead content. Knowing the presence of lead paint on project components is used to evaluate: 1) worker health and safety considerations; and 2) recycling and/or disposal options.

CDOT does not expect that painted materials having a total lead content of less than 0.01 percent (%) in paint would exceed Resource Conservation and Recovery Act (RCRA) Hazardous Waste Limits for landfill leaching and disposal. When paint samples contain lead concentrations exceeding 0.01%, CDOT requires analysis by the Toxicity Characteristic Leachate Procedure (TCLP). That sample should include not only paint, but a representative sample of the substrate to which the paint is adhered (e.g., concrete). If after TCLP analysis the results are less than 5.0 milligrams per liter (mg/L), the material may be disposed as solid waste at a permitted Subtitle D landfill. If the results are equal to or exceed 5.0 mg/L, then lead paint must be abated prior to demolition and disposal. TCLP analysis is required where the total lead concentration is greater than 0.01%, and the substrate to which the paint is adhered is not metal (see below).

CDOT requires that all metal project components (e.g., light poles, metal railing, and bridge girders) be recycled. As these materials are recycled, and not disposed at a landfill, it is not necessary to evaluate the content of lead by TCLP, regardless of concentration. The recycling facility must be notified that metal project components contain lead, if applicable. Regardless of lead content, the future contractor must comply with Occupational Safety and Health Administration (OSHA) Regulation 1926.62 for worker safety.

For this project, lead paint was evaluated for bridge structures F-14-E and F-14-Y (Walsh, 2013 and Walsh, 2014, respectively). Lead was detected at several locations on metal project components (Table 3-3).

Table 3-3 Lead Sample Designation, Location, Description, and Results

Sample Designation	Location	Substrate	Color	Condition	Total Lead Content (percent)
Bridge F-14-E (SH-103 over I-70)					
F14E-LBP01	Guardrail System	Metal	Green	Poor	0.36

Sample Designation	Location	Substrate	Color	Condition	Total Lead Content (percent)
F14E-LBP02	Guardrail	Metal	Silver	Poor	0.66
F14E-LBP03	6" Pipe under bridge	Metal	Silver	Poor	0.045
F14E-LBP04	6" Pipe under bridge	Metal	Red	Poor	<0.012
F14E-LBP05	8" Pipe under bridge	Pipe Wrap	Silver	Poor	0.008
Bridge F-14-Y (East Idaho Springs Interchange)					
F14Y-LBP01	Guardrail and Barrier System	Concrete	Adobe	Good	BRL
F14Y-LBP02	Fence System	Metal	Brown	Good	0.042

BRL – Below the reporting limit

3.3.3 Limited Phase II Environmental Site Assessment

Early research supporting this Modified ESA, including the I-70 Programmatic Environmental Impact Statement (PEIS), indicated that mine wastes could be a REC, based on significant mineral extraction and processing that historically occurred in the project vicinity (see Section 4.2). CDOT requested that several non-scope (ASTM) services be completed to evaluate the potential RECs. The following services were completed:

- CDOT requested that soil samples be collected concurrently during geotechnical drilling activities in order to further understand potential contaminant issues.

- A groundwater sample was collected in the vicinity of SH-103 (YA-B-5), as there are automotive fueling stations in the vicinity of the new bridge (Figure 2) (Section 4.1). Additionally, a groundwater sample was collected in the vicinity of the East Idaho Springs Interchange (YA-B-1), as there are automotive fueling stations in the vicinity.

- The methodology utilized to support the soil and water sampling is presented in a Sampling and Analysis Plan (SAP) prepared by Pinyon to support the Twin Tunnels project, dated November 23, 2011 (Pinyon, 2011). The SAP presents the protocols to sample and analyze potential regulated materials, specifically those related to mine-related waste. Samples were visually described, the colors evaluated using Munsell Soil Color Charts (Munsell, 2000) to further evaluate potential mine waste. Procedures included evaluating soils within the construction zone, focusing on visually identifying mine wastes in areas where significant excavation would be located (e.g., new bridge, widening, retaining walls) to expand the knowledge about contaminants that could occur in the significant disturbance areas.

As requested by CDOT, on select dates between August 27, and February 18, 2014, Pinyon collected soil and groundwater samples concurrently with the geotechnical investigation, completed by Yeh. Soil and

groundwater laboratory reports are attached to this report as Appendix E and F, respectively. Soil samples were placed in laboratory-supplied containers and submitted for analysis of:

- Eight Resource Conservation and Recovery Act (RCRA) metals by U.S. EPA Method 6010/7471, and;
- pH by U.S. EPA Method 9045C.

Groundwater samples were also analyzed for RCRA 8 metals, as well as volatile organic compounds by U.S. EPA Method 8260, and pH using field instrumentation, near the bridge at SH-103 and at the East Idaho Springs interchange due to the potential that dewatering and/or discharge would be necessary during bridge construction.

3.3.3.1 Soil Sample Results

In general, the material encountered during drilling included varying depths of fill material composed of sandy, angular to sub-angular gravel sidecast with cobbles and boulders derived from presumably local metamorphic and igneous rock sources. This material overlays rounded gravels, cobbles and boulders, assumed to be alluvium associated with Clear Creek. The color of this material ranged from dark grayish brown, to olive brown and brown.

2012 Twin Tunnels Samples: Five soil samples were collected in the PPSL project limits, originally supporting the Twin Tunnels project, in July and August of 2012 (Figure 2, 3, and 4; Table 3-4). Due to the inclusion within the PPSL project limits (the western boundary of Idaho Springs), the results were considered for this project.

PPSL Samples: Twenty-four soil samples from 22 geotechnical borings were collected by Pinyon for laboratory analysis between August 27, and November 14, 2013 (Figure 2). Nine samples were collected in the vicinity of SH-103 bridge structure F-14-E. Significant subsurface work will be conducted in this area during the removal and reconstruction of the bridge. The remaining borings were advanced in support of proposed retaining wall structures and were collected by Pinyon throughout the project area (Figures 2, 3 and 4). Metals were detected at concentrations exceeding the U.S. EPA Regional Screening Levels (RSLs) for Industrial Soils in some soil samples (Table 3-3).

2012 Twin Tunnels Sample Results: The sample results were compared to the U.S. EPA RSLs for Industrial Soils as directed by the Colorado Department of Public Health and Environment (CDPHE). Metals were detected in all five soil samples collected. Lead was detected in two of the samples collected (both from boring YA-S-1) at concentrations above the RSL of 800 mg/kg for industrial soils. The samples were collected at depths of 13 to 18 feet bgs and 18 to 23 feet bgs within the boring; the concentrations detected were 37,000 and 29,000 mg/kg of lead, respectively (Pinyon, 2012).

Arsenic was detected in all five soil samples at levels above the current industrial RSL (2.4 mg/kg) (Table 3-3).

PPSL Sample Results: With the exception of arsenic, the concentrations of the metals detected in the soil samples collected throughout the remainder of the project area were below the industrial-use RSL. The concentrations of arsenic detected ranged from below the laboratory reporting limit to 14.6 mg/kg. Arsenic was detected in eight of the samples at levels above the RSL for industrial use (Table 3-3).

The pH readings of the soil samples ranged between 4.4 and 8.08 which did not exceed the hazardous material limit for waste characterization.

In Colorado, arsenic occurs naturally. The CDPHE released guidance related to evaluating arsenic concentrations in soil, specifically regarding screening data collected from sites where historical use does not

indicate the potential for arsenic contamination (CDPHE, 2011b). The guidance is based on the collection of over 2,700 samples from 44 counties in Colorado. The average concentration of arsenic in soils based on this sampling was 11 mg/kg. The CDPHE has adopted a policy that, if arsenic concentrations are lower than 11 mg/kg, and releases of arsenic could not have occurred at the site, the CDPHE will require no further action to address arsenic in soil. In samples YA-S-2 and YA-02, collected by Pinyon in the area of the SH-103 bridge structure, 16 mg/kg and 12.9 mg/kg of arsenic were detected, respectively (Figure 4). In sample YA-S-1, collected near the western boundary of Idaho Springs, arsenic was detected at concentrations of 190 mg/kg and 540 mg/kg of arsenic, respectively.

Table 3-4 Soil Sample Results

Sample Location	Depth (feet)	Date	Comment	Analyte		pH
				Arsenic	Lead	
			Industrial RSL (mg/kg)	**2.4**	**800**	**NS**
			Hazardous Material Limit (mg/L)[1]	**5**	**5**	**<2.0 : >12.6**
2012 Results Supporting Twin Tunnels Project within the PPSL Project						
YA-S-1	13-18	7/12/2012	Clay with sand, fine to course grained, slightly moist, medium stiff to stiff, pale olive (5Y 6/4); soft drilling, oxidized, possible mine waste.	**190** **<0.05 [2]**	**37,000** **200 [2]**	4.7
YA-S-1	18-23	7/12/2012	Clay with sand, very silty, medium moist to moist, soft, pale olive (5Y 6/4), possible mine waste by visual observation.	**540** **<0.05 [2]**	**29,000** **200 [2]**	4.4
YA-S-2	0-8	7/17/2012	Clay, very sandy with gravel, silty, medium moist, medium stiff, very dark gray (10YR 3/1) to sand/gravel, fine to very course grained, silty, medium moist, dense to hard, dark yellowish brown (10YR 4/4); wet at eight feet.	**16**	180	6.5
YA-S-3	0-23	7/17/2012	Possible fill, sand, very gravelly, silty, medium moist, medium dense to dense, very dark grayish brown (10YR 3/2) to very yellowish brown (10YR 4/4)	**2.5**	14	6.7
YA-S-4	0-13	8/1/2012	Possible fill, gravelly sand to gravelly cobble, medium moist to dense, dark yellowish brown (10YR 4/4 and 4/2)	**2.9**	28	6.3
2013 Results Supporting PPSL Project						
YA-02	13.5-18.5	8/28/2013	SP/GP, clayey, medium density, dark brown (10YR 3/3)	**12.9**	99.9	NA
B-3	14-18	9/3/2013	SP/GP, gray/brown medium sand with semi-rounded gravel, moist (10YR 4/2)	**<3.22**	11.1	8.00
B-4	10-15	9/4/2013	SP, dark brown very coarse sand with lesser gravel, loose, wet, gravel is sub-angular to sub-rounded (10YR 3/2)	1.21	9.95	7.16

Sample Location	Depth (feet)	Date	Comment	Analyte		pH
				Arsenic	Lead	
			Industrial RSL (mg/kg)	**2.4**	**800**	**NS**
			Hazardous Material Limit (mg/L)[1]	**5**	**5**	**<2.0 : >12.6**
B-4	25-30	9/4/2013	Dark brown, very coarse sand with lesser sub-angular to sub-rounded gravel, loose, wet (10YR 3/2)	**3.96**	10.8	6.42
YA-B-5	25	9/26/2013	Orange/brown clayey sand with sub-rounded gravel, wet (10YR 5/8)	**<3.26**	11.2	7.30
YA-DOW-2	3.5-8.5	11/6/2013	Very dark brown, more fines, gravelly and sandy (10YR 3/2)	**3.70**	72.4	7.26
YA-DOW-3	3.5-8.5	11/7/2013	Clayey sand, some gravel, medium brown, dry to moist, medium plasticity, medium density (10YR 4/3)	1.88	21.5	7.51
YA-DOW-4	3.5-8.5	11/7/2013	Dark gray brown, silty sand with some gravel, low plasticity, medium density (10YR 3/2)	1.20	24.2	7.6
YA-DOW-5	0-3.5	11/7/2013	Yellow, powdery very fine sand, medium plasticity, medium density (10YR 7/2)	1.30	35.6	7.92
YA-DOW-5	3.5-8.5	11/7/2013	Medium brown, silty sand, some gravel, low plasticity, medium density (10YR 4/3)	1.16	33.8	7.62
YA-DOW-6	3.5-8.5	11/8/2013	Light grey/brown to reddish brown clayey sand, some gravel, low plasticity, medium density (10YR 5/2 to 7.5YR 4/4)	**4.83**	66.5	7.58
YA-DUM-1	5-8.5	11/11/2013	SW, brown sand with no plasticity and medium density (10YR 4/2)	**<2.84**	14	7.63
YA-DUM-2	3.5-8.5	11/12/2013	Gray-brown, coarse grained sand, dry, no plasticity (10 YR 3/2)	**<14.5**	12.8	6.49
YA-DUM-3	3.5-8.5	11/12/2013	Very dark brown, SP, dry, coarse grained sand with no plasticity and medium density (10YR 4/2)	**<2.82**	44.6	7.69
YA-DUM-4	8.5-13.5	11/13/2013	Very dark brown, SP, dry coarse grained sand with no plasticity (10YR 3/2)	**<2.72**	19.6	7.69

Sample Location	Depth (feet)	Date	Comment	Analyte		pH
				Arsenic	Lead	
			Industrial RSL (mg/kg)	**2.4**	**800**	**NS**
			Hazardous Material Limit (mg/L)[1]	**5**	**5**	**<2.0 : >12.6**
YA-FAL-1	0-3.5	11/14/2013	Brown, SP, dry, gravelly medium grained sand, non-plastic (10YR 4/3)	**<2.88**	20	6.73
YA-FAL-2	3.5-8.5	11/14/2013	Dark gray, dry, medium density, non-plastic (10YR 4/1)	**<14.6**	17.5	6.87
YA-LAW-02	13.5-18.5	11/5/2013	Brown, sandy silty clay, medium plasticity, medium density, low moisture, round gravel (10YR 4/3)	**4.48**	132	7.44
YA-LAW-03	3.5-8.5	11/6/2013	Brown, sand, no plasticity, low density, no moisture (10YR 4/3)	0.546	38.9	8.08
YA-LAW-04	1-3.5	11/6/2013	Dark grayish brown, sand and round gravel, no plasticity, low density, dry (10YR 4/2)	1.3	43.7	7.89
YA-LAW-05	5-8.5	11/12/2013	SP, brown sand with no plasticity and medium density (10YR 3/1)	**<2.70**	22.6	7.3
YA-WB-1	3.5-8.5	11/13/2013	Very dark gray, SP, dry medium and coarse grained sands with no plasticity and medium density (10YR 3/1)	**<3.05**	91.8	7.16
YA-WB-2	3.5-8.5	10/28/2013	Dark grayish brown gravelly sand, water at 13 feet (10YR 4/2)	**<3.12**	12.1	7.89
YA-WB-3	0-3.5	10/29/2013	Very dark grayish brown, SP/GP, slightly clayey medium plasticity and density (10YR 4/3)	**3.20**	132	7.63

Notes:

RSLs - Regional Screening Level Summary Table, United States Environmental Protection Agency, May 2013.

[1] - EPA Toxicity Characteristic Maximum Concentration, after analysis by the Toxicity Characteristic Leachate Procedure.

[2] - Concentration, in mg/L, when analyzed by toxicity characteristic leaching procedure (TCLP)

mg/kg - milligrams per kilogram

mg/L - milligrams per Liter

NA - Not analyzed

NS - No Standard

< - Indicates concentrations below laboratory reporting limits

***Bold** - Indicates concentration exceeds industrial RSL*

Visual evaluation of the material encountered during drilling activities indicates that the subgrade at the locations where significant excavation will be completed (near the SH-103 bridge structure over I-70, at the East Idaho Springs interchange, and retaining walls where sampled), is composed of processed blast rock derived from local metamorphic and igneous rock sources upslope of I-70, likely placed when I-70 was initially constructed.

However, suspected mine waste was observed at one location (YA-S-1). Elevated lead concentrations were detected in samples from YA-S-1 (29,000 mg/kg and 37,000 mg/kg, respectively); due to the high concentrations, the samples were also analyzed by TCLP. The concentrations of lead exceeded the TCLP threshold; therefore, the suspected mine waste in the area of YA-S-1 is characterized as hazardous waste.

3.3.3.2 Groundwater Sample Results

Pinyon collected one groundwater sample, YA-B-5, on September 26, 2013, near the SH-103 bridge structure, and from YA-B-1 on February 18, 2014 near the East Idaho Springs Interchange.

Analytes detected within the groundwater samples were compared to the CDPHE – Water Quality Control Commission's Regulation 38. Based on the Site location, surface water discharges to Segment 2C of Clear Creek, and the first hierarchal regulation is Regulation 38 for inorganic constituents (metals) (CDPHE, 2011c), followed by Regulation 31 (CDPHE, 2011d). Using CDPHE protocols, only chronic standards were examined during this investigation (Table 3-5).

If no value was listed for a given metal, table value standards (TVS) from Regulations 31, and 38 for chronic aquatic life impacts, were used. For example, Segment 2C has a numeric limitation for arsenic, whereas other metals such as cadmium and lead have a TVS from Regulations 31 and 38. If no numeric value from Regulation 38, or chronic TVS from Regulations 31 and 38, are given for a specific constituent, then the standard for the most protective use applies. For this segment of Clear Creek the most protective use is for domestic water supply, and those standards were used for comparison. Finally, many of the Regulation 31 and 38 TVS are based on a mathematical formula with the current stream hardness as the variable. CDPHE has provided an average year-round hardness value for this segment of Clear Creek of 75 milligrams per liter (mg/L) (CDPHE, 2008), which was utilized as the variable. It should be noted that the samples collected during this investigation were done so using the EPA solid waste methodologies, and may not correlate well to the surface water standards due to the preservation techniques, which differ from the Clean Water Act methodologies. However, the methodology used in this investigation is applicable for comparison to the Colorado Ground Water Standards.

Near the SH-103 bridge, arsenic, mercury, and selenium concentrations were below the laboratory detection limit; however, those limits exceed the appropriate CDPHE surface water standard for Segment 2C of Clear Creek. Cadmium, lead, and silver were all detected at concentrations exceeding the appropriate surface water standard (Table 3-5). Cadmium concentrations exceeded the groundwater standards (Table 3-5).

Near the East Idaho Springs interchange, several metals were detected at concentrations that exceeded both the surface water and groundwater standards (Table 3-5).

The samples were also analyzed for volatile organic compounds (VOCs). With the exception of chloroform, all concentrations were below the laboratory detections limits or the surface water and groundwater standards (Table 3-5). The detection of chloroform is most likely attributed to a leaking water line(s) which led to an influx of potable drinking water into the groundwater system. It is believed that other chemicals detected at the East Idaho Springs Interchange may have been introduced during drilling activities as they were not indicative of nearby land uses.

Table 3-5 Groundwater Sample Results

Analytes	Sample YA-B-5 Near SH-103 Bridge Structure; collected 9/26/13		Sample YA-B-1 Near East Idaho Springs Interchange, collected March 18, 2014		Ground Water Standard (µg/l)	Surface Water Potential Permit Limit (µg/l) Hierarchal Limits from Left to Right					
	Dissolved (SW846) (µg/L)	Notes	Dissolved (SW846) (µg/L)	Notes		Reg 38 Numeric (Chronic)	Reg 38 Numeric (Acute)	Chronic TVS (Reg 31 & 38)	Acute TVS (Reg 31 & 38)	water+fish (Reg 31)	DWS (Reg 31)
Metals											
Arsenic	<5.00	U	23.3	J	10	0.02	340.00			0.02	0.02
Barium	63.7		798		2000						1,000
Cadmium	35.6		7.0		5			0.34	2.13		5
Total Chromium	6.92		105		100		50.00	58.56	450.17		50
Lead	7.10	J	139		50			1.84	47.15		50
Mercury	<0.067	U	<0.2		2	0.01					2
Selenium	<6.00	U	6.8	J	50			4.60	18.40	170	50
Silver	2.39	J	<5.0	U	50			0.20	1.24		100
Volatile Organic Compounds (detected)											
2-Butanone	<5.0		17.0		NS	NS					
Acetone	<8.0		78		6,300	NS					
Benzene	<1.0		1.6		5.0					2.2	5.0
Chloroform	3.94		<1.0		3.5					3.4	NS
Chloromethane	<1.0		2.6		NS	NS					
Styrene	<1.0		3.4		100						100

Notes:

Hardness-Dependent Value for River Segment = 75 mg/L provided by CDPHE

Permit Limit highlighted in green

Value potentially exceeds discharge permit limit

Indicates the laboratory reporting and minimum detection limits are higher than the potential permit limit for this metal

NS – No standard

TVS = table value standard

DWS - domestic water supply limit

< = indicates a result less than the reporting limit

J = Indicates a result greater than the method detection limit but less than the reporting limit

B = Indicates metal detected in method blank

U = Indicates a result lower than reporting limit and method detection limit

µg/l - micrograms per liter

Formulas for TVS Values and Other Notes:

Metals	Formulas for TVS Values/Other Notes
Aluminum	Acute = e(1.3695[ln(hardness)]+1.8308) (applies to total recoverable results) Chronic = e(1.3695[ln(hardness)]-0.1158)
Antimony	
Arsenic	
Barium	Note that only acute Ba level given is DWS
Cadmium	Acute TVS = (1.136672-[ln(hardness) x (0.041838)])*e(0.9151[ln(hardness)]-3.1485) Chronic TVS = (1.101672-[ln(hardness) x (0.041838)])*e(0.7998[ln(hardness)]-4.4451)
Copper	Acute TVS = e(0.9422[ln(hardness)]-1.7408) Chronic TVS = e(0.8545[ln(hardness)]-1.7428) Numeric standard from Reg 38 (chronic)=17
Lead	Acute TVS = (1.46203-[ln(hardness)*(0.145712)])*e(1.273[ln(hardness)]-1.46) Chronic TVS = (1.46203-[ln(hardness)*(0.145712)])*e(1.273[ln(hardness)]-4.705)
Mercury	Total Recoverable
Selenium	
Silver	Acute TVS = ½ e(1.72[ln(hardness)]-6.52) Chronic TVS = e(1.72[ln(hardness)]-9.06) Trout TVS = (1.72[ln(hardness)]-10.51) (This value used instead of chronic as it is more conservative) Standard is lower than laboratory minimum detection limit and reporting limit

3.4 Site History

The following resources were used in developing the Site history (Table 3-6):

- Aerial photographs from selected years between 1951 and 2011;
- Historical USGS topographic maps, from selected years between 1905 and 2013;
- Sanborn fire insurance maps from selected years between 1907 and 1931;
- Site reconnaissance conducted on September 24, 2013;
- Tax assessor information, provided by the Clear Creek County Assessor's Office;
- Zoning records from Clear Creek County;
- Interviews; and
- Agency file review.

A complete list of references is included as Section 6.0.

Table 3-6 Summary of Site History

From	To	Site Use
Prior to 1859	1912	Gold was discovered in 1859 in Idaho Springs, after which the majority of the Clear Creek floodplain was dredged for gold, likely including portions of the Site near Clear Creek (EPA, 1991). An unimproved-road has been developed on the Site, west of Idaho Springs since at least 1905. A light-duty road has been developed at the same location as the current SH-103 bridge structure since 1905. It appears that there is a bridge associated with the light-duty road at the current SH-103 bridge structure; however, it is not possible to determine if there was a bridge because of the scale of the map (*topographic maps and Sanborn maps).*
1912	1960	The stretch of road between Idaho Springs and Empire Junction has been developed with a highway or a road with a median strip since at least 1942 *(topographic maps, aerial photographs, and Sanborn maps).*

From	To	Site Use
1960	Present	Since at least 1960, I-70 has been listed as a primary highway. Prior to that it was listed as a secondary highway. The SH-103 bridge has been developed since at least 1967 and the configuration of the road through Idaho Springs is consistent with the current I-70 configuration *(topographic maps and aerial photographs).* During the construction of I-70, Clear Creek was moved to the south between Chicago Creek on the east and the Big Five mine tunnel on the west (*topographic maps and aerial photographs).*

3.5 Questions Regarding Past Environmental Practices

Past environmental practices at the Site, as identified during the course of this Modified ESA report, were also reviewed (Table 3-7).

Table 3-7 Summary of Past Environmental Practices

Environmental Practice	**Identified (Yes or No)**	**Section for Additional Information**
Past Spills/Releases Is the Site listed on an agency listing for a reported or suspected release or spill or petroleum products, hazardous wastes, or hazardous substances?	Yes	3.5.1
Past Environmental Studies Has an environmental assessment previously been conducted at the Site?	Yes	4.2
Environmental Liens/Actions Are there any pending, threatened or past litigation relevant to environmental issues at the Site?	No	--
Are there any pending, threatened or past administrative proceedings relevant to environmental issues at the Site?	No	--
Are there any notices from any governmental entity regarding any possible violation of environmental laws at the Site?	No	--

3.5.1 Past Spills/Releases

Fifteen spill incidents were reported in the GeoSearch database as having occurred on I-70 (Appendix A). Review of the listings did not provide exact locations where these incidents occurred, with location descriptions based on approximate mile markers. Materials released included diesel fuel and gasoline, and were generally in relatively small quantities of less than 60 gallons. The Colorado State Patrol (CSP) is responsible for cleanup of spills that occur on Colorado highways. No indication of investigation or cleanup beyond initial report of release and response actions was identified in the environmental database.

3.6 Interviews

In completing this Modified ESA, Pinyon contacted agencies and individuals who may have knowledge about the Site (Table 3-8). Pertinent information regarding the interviews conducted can be found in Sections 3.6.1.

Table 3-8 Summary of Persons and Agencies Contacted

Agency/Affiliation	Contact Name Phone/Email/Website	Date Contacted	Summary of Interview
Municipal Water/Sewer Provider			
N/A	N/A	N/A	N/A
Electrical/Natural Gas Provider			
Xcel Energy	www.xcelenergy.com	800.895.4999	NA
Agencies			
Clear Creek Assessor	www.co.clear-creek.co.us/depts/assess.htm 303.679.2322	September 23, 2013	Reviewed information online.
Clear Creek County	Alexis Ehrgott 303.670.7531	September 24, 2013	Reviewed historical mining documents and maps.
Colorado Department of Labor and Environment – Division of Oil and Public Safety	http://Costis.cdle.state.co.us	September 17, 2013	Reviewed regulatory documents for adjacent and surrounding properties included within the GeoSearch database.

Agency/Affiliation	Contact Name Phone/Email/Website	Date Contacted	Summary of Interview
CDPHE	Steve Laudeman 303.692.3381	October 17, 2013	Site visit to review project elements and overview of known milling sites.

Notes:
NA Not applicable
NC Not contacted

4. Adjacent and Nearby Properties

4.1 General Off-Site Description

Zoning:

The adjacent properties in vicinity of the Site are generally zoned for mining. The areas around Idaho Springs are zoned for residential and commercial uses. Along with being zoned for mining, the areas around Downieville, Lawson, and Dumont are also zoned for residential and commercial uses.

Adjacent Site Use:

The PPSL improvements will be on the eastbound lanes of I-70. Throughout this project area, the north adjacent use is the west-bound I-70 lanes and the south adjacent use is generally Clear Creek, except for the eastern portion of Idaho Springs where there is a bend in the creek and it flows to the north of I-70. The following site uses are for the properties in the general vicinity of the project area.

Between Mile Post 238 and 241:

Lands adjacent to the Site in this area include residences, commercial developments, a grocery store, automotive fueling stations (Amoco Oil and Miner Street Shell), and former mine/mill sites (Alma Lincoln, Mayflower, Hukill, Big Five Mine Waste and Drainage, Sunshine, Lyons/Dixie, and Silver Spruce).

Between Mile Post 235 and 238:

This area is generally undeveloped forested lands, residential and commercial development, mine/mill sites (Snider, Sprecht/McClelland, General Herkimer, Dover Mill, Donaldson Mill, Hoosac Mill, and the Stanley Smelter Complex), and Superfund listed Operable Units (McClelland Mine Waste and Drainage and Rockford Mine Drainage).

Between Mile Post 232 and 235

This area is generally undeveloped forested lands, residential and commercial development, mine/mill sites (Woolcott Placer, Junction Placer, Red Elephant, and Blue Ridge).

General Regional Property Use:

Except for the city of Idaho Springs and the towns of Dumont, Lawson, and Downieville, land use in the vicinity of the project is vacant, and constrained by rugged forested and mountainous lands. Development is generally comprised of residential and commercial properties that are located near I-70 and/or Clear Creek.

4.2 Sensitive Environmental Off-Site Uses (Current and Historic)

A total of 43 facilities were identified in the agency database search (Table 4-1; Appendix A); several of these facilities were identified with multiple database listings (GeoSearch, 2013). Sites identified in the agency database were categorized as either having a low or high potential to impact the study area. A summary of the facilities identified in the agency database is presented in Appendix A.

Table 4-1 Summary of Agency Database Search

Type of Database	Number of Listings in a Specified Search Radius (mile)			
	<1/8	1/8-1/4	1/4 -1/2	1/2 - 1
National Priority List (NPL)	1	0	0	0
RCRA Corrective Action (RCRAC)	0	0	0	0
Tribal Lands	0	0	0	0
RCRA Permitted Treatment, Storage, and Disposal (RCRAT)	0	0	0	
RCRA Do Not Presently Generate (NonGen)	7			
RCRA No Longer Regulated (NLR)	1			
National CERCLIS	0	0	1	
National CERCLIS-NFRAP	0	0	1	
State Spills	20			
State VCP	0	0	1	
Solid Waste Landfills	2	0	0	
Leaking Underground Storage Tanks (LUST)	15	1	0	
Registered UST/AST	22	27		
Federal IC/EC	0	0		
Federal ERNS	6			
RCRA Generators	2			
Hazardous Waste Sites – Corrective Action (HWSCA)	0	0	0	0
Federal Brownfield	0	0	0	

Notes:
The grey boxes indicate that this distance is not required to meet the minimum ASTM-required distance.
See Appendix A for complete report and maps identifying facilities summarized above, including a description of each database reviewed.

During the off-Site reconnaissance and review of the GeoSearch database report (Appendix A), regulatory agency files and historical information, or a combination thereof, six establishments with the potential to impact the Site were identified (Table 4-2).

Table 4-2 Sensitive Environmental Off-Site Uses

From	To	Address/Distance	Use
1983	Present	Located within the Site vicinity.	Central City, Clear Creek (1)
2006	Present	South of Minor Street - located approximately 150 feet to the north of the Site.	Soda Creek - (10)
2010	Present	1039/1041 - 1041A County Road 308 – approximately 200 feet to the north of the Site	Downieville Fuel Stop/REXOCO #35 – fueling station (13)
2009	Present	1359 Miner Street – located approximately 300 feet to the north of the Site.	Kum & Go #975 – fueling station (21)
1992	Present	1319 Miner Street – located approximately 300 feet to the north of the Site	Amoco #5329 – fueling station (21)
1996	Present	1856 Colorado Boulevard – located approximately 500 feet to the north of the Site.	Get Gassed – fueling station (33)

1. Central City/Clear Creek Superfund Site (GeoSearch database number 1) – Gold was discovered in Idaho Springs in 1859, and hard rock and placer mining was a leading industry in the vicinity until the 1950s. Over 800 inactive mines and tunnels are located in Clear Creek and Gilpin counties (EPA, 1991). Initially, placer mining was conducted; however, deposits were quickly depleted. Mining activities then focused on hard rock sulfide ores through deep mines. Flooding problems required that the mines be drained through drainage shafts, many of which continue to drain water heavily contaminated with metals, and discharge into surface-water bodies. The Central City/Clear Creek Superfund site was added to the National Priorities List (NPL) in 1983. This listing includes multiple waste piles, tailing impoundments, milling sites and draining mine adits within a 400-square mile area in the Clear Creek watershed. Mining and ore processing left a legacy of contamination of soil, surface water and groundwater in many areas in Clear Creek and Gilpin counties. Most significant is the impact to Clear Creek and its tributaries, which serve as a major drinking water source for the Denver area. The most significant contaminants are metals, in particular, lead, arsenic and cadmium (EPA, 1991).

   The boundary of this Superfund site is not precisely defined due to the nature of the site, but generally includes the approximately 400 square miles of the Clear Creek watershed west of Golden. Mining activities occurred at many locations across a broad area, leading to a wide distribution of mine waste, where many discrete locations contain small amounts of waste. In order to address concerns with different discrete facilities, the EPA organized work into separate operational units (OUs). OU 1 was designated to address acid mine drainage from five mine tunnels utilizing passive treatment. OU 2 was designated to address remediation of mill tailings and mine waste rock associated with the five discharging tunnels in OU 1. OU 3 was designated to conduct a more comprehensive evaluation of the Clear Creek watershed including active treatment of two of the five OU 1 mine discharges. OU 4 focuses on sources of metals contamination to the North Fork of Clear Creek, a major tributary to Clear Creek. The remedial actions

address contaminated surface water, ground water and sediment. Several sites located within the project area are included in the OUs (CDPHE, 2009):

- *McClelland Waste Pile/Mine Adit Discharge* – The waste pile is included in OU 3 and is located between mile posts 235 and 236 approximately 250 feet south of the Site, south of Clear Creek. This pile has been partially remediated with the mill tailings excavated from Clear Creek and capped; however, drainage is not designated as an OU (PEIS, 2011). The mine adit discharge is also included in OU 3, but no remedial action has been taken (CDPHE, 2009). The CDPHE five-year review report indicated that in-stream concentrations of copper have been noted to increase in Clear Creek. The increase is due, in part, to contributions from mining-impacted tributaries and small inflows from the McClelland Mine.

- *Rockford Mine Adit Discharge* – This mine is located near mile post 237, approximately 200 feet south of the project area. This mine adit is listed under the OU 3, but no abatement action has been taken and the drainage continues to flow into Clear Creek (CDPHE, 2009). The CDPHE five-year review report indicated that in-stream concentrations of copper have been noted to increase in Clear Creek. The increase is due, in part, to contributions from mining-impacted tributaries and small inflows from the Rockford Mine.

- *Argo Waste Pile/Tunnel* – The Argo Waste Pile and Tunnel are both located in Idaho Springs approximately 750 feet north of the Site. This drainage site used to dump approximately 740 pounds of metals into Clear Creek per day (Fliniau and Norbeck, 1997). The tunnel was constructed between 1893 and 1910 to drain water from deep mines along its route from Central City to Idaho Springs. The tunnel serviced gold rich mines in Virginia Canyon, Gilpin Gulch, Quartz Hill, Nevadaville, and Central City. The waste pile is included in OU2 and remediation activities include re-grading of the waste pile to remove its toe from Clear Creek along with capping and constructing a retaining wall along a portion of the waste pile toe. The tunnel drainage is the largest source of metal contamination to Clear Creek. The Argo Tunnel is included in OU1 and a 700 gallon-per-minute water treatment facility began operation in 1998. The treatment facility prevents approximately 1,200 pounds of metals from entering Clear Creek each day (PEIS, 2011).

- *Big Five Waste Pile/Tunnel* – The Big Five Waste Pile and Tunnel are located on the western end of Idaho Springs between mile marker 238 and 239 approximately 350 feet north of the Site. Mine dumps on both sides of Clear Creek have been excavated from the creek and capped (PEIS, 2011). The waste pile is included in OU2 and has been capped and a retaining wall has been constructed. The tunnel is included in OU1 and water from this drainage is piped and discharged to the Argo water treatment plant. The USDA maps indicate that surficial soils in this area are potentially derived from mine-related waste (Figure 4).

- The majority of I-70 has been constructed on embankment fill, which was confirmed during geotechnical investigations completed by Yeh in support of this CDOT project. Geotechnical investigations have been completed in support of this CDOT project, which included drilling of numerous vertical soil borings in locations where structural elements are anticipated (e.g., retaining walls and new bridge abutments). During those drilling activities, Pinyon personnel collected representative soil samples of fill material to evaluate potential environmental conditions.

Based on the resources reviewed, the following summary is presented regarding potential mining activities near and within the Site:

- Information collected from the Division of Reclamation Mining and Safety (DRMS) indicates several mine permits in the vicinity; however, there is no information that mining actually occurred at the locations noted in that database (DRMS, 2013).

- Thirty-eight mill sites have been identified in the vicinity of the Site, including 13 known operational mills as of June 2003 (PEIS, 2011 and Slagel, 2003). The sites are shown on Figures 2 through 4.

- Four Superfund remediation sites are located within the Site vicinity (Figures 2 through 4).

- It is possible that mine wastes have been utilized as roadway embankment beneath I-70, as well as nearby off-Site areas. Mapping information from the USDA indicates that at least two large areas beneath the Site may include mine waste (USDA, 2013).

2. Soda Creek, South of Miner Street, (GeoSearch database number 10) – According to the database, an unknown material of unknown quantity was released into the Soda Creek, located approximately 150 feet to the north of the Site. According to the database, the release is listed as an impacted water.

3. Downieville Fuel Stop/REXOCO #35, 1039/1041 - 1041A County Road 308 (GeoSearch database number 13) – A fueling station is currently located at 1039/1041 - 1041A County Road 308, approximately 200 feet to the north and hydraulically upgradient of the Site.

   According to the database, an unknown quantity of unleaded gasoline was released from a flexible connector at the Downieville Fuel Stop on July 30, 2010. Elevated benzene concentrations have been detected above the Risk Based Screening Level and free phase hydrocarbons were observed above the Risk Based Screening Levels in groundwater monitoring wells installed on the property. Quarterly groundwater monitoring has been taking place at the property since October of 2012; however, no active remediation is currently underway.

4. Kum & Go #975, 1359 Miner Street, Idaho Springs (GeoSearch database number 21) – A fueling station is currently located at 1359 Miner Street, approximately 300 feet to the north and hydraulically upgradient of the Site.

   According to the database report, stained soil was discovered during previous construction activities. Soil samples were collected and all samples were below the Risk Based Screening Levels. The Division of Oil and Public Safety issued a No Further Action letter on November 17, 2009. There are currently three petroleum underground storage tanks (USTs) at the facility; however, no releases or violations have been reported other than the stained soil.

5. Amoco #5329, 1319 Miner Street, Idaho Springs (GeoSearch database number 21) – A fueling station is currently located at 1319 Miner Street, approximately 300 feet to the north and hydraulically upgradient of the Site.

   According to the database report, in 1992 100 cubic yards of petroleum impacted soil was removed, along with USTs and associated fuel distribution system. Elevated levels of benzene, toluene, ethyl-benzene, and xylenes, were detected; however, an approved corrective action plan suggested quarterly monitoring and to allow biological degradation and natural attenuation to continue. Quarterly groundwater sampling was conducted until the Division of Oil and Public Safety issued a No Further Action letter on July 22, 1996.

4. Get Gassed, 1856 Colorado Boulevard, (GeoSearch database number 33) – A fueling station is currently located at 1856 Colorado Boulevard, approximately 500 feet to the north and hydraulically down-gradient of the Site.

According to the database, the two leaking underground storage tanks (LST) events have received No Further Action letters from the Colorado Department of Health (presently known as the CDPHE). Additionally, approximately 300 gallons of gasoline was released into the soil from a bad connection between the pump and piping, which was reported as a spill. No other information was available from the database.

5. Conclusions

5.1 Findings

Based on the information obtained and reviewed, the following RECs were identified:

RECs **Yes**

- *Adjacent Automotive Fueling Station:* An unknown quantity of unleaded gasoline was released from a flexible connector at the Downieville Fuel Stop, located at 1039 County Road 308 in Downieville. This property is approximately 200 feet to the north of the Site and is hydraulically upgradient. Further, this property is located approximately 1,200 feet upgradient of the Dumont on-ramp retaining wall where intensive excavation is anticipated. Elevated benzene concentrations and free phase hydrocarbons were observed in groundwater monitoring wells on the property. Quarterly groundwater monitoring has been conducted at the property since October of 2012; however, no active remediation is currently underway. Based on the presence of free phase hydrocarbons and the lack of monitoring activities, this finding is considered to be a REC.

- *Previous Mining and Milling Operations:* Mining and milling activities occurred in the Site vicinity from approximately 1859 to the 1980s. It is possible that mine-related wastes are located beneath the on-Site ROW, which could be encountered during construction activities at the Site. It is likely that mine waste, if encountered, would be difficult to distinguish as it would likely have been mixed with "clean" embankment material beneath the ROW. If this is the case, chemical concentrations would be significantly diluted by those historic processes. Several RCRA 8 metals (including arsenic and lead) were detected at levels which exceeded the RSLs for industrial soils (Figures 2, 3, and 4). Lead was detected in samples from YA-S-1 at concentrations that would make the soil a hazardous waste (Figure 3). Further, metals have been detected in the on-Site groundwater at levels which exceed the appropriate surface water standard for Segment 2C of Clear Creek. Metals concentrations also exceed the applicable groundwater standards at the East Idaho Springs Interchange. Additionally, chloroform was detected as exceeding the groundwater standard. Based on this information, this previous mining and milling operations that have occurred in the project vicinity is considered to be a REC.

Controlled RECs

None.

Historic RECs

None.

De Minimis Conditions

None.

5.2 Opinion

The classification of items as RECs was made using the definition of a REC. There is indication of an existing or material threat of release at the Site.

Based on dates of mining operations in the project vicinity, the lack of environmental regulations during those times, and the limited availability of data regarding the disposition of mine-related wastes for the time period

in question, there is a possibility that mine wastes are located in the project area, including Site soils and groundwater, and could be encountered during construction activities.

The magnitude of the project impact from a REC is dependent on different factors, including: the distance between a potential source of a regulated material and the project; status of regulated facilities (e.g., active or inactive); known or suspected releases into soil, surface water or groundwater; the hydrogeologic relationship of the source of a regulated material to the project; and the depth and/or duration of construction. These factors have been considered in this MESA as part of the evaluation of whether a REC has the potential to impact the project. Facilities were categorized as either having a low or high potential to impact the study area. The following describes the categories:

Low Potential: Facilities that fit this criteria include:

- Facilities with minimal indications of an existing release, past release, or material threat of a release of regulated materials into the ground (soil), groundwater, or surface water that could impact the study area.
- Facilities located hydraulically down-gradient of the study area.
- Those facilities where contamination has impacted the study area; however, there is a low potential for known or suspected contamination to be exposed during construction of the project.

High Potential: Facilities that fit this criteria include:

- Facilities with indications of an existing release, past release, or material threat of a release of any regulated materials into the ground (soil), groundwater, or surface water, and the possibility of migration from the contaminant source into the study area.
- Those same facilities that have caused a migration of the contaminants into the study area, and where construction would likely result in exposure of media impacted by those contaminants (e.g., soil, soil vapor, groundwater).

Pinyon has utilized these criteria to develop an opinion as to the magnitude of impact to the project:

Adjacent Automotive Fueling Station: It is unlikely that the facility has impacted soil that would be disturbed during construction, and groundwater is not likely to be encountered during construction in the vicinity of this facility. Although this facility qualifies as a REC based on the definition of a REC, the potential for it to impact construction of the project is considered **low**.

Previous Mining and Milling Operations: Mine-impacted soils and groundwater have been identified during field sampling activities, and there is a possibility that mine waste could be encountered in other locations throughout the project area. Further, the potential to encounter mine wastes increases where intensive excavation would occur (e.g., retaining walls or bridge abutments). The potential for mine wastes to impact this project is considered **high**.

5.3 Additional Investigation

No additional investigation is recommended at this time.

5.4 Data Gaps

The ASTM Standard requires that Site use be documented to 1940, or first use, whichever is earlier. Pinyon has been able to verify the Site use since 1890, but could not document the start date of land use. Not all of the standard historical resources were used. In Pinyon's experience, the following are not reasonably attainable, or would not be available, for this Site, and were therefore not consulted:

- The Site was not developed for the time period in question; therefore, building department records were not reviewed;
- Recorded land title records – were not available due to the Site being publicly-owned ROW and easement areas with no associated parcel numbers; and
- Local street directories.

Pinyon concludes data failure has occurred, a form of data gap. This is not considered a significant data gap.

The ASTM Standard requires that interviews (e.g., Site property owners/occupants, previous property owners, adjacent property owners/occupants) be conducted to obtain information regarding hazardous materials utilized, stored or generated at the Site. Site property owners were not interviewed during this assessment and a user questionnaire was not completed. This data gap is considered significant to the findings in this report.

5.5 Conclusions

Pinyon has performed a Modified ESA in conformance with the scope and limitations of ASTM Practice E 1527 of the I-70 Peak Period Shoulder Lane along I-70 between Empire Junction to Idaho Springs (the "Site"). Any exceptions to, or deletions from, this practice are described in Section 7.1 of this report. This assessment has revealed evidence of recognized environmental conditions in connection with the Site.

5.6 Conclusions and Recommendations Regarding Additional Services

Based on the results of this assessment, the potential exists for hazardous materials and mine wastes to be encountered in areas with intensive excavation (e.g., retaining walls or bridge abutments), or where proposed construction and excavation areas approach the groundwater table (e.g., bridge piers). Activities related to this project will likely disturb the soil and/or groundwater; therefore, it is recommended that workers be made aware of these materials, and that those media be managed appropriately.

Dewatering activities could potentially be necessary during the installation of deep foundation systems for the new SH-103 bridge structure and the new east Idaho Springs Interchange bridge structure. Results indicate that concentrations in groundwater exceed surface water and groundwater standards. Therefore, the water would require either treatment to meet those standards prior to discharge, or off-site disposal. Pinyon understands that CDOT is currently negotiating a disposal option at the Argo Water Treatment Facility with the CDPHE; the results of that negotiation will be presented under separate cover (Materials Management Plan).

A Materials Management Plan should be prepared and implemented in order to specify management practices in these areas for contaminated soil or groundwater that may be encountered during construction. Pinyon is under contract to prepare a Materials Management Plan for the project, and has discussed the approach with CDOT and CDPHE.

Workers on this project must follow CDOT Specification 250 – Environmental, Health and Safety Management and the CDOT Asbestos-Contaminated Soil Management Standard Operating Procedure during excavation activities at this Site.

In the event that suspected ACM is encountered, including with buried utilities, workers must follow CDOT Specification 250.07 – Asbestos-Containing Material Management and CDOT Asbestos-Contaminated Soil Management Standard Operating Procedure. Additionally, depending on the type of ACM, this material must also be abated in accordance with either Section 5.5 of the Solid Waste Regulations, or Regulation No. 8 of the Air Quality Control Commission Regulations.

CDOT requires that all metal project components (e.g., light poles, metal railing, and bridge girders) be recycled. As these materials are recycled, and not disposed at a landfill, it is not necessary to evaluate the content of lead by TCLP, regardless of concentration. The recycling facility must be notified that metal project components contain lead, if applicable. Regardless of lead content, the future contractor must comply with Occupational Safety and Health Administration (OSHA) Regulation 1926.62 for worker safety.

6. References

Agency Contacts

Refer to Table 3-4.

Reports and Publications

Bastin and Hill, 1917. "Economic Geology of Gilpin County and adjacent parts of Clear Creek and Boulder Counties, Colorado," Published 1917.

Braddock, 1969. "Geology of the Empire Quadrangle, Grand, Gilpin, and Clear Creek Counties, Colorado," Completed by U.S. Geological Survey Professional Paper, Dated 1969.

CBM, 1959. "Information Report, Dixie Mill," Completed by the Colorado Bureau of Mines, Dated December 22, 1959.

CBM, 1967. "Information Report, Dixie Mill," Completed by the Colorado Bureau of Mines, Dated June 8, 1967.

CDPHE, 2008. "Total Maximum Daily Load Assessment – Clear Creek – Clear Creek/Gilpin/Jefferson Counties, Colorado," prepared by the Colorado Department of Public Health and Environment, August, 2008.

CDPHE, 2009. "Five-Year Review Report, Fourth Five-Year Review Report for Central City/Clear Creek Superfund Site, Gilpin and Clear Creek Counties, Colorado," prepared by the Colorado Department of Public Health and Environment, September 29, 2009.

CDPHE, 2011b. "Risk Management Guidance for Evaluating Arsenic Concentrations in Soil," Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division, June 2011.

CDPHE, 2011c. "Regulation No. 31 – The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31)," Colorado Department of Public Health and Environment, Water Quality Control Commission, Effective January 1, 2011.

CDPHE, 2011d. "Regulation No. 38 – Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin," Colorado Department of Public Health and Environment, Water Quality Control Commission, Effective June 30, 2011.

CDWR, 2012. "Colorado Decision Support System (CDSS) On-Line Mapping Application," Maintained by the Colorado Division of Water Resources, accessed January 2012.

DRMS, 2013. "Colorado Division of Reclamation Mining and Safety Mapping Application," maintained by the Colorado Division of Reclamation Mining and Safety, www.drmsmaps.state.co.us, accessed September 25, 2013.

EPA, 1991. "EPA Superfund Record of Decision: Central City, Clear Creek, EPA ID: COD980717557 OU 3, Idaho Springs, Colorado," prepared by the U.S. Environmental Protection Agency, September 30, 1991.

Munsell, 2000. "Munsell Soil Color Charts," Published by Munsell Color, 2000.

PEIS, 2011. "I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report," prepared in support of the I-70 Mountain Corridor Programmatic Environmental Impact Statement by the Colorado Department of Transportation, dated August 2010, reissued March 2011.

Pinyon, 2011. "Sampling and Analysis Plan – Twin Tunnels," Prepared by Pinyon Environmental, Inc., November 23, 2011.

Pinyon, 2012. "Materials Management Plan, I-70 Twin Tunnels Project, CDOT Project No. C 0703-354, Clear Creek County, Colorado," September 14, 2012.

Slagel, 2003. "Mill Sites in the I-70 Right of Way" Map provided by JoAnn Sorensen from Clear Creek County, Land Use Division, October 11, 2013.

USDA, 2003. "Soil Survey of Georgetown Area, Colorado, Parts of Clear Creek, Gilpin, and Park Counties," United States Department of Agriculture, Soil Conservation Service, 2003.

Walsh, 2013. "Pre-Demolition/Renovation Asbestos and Lead-Based Paint Inspection Report for the Colorado Department of Transportation Bridge Structure: F-14-E, Chicago Creek Road (N/S Bound) over I-70 (E/W Bound), Mile Marker 239.652," Prepared by Walsh Environmental Scientists and Engineers, LLC, November 15, 2013.

Walsh, 2013. "Pre-Demolition/Renovation Asbestos and Lead-Based Paint Inspection Report for the Colorado Department of Transportation Bridge Structure: F-14-Y, I-70 Business Route (E/W Bound) over I-70 (E/W Bound), Mile Marker 241.125," Prepared by Walsh Environmental Scientists and Engineers, LLC, January 27, 2014.

Yeh, 2005. "Preliminary Site Investigation, Interstate 70 Ramp Metering, Empire Junction, Downieville, Mt. Evans-SH 103 and Idaho Springs East, Clear Creek County, Colorado," prepared by Yeh and Associates, Inc., June 7, 2005.

Maps

Sheridan, D.M. and Marsh, S.P., 1976, Geologic map of the Squaw Pass quadrangle, Clear Creek, Jefferson, and Gilpin Counties, Colorado: U.S. Geological Survey, Geologic Quadrangle Map GQ-1337, scale 1:24000.

USGS, 1905. "Topographic Map, Georgetown Quadrangle, Colorado," United States Geological Survey, 1905.

USGS, 1912. "Topographic Map, Central City Quadrangle, Colorado," United States Geological Survey, 1961.

USGS, 1942. "7.5-Minute Topographic Map, Central City Quadrangle, Colorado," United States Geological Survey, 1942.

USGS, 1953. "Topographic Map, Denver Quadrangle, Colorado," United States Geological Survey, 1953.

USGS, 1957. "7.5-Minute Topographic Map, Idaho Springs Quadrangle, Colorado," United States Geological Survey, 1957.

USGS, 1957. "7.5-Minute Topographic Map, Squaw Pass Quadrangle, Colorado," United States Geological Survey, 1957.

USGS, 1958. "7.5-Minute Topographic Map, Empire Quadrangle, Colorado," United States Geological Survey, 1958.

USGS, 1960. "Topographic Map, Denver Quadrangle, Colorado," United States Geological Survey, 1960.

USGS, 1972. "7.5-Minute Topographic Map, Central City Quadrangle, Colorado," United States Geological Survey, 1972.

USGS, 1983. "30x60-Minute Topographic Map, Denver West Quadrangle, Colorado," United States Geological Survey, 1983.

USGS, 2013. "7.5-Minute Topographic Map, Central City Quadrangle, Colorado," United States Geological Survey, 2013.

USGS, 2013. "7.5-Minute Topographic Map, Idaho Springs Quadrangle, Colorado," United States Geological Survey, 2013.

USGS, 2013. "7.5-Minute Topographic Map, Squaw Pass Quadrangle, Colorado," United States Geological Survey, 2013.

USDA, 2013. "Web Soil Survey," Online Mapping Application Maintained by the Unites States, Department of Agriculture, Natural Resources Conservation Services, http://websoilsurvey.nrcs.usda.gov/app/, Accessed September 2013.

Sanborn Fire Insurance Maps

The following Sanborn Fire Insurance Maps of Idaho Springs, Colorado, were reviewed:
1890, 1895, 1900, 1907, 1931 and 1939

Aerial Photographs

Pinyon reviewed the following photographs from Clear Creek County

October 8, 1951, Frame 1-27
September 15, 1956, Frame ECB-8-166
October 11, 1957, Frame ECB-21-101
July 2, 1967, Frame BLM-C-4-4
October 3, 1974, Frame F16CN
1979, Frame 2-27
July 2, 1998, Frame Virginia Canyon Rd 3-1

The following aerials were reviewed on-line using Google Earth:

September 5, 1999;
December 30, 2002;
October 22, 2005;
March 30, 2008; and
October 7, 2012.

Databases

GeoSearch, 2013. "GeoSearch Environmental Information Database Search, I-70 PPSL Clear Creek County, dated September 12, 2013 (Appendix D)."

7. Limitations

This report was prepared by Pinyon Environmental, Inc., at the request of and for the sole benefit of HDR Engineering, Inc., or any entity controlling, controlled by, or under common control with HDR Engineering, Inc.. This report addresses certain physical characteristics of the Site with regards to the release or presence of hazardous materials. It is not intended to warrant or otherwise imply that the Site is or is not free from conditions, materials, or substances which could adversely impact the environment or pose a threat to public health and safety. The material in this report reflects the best judgment of Pinyon in light of the information that was readily available at the time of preparation.

This report is for the exclusive and present use of HDR Engineering, Inc., or any entity controlling, controlled by, or under common control with HDR Engineering, Inc., to assist with an environmental evaluation of the Site. In the event of any reuse or publication of any portion of this report, Pinyon Environmental, Inc., shall not be liable for any damages arising out of such reuse of publication. Any use a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third party. Pinyon accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

The principles outlined in Section 4.5 of the ASTM Standard are an integral part of this practice and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the user or environmental professional in performing an environmental site assessment or in judging whether a user or environmental professional has conducted appropriate inquiry or has otherwise conducted an adequate environmental site assessment.

Under ASTM Standard, this report is presumed to be valid for 180 days from the date of completion. For more information on the continued viability of this document, refer to the ASTM Standard, Section 4.6.

This report does not address additional requirements that must be met in order to qualify for the landowner liability protections (LLPs) (for example, the continuing obligation not to impede the integrity and effectiveness of activity and use limitations (AULs), or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations). Additionally, the report user has responsibilities with respect to All Appropriate Inquiry and LLPs.

7.1 Deletions and Deviations from Standard

This report was not completed to the requirements of the ASTM standard. The following deviations are presented:

- Owners of properties that may be acquired were not interviewed in support if this Modified ESA, and a User Questionnaire was not provided. Additionally, the local health department was not contacted.

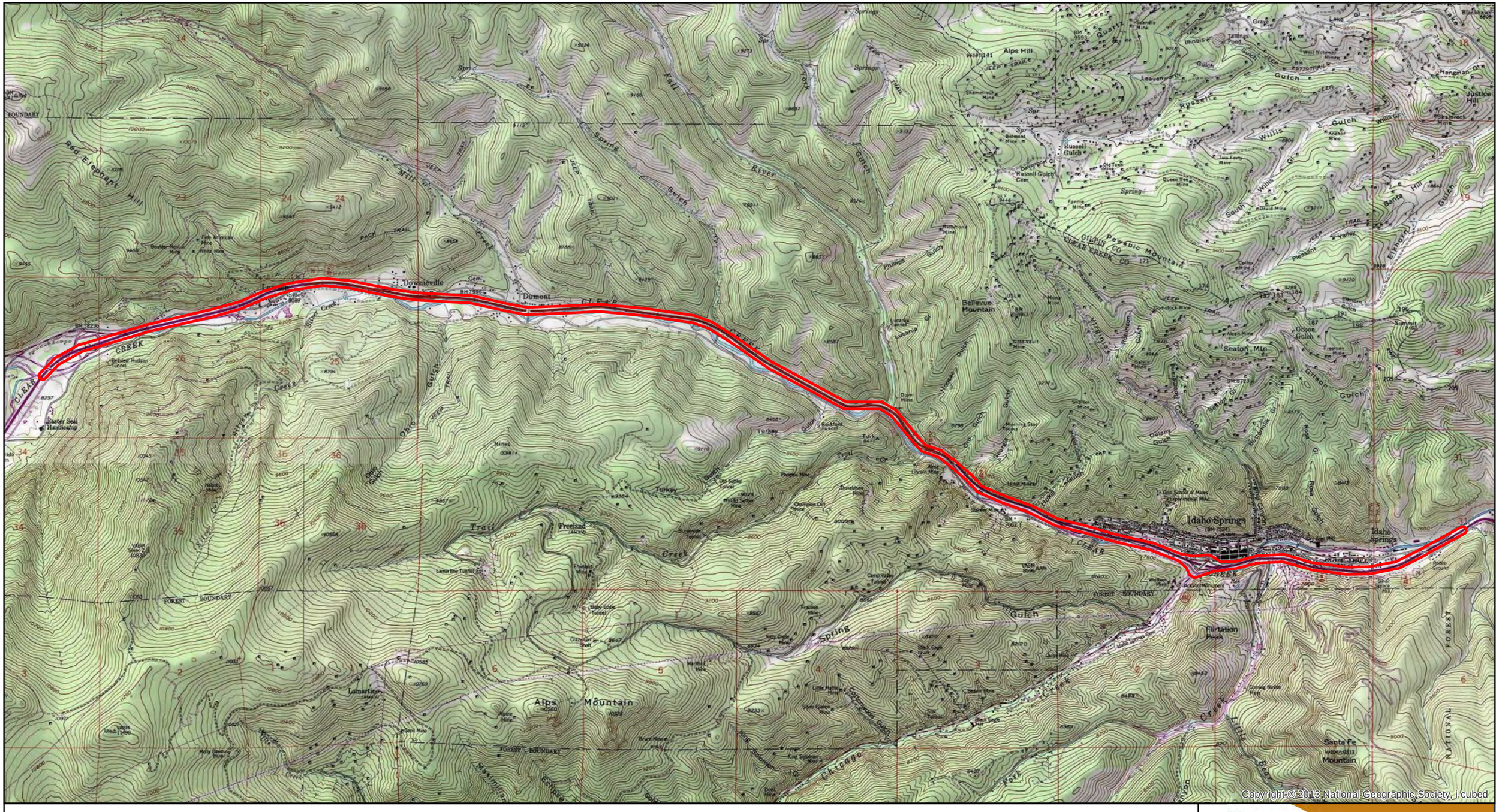
- Any data failures encountered are discussed in Section 3.4; any data gaps are outlined in Section 5.4.

7.2 Additions to Standard

There were no additional services were added to the ASTM Standard with the exception of the following:

- A limited Phase II ESA was completed concurrently with this Modified ESA (Section 3.3.2).

Figures



Legend

Project Boundary

0 1,500 3,000 Feet

1 inch = 3,000 feet

N

Pinyon Environmental, Inc.

Project Area

I-70 Peak Period Shoulder Lane
Empire Junction to Idaho Springs
Clear Creek County, Colorado

Site Location: Clear Creek County, Colorado		Drawn By: MF	Figure 1
Document Path: Z:\PROJECTS\2013\11319101 I-70 US 40 at Empire Junction\Hazardous Materials\Figures\MXD\I70_Mines_USGS_V1.mxd	Job No. 1/13-191-01.8001	Reviewed By: TG	Revision: 12/17/2013

Sources:

1) I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report, August 2010, Reissued March 2011.
2) Five-Year Review Report, Fourth Five-Year Review Report for Central City/Clear Creek Superfund Site Gilpin and Clear Creek Counties, Colorado, September 2009 by Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division.

Legend

- Bore Hole Locations
- Mill Sites
- SuperfundRemediationSites
- Not Remediated
- Partially Remediated
- Remediated
- Site with Potential Impact to Project
- Superfund Listed Not Remediated
- Superfund Listed Operable Units

N

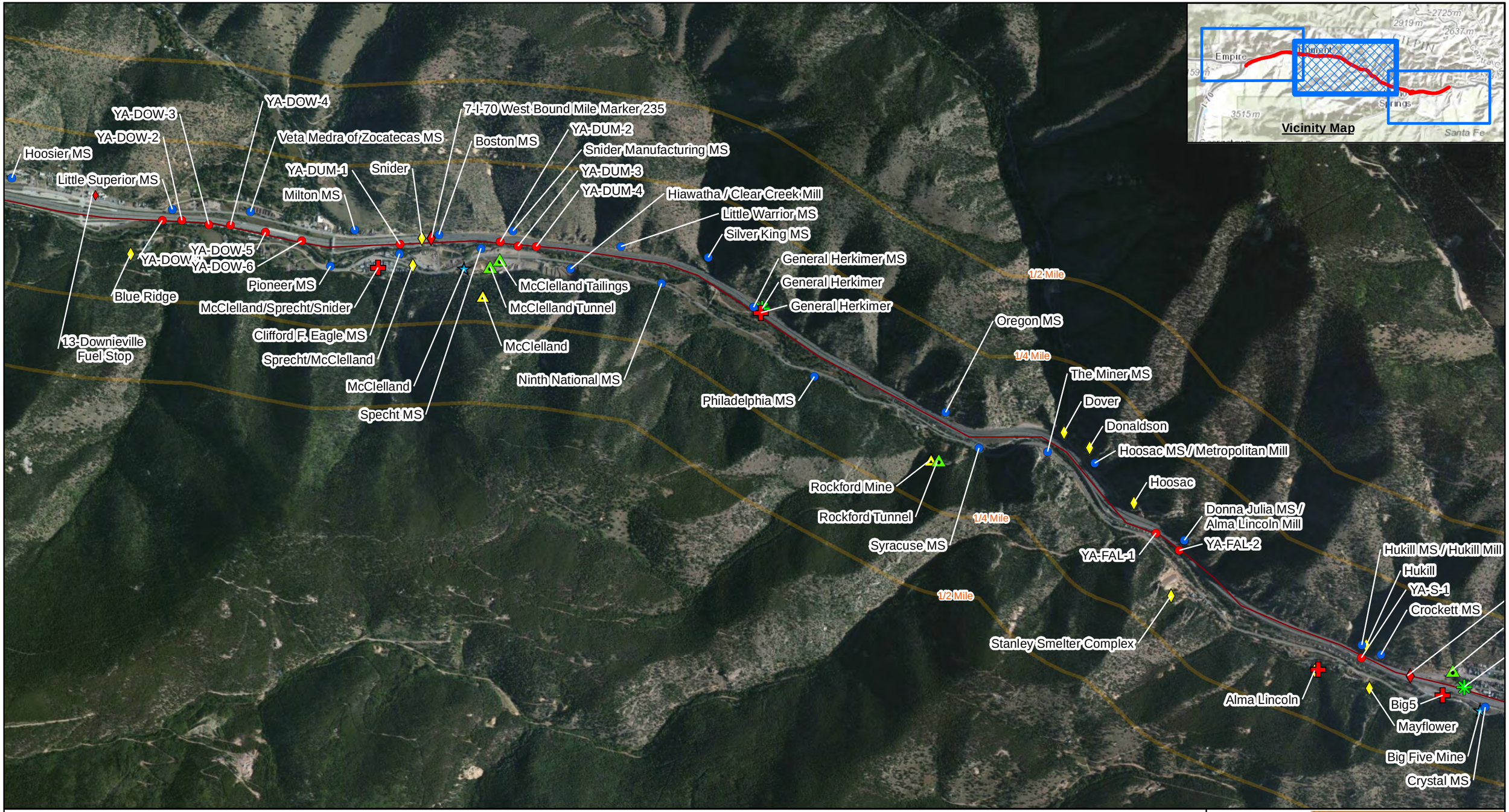
0 750 1,500 Feet

Pinyon Environmental, Inc.

SITE MAP

I-70 Peak Period Shoulder Lane
Empire Junction to Idaho Springs
Clear Creek County, Colorado

Site Location: Clear Creek County, Colorado		Drawn By: MF	Figure 2
Document Path: Z:\PROJECTS\2013\11319101 I-70 US 40 at Empire Junction\Hazardous Materials\Figures\MXD\Figure2,3,4.mxd	Job No. 1/13-191-01.8001	Reviewed By: AC	Revision: 3/12/2014



Sources:

1) I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report, August 2010, Reissued March 2011.
2) Five-Year Review Report, Fourth Five-Year Review Report for Central City/Clear Creek Superfund Site Gilpin and Clear Creek Counties, Colorado, September 2009 by Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division.

Legend

- Bore Hole Locations
- Mill Sites
- SuperfundRemediationSites
- Not Remediated
- Partially Remediated
- Remediated
- Site with Potential Impact to Project
- Superfund Listed Not Remediated
- Superfund Listed Operable Units

0 750 1,500 Feet

N

Pinyon Environmental, Inc.

SITE MAP

I-70 Peak Period Shoulder Lane
Empire Junction to Idaho Springs
Clear Creek County, Colorado

Site Location: Clear Creek County, Colorado		Drawn By: MF	Figure 3
Document Path: Z:\PROJECTS\2013\11319101 I-70 US 40 at Empire Junction\Hazardous Materials\Figures\MXD\Figure2,3,4.mxd	Job No. 1/13-191-01.8001	Reviewed By: AC	Revision: 3/12/2014

Sources:

1) I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report, August 2010, Reissued March 2011.
2) Five-Year Review Report, Fourth Five-Year Review Report for Central City/Clear Creek Superfund Site Gilpin and Clear Creek Counties, Colorado, September 2009 by Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division.

Legend

- Bore Hole Locations
- Mill Sites
- SuperfundRemediationSites
- Not Remediated
- Partially Remediated
- Remediated
- Site with Potential Impact to Project
- Superfund Listed Not Remediated
- Superfund Listed Operable Units

0 750 1,500 Feet

N

Pinyon Environmental, Inc.

SITE MAP

I-70 Peak Period Shoulder Lane
Empire Junction to Idaho Springs
Clear Creek County, Colorado

Site Location: Clear Creek County, Colorado		Drawn By: MF	Figure 4
Document Path: Z:\PROJECTS\2013\11319101 I-70 US 40 at Empire Junction\Hazardous Materials\Figures\MXD\Figure2,3,4.mxd	Job No. 1/13-191-01.8001	Reviewed By: AC	Revision: 3/12/2014

Appendices

Appendix A Agency Database Summary and Report

Summary of Details of Identified Agency Listings

Agency Database Number	Facility Name	Facility Address	Distance (feet) / Direction	Type	Potential to Impact Site[1]
1	Central City, Clear Creek	Idaho Springs	On-site	NPL, SF	Yes; Further detail is available in Section 4.2 of the report.
2	WB I-70, Exit 240	WB I-70, Exit 240	On-site	SPILLS, ERNSCO	No
3	Orphan Tank	291 CR 308, Idaho Springs, CO 80452	On-site	LST, AST	No
3	Dumont Truck Stop	Dumont Truck Stop (I-70 and Dumont)	~100 north	SPILLS	No
3	Blackwell Oil Co., Inc.	I-70 and Dumont Exit	~100 north	UST	No
4	CDOT	I-70, Mile Post 241.05	Adjacent north	RCRAGR08, UST	No
5	I-70, Mile Post 234	I-70, Mile Post 234	On-site	ERNSCO	No
6	I-70, Mile Post 239	I-70, Mile Post 239	On-site	ERNSCO	Yes; Further detail is available in Section 3.5.1 of the report.
7	I-70, West Bound Mile Marker 235	I-70, West Bound Mile Marker 235	On-site	HMIRSR08	Yes; Further detail is available in Section 3.5.1 of the report.
8	Offramp of East Bound Exit 233	Offramp of East Bound Exit 233	Adjacent south	SPILLS	No
9	PSCO-Dumont SC	681 CR 308	~100 north	RCRAGR08	No
10	Soda Creek, South of Minor St.	Soda Creek, South of Minor St.	~150 north	ERNSCO	Yes; Further detail is available in Section 4.2 of the report.
10	Idaho Springs Lumber Co.	1965 Miner St, Idaho Springs	~150 north	UST	No
11	Revolution Auto and Towing	909 County Road 308	~150 north	RCRAGR08	No

Agency Database Number	Facility Name	Facility Address	Distance (feet) / Direction	Type	Potential to Impact Site[1]
12	2911 Colorado BLvd, Idaho Springs	2911 Colorado Blvd, Idaho Springs	~350 north	SPILLS, SPILLS, SPILLS, SPILLS, SPILLS	No
12	K&G Store #528	2911 Colorado Blvd, Idaho Springs	~350 north	UST	No
12	BP Facility #70482	2911 Colorado Blvd, Idaho Springs	~350 north	RCRAGR08	No
13	Downieville Fuel Stop REXOCO #35	1039 CR308 and 1041-1041A CR308	~200 north	UST, LST	Yes; Further detail is available in Section 4.2 of the report.
14	Center Street at Fifth Avenue	Center Street at Fifth Avenue, Idaho Springs	~150 north	ERNSCO	No
15	CDOT Idaho Springs CSP	3000 Colorado Blvd, Idaho Springs	~400 north	LST, UST, AST	No
16	Silver City Automotive	243 Colorado Blvd, Idaho Springs	~275 north	UST, LST	No
17	Wastewater Treatment Plant	1711 Miner St, Idaho Springs	~250 north	SPILLS	No
18	City of Idaho Springs	2000 Miner St, Idaho Springs	~300 north	SPILLS	No
19	Clear Creek School Transportation Division	1125 Idaho St, Idaho Springs	~250 north	UST	No
20	Buffalo Trails Gift Shop	1535 Miner St, Idaho Springs	~250 north	RCRAGR08	No
21	Kum & Go #975	1359 Miner St, Idaho Springs	~300 north	LST, UST	No
21	Amoco #5329	1319 Miner St, Idaho Springs	~300 north	UST, ERNSCO, HMIRSR08, RCRANGR08, LST	No
22	Miner Street Shell	115 13th Ave, Idaho Springs	~300 north	UST, LST	No
22	Wardrobe Cleaners	1241 Miner St, Idaho Springs	~300 north	NLRRCRAG, RCRANGR08	No
23	Center Street at Fifth Avenue	Center Street at Fifth Avenue	~300 north	SPILLS	No.

Agency Database Number	Facility Name	Facility Address	Distance (feet) / Direction	Type	Potential to Impact Site[1]
23	Orphan Tank	1840 Miner St, Idaho Springs	~300 north	UST, LST	No
24	1300 Minor Street	1300 Minor Street, Idaho Springs	~450 north	SPILLS	No
25	Idaho Springs Sunmart #501	2833 Colorado Blvd, Idaho Springs	~325 north	UST	No.
26	Clear Creek County Sportsmen Club	3201 County Road, Dumont	~275 south	RCRAGR08	No
27	Bolo Limited Liability/Former Service Station	2410 Colorado Blvd, Idaho Springs	~250 north	LST, UST, AST	No.
27	Eight Ball Tire and Auto	2410 Colorado Blvd, Idaho Springs	~250 north	RCRANGR08	No
28	Clear Creek County Road and Bridge	3549 Clear Creek CR312, Dumont	~200 south	UST	No
29	Blackwell Oil Co., Inc.	1246 Miner St, Idaho Springs	~450 north	UST, LST	No
30	25 Dumont Lane	25 Dumont Lane, Dumont	~400 north	SPILLS	No
31	Lawson Trailer Court	2038 CR308, Idaho Springs	Adjacent south	UST, LST	No
32	Spring Station, LLC	2900 Colorado Blvd, Idaho Springs	~500 north	LST, AST	No
33	Get Gassed	1856 Colorado Blvd, Idaho Springs	~500 north	LST, SPILLS, UST, AST	Yes; Further detail is available in Section 4.2 of the report..
34	9th Ave and Colorado Blvd	9th Ave and Colorado Blvd, Idaho Springs	~550 north	SPILLS	No
35	Western Convenience #120	2630 Colorado Blvd, Idaho Springs	~525 north	UST	No
36	Scorpion Shell/Texaco	2808 Colorado Blvd, Idaho Springs	~600 north	LST, SWF, UST	No
36	Blackwell Oil Co., Inc.	2806 Colorado Blvd, Idaho Springs	~600 north	UST, LST	No
36	Tall Country Idaho Springs	2806 Colorado Blvd, Idaho Springs	~600 north	UST	No
37	Argo Treatment Facility	2330 Riverside Dr, Idaho Springs	~625 north	SPILLS	Yes
38	Silver Spruce Mill	Address not reported	~500 south	HISTSWLF	Yes

Agency Database Number	Facility Name	Facility Address	Distance (feet) / Direction	Type	Potential to Impact Site[1]
39	Idaho Springs Utilities	Colorado Blvd and 16th Ave, Idaho Springs	~600 north	SPILLS	No
40	920 Colorado Blvd	920 Colorado Blvd, Idaho Springs	~700 north	SPILLS, CDL	No
41	Everist Material	Highway 40 and Highway 257	~1,000 northwest	SPILLS	No
42	1938 Wall St	1938 Wall St, Idaho Springs	~1,200 north	CDL	No
43	CSM Experimental Mine	365 8th St, Idaho Springs	~1,500 north	NFRAP, CERCLIS	No

Notes:

[1] *Potential impacts are assessed based on depth and direction of groundwater flow, and distance from Site. See the following report for the facility number and Appendix D for definitions of acronyms.*

Radius Report

Satellite view

Target Property:

I-70 PPSL

Clear Creek County, Clear Creek County, Colorado 80452

Prepared For:

Satisfi

Order #: 28445

Job #: 63544

Project #: 11319101

Date: 09/12/2013

Table of Contents

Target Property Summary

I-70 PPSL
Clear Creek County, Clear Creek County, Colorado 80452

USGS Quadrangle: ***Central City, CO***
Target Property Geometry: ***Corridor***

Target Property Longitude(s)/Latitude(s):
(-105.65611, 39.758155), (-105.65611, 39.758155), (-105.65458, 39.759410), (-105.65182, 39.760456), (-105.64701, 39.761745), (-105.64008, 39.763140), (-105.63408, 39.764220), (-105.63248, 39.764639), (-105.62910, 39.765928), (-105.62582, 39.766381), (-105.62010, 39.766521), (-105.61383, 39.765510), (-105.61125, 39.765371), (-105.60717, 39.765196), (-105.60271, 39.764534), (-105.59880, 39.764011), (-105.59284, 39.764220), (-105.59072, 39.764325), (-105.58570, 39.763907), (-105.58099, 39.763523), (-105.57761, 39.762721), (-105.57454, 39.761188), (-105.56830, 39.758155), (-105.56360, 39.756064), (-105.56193, 39.755471), (-105.55827, 39.755611), (-105.55649, 39.754844), (-105.55457, 39.752996), (-105.55359, 39.752195), (-105.55133, 39.751463), (-105.54798, 39.749057), (-105.54586, 39.747698), (-105.53993, 39.745816), (-105.53895, 39.745397), (-105.53453, 39.744247), (-105.53125, 39.743410), (-105.52930, 39.743201), (-105.52581, 39.742400), (-105.52174, 39.741180), (-105.51909, 39.740796), (-105.51647, 39.740796), (-105.51400, 39.741389), (-105.51048, 39.741458), (-105.50828, 39.741040), (-105.50636, 39.740413), (-105.50392, 39.740308), (-105.50037, 39.740238), (-105.49831, 39.740517), (-105.49437, 39.741981), (-105.49218, 39.743097), (-105.49019, 39.744073)

County/Parish Covered:
Clear Creek (CO) , Gilpin (CO)

Zipcode(s) Covered:
Golden CO: 80403
Evergreen CO: 80439
Idaho Springs CO: 80452

State(s) Covered:
CO

****Target property is located in Radon Zone 1.***
Zone 1 areas have a predicted average indoor radon screening level greater than 4 pCi/L (picocuries per liter).

This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquires Rule (40 CFR §312.26) 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 §312.26 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.

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Database Findings Summary

FEDERAL LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	2	0	0.2500
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	1	0.2500
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNSCO	6	6	0.2500
HISTORICAL GAS STATIONS	HISTPST	0	0	0.2500
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR08	2	2	0.2500
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	0.2500
NO LONGER REGULATED RCRA GENERATOR FACILITIES	NLRRCRAG	1	0	0.2500
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR FACILITIES	RCRAGR08	2	0	0.2500
RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR FACILITIES	RCRANGR08	7	2	0.2500
RCRA SITES WITH CONTROLS	RCRASC	0	0	0.2500
TOXICS RELEASE INVENTORY	TRI	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	1	1	0.5000
NO FURTHER REMEDIAL ACTION PLANNED SITES	NFRAP	1	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	NLRRCRAT	0	0	0.5000
OPEN DUMP INVENTORY	ODI	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL FACILITIES	RCRAT	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
NATIONAL PRIORITIES LIST	NPL	1	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	RCRAC	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	1	1.0000

SUB-TOTAL		23	13	

Database Findings Summary

STATE (CO) LISTING

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
ABOVEGROUND STORAGE TANK FACILITIES	AST	5	1	0.2500
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	1	0	0.2500
ENVIRONMENTAL REAL COVENANTS LIST	COVENANTS	0	0	0.2500
HAZARDOUS WASTE SITES- GENERATOR	HWSG	0	0	0.2500
SPILLS LISTING	SPILLS	20	10	0.2500
UNDERGROUND STORAGE TANK FACILITIES	UST	22	2	0.2500
HISTORICAL SOLID WASTE LANDFILLS	HISTSWLF	1	8	0.5000
HAZARDOUS WASTE SITES- TREATMENT, STORAGE & DISPOSAL	HWSTSD	0	0	0.5000
LEAKING STORAGE TANK FACILITIES	LST	16	1	0.5000
LEAKING UNDERGROUND STORAGE TANKS TRUST FUND SITES	LUSTTRUST	0	2	0.5000
METHANE GAS STUDY SITES	METHANESITES	0	0	0.5000
SOLID WASTE FACILITIES	SWF	1	0	0.5000
VOLUNTARY CLEANUP AND REDEVELOPMENT PROGRAM SITES	VCRA	0	0	0.5000
HAZARDOUS WASTE SITES- CORRECTIVE ACTION	HWSCA	0	0	1.0000
SUPERFUND SITES	SF	1	0	1.0000

SUB-TOTAL		67	24	

Database Findings Summary

TRIBAL LISTING

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
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	
TOTAL		90	37	

Locatable Database Findings

FEDERAL LISTING

Acronym	Search Radius (miles)	Target Property	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
CDL	0.2500		0	2	NS	NS	NS	2
EC	0.2500		0	0	NS	NS	NS	0
ERNSCO	0.2500	3	3	0	NS	NS	NS	6
HISTPST	0.2500		0	0	NS	NS	NS	0
HMIRSR08	0.2500	1	1	0	NS	NS	NS	2
LUCIS	0.2500		0	0	NS	NS	NS	0
NLRRCRAG	0.2500		1	0	NS	NS	NS	1
RCRAGR08	0.2500	1	1	0	NS	NS	NS	2
RCRANGR08	0.2500		7	0	NS	NS	NS	7
RCRASC	0.2500		0	0	NS	NS	NS	0
TRI	0.2500		0	0	NS	NS	NS	0
BF	0.5000		0	0	0	NS	NS	0
CERCLIS	0.5000		0	0	1	NS	NS	1
NFRAP	0.5000		0	0	1	NS	NS	1
NLRRCRAT	0.5000		0	0	0	NS	NS	0
ODI	0.5000		0	0	0	NS	NS	0
RCRAT	0.5000		0	0	0	NS	NS	0
DNPL	1.0000		0	0	0	0	NS	0
NLRRCRAC	1.0000		0	0	0	0	NS	0
NPL	1.0000	1	0	0	0	0	NS	1
PNPL	1.0000		0	0	0	0	NS	0
RCRAC	1.0000		0	0	0	0	NS	0
RODS	1.0000		0	0	0	0	NS	0
SUB-TOTAL		6	13	2	2	0	0	23

Locatable Database Findings

STATE (CO) LISTING

Acronym	Search Radius (miles)	Target Property	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AST	0.2500		5	0	NS	NS	NS	5
CDL	0.2500		0	1	NS	NS	NS	1
COVENANTS	0.2500		0	0	NS	NS	NS	0
HWSG	0.2500		0	0	NS	NS	NS	0
SPILLS	0.2500	4	13	3	NS	NS	NS	20
UST	0.2500	2	18	2	NS	NS	NS	22
HISTSWLF	0.5000		1	0	0	NS	NS	1
HWSTSD	0.5000		0	0	0	NS	NS	0
LST	0.5000		15	1	0	NS	NS	16
LUSTTRUST	0.5000		0	0	0	NS	NS	0
METHANESITES	0.5000		0	0	0	NS	NS	0
SWF	0.5000		1	0	0	NS	NS	1
VCRA	0.5000		0	0	0	NS	NS	0
HWSCA	1.0000		0	0	0	0	NS	0
SF	1.0000	1	0	0	0	0	NS	1
SUB-TOTAL		7	53	7	0	0	0	67

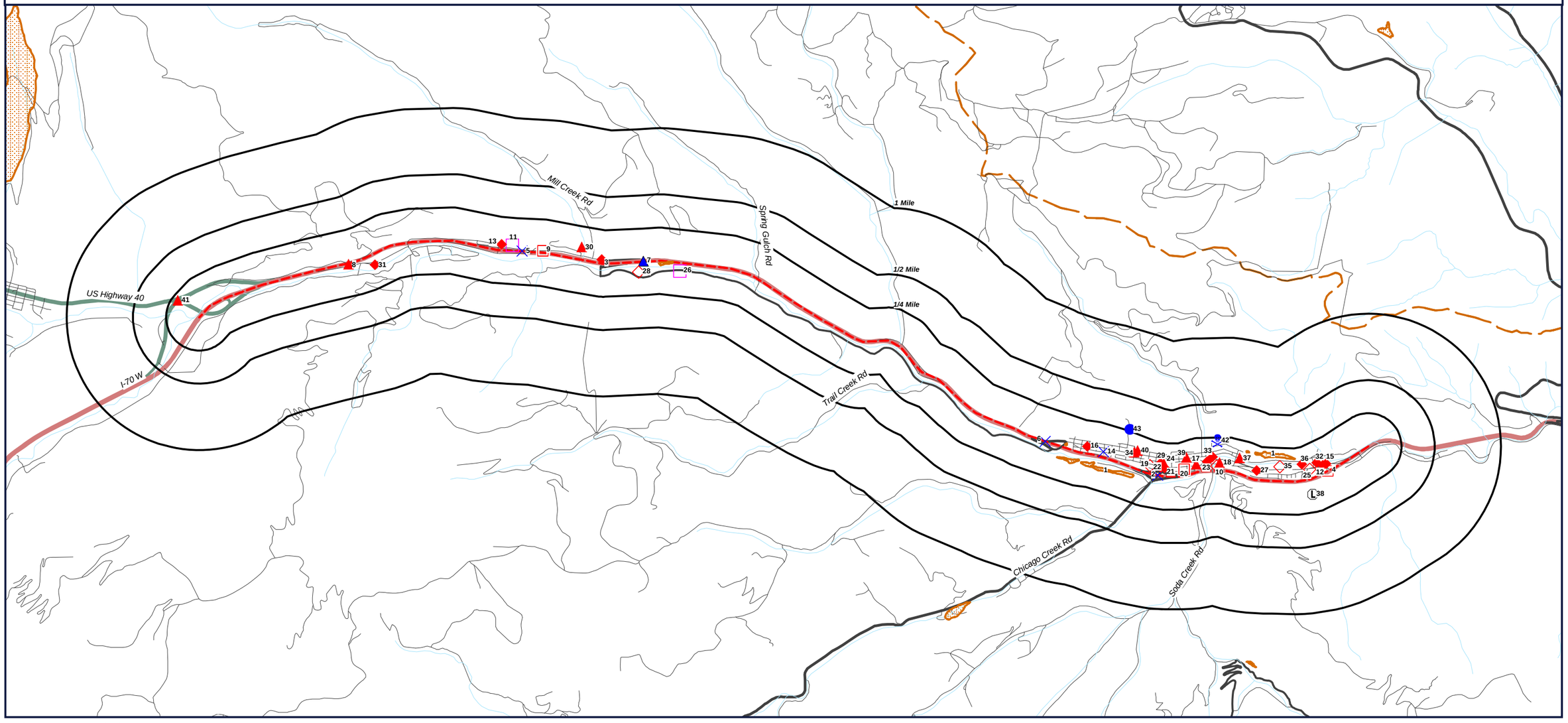
Locatable Database Findings

TRIBAL LISTING

Acronym	Search Radius (miles)	Target Property	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR08	0.2500		0	0	NS	NS	NS	0
LUSTR08	0.5000		0	0	0	NS	NS	0
ODINDIAN	0.5000		0	0	0	NS	NS	0
INDIANRES	1.0000		0	0	0	0	NS	0
SUB-TOTAL			0	0	0	0	0	0
TOTAL		13	66	9	2	0	0	90

NOTES:
NS = NOT SEARCHED

RADIUS MAP



Target Property (TP)
NPL
SF
ERNSCO
LST
RCRAGR08
HMIRSR08
SPILLS
UST
RCRANGR08
HISTSWLF
CDL
CERCLIS

I-70 PPSL
Clear Creek County, Colorado
80452

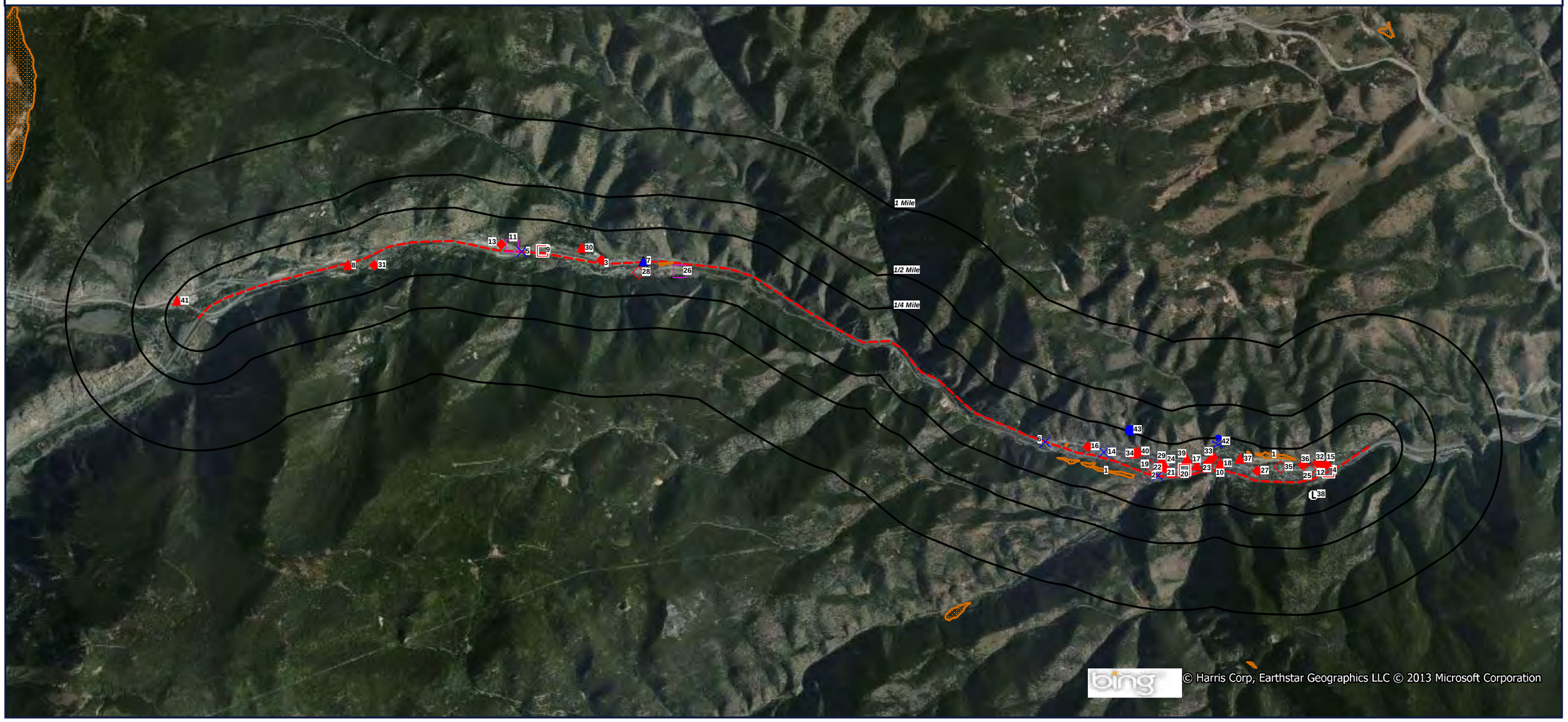
N
W E
S

0' 2000' 4000' 6000'
SCALE: 1" = 4000'

GeoSearch *www.geo-search.com - phone: 866-396-0042 - fax: 512-472-9967*

JOB #: 63544 - 9/12/2013

ORTHOPHOTO MAP



- Target Property (TP)
- NPL
- SF
- ERNSCO
- LST
- RCRAGR08
- HMIRSR08
- SPILLS
- UST
- RCRANGR08
- HISTSWLF
- CDL
- CERCLIS

Quadrangle(s): Central City, Idaho Springs, Empire, Squaw Pass
I-70 PPSL
Clear Creek County, Colorado
80452

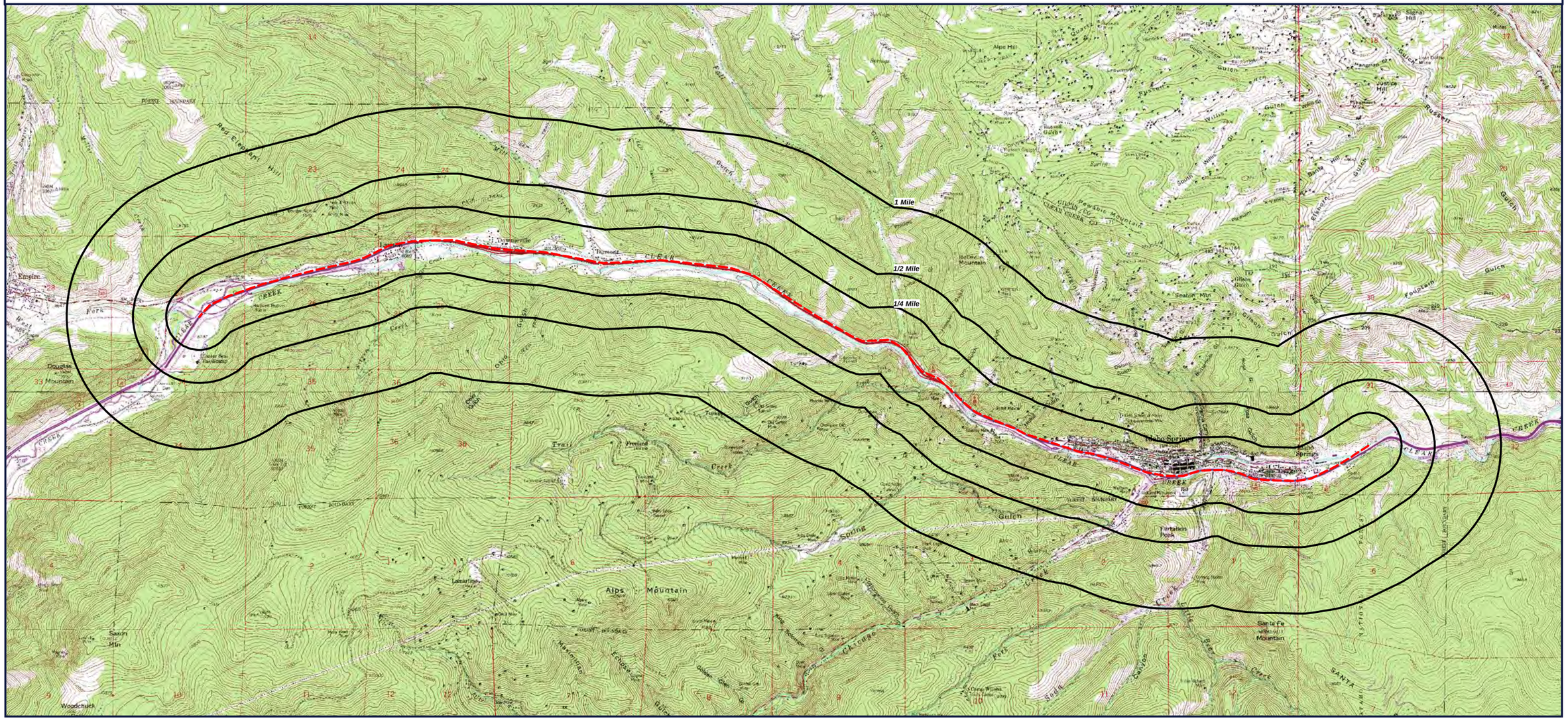
N
W E
S

0' 2000' 4000' 6000'
SCALE: 1" = 4000'

GeoSearch www.geo-search.com - phone: 866-396-0042 - fax: 512-472-9967

JOB #: 63544 - 9/12/2013

TOPOGRAPHIC MAP



Target Property (TP)

Quadrangle(s): Central City, Idaho Springs, Empire, Squaw Pass
Source: USGS, 1972
I-70 PPSL
Clear Clear County, Colorado
80452

N
W E
S

0' 2000' 4000' 6000'

SCALE: 1" = 4000'

Report Summary of Locatable Sites

Map ID#	Database Name	Site ID#	Distance From Site	Site Name	Address	City, Zip Code
1	NPL	COD980717557	0.001 W	CENTRAL CITY, CLEAR CREEK	NEAR TOWN	IDAHO SPRINGS, 80452
1	SF	COD980717557	0.001 W	CENTRAL CITY/CLEAR CREEK	NEAR TOWN	IDAHO SPGS,CENT.CY,BKHAWK, 80452
2	SPILLS	2007-0945	0.01 W		I-70 WB EXIT 240	IDAHO SPRINGS
2	ERNSCO	26672514	0.01 W		EXIT 240 WESTBOUND ON I-70	IDAHO SPRINGS
2	SPILLS	2002-1206	0.02 SW		I-70 AND COLORADO HWY 103	IDAHO SPRINGS
3	LST	18282	0.03 NW	ORPHAN TANK AT 291 CR 308	291 CR 308	IDAHO SPRINGS, 80452
3	SPILLS	CO97-455	0.01 W		DUMONT TRUCK STOP (I-70 & DUMONT)	DUMONT
3	UST	10644	0.01 W	BLACKWELL OIL CO INC	I-70 & DUMONT EXIT	DUMONT, 80436
3	AST	18282	0.03 NW	ORPHAN TANK AT 291 CR 308	291 CR 308	DUMONT, 80436
4	RCRAGR08	COD983773581	0.01 W	COLORADO DEPT OF TRANS - IDAHO SPRINGS	1-70 MP 241.05	IDAHO SPRINGS, 80452
4	UST	7418	0.01 W	CDOT IDAHO SPRINGS	HWY 70 MP 241.05	IDAHO SPRINGS, 80452
5	ERNSCO	605113636	0.01 W		I-70 / MILE POST 234	DUMONT
6	ERNSCO	2570796602	0.01 W		INTERSTATE 70 MILE MARKER 239	IDAHO SPRINGS
7	HMIRSR08	I-2002010020	0.01 NW		I-70 WB MM 235	DUMONT
8	SPILLS	2012-0313	0.02 S		OFFRAMP OF EB I-70 EXIT 233 (LAWSON	LAWSON
9	RCRAGR08	COD980961742	0.03 NW	PSCO-DUMONT SC	681 CR 308	DUMONT, 80436
10	ERNSCO	1279464214	0.04 NW		SODA CREEK SOUTH OF MINOR ST.	IDAHO SPRINGS
10	UST	10636	0.04 NW	IDAHO SPRINGS LUMBER CO	1965 MINER ST	IDAHO SPRINGS, 80452
11	RCRANGR08	COR000202523	0.04 N	REVOLUTION AUTO & TOWING	909 CNTY RD 308	DUMONT, 80436
12	SPILLS	2007-1005	0.05 NW		2911 COLORADO BLVD.	IDAHO SPRINGS, 80452
12	SPILLS	2011-0626	0.05 NW		2911 COLORADO BLVD	IDAHO SPRINGS, 80452
12	SPILLS	2011-0625	0.05 NW		2911 COLORADO BLVD,	IDAHO SPRINGS, 80452
12	SPILLS	2011-0627	0.05 NW		2911 COLORADO BLVD	IDAHO SPRINGS, 80452
12	SPILLS	2013-0263	0.05 NW		2911 COLORADO BLVD	IDAHO SPRINGS, 80452
12	UST	15075	0.05 NW	K & G STORE #528	2911 COLORADO BLVD	IDAHO SPRINGS, 80452
12	RCRANGR08	COR000209387	0.05 NW	BP FACILITY #70482	2911 COLORADO BLVD	IDAHO SPRINGS, 80452
12	LST	7418	0.06 NW	CDOT IDAHO SPRINGS	2931 COLORADO BLVD N SIDE HWY 70A	IDAHO SPRINGS, 80452
13	UST	3846	0.05 NW	DOWNIEVILLE FUEL STOP REXOCO #35	1039 CR 308 AND 1041-1041A CR 308	DOWNIEVILLE, 80436

Report Summary of Locatable Sites

13	LST	3846	0.05 NW	DOWNIEVILLE FUEL STOP REXOCO #35	1039 CR 308 AND 1041-1041A CR 308	DOWNIEVILLE, 80436
14	ERNSCO	1314279718	0.05 N		CENTER STREET AT FIFTH AVENUE	IDAHO SPRINGS
15	LST	2923	0.06 NW	CDOT IDAHO SPRINGS CSP	3000 COLORADO BLVD	IDAHO SPRINGS, 80452
15	UST	2923	0.06 NW	CSP - IDAHO SPRINGS #49612	3000 COLORADO BLVD	IDAHO SPRINGS, 80452
15	AST	12340	0.06 NW	CDOT IDAHO SPRINGS CSP	3000 COLORADO BLVD	IDAHO SPRINGS, 80452
16	UST	15563	0.06 N	SILVER CITY AUTOMOTIVE	243 COLORADO BLVD	IDAHO SPRINGS, 80452
16	LST	15563	0.06 N	SILVER CITY AUTOMOTIVE	243 COLORADO BLVD	IDAHO SPRINGS, 80452
17	SPILLS	2011-0453	0.06 NW		1711 MINER ST, AT THE WASTEWATER TR	IDAHO SPRINGS, 80452
18	SPILLS	2007-0763	0.06 NW		2000 MINER ST.	IDAHO SPRINGS
19	UST	8666	0.06 N	CLEAR CREEK SCHOOL TRANSPORTATION DIVISI	1125 IDAHO ST	IDAHO SPRINGS, 80452
20	RCRANGR08	COR000005892	0.06 NW	BUFFALO TRAILS GIFT SHOP	1535 MINER ST	IDAHO SPRINGS, 80452
21	LST	18798	0.07 NW	KUM & GO #975	1359 MINER ST	IDAHO SPRINGS, 80452
21	UST	6517	0.07 NW	AMOCO #5329	1319 MINER ST	IDAHO SPRINGS, 80452
21	UST	18798	0.07 NW	KUM & GO #975	1359 MINER ST	IDAHO SPRINGS, 80452
21	ERNSCO	3484211329	0.07 NW		1319 MINER STREET	IDAHO SPRINGS
21	HMIRSR08	I-2012020050	0.07 NW		1319 MINER STREET	IDAHO SPRINGS, 80452
21	RCRANGR08	COD983788126	0.07 NW	AMOCO OIL 5329	1319 MINER ST	IDAHO SPRINGS, 80452
21	LST	6517	0.07 NW	AMOCO OIL #5329	1319 MINER ST	IDAHO SPRINGS, 80452
22	UST	2423	0.07 N	MINER STREET SHELL	115 13TH AVE	IDAHO SPRINGS, 80452
22	NLRRCRAG	COD983800285	0.08 N	WARDROBE CLEANERS	1241 MINER ST	IDAHO SPRINGS, 80452
22	RCRANGR08	COD983800285	0.08 N	WARDROBE CLEANERS INC	1241 MINER ST	IDAHO SPRINGS, 80452
22	LST	2423	0.07 N	MINER STREET BUSINESS CORP	115 13TH AVE	IDAHO SPRINGS, 80452
23	SPILLS	2007-0517	0.08 N		CENTER ST & 5TH AVE	IDAHO SPRINGS
23	UST	18152	0.07 NW	ORPHAN TANK AT MINER STREET	1840 MINER ST	IDAHO SPRINGS, 80452
23	LST	18152	0.07 NW	ORPHAN TANK AT MINER STREET	1840 MINER ST	IDAHO SPRINGS, 80452
24	SPILLS	2006-1017	0.09 N		1300 MINOR STREET	IDAHO SPRINGS
25	UST	2287	0.07 NW	IDAHO SPRINGS SUNMART #501	2833 COLORADO BLVD	IDAHO SPRINGS, 80452
26	RCRANGR08	COR000204701	0.07 SW	CLEAR CREEK CNTY SPORTSMEN CLUB	3201 CNTY RD	DUMONT, 80436

Report Summary of Locatable Sites

27	LST	5418	0.08 NW	BOLO LIMITED LIABILITY	2410 COLORADO BLVD	IDAHO SPRINGS, 80452
27	UST	5418	0.08 NW	FORMER SERVICE STATION	2410 COLORADO BLVD	IDAHO SPRINGS, 80452
27	RCRANGR08	COD983802745	0.08 NW	EIGHT BALL TIRE & AUTO	2410 COLORADO BLVD.	IDAHO SPRINGS, 80452
27	AST	13123	0.08 NW	BOLO LIMITED LIABILITY	2410 COLORADO BLVD	IDAHO SPRINGS, 80452
28	UST	8661	0.08 S	CLEAR CREEK COUNTY ROAD & BRIDGE	3549 CLEAR CREEK CR 312	DUMONT, 80436
29	UST	10641	0.1 N	BLACKWELL OIL CO	1246 MINER ST	IDAHO SPRINGS, 80452
29	LST	10641	0.1 N	BLACKWELL OIL CO	1246 MINER ST	IDAHO SPRINGS, 80452
30	SPILLS	2012-0785	0.09 N		25 DUMONT LANE	DUMONT, 80452
31	UST	16216	0.09 S	LAWSON TRAILER COURT	2038 CR 308	IDAHO SPRINGS, 80452
31	LST	16216	0.09 S	LAWSON TRAILER COURT	2038 CR 398	IDAHO SPRINGS, 80452
32	LST	17890	0.1 NW	SPRING STATION LLC	2900 COLORADO BLVD	IDAHO SPRINGS, 80452
32	AST	17890	0.1 NW	SPRING STATION LLC	2900 COLORADO BLVD	IDAHO SPRINGS, 80452
33	LST	3445	0.11 N	GET GASSED	1856 COLORADO BLVD	IDAHO SPRINGS, 80452
33	SPILLS	CO96-458	0.11 N		1856 COLORADO BLVD	IDAHO SPRINGS, 80452
33	UST	3445	0.11 N	GET GASSED	1856 COLORADO BLVD	IDAHO SPRINGS, 80452
33	AST	13758	0.11 N	GET GASED	1856 COLORADO BLVD	IDAHO SPRINGS, 80452
34	SPILLS	2008-0076	0.11 N		9TH AVE. & COLORADO BLVD.	IDAHO SPRINGS
35	UST	946	0.11 N	WESTERN CONVENIENCE #120	2630 COLORADO BLVD	IDAHO SPRINGS, 80452
36	LST	10789	0.12 NW	SCORPION SHELL	2808 COLORADO BLVD	IDAHO SPRINGS, 80452
36	SWF	4256013643	0.12 NW	SCORPION TEXACO INC	2808 COLORADO BOUL	IDAHO SPRINGS, 80452
36	UST	10638	0.13 NW	BLACKWELL OIL CO	2806 COLORADO BLVD	IDAHO SPRINGS, 80452
36	UST	10789	0.12 NW	SCORPION SHELL	2808 COLORADO BLVD	IDAHO SPRINGS, 80452
36	UST	14756	0.13 NW	TALL COUNTRY IDAHO SPRINGS	2806 COLORADO BLVD	IDAHO SPRINGS, 80452
36	LST	10638	0.13 NW	BLACKWELL OIL CO	1246 MINER ST	IDAHO SPRINGS, 80452
37	SPILLS	2007-0493	0.12 N		2330 RIVERSIDE DR	IDAHO SPRINGS, 80452
38	HISTSWLF	00070-0001096	0.12 S	SILVER SPRUCE MILL	ADDRESS NOT REPORTED	CITY NOT REPORTED
39	SPILLS	2008-0170	0.13 NW		COLORADO BLVD & 16TH AVE	IDAHO SPRINGS, 80452
40	SPILLS	2006-620	0.13 N		920 COLORADO BLVD	IDAHO SPRINGS

Report Summary of Locatable Sites

40	CDL	448385837	0.13 N		920 COLORADO BOULEVARD	IDAHO SPRINGS, 80452
40	CDL	3424068808	0.13 N		920 COLORADO BLVD.	IDAHO SPRINGS, 80452
41	SPILLS	2005-436	0.21 NW		HWY 40 & HWY 257	EMPIRE
42	CDL	863187168	0.23 N		1938 WALL ST	IDAHO SPRINGS, 80452
43	NFRAP	COD983793753	0.26 N	CSM EXPERIMENTAL MINE	365 8TH STREET	IDAHO SPRINGS, 80452
43	CERCLIS	COD983793753	0.26 N	CSM EXPERIMENTAL MINE	365 8TH STREET	IDAHO SPRINGS, 80452

National Priorities List (NPL)

MAP ID# 1 **Distance from Property: 0.00 mi. W**

FACILITY INFORMATION

EPA ID#: **COD980717557**

SITE ID#: **0800257**

NAME: **CENTRAL CITY, CLEAR CREEK**

ADDRESS: **NEAR TOWN**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

NATIONAL PRIORITY LISTING: **F - CURRENTLY ON THE FINAL NPL**

FEDERAL FACILITY CLASSIFICATION: **N - NOT A FEDERAL FACILITY**

NON-NPL STATUS: **NOT REPORTED -**

NON-NPL STATUS DATE: **/ /**

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MINES/TAILINGS**

FEDERAL REGISTER INFORMATION

DATE	VOLUME	PAGE #	ACTION	HRS SCORE
12/30/1982	**47**	**58476**	**PROPOSED TO THE FINAL NPL**	**46.65**
09/08/1983	**48**	**40658**	**PROMULGATED TO THE FINAL NPL**	**51.39**

SITE DESCRIPTION

THE CLEAR CREEK WATERSHED INCORPORATES THE CLEAR CREEK/CENTRAL CITY SUPERFUND INVESTIGATION AREA AND THE HISTORIC MINING ACTIVITIES ASSOCIATED WITH THE COLORADO MINERAL BELT WHERE THE WATERSHED AND THE MINERAL BELT INTERSECT. THE WATER QUALITY OF THE WATERSHED IS COMPROMISED BY METALS CONTAMINATION FROM ACID MINE DRAINAGE DISCHARGING FROM HISTORIC MINE TUNNELS TO CLEAR CREEK AND ITS TRIBUTARIES, FROM DIFFUSE GROUND WATER METALS LOADINGS ASSOCIATED WITH FLOODED UNDERGROUND MINE WORKINGS, AND FROM MINE WASTE PILES LOCATED ADJACENT TO THE FLOWS IN CLEAR CREEK AND ITS TRIBUTARIES. AS A RESULT, THE EPA INCLUDED THE WATERSHED ON THE INTERIM NATIONAL PRIORITY LIST (NPL) IN 1982. IN 1983 IT WAS RETAINED ON THE FINAL NPL.

A PHASE I CLEAR CREEK/CENTRAL CITY REMEDIAL INVESTIGATION AND FEASIBILITY STUDY (RI/FS) WERE CONDUCTED IN 1985 IN THE IDAHO SPRINGS AND THE BLACK HAWK/CENTRAL CITY AREAS. THIS INVESTIGATION FOCUSED ON DISCHARGES AND MINING-RELATED WASTES ASSOCIATED WITH THE BIG 5 TUNNEL AND ARGO TUNNEL LOCATED IN IDAHO SPRINGS, COLORADO, AND THE NATIONAL TUNNEL, QUARTZ HILL TUNNEL IN CENTRAL CITY, COLORADO, AND THE GREGORY INCLINE IN BLACK HAWK, COLORADO. THE PHASE I FS WAS COMPLETED IN AUGUST 1988.

A PHASE II CLEAR CREEK/CENTRAL CITY RI/FS WAS IMPLEMENTED IN 1989 FOR THE COLORADO DEPARTMENT OF HEALTH, KNOWN NOW AS THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE), WHICH WAS DESIGNATED THE ROLE OF LEAD AGENCY IN 1988. THE PHASE II INVESTIGATION BROADENED THE ORIGINAL PHASE I AREA TO INCLUDE THE APPROXIMATELY 400 SQUARE MILE CLEAR CREEK WATERSHED ABOVE GOLDEN, COLORADO. THE PHASE II RI WAS COMPLETED IN SEPTEMBER 1990 AND THE DRAFT PHASE II FS SUBMITTED TO THE PUBLIC FOR COMMENT IN JUNE 1991.

THE CLEAR CREEK CENTRAL CITY SUPERFUND INVESTIGATION AREA WAS DIVIDED INTO FOUR OPERABLE UNITS (OUS) FOR THE PURPOSE OF ADDRESSING SPECIFIC SOURCES OF METALS CONTAMINATION.

OU1 WAS DESIGNATED TO EVALUATE TREATMENT OF THE ACID MINE DRAINAGE FROM THE NATIONAL, GR EGORY INCLINE, QUARTZ HILL, ARGO, AND BIG FIVE TUNNEL DISCHARGES. THE FEASIBILITY STUDY FOR OU1 WAS COMPLETED IN 1987 AND A RECORD OF DECISION (ROD) WAS SIGNED IN SEPTEMBER 1987. THE ROD SELECTED PASSIVE TREATMENT OF THE DISCHARGING ACID MINE WATER AS THE PREFERRED REMEDIAL ALTERNATIVE. IF IT WAS DETERMINED THAT

PASSIVE TREATMENT WAS NOT EFFECTIVE, THE ROD ALLOWED THE FLEXIBILITY FOR ACTIVE TREATMENT. ACTIVE TREATMENT OF THE ARGO TUNNEL DISCHARGE HAS BEEN EFFECTIVE IN REDUCING METALS LOADING TO CLEAR CREEK.

OPERABLE UNIT 01:

SURFACE WATER CONTAMINATION RESULTS FROM ACID MINE DRAINAGE EMANATING FROM THE FIVE TUNNELS AND FROM SEEPAGE OF GROUND WATER THROUGH TAILINGS PILES BOTH PROXIMAL TO THESE TUNNELS AND ALONG STREAM COURSES. POTENTIAL CONTAMINANT RECEPTORS INCLUDE INHABITANTS OF THE AREA, DOWNSTREAM SURFACE WATER AND GROUND WATER USERS AND WILDLIFE, BOTH TERRESTRIAL AND AQUATIC. RECENT STUDIES COMPLETED BY EPA INDICATE THAT SIGNIFICANT LOADINGS OF DISSOLVED AND SUSPENDED METALS (1,200 POUNDS PER DAY) ARE DISCHARGED TO THE CLEAR CREEK DRAINAGE FROM THE FIVE MINE TUNNELS. THESE DISSOLVED AND SUSPENDED METAL LOADINGS HAVE RESULTED IN A SIGNIFICANT DEPLETION OF AQUATIC LIFE AND HAVE POTENTIAL IMPACT TO DOWNSTREAM USERS OF SURFACE AND GROUND WATER.

THE ACIDITY OF THE MINE DRAINAGE IS DUE LARGELY TO OXIDIZED GROUND WATER PASSING THROUGH ORE ZONES DOMINATED BY IRON-BEARING MINERALS, PRIMARILY PYRITE. ONE METHOD OF FORMING ACID MINE DRAINAGE IS SULFIDE OXIDATION BEING CATALYZED BY AEROBIC BACTERIA, PARTICULARLY THE GENUS THIOBACILLUS, RESULTING IN THE RELEASE OF SULFURIC ACID AND, CONSEQUENTLY, FURTHER MINERAL DISSOLUTION. SUBSEQUENT DISCHARGE FROM THE TUNNELS RELEASES DISSOLVED AND SUSPENDED METALS TO CLEAR CREEK AND NORTH CLEAR CREEK, ADVERSELY AFFECTING WATER QUALITY FOR DOWNSTREAM USERS.

A RECORD OF DECISION ADDRESSING OPERABLE UNIT 01 OF THE CENTRAL CITY/CLEAR CREEK SITE WAS COMPLETED IN SEPTEMBER 1987.

OPERABLE UNIT 02:

THE WASTE ROCK/TAILINGS PIL ES CONSIDERED IN THE OPERABLE UNIT WERE SELECTED BASED ON THEIR LOCATION CLOSE TO THE ACID MINE DISCHARGES. CURRENTLY, THE MAJOR IMPACTS ON THE WATER QUALITY OF CLEAR CREEK ARE THE BIG FIVE AND ARGO MINE TUNNEL DISCHARGES. THE WATER QUALITY OF NORTH CLEAR CREEK IS AFFECTED BY THE NATIONAL TUNNEL DISCHARGE AND SEEPAGE FROM THE GREGORY INCLINE AND THE QUARTZ HILL TUNNEL. THE DISCHARGES FROM THE FIVE SITES WERE ADDRESSED IN OPERABLE UNIT NO. ONE.

IN ADDITION TO DIRECT DISCHARGE FROM THE MINE TUNNELS, CONTAMINATED WATER MAY ENTER THE CREEKS DURING OVERLAND SHEET FLOW. OVERLAND RUNOFF OCCURS DURING RAPID SNOW MELT AND THUNDERSTORMS. THE RESULTING SURFACE FLOW ACROSS THE TAILINGS AND WASTE ROCK PILES DISSOLVES SOLUBLE MINERALS AND TRANSPORTS PARTICULATE TAILINGS AND WASTE ROCK MATERIAL INTO THE CREEKS. THESE MECHANISMS RESULT IN ELEVATED CREEK ACIDITY AND METAL LOADS. THE INTRODUCTION OF TAILINGS AND WASTE ROCK INTO THE CREEKS COULD ALSO OCCUR DUE TO CATASTROPHIC COLLAPSE OF TAILINGS AND WASTE ROCK PILES DURING A FLASH FLOOD OR AS A RESULT OF UNDERCUTTING OF THE BASE OF THE PILE UNDER ANY FLOW REGIME.

A RECORD OF DECISION ADDRESSING OPERABLE UNIT TWO WAS COMPLETED IN MARCH 1988.

OU3 WAS ORIGINALLY DESIGNATED TO ADDRESS CONTROL OF SURGE EVENTS FROM THE ARGO TUNNEL PURSUANT TO THE PHASE I INVESTIGATION. HOWEVER, OU3 WAS REDESIGNED TO INCLUDE A FINAL DECISION FOR SURGE EVENTS FROM THE ARGO TUNNEL; THE VIRGINIA CANYON GROUND WATER METALS LOADING THAT IMPACTS THE WATER QUALITY OF CLEAR CREEK; REMEDIATION OF SEVERAL MINE WASTE ROCK PILES; A DECISION ON THE BIG 5 TUNNEL DISCHARGE; AND THE BURLEIGH TUNNEL DISCHARGE BASED UPON THE RESULTS OF THE PHASE II INVESTIGATION. THE OU3 ROD WAS SIGNED ON SEPTEMBER 30, 1991. THE PREFERRED REMEDIAL ACTION PLAN SELECTED TO ADDRESS THE BURLEIGH TUNNEL DISCHARGE WAS PASSIVE TREATMENT UTILIZING CONSTRUCTED WETLAND TECHNOLOGY. A ROD AMENDMENT ADDRESSING OU3 WAS COMPLETED IN SEPTEMBER 2003.

OU 3 WAS ORIGINALLY DESIGNATED TO ADDRE SS CONTROL OF SURGE EVENTS OF ACID MINE DRAINAGE FROM THE ARGO TUNNEL. THE SIGNING OF THE OU 3 ROD WAS DELAYED PENDING THE OUTCOME OF ADDITIONAL PHASE II INVESTIGATIONS. IN 1988, A PHASE II REMEDIAL INVESTIGATION (RI) WAS INITIATED TO TAKE A COMPREHENSIVE VIEW OF THE APPROXIMATELY 400 SQUARE MILE CLEAR CREEK DRAINAGE BASIN. THE OU 3 ROD WAS SIGNED ON SEPTEMBER 30, 1991, AND ADDRESSED THE PROBLEMS IDENTIFIED IN THE PHASE II RI. THE OU 3 ROD SUPERSEDED THE ORIGINAL OU 1 ROD. THE OU 2 ROD REMAINED UNCHANGED BY THE OU 3 ROD. THE OU 3 ROD SELECTED A COMBINATION OF ACTIVE TREATMENT FOR THE ARGO TUNNEL, PASSIVE TREATMENT FOR THE BURLEIGH TUNNEL, COLLECTION OF VIRGINIA CANYON GROUND WATER FOR TREATMENT, PROVISION OF AN ALTERNATE DRINKING WATER SUPPLY FOR USERS OF CONTAMINATED GROUND WATER, AND CAPPING, RUNON CONTROLS, RUNOFF CONTROLS, INSTITUTIONAL CONTROLS, AND/OR RETAINING STRUCTURES AS APPLICABLE FOR SELECTED PRIORITY MINE WASTE PILES. THE OU 3 ROD UTILIZED AN INTERIM WAIVER OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) TO DEFER A DECISION ON TREATMENT OF THE BIG FIVE TUNNEL, QUARTZ HILL TUNNEL, NATIONAL TUNNEL, AND GREGORY INCLINE. THE OU 4 RI, FEASIBILITY STUDY (FS), AND ROD HAVE SINCE EVALUATED AND ADDRESSED THE NATIONAL AND QUARTZ HILL TUNNELS AND GREGORY INCLINE THROUGH A COMBINATION OF ACTIVE AND PASSIVE TREATMENT SYSTEMS. THE BIG FIVE TUNNEL REQUIRES A FINAL DECISION.

THE OU 3 ROD STATED THAT: "THE INTERIM WAIVER OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS) WAS INVOKED FOR THE BIG FIVE DISCHARGE. THE BIG FIVE DISCHARGE IS CURRENTLY DESIGNATED AS A PRIORITY DISCHARGE UNDER SECTION 304 (l) OF THE CLEAN WATER ACT BECAUSE IT WAS ORIGINALLY BELIEVED THAT THE DISCHARGE WAS IMPAIRING THE ATTAINMENT OF THE WATER QUALITY STANDARDS FOR CLEAR CREEK".

AS SPECIFIED UNDER THE STATUTORY DETERMINATIONS PORTION AT THE END OF THE OU 3 ROD, THE SELECTED ALTERNATIVE DETAILED UNDER THE OU 3 ROD WAS NOT INTENDED TO BE THE FINAL REMEDY OF THE SIT E. BECAUSE THE ACTION PRESENTED UNDER THE OU 3 ROD WAS AN INTERIM ACTION, THE STATUTORY PREFERENCE FOR REMEDIES THAT REDUCE TOXICITY, MOBILITY, OR VOLUME AS A PRINCIPAL ELEMENT WOULD BE ADDRESSED BY THE FINAL RESPONSE ACTION FOR THE SITE. REVIEW OF THE SITE AND OF THE INTERIM REMEDY WOULD BE ONGOING AS THE EPA AND CDPHE CONTINUED TO DEVELOP FINAL REMEDIAL ALTERNATIVES FOR THE SITE.

TREATMENT OF THE BIG FIVE DISCHARGE AFTER IT IS CONVEYED TO THE EXISTING ARGO WATER TREATMENT FACILITY WILL REMOVE IT AS A PRIORITY DISCHARGE UNDER SECTION 304(1) AND MEET THE ARARS. INCLUSION OF THE BIG FIVE TUNNEL DISCHARGE IN THE INDIVIDUAL CONTROL STRATEGY AND DISCHARGE CONTROL MECHANISM FOR TREATMENT OF THE ARGO TUNNEL DISCHARGE WILL MEET REGULATORY REQUIREMENTS. THE INTERIM WAIVER WILL NO LONGER BE NECESSARY AND WILL BE WITHDRAWN. THEREFORE, ADDRESSING THE BIG FIVE DISCHARGE AS AN ELEMENT OF THE FINAL RESPONSE ACTION AT THE SITE WITH RESPECT TO ELIMINATING THE TOXICITY OF THIS DISCHARGE TO HUMAN HEALTH AND THE ENVIRONMENT, AS DISCUSSED IN THIS EXPLANATION OF SIGNIFICANT DIFFERENCE (ESD), IS APPROPRIATE.

A ROD ADDRESSING OU 3 WAS COMPLETED IN SEPTEMBER OF 1991. AN ESD PERTAINING TO THE OU3 ROD WAS COMPLETED IN JUNE OF 2005.

OU4:

OU4 WAS DESIGNATED IN 1999 AND INCLUDES SEDIMENT CONTROL ON THE NORTH FORK OF CLEAR CREEK AS WELL AND TRIBUTARIES TO THE NORTH FORK, WASTE ROCK PILES IN VIRGINIA CANYON, CLEAR CREEK MAINSTEM WASTE ROCK PILES, AN ON-SITE REPOSITORY TO CONSOLIDATE MINE WASTE ROCK, AND THE NORTH FORK AND MAIN STEM CLEAR CREEK RI/FS.

THE CLEAR CREEK/CENTRAL CITY SUPERFUND STUDY AREA COVERS THE APPROXIMATELY 400 SQUARE-MILE CLEAR CREEK WATERSHED, LOCATED IN THE FRONT RANGE OF THE COLORADO ROCKY MOUNTAINS. THE BASIN OF THE NORTH FORK OF CLEAR CREEK ENCOMPASSES APPROXIMATELY 60 SQUARE MILES OF THIS STUDY AREA, AND HAS BEEN

DESIGNATED AS OPERABLE UNIT (OU) 4 OF THE CLEAR CREEK/CENTRAL CITY SUPERFUND SITE. OU 4 ENCOMPASSES THE NORTH FORK OF CLEAR CREEK AND ITS TRIBUTAR IES AND THE MAIN STEM OF CLEAR CREEK FROM THE CONFLUENCE WITH THE NORTH FORK TO THE CITY OF GOLDEN, COLORADO. OU 4 CONSISTS OF HIGHLY VARIABLE MOUNTAINOUS TERRAIN CHARACTERIZED BY STEEP-WALLED CANYONS AND NARROW VALLEY FLOORS. CITIES WITHIN OU 4 ARE CENTRAL CITY AND BLACK HAWK. THESE CITIES HAVE EXPERIENCED ACCELERATED DEVELOPMENT SINCE THE INTRODUCTION OF GAMBLING IN 1991.

ELEVATED METALS CONCENTRATIONS ARE THE RISK DRIVERS WITHIN OU 4. THE METALS, OR CONTAMINANTS, OF CONCERN FOR AQUATIC LIFE ARE ZINC, COPPER, CADMIUM, AND MANGANESE, AND OF CONCERN FOR HUMAN HEALTH ARE LEAD AND ARSENIC. THE MAJORITY OF THESE METALS POSE ACUTE OR CHRONIC THREATS TO AQUATIC ORGANISMS WHICH ARE MORE SENSITIVE TO THEIR HIGH CONCENTRATIONS THAN ARE HUMANS. THE RISK TO HUMAN HEALTH DUE TO EXPOSURE TO MINE WASTES IS LOW, BUT IS ASSOCIATED WITH INGESTION OF WASTE ROCK AND INHALATION OF WASTE ROCK DUST. ECOLOGICAL RISK IS THE PRIMARY DRIVER OF CLEANUP ACTIONS AT OU 4 AND IS MAINLY ASSOCIATED WITH DIRECT EXPOSURE TO METALS-CONTAMINATED SURFACE WATER.

IN ADDITION TO THE DELETERIOUS EFFECTS OF MINE WASTES, THE AREAS OF POOR FISH HABITAT ALONG THE NORTH FORK ALSO THREATEN THE SURVIVAL OF TROUT SPECIES. IN SOME PLACES THE VALLEY THROUGH WHICH THE NORTH FORK FLOWS HAS BEEN SEVERELY NARROWED DUE TO HISTORIC MINING AND RECENT DEVELOPMENT. THIS HAS RESULTED IN THE CHANNELIZATION OF THE RIVER AND A DECREASE IN THE AMOUNT OF POOLS, RIFFLES, AND STREAM BANK VEGETATION THAT IS NECESSARY TO PROVIDE THRIVING FISH HABITAT.

CURRENT LAND USES WITHIN OU 4 INCLUDE RESIDENTIAL, RECREATION, AND TO A LIMITED EXTENT, AGRICULTURE AND RANCHING. THE CLEAR CREEK WATERSHED IS A POPULAR OUTDOOR RECREATION AREA FOR RESIDENTS ALONG THE FRONT RANGE. POPULAR ACTIVITIES INCLUDE HIKING, CAMPING, AND ALL-TERRAIN VEHICLE (ATV) RIDING. THE MAJORITY OF THE LAND WITHIN OU 4, NOT INCLUDING THE BLACK HAWK AND CENTRAL CITY AREAS, HAS A FORESTRY ZONING DESIGNATION, WHICH IS A BROAD DESIGNATION THAT DOES NOT PRECLUDE DEVELOPME NT OF THE LAND FOR RESIDENTIAL OR COMMERCIAL USE. BASED ON DISCUSSIONS WITH GILPIN COUNTY PLANNING OFFICIALS, FUTURE LAND USES WITHIN OU 4 COULD POTENTIALLY INCLUDE RESIDENTIAL AND COMMERCIAL USE IN ADDITION TO THE CURRENT USES OF THE LAND.

THE CLEAR CREEK WATERSHED IS A POPULAR RECREATION DESTINATION. RECREATIONAL SURFACE WATER USES WITHIN THE NORTH FORK BASIN (OU 4) INCLUDE FISHING, SWIMMING, GOLD PANNING, AND RECREATIONAL MINING. BASED ON THE RELATIVE LOW FLOW OF THE NORTH FORK COMPARED TO THE MAIN STEM OF CLEAR CREEK, AS WELL AS THE CONFINING NATURE OF THE VALLEY THROUGH WHICH THE NORTH FORK FLOWS, FUTURE USES OF THE SURFACE WATER WITHIN OU 4 ARE NOT EXPECTED TO CHANGE.

GROUND WATER WITHIN OU 4 IS CURRENTLY USED AS A DRINKING WATER SOURCE FOR RESIDENTS WHO LIVE OUTSIDE OF THE BLACK HAWK OR CENTRAL CITY BOUNDARIES WHERE CONNECTIONS TO MUNICIPAL WATER SUPPLIES ARE NOT FEASIBLE. THESE RESIDENTS ARE SCATTERED THROUGHOUT THE OU 4 BASIN OR CLUSTERED IN VERY SMALL TOWNS WITHIN NEVADA AND RUSSELL GULCHES. UNCONFINED BEDROCK AQUIFERS SUPPLY THIS DRINKING WATER. THESE AQUIFERS OFTEN OCCUR IN HIGHLY FRACTURED BEDROCK ZONES, MAKING GROUND WATER CHARACTERIZATION DIFFICULT. FUTURE USES OF GROUND WATER AS A DRINKING WATER SOURCE MAY INCREASE IF THE POPULATION UTILIZING GROUND WATER WELLS INCREASES. HOWEVER, THE TYPES OF GROUND WATER USE WITHIN THE STUDY AREA ARE NOT EXPECTED TO CHANGE IN THE FUTURE.

A RECORD OF DECISION ADDRESSING OU 4 WAS COMPLETED IN SEPTEMBER 2004.

WHILE NOT DIRECTLY ADDRESSED BY THE OUS 3 AND 4 RODS, CDPHE AND EPA HAD BEEN CONSIDERING THE OPTION OF CONSTRUCTING A MINE WASTE REPOSITORY TO BE USED FOR RELOCATING MINE WASTE PILE MATERIAL AND WATER TREATMENT PLANT SOLIDS GENERATED BY CENTRAL CITY/CLEAR CREEK CERCLA RESPONSE PROJECTS SUCH AS THE ARGO TUNNEL TREATMENT PLANT IN IDAHO SPRINGS. THE OU 4 ROD DISCUSSES THE OPTION OF RELOCATING WASTE

PILES AND WATER TREATMENT SOLIDS TO AN ON-SITE REPOSITORY AS PART OF THE SELECTED REMEDIAL OPTION, BUT THE ROD DOES NOT EXPLICITLY INCLUDE CONSTRUCTION OF A REPOSITORY AS A SELECTED REMEDIAL ACTION COMPONENT. THE CDPHE AND EPA NOW ADD THE REPOSITORY COMPONENT TO THE PREVIOUSLY SELECTED REMEDIES TO PROVIDE AN ADDITIONAL PROTECTIVE, EFFICIENT AND EFFECTIVE WAY OF ADDRESSING MINE WASTES AND DISPOSING OF WATER TREATMENT PLANT SOLIDS.

A ROD AMENDMENT ADDRESSING OU 4 AND OU 3 WAS COMPLETED IN SEPTEMBER OF 2006.

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **03/13/2012**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **03/13/2012**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **02/23/2012**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RV - REMOVAL - EMERGENCY**
START DATE: **10/15/2011**
COMPLETION DATE: **11/15/2011**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **RV - REMOVAL - EMERGENCY**
START DATE: **10/15/2011**
COMPLETION DATE: **11/15/2011**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **07/11/2011**

COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **SV - SECTION 107 LITIGATION**
START DATE: **11/29/2010**
COMPLETION DATE: **12/21/2010**
ACTION TYPE DEFINITION:
JUDICIAL REFERRAL UNDER S107 TO RECOVERY FROM POTENTIALLY RESPONSIBLE PARTIES (PRPS).

TYPE: **CB - CLAIM IN BANKRUPTCY PROCEEDING**
START DATE: **11/29/2010**
COMPLETION DATE: **12/21/2010**
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: **RV - REMOVAL - TIME CRITICAL**
START DATE: **06/15/2010**
COMPLETION DATE: **09/15/2010**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **04/12/2010**
COMPLETION DATE: **06/26/2012**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **04/15/2009**
COMPLETION DATE: **06/15/2010**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **SF - SECTION 104(E) REF LITIGATION**
START DATE: **07/18/2008**
COMPLETION DATE: **09/28/2012**
ACTION TYPE DEFINITION:
ALL SECTION 104(E) REFERRALS WITHOUT SETTLEMENT REFERRED TO DOJ/OECM. THE REFERRAL CAN BE FOR INFORMATION, SITE ACCESS, OR ENFORCEMENT OF A S104(E) ORDER.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **06/02/2008**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RV - REMOVAL - TIME CRITICAL**
START DATE: **05/05/2008**
COMPLETION DATE: **09/19/2008**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **RA - REMEDIAL ACTION**
START DATE: **04/07/2008**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **LT - LITIGATION (GENERIC)**
START DATE: **08/08/2007**
COMPLETION DATE: **08/22/2007**
ACTION TYPE DEFINITION:
THIS ACTIVITY IS USED TO CODE REFERRALS FOR LITIGATION THAT COVER ANY COMBINATION OF REMEDIES OR STATUTES (CERCLA, SARA, RCRA) NOT REFLECTED IN THE CONVENTIONAL ACTIVITY TYPES OF SX (SECTION 106), SV (SECTION 107), CL (COMBINED 106/107), AND SF (SECTION 104). IF PREFERRED, THIS ACTIVITY CAN BE USED TO CODE ALL REFERRAL TYPES INSTEAD OF USING THE CONVENTIONAL SX, SV, CL, SF CODES. BECAUSE THIS ACTIVITY IS GENERIC, CODING THE STATUTES (STATUTE) AND THE REMEDY TYPES (REMEDY) CORRECTLY IS MANDATORY. ALL OTHER EDIT CHECKS AND CODING REQUIREMENTS THAT APPLY TO SX, SV, CL, AND SF APPLY TO LT AS WELL. EXAMPLES: ACTION=LT, STATUTE=106, REMEDY=RA IS EQUIVALENT TO SX; ACTION=LT, STATUTE=107, REMEDY=VA IS EQUIVALENT TO SV; ACTION=LT, STATUTE=106,107, REMEDY=VD, RA IS EQUIVALENT TO CL; ACTION=LT, STATUTE=104, REMEDY=SE, DE IS EQUIVALENT TO SF; ACTION=LT, STATUTE=104,107,106, REMEDY=DE, VM, RD, RA, IS A COMBINATION NOT COVERED BY SX, SV, CL, SF.

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **05/01/2007**
COMPLETION DATE: **09/29/2009**
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: **CD - CONSENT DECREE**
START DATE: **03/13/2007**
COMPLETION DATE: **05/21/2007**
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: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **09/28/2006**

COMPLETION DATE: **09/25/2008**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/28/2006**
COMPLETION DATE: **06/14/2011**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/28/2006**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/28/2006**
COMPLETION DATE: **02/26/2009**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/28/2006**
COMPLETION DATE: **04/29/2010**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **07/19/2006**
COMPLETION DATE: **08/29/2006**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **PJ - POTENTIALLY RESPONSIBLE PARTY EMERGENCY REMOVAL - TIME CRITICAL**
START DATE: **07/17/2006**
COMPLETION DATE: **08/29/2006**
ACTION TYPE DEFINITION:
THE PRP OR THEIR CONTRACTORS HAVE BEGUN CONSTRUCTION WORK ON-SITE IN RESPONSE TO AN EMERGENCY INCIDENT, AND EPA PROVIDES ON-SITE TECHNICAL OVERSIGHT AND/OR IS PART OF AN INCIDENT COMMAND SYSTEM/UNIFIED COMMAND. THE DATE OF CONSTRUCTION IS REPORTED IN WASTELAN AS THE PRP EMERGENCY REMOVAL ACTUAL START DATE.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **04/26/2006**
COMPLETION DATE: **03/20/2009**
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: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **11/19/2005**
COMPLETION DATE: **05/23/2006**
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: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **08/04/2005**
COMPLETION DATE: **09/28/2005**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **05/17/2005**
COMPLETION DATE: **03/31/2006**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **05/17/2005**
COMPLETION DATE: **03/31/2006**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **05/10/2005**
COMPLETION DATE: **07/27/2006**
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: **RD - REMEDIAL DESIGN**
START DATE: **04/01/2005**
COMPLETION DATE: **09/29/2006**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **04/01/2005**
COMPLETION DATE: **08/21/2009**
ACTION TYPE DEFINITION:

THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **04/01/2005**
COMPLETION DATE: **09/27/2012**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **04/01/2005**
COMPLETION DATE: **03/31/2011**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **SV - SECTION 107 LITIGATION**
START DATE: **09/28/2004**
COMPLETION DATE: **05/21/2007**
ACTION TYPE DEFINITION:
JUDICIAL REFERRAL UNDER S107 TO RECOVERY FROM POTENTIALLY RESPONSIBLE PARTIES (PRPS).

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **07/22/2004**
COMPLETION DATE: **01/05/2006**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **RV - REMOVAL - EMERGENCY**
START DATE: **07/20/2004**
COMPLETION DATE: **04/04/2006**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **FE - FIVE-YEAR REVIEW**
START DATE: **04/28/2004**
COMPLETION DATE: **09/29/2004**
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: **JF - ECOLOGICAL RISK ASSESSMENT**
START DATE: **07/28/2000**
COMPLETION DATE: **11/14/2001**
ACTION TYPE DEFINITION:
ASSESSMENT OF THE BASELINE RISKS POSED BY THE SITE TO ECOLOGICAL RECEPTORS.

TYPE: **CO - COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY**
START DATE: **12/29/1999**
COMPLETION DATE: **09/29/2004**
ACTION TYPE DEFINITION:
THE PROCESS OF DATA COLLECTION AND ANALYSES OF THE SITE PROBLEM, IDENTIFICATION OF PRELIMINARY REMEDIAL ALTERNATIVES, AND RECOMMENDATION OF A COST-EFFECTIVE REMEDY. THERE CAN BE MULTIPLE REMEDIAL INVESTIGATION/FEASIBILITY STUDIES (RI/FS) CONDUCTED AT A SITE.

TYPE: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **12/20/1999**
COMPLETION DATE: **05/22/2003**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **10/13/1999**
COMPLETION DATE: **11/03/1999**
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: **LR - LONG TERM RESPONSE ACTION**
START DATE: **09/28/1999**
COMPLETION DATE: **09/30/2009**
ACTION TYPE DEFINITION:
SITE REQUIREMENTS ASSOCIATED WITH A REMEDY THAT MUST BE PERFORMED AFTER COMPLETION OF A REMEDIAL ACTION.

TYPE: **QX - PROSPECTIVE PURCHASER AGREEMENT ASSESSMENT**
START DATE: **06/17/1999**
COMPLETION DATE: **01/14/2000**
ACTION TYPE DEFINITION:
EPA REVIEWS A FORMAL REQUEST FOR A PROSPECTIVE PURCHASER AGREEMENT (PPA), RESULTING IN A DECISION TO GRANT OR DENY THE REQUEST.

TYPE: **CL - SECTION 106 107 LITIGATION**
START DATE: **05/26/1999**
COMPLETION DATE: **03/10/2000**
ACTION TYPE DEFINITION:
REFERRAL TO OECM OR DOJ, WITHOUT SETTLEMENT, OF A CIVIL ACTION ADDRESSING A SITE UNDER SECTIONS 106 AND 107 OF CERCLA.

TYPE: **CL - SECTION 106 107 LITIGATION**
START DATE: **05/26/1999**
COMPLETION DATE: **01/14/2000**
ACTION TYPE DEFINITION:
REFERRAL TO OECM OR DOJ, WITHOUT SETTLEMENT, OF A CIVIL ACTION ADDRESSING A SITE UNDER SECTIONS 106 AND 107 OF CERCLA.

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION - LONG TERM ACTION**

START DATE: **01/28/1999**
COMPLETION DATE: **08/25/2000**
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: **FE - FIVE-YEAR REVIEW**
START DATE: **12/02/1998**
COMPLETION DATE: **03/26/1999**
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: **OF - OPERATIONAL & FUNCTIONAL**
START DATE: **12/01/1998**
COMPLETION DATE: **09/28/1999**
ACTION TYPE DEFINITION:
MEASURES TAKEN TO ENSURE THAT THE REMEDY IS FUNCTIONING PROPERLY AND IS PERFORMING AS DESIGNED. EPA WILL FUND UP TO ONE YEAR OF OF OR UP TO TEN YEARS OF OF IF THE REMEDY INVOLVES RESTORATION OF GROUND OR SURFACE WATER.

TYPE: **RV - REMOVAL - TIME CRITICAL**
START DATE: **09/21/1998**
COMPLETION DATE: **12/14/1998**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
START DATE: **09/17/1998**
COMPLETION DATE: **01/27/2000**
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: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **05/22/1998**
COMPLETION DATE: **03/29/1999**
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: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**
START DATE: **05/21/1998**
COMPLETION DATE: **09/24/1998**
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: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **11/17/1997**
COMPLETION DATE: **09/28/1999**
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: **RA - REMEDIAL ACTION**
START DATE: **09/15/1997**
COMPLETION DATE: **08/25/2000**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **AN - REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS**
START DATE: **06/25/1997**
COMPLETION DATE: **09/19/1997**
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: **TA - TECHNICAL ASSISTANCE**
START DATE: **06/05/1997**
COMPLETION DATE: **09/30/2002**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **09/21/1996**
COMPLETION DATE: **11/10/1996**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **CD - CONSENT DECREE**
START DATE: **09/10/1996**
COMPLETION DATE: **06/03/1997**
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: **RV - REMOVAL - NON-TIME CRITICAL**
START DATE: **08/12/1996**
COMPLETION DATE: **11/12/1996**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **11/02/1995**
COMPLETION DATE: **05/30/2003**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **10/30/1995**
COMPLETION DATE: **04/19/1996**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **RD - REMEDIAL DESIGN**
START DATE: **09/21/1995**
COMPLETION DATE: **09/29/2006**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/21/1995**
COMPLETION DATE: **08/12/2002**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/21/1995**

COMPLETION DATE: **05/21/1999**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RN - REMOVAL NEGOTIATIONS**
START DATE: **08/28/1995**
COMPLETION DATE: **08/21/1996**
ACTION TYPE DEFINITION:
REMOVAL NEGOTIATIONS ARE DEFINED AS DISCUSSIONS BETWEEN EPA AND THE POTENTIALLY RESPONSIBLE PARTIES (PRPS) ON THE LIABILITY FOR AND CONDUCT OF A REMOVAL.

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **06/08/1995**
COMPLETION DATE: **06/09/1995**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **TA - TECHNICAL ASSISTANCE**
START DATE: **09/26/1994**
COMPLETION DATE: **09/30/1999**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TG - TECHNICAL ASSISTANCE GRANT**
START DATE: **09/23/1994**
COMPLETION DATE: **05/18/2001**
ACTION TYPE DEFINITION:
A GRANT OF UP TO $50,000 PROVIDED UNDER SARA TO A COMMUNITY FOR TECHNICAL ASSISTANCE IN DEALING WITH SUPERFUND ISSUES AT A NATIONAL PRIORITY LIST (NPL) SITE.

TYPE: **NG - NEGOTIATION (GENERIC)**
START DATE: **08/10/1994**
COMPLETION DATE: **06/08/1995**
ACTION TYPE DEFINITION:
THIS ACTION IS USED TO CODE NEGOTIATIONS THAT COVER ANY COMBINATION OF REMEDIES OR STATUTES (CERCLA, SARA, RCRA) NOT REFLECTED IN THE CONVENTIONAL ACTIVITY TYPES OF AN (RD/RA NEGOTIATIONS), FN (RI/FS NEGOTIATIONS), RN (REMOVAL NEGOTIATIONS) AND NE (COST RECOVERY NEGOTIATIONS). IF PREFERRED, THIS ACTIVITY CAN BE USED TO CODE ALL NEGOTIATION TYPES INSTEAD OF USING THE CONVENTIONAL AN, FN, RN, AND NE CODES. BECAUSE THIS ACTIVITY IS GENERIC, CODING THE STATUTES AND THE REMEDY TYPES CORRECTLY IS MANDATORY. ALL OTHER EDIT CHECKS AND CODING REQUIREMENTS THAT APPLY TO AN, FN, RN, AND NE APPLY TO NG AS WELL. EXAMPLES: ACTION=NG, STATUTE=106,122, REMEDY=RA IS EQUIVALENT TO AN; ACTION=NG, STATUTE=107,122, REMEDY=VA IS EQUIVALENT TO NE; ACTION=NG,STATUTE=106,122, REMEDY=RV IS EQUIVALENT TO RN; ACTION=NG, STATUTE=106,122, REMEDY=CO IS EQUIVALENT TO FN; ACTION=NG, STATUTE=106,122, REMEDY=OM, VD, VA, CO ARE COMBINATIONS NOT COVERED BY AN, FN, RN, NE.

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **08/02/1994**
COMPLETION DATE: **07/29/1996**

ACTION TYPE DEFINITION:

PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **BF - POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION**

START DATE: **07/25/1994**

COMPLETION DATE: **02/23/1995**

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: **TA - TECHNICAL ASSISTANCE**

START DATE: **05/31/1994**

COMPLETION DATE: **06/16/1994**

ACTION TYPE DEFINITION:

PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**

START DATE: **01/04/1994**

COMPLETION DATE: **04/29/1994**

ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**

START DATE: **12/15/1993**

COMPLETION DATE: **04/29/1994**

ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**

START DATE: **12/08/1993**

COMPLETION DATE: **06/09/1994**

ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **RA - REMEDIAL ACTION**

START DATE: **09/29/1993**

COMPLETION DATE: **01/06/1995**

ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/29/1993**
COMPLETION DATE: **09/28/1999**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/29/1993**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/29/1993**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RA - REMEDIAL ACTION - LONG TERM ACTION**
START DATE: **09/29/1993**
COMPLETION DATE: **11/17/2003**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **08/23/1993**
COMPLETION DATE: **09/23/1994**
ACTION TYPE DEFINITION:
PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **08/09/1993**
COMPLETION DATE: **03/30/1994**
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: **BB - POTENTIALLY RESPONSIBLE PARTY REMOVAL - TIME CRITICAL**
START DATE: **06/15/1993**
COMPLETION DATE: **06/16/1993**
ACTION TYPE DEFINITION:

PROVIDES FOR OVERSIGHT OF POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE ACTION FOR REMOVALS, INCLUDING ALL ACTIVITIES FOR MONITORING AND SUPERVISING THE PERFORMANCE OF PRPS 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: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **04/22/1993**
COMPLETION DATE: **03/15/1994**
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: **RS - REMOVAL ASSESSMENT**
START DATE: **02/18/1993**
COMPLETION DATE: **09/09/1993**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **PC - PREPARATION OF COST DOCUMENT PACKAGE**
START DATE: **01/31/1993**
COMPLETION DATE: **12/31/1993**
ACTION TYPE DEFINITION:
PACKAGE PREPARED IN SUPPORT OF COST RECOVERY ACTIONS CONTAINING SITE-SPECIFIC COST DOCUMENTATION INFORMATION FOR DIRECT EXPENDITURES (I.E., AGENCY PAYROLL AND TRAVEL, CONTRACTING COSTS) AND INDIRECT COSTS. DOCUMENTATION MAY BE CONDENSED PER RULE 1006 OF THE FEDERAL RULES OF EVIDENCE.

TYPE: **RA - REMEDIAL ACTION**
START DATE: **09/30/1992**
COMPLETION DATE: **02/12/1997**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/14/2004**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/28/2005**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/09/2002**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **05/02/2005**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/22/2003**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/30/2004**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/25/2008**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **09/30/1991**
COMPLETION DATE: **09/25/2008**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **AR - ADMINISTRATIVE RECORDS**
START DATE: **09/17/1991**
COMPLETION DATE: **09/17/1991**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **RP - NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH**
START DATE: **09/04/1991**
COMPLETION DATE: **01/14/1994**
ACTION TYPE DEFINITION:
THE NON-NPL POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS TO IDENTIFY PRPS AT NON-NPL OR REMOVAL ACTION SITES.

TYPE: **RV - REMOVAL - EMERGENCY**
START DATE: **08/01/1991**
COMPLETION DATE: **09/14/1991**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A

REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **AS - AERIAL SURVEY**
START DATE: **03/18/1991**
COMPLETION DATE: **06/25/1991**
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: **TA - TECHNICAL ASSISTANCE**
START DATE: **03/04/1991**
COMPLETION DATE: **06/30/1994**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RS - REMOVAL ASSESSMENT**
START DATE: **01/01/1991**
COMPLETION DATE: **07/02/1991**
ACTION TYPE DEFINITION:
COLLECTING SITE CHARACTERISTICS TO DETERMINE WHETHER OR NOT A REMOVAL MUST BE PERFORMED.

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **12/30/1990**
COMPLETION DATE: **09/30/1991**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **12/27/1990**
COMPLETION DATE: **NR**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **10/17/1990**
COMPLETION DATE: **06/09/1994**
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: **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: **RP - NON-NATIONAL PRIORITIES LIST POTENTIALLY RESPONSIBLE PARTY SEARCH**
START DATE: **06/30/1990**
COMPLETION DATE: **09/04/1991**
ACTION TYPE DEFINITION:
THE NON-NPL POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH IS TO IDENTIFY PRPS AT NON-NPL OR REMOVAL ACTION SITES.

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **12/19/1989**
COMPLETION DATE: **01/09/1997**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **09/07/1989**
COMPLETION DATE: **06/30/1994**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RA - REMEDIAL ACTION**
START DATE: **03/29/1989**
COMPLETION DATE: **09/30/1991**
ACTION TYPE DEFINITION:
THE IMPLEMENTATION OF A PERMANENT RESOLUTION TO ADDRESS A RELEASE OR POTENTIAL RELEASE OF A HAZARDOUS SUBSTANCE FROM A SITE.

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **12/01/1988**
COMPLETION DATE: **05/30/1989**
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: **AR - ADMINISTRATIVE RECORDS**
START DATE: **09/01/1988**
COMPLETION DATE: **09/30/1991**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **06/27/1988**
COMPLETION DATE: **03/29/1989**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **06/27/1988**
COMPLETION DATE: **01/09/1997**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **TA - TECHNICAL ASSISTANCE**

START DATE: **06/22/1988**
COMPLETION DATE: **01/09/1997**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **RI - REMEDIAL INVESTIGATION**
START DATE: **06/15/1988**
COMPLETION DATE: **09/21/1990**
ACTION TYPE DEFINITION:
AN INVESTIGATION INTENDED TO GATHER THE DATA NECESSARY TO: (1) DETERMINE THE NATURE AND EXTENT OF PROBLEMS AT THE SITE; (2) ESTABLISH CLEANUP CRITERIA FOR THE SITE; (3) IDENTIFY PRELIMINARY ALTERNATIVE REMEDIAL ACTIONS; AND (4) SUPPORT THE TECHNICAL AND COST ANALYSES OF THE ALTERNATIVES.

TYPE: **RD - REMEDIAL DESIGN**
START DATE: **06/15/1988**
COMPLETION DATE: **09/30/1991**
ACTION TYPE DEFINITION:
THE PROCESS OF FULLY DETAILING AND SPECIFYING THE SELECTED REMEDY IDENTIFIED IN THE ROD OR EDD.

TYPE: **AR - ADMINISTRATIVE RECORDS**
START DATE: **10/01/1987**
COMPLETION DATE: **10/01/1987**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **RV - REMOVAL - TIME CRITICAL**
START DATE: **09/30/1987**
COMPLETION DATE: **12/09/1988**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **AR - ADMINISTRATIVE RECORDS**
START DATE: **09/30/1987**
COMPLETION DATE: **05/08/1988**
ACTION TYPE DEFINITION:
SARA SPECIFIES THAT ADMINISTRATIVE RECORDS BE COMPILED AT SUPERFUND SITES WHERE REMEDIAL OR REMOVAL RESPONSES ARE PLANNED, OR ARE OCCURRING, OR WHERE EPA IS ISSUING A UNILATERAL ORDER OR INITIATING LITIGATION TO TRACK ENFORCEMENT CASE BUDGET FUNDS USED FOR ANY RP LEAD ACTIVITY.

TYPE: **NS - NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH**
START DATE: **07/07/1987**
COMPLETION DATE: **11/30/1988**
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: **FS - FEASIBILITY STUDY**
START DATE: **04/09/1987**
COMPLETION DATE: **03/31/1988**
ACTION TYPE DEFINITION:
A STUDY OF A HAZARDOUS WASTE SITE INTENDED TO (1) EVALUATE ALTERNATIVE REMEDIAL ACTIONS FROM TECHNICAL, ENVIRONMENTAL, AND COST-EFFECTIVENESS PERSPECTIVES; (2) RECOMMEND THE COST-EFFECTIVE REMEDIAL ACTION; AND (3) PREPARE A CONCEPTUAL DESIGN, A COSTESTIMATE FOR BUDGETARY PURPOSES, AND A PRELIMINARY CONSTRUCTION SCHEDULE.

TYPE: **RV - REMOVAL - EMERGENCY**
START DATE: **03/27/1987**
COMPLETION DATE: **04/29/1987**
ACTION TYPE DEFINITION:
RESPONSE ACTION THAT REQUIRES EXPEDITIOUS ATTENTION TO REDUCE IMMINENT AND SUBSTANTIAL DANGERS TO HUMAN HEALTH, WELFARE, OR THE ENVIRONMENT OR AN EMERGENCY RESPONSE REQUIRED WITHIN HOURS OR DAYS TO ADDRESS ACUTE SITUATIONS INVOLVING ACTUAL OR POTENTIAL THREAT TO HUMAN HEALTH, THE ENVIRONMENT, OR REAL OR PERSONAL PROPERTY DUE TO THE RELEASE OF A HAZARDOUS SUBSTANCE. CHARACTERIZATION OF A REMOVAL ACTION AS REMOVAL, NOT IMMEDIATE REMOVAL OR PLANNED REMOVAL, STARTED AT THE BEGINNING OF FY 1987. THIS CODE NOW TAKES THE PLACE OF IMMEDIATE REMOVAL (IR) AND PLANNED REMOVAL (PR).

TYPE: **FS - FEASIBILITY STUDY**
START DATE: **09/17/1986**
COMPLETION DATE: **09/30/1987**
ACTION TYPE DEFINITION:
A STUDY OF A HAZARDOUS WASTE SITE INTENDED TO (1) EVALUATE ALTERNATIVE REMEDIAL ACTIONS FROM TECHNICAL, ENVIRONMENTAL, AND COST-EFFECTIVENESS PERSPECTIVES; (2) RECOMMEND THE COST-EFFECTIVE REMEDIAL ACTION; AND (3) PREPARE A CONCEPTUAL DESIGN, A COSTESTIMATE FOR BUDGETARY PURPOSES, AND A PRELIMINARY CONSTRUCTION SCHEDULE.

TYPE: **FS - FEASIBILITY STUDY**
START DATE: **09/01/1986**
COMPLETION DATE: **09/30/1991**
ACTION TYPE DEFINITION:
A STUDY OF A HAZARDOUS WASTE SITE INTENDED TO (1) EVALUATE ALTERNATIVE REMEDIAL ACTIONS FROM TECHNICAL, ENVIRONMENTAL, AND COST-EFFECTIVENESS PERSPECTIVES; (2) RECOMMEND THE COST-EFFECTIVE REMEDIAL ACTION; AND (3) PREPARE A CONCEPTUAL DESIGN, A COSTESTIMATE FOR BUDGETARY PURPOSES, AND A PRELIMINARY CONSTRUCTION SCHEDULE.

TYPE: **TA - TECHNICAL ASSISTANCE**
START DATE: **07/15/1986**
COMPLETION DATE: **01/18/1994**
ACTION TYPE DEFINITION:
PARTICIPATION IN THE CONDUCT OF FUND-FINANCED REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS).

TYPE: **CR - COMMUNITY INVOLVEMENT**
START DATE: **12/31/1985**
COMPLETION DATE: **06/30/1986**
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: **MA - STATE SUPPORT AGENCY COOPERATIVE AGREEMENT**
START DATE: **07/10/1985**
COMPLETION DATE: **06/15/1988**
ACTION TYPE DEFINITION:
FEDERAL RENUMERATION OF STATE ADMINISTRATIVE COSTS OF PARTICIPATION IN SITE-SPECIFIC REMEDIAL PLANNING OR IMPLEMENTATION ACTIVITIES.

TYPE: **RI - REMEDIAL INVESTIGATION**
START DATE: **09/23/1983**
COMPLETION DATE: **04/09/1987**
ACTION TYPE DEFINITION:
AN INVESTIGATION INTENDED TO GATHER THE DATA NECESSARY TO: (1) DETERMINE THE NATURE AND EXTENT OF PROBLEMS AT THE SITE; (2) ESTABLISH CLEANUP CRITERIA FOR THE SITE; (3) IDENTIFY PRELIMINARY ALTERNATIVE REMEDIAL ACTIONS; AND (4) SUPPORT THE TECHNICAL AND COST ANALYSES OF THE ALTERNATIVES.

TYPE: **WP - REMEDIAL INVESTIGATION/FEASIBILITY STUDY WORKPLAN APPROVAL BY HQ**
START DATE: **02/14/1983**
COMPLETION DATE: **07/15/1985**
ACTION TYPE DEFINITION:
APPROVAL OF THE REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) WORKPLAN, WHICH IS A DESCRIPTION OF THE TASKS AND RESOURCES PLANNED FOR THE RI/FS.

TYPE: **RO - RECORD OF DECISION**
START DATE: **NR**
COMPLETION DATE: **09/30/1987**
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: **RO - RECORD OF DECISION**
START DATE: **NR**
COMPLETION DATE: **03/31/1988**
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: **UA - UNILATERAL ADMIN ORDER**
START DATE: **NR**
COMPLETION DATE: **07/15/1994**
ACTION TYPE DEFINITION:
ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**
START DATE: **NR**
COMPLETION DATE: **06/02/1995**
ACTION TYPE DEFINITION:
ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **06/02/1995**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **09/19/1997**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **09/05/1997**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **09/05/1997**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **09/05/1997**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **UA - UNILATERAL ADMIN ORDER**

START DATE: **NR**

COMPLETION DATE: **09/19/1997**

ACTION TYPE DEFINITION:

ADMINISTRATIVE ORDER ISSUED BY EPA UNILATERALLY (UNDER SECTION 106 OF SARA). UNILATERAL ORDERS CAN COMPEL POTENTIALLY RESPONSIBLE PARTIES (PRPS) TO CONDUCT REMOVAL, REMEDIAL INVESTIGATION/FEASIBILITY STUDY, REMEDIAL DESIGN/REMEDIAL ACTION, AND MAY INCLUDE COST RECOVERY. COMMONLY ABBREVIATED UAO.

TYPE: **RO - RECORD OF DECISION**

START DATE: **NR**

COMPLETION DATE: **09/29/2004**

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: **RO - RECORD OF DECISION**
START DATE: **NR**
COMPLETION DATE: **09/30/1991**
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: **SI - SITE INSPECTION**
START DATE: **NR**
COMPLETION DATE: **06/01/1982**
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: **EH - EXPLANATION OF SIGNIFICANT DIFFERENCES**
START DATE: **NR**
COMPLETION DATE: **06/06/2005**
ACTION TYPE DEFINITION:
MINOR CHANGE FROM THE ORIGINAL REMEDY SELECTED IN THE ORIGINAL RECORD OF DECISION (ROD), SUCH AS CONTINGENT REMEDY.

TYPE: **CA - CONSENT AGREEMENT (ADMINISTRATIVE)**
START DATE: **NR**
COMPLETION DATE: **09/14/1998**
ACTION TYPE DEFINITION:
INFORMAL AGREEMENT USED TO INITIATE POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE OR COST RECOVERY.

TYPE: **DP - PUBLIC NOTICE PUBLISHED**
START DATE: **NR**
COMPLETION DATE: **09/27/1991**
ACTION TYPE DEFINITION:
PUBLICATION IN THE LOCAL NEWSPAPER OF THE AVAILABILITY OF DOCUMENTS FOR PUBLIC REVIEW, SUCH AS THE ADMINISTRATIVE RECORD, PROPOSED PLAN, AND DELETION PACKAGE.

TYPE: **DS - DISCOVERY**
START DATE: **NR**
COMPLETION DATE: **03/01/1982**
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: **EH - EXPLANATION OF SIGNIFICANT DIFFERENCES**
START DATE: **NR**
COMPLETION DATE: **09/01/1999**
ACTION TYPE DEFINITION:
MINOR CHANGE FROM THE ORIGINAL REMEDY SELECTED IN THE ORIGINAL RECORD OF DECISION (ROD), SUCH AS CONTINGENT REMEDY.

TYPE: **CA - CONSENT AGREEMENT (ADMINISTRATIVE)**
START DATE: **NR**

COMPLETION DATE: **03/10/2000**
ACTION TYPE DEFINITION:
INFORMAL AGREEMENT USED TO INITIATE POTENTIALLY RESPONSIBLE PARTY (PRP) RESPONSE OR COST RECOVERY.

TYPE: **AC - ADMINISTRATIVE ORDER ON CONSENT**
START DATE: **NR**
COMPLETION DATE: **02/12/1993**
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: **NR**
COMPLETION DATE: **02/25/1993**
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: **NR**
COMPLETION DATE: **04/18/1993**
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: **NR**
COMPLETION DATE: **06/02/1993**
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: **NR**
COMPLETION DATE: **11/19/1993**

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: **NR**

COMPLETION DATE: **06/08/1995**

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: **NR**

COMPLETION DATE: **09/13/1995**

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: **NR**

COMPLETION DATE: **08/21/1996**

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: **NR**

COMPLETION DATE: **04/26/2007**

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: **NR**
COMPLETION DATE: **04/26/2007**
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: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **02/15/1995**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **08/30/1995**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **07/09/1997**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **06/25/1997**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **09/05/1997**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **09/22/1997**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY

UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **08/10/1994**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **08/12/1994**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **02/18/1987**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **10/04/1996**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **PA - PRELIMINARY ASSESSMENT**
START DATE: **NR**
COMPLETION DATE: **07/01/1982**
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: **NP - PROPOSAL TO NATIONAL PRIORITIES LIST**
START DATE: **NR**
COMPLETION DATE: **12/30/1982**
ACTION TYPE DEFINITION:
SITE PROPOSED FOR INCLUSION ON THE NATIONAL PRIORITY LIST BASED ON THE HAZARD RANKING SYSTEM (HRS) SCORE FOR THE SITE.

TYPE: **NJ - NOTICE LETTERS ISSUED**
START DATE: **NR**
COMPLETION DATE: **08/30/1995**
ACTION TYPE DEFINITION:
EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **GU - NON-CONSENSUAL JUDICIAL ORDER**
START DATE: **NR**
COMPLETION DATE: **08/22/2007**

ACTION TYPE DEFINITION:

ANY ORDER ISSUED BY THE COURT OTHER THAN A CONSENT ORDER OR ADMINISTRATIVE DEFAULT ORDER.

TYPE: **HR - HAZARD RANKING SYSTEM PACKAGE**

START DATE: **NR**

COMPLETION DATE: **12/01/1982**

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: **IC - ISSUE REQUEST LETTERS (104E)**

START DATE: **NR**

COMPLETION DATE: **04/22/1993**

ACTION TYPE DEFINITION:

EPA ISSUES LETTERS UNDER THE AUTHORITY OF SECTION 104(E) TO GATHER INFORMATION RELATED TO (1) THE IDENTIFICATION, NATURE, AND QUANTITY OF MATERIALS; (2) THE NATURE OR EXTENT OF A RELEASE OR THREATENED RELEASE OF A HAZARDOUS SUBSTANCE, POLLUTANT, OR CONTAMINANT; OR (3) THE ABILITY OF A PERSON TO PAY FOR OR TO PERFORM A CLEANUP.

TYPE: **IC - ISSUE REQUEST LETTERS (104E)**

START DATE: **NR**

COMPLETION DATE: **02/15/1995**

ACTION TYPE DEFINITION:

EPA ISSUES LETTERS UNDER THE AUTHORITY OF SECTION 104(E) TO GATHER INFORMATION RELATED TO (1) THE IDENTIFICATION, NATURE, AND QUANTITY OF MATERIALS; (2) THE NATURE OR EXTENT OF A RELEASE OR THREATENED RELEASE OF A HAZARDOUS SUBSTANCE, POLLUTANT, OR CONTAMINANT; OR (3) THE ABILITY OF A PERSON TO PAY FOR OR TO PERFORM A CLEANUP.

TYPE: **LO - LODGED BY DOJ**

START DATE: **NR**

COMPLETION DATE: **02/12/1997**

ACTION TYPE DEFINITION:

AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **NJ - NOTICE LETTERS ISSUED**

START DATE: **NR**

COMPLETION DATE: **09/04/1991**

ACTION TYPE DEFINITION:

EPA ISSUES NOTICE LETTERS TO POTENTIALLY RESPONSIBLE PARTIES INFORMING THEM OF THEIR POTENTIAL LIABILITY UNDER CERCLA AND INVITING THEM TO DISCUSS INVOLVEMENT AT THE SITE.

TYPE: **IC - ISSUE REQUEST LETTERS (104E)**

START DATE: **NR**

COMPLETION DATE: **10/04/1996**

ACTION TYPE DEFINITION:

EPA ISSUES LETTERS UNDER THE AUTHORITY OF SECTION 104(E) TO GATHER INFORMATION RELATED TO (1) THE IDENTIFICATION, NATURE, AND QUANTITY OF MATERIALS; (2) THE NATURE OR EXTENT OF A RELEASE OR THREATENED RELEASE OF A HAZARDOUS SUBSTANCE, POLLUTANT, OR CONTAMINANT; OR (3) THE ABILITY OF A PERSON TO PAY FOR OR TO PERFORM A CLEANUP.

TYPE: **NF - FINAL LISTING ON NATIONAL PRIORITIES LIST**

START DATE: **NR**
COMPLETION DATE: **09/08/1983**
ACTION TYPE DEFINITION:
SITE MOVED FROM PROPOSED LIST TO FINAL NATIONAL PRIORITY LIST.

TYPE: **LO - LODGED BY DOJ**
START DATE: **NR**
COMPLETION DATE: **03/15/2007**
ACTION TYPE DEFINITION:
AN ENFORCEMENT INSTRUMENT (E.G. CONSENT DECREE) IS LODGED BY DOJ WITH THE COURT.

TYPE: **JQ - RECORD OF DECISION AMENDMENT**
START DATE: **NR**
COMPLETION DATE: **04/29/2010**
ACTION TYPE DEFINITION:
SIGNIFICANT CHANGE FROM THE ORIGINAL SELECTED REMEDY STATED IN THE ORIGINAL RECORD OF DECISION (ROD), SUCH AS NEW TECHNOLOGY OR NEW MEDIUM.

TYPE: **JQ - RECORD OF DECISION AMENDMENT**
START DATE: **NR**
COMPLETION DATE: **09/25/2006**
ACTION TYPE DEFINITION:
SIGNIFICANT CHANGE FROM THE ORIGINAL SELECTED REMEDY STATED IN THE ORIGINAL RECORD OF DECISION (ROD), SUCH AS NEW TECHNOLOGY OR NEW MEDIUM.

TYPE: **JQ - RECORD OF DECISION AMENDMENT**
START DATE: **NR**
COMPLETION DATE: **09/22/2003**
ACTION TYPE DEFINITION:
SIGNIFICANT CHANGE FROM THE ORIGINAL SELECTED REMEDY STATED IN THE ORIGINAL RECORD OF DECISION (ROD), SUCH AS NEW TECHNOLOGY OR NEW MEDIUM.

CONTAMINANTS
WASTE SOURCE MEDIA CONTAMINATED NAME: **CADMIUM**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **COPPER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**

HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **4600 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **FLUORIDE**
CONTAMINANT GROUP NAME: **INORGANICS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **7.5 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **312 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **9 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **6700 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **50000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **688 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **0.2 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **60100 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **GROUNDWATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **LEAD**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ZINC**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ARGO TREATMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ACID COMPOUNDS**
CONTAMINANT GROUP NAME: **ACIDS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ARGO TREATMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **LEACHATE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **CYANIDE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **SODIUM CYANIDE**
CONTAMINANT GROUP NAME: **INORGANICS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **LIQUID MERCURY**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ACID MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ACID MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ACID MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ACID MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **ACID MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
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: **NOT REPORTED**
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: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
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: **NOT REPORTED**
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: **NOT REPORTED**
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: **NOT REPORTED**
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: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SEDIMENT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **BARIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**

HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 01 RVNEI**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 02 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 02 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 02 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 02 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL 02 MATRL**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOIL OU O3, RA 01**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **TAILINGS**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **FLUORIDE**
CONTAMINANT GROUP NAME: **INORGANICS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM (HEXAVALENT)**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **5 PILES SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **FLUORIDE**
CONTAMINANT GROUP NAME: **INORGANICS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM (HEXAVALENT)**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **BIG 5/GREGORY SW**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **MINE WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **MINE WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **630 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **28 MG/KG**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **83 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **790 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5630 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **38 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **35 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5830 MG/KG**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**

HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SOLID WASTE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **MINE DRAINAGE**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **BARIUM**

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **METALS**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER 01 MAT**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **VOC**
CONTAMINANT GROUP NAME: **VOC**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **19600 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **135 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **12.6 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **19 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **5170 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **144000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **IRON**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **59 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **84050 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **239 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **75 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **42375 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **63400 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ALUMINUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **1474 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **363 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **56 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **48733 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **549667 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **IRON**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **137 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **62100 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **480 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **18 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **SILVER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SW NORTH CLEAR CREEK**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **89300 UG/L**
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: **2 UG/L**

CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ARSENIC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **20 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **CADMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2960 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **16 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **LEAD**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **19500 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **0.1 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **MERCURY**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **7610 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **NOT REPORTED**
HAZARDOUS SUBSTANCE NAME: **ZINC**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **4800 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **FLUORIDE**
CONTAMINANT GROUP NAME: **INORGANICS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **3 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: **19 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: **59 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **CHROMIUM**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **203 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **10000 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **87 UG/L**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **NICKEL**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **2220 UG/L**
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: **NOT REPORTED**
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: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **COPPER**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MANGANESE**
CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**
CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**
CONSTITUTENT CONTAMINANT OF CONCERN FLAG: **YES**
HAZARDOUS SUBSTANCE NAME: **MERCURY**

National Priorities List (NPL)

CONTAMINANT GROUP NAME: **METALS**

WASTE SOURCE MEDIA CONTAMINATED NAME: **SURFACE WATER**

CONSTITUTENT CONTAMINANT MAXIMUM CONCENTRATION VALUE: **NOT REPORTED**

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

Superfund Sites (SF)

MAP ID# 1 **Distance from Property: 0.00 mi. W**

SITE INFORMATION

EPA ID: **COD980717557** SITE ID: **0800257**

SITE NAME: **CENTRAL CITY/CLEAR CREEK**

SITE ADDRESS: **NEAR TOWN**
IDAHO SPGS,CENT.CY,BKHAWK, CO 80452

SITE COUNTY: **CLEAR CREEK**

ADDITIONAL INFORMATION: **ACTIVE SUPERFUND SITES**

MAP LINKS: **HTTP://EMAPS.DPHE.STATE.CO.US/HMSITEMAP/NPL/CENTRALCITY.HTM**

CONTACT INFORMATION

NAME: **RON ABEL**

PHONE: **(303) 692-3381**

SITE SUMMARY

LOCATION:

THE CLEAR CREEK/CENTRAL CITY SUPERFUND SITE IS LOCATED IN CLEAR CREEK AND GILPIN COUNTIES, APPROXIMATELY 30 MILES WEST OF DENVER. THE SUPERFUND STUDY AREA COVERS THE 400-SQUARE MILE DRAINAGE BASIN OF CLEAR CREEK, WHICH HAS BEEN AFFECTED BY A NUMBER OF INACTIVE PRECIOUS METAL MINES. THE SUPERFUND INVESTIGATION HAS FOCUSED ON MINE DRAINAGE TUNNELS AND MINE TAILINGS AND WASTE ROCK PILES.

HISTORY:

GOLD WAS DISCOVERED NEAR IDAHO SPRINGS IN 1859, AND IN THE BLACK HAWK/CENTRAL CITY AREA IN 1860. FOR THE NEXT 20 YEARS, THE BLACK HAWK/CENTRAL CITY AREA WAS THE LEADING MINING CENTER IN COLORADO WITH THE CONSTRUCTION OF MILLS TO PROCESS THE GOLD AND SILVER FOUND THROUGH PLACER AND HARD ROCK MINING. THE DECLINE OF MINING IN THE AREA BEGAN WITH THE SILVER CRASH IN THE 1890'S AND THE RISE IN MINING IN LEADVILLE. HOWEVER, MINING CONTINUED TO BE AN IMPORTANT INDUSTRY IN CLEAR CREEK AND GILPIN COUNTIES FROM THE TURN OF THE CENTURY UNTIL APPROXIMATELY 1950. SINCE 1950, MINING IN THE AREA HAS BEEN LIMITED WITH ONLY A HANDFUL OF MINES CURRENTLY OPERATING. THE SITE WAS PLACED ON THE LIST OF SUPERFUND SITES IN SEPTEMBER 1983. SINCE THAT TIME, THE DEPARTMENT, EPA AND THE LOCAL COMMUNITY HAVE WORKED TO CLEAN UP HEAVY METAL CONTAMINATION RESULTING FROM DECADES OF HARD ROCK MINING IN THE AREA. THE DEPARTMENT AND EPA HAVE DEVELOPED CLEAN-UP PLANS TO DEAL WITH THE WORST SOURCES OF CONTAMINATION WITHIN THE CLEAR CREEK WATERSHED. IN 1992, LIMITED STAKES GAMING BEGAN IN CENTRAL CITY AND BLACK HAWK. INTRODUCTION OF GAMBLING HAS LED TO SOME LAND USE CHANGES. WHILE THESE CHANGES HAVE THE POTENTIAL TO INCREASE THE DIRECT HUMAN EXPOSURE TO MINE WASTES, MANY MINE WASTE CLEAN-UP PROJECTS WERE IMPLEMENTED AS PROPERTY DEVELOPED.

ENVIRONMETAL CONCERNS

CHEMICALS:

NOT REPORTED

EXPOSURE:

NOT REPORTED

SITE REMEDIATION:

THE CLEAN UP PLANS FOR THE CLEAR CREEK/CENTRAL CITY SUPERFUND SITE CALL FOR TREATMENT OF CONTAMINATED WATER DISCHARGING FROM A NUMBER OF DIFFERENT MINES, CAPPING OF TAILINGS AND WASTE ROCK PILES DETERMINED TO BE THE LARGEST SOURCES OF CONTAMINATION, FURTHER INVESTIGATION OF GROUND WATER, AND PLANS TO IDENTIFY CONTAMINATED DOMESTIC WELLS AND PROVIDE THE OWNERS WITH AN ALTERNATE SUPPLY OF DRINKING WATER.

THE ARGO TUNNEL, IN IDAHO SPRINGS, IS THE LARGEST SINGLE SOURCE OF METALS CONTAMINATION TO CLEAR CREEK. CONSTRUCTION OF A 700 GALLON PER MINUTE TREATMENT FACILITY WAS COMPLETED IN 1998. FULL TIME OPERATION OF THE TREATMENT PLANT BEGAN IN APRIL 1988. APPROXIMATELY 1200 POUNDS OF METALS ARE PREVENTED FROM ENTERING CLEAR CREEK EACH DAY DUE TO TREATMENT OF THE ARGO TUNNEL. THE REMOVED METALS ARE PRESSED INTO A SOLID WASTE AND DISPOSED OF IN A SOLID WASTE LANDFILL. THE TREATED WATER IS DISCHARGED INTO CLEAR CREEK.

AT THE BURLEIGH TUNNEL IN SILVER PLUME, THE DEPARTMENT CONSTRUCTED A PILOT SCALE PASSIVE TREATMENT SYSTEM TO TEST AN ALTERNATIVE TECHNOLOGY FOR TREATING ACID MINE DISCHARGE. ALTHOUGH ORIGINAL RESULTS WERE PROMISING, THE TECHNOLOGY WAS DETERMINED NOT TO BE APPROPRIATE FOR TREATING THE CONTAMINATED WATER FLOWING FROM THE BURLEIGH TUNNEL AND THE PILOT SYSTEM WAS DISMANTLED IN 1999. THE DEPARTMENT AND EPA CONTINUE TO MONITOR WATER QUALITY IN THE VICINITY AND ARE EXPLORING OTHER OPTIONS FOR THE BURLEIGH TUNNEL.

CLEAN-UP OF PRIORITY WASTE PILES BEGAN IN 1993, AND IS ON-GOING. BETWEEN 1993 AND 1999, THE DEPARTMENT AND EPA HAVE WORKED WITH A NUMBER OF GOVERNMENT ENTITIES, DEVELOPERS, INDIVIDUAL PROPERTY OWNERS, AND COMMUNITY STAKEHOLDERS TO COMPLETE CLEAN UP WORK AT TWELVE PRIORITY WASTE PILE LOCATIONS. WASTE PILES REMEDIATED IN CLEAR CREEK COUNTY INCLUDE THE MINNESOTA MINE NEAR EMPIRE, THE MCCLELLAND TAILINGS NEAR DUMONT, AND THE BLACK EAGLE AND LITTLE BEAR WASTE PILES NEAR IDAHO SPRINGS. IN THE BLACK HAWK/CENTRAL CITY AREA CLEAN-UP HAS BEEN COMPLETED AT THE MILLSITE #11 & #12, CHASE GULCH #1, GREGORY INCLINE, GREGORY #1, GREGORY #2, NATIONAL TUNNEL, CLAY COUNTY, NORTH CLEAR CREEK, BIG FIVE AND BOODLE MILL WASTE PILES. ADDITIONAL MINE WASTE PILE CLEAN-UPS ARE SCHEDULED .

THE DEPARTMENT AND EPA ARE ALSO TAKING STEPS TO ADDRESS GROUNDWATER CONTAMINATION IN SELECT PORTIONS OF THE SUPERFUND STUDY AREA. VIRGINIA CANYON DRAINS THE MOUNTAIN CANYONS NORTH OF IDAHO SPRINGS. GROUNDWATER IN THE VICINITY OF VIRGINIA CANYON IS CONTAMINATED BY THE LARGE CONCENTRATION OF ABANDONED MINES IN THE AREA. GROUNDWATER FLOW IS CONCENTRATED BY THE CANYON AND ENTERS CLEAR CREEK JUST UPSTREAM OF THE ARGO TUNNEL TREATMENT FACILITY. THE DEPARTMENT IS EVALUATING THE POTENTIAL MEAN AND VIABILITY OF EXTRACTING THE CONTAMINATED GROUNDWATER WITH FUTURE PLANS TO PUMP THE GROUNDWATER TO THE ARGO FACILITY FOR TREATMENT.

THE AGENCIES HAVE ALSO TAKEN STEPS TO PROTECT INDIVIDUAL HOME OWNERS WHO MIGHT BE DRINKING CONTAMINATED WATER FROM DOMESTIC WELLS. FROM 1994 THROUGH 1996, THE DEPARTMENT OPERATED A VOLUNTARY RESIDENTIAL WELL TESTING PROGRAM. UNDER THE PROGRAMS, OWNERS OF DOMESTIC WELLS WERE OFFERED FREE WELL WATER SAMPLING AND ANALYSIS. OWNERS WHOSE WELL WATER CONTAINED LEVELS OF METALS THAT EXCEEDED DRINKING WATER STANDARDS WERE SUPPLIED WITH BOTTLED WATER. ONLY A SMALL PERCENTAGE OF THE WELLS TESTED REQUIRED AN ALTERNATE SOURCE OF DRINKING WATER, AND THOSE HOMES HAVE BEEN RECEIVING BOTTLED WATER EVER SINCE. THE DEPARTMENT IS IN THE PROCESS OF SELECTING LONG TERM ALTERNATIVE DRINKING WATER SOURCES FOR THE HOMES AFFECTED BY CONTAMINATED WELL WATER.

THE DEPARTMENT AND EPA WILL COMPLETE REMEDIATION WORK REQUIRED BY EXISTING CLEAN-UP PLANS. THE AGENCIES HAVE ALSO BEEN WORKING WITH LOCAL WATERSHED STAKEHOLDERS TO IDENTIFY SIGNIFICANT SOURCES OF CONTAMINATION NOT COVERED BY EXISTING PLANS. THE GOAL OF THIS PROCESS IS TO COMPLETE WORK OUTLINED IN EXISTING PLANS, IDENTIFY AND DETERMINE APPROPRIATE CLEAN-UP PLANS FOR SIGNIFICANT CONTAMINATION SOURCES NOT INCLUDED IN EXISTING WORK PLANS, AND OVER THE LONG TERM, TO COMPLETE THE SUPERFUND CLEAN-UP OF THE CLEAR CREEK WATERSHED.

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 2 **Distance from Property: 0.01 mi. W**

INCIDENT INFORMATION

CASE NUMBER: **2007-0945** NRC NUMBER: **855375**

SPILL DATE: **11/23/2007**

SPILL LOCATION: **I-70 WB EXIT 240**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **PAUL HARDRICK TRUCKING**

ADDRESS: **P.O. BOX 319**
FLORENCE, CO 81226

COUNTY: **NOT REPORTED**

CONTACT: **PAUL HARDRICK**

PHONE: **719-252-9817**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **MOTOR VEHICLE**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**60 G**	**NOT REPORTED**

CAUSE INFORMATION:

AN SUV HIT A MEDIAN BARRIER, BOUNCED BACK INTO THE FLOW OF TRAFFIC AND HIT A SEMI TRUCK, RESULTING IN THE PUNCTURING OF THE SEMI TRUCK'S SADDLE TANK.

ACTION:

CUSTOM ENVIRONMENTAL WAS NOTIFIED FOR CLEANUP OF ALL IMPACTED AREAS. CSP HAZAMT DID APPLY ABSORBENT TO SPILLED DIESEL TO SECURE RELEASE. CLEANUP HAS BEEN COMPLETED.

RESPONSE COMMENTS:

NO WATERWAYS WERE IMAPCTED.

COMMENTS:

CDOT-ANDY FLURKEY

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 2 **Distance from Property: 0.01 mi. W**

INCIDENT INFORMATION

GSID#: **26672514**
NRC ID#: **855375**
INCIDENT LOCATION: **EXIT 240 WESTBOUND ON I-70**
INCIDENT ADDRESS: **EXIT 240 WESTBOUND ON I-70**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **HARDRICK TRUCKING**
ADDRESS: **NOT REPORTED**
CITY: **FLORENCE**
STATE: **CO**
ZIP: **81226**

INCIDENT DETAILS

INCIDENT DATE: **11/23/2007 20:30**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **ABSORBENTS APPLIED, CLEANUP COMPLETED**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL: DIESEL/60 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 2 **Distance from Property: 0.02 mi. SW**

INCIDENT INFORMATION

CASE NUMBER: **2002-1206** NRC NUMBER: **0**

SPILL DATE: **9/25/2002**

SPILL LOCATION: **I-70 AND COLORADO HWY 103**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **GILPIN**

RESPONSIBLE PARTY

NAME: **CHICAGO CREEK SANITATION DISTRICT**

ADDRESS: **P.O. BOX 634**
IDAHO SPRINGS, CO 80452

COUNTY: **NOT REPORTED**

CONTACT: **CRYSTAL MILLER**

PHONE: **970-724-0817**

INCIDENT DETAILS

SOURCE: **PIPELINE**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **BLOCKAGE**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SANITARY SEWER MATERIAL	**100 G**	**100 G**

CAUSE INFORMATION:

ROCK IN SEWER LINE CAUSED BACK UP AND RELEASE OF MATERIAL. MATERIAL RELEASED FROM MANHOLE AND RAN INTO CLEAR CREEK.

ACTION:

BLOCKAGE CLEARED BY GILDNER PIPELINE MAINTENANCE.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

ADDRESS TO SEND ALL CORRESPONDENCE TO CHICAGO CREEK SANITATION IS: CRYSTAL MILLER P.O. BOX 556 K

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 3 **Distance from Property: 0.03 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18282**

NAME: **ORPHAN TANK AT 291 CR 308**

ADDRESS: **291 CR 308**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10358	**CLOSED**	**5/16/2007 11:05**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10358

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 3 **Distance from Property: 0.01 mi. W**

INCIDENT INFORMATION

CASE NUMBER: **CO97-455** NRC NUMBER: **0**

SPILL DATE: **9/29/1997**

SPILL LOCATION: **DUMONT TRUCK STOP (I-70 & DUMONT)**

SPILL CITY/STATE/ZIP: **DUMONT, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **CO DEPT OF TRANSPORTATION**

ADDRESS: **STREET NOT REPORTED**

CITY NOT REPORTED, NOT REPORTED

COUNTY: **NOT REPORTED**

CONTACT: **DAVE KYLE**

PHONE: **303-757-9243**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **CDOT TRUCK**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **F**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
HYDRAULIC FLUID OR OIL	**40 G**	**NOT REPORTED**

CAUSE INFORMATION:

HYDRAULIC LINE SPRUNG A LEAK

ACTION:

COVERING SPILL W/FLOOR DRY & SAND. WILL DISPOSE @ LANDFILL W/IN NEXT COUPLE OF DAYS.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 3 **Distance from Property: 0.01 mi. W**

FACILITY INFORMATION

FACILITY ID: **10644**

NAME: **BLACKWELL OIL CO INC**

ADDRESS: **I-70 & DUMONT EXIT**
DUMONT, CO 80436

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10644

OWNER INFORMATION

NAME: **BLACKWELL OIL CO**

ADDRESS: **PO BOX 3333**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
10644-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**01-JAN-73**
10644-2	**UST**	**DIESEL #1**	**10000**	**OPEN**	**01-JAN-73**
10644-3	**UST**	**DIESEL DYED #2**	**10000**	**OPEN**	**01-JAN-73**

Back to Report Summary

Aboveground Storage Tank Facilities (AST)

MAP ID# 3 **Distance from Property: 0.03 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18282**
NAME: **ORPHAN TANK AT 291 CR 308**
ADDRESS: **291 CR 308**
DUMONT, CO 80436
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=18282

OWNER INFORMATION

NAME: **SMITH**
ADDRESS: **PO BOX 1193**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Generator Facilities (RCRAGR08)

MAP ID# 4 **Distance from Property: 0.01 mi. W**

FACILITY INFORMATION

EPA ID#: **COD983773581**
NAME: **COLORADO DEPT OF TRANS - IDAHO SPRINGS**
ADDRESS: **1-70 MP 241.05**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **DAVID KILE**
CONTACT ADDRESS: **18500 EAST COLFAX**
AURORA, CO 80011
CONTACT PHONE: **3033657123**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/14/2007**

OWNER TYPE: **STATE**
OWNER NAME: **COLORADO DEPT OF TRANS**
OPERATOR TYPE: **STATE**
OPERATOR NAME: **COLORADO DEPT OF TRANS**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
DAVID KILE	**MGR**	**20070209**

INDUSTRY CLASSIFICATION (NAICS)
23731 - HIGHWAY, STREET, AND BRIDGE CONSTRUCTION

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)
DATE RECEIVED BY AGENCY: **02/14/07**
NAME: **COLORADO DEPT OF TRANS - IDAHO SPRINGS**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**
DATE RECEIVED BY AGENCY: **05/13/93**
NAME: **COLORADO DEPT OF HWYS - IDAHO SP**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

Resource Conservation & Recovery Act - Generator Facilities (RCRAGR08)

HAZARDOUS WASTE

D001	**IGNITABLE WASTE**
D002	**CORROSIVE WASTE**
D008	**LEAD**
D035	**METHYL ETHYL KETONE**
D039	**TETRACHLOROETHYLENE**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
NOT REPORTED	**NO**	**NO**	**NOTIFICATION**
BATTERIES	**NO**	**NOT REPORTED**	**NOTIFICATION**
OTHER	**NO**	**NO**	**NOTIFICATION**
LAMPS	**NO**	**NOT REPORTED**	**NOTIFICATION**
MERCURY-CONTAINING DEVICES	**NO**	**NO**	**NOTIFICATION**
PESTICIDES	**NO**	**NOT REPORTED**	**NOTIFICATION**
MERCURY CONTAINING EQUIPMENT	**NO**	**NOT REPORTED**	**NOTIFICATION**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 4 **Distance from Property: 0.01 mi. W**

FACILITY INFORMATION

FACILITY ID: **7418**

NAME: **CDOT IDAHO SPRINGS**

ADDRESS: **HWY 70 MP 241.05**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **4**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=7418

OWNER INFORMATION

NAME: **CDOT**

ADDRESS: **18500 E COLFAX AVE**
AURORA, CO 80011

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
7418-1	**UST**	**4 - DIESEL**	**10000**	**CLOSED**	**14-MAR-48**
7418-2	**UST**	**6 - USED OIL (WASTE OIL)**	**500**	**CLOSED**	**14-MAR-48**
7418-3	**UST**	**4 - DIESEL**	**2000**	**CLOSED**	**14-MAR-48**
7418-4	**UST**	**6 - USED OIL (WASTE OIL)**	**500**	**CLOSED**	**14-MAR-48**

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 5 **Distance from Property: 0.01 mi. W**

INCIDENT INFORMATION

GSID#: **605113636**
NRC ID#: **792447**
INCIDENT LOCATION: **I-70 / MILE POST 234**
INCIDENT ADDRESS: **I-70 / MILE POST 234**
INCIDENT CITY: **DUMONT**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **CALFRAC WELL SERVICES**
ADDRESS: **NOT REPORTED**
CITY: **PLATTEVILLE**
STATE: **CO**
ZIP: **80651**

INCIDENT DETAILS

INCIDENT DATE: **3/29/2006 12:54**
INCIDENT CAUSE: **EQUIPMENT FAILURE**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **INITIAL RESPONSE WAS SECUREMENT OF THE AREA / ATTEMPTED TO STOP THE LEAK / OFFLOADED THE TRUCK**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **HYDROCHLORIC ACID/15 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 6 **Distance from Property: 0.01 mi. W**

INCIDENT INFORMATION

GSID#: **2570796602**
NRC ID#: **720068**
INCIDENT LOCATION: **INTERSTATE 70 MILE MARKER 239**
INCIDENT ADDRESS: **INTERSTATE 70 MILE MARKER 239**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **NOT REPORTED**
ADDRESS: **NOT REPORTED**
CITY: **GRANBY**
STATE: **CO**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **4/25/2004**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **CONTRACTOR HAS BEEN HIRED**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL: DIESEL/80 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Hazardous Materials Incident Reporting System (HMIRSR08)

MAP ID# 7 **Distance from Property: 0.01 mi. NW**

INCIDENT INFORMATION

REPORT #: **I-2002010020**

DATE: **11/9/2001**

INCIDENT LOCATION:

I-70 WB MM 235

DUMONT, CO

CLEAR CREEK COUNTY

CARRIER INFORMATION

NAME: **IOWA TANKLINES INC**

ADDRESS: **7722 F STREET**

OMAHA, NE 68127

MODE OF TRANSPORTATION: **HIGHWAY**

TRANSPORTATION PHASE: **IN TRANSIT**

COMMODITY DETAILS

IDENTIFICATION NUMBER: **UN1203**

COMMODITY SHIPPING NAME: **GASOLINE**

TRADE NAME: **GASOLINE**

QUANTITY RELEASED: **8201 LIQUID - GALLON**

PACKAGING: **CARGO TANK MOTOR VEHICLE (CTMV)**

FAILURE DESCRIPTION

WHAT FAILED: **103; BASIC MATERIAL;**

HOW FAILED: **303; - BURST OR RUPTURED;**

FAILURE CAUSE DESCRIPTION:

531; 537 - ROLLOVER ACCIDENT; VEHICULAR CRASH OR ACCIDENT DAMAGE

DESCRIPTION OF EVENTS:

DRIVER HEADING WEST ON I-70 TIRES SLIPPED OFF ON SOFT SHOULDER OVER CORRECTED AND ROLLED TRACTOR TRAILER GASOLINE LEAKED FROM TRAILER. FIRE DEPARTMENT AND HAZMAT UNITS RESPONDED. A CLEAN UP CONTRACTOR WAS ON THE SCENE.

RECOMMENDATIONS/ACTIONS TAKEN:

NO ACTION OR RECOMMENDATION REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 8 **Distance from Property: 0.02 mi. S**

INCIDENT INFORMATION

CASE NUMBER: **2012-0313** NRC NUMBER: **0**

SPILL DATE: **5/7/2012**

SPILL LOCATION: **OFFRAMP OF EB I-70 EXIT 233 (LAWSON EXIT) ON RIGHT HAND SIDE, JUST BEFORE STOP SIGN**

SPILL CITY/STATE/ZIP: **LAWSON, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **NOT REPORTED**

ADDRESS: **STREET NOT REPORTED**
CITY NOT REPORTED, CO

COUNTY: **NOT REPORTED**

CONTACT: **NOT REPORTED**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **MOTOR VEHICLE**

MEDIUM: **NOT REPORTED**

WATERWAY: **NOT REPORTED**

CAUSE: **DUMPING**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
MOTOR OIL	**10 QUARTS**	**NOT REPORTED**

CAUSE INFORMATION:

CALLER FROM CDOT REPORTS THAT THERE ARE TWO 5 QUART JUGS OF USED MOTOR OIL ON THE ROADSIDE. CALLER SUSPECTS THAT THEY ARE FROM A TRUCKER CHANGING THEIR OIL. THE JUGS ARE GREY AND SAY "MOBILE 1" ON THEM.

ACTION:

NOT REPORTED

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary

Resource Conservation & Recovery Act - Generator Facilities (RCRAGR08)

MAP ID# 9 **Distance from Property: 0.03 mi. NW**

FACILITY INFORMATION

EPA ID#: **COD980961742**
NAME: **PSCO-DUMONT SC**
ADDRESS: **681 CR 308**
DUMONT, CO 80436
CONTACT NAME: **TERRY STALEY**
CONTACT ADDRESS: **4653 TABLE MOUNTAIN DR**
GOLDEN, CO 80202
CONTACT PHONE: **7204972107**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **01/09/2009**

OWNER TYPE: **PRIVATE**
OWNER NAME: **1480 WELTON**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **PSCO-DUMONT SC**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
R KIM MONTGOMERY	**MGR**	**20081216**

INDUSTRY CLASSIFICATION (NAICS)

221119 - OTHER ELECTRIC POWER GENERATION

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **01/09/09**
NAME: **PSCO-DUMONT SC**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

DATE RECEIVED BY AGENCY: **06/25/86**
NAME: **PUBLIC SERVICE FRONT RANGE WEST**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

Resource Conservation & Recovery Act - Generator Facilities (RCRAGR08)

HAZARDOUS WASTE

D001 **IGNITABLE WASTE**

D002 **CORROSIVE WASTE**

UNIVERSAL WASTE

WASTE TYPE:	ACCUMULATED WASTE ON-SITE:	GENERATED WASTE ON-SITE:	SOURCE TYPE:
NOT REPORTED	**NO**	**NO**	**NOTIFICATION**
BATTERIES	**NO**	**NOT REPORTED**	**NOTIFICATION**
OTHER	**NO**	**NO**	**NOTIFICATION**
LAMPS	**NO**	**NOT REPORTED**	**NOTIFICATION**
MERCURY-CONTAINING DEVICES	**NO**	**NO**	**NOTIFICATION**
PESTICIDES	**NO**	**NOT REPORTED**	**NOTIFICATION**
MERCURY CONTAINING EQUIPMENT	**NO**	**NOT REPORTED**	**NOTIFICATION**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 10 **Distance from Property: 0.04 mi. NW**

INCIDENT INFORMATION

GSID#: **1279464214**
NRC ID#: **811467**
INCIDENT LOCATION: **SODA CREEK SOUTH OF MINOR ST.**
INCIDENT ADDRESS: **SODA CREEK SOUTH OF MINOR ST.**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **NOT REPORTED**
ADDRESS: **NOT REPORTED**
CITY: **NOT REPORTED**
STATE: **XX**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **9/14/2006 14:00**
INCIDENT CAUSE: **UNKNOWN**
MATERIAL REACHED WATER: **YES**
REMEDIAL ACTION: **NONE**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **UNKNOWN MATERIAL/ UNKNOWN AMOUNT**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 10 **Distance from Property: 0.04 mi. NW**

FACILITY INFORMATION

FACILITY ID: **10636**
NAME: **IDAHO SPRINGS LUMBER CO**
ADDRESS: **1965 MINER ST**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **2**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10636

OWNER INFORMATION

NAME: **BLACKWELL OIL CO**
ADDRESS: **PO BOX 3333**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
10636-1	**UST**	**4 - DIESEL**	**1000**	**CLOSED**	**01-JAN-73**
10636-2	**UST**	**GASOLINE**	**1000**	**CLOSED**	**01-JAN-73**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 11 **Distance from Property: 0.04 mi. N**

FACILITY INFORMATION

EPA ID#: **COR000202523**
NAME: **REVOLUTION AUTO & TOWING**
ADDRESS: **909 CNTY RD 308**
DUMONT, CO 80436
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **909 CNTY RD 308**
DUMONT, CO 80436
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **X**
DATE RECEIVED BY AGENCY: **10/15/2001**

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**
SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)
DATE RECEIVED BY AGENCY: **10/15/01**
NAME: **REVOLUTION AUTO & TOWING**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS
2001/10/15 **CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -
UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2007-1005** NRC NUMBER: **0**

SPILL DATE: **12/25/2007**

SPILL LOCATION: **2911 COLORADO BLVD.**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **GILPIN**

RESPONSIBLE PARTY

NAME: **MCDONALD'S**

ADDRESS: **2911 COLORADO BLVD.**
IDAHO SPRINGS, CO 80452

COUNTY: **NOT REPORTED**

CONTACT: **JIM BOSELLI**

PHONE: **720-621-2773**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **FIXED FACILITY**

WATERWAY: **NOT REPORTED**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
WASTEWATER	**25 G**	**NOT REPORTED**

CAUSE INFORMATION:

MOTOR ON A PUMP AT A LIFT STATION FAILED ALLOWING FOR RELEASE OF WASTEWATER FROM FACILITY.

ACTION:

PUMP WAS TURNED OFF AND A NEW PUMP WAS INSTALLED. IMPACTED AREAS WERE CLEANED AND FACILITY IS BACK IN SERVICE.

RESPONSE COMMENTS:

NO WATERWAYS WERE IMAPCTED.

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2011-0626** NRC NUMBER: **0**

SPILL DATE: **9/3/2011**

SPILL LOCATION: **2911 COLORADO BLVD**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **MCDONALD'S**

ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **RUDY, MANAGER**

PHONE: **303-567-1410**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **LAND**

WATERWAY: **STORM DRAINS --> GRASSY AREA BY INTERSTATE**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SEWAGE	**8400 G**	**8400 G**

CAUSE INFORMATION:

CALLER REPORTS THAT THE LIFT PUMP FOR THE LIFT STATION OWNED BY MCDONALD'S ON THIS PROPERTY NEEDS TO BE REPLACED. THEY HAVE ORDERED A NEW ONE FROM GERMANY. THIS REPORT IS FOR THE MIDDLE OF 3 SPILLS FROM 8/30 - 9/3/11. THE OTHER TWO REPORTS WILL BE 2011

ACTION:

AFTER THE THIRD EVENT OF A RELEASE FROM THIS LIFT STATION, WHICH OCCURRED AT 6 P.M., ONLY 7 HOURS AFTER THIS RELEASE, THE CITY OF IDAHO SPRINGS SHUT OFF THE WATER TO THIS MCDONALD'S, FORCING THEM TO CLOSE. THEY TURNED THE WATER BACK ON FOR THEM ON SUNDAY

RESPONSE COMMENTS:

CALLER'S EMAIL: PW@IDAHOSPRINGSCO.COM; FAX: 303-567-0124; CALLER DID CALL ON 8/31/11 TO REPORT THE FIRST RELEASE, BUT SOMEHOW WE GOT HIS PHONE NUMBER WRITTEN DOWN INCORRECTLY AND WERE UNABLE TO CALL HIM BACK. THE MESSAGE WAS NOT VERY CLEAR SO WE WEREN'T

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2011-0625** NRC NUMBER: **0**

SPILL DATE: **8/30/2011**

SPILL LOCATION: **2911 COLORADO BLVD,**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **MCDONALD'S**

ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **RUDY, MANAGER**

PHONE: **303-567-1410**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **WATER AND LAND**

WATERWAY: **STORM DRAIN**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SEWAGE	**50 UNKNOWN**	**50 U**

CAUSE INFORMATION:

LIFT PUMP FOR THE LIFT STATION OWNED BY MCDONALD'S ON THIS PROPERTY NEEDS TO BE REPLACED. THEY HAVE ORDERED A NEW ONE FROM GERMANY. THIS REPORT IS FOR THE FIRST OF 3 SUCH RELEASES. THE AMOUNT OF THE RELEASE ON 8/30/11 IS UNKNOWN. SEWAGE DID GO INTO A

ACTION:

NOT REPORTED

RESPONSE COMMENTS:

REFER TO THE OTHER TWO RELATED SPILLS 2011-0626 AND 2011-0627. DOUG CAMRUD IS LOOKING INTO THIS SITUATION.

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2011-0627** NRC NUMBER: **0**

SPILL DATE: **9/3/2011**

SPILL LOCATION: **2911 COLORADO BLVD**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **MCDONALD'S**

ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **RUDY, MANAGER**

PHONE: **303-567-0124**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **WATER AND LAND**

WATERWAY: **STORM DRAIN**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SEWAGE	**50 UNKNOWN**	**50 U**

CAUSE INFORMATION:

LIFT PUMP FOR THE LIFT STATION OWNED BY MCDONALD'S ON THIS PROPERTY NEEDS TO BE REPLACED. THEY HAVE ORDERED A NEW ONE FROM GERMANY. THIS REPORT IS FOR THE THIRD OF 3 SUCH RELEASES. THE AMOUNT OF THIS SECOND RELEASE ON 9/3/11 IS UNKNOWN. SEWAGE DID GO

ACTION:

THE CITY SHUT OFF THE WATER TO THE STORE AND FORCED THEM TO CLOSE FOR THE DAY AFTER THIS RELEASE. THE WATER WAS TURNED BACK ON ON 9/4/11.

RESPONSE COMMENTS:

DOUG CAMRUD WAS GOING TO LOOK INTO THIS AFTER THE FIRST REPORT, 2011-0626, WAS SENT OUT ON 9/6/11.

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2013-0263** NRC NUMBER: **0**

SPILL DATE: **4/21/2013**

SPILL LOCATION: **2911 COLORADO BLVD**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **MCDONALDS**

ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **UNKNOWN**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **WATER AND LAND**

WATERWAY: **STORM DRAIN --> FIELD**

CAUSE: **UNKNOWN**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SEWAGE	**1000 GALLONS**	**1000 G**

CAUSE INFORMATION:

CALLER DROVE PAST THE MCDONALD'S AND NOTICED THAT WATER WAS COMING UP FROM THE MANHOLE ON MCDONALD;S PROPERTY. HE DOES NOT KNOW HOW LONG IT HAD BEEN BACKING UP. THE WATER WAS SPURTING UP 3 INCHES ABOVE THE MANHOLE, AND THERE WAS A PUDDLE AROUND THE MANH

ACTION:

NOT REPORTED

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

CALLER'S EMAIL: PW@IDAHOSPRINGSCO.COM. HE IS WILLING TO DO THE REPORT.

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

FACILITY INFORMATION

FACILITY ID: **15075**

NAME: **K & G STORE #528**

ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=15075

OWNER INFORMATION

NAME: **K & G PETROLEUM INC**

ADDRESS: **10459 PARK MEADOWS DR STE 101**
LONE TREE, CO 80124

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
15075-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**01-AUG-99**
15075-2	**UST**	**2 - UNLEADED MID-GRADE (MUL)**	**10000**	**OPEN**	**01-AUG-99**
15075-3	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**10000**	**OPEN**	**01-AUG-99**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 12 **Distance from Property: 0.05 mi. NW**

FACILITY INFORMATION

EPA ID#: **COR000209387**
NAME: **BP FACILITY #70482**
ADDRESS: **2911 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **SCOTT HARTWELL**
CONTACT ADDRESS: **P O BOX 6038**
ARTESIA, CA 90702
CONTACT PHONE: **7146715248**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **10/02/2006**

OWNER TYPE: **PRIVATE**
OWNER NAME: **BP PRODUCTS NORTH AMERICA INC**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **BP FACILITY #70482**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
SCOTT HARTWELL	**ENV COMPLIANCE SPECIALIST**	**20040916**
SCOTT HARTWELL	**ENV COMPLIANCE SPECIALIST**	**20061002**

INDUSTRY CLASSIFICATION (NAICS)
44711 - GASOLINE STATIONS WITH CONVENIENCE STORES

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)
DATE RECEIVED BY AGENCY: **10/02/06**
NAME: **BP FACILITY #70482**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**
DATE RECEIVED BY AGENCY: **09/20/04**
NAME: **BP FACILITY #70482**
GENERATOR CLASSIFICATION: **SMALL QUANTITY GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

D001 **IGNITABLE WASTE**

D018 **BENZENE**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 12 **Distance from Property: 0.06 mi. NW**

FACILITY INFORMATION

FACILITY ID: **7418**

NAME: **CDOT IDAHO SPRINGS**

ADDRESS: **2931 COLORADO BLVD**

N SIDE HWY 70A MP 241.05

IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
3341	**CLOSED**	**10/18/1991**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=3341

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 13 **Distance from Property: 0.05 mi. NW**

FACILITY INFORMATION

FACILITY ID: **3846**

NAME: **DOWNIEVILLE FUEL STOP REXOCO #35**

ADDRESS: **1039 CR 308 AND 1041-1041A CR 308**
DOWNIEVILLE, CO 80436

TOTAL TANK: **11**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=3846

OWNER INFORMATION

NAME: **P & T HOLDINGS DIVISION OF REX OIL**

ADDRESS: **1970 E 68TH AVE**
DENVER, CO 80229

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
3846-1	**UST**	**4 - DIESEL**	**10000**	**OPEN**	**01-DEC-92**
3846-2	**UST**	**4 - DIESEL**	**10000**	**OPEN**	**01-DEC-92**
3846-3	**UST**	**4 - DIESEL**	**10000**	**OPEN**	**01-DEC-92**
3846-4	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**01-DEC-92**
3846-5	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**01-DEC-92**
3846-6	**UST**	**2 - UNLEADED MID-GRADE (MUL)**	**10000**	**OPEN**	**01-DEC-92**
3846-7	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**10000**	**OPEN**	**01-DEC-92**
3846-8	**UST**	**GASOLINE**	**10000**	**CLOSED**	**01-DEC-92**
3846-9	**UST**	**4 - DIESEL**	**10000**	**CLOSED**	**01-DEC-92**
3846-10	**UST**	**GASOLINE**	**10000**	**CLOSED**	**01-DEC-92**
3846-11	**UST**	**GASOLINE**	**10000**	**CLOSED**	**01-DEC-92**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 13 **Distance from Property: 0.05 mi. NW**

FACILITY INFORMATION

FACILITY ID: **3846**

NAME: **DOWNIEVILLE FUEL STOP REXOCO #35**

ADDRESS: **1039 CR 308 AND 1041-1041A CR 308**
DOWNIEVILLE, CO 80436

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
8974	**CLOSED**	**6/24/2002 8:57**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=8974

11215	**OPEN**	**8/3/2010 8:59**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=11215

11707	**CLOSED**	**8/22/2012 13:35**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=11707

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 14 **Distance from Property: 0.05 mi. N**

INCIDENT INFORMATION

GSID#: **1314279718**
NRC ID#: **836393**
INCIDENT LOCATION: **CENTER STREET AT FIFTH AVENUE**
INCIDENT ADDRESS: **CENTER STREET AT FIFTH AVENUE**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **NOT REPORTED**
ADDRESS: **NOT REPORTED**
CITY: **NOT REPORTED**
STATE: **XX**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **5/22/2007 13:00**
INCIDENT CAUSE: **EQUIPMENT FAILURE**
MATERIAL REACHED WATER: **YES**
REMEDIAL ACTION: **LOCAL COUNTY WILL HANDLE THE CLEAN UP, CLEAN UP IS UNDERWAY**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **RAW SEWAGE/ UNKNOWN AMOUNT**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 15 **Distance from Property: 0.06 mi. NW**

FACILITY INFORMATION

FACILITY ID: **2923**

NAME: **CDOT IDAHO SPRINGS CSP**

ADDRESS: **3000 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
4126	**CLOSED**	**12/24/1992**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=4126

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 15 **Distance from Property: 0.06 mi. NW**

FACILITY INFORMATION

FACILITY ID: **2923**
NAME: **CSP - IDAHO SPRINGS #49612**
ADDRESS: **3000 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=2923

OWNER INFORMATION

NAME: **COLORADO STATE PATROL**
ADDRESS: **4201 E ARKANSAS AVE**
DENVER, CO 80222

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
2923-1	**UST**	**GASOLINE**	**10000**	**CLOSED**	**01-JUL-73**

Back to Report Summary

Aboveground Storage Tank Facilities (AST)

MAP ID# 15 **Distance from Property: 0.06 mi. NW**

FACILITY INFORMATION

FACILITY ID: **12340**
NAME: **CDOT IDAHO SPRINGS CSP**
ADDRESS: **3000 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=12340

OWNER INFORMATION

NAME: **CDOT**
ADDRESS: **4201 E ARKANSAS AVE RM 284**
DENVER, CO 80222

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 16 **Distance from Property: 0.06 mi. N**

FACILITY INFORMATION

FACILITY ID: **15563**
NAME: **SILVER CITY AUTOMOTIVE**
ADDRESS: **243 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **5**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=15563

OWNER INFORMATION

NAME: **SILVER CITY AUTOMOTIVE**
ADDRESS: **243 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
15563-1	**UST**	**Z UNKNOWN**	**2000**	**CLOSED**	**NOT REPORTED**
15563-2	**UST**	**Z UNKNOWN**	**1000**	**CLOSED**	**NOT REPORTED**
15563-3	**UST**	**7 - LUBE OIL**	**1000**	**CLOSED**	**NOT REPORTED**
15563-4	**UST**	**Z UNKNOWN**	**1000**	**CLOSED**	**NOT REPORTED**
15563-5	**UST**	**KEROSENE**	**1000**	**CLOSED**	**NOT REPORTED**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 16 **Distance from Property: 0.06 mi. N**

FACILITY INFORMATION

FACILITY ID: **15563**

NAME: **SILVER CITY AUTOMOTIVE**

ADDRESS: **243 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
8761	**CLOSED**	**10/15/2001**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=8761

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 17 **Distance from Property: 0.06 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2011-0453** NRC NUMBER: **0**

SPILL DATE: **7/10/2011**

SPILL LOCATION: **1711 MINER ST, AT THE WASTEWATER TREATMENT PLANT**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **IDAHO SPRINGS WASTEWATER TREATMENT PLANT**

ADDRESS: **1711 MINER ST.**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **JOHN CURTIS**

PHONE: **720-341-0305**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
TREATED, NOT DISINFECTED WASTEWATER	**200000 G**	**200000 G**

CAUSE INFORMATION:

BROKEN BRICKS AND ONE OF THE ARMS POPPING OPEN CAUSED A RELEASE OF 200,000 GALLONS OF TREATED, BUT NOT DISINFECTED, WASTEWATER TO CLEAR CREEK. THE HIGH LEVELS HAD BEEN RECORDED AT 1547 ON 7/9/11, BUT THE ALARM DID NOT GO OFF. THE RELEASE WAS DISCOVERED

ACTION:

REPAIRS WERE COMPLETED ENOUGH TO STOP THE RELEASE BY 10 A.M.

RESPONSE COMMENTS:

THE ROC RESIGNED. JOHN CURTIS IS ON THE TOWN BOARD, SO HE REPORTED THE RELEASE. RAMEY ENVIRONMENTAL HAS JUST BEEN HIRED TO RUN THE PLANT UNTIL A PERMANENT PERSON IS FOUND. JOHN CURTIS' EMAIL IS GTOWNUTILITIES@EARTHLINK.NET. HE AND WAYNE RAMEY WILL MAK

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 18 **Distance from Property: 0.06 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2007-0763** NRC NUMBER: **0**

SPILL DATE: **9/11/2007**

SPILL LOCATION: **2000 MINER ST.**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **CITY OF IDAHO SPRINGS**

ADDRESS: **200 COLORADO BLVD.**
IDAHO SPRINGS, CO 80452

COUNTY: **NOT REPORTED**

CONTACT: **CAROL MIKAL**

PHONE: **303-567-2400**

INCIDENT DETAILS

SOURCE: **PIPELINE**

SOURCE TYPE: **WATER LINE**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **POTABLE WATER**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
POTABLE WATER	**18000 G**	**18000 G**

CAUSE INFORMATION:

A WATER MAIN BREAK AT THE ABOVE LISTED LOCATION IS THE RESULT OF POTABLE WATER BEING RELEASED.INTO CLEAR CREEK.

ACTION:

WATER MAIN IS BEING REPAIRED. ESTIMATED THAT LINE WILL BE REPAIRED BY 7PM THIS EVENING.

RESPONSE COMMENTS:

ABOUT 150 GALLONS PER MINUTE BEING RELEASED. RELEASE HAS BEEN GOING ON FOR APPROXIMATELY 2 HOURS.

COMMENTS:

NOT REPORTED

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 19 **Distance from Property: 0.06 mi. N**

FACILITY INFORMATION

FACILITY ID: **8666**
NAME: **CLEAR CREEK SCHOOL TRANSPORTATION DIVISION**
ADDRESS: **1125 IDAHO ST**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=8666

OWNER INFORMATION

NAME: **CLEAR CREEK SCHOOL DIST RE-1**
ADDRESS: **PO BOX 3399**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
8666-1	**UST**	**4 - DIESEL**	**10000**	**OPEN**	**27-MAR-70**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 20 **Distance from Property: 0.06 mi. NW**

FACILITY INFORMATION

EPA ID#: **COR000005892**
NAME: **BUFFALO TRAILS GIFT SHOP**
ADDRESS: **1535 MINER ST**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **NOT REPORTED**
,
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **X**
DATE RECEIVED BY AGENCY: **08/08/1996**

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**

INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **08/08/96**
NAME: **BUFFALO TRAILS GIFT SHOP**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS
1996/08/08 CEI COMPLIANCE EVALUATION INSPECTION ON-SITE

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18798**

NAME: **KUM & GO #975**

ADDRESS: **1359 MINER ST**

IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10897	**CLOSED**	**8/7/2009 12:01**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10897

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **6517**

NAME: **AMOCO #5329**

ADDRESS: **1319 MINER ST**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **4**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=6517

OWNER INFORMATION

NAME: **BP AMERICA**

ADDRESS: **501 WESTLAKE PARK BLVD STE 20-109C**
HOUSTON, TX 77079

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
6517-1	**UST**	**6 - USED OIL (WASTE OIL)**	**550**	**CLOSED**	**17-APR-85**
6517-2	**UST**	**GASOLINE**	**8000**	**CLOSED**	**17-APR-85**
6517-3	**UST**	**GASOLINE**	**10000**	**CLOSED**	**17-APR-85**
6517-4	**UST**	**GASOLINE**	**10000**	**CLOSED**	**17-APR-85**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18798**

NAME: **KUM & GO #975**

ADDRESS: **1359 MINER ST**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=18798

OWNER INFORMATION

NAME: **KUM & GO LC**

ADDRESS: **6400 WESTOWN PKWY**
WEST DES MOINES, IA 50266

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
18798-1	**UST**	**9 - GAS/GAS (MULTI-COMP)**	**20000**	**OPEN**	**17-SEP-09**
18798-2	**UST**	**8 - DIESEL/GAS (MULTI-COMP)**	**20000**	**OPEN**	**17-SEP-09**
18798-3	**UST**	**1 - UNLEADED REGULAR (RUL)**	**8000**	**OPEN**	**17-SEP-09**

Back to Report Summary

Emergency Response Notification System (ERNSCO)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

INCIDENT INFORMATION

GSID#: **3484211329**
NRC ID#: **1000591**
INCIDENT LOCATION: **COME AND GO STORE**
INCIDENT ADDRESS: **1319 MINER STREET**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **GILPIN**

RESPONSIBLE PARTY

COMPANY: **SOLAR TRANSPORT**
ADDRESS: **NOT REPORTED**
CITY: **WEST DES MOINES**
STATE: **IA**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **1/17/2012 12:50**
INCIDENT CAUSE: **EQUIPMENT FAILURE**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **CALLER STATED THE SPILL WAS CLEANED UP WITH ABSORBENT PADS.**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **GASOLINE: AUTOMOTIVE (UNLEADED)/5 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary

Hazardous Materials Incident Reporting System (HMIRSR08)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

INCIDENT INFORMATION

REPORT #: **I-2012020050**

DATE: **01/17/2012**

INCIDENT LOCATION:

1319 MINER STREET

IDAHO SPRINGS, CO 80452

CLEAR CREEK COUNTY

CARRIER INFORMATION

NAME: **SOLAR TRANSPORT COMPANY**

ADDRESS: **6400 WESTOWN PKWY**

WEST DES MOINES, IA 50266

MODE OF TRANSPORTATION: **HIGHWAY**

TRANSPORTATION PHASE: **UNLOADING**

COMMODITY DETAILS

IDENTIFICATION NUMBER: **UN1203**

COMMODITY SHIPPING NAME: **GASOLINE**

TRADE NAME: **BR CONVENTIONAL GASOLINE WITH ETHER**

QUANTITY RELEASED: **5 LIQUID - GALLON**

PACKAGING: **CARGO TANK MOTOR VEHICLE (CTMV)**

FAILURE DESCRIPTION

WHAT FAILED: **125 HOSE**

HOW FAILED: **308 - LEAKED**

FAILURE CAUSE DESCRIPTION:

515 - HUMAN ERROR

DESCRIPTION OF EVENTS:

DRIVER FAILED TO CONNECT HOSE PROPERLY TO DROP ELBOW. HOSE CAME LOOSE DURING DELIVERY. DRIVER STOPPED FLOW & CONTAINED PRODUCT & CLEANED UP.

RECOMMENDATIONS/ACTIONS TAKEN:

DRIVER WILL BE TRAINED TO ENSURE HE CAN DELIVERY PRODUCT WITH OUT SPILLING A DROP.

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

EPA ID#: **COD983788126**
NAME: **AMOCO OIL 5329**
ADDRESS: **1319 MINER ST**
IDAHO SPRINGS, CO 804520480
CONTACT NAME: **JAMES ROGERS**
CONTACT ADDRESS: **PO BOX 26045**
SHAWNEE MISSION, KS 662256045
CONTACT PHONE: **9133394530**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **02/15/1995**

OWNER TYPE: **PRIVATE**
OWNER NAME: **AMOCO OIL CO**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**
INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**
SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)
DATE RECEIVED BY AGENCY: **02/15/95**
NAME: **AMOCO OIL 5329**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**
VIOLATIONS **- NO VIOLATIONS REPORTED -**
ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

D000
D001 **IGNITABLE WASTE**
D018 **BENZENE**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**
CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 21 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **6517**

NAME: **AMOCO OIL #5329**

ADDRESS: **1319 MINER ST**

IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
1944	**CLOSED**	**4/1/1991**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=1944

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 22 **Distance from Property: 0.07 mi. N**

FACILITY INFORMATION

FACILITY ID: **2423**

NAME: **MINER STREET SHELL**

ADDRESS: **115 13TH AVE**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=2423

OWNER INFORMATION

NAME: **GUY M L GIBSON MINER STREET BUSINESS CORP**

ADDRESS: **PO BOX 911**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
2423-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**NOT REPORTED**
2423-2	**UST**	**4 - DIESEL**	**6000**	**OPEN**	**NOT REPORTED**
2423-3	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**6000**	**OPEN**	**NOT REPORTED**

Back to Report Summary

No Longer Regulated RCRA Generator Facilities (NLRRCRAG)

MAP ID# 22 **Distance from Property: 0.08 mi. N**

FACILITY INFORMATION

EPA ID#: **COD983800285**
NAME: **WARDROBE CLEANERS**
ADDRESS: **1241 MINER ST**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **CAROLYN KENNEDY**
CONTACT ADDRESS: **P.O. BOX 785**
IDAHO SPRINGS, CO 80452
CONTACT PHONE: **3035672555**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **08/05/2008**

OWNER TYPE: **PRIVATE**
OWNER NAME: **CAROLYN KENNEDY**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **WARDROBE CLEANERS**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
CAROLYN KENNEDY	**OWNER**	**20070102**
CAROLYN KENNEDY	**OWNER**	**20080725**
CAROLYN KENNEDY	**PRESIDENT**	**20080725**

INDUSTRY CLASSIFICATION (NAICS)

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPE

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **08/05/08**
NAME: **WARDROBE CLEANERS INC**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

DATE RECEIVED BY AGENCY: **01/10/07**
NAME: **WARDROBE CLEANERS**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

DATE RECEIVED BY AGENCY: **03/01/93**
NAME: **WARDROBE CLEANERS**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

F002 **THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 22 **Distance from Property: 0.08 mi. N**

FACILITY INFORMATION

EPA ID#: **COD983800285**
NAME: **WARDROBE CLEANERS INC**
ADDRESS: **1241 MINER ST**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **CAROLYN KENNEDY**
CONTACT ADDRESS: **P.O. BOX 785**
IDAHO SPRINGS, CO 80452
CONTACT PHONE: **3035672555**
NON-NOTIFIER: **NOT A NON-NOTIFIER**
DATE RECEIVED BY AGENCY: **08/05/2008**

OWNER TYPE: **PRIVATE**
OWNER NAME: **CAROLYN KENNEDY**
OPERATOR TYPE: **PRIVATE**
OPERATOR NAME: **WARDROBE CLEANERS**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
CAROLYN KENNEDY	**OWNER**	**20070102**
CAROLYN KENNEDY	**OWNER**	**20080725**
CAROLYN KENNEDY	**PRESIDENT**	**20080725**

INDUSTRY CLASSIFICATION (NAICS)

81232 - DRYCLEANING AND LAUNDRY SERVICES (EXCEPT COIN-OPE

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **08/05/08**
NAME: **WARDROBE CLEANERS INC**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

DATE RECEIVED BY AGENCY: **01/10/07**
NAME: **WARDROBE CLEANERS**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

DATE RECEIVED BY AGENCY: **03/01/93**
NAME: **WARDROBE CLEANERS**
GENERATOR CLASSIFICATION: **LARGE QUANTITY GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**
IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

USED OIL TRANSFER FACILITY: **NO** USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

F002 **THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE,TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001,F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.**

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 22 **Distance from Property: 0.07 mi. N**

FACILITY INFORMATION

FACILITY ID: **2423**

NAME: **MINER STREET BUSINESS CORP**

ADDRESS: **115 13TH AVE**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10237	**CLOSED**	**10/30/2006 13:09**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10237

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 23 **Distance from Property: 0.08 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2007-0517** NRC NUMBER: **0**

SPILL DATE: **5/22/2007**

SPILL LOCATION: **CENTER ST & 5TH AVE**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **UNKNOWN**

ADDRESS: **STREET NOT REPORTED**
CITY NOT REPORTED, CO

COUNTY: **NOT REPORTED**

CONTACT: **NOT REPORTED**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **DESCRIBE SOURCE**

MEDIUM: **WATER AND LAND**

WATERWAY: **DRAINAGE DITCH**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **UNKNOWN**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
UNKNOWN	**30 G**	**NOT REPORTED**

CAUSE INFORMATION:

RED LIQUID COMING OUT OF MANHOLE TO DRAINAGE DITCH - NO RELEASE TO CLEAR CREEK. NEG FOR ALL HAZMAT.
IDAHO SPRINGS WASTEWATER

ACTION:

CSP-HAZCATTED & LEFT ON SITE - COUNTY WILL VAC UP AND EXCAVATE.

RESPONSE COMMENTS:

POSSIBLY AN IRON ORE OXIDE.

COMMENTS:

NOT REPORTED

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 23 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18152**
NAME: **ORPHAN TANK AT MINER STREET**
ADDRESS: **1840 MINER ST**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=18152

OWNER INFORMATION

NAME: **PROPERTY ON MINER STREET**
ADDRESS: **1840 MINER ST**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
18152-1	**UST**	**NOT REPORTED**	**500**	**CLOSED**	**NOT REPORTED**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 23 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **18152**

NAME: **ORPHAN TANK AT MINER STREET**

ADDRESS: **1840 MINER ST**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10217	**CLOSED**	**10/6/2006 9:46**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10217

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 24 **Distance from Property: 0.09 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2006-1017** NRC NUMBER: **0**

SPILL DATE: **10/27/2006**

SPILL LOCATION: **1300 MINOR STREET**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **SHELL GAS STATION**

ADDRESS: **1300 MINER STREET**
IDAHO SPRINGS, CO

COUNTY: **CLEAR CREEK**

CONTACT: **NOT REPORTED**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **UNDERGROUND STORAGE TANK**

SOURCE TYPE: **GAS PUMP/GAS STATION**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
GASOLINE	**40 G**	**20 G**

CAUSE INFORMATION:

NOT REPORTED

ACTION:

THE RELEASE WENT INTO THE STORM DRAIN AND THE FIRE DEPARTMENT WAS ABLE TO PREVENT ABOUT HAVE OF THE RELEASE FROM GOING INTO THE STORM DRAIN. DOWNSTREAM USERS HAVE BEEN NOTIFIED.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

FIRE CHIEF KELLY BABEON MAY BE CONTACTED FOR MORE INFORMATION WHEN HE IS BACK IN HIS OFFICE. HIS OF

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 25 **Distance from Property: 0.07 mi. NW**

FACILITY INFORMATION

FACILITY ID: **2287**
NAME: **IDAHO SPRINGS SUNMART #501**
ADDRESS: **2833 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **3**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=2287

OWNER INFORMATION

NAME: **PETROLEUM WHOLESALE LP**
ADDRESS: **PO BOX 4456**
HOUSTON, TX 77210

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
2287-1	**UST**	**GASOLINE**	**6000**	**CLOSED**	**29-APR-69**
2287-2	**UST**	**GASOLINE**	**6000**	**CLOSED**	**29-APR-69**
2287-3	**UST**	**GASOLINE**	**6000**	**CLOSED**	**29-APR-69**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 26 **Distance from Property: 0.07 mi. SW**

FACILITY INFORMATION

EPA ID#: **COR000204701**

NAME: **CLEAR CREEK CNTY SPORTSMEN CLUB**

ADDRESS: **3201 CNTY RD**
DUMONT, CO 80436

OWNER TYPE: **PRIVATE**

OWNER NAME: **CLEAR CREEK CNTY SPORTSMEN CLUB**

OPERATOR TYPE: **PRIVATE**

OPERATOR NAME: **CLEAR CREEK CNTY SPORTSMAN CLUB**

CONTACT NAME: **RAY EAVES**

CONTACT ADDRESS: **3201 CNTY RD**
DUMONT, CO 80436

CONTACT PHONE: **9999999999**

NON-NOTIFIER: **X**

DATE RECEIVED BY AGENCY: **11/07/2002**

CERTIFICATION

CERTIFICATION NAME:	CERTIFICATION TITLE:	CERTIFICATION SIGNED DATE:
RAY EAVES	**PRESIDENT**	**20021107**

INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **11/07/02**

NAME: **CLEAR CREEK CNTY SPORTSMEN CLUB**

GENERATOR CLASSIFICATION: **NOT A GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**

CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**

MIXED WASTE GENERATOR: **NO**

RECYCLER: **NO**

TRANSPORTER: **NO**

ONSITE BURNER EXEMPTION: **NO**

FURNACE EXEMPTION: **NO**

USED OIL REFINER: **NO**

USED OIL TRANSFER FACILITY: **NO**

UNDERGROUND INJECTION: **NO**

UNIVERSAL WASTE DESTINATION FACILITY: **NO**

TRANSFER FACILITY: **NO**

USED OIL FUEL BURNER: **NO**

USED OIL PROCESSOR: **NO**

USED OIL FUEL MARKETER TO BURNER: **NO**

SPECIFICATION USED OIL MARKETER: **NO**

USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 27 **Distance from Property: 0.08 mi. NW**

FACILITY INFORMATION

FACILITY ID: **5418**

NAME: **BOLO LIMITED LIABILITY**

ADDRESS: **2410 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
4496	**CLOSED**	**6/13/1994**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=4496	
9722	**CLOSED**	**1/27/2005 7:09**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=9722	
10369	**CLOSED**	**6/5/2007 13:47**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=10369	
8420	**CLOSED**	**1/8/2001**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=8420	
10913	**LUST TRUST**	**8/26/2009 10:42**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=10913	
9361	**CLOSED**	**10/3/2003 8:59**
COSTIS LINK:	http://costis.cdle.state.co.us/event.asp?h_id=9361	

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 27 **Distance from Property: 0.08 mi. NW**

FACILITY INFORMATION

FACILITY ID: **5418**
NAME: **FORMER SERVICE STATION**
ADDRESS: **2410 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **3**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=5418

OWNER INFORMATION

NAME: **BOB BOWLAND**
ADDRESS: **BOX 1201**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
5418-1	**UST**	**Z UNKNOWN**	**999999999**	**CLOSED**	**NOT REPORTED**
5418-2	**UST**	**Z UNKNOWN**	**999999999**	**CLOSED**	**NOT REPORTED**
5418-3	**UST**	**Z UNKNOWN**	**999999999**	**CLOSED**	**NOT REPORTED**

Back to Report Summary

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

MAP ID# 27 **Distance from Property: 0.08 mi. NW**

FACILITY INFORMATION

EPA ID#: **COD983802745**
NAME: **EIGHT BALL TIRE & AUTO**
ADDRESS: **2410 COLORADO BLVD.**
IDAHO SPRINGS, CO 80452
CONTACT NAME: **NOT REPORTED**
CONTACT ADDRESS: **NOT REPORTED**
,
CONTACT PHONE: **NOT REPORTED**
NON-NOTIFIER: **X**
DATE RECEIVED BY AGENCY: **08/18/1993**

OWNER TYPE: **NOT REPORTED**
OWNER NAME: **NOT REPORTED**
OPERATOR TYPE: **NOT REPORTED**
OPERATOR NAME: **NOT REPORTED**

CERTIFICATION **- NO CERTIFICATION REPORTED -**

INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

SITE HISTORY (INCLUDES GENERATORS AND NON-GENERATORS)

DATE RECEIVED BY AGENCY: **08/18/93**
NAME: **EIGHT BALL TIRE & AUTO**
GENERATOR CLASSIFICATION: **NOT A GENERATOR**

ACTIVITY INFORMATION

GENERATOR STATUS: **NOT A GENERATOR**
SUBJECT TO CORRECTIVE ACTION UNIVERSE: **NO**
TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **NO**
TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **NO**
NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE: **NO**
CORRECTIVE ACTION WORKLOAD UNIVERSE: **NO**

IMPORTER: **NO**
MIXED WASTE GENERATOR: **NO**
RECYCLER: **NO**
TRANSPORTER: **NO**
ONSITE BURNER EXEMPTION: **NO**
FURNACE EXEMPTION: **NO**
USED OIL REFINER: **NO**
USED OIL TRANSFER FACILITY: **NO**
UNDERGROUND INJECTION: **NO**
UNIVERSAL WASTE DESTINATION FACILITY: **NO**
TRANSFER FACILITY: **NO**
USED OIL FUEL BURNER: **NO**
USED OIL PROCESSOR: **NO**
USED OIL FUEL MARKETER TO BURNER: **NO**
SPECIFICATION USED OIL MARKETER: **NO**
USED OIL TRANSPORTER: **NO**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS
1993/08/18 **CEI COMPLIANCE EVALUATION INSPECTION ON-SITE**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary

Aboveground Storage Tank Facilities (AST)

MAP ID# 27 **Distance from Property: 0.08 mi. NW**

FACILITY INFORMATION

FACILITY ID: **13123**
NAME: **BOLO LIMITED LIABILITY**
ADDRESS: **2410 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=13123

OWNER INFORMATION

NAME: **BOLO LIMITED LIABILITY**
ADDRESS: **PO BOX 1201**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 28 **Distance from Property: 0.08 mi. S**

FACILITY INFORMATION

FACILITY ID: **8661**

NAME: **CLEAR CREEK COUNTY ROAD & BRIDGE**

ADDRESS: **3549 CLEAR CREEK CR 312**

DUMONT, CO 80436

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=8661

OWNER INFORMATION

NAME: **CLEAR CREEK COUNTY ROAD & BRIDGE**

ADDRESS: **PO BOX 362**

DUMONT, CO 80436

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
8661-1	**UST**	**4 - DIESEL**	**10000**	**OPEN**	**10-APR-80**
8661-2	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**10-APR-80**
8661-3	**UST**	**1 - UNLEADED REGULAR (RUL)**	**6000**	**OPEN**	**10-APR-80**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 29 **Distance from Property: 0.10 mi. N**

FACILITY INFORMATION

FACILITY ID: **10641**

NAME: **BLACKWELL OIL CO**

ADDRESS: **1246 MINER ST**

IDAHO SPRINGS, CO 80452

TOTAL TANK: **5**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10641

OWNER INFORMATION

NAME: **BLACKWELL OIL CO**

ADDRESS: **PO BOX 3333**

IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
10641-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**8000**	**OPEN**	**01-JAN-70**
10641-2	**UST**	**2 - UNLEADED MID-GRADE (MUL)**	**8000**	**OPEN**	**01-JAN-70**
10641-3	**UST**	**DIESEL DYED #1**	**8000**	**OPEN**	**01-JAN-70**
10641-4	**UST**	**DIESEL/DIESEL (MULTI-COMP)**	**2000**	**OPEN**	**01-JAN-70**
10641-5	**UST**	**6 - USED OIL (WASTE OIL)**	**500**	**OPEN**	**01-JAN-70**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 29 **Distance from Property: 0.10 mi. N**

FACILITY INFORMATION

FACILITY ID: **10641**

NAME: **BLACKWELL OIL CO**

ADDRESS: **1246 MINER ST**

IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10921	**CLOSED**	**28-AUG-09**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10921

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 30 **Distance from Property: 0.09 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2012-0785** NRC NUMBER: **0**

SPILL DATE: **11/16/2012**

SPILL LOCATION: **25 DUMONT LANE**

SPILL CITY/STATE/ZIP: **DUMONT, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **XCELL ENERGY**

ADDRESS: **1800 LARIMER ST.**
DENVER, CO 80202

COUNTY: **DENVER**

CONTACT: **REBECCA STURGEON**

PHONE: **303-294-2189**

INCIDENT DETAILS

SOURCE: **OTHER**

SOURCE TYPE: **OIL WELL/WELL SITE**

MEDIUM: **WATER**

WATERWAY: **MILL CREEK (TRIBUTARY OF CLEAR CREEK)**

CAUSE: **OTHER**

MATERIAL TYPE: **E & P WASTES**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
BENTONITE SLURRY	**2000 GALLONS**	**2000 G**

CAUSE INFORMATION:

WHILE BORING A LINE UNDER THE CREEK, DRILL HIT A ROCK CAUSING BOOR TO FRACK OUT INTO THE MILL CREEK. INITIALLY OCCURRED ON 11/16.

ACTION:

AFTER INITIAL DICOVERY XCEL PUT FIBER MESH IN TO SEAL CRACK. RESTARTED TODAY AND DISCOVERED THAT CRACK WASN'T SEALED. CONSULTED WITH ARMY CORPS OF ENGINEERS TODAY. ADVISED TO PUT BMP'S IN WATER. XCEL NOTIFIED CLEAR CREEK EH. SPOKE WITH TRENT HYATT.

RESPONSE COMMENTS:

XCEL SUPERVISOR- JOE MARKANO 720-281-6876.

COMMENTS:

NOT REPORTED

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 31 **Distance from Property: 0.09 mi. S**

FACILITY INFORMATION

FACILITY ID: **16216**
NAME: **LAWSON TRAILER COURT**
ADDRESS: **2038 CR 308**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **2**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=16216

OWNER INFORMATION

NAME: **LAWSON TRAILER COURT**
ADDRESS: **2038 CR 398**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
16216-1	**UST**	**GASOLINE**	**1000**	**CLOSED**	**01-JAN-30**
16216-2	**UST**	**GASOLINE**	**1000**	**CLOSED**	**01-JAN-30**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 31 **Distance from Property: 0.09 mi. S**

FACILITY INFORMATION

FACILITY ID: **16216**

NAME: **LAWSON TRAILER COURT**

ADDRESS: **2038 CR 398**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
9518	**CLOSED**	**6/7/2004 13:14**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=9518

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 32 **Distance from Property: 0.10 mi. NW**

FACILITY INFORMATION

FACILITY ID: **17890**

NAME: **SPRING STATION LLC**

ADDRESS: **2900 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
9879	**CLOSED**	**8/23/2005 7:38**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=9879

Back to Report Summary

Aboveground Storage Tank Facilities (AST)

MAP ID# 32 **Distance from Property: 0.10 mi. NW**

FACILITY INFORMATION

FACILITY ID: **17890**
NAME: **SPRING STATION LLC**
ADDRESS: **2900 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=17890

OWNER INFORMATION

NAME: **SPRING STATION LLC**
ADDRESS: **20 N WACKER STE 2275**
CHICAGO, IL 60606

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 33 **Distance from Property: 0.11 mi. N**

FACILITY INFORMATION

FACILITY ID: **3445**

NAME: **GET GASSED**

ADDRESS: **1856 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
1165	**CLOSED**	**9/3/1996**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=1165

11372	**CLOSED**	**2/25/2011 10:47**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=11372

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 33 **Distance from Property: 0.11 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **CO96-458** NRC NUMBER: **0**

SPILL DATE: **9/3/1996**

SPILL LOCATION: **1856 COLORADO BLVD**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **GET GASSED CONOCO STATION**

ADDRESS: **1856 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **SANDY OLHAUSSEN**

PHONE: **303-567-4085**

INCIDENT DETAILS

SOURCE: **UNDERGROUND STORAGE TANK**

SOURCE TYPE: **UNDERGROUND STORAGE TANK**

MEDIUM: **WATER AND LAND**

WATERWAY: **CREEK**

CAUSE: **F**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
GASOLINES:AUTOMOTIVE	**300 G**	**NOT REPORTED**

CAUSE INFORMATION:

PUMP IN SUMP LEAKED

ACTION:

NOT REPORTED

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

CONNECTION BETWEEN PUMP & PIPING LEAKED. PUT IN BOOMS ALONG CREEK & PADS ON SHORE TO ABSORB GAS, GOI

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 33 **Distance from Property: 0.11 mi. N**

FACILITY INFORMATION

FACILITY ID: **3445**

NAME: **GET GASSED**

ADDRESS: **1856 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **3**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=3445

OWNER INFORMATION

NAME: **WALT GROSS**

ADDRESS: **PO BOX 1482**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
3445-1	**UST**	**4 - DIESEL**	**4000**	**CLOSED**	**01-JAN-76**
3445-2	**UST**	**1 - UNLEADED REGULAR (RUL)**	**12000**	**CLOSED**	**01-JAN-76**
3445-3	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**12000**	**CLOSED**	**01-JAN-76**

Back to Report Summary

Aboveground Storage Tank Facilities (AST)

MAP ID# 33 **Distance from Property: 0.11 mi. N**

FACILITY INFORMATION

FACILITY ID: **13758**
NAME: **GET GASED**
ADDRESS: **1856 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=13758

OWNER INFORMATION

NAME: **OLNHAUSEN**
ADDRESS: **BOX 142**
DUMONT, CO 80436

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 34 **Distance from Property: 0.11 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2008-0076** NRC NUMBER: **0**

SPILL DATE: **2/5/2008**

SPILL LOCATION: **9TH AVE. & COLORADO BLVD.**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **CITY OF IDAHO SPRINGS PUBLIC WORKS**

ADDRESS: **P.O. BOX 907**
IDAHO SPRINGS, CO 80452

COUNTY: **NOT REPORTED**

CONTACT: **RANDY RASMUSSEN**

PHONE: **303-567-2400**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
WASTEWATER	**300 G**	**NOT REPORTED**

CAUSE INFORMATION:

A SANITARY SEWER MAIN HAS EITHER COLLAPSED, SHIFTED OR BROKEN, THUS CAUSING A BACK UP WHICH IS BEING RELEASED THROUGH A MANHOLE.

ACTION:

DAMAGED SANITARY SEWER LINE HAS BEEN ISOLATED AND WILL BE REPAIRED IN A WEEK OR SO. IMPACTED AREAS WERE CLEANED AND DISINFECTED.

RESPONSE COMMENTS:

NO WATERWAYS WERE IMPACTED.

COMMENTS:

NOT REPORTED

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 35 **Distance from Property: 0.11 mi. N**

FACILITY INFORMATION

FACILITY ID: **946**

NAME: **WESTERN CONVENIENCE #120**

ADDRESS: **2630 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **4**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=946

OWNER INFORMATION

NAME: **WESTERN CONVENIENCE STORES INC**

ADDRESS: **9849 E EASTER AVE**
CENTENNIAL, CO 80112

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
946-1	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**6000**	**OPEN**	**01-JAN-87**
946-2	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**01-JAN-87**
946-3	**UST**	**NOT REPORTED**	**6000**	**CLOSED**	**01-JAN-87**
946-4	**UST**	**8 - DIESEL/GAS (MULTI-COMP)**	**12000**	**OPEN**	**01-JAN-87**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 36 **Distance from Property: 0.12 mi. NW**

FACILITY INFORMATION

FACILITY ID: **10789**

NAME: **SCORPION SHELL**

ADDRESS: **2808 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
9509	**CLOSED**	**5/26/2004 8:05**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=9509

Back to Report Summary

Solid Waste Facilities (SWF)

MAP ID# 36 **Distance from Property: 0.12 mi. NW**

SITE INFORMATION

CRC32: **4256013643**
GS ID: **1188*WTR**
NAME: **SCORPION TEXACO INC**
ADDRESS: **2808 COLORADO BOUL**
IDAHO SPRINGS, CO 80452
COUNTY: **NOT REPORTED**
CERTIFICATION ID: **1188**
FACILITY TYPE: **REGISTERED TIRE HAULER**
TIRE RETAILER/WHOLESALER: **YES**
HAULER: **NO**
END USER: **NO**
COLLECTION: **NO**
PROCESSOR: **NO**
MONOFILL: **NO**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 36 **Distance from Property: 0.13 mi. NW**

FACILITY INFORMATION

FACILITY ID: **10638**

NAME: **BLACKWELL OIL CO**

ADDRESS: **2806 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **13**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10638

OWNER INFORMATION

NAME: **BLACKWELL OIL CO**

ADDRESS: **PO BOX 3333**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
10638-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**CLOSED**	**06-MAY-73**
10638-2	**UST**	**2 - UNLEADED MID-GRADE (MUL)**	**10000**	**CLOSED**	**06-MAY-73**
10638-3	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**10000**	**CLOSED**	**06-MAY-73**
10638-4	**UST**	**4 - DIESEL**	**500**	**CLOSED**	**06-MAY-73**
10638-8	**UST**	**Z NOT LISTED**	**3000**	**CLOSED**	**06-MAY-73**
10638-9	**UST**	**Z NOT LISTED**	**3000**	**CLOSED**	**06-MAY-73**
10638-10	**UST**	**Z NOT LISTED**	**3000**	**CLOSED**	**06-MAY-73**
10638-11	**UST**	**Z NOT LISTED**	**999999999**	**CLOSED**	**06-MAY-73**
10638-12	**UST**	**Z NOT LISTED**	**999999999**	**CLOSED**	**06-MAY-73**
10638-13	**UST**	**Z NOT LISTED**	**999999999**	**CLOSED**	**06-MAY-73**
10638-5	**UST**	**1 - UNLEADED REGULAR (RUL)**	**10000**	**OPEN**	**06-MAY-73**
10638-6	**UST**	**2 - UNLEADED MID-GRADE (MUL)**	**10000**	**OPEN**	**06-MAY-73**
10638-7	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**10000**	**OPEN**	**06-MAY-73**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 36 **Distance from Property: 0.12 mi. NW**

FACILITY INFORMATION

FACILITY ID: **10789**

NAME: **SCORPION SHELL**

ADDRESS: **2808 COLORADO BLVD**
IDAHO SPRINGS, CO 80452

TOTAL TANK: **5**

COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10789

OWNER INFORMATION

NAME: **SCORPION SHELL**

ADDRESS: **PO BOX 189**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
10789-1	**UST**	**1 - UNLEADED REGULAR (RUL)**	**8000**	**OPEN**	**01-DEC-89**
10789-2	**UST**	**3 - UNLEADED PREMIUM (PUL)**	**8000**	**OPEN**	**01-DEC-89**
10789-3	**UST**	**4 - DIESEL**	**8000**	**OPEN**	**01-DEC-89**
10789-4	**UST**	**6 - USED OIL (WASTE OIL)**	**6000**	**CLOSED**	**01-DEC-89**
10789-5	**UST**	**6 - USED OIL (WASTE OIL)**	**560**	**CLOSED**	**01-DEC-89**

Back to Report Summary

Underground Storage Tank Facilities (UST)

MAP ID# 36 **Distance from Property: 0.13 mi. NW**

FACILITY INFORMATION

FACILITY ID: **14756**
NAME: **TALL COUNTRY IDAHO SPRINGS**
ADDRESS: **2806 COLORADO BLVD**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **6**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=14756

OWNER INFORMATION

NAME: **BLACKWELL OIL CO**
ADDRESS: **PO BOX 3333**
IDAHO SPRINGS, CO 80452

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
14756-1	**UST**	**NOT LISTED**	**3000**	**PERMANENTLY CLOSED**	**/ /**
14756-2	**UST**	**NOT LISTED**	**3000**	**PERMANENTLY CLOSED**	**/ /**
14756-3	**UST**	**NOT LISTED**	**3000**	**PERMANENTLY CLOSED**	**/ /**
14756-4	**UST**	**NOT LISTED**	**UNKNOWN**	**PERMANENTLY CLOSED**	**/ /**
14756-5	**UST**	**NOT LISTED**	**UNKNOWN**	**PERMANENTLY CLOSED**	**/ /**
14756-6	**UST**	**NOT LISTED**	**UNKNOWN**	**PERMANENTLY CLOSED**	**/ /**

Back to Report Summary

Leaking Storage Tank Facilities (LST)

MAP ID# 36 **Distance from Property: 0.13 mi. NW**

FACILITY INFORMATION

FACILITY ID: **10638**

NAME: **BLACKWELL OIL CO**

ADDRESS: **1246 MINER ST**

IDAHO SPRINGS, CO 80452

LEAKING INFORMATION

EVENT ID:	STATUS:	RELEASE DATE:
10921	**CLOSED**	**8/28/2009 15:56**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10921

7377	**CLOSED**	**4/1/1999**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=7377

9276	**CLOSED**	**7/22/2003 9:24**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=9276

10802	**CLOSED**	**2/18/2009 8:00**

COSTIS LINK: http://costis.cdle.state.co.us/event.asp?h_id=10802

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 37 **Distance from Property: 0.12 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2007-0493** NRC NUMBER: **0**

SPILL DATE: **5/15/2007**

SPILL LOCATION: **2330 RIVERSIDE DR**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **ARGO TREATMENT FACILITY**

ADDRESS: **2330 RIVERSIDE DR**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **BOB OLSON**

PHONE: **303-567-9281**

INCIDENT DETAILS

SOURCE: **OTHER**

SOURCE TYPE: **TREATMENT FACILITY**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **ERROR OPERATOR**

MATERIAL TYPE: **OTHER**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
HEAVY METALS WATER	**18000 G**	**18000 G**

CAUSE INFORMATION:

DID NOT HAVE ENOUGH LIME TO TREAT FULL INCOMING FLOW, LIME SHOULD BE DELIVERED BY 8AM AND WILL REMEDY SITUATION. RELEASING APPROX 100 GAL/MINUTER OF UNTREATED WATER CONTAMINATED WITH HEAVY METALS.
UPDATE: UNTREATED WATER FLOW STOPPED AT 9:30AM.

ACTION:

RAN OUT OF LIME FOR TREATMENT, DELIVERY SHOULD OCCUR AT 8AM.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary

Historical Solid Waste Landfills (HISTSWLF)

MAP ID# 38 **Distance from Property: 0.12 mi. S**

SITE INFORMATION

UNIQUE ID: **00070-0001096**

NAME: **SILVER SPRUCE MILL**

ADDRESS: **ADDRESS NOT REPORTED**
CITY NOT REPORTED, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

S. CLEAR CREEK #4,6,7,8 UNKNOWN. ; TRS- T03S R72W S32

DETAIL2:

TYPE- MILL WASTE; FILL- TAILINGS. ; OPER/OWNR/OTHR- , ,

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 39 **Distance from Property: 0.13 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2008-0170** NRC NUMBER: **0**

SPILL DATE: **3/20/2008**

SPILL LOCATION: **COLORADO BLVD & 16TH AVE**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO 80452**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **IDAHO SPRINGS UTILITIES**

ADDRESS: **STREET NOT REPORTED**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

CONTACT: **RANDY RASSMUSSEN**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **SANITARY SEWER**

SOURCE TYPE: **SANITARY SEWER/LIFT STATION**

MEDIUM: **NOT REPORTED**

WATERWAY: **CLEAR CREEK**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
SANITARY SEWER OVERFLOW	**2300 G**	**800 G**

CAUSE INFORMATION:

GROUT FROM REGROUTING OPERATION ENTERED MANHOLE, RESULTING IN BLOCKAGE, RELEASE, AND OVERFLOW. MATERIAL RELEASED TO GROUND AND TO CLEAR CREEK.

ACTION:

RANDY RASSMUSSEN ACTIVATED DOWN STREAM USER NOTIFICATION CALL DOWN LIST. CONTRACTOR CALLED. CLEAN FILL DIRT APPLIED TO STREET AND BANK OF CLEAR CREEK TO ABSORB RELEASED MATERIAL. SSO UNDER CONTROL AT 8:30 AT 03/21/08.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 40 **Distance from Property: 0.13 mi. N**

INCIDENT INFORMATION

CASE NUMBER: **2006-620** NRC NUMBER: **0**

SPILL DATE: **6/22/2006**

SPILL LOCATION: **920 COLORADO BLVD**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **JOHNS ROPER (AKA MICHAEL MCCOMMON OR RYAN FARMER)**

ADDRESS: **STREET NOT REPORTED**
IDAHO SPRINGS, CO

COUNTY: **CLEAR CREEK**

CONTACT: **NOT REPORTED**

PHONE: **NOT REPORTED**

INCIDENT DETAILS

SOURCE: **FIXED FACILITY**

SOURCE TYPE: **METH LAB**

MEDIUM: **FIXED FACILITY**

WATERWAY: **NOT REPORTED**

CAUSE: **CRIMINAL INTENT**

MATERIAL TYPE: **METH LAB**

MATERIAL DESCRIPTION:
METH LAB RELATED

MATERIAL QUANTITY:
NOT REPORTED

WATER QUANTITY:
NOT REPORTED

CAUSE INFORMATION:

NOT REPORTED

ACTION:

SUSECT WAS TAKEN INTO CUSTODY ON 6/26/06. SEISURE OF METH LAB RELATED MATERIALS.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary

Clandestine Drug Laboratory Locations (CDL)

MAP ID# 40 **Distance from Property: 0.13 mi. N**

SITE INFORMATION

ID#: **448385837**
ADDRESS: **920 COLORADO BOULEVARD**
CITY: **IDAHO SPRINGS**
STATE: **CO**
COUNTY: **CLEAR CREEK**
SEIZURE DATE: **6/22/2006**

Back to Report Summary

Clandestine Drug Laboratory Locations (CDL)

MAP ID# 40 **Distance from Property: 0.13 mi. N**

SITE INFORMATION

GS ID: **3424068808**
LAB NUM: **17**
LOCATION: **920 COLORADO BLVD.**
IDAHO SPRINGS, CO 80452
COUNTY: **CLEAR CREEK**
LOCATION TYPE: **HOUSE**
DATE: **06/22/06**
JURISDICTION: **IDAHO SPRINGS**

Back to Report Summary

Spills Listing (SPILLS)

MAP ID# 41 **Distance from Property: 0.21 mi. NW**

INCIDENT INFORMATION

CASE NUMBER: **2005-436** NRC NUMBER: **0**

SPILL DATE: **7/8/2005**

SPILL LOCATION: **HWY 40 & HWY 257**

SPILL CITY/STATE/ZIP: **EMPIRE, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **EVERIST MATERIAL**

ADDRESS: **28755 HWY 9**
SILVERTHORNE, CO

COUNTY: **NOT REPORTED**

CONTACT: **NOT REPORTED**

PHONE: **970-468-2721**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK/TRAILER**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**85 G**	**NOT REPORTED**

CAUSE INFORMATION:

A CAR RAN A STOP SIGN A BROADSIDED A TRUCK AT THE ABOVE LISTED LOCATION. THE IMPACT PUNCTURED THE TRUCK'S SADDLE TANK ALLOWING FOR THE RELEASE OF DIESEL FUEL PRIMARILY ON THE ROADWAY.

ACTION:

RM CAT WAS CONTACTED TO PERFORM THE CLEANUP OF ALL RELEASED MATERIALS AND IMPACTED AREAS.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NO WATERWAYS WERE IMPACTED.

Back to Report Summary

Clandestine Drug Laboratory Locations (CDL)

MAP ID# 42 **Distance from Property: 0.23 mi. N**

SITE INFORMATION

ID#: **863187168**
ADDRESS: **1938 WALL ST**
CITY: **IDAHO SPRINGS**
STATE: **CO**
COUNTY: **CLEAR CREEK**
SEIZURE DATE: **4/15/2005**

Back to Report Summary

No Further Remedial Action Planned Sites (NFRAP)

MAP ID# 43 **Distance from Property: 0.26 mi. N**

FACILITY INFORMATION

EPA ID#: **COD983793753**

SITE ID#: **0801260**

NAME: **CSM EXPERIMENTAL MINE**

ADDRESS: **365 8TH STREET**
IDAHO SPRINGS, CO 80452

COUNTY: **CLEAR CREEK**

ACTION	START DATE	COMPLETION DATE	RESPONSIBILITY
DS - DISCOVERY	**NOT REPORTED**	**6/15/1992 00:00:00**	**EPA FUND**
PA - PRELIMINARY ASSESSMENT	**NOT REPORTED**	**5/17/1993 00:00:00**	**EPA FUND**
VS - ARCHIVE SITE	**NOT REPORTED**	**5/17/1993 00:00:00**	**EPA IN-HOUSE**

ACTION DESCRIPTIONS

DS - (DISCOVERY) - 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.

PA - (PRELIMINARY ASSESSMENT) - 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.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

Back to Report Summary

Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS)

MAP ID# 43 **Distance from Property: 0.26 mi. N**

FACILITY INFORMATION

EPA ID#: **COD983793753**

SITE ID#: **0801260**

NAME: **CSM EXPERIMENTAL MINE**

ADDRESS: **365 8TH STREET**
IDAHO SPRINGS, CO 0452

COUNTY: **CLEAR CREEK**

NATIONAL PRIORITY LISTING: **N - NOT ON THE NPL**

FEDERAL FACILITY CLASSIFICATION: **N - NOT A FEDERAL FACILITY**

NON-NPL STATUS: **NF - NFRAP**

NON-NPL STATUS DATE: **NOT REPORTED**

PHYSICAL CLASSIFICATION OF SITE / INCIDENT: **MINES/TAILINGS**

SITE DESCRIPTION **- NO SITE DESCRIPTION INFORMATION AVAILABLE -**

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS

TYPE: **DS - DISCOVERY**

START DATE: **NR**

COMPLETION DATE: **06/15/1992**

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: **PA - PRELIMINARY ASSESSMENT**

START DATE: **NR**

COMPLETION DATE: **05/17/1993**

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: **VS - ARCHIVE SITE**

START DATE: **NR**

COMPLETION DATE: **05/17/1993**

ACTION TYPE DEFINITION:

THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

CONTAMINANTS **- NO CONTAMINATION INFORMATION AVAILABLE -**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT **- NOT AN INSTITUTIONAL CONTROL SITE -**

Back to Report Summary

Report Summary of Unlocatable Sites

Database Type	Site ID#	Site Name	Address	City	Zip Code
LUSTTRUST	00023-0000065	DOWNIEVILLE	DOWNIEVILLE	DOWNIEVILLE	80000
AST	13518	DOWNIEVILLE	I-70 IN DOWNIEVILLE	DOWNIEVILLE	80436
HISTSWLF	00070-0001108	GREATER NEBRASKA MIN.DUMONT,C	ADDRESS NOT REPORTED	DUMONT	
UST	9467	PESTER #1265	HWY I-70	DUMONT	80436
LST	13518*LST	DOWNIEVILLE	I-70 IN DOWNIEVILLE	DOWNIEVILLE	80436
RODS	COD980717557	CENTRAL CITY, CLEAR CREEK	NEAR TOWN	IDAHO SPRINGS	
HISTSWLF	00070-0001119	EQUITY GOLD MCCLELLAND TUNNEL	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001117	JACK PINE MINING BLACK E.MINE	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001118	JUMBO WILDCAT IDAHO SPRINGS	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001120	EQUITY GOLD STANLEY MINE	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001121	CONCORD MINERALS HIDDEN V.MIL	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001122	BLACK EAGLE MILL	ADDRESS NOT REPORTED	IDAHO SPRINGS	
HISTSWLF	00070-0001123	OPEN PIT WITH FILTER OLD	ADDRESS NOT REPORTED	IDAHO SPRINGS	
LUSTTRUST	00023-0000066	IDAHO SPRINGS #1	IDAHO SPRINGS #1	IDAHO SPRINGS	80000
SPILLS	2001-322		I-70 WESTBOUND	IDAHO SPRINGS	
SPILLS	2002-410		I-70 WB	IDAHO SPRINGS	
SPILLS	2004-241		I-70	IDAHO SPRINGS	
SPILLS	2006-104		EB I-70	IDAHO SPRINGS	
SPILLS	2006-765		I-70	IDAHO SPRINGS	
SPILLS	2007-0593		I-70 WEST BOUND	IDAHO SPRINGS	
SPILLS	2009-0411		I-70	IDAHO SPRINGS	
SPILLS	2001-476		I-70 WB	IDAHO SPRINGS	
SPILLS	CO99-188		IDAHO SPRINGS WASTE WATER TREATMENT PLANT	IDAHO SPRINGS	
SPILLS	2005-399		IDAHO SPRINGS WASTEWATER TREATMENT PLANT	IDAHO SPRINGS	

Report Summary of Unlocatable Sites

Database Type	Site ID#	Site Name	Address	City	Zip Code
ERNSCO	2135250854		STATE ROUTE 6	IDAHO SPRINGS	
ERNSCO	1368208180		INTERSTATE 70	IDAHO SPRINGS	
ERNSCO	331934020		I-70 WEST BOUND AT THE BOTTOM OF EXIT 24	IDAHO SPRINGS	
ERNSCO	3320950651		INTERSTATE 70 WEST BOUND AT MILE MARKER	IDAHO SPRINGS	
ERNSCO	3948304149		EB I-70	IDAHO SPRINGS	
ERNSCO	2739799460		STATE HIGHWAY 70	IDAHO SPRINGS	
RCRANGR08	COD983778028*NG	IDAHO SPRINGS OLD WATER PLANT	10 COUNTY RD 314	IDAHO SPRINGS	80452
HMIRSR08	1996080131		I-70	IDAHO SPRINGS	80452
UST	7364	FEDERAL AVIATION ADMINISTRATION	NO ST ADDRESS	IDAHO SPRINGS	80452
HMIRSR08	I-2010070581		HWY 6	IDAHO SPRING	80452
CERCLIS	COD980717557*CC	CENTRAL CITY, CLEAR CREEK	NEAR TOWN	IDAHO SPRINGS	80452
EC	COD980717557	CENTRAL CITY, CLEAR CREEK	NEAR TOWN	IDAHO SPRINGS	80452
RCRANGR08	COR000005058*NG	U S DRUG ENFORCEMENT AGENCY	TWO BROTHERS MINE	IDAHO SPRINGS	80452

Leaking Underground Storage Tanks Trust Fund Sites (LUSTTRUST)

FACILITY INFORMATION

UNIQUE ID: **00023-0000065**

AGENCY ID: **NOT REPORTED**

NAME: **DOWNIEVILLE**

ADDRESS: **DOWNIEVILLE**
DOWNIEVILLE, CO 80000

COUNTY: **CLEAR CREEK**

COMMENTS: **FROM AN OLD CDPHE LIST OF LOCATIONS WHERE TANK LEAKS WERE SUSPECTED AND LUST TRUST FUNDS WERE USED IN AN EFFORT TO IDENTIFY THE SOURCE. OFTEN, THE SOURCE WAS FOUND NEARBY AND WAS ENTERED IN THE LUST DATABASE (NOW COSTIS).**
THIS LISTING NOT ENTERED INTO COSTIS BACK WHEN CDPHE TRANSFERRED RESPONSIBILITY FOR TANK LEAKS TO OPS. FEW PEOPLE AT OPS KNOW OF THIS OLD CDPHE LIST, AND ANY ASSOCIATED FILES ARE THOUGHT TO HAVE BEEN DISPOSED OF OR MISPLACED.

COSTIS LINK: **NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Aboveground Storage Tank Facilities (AST)

FACILITY INFORMATION

FACILITY ID: **13518**
NAME: **DOWNIEVILLE**
ADDRESS: **I-70 IN DOWNIEVILLE**
DOWNIEVILLE, CO 80436
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=13518

OWNER INFORMATION

NAME: **DOWNIEVILLE**
ADDRESS: **I-70 IN DOWNIEVILLE**
DUMONT, CO 80436

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
NR	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**	**NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001108**

NAME: **GREATER NEBRASKA MIN.DUMONT,C**

ADDRESS: **ADDRESS NOT REPORTED**
DUMONT, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

5B-MNG 7A-1POND 80-CO0031801. HAZARD TYPE: CHEMICAL. IMPACT: GW.; TRS- T03 R73 S34; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- TAILINGS. ; OPER/OWNR/OTHR- / / GREATER NEBRASKA MIN, ,

---

Back to Report Summary of Unlocatable Sites

Underground Storage Tank Facilities (UST)

FACILITY INFORMATION

FACILITY ID: **9467**
NAME: **PESTER #1265**
ADDRESS: **HWY I-70**
DUMONT, CO 80436
TOTAL TANK: **4**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=9467

OWNER INFORMATION

NAME: **UNKNOWN #2**
ADDRESS: **UNKNOWN #2**
GREELEY, CO 80631

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
9467-1	**UST**	**GASOLINE**	**10000**	**CLOSED**	**NOT REPORTED**
9467-2	**UST**	**GASOLINE**	**10000**	**CLOSED**	**NOT REPORTED**
9467-3	**UST**	**GASOLINE**	**999999999**	**CLOSED**	**NOT REPORTED**
9467-4	**UST**	**GASOLINE**	**999999999**	**CLOSED**	**NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Leaking Storage Tank Facilities (LST)

FACILITY INFORMATION

FACILITY ID:

NAME:

ADDRESS:

,

Back to Report Summary of Unlocatable Sites

EPA ID: **COD980717557**
NAME: **CENTRAL CITY, CLEAR CREEK**
ADDRESS: **NEAR TOWN, IDAHO SPRINGS, CO**
COUNTY: **CLEAR CREEK**
ROD DATE: **09/29/04**
ROD TYPE: **RECORD OF DECISION**
ROD ID: **08002572004ROD712**
CENTRAL CITY, CLEAR CREEK
ABSTRACT SITE NAME: CENTRAL CITY, CLEAR CREEK
ADDRESS: NEAR TOWN
CITY & STATE: IDAHO SPRINGS CO 80452
COUNTY: CLEAR CREEK

EPA ID: COD980717557
EPA REGION: 08

NPL STATUS: CURRENTLY ON THE FINAL NPL

ROD TYPE: RECORD OF DECISION
ROD ID: EPA/541/R-04/712
ROD DATE: 09/29/2004
OPERABLE UNIT(S): 04
ROD DATE: **09/30/91**
ROD TYPE: **RECORD OF DECISION**
ROD ID: **08002571991ROD055**
CENTRAL CITY, CLEAR CREEK
ABSTRACT SITE NAME: CENTRAL CITY, CLEAR CREEK
ADDRESS: NEAR TOWN
CITY & STATE: IDAHO SPRINGS CO 80452
COUNTY: CLEAR CREEK

EPA ID: COD980717557
EPA REGION: 08

NPL STATUS: CURRENTLY ON THE FINAL NPL

ROD TYPE: RECORD OF DECISION
ROD ID: EPA/ROD/R08-91/055
ROD DATE: 09/30/1991
OPERABLE UNIT(S): 03

MEDIA: GROUNDWATER

CONTAMINANT: METALS, ARSENIC, CADMIUM, CHROMIUM, LEAD

ABSTRACT:
THE CENTRAL CITY-CLEAR CREEK SITE IS AN ACTIVE MINING FACILITY IN CENTRAL CITY, CLEAR CREEK AND GILPIN COUNTIES, COLORADO. LAND USE IN THE AREA IS PREDOMINANTLY COMMERCIAL AND RECREATIONAL, AND AN ARTIFICIAL WETLANDS AREA IS LOCATED ONSITE. THE SITE LIES WITHIN THE 400-SQUARE MILE DRAINAGE BASIN OF CLEAR CREEK, WHICH SERVES AS A DRINKING WATER SOURCE FOR SEVERAL MUNICIPALITIES. GOLD MINING OPERATIONS BEGAN ONSITE IN 1859 AND PORTIONS OF THE SITE BECAME SOME OF THE MOST HEAVILY MINED AREAS OF COLORADO. EXTRACTION OF SURFACE ORES LED TO AN INCREASE IN THE DEPTH OF THE MINING AND, CONSEQUENTLY, DRAINAGE TUNNELS WERE CONSTRUCTED TO CONTROL WATER DRAINAGE PROBLEMS. PRESENTLY, SIX MAJOR MINE DRAINAGE TUNNELS ARE THOUGHT TO BE PRINCIPAL DISCHARGE SOURCES OF ACID MINE WATER CONTAINING HIGH CONCENTRATIONS OF METALS TO SURFACE WATERS INCLUDING CLEAR CREEK AND ITS TRIBUTARIES. IN ADDITION, OVER 21 MINE TAILINGS PILES WITH AN ESTIMATED TOTAL VOLUME OF OVER 2,000,000 CUBIC YARDS AT NUMEROUS LOCATIONS THROUGHOUT THE SITE ARE THOUGHT TO BE MAJOR SOURCES OF CONTAMINATION. IN RESPONSE TO SITE CONTAMINATION, EPA HAS CONDUCTED THREE REMOVAL ACTIONS SINCE 1987. IN 1987, EPA CONDUCTED A REMOVAL ACTION TO PREVENT THE COLLAPSE OF A MINE WASTE PILE. ALSO IN 1987, EPA CONDUCTED A SECOND REMOVAL ACTION, WHICH INVOLVED CONNECTING THREE RESIDENCES WITH PRIVATE WELLS TO THE MUNICIPAL PUBLIC WATER SUPPLY. IN 1991, EPA CONDUCTED A THIRD REMOVAL ACTION, WHICH INVOLVED REMOVING UNCONTAMINATED MERCURY FROM A SMALL TRAILER. BECAUSE OF THE COMPLEXITY OF THE SITE, EPA DIVIDED THE SITE INTO SEVERAL OPERABLE UNITS (OUS) FOR REMEDIATION. A 1987 RECORD OF DECISION (ROD) ADDRESSED OU1 AND PROVIDED FOR PASSIVE TREATMENT OF ACID MINE WATER DISCHARGE FROM FIVE DISCHARGING TUNNELS: NATIONAL, GREGORY INCLINE, ARGO TUNNEL, BIG FIVE, AND QUARTZ HILL TUNNELS. A 1988 ROD ADDRESSED OU2 AND PROVIDED FOR THE REMEDIATION OF MINE WASTE PILES IN THE IMMEDIATE PROXIMITY OF THE FIVE DISCHARGING TUNNELS. THIS ROD SUPERSEDES THE REMEDY PROVIDED FOR OU1 IN THE 1987 ROD BY INCLUDING ACTIVE TREATMENT OF THE ARGO TUNNEL AND DELAYING A DECISION ON TREATING THE DISCHARGES FROM THE BIG FIVE, NATIONAL AND QUARTZ HILL TUNNELS, AND THE GREGORY INCLINE. EPA WILL CONSIDER A SUBSEQUENT ROD TO ADDRESS TREATMENT OF THE REMAINING ONSITE TUNNELS PENDING FURTHER MONITORING AND TREATABILITY STUDIES. THE PRIMARY CONTAMINANTS OF CONCERN AFFECTING THE GROUND WATER ARE METALS INCLUDING ARSENIC, CADMIUM, CHROMIUM, AND LEAD.

THE SELECTED REMEDIAL ACTION FOR THIS SITE INCLUDES CONSTRUCTING PHYSICAL BARRIERS FOR MINE WASTE PILES (TO REDUCE METALS LOADING TO SURFACE WATER AND HUMAN HEALTH RISKS FROM INGESTION OR INHALATION OF METALS); TREATING DISCHARGES FROM THE BURLEIGH TUNNEL PASSIVELY THROUGH THE USE OF MAN-MADE WETLANDS; TREATING DISCHARGES FROM THE ARGO TUNNEL ACTIVELY ALONG WITH GROUND WATER PUMPED FROM THE IMMEDIATE AREA; PROVIDING AN ALTERNATE WATER SUPPLY WHERE NEEDED; INVOKING AN INTERIM ACTION WAIVER OF ARARS FOR DISCHARGES FROM THE NATIONAL, QUARTZ HILL, AND BIG FIVE TUNNELS, AND THE GREGORY INCLINE, AND INVOKING A TECHNICAL IMPRACTICALITY WAIVER FOR RESTORING GROUND WATER TO MCLS; COLLECTING DISCHARGES FROM THE NATIONAL AND QUARTZ HILL TUNNELS, AND GREGORY INCLINE WITH FINAL DISPOSITION TO BE ESTABLISHED PENDING FURTHER MONITORING AND TREATABILITY STUDIES; AND IMPLEMENTING INSTITUTIONAL CONTROLS. THE ESTIMATED PRESENT WORTH COST FOR THIS REMEDIAL ACTION IS $23,510,000, WHICH INCLUDES AN ANNUAL O&M COST OF $1,204,000 FOR 30 YEARS.

PERFORMANCE STANDARDS OR GOALS; THE PASSIVE TREATMENT SYSTEM WILL REMOVE APPROXIMATELY 99.5 PERCENT OF THE ZINC, 99.84 PERCENT OF THE COPPER, AND 9.7 PERCENT OF THE MANGANESE FROM TUNNEL DISCHARGE. ACTIVE TREATMENT WILL REMOVE 100 PERCENT OF THE ZINC AND MANGANESE, AND 99.84 PERCENT OF THE COPPER.

REMEDY:
THE CLEAR CREEK/CENTRAL CITY SUPERFUND SITE CONSISTS OF THREE OPERABLE UNITS WHICH WERE DESIGNATED TO ADDRESS HEAVY METALS CONTAMINATION ASSOCIATED WITH HISTORIC MINING ACTIVITY IN THE CLEAR CREEK

DRAINAGE BASIN. OPERABLE UNIT #1 WAS DESIGNATED TO ADDRESS THE DISCHARGE OF ACID MINE WATER FROM FIVE TUNNELS (NATIONAL AND GREGORY INCLINE NEAR BLACK HAWK, THE QUARTZ HILL TUNNEL SOUTHWEST OF CENTRAL CITY, AND THE ARGO AND BIG FIVE TUNNELS IN IDAHO SPRINGS). THE OPERABLE UNIT #1 RECORD OF DECISION WAS SIGNED IN SEPTEMBER, 1987. OPERABLE UNIT #2 WAS DESIGNATED TO ADDRESS REMEDIATION OF MINE WASTE PILES IN IMMEDIATE PROXIMITY TO THE FIVE DISCHARGING TUNNELS REFERENCED ABOVE. THE OPERABLE UNIT #2 RECORD OF DECISION WAS SIGNED IN MARCH, 1988. OPERABLE UNIT #3 WAS ORIGINALLY DESIGNATED TO ADDRESS CONTROL OF SURGE EVENTS FROM THE ARGO TUNNEL. THE RECORD OF DECISION FOR OPERABLE UNIT #3 WAS DELAYED PENDING THE OUTCOME OF THE PHASE II INVESTIGATIONS. IN 1988 THE PHASE II INVESTIGATION WAS INITIATED TO TAKE A COMPREHENSIVE VIEW OF THE APPROXIMATELY 400 SQUARE MILE CLEAR CREEK DRAINAGE BASIN. THIS RECORD OF DECISION IS FOR THE PHASE II INVESTIGATIONS. THIS RECORD OF DECISION SUPERSEDES THE OPERABLE UNIT #1 RECORD OF DECISION AND INCLUDES A DECISION FOR THE ORIGINAL OPERABLE UNIT #3. THE OPERABLE UNIT #2 RECORD OF DECISION REMAINS UNCHANGED BY THIS RECORD OF DECISION. FOR THE PURPOSES OF OPERABLE UNIT DESIGNATION, OPERABLE UNIT #3 IS HEREBY REDESIGNATED AND WILL BE EQUIVALENT IN MEANING TO THE PHASE II INVESTIGATIONS.

THE SELECTED REMEDY FOR OPERABLE UNIT #3 ADDRESSES A PORTION OF THE PRINCIPAL THREATS REMAINING AT THE SITE BY TREATING HIGHLY TOXIC AND HIGHLY MOBILE LIQUID WASTES, I.E., ACID MINE DISCHARGES, WHICH PRESENT SIGNIFICANT RISK TO THE ENVIRONMENT. TREATMENT OF THE PRINCIPAL THREATS WILL INCLUDE THE USE OF AN INNOVATIVE EMERGING TECHNOLOGY - PASSIVE TREATMENT VIA CONSTRUCTED WETLANDS. THIS TECHNOLOGY HAS BEEN UNDERGOING LABORATORY AND PILOT SCALE TESTING AT THE SITE UNDER THE SUPERFUND INNOVATIVE TECHNOLOGY EVALUATION (SITE) PROGRAM. THE SELECTED REMEDY ADDRESSES LOW LEVEL THREAT WASTES BY RELIABLY MANAGING SOURCE MATERIALS, I.E., MINE TAILINGS AND WASTE ROCK MATERIAL. THE SELECTED REMEDY ADDRESSES CONTAMINATED GROUND WATER.

THE SELECTED REMEDY FOR OPERABLE UNIT #3 AT THE CLEAR CREEK/CENTRAL CITY SITE IS DESCRIBED BELOW BY ITS MAJOR COMPONENTS;
* CAPPING OR PHYSICAL BARRIERS, AND INSTITUTIONAL CONTROLS FOR SELECT MINE WASTE PILES.
* AN ALTERNATE DRINKING WATER SUPPLY WHERE REQUIRED.
* TREATMENT OF THE BURLEIGH AND ARGO TUNNEL DISCHARGES.
* A GROUND WATER PUMP AND TREAT SYSTEM IN THE IDAHO SPRINGS AREA TO ADDRESS NON-POINT SOURCE METALS LOADING TO SURFACE WATER.
* REDUCTION IN THE HEAVY METALS LOAD FROM WOODS CREEK.
* NO ACTION TO CONTROL SURGE EVENTS FROM TUNNELS.

ADDITIONALLY, THIS RECORD OF DECISION AMENDS THE OPERABLE UNIT #1 RECORD OF DECISION BY;
* USE OF THE INTERIM WAIVER OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS FOR THE DISCHARGE FROM THE BIG FIVE TUNNEL.
* COLLECTING THE DISCHARGES FROM THE GREGORY INCLINE, NATIONAL AND QUARTZ HILL TUNNELS.
* DELAYING A DECISION ON TREATMENT OF THE GREGORY INCLINE, NATIONAL AND QUARTZ HILL TUNNELS PENDING TREATABILITY STUDIES AND FURTHER DELINEATION OF THE CONTAMINATION SOURCES IN NORTH CLEAR CREEK. THESE STUDIES WILL SERVE AS A NEW OPERABLE UNIT FOR THE SITE, OPERABLE UNIT #4.

ROD DATE: **03/31/88**
ROD TYPE: **RECORD OF DECISION**
ROD ID: **08002571988ROD019**
CENTRAL CITY, CLEAR CREEK
ABSTRACT SITE NAME: CENTRAL CITY, CLEAR CREEK
ADDRESS: NEAR TOWN

Record of Decision System (RODS)

CITY & STATE: IDAHO SPRINGS CO 80452
COUNTY: CLEAR CREEK

EPA ID: COD980717557
EPA REGION: 08

NPL STATUS: CURRENTLY ON THE FINAL NPL

ROD TYPE: RECORD OF DECISION
ROD ID: EPA/ROD/R08-88/019
ROD DATE: 03/31/1988
OPERABLE UNIT(S): 02

MEDIA: SURFACE WATER

CONTAMINANT: INORGANICS (METALS)

ABSTRACT:
THE CLEAR CREEK/CENTRAL CITY SITE IS LOCATED APPROXIMATELY 30 MILES WEST OF DENVER IN CLEAR CREEK AND GILPIN COUNTIES, CO. THE SITE CONSISTS PRIMARILY OF ACID MINE DRAINAGES FROM FIVE MINES/TUNNELS AND ADJACENT MILLING AND MINING WASTES. CURRENTLY, ACID MINE DRAINAGE AND RUNUN AND RUNOFF FROM THE TAILINGS AND WASTE ROCK PILES HAVE AFFECTED DOWNSTREAM SURFACE WATER QUALITY. IN ADDITION TO THE DIRECT DISCHARGE FROM THE MINE TUNNELS, CONTAMINATED WATER MAY ENTER CLEAR CREEK AND NORTH CLEAR CREEK DURING OVERLAND SHEET FLOW. THIS OCCURS DURING RAPID SNOWMELT AND STORMS. THE RESULTING SURFACE FLOW ACROSS THE TAILINGS AND WASTE ROCK PILES DISSOLVES SOLUBLE MINERALS AND TRANSPORTS PARTICULATE TAILINGS AND WASTE ROCK MATERIALS INTO THE CREEKS. ALL THIS RESULTS IN ELEVATED CREEK ACIDITY AND METAL LOADS. THE INTRODUCTION OF TAILINGS AND WASTE ROCK INTO THE CREEKS COULD ALSO OCCUR DUE TO CATASTROPHIC COLLAPSE OF TAILINGS AND WASTE ROCK PILES DURING A FLASH FLOOD OR AS A RESULT OF UNDERCUTTING OF THE BASE OF THE PILE UNDER ANY FLOW REGIMEN. THE DISCHARGES FROM THE FIVE TUNNELS WERE ADDRESSED IN THE FIRST REMEDIAL ACTION OPERABLE UNIT FOR THIS SITE. THE PRIMARY CONTAMINANTS OF CONCERN FOR HUMAN RECEPTORS IN SURFACE WATER INCLUDE; ALUMINUM, ARSENIC, CADMIUM, CHROMIUM (IV), LEAD, MANGANESE, NICKEL, AND SILVER. FOR AQUATIC RECEPTORS, THE ABOVE LIST EXPANDS TO INCLUDE; COPPER, FLUORIDE, AND ZINC.

THE SELECTED REMEDIAL ACTION FOR THIS SITE INCLUDES; SLOPE STABILIZATION AT THE BIG FIVE TUNNEL AND GREGORY INCLINE; MONITORING OF THE GABION WALL AT THE GREGORY INCLINE; AND RUN-ON CONTROL AT THE ARGO TUNNEL, BIG FIVE TUNNEL, GREGORY INCLINE, NATIONAL TUNNEL, AND THE QUARTZ HILL TUNNEL. THE ESTIMATED PRESENT WORTH COST FOR THIS REMEDIAL ACTION IS $1,049,600.

REMEDY:
THE CLEAR CREEK/CENTRAL CITY SUPERFUND SITE IS LOCATED APPROXIMATELY 30 MILES WEST OF DENVER, COLORADO AND PRIMARILY CONSISTS OF ACID MINE DISCHARGES AND MILLING AND MINING WASTES FROM FIVE MINES/TUNNELS IN THE CLEAR CREEK AND NORTH CLEAR CREEK DRAINAGES. THESE ARE THE ARGO TUNNEL AND BIG FIVE TUNNEL IN THE CLEAR CREEK DRAINAGE; AND THE GREGORY INCLINE, NATIONAL TUNNEL, AND THE QUARTZ HILL TUNNEL IN THE NORTH CLEAR CREEK DRAINAGE. CONDITIONS AT THE FIVE TUNNELS AND TAILINGS AND WASTE ROCK PILE LOCATIONS POSE POTENTIAL IMPACTS TO HUMAN HEALTH AND THE ENVIRONMENT.

MORE SPECIFICALLY, POTENTIAL IMPACTS TO HUMAN HEALTH AND THE ENVIRONMENT RESULTING FROM THE ACID MINE DISCHARGES INCLUDE;
- DEGRADATION OF DOWNSTREAM SURFACE WATER QUALITY RESULTING FROM DISSOLVED AND SUSPENDED METALS IN THE DISCHARGES AND RESUSPENDED METAL LADEN SEDIMENTS BELOW THE DISCHARGES; AND
- REDUCTION IN AQUATIC HABITAT QUALITY OR PRODUCTIVITY IN CLEAR CREEK AND NORTH CLEAR CREEK RESULTING FROM CONTAMINATED SURFACE WATER. THESE IMPACTS WERE ADDRESSED IN THE SEPTEMBER 30, 1987 RECORD OF DECISION FOR THE DISCHARGE TREATMENT OPERABLE UNIT OR OPERABLE UNIT NO. ONE FOR THE SITE. OPERABLE UNIT NO. TWO FOR THE SITE, THE TAILINGS AND WASTE ROCK REMEDIATION OPERABLE UNIT, CONSIDERS POTENTIAL IMPACTS TO HUMAN HEALTH AND THE ENVIRONMENT RESULTING FROM;
- DEGRADATION OF DOWNSTREAM SURFACE WATER QUALITY DUE TO COLLAPSE OF THE PILES INTO EITHER CLEAR CREEK OR NORTH CLEAR CREEK;
- DEGRADATION OF DOWNSTREAM SURFACE WATER QUALITY DUE TO RUNON AND RUNOFF FROM THE TAILINGS AND WASTE ROCK PILES; AND
- HUMAN UPTAKE OF METALS FROM THE INHALATION OF DUST OR INGESTION OF MATERIAL FROM THE TAILINGS AND WASTE ROCK PILES.

THESE IMPACTS ARE ADDRESSED IN THIS RECORD OF DECISION.

EPA IS UNDERTAKING AN ADDITIONAL FEASIBILITY STUDY, OPERABLE UNIT NO. THREE OR THE BLOWOUT/DISCHARGE CONTROL OPERABLE UNIT, TO EVALUATE REMEDIAL ACTION ALTERNATIVES FOR REMEDIATING IMPACTS TO HUMAN HEALTH AND THE ENVIRONMENT RESULTING FROM A POTENTIAL BLOWOUT OF THE ARGO TUNNEL. IN ADDITION, THE STATE OF COLORADO HAS SUBMITTED AN APPLICATION TO EPA FOR MONIES TO FUND AN INVESTIGATION TO IDENTIFY OTHER AREAS WITHIN THE MINING DISTRICT WHICH MAY BE SIGNIFICANTLY IMPACTING NORTH CLEAR CREEK AND CLEAR CREEK. THE STATE WILL ALSO INVESTIGATE THE QUALITY OF GROUNDWATER IN THE AREA. DEPENDING UPON THE RESULTS OF THE STATE STUDY, EPA MAY CONSIDER ADDITIONAL OPERABLE UNITS.

THE SELECTED REMEDY FOR OPERABLE UNIT NO. TWO CONSISTS OF SLOPE STABILIZATION AT THE BIG FIVE TUNNEL AND GREGORY INCLINE AND RUNON CONTROL AT ALL FIVE TAILINGS AND WASTE ROCK PILES. NO ACTION WILL BE TAKEN AT THIS TIME TO ADDRESS POTENTIAL IMPACTS FROM INHALATION AND INGESTION OF MATERIAL FROM THE PILES.

THE UNSTABLE SLOPES AT THE BIG FIVE TUNNEL AND GREGORY INCLINE COULD COLLAPSE INTO CLEAR CREEK AND NORTH CLEAR CREEK, RESPECTIVELY, AND THE RESULTING METALS LOADING INTO THE CREEKS WOULD ADVERSELY AFFECT THE WATER QUALITY OF THE CREEKS. SLOPE STABILIZATION AT THE BIG FIVE TUNNEL WILL CONSIST OF REGRADING PORTIONS OF THE PILES TO A STABLE CONFIGURATION AND PLACING LARGE BOULDERS AT THE BASE TO MINIMIZE EROSION. THE CURRENT GABION WALL AT THE GREGORY INCLINE WILL BE MAINTAINED UNTIL MONITORING INDICATES REMEDIATION IS NECESSARY OR UNTIL THE TAILINGS ARE REMOVED FOR REPROCESSING. AT THAT TIME, A PERMANENT SOLUTION WILL BE IMPLEMENTED.

RUNON CONTROL WILL REDUCE THE METALS LOADING TO CLEAR CREEK AND NORTH CLEAR CREEK RESULTING IN AN IMPROVEMENT OF STREAM WATER QUALITY. RUNON CONTROL AT ALL FIVE LOCATIONS WILL CONSIST OF INSTALLING DIVERSION DITCHES ON THE UPGRADIENT SIDES OF THE PILES.

NO ACTION WILL BE TAKEN AT THIS TIME TO ADDRESS POTENTIAL IMPACTS FROM INHALATION AND INGESTION OF MATERIAL FROM THE PILES BECAUSE THE PUBLIC HEALTH EVALUATION FOR THE SITE INDICATED THAT CURRENT OR EPISODIC HUMAN HEALTH AND ENVIRONMENTAL RISKS RESULTING FROM THESE EXPOSURE PATHWAYS WERE MINOR. CURRENT USE CONSISTS OF PERIODIC VISITS TO THE SITES BY LOCAL RESIDENTS AND VISITORS. THE PUBLIC HEALTH EVALUATION INDICATED, HOWEVER, THAT FOR A POTENTIAL FUTURE RESIDENTIAL SCENARIO, RISKS RESULTING FROM

THE INHALATION AND INGESTION EXPOSURE PATHWAYS ARE OF SOME CONCERN. THEREFORE, EPA WILL EVALUATE THIS NO ACTION DECISION WHEN THE FINAL REMEDY IS SELECTED FOR THE SITE. EPA, IN COORDINATION WITH THE STATE OF COLORADO AND LOCAL OFFICIALS, WILL EVALUATE THE USE OF INSTITUTIONAL MEASURES WHICH WOULD CONTROL ANY HUMAN HEALTH OR ENVIRONMENTAL THREAT THAT COULD BE CREATED BY FUTURE DEVELOPMENT UPON THESE TAILINGS AND WASTE ROCK PILES AND ANY OTHER PILES WHICH THE STATE IDENTIFIES IN ITS STUDY. IN ADDITION, PURSUANT TO SARA SECTION 121(C), EPA WILL REVIEW NO LESS THAN EVERY FIVE YEARS ALL PROPERTIES WHERE HAZARDOUS SUBSTANCES CONTINUE TO REMAIN ONSITE AND, IF NECESSARY, WILL RECONSIDER THIS NO ACTION DECISION.

ESTIMATED COSTS FOR SLOPE STABILIZATION AT THE BIG FIVE TUNNEL AND GREGORY INCLINE AND RUNON CONTROL AT ALL FIVE SITES IS APPROXIMATELY $1.0 MILLION.

THE SELECTED REMEDY FOR OPERABLE UNIT NO. TWO HAS BEEN CHOSEN TO MITIGATE AND MINIMIZE POTENTIAL IMPACTS RESULTING FROM THE TAILINGS AND WASTE ROCK PILES AND TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT. THE SELECTED REMEDY FOR OPERABLE UNIT NO. TWO IS AN INTERIM REMEDY BECAUSE THE NET BENEFICIAL IMPACT TO CLEAR CREEK AND NORTH CLEAR CREEK WILL NOT BE REALIZED UNTIL THE COMPLETION OF REMEDIAL ACTIONS FOR THE OTHER OPERABLE UNITS. THE SELECTED REMEDY THEREFORE REQUIRES THE EXERCISE OF THE "INTERIM REMEDY" WAIVER (SARA SECTION 121(D)(4)(A)) FROM CONTAMINANT-SPECIFIC ARARS LISTED IN THE FEASIBILITY STUDY. THE INTERIM REMEDY WAIVER ALLOWS FOR THE SELECTION OF A REMEDIAL ACTION THAT DOES NOT ATTAIN ARARS IF "THE REMEDIAL ACTION SELECTED IS ONLY PART OF A TOTAL REMEDIATION ACTION THAT WILL ATTAIN SUCH LEVEL OR STANDARD OF CONTROL WHEN COMPLETED.". THE INTERIM REMEDY IS CONSISTENT WITH THE FINAL SITE REMEDY. LOCATION- AND ACTION-SPECIFIC ARARS WILL BE MET.

ROD DATE: **09/30/87**
ROD TYPE: **RECORD OF DECISION**
ROD ID: **08002571987ROD016**
CENTRAL CITY, CLEAR CREEK
ABSTRACT SITE NAME: CENTRAL CITY, CLEAR CREEK
ADDRESS: NEAR TOWN
CITY & STATE: IDAHO SPRINGS CO 80452
COUNTY: CLEAR CREEK

EPA ID: COD980717557
EPA REGION: 08

NPL STATUS: CURRENTLY ON THE FINAL NPL

ROD TYPE: RECORD OF DECISION
ROD ID: EPA/ROD/R08-87/016
ROD DATE: 09/30/1987
OPERABLE UNIT(S): 01

MEDIA: GROUNDWATER SEDIMENTS SURFACE WATER

CONTAMINANT: ARSENIC, CHROMIUM, METALS

ABSTRACT:
THE CLEAR CREEK/CENTRAL CITY SITE ENCOMPASSES PORTIONS OF CLEAR CREEK COUNTY AND GILPIN COUNTY IN THE

COLORADO MINERAL BELTS, CO. MORE SPECIFICALLY, THE FOCUS IS ON FIVE ABANDONED MINES/TUNNELS PROXIMAL TO THE CITIES OF IDAHO SPRINGS, BLACK HAWK AND CENTRAL CITY AND THE INFLUENCE OF ACID MINE DRAINAGE FROM THOSE TUNNELS ON ADJACENT STREAM COURSES. SURFACE WATER CONTAMINATION RESULTS FROM ACID MINE DRAINAGE EMANATING FROM THE FIVE TUNNELS AND FROM SEEPAGE OF GROUND WATER THROUGH TAILINGS PILES BOTH PROXIMAL TO THESE TUNNELS AND ALONG STREAM COURSES. APPROXIMATELY 1,200 LBS PER DAY OF DISSOLVED AND SUSPENDED METAL LOADINGS HAVE RESULTED IN A SIGNIFICANT DEPLETION OF AQUATIC LIFE AND HAVE POTENTIAL IMPACT TO SEDIMENTS AND DOWNSTREAM USERS OF SURFACE AND GROUND WATER. THERE ARE TEN CONTAMINANTS OF CONCERN INCLUDING ALUMINUM, ARSENIC, CADMIUM, CHROMIUM, COPPER, FLUORIDE, LEAD, MANGANESE, NICKEL, SILVER AND ZINC.

THE SELECTED INTERIM REMEDY FOR THIS SITE INCLUDES; CONSTRUCTION OF PASSIVE TREATMENT SYSTEMS TO TREAT MINE TUNNEL DISCHARGE PRIOR TO SURFACE WATER. THIS IS THE PREFERRED ALTERNATIVE AND IS CONTINGENT UPON RESULTS OF ONGOING PILOT PLANT STUDIES. IF WATER QUALITY CONCENTRATIONS CANNOT BE ACHIEVED BY PASSIVE TREATMENT, EITHER A COMBINATION SYSTEM OF PASSIVE AND ACTIVE TREATMENT SYSTEMS WILL BE CONSTRUCTED OR TWO ACTIVE TREATMENT SYSTEMS (CHEMICAL PRECIPITATION OR ELECTROCHEMICAL PRECIPITATION) WILL BE CONSTRUCTED TO TREAT MINE TUNNEL DISCHARGE. THE ESTIMATED CAPITAL COST FOR PASSIVE TREATMENT IS $1,663,000 WITH ANNUAL O&M OF $115,000.

REMEDY:
LOW PH MINE TUNNEL DISCHARGE WATER IS ONLY ONE OF SEVERAL SOURCES TO THE DEGRADATION OF WATER QUALITY AND AQUATIC HABITAT AT THE CLEAR CREEK/CENTRAL CITY SITE. DATA GATHERED DURING THE REMEDIAL INVESTIGATION HAS SHOWN THAT;

- RUNOFF FROM TAILINGS AND WASTE ROCK PILES CONTAIN DISSOLVED AND SUSPENDED METALS.
- TAILINGS AND WASTE ROCK PILES ADJACENT TO CLEAR CREEK AND NORTH CLEAR CREEK ARE UNSTABLE AND COULD COLLAPSE INTO THE CREEKS. THESE PILES HAVE THE POTENTIAL TO PRODUCE ACID. WHEN INTRODUCED TO WATER, THE PH WILL RAPIDLY DECREASE AND SIGNIFICANT AMOUNTS OF METALS WILL BE RELEASED TO THE ENVIRONMENT.
- HYDROSTATIC PRESSURE WILL BUILD UP IN THE TUNNELS DUE TO CAVE-INS. AFTER SUFFICIENT PRESSURE HAS BUILT UP, THE TUNNELS WILL BLOW OUT, RELEASING LARGE VOLUMES OF DISSOLVED AND SUSPENDED METALS TO THE CREEKS.
- THE GROUND WATERS IN THE VICINITY OF THE ACID MINE DISCHARGES ARE CONTAMINATED.
- THERE ARE ADDITIONAL SOURCES OF LOW PH MINE TUNNEL DISCHARGES AND TAILINGS UPSTREAM OF THE SITE THAT COULD BE CONTRIBUTING DISSOLVED AND SUSPENDED METALS TO THE STREAMS.

ALL OF THE ABOVE FACTORS CONTRIBUTE TO WATER QUALITY AND AQUATIC HABITAT DEGRADATION AND WILL BE STUDIED IN THE FOLLOWING SUBSEQUENT OPERABLE UNITS;

OPERABLE UNIT NO. TWO - TAILINGS AND WASTE ROCK REMEDIATION
OPERABLE UNIT NO. THREE - SOURCE CONTROL
OPERABLE UNIT NO. FOUR - BLOWOUT CONTROL
OPERABLE UNIT NO. FIVE - REGIONAL GROUND WATER CONTAMINATION
OPERABLE UNIT NO. SIX - UPSTREAM MINE DISCHARGES AND TAILINGS.

THESE OPERABLE UNITS ARE SUBJECT TO CHANGE.

THE SELECTED REMEDY FOR OPERABLE UNIT NO. ONE OF THE CLEAR CREEK/CENTRAL CITY SITE CONSISTS OF TREATMENT TO MEET UPSTREAM WATER QUALITY CONCENTRATION FOR CONTAMINANTS OF CONCERN IDENTIFIED IN THE

REMEDIAL INVESTIGATION (RI) IN A TREATMENT SYSTEM DISCHARGE LINE. THE UPSTREAM WATER QUALITY CONCENTRATIONS WILL BE USED AS OPERATIONAL STANDARDS FOR THIS INTERIM REMEDY. THE UPSTREAM WATER QUALITY CONCENTRATIONS ("UPSTREAM LEVELS") CONSIST OF THE GEOMETRIC MEAN OF THE SUBSET OF RI SAMPLES TAKEN ON CLEAR CREEK IMMEDIATELY UPSTREAM OF THE DISCHARGE FROM THE BIG FIVE TUNNEL AND ON NORTH CLEAR CREEK IMMEDIATELY UPSTREAM OF THE DISCHARGE FROM THE GREGORY INCLINE. THESE UPSTREAM LEVELS ARE NOT TO BE CONSIDERED AS FINAL APPLICABLE AND/OR RELEVANT AND APPROPRIATE REQUIREMENTS FOR THE FINAL SITE REMEDY.

BECAUSE A DETERMINATION OF THE FINAL REMEDY IS CONTINGENT UPON THE COMPLETION OF THE OTHER OPERABLE UNITS LISTED ABOVE, THE SELECTED REMEDY IS AN INTERIM REMEDY. THIS INTERIM REMEDY WILL CONSIST OF CONSTRUCTION OF PASSIVE TREATMENT SYSTEMS TO TREAT THE LOW PH MINE TUNNEL DISCHARGE FROM EACH TUNNEL PRIOR TO DISCHARGE TO SURFACE WATERS. THIS IS THE PREFERRED ALTERNATIVE AND IS CONTINGENT UPON THE RESULTS OF ONGOING PILOT PLANT STUDIES DEMONSTRATING THAT UPSTREAM LEVELS CAN BE MET BY A PASSIVE TREATMENT SYSTEM. IF THE UPSTREAM LEVELS CANNOT BE MET BY PASSIVE TREATMENT, THEN EITHER OF THE FOLLOWING TREATMENT SYSTEMS WILL BE BUILT;

- A COMBINATION SYSTEM CONSISTING OF PASSIVE AND ACTIVE TREATMENT SYSTEMS WILL BE CONSTRUCTED. A PHASED APPROACH TO CONSTRUCTION WILL BE UTILIZED.
- TWO ACTIVE TREATMENT SYSTEMS (CHEMICAL PRECIPITATION OR ELECTROCHEMICAL PRECIPITATION) WILL BE CONSTRUCTED TO TREAT MINE TUNNEL DRAINAGE PRIOR TO DISCHARGE.

THESE SYSTEMS WILL BE DESIGNED TO REDUCE THE MOBILITY, TOXICITY OR VOLUME OF DISSOLVED AND SUSPENDED METALS IN THE MINE DRAINAGE, INCREASE PH, AND MEET UPSTREAM LEVELS. UPSTREAM LEVELS ARE LISTED IN THE SELECTED REMEDY SECTION.

A PILOT-TREATMENT SYSTEM FOR PASSIVE TREATMENT HAS BEEN CONSTRUCTED AT THE BIG FIVE TUNNEL. THE PILOT PLANT HAS BEEN CONSTRUCTED TO DETERMINE THE ABILITY OF PASSIVE-TREATMENT EFFLUENT TO MEET UPSTREAM LEVELS FOR THE DISCHARGE FROM A TREATMENT FACILITY AT THE END OF THE FACILITY DISCHARGE PIPE. THE PILOT PLANT WILL ALSO BE OPERATED TO GATHER DESIGN DATA FOR SIZING VOLUME REQUIREMENTS, DETERMINE OPTIMUM DISSOLVED AND SUSPENDED METAL REMOVAL FOR VARIOUS ORGANIC AND VEGETATION TYPES AND CONFIRM REMOVAL EFFICIENCIES. RESULTS OF STUDIES AT THE PILOT PLANT WILL PROVIDE DATA REQUIRED IN ORDER TO DETERMINE FINAL DESIGN CRITERIA. SITING STUDIES WILL EVALUATE ALTERNATE TREATMENT SITE LOCATIONS.

THE REMEDY INCLUDES THE FOLLOWING OPERATION AND MAINTENANCE ACTIVITIES;

PASSIVE TREATMENT
- ANNUAL COLLECTION OF AND LABORATORY ANALYSES OF SOILS AND VEGETATION TO MEASURE HEAVY METAL ACCUMULATION.
- ANNUAL MAINTENANCE OF VEGETATION.
- REPLACEMENT OF WETLAND MATERIALS AND DISPOSAL AND TREATMENT OF METAL SATURATED ORGANIC MATERIALS AND PLANTS EVERY 5 TO 10 YEARS.
- MAINTENANCE OF PIPELINES CARRYING LOW PH MINE TUNNEL DISCHARGE WATER FROM TUNNELS TO PASSIVE TREATMENT SYSTEMS. ACTIVE TREATMENT
- LABOR COSTS FOR OPERATION AND MAINTENANCE OF THE FACILITY.
- CHEMICAL COSTS AND POWER COSTS FOR OPERATION AND MAINTENANCE OF THE FACILITY.
- SLUDGE TREATMENT AND DISPOSAL COSTS.
- MAINTENANCE OF PIPELINES CARRYING LOW PH MINE TUNNEL DISCHARGE WATER FROM TUNNELS TO TREATMENT

FACILITIES. PASSIVE TREATMENT AND ACTIVE TREATMENT COMBINATION

- THE COMBINATION OF COSTS LISTED ABOVE UNDER PASSIVE TREATMENT AND ACTIVE TREATMENT.

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001119**

NAME: **EQUITY GOLD MCCLELLAND TUNNEL**

ADDRESS: **ADDRESS NOT REPORTED**

IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

7A 2PONDS 8D CO-0038148 10F MINE DRAIN. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T03 R73 S29; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- LIQUIDS. ; OPER/OWNR/OTHR- / / J. TATUM LOUISVILLE,, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001117**

NAME: **JACK PINE MINING BLACK E.MINE**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

7A #PONDS? 8D CO-0028797 10F TAILINGS. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T04 R73 S03; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- LIQUIDS. ; OPER/OWNR/OTHR- / / D.WATROUS IDAHO SPGS, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001118**

NAME: **JUMBO WILDCAT IDAHO SPRINGS**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

7A 1POND 8D CO0037648 10F DRAINAGE. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T03 R73 S16; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- LIQUIDS. ; OPER/OWNR/OTHR- / / KEVIN BETTALE, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001120**

NAME: **EQUITY GOLD STANLEY MINE**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

7A 1POND, 8D-CO-0037559 10F MINE WATER. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T03 R73 S; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- LIQUIDS. ; OPER/OWNR/OTHR- / / J.TATUM BOULER, CO, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001121**

NAME: **CONCORD MINERALS HIDDEN V.MIL**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

7A 1POND ,D CO-0036951 10F TAILINGS. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T03 R72 S32; ACRES- <1

DETAIL2:

TYPE- IMPOUNDMENT; FILL- LIQUIDS. ; OPER/OWNR/OTHR- / / TOM COCHRAN IDAHO SP, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001122**

NAME: **BLACK EAGLE MILL**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

#6,7,8 UNKNOWN-CONTRACT MLRD. ; TRS- T04S R73W S09

DETAIL2:

TYPE- MILL WASTE; FILL- TAILINGS. ; OPER/OWNR/OTHR- / / SILVERGLADE MINING, ,

---

Back to Report Summary of Unlocatable Sites

Historical Solid Waste Landfills (HISTSWLF)

SITE INFORMATION

UNIQUE ID: **00070-0001123**

NAME: **OPEN PIT WITH FILTER OLD**

ADDRESS: **ADDRESS NOT REPORTED**
IDAHO SPRINGS, CO

DIRECTIONS: **NOT REPORTED**

COUNTY: **CLEAR CREEK**

SITE DETAILS

AGENCY ID: **NOT REPORTED**

DETAIL1:

; TRS- T04S R73W S02

DETAIL2:

TYPE- LANDFILL; FILL- REFUSE. ; OPER/OWNR/OTHR- , ,

Back to Report Summary of Unlocatable Sites

Leaking Underground Storage Tanks Trust Fund Sites (LUSTTRUST)

FACILITY INFORMATION

UNIQUE ID: **00023-0000066**

AGENCY ID: **NOT REPORTED**

NAME: **IDAHO SPRINGS #1**

ADDRESS: **IDAHO SPRINGS #1**
IDAHO SPRINGS, CO 80000

COUNTY: **CLEAR CREEK**

COMMENTS: **FROM AN OLD CDPHE LIST OF LOCATIONS WHERE TANK LEAKS WERE SUSPECTED AND LUST TRUST FUNDS WERE USED IN AN EFFORT TO IDENTIFY THE SOURCE. OFTEN, THE SOURCE WAS FOUND NEARBY AND WAS ENTERED IN THE LUST DATABASE (NOW COSTIS).**
THIS LISTING NOT ENTERED INTO COSTIS BACK WHEN CDPHE TRANSFERRED RESPONSIBILITY FOR TANK LEAKS TO OPS. FEW PEOPLE AT OPS KNOW OF THIS OLD CDPHE LIST, AND ANY ASSOCIATED FILES ARE THOUGHT TO HAVE BEEN DISPOSED OF OR MISPLACED.

COSTIS LINK: **NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2001-322** NRC NUMBER: **575707**

SPILL DATE: **8/7/2001**

SPILL LOCATION: **I-70 WESTBOUND**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **ALL CITY TRUCKING**

ADDRESS: **837 SOUTH KUNER ROAD**
BRIGHTON, CO 80601

COUNTY: **ADAMS**

CONTACT: **NOT REPORTED**

PHONE: **720-985-8985**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK ACCIDENT**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **T**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**100 G**	**100 G**
ASPHALT	15 T	
HYDRAULIC & MOTOR OILS	18 G	

CAUSE INFORMATION:

TRUCK HAULING ASPHALT TRAVELED OFF I-70 INTO CLEAR CREEK SPILLING VARIOUS AMOUNTS OF DIESEL, OIL, AND ANTI-FREEZE.

ACTION:

BOOMS APPLIED TO CREEK. MOST OF THE PRODUCTS CAUGHT.

RESPONSE COMMENTS:

CUSTOM ENVIRONMENTAL HIRED TO DO CLEAN UP OF AREA.

COMMENTS:

ANOTHER NRC REPORT ISSUED ON THIS INCIDENT IS #575713

ADDITIONAL COMMENTS:

ADDITIONAL NOTIFICATION FROM CSP DISPATCH (KIMI) AT 2350 8/7/01. THE FOLLOWING DOWNSTREAM WATER USERS NOTIFIED OR NOTIFICATION ATTEMPTED BY CDPHE/EMP DUTY OFFICER: CITY OF BROOMFIELD - (303)466-3104 SPOKE WITH BILL. THEY WILL NOTIFY ""VAN"" THAT H

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2002-410** NRC NUMBER: **0**

SPILL DATE: **6/24/2002**

SPILL LOCATION: **I-70 WB**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **7-24 AIRX**

ADDRESS: **5355 TAMARUS**
LAS VEGAS, NV 89119

COUNTY: **NOT REPORTED**

CONTACT: **NICK KORPAL**

PHONE: **800-216-3876**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK/TRAILER**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**150 G**	**NOT REPORTED**

CAUSE INFORMATION:

TRUCK LOST CONTROL ON I-70 WB, ALLOWING FOR TRAILER TO JACKKNIFE AND PUNCTURE RIGHT SIDE SADDLE TANK. RELEASE OF 150 GALLONS OF DIESEL WAS RESULT.

ACTION:

RM CAT NOTIFIED FOR CLEAN UP OF AREA.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2004-241** NRC NUMBER: **720068**

SPILL DATE: **4/25/2004**

SPILL LOCATION: **I-70**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **IVAN HARMS**

ADDRESS: **620 E. TOPAZ AVE**
GRANBY, CO 80446

COUNTY: **NOT REPORTED**

CONTACT: **NOT REPORTED**

PHONE: **970-887-3825**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK/TRAILER**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**80 G**	**NOT REPORTED**

CAUSE INFORMATION:

A TRUCK COLLIDED WITH THE CENTER MEDIAN AND OVERTURNED. THIS RESULTED IN THE PUNCTURING OF THE LEFT SIDE SADDLE TANK AND THE RELEASE OF DIESEL ONTO ROADWAY.

ACTION:

CUSTOM ENVIRONMENTAL WAS NOTIFIED FOR CLEANUP. CUSTOM ENV. APPLIED ABSORBENT TO THE ROADWAY TO RECOVER RELEASED DIESEL.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NO WATEWAYS WERE IMPACTED.

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2006-104** NRC NUMBER: **787022**

SPILL DATE: **1/31/2006**

SPILL LOCATION: **EB I-70**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **STURGEON ELECTRIC**

ADDRESS: **12150 E 112 AVE**
HENDERSON, CO 80640

COUNTY: **NOT REPORTED**

CONTACT: **ROBERT HENSLEY**

PHONE: **303-239-4546**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK/TRAILER**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **ERROR OPERATOR**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**90 G**	**NOT REPORTED**

CAUSE INFORMATION:

A COMMERCIAL TRUCK LOST CONTROL DUE TO UNKNOWN CAUSES AND ROLLED ONTO ITS RIGHT SIDE RELEASING 90 GALLONS OF DIESEL TO THE MEDIAN AND HWY. THE SPILL WAS 300 FEET FROM CLEAR CREEK, BUT NO SURFACE WATER WAS IMPACTED.

ACTION:

ABSORBENT USED WHERE DIESEL POOLED. RM CAT CONTRACTED FOR CLEANUP.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2006-765** NRC NUMBER: **808446**

SPILL DATE: **8/18/2006**

SPILL LOCATION: **I-70**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **CHRIS BROWN**

ADDRESS: **PO BOX 1526**
DILLON, CO 80435

COUNTY: **NOT REPORTED**

CONTACT: **DILLON TOWING**

PHONE: **970-468-2907**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **MOTOR VEHICLE**

MEDIUM: **AIR**

WATERWAY: **CLEAR CREEK**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OTHER**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
PARTICULATE PLASTIC PIPING	**NOT REPORTED**	**NOT REPORTED**

CAUSE INFORMATION:

CALLER STATES THAT A PLASTIC ASH PARTICULATE HAS DISCHARGED INTO CLEAR CREEK. A TOWING TRACTOR/TRAILER COMBO HAD A LOAD OF EBS CELL CORE PLASTIC PIPING. WHILE THE MATERIAL WAS BEING TOWED IT HAD A WHEEL BRAKE CATCH ON FIRE WHICH LIT THE PLASTIC PIPE.

ACTION:

THE FIRE DEPT EXTINGUISHED THE FIRE AND, WHILE CARRYING THE FOAM FROM THE EXTINGUISHING MATERIAL DOWNHILL, A SMALL AMOUNT OF RESIDUAL PLASTIC ASH PARTICULATE, FLOATED DOWN TO THE SOIL AND CREEK.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2007-0593** NRC NUMBER: **839584**

SPILL DATE: **6/16/2007**

SPILL LOCATION: **I-70 WEST BOUND**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **JEFF DIGBY**

ADDRESS: **1280 W 64TH AVE**
DENVER, CO

COUNTY: **NOT REPORTED**

CONTACT: **VOYAGER EXPRESS**

PHONE: **303-412-1700**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **MOTOR VEHICLE**

MEDIUM: **LAND**

WATERWAY: **NOT REPORTED**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**40 G**	**NOT REPORTED**

CAUSE INFORMATION:

CALLER STATED THERE WAS A RELEASE OF MATERIALS FROM THE SADDLE TANK ON A TRACTOR TRAILER TRUCK DUE TO A VEHICLE ACCIDENT. SPILLED DIESEL, WENT INTO CENTER MEDIAL SOIL, NO WATERWAYS WERE IMPACTED.

ACTION:

CLEANUP UNDERWY BY RMCAT ENVIRONMENTAL.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

NOT REPORTED

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2009-0411** NRC NUMBER: **916971**

SPILL DATE: **9/4/2009**

SPILL LOCATION: **I-70**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **WESTERN EXPRESS**

ADDRESS: **7135 CENTENNIAL PLACE**
NASHVILLE, TN 37209

COUNTY: **NOT REPORTED**

CONTACT: **DEREK MILLER**

PHONE: **812-454-6377**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **MOTOR VEHICLE**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **TRANSPORTATION ACCIDENT**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
DIESEL	**150 G**	**50 G**

CAUSE INFORMATION:

A TRUCK RAN OFF THE HIGHWAY AND LANDED WITHIN THE CLEAR CREEK.

ACTION:

CLEAR CREEK COUNTY DISPATCH MADE DOWNSTREAM WATER NOTIFICATIONS. BOOMS APPLIED TO AREA.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

CDOT-ANDY FLURKEY

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2001-476** NRC NUMBER: **585544**

SPILL DATE: **11/9/2001**

SPILL LOCATION: **I-70 WB**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **IOWA TANKLINE**

ADDRESS: **3975 56TH AVE.**
COMMERCE CITY, CO 80022

COUNTY: **NOT REPORTED**

CONTACT: **NOT REPORTED**

PHONE: **303-292-2288**

INCIDENT DETAILS

SOURCE: **HIGHWAY/ROADWAY**

SOURCE TYPE: **TRUCK TANKER**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **T**

MATERIAL TYPE: **OIL**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
UNLEADED	**7000 G**	**5500 G**

CAUSE INFORMATION:

SEMI TRUCK HAULING 8300 GALLONS OF UNLEADED GASOLINE ROLLED OVER ON I-70 WB. ACCIDENT CAUSED A PUNCTURE TO THE TANK TRAILER.

ACTION:

AREA HAS BEEN ISOLATED. BOOMS APPLIED TO RIVER AND ABSORBENTS USED TO CLEAN UP FUEL SPILLED ONTO HIGHWAY. CSP HAZ MAT AND RM CAT ON SCENE TO PROVIDE CLEANUP.

RESPONSE COMMENTS:

EPA IS RESPONDING TO INCIDENT. DEPT. OF NATURAL RESOURCES(MARK LAMB) HAS ALSO BEEN NOTIFIED OF THE SITUATION.

COMMENTS:

ALL DOWNSTREAM USERS HAVE BEEN NOTIFIED AND ALERTED OF SITUATION.

ADDITIONAL COMMENTS:

DRIVER OF TANKER WAS TAKEN TO ST. ANTHONY HOSPITAL FOR TREATMENT OF INJURIES SUFFERED IN THE ACCIDENT.

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **CO99-188** NRC NUMBER: **0**

SPILL DATE: **5/29/1999**

SPILL LOCATION: **IDAHO SPRINGS WASTE WATER TREATMENT PLANT**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **IDAHO SPRINGS WASTE WATER PLNT**

ADDRESS: **STREET NOT REPORTED**
IDAHO SPRINGS, CO

COUNTY: **CLEAR CREEK**

CONTACT: **ROBERT DEY**

PHONE: **303-944-8294**

INCIDENT DETAILS

SOURCE: **FIXED FACILITY**

SOURCE TYPE: **TREATMENT PLANT**

MEDIUM: **WATER**

WATERWAY: **CLEAR CREEK**

CAUSE: **F**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:
SEWAGE, RAW

MATERIAL QUANTITY:
NOT REPORTED

WATER QUANTITY:
NOT REPORTED

CAUSE INFORMATION:

POWER FAILURE

ACTION:

5/29/99 2225 HRS-ROBERT DEY CALLED TO REPORT THAT POWER HAD BEEN RESTORED TO THE PLANT AS OF 2130 HRS & THE OVERFLOW WAS UNDER CONTROL.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

DUE TO A POWER OUTAGE, PUMPS AT THE PLANT FAILED TO OPERATE ALLOWING RAW SEWAGE TO OVERFLOW INTO CLE

Back to Report Summary of Unlocatable Sites

Spills Listing (SPILLS)

INCIDENT INFORMATION

CASE NUMBER: **2005-399** NRC NUMBER: **0**

SPILL DATE: **5/13/2005**

SPILL LOCATION: **IDAHO SPRINGS WASTEWATER TREATMENT PLANT**

SPILL CITY/STATE/ZIP: **IDAHO SPRINGS, CO**

SPILL COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

NAME: **ECO RESOURCES, INC.**

ADDRESS: **6050 W. 54TH AVENUE**
ARVADA, CO 80002

COUNTY: **NOT REPORTED**

CONTACT: **TERRY MIERS**

PHONE: **303-307-3200**

INCIDENT DETAILS

SOURCE: **FIXED FACILITY**

SOURCE TYPE: **UPSET WASTEWATER TREATMENT PLANT**

MEDIUM: **WATER AND LAND**

WATERWAY: **CLEAR CREEK**

CAUSE: **FAILURE EQUIPMENT**

MATERIAL TYPE: **SANITARY SEWER OVERFLOW**

MATERIAL DESCRIPTION:	MATERIAL QUANTITY:	WATER QUANTITY:
EFFLUENT	**6000 G**	**6000 G**

CAUSE INFORMATION:

FLOW METER BURST DUE TO HIGH WATER PRESSURE. CHLORINE ROOM FILLED WITH A COUPLE FEET OF WATER.

ACTION:

UPON PLANT FILLING, MANUAL DECANT WAS ENACTED. DURING FIRST DISCHARGE A VISUAL IMPACT FROM CHLORINE WAS NOTED IN CREEK NO FURTHER IMPACT NOTED DURING ADDITIONAL MANUAL DECANTS. REPAIRS BEING MADE TO VALVE, NOTED DECANTERS MAY NOT BE SEALING PROPERLY.

RESPONSE COMMENTS:

NOT REPORTED

COMMENTS:

OTHER PROBLEMS NOTED: THE BYPASS VALVE WAS NOT CLOSING AND WAS DEADHEADED. THE MAIN VALVE TO THE PLA

ADDITIONAL COMMENTS:

PER VOICEMAIL FROM TERRY MEIRS AND FOLLOW BY TOM ARMITAGE THE AMOUNT RELEASED IN THE MANUAL DISCHARGE IS CHANGED FROM 20000 GALLONS TO 6000 GALLONS AND THE REPORT HAS BEEN CHANGED TO REFLECT AN UPSET WASTEWATER TREATEMENT PLANT INSTEAD OF A SANITARY SEWE

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **2135250854**
NRC ID#: **575713**
INCIDENT LOCATION: **WEST BOUND ON ROUTE 6**
INCIDENT ADDRESS: **STATE ROUTE 6**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **ALL CITY TRUCKING**
ADDRESS: **837 SOUTH KUNER ROAD**
CITY: **BLIGHTON**
STATE: **CO**
ZIP: **80601**

INCIDENT DETAILS

INCIDENT DATE: **07-AUG-01**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **PLACED BOOM BUT A LOT OF DIESEL WENT DOWN STREAM TOWARDS GOLDEN CO.**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **ASPHALT/15 TON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **HY/8 GA**

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **1368208180**
NRC ID#: **575707**
INCIDENT LOCATION: **NOT REPORTED**
INCIDENT ADDRESS: **INTERSTATE 70**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **UNKNOWN**
ADDRESS: **NOT REPORTED**
CITY: **NOT REPORTED**
STATE: **XX**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **07-AUG-01**
INCIDENT CAUSE: **UNKNOWN**
MATERIAL REACHED WATER: **YES**
REMEDIAL ACTION: **STATE PATROL HAZMAT EN ROUTE**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **ASPHALT/ UNKNOWN AMOUNT**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **331934020**
NRC ID#: **819210**
INCIDENT LOCATION: **I-70 WEST BOUND AT THE BOTTOM OF EXIT 244 US HWY 6**
INCIDENT ADDRESS: **I-70 WEST BOUND AT THE BOTTOM OF EXIT 24**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **SAFEWAY TRUCKING**
ADDRESS: **NOT REPORTED**
CITY: **HENDERSON**
STATE: **CO**
ZIP: **80640**

INCIDENT DETAILS

INCIDENT DATE: **11/26/2006 13:00**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **BOOMS APPLIED,CONTRACTOR HAS BEEN HIRED (RMCAT ENVIRONMENTAL))**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL: DIESEL/30 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **3320950651**
NRC ID#: **775730**
INCIDENT LOCATION: **INTERSTATE 70 WEST BOUND AT MILE MARKER 242**
INCIDENT ADDRESS: **INTERSTATE 70 WEST BOUND AT MILE MARKER**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **AMERICAN FURNITURE WAREHOUSE**
ADDRESS: **8501 GRANT STREET**
CITY: **THORNTON**
STATE: **CO**
ZIP: **NOT REPORTED**

INCIDENT DETAILS

INCIDENT DATE: **10/11/2005 1:00**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **YES**
REMEDIAL ACTION: **BOOMS APPLIED,ABSORBENTS APPLIED,CONTRACTOR HAS BEEN HIRED**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL: DIESEL/80 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **3948304149**
NRC ID#: **787022**
INCIDENT LOCATION: **EB I-70**
INCIDENT ADDRESS: **EB I-70**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **STURGEON ELECTRIC**
ADDRESS: **NOT REPORTED**
CITY: **HENDERSON**
STATE: **CO**
ZIP: **80640**

INCIDENT DETAILS

INCIDENT DATE: **1/31/2006 13:28**
INCIDENT CAUSE: **UNKNOWN**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **ABSORBENTS WERE PLACED INTO THE CENTER OF THE MEDIAN,,CONTRACTOR HAS BEEN HIRED**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL, FUEL: NO. 2-D/90 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Emergency Response Notification System (ERNSCO)

INCIDENT INFORMATION

GSID#: **2739799460**
NRC ID#: **871863**
INCIDENT LOCATION: **NOT REPORTED**
INCIDENT ADDRESS: **STATE HIGHWAY 70**
INCIDENT CITY: **IDAHO SPRINGS**
INCIDENT STATE: **CO**
INCIDENT ZIP: **NOT REPORTED**
INCIDENT COUNTY: **CLEAR CREEK**

RESPONSIBLE PARTY

COMPANY: **LAND STAR RANGER**
ADDRESS: **NOT REPORTED**
CITY: **JACKSONVILLE**
STATE: **FL**
ZIP: **32224**

INCIDENT DETAILS

INCIDENT DATE: **5/1/2008 9:10**
INCIDENT CAUSE: **TRANSPORT ACCIDENT**
MATERIAL REACHED WATER: **NO**
REMEDIAL ACTION: **CALLER STATED CUSTOM ENVIRONMENTAL SERVICES DID THE CLEAN UP THE SPILL.**
INCIDENT DESCRIPTION: **{NO_MEMO_FILE_OPEN}**
MATERIAL RELEASED/AMOUNT: **OIL: DIESEL/75 GALLON(S)**
OTHER MATERIAL RELEASED/AMOUNT: **NOT REPORTED/NOT REPORTED NOT REPORTED**

Back to Report Summary of Unlocatable Sites

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

FACILITY INFORMATION

EPA ID#: **COD983778028*NG**

NAME:

ADDRESS:

,

CONTACT NAME:

CONTACT ADDRESS:

,

CONTACT PHONE:

NON-NOTIFIER:

DATE RECEIVED BY AGENCY:

OWNER TYPE: **NOT REPORTED**

OWNER NAME:

OPERATOR TYPE: **NOT REPORTED**

OPERATOR NAME:

CERTIFICATION **- NO CERTIFICATION REPORTED -**

INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

ACTIVITY INFORMATION

GENERATOR STATUS:

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **UNKNOWN**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **UNKNOWN**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **UNKNOWN**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE:

CORRECTIVE ACTION WORKLOAD UNIVERSE: **UNKNOWN**

IMPORTER: **NOT REPORTED**

MIXED WASTE GENERATOR: **NOT REPORTED**

RECYCLER: **NOT REPORTED**

TRANSPORTER: **NOT REPORTED**

ONSITE BURNER EXEMPTION: **NOT REPORTED**

FURNACE EXEMPTION: **NOT REPORTED**

USED OIL REFINER: **NOT REPORTED**

USED OIL TRANSFER FACILITY: **NOT REPORTED**

UNDERGROUND INJECTION: **NOT REPORTED**

UNIVERSAL WASTE DESTINATION FACILITY: **NOT REPORTED**

TRANSFER FACILITY: **NOT REPORTED**

USED OIL FUEL BURNER: **NOT REPORTED**

USED OIL PROCESSOR: **NOT REPORTED**

USED OIL FUEL MARKETER TO BURNER: **NOT REPORTED**

SPECIFICATION USED OIL MARKETER: **NOT REPORTED**

USED OIL TRANSPORTER: **NOT REPORTED**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary of Unlocatable Sites

Hazardous Materials Incident Reporting System (HMIRSR08)

INCIDENT INFORMATION

REPORT #: **1996080131**

DATE: **07/09/96**

INCIDENT LOCATION:

I-70

IDAHO SPRINGS, CO 80452

COUNTY NOT REPORTED

CARRIER INFORMATION

NAME: **KLEIN FRANK C & CO INC**

ADDRESS: **7627 DAHLIA**

COMMERCE CITY, CO 80022

MODE OF TRANSPORTATION: **HIGHWAY (FOR HIRE)**

TRANSPORTATION PHASE: **NOT REPORTED**

COMMODITY DETAILS

IDENTIFICATION NUMBER: **NOT REPORTED**

COMMODITY SHIPPING NAME: **FUEL OIL (NO. 1,2,4,5,6)**

TRADE NAME: **#2 DIESEL FUEL**

QUANTITY RELEASED: **7389.00 GALLONS**

PACKAGING: **NOT REPORTED**

FAILURE DESCRIPTION

WHAT FAILED:

HOW FAILED: **-**

FAILURE CAUSE DESCRIPTION:

-

DESCRIPTION OF EVENTS:

TRAILER WAS NOT PROPERLY HOOKED TO TRACTOR. UNITS SEPARATED AS THEY WENT THROUGH A CURVE IN THE ROAD. TRAILER ROLLED AFTER SEPARATION. ACCIDENT WAS DUE ENTIRELY TO DRIVER ERROR. WE HAVE GIVEN SAFETY TRAINING TO ALL DRIVERS ON PROPERLY COUPLING. HALLMARK ENVIRONMENTAL WAS CALLED TO THE SCENE TO CLEAN UP THE SPILLL AND CONTAMINATION.

RECOMMENDATIONS/ACTIONS TAKEN:

NO ACTION OR RECOMMENDATION REPORTED

Back to Report Summary of Unlocatable Sites

Underground Storage Tank Facilities (UST)

FACILITY INFORMATION

FACILITY ID: **7364**
NAME: **FEDERAL AVIATION ADMINISTRATION**
ADDRESS: **NO ST ADDRESS**
IDAHO SPRINGS, CO 80452
TOTAL TANK: **1**
COSTIS LINK: http://costis.cdle.state.co.us/facility.asp?h_id=7364

OWNER INFORMATION

NAME: **FAA DENVER OEP DIST OFFICE-DIA TRACON BLDG**
ADDRESS: **26705 E 68TH AVE**
DENVER, CO 80249

TANK INFORMATION

TANK ID:	TANK TYPE:	TANK PRODUCT:	TANK CAPACITY:	TANK STATUS:	INSTALLATION DATE:
7364-1	**UST**	**Z UNKNOWN**	**999999999**	**CLOSED**	**NOT REPORTED**

Back to Report Summary of Unlocatable Sites

INCIDENT INFORMATION

REPORT #: **I-2010070581**

DATE: **9/10/2009**

INCIDENT LOCATION:

HWY 6

IDAHO SPRING, CO 80452

CLEAR CREEK COUNTY

CARRIER INFORMATION

NAME: **AAO INC**

ADDRESS: **8150 E 86TH AVE**

DENVER, CO 80266

MODE OF TRANSPORTATION: **HIGHWAY**

TRANSPORTATION PHASE: **IN TRANSIT**

COMMODITY DETAILS

IDENTIFICATION NUMBER: **NA1993**

COMMODITY SHIPPING NAME: **DIESEL FUEL**

TRADE NAME: **DIESEL FUEL**

QUANTITY RELEASED: **60 LIQUID - GALLON**

PACKAGING: **PORTABLE TANK**

FAILURE DESCRIPTION

WHAT FAILED: **133 LIQUID LINE**

HOW FAILED: **305 - CRUSHED**

FAILURE CAUSE DESCRIPTION:

537 - VEHICULAR CRASH OR ACCIDENT DAMAGE

DESCRIPTION OF EVENTS:

THE SEQUENCES WHERE THE DRIVER DIE IN THE ACCIDENT THE ACTION TAKEN WAS CALL 911 IMMEDIATELY AND GET ALL EMERGENCY HELP. DURATION OF THE RELEASE WAS FOR FEW HOURS ONLY UNTIL EMERGENCY DEPARTMENT STOPPED UP.

RECOMMENDATIONS/ACTIONS TAKEN:

AAO INC. HAVE MORE MEETINGS WITH ALL DRIVERS TO REMIND THEM TO PUT ATTENTION TO ALL TRAFFIC SIGNS AND TO BE ALERT AT ALL TIMES DURING DRIVING. AAO INC. HIRES DRIVERS WITH PLENTY OF EXPERIENCE.

Back to Report Summary of Unlocatable Sites

Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS)

FACILITY INFORMATION

EPA ID#: **COD980717557*CC**

SITE ID#:

NAME:

ADDRESS:

,

COUNTY:

NATIONAL PRIORITY LISTING: **- NOT ON THE NPL**

FEDERAL FACILITY CLASSIFICATION: **- NOT A FEDERAL FACILITY**

NON-NPL STATUS DATE:

PHYSICAL CLASSIFICATION OF SITE / INCIDENT:

SITE DESCRIPTION **- NO SITE DESCRIPTION INFORMATION AVAILABLE -**

SITE HISTORY **- NO SITE HISTORY INFORMATION AVAILABLE -**

ACTIONS **- NO ACTION INFORMATION AVAILABLE -**

CONTAMINANTS **- NO CONTAMINATION INFORMATION AVAILABLE -**

LISTING OF PUBLISHED INSTITUTIONAL CONTROL SITE REPORT **- NOT AN INSTITUTIONAL CONTROL SITE -**

Back to Report Summary of Unlocatable Sites

Federal Engineering Institutional Control Sites (EC)

SITE INFORMATION

EPA ID#: **COD980717557**

SITE ID#: **0800257**

SITE NAME: **CENTRAL CITY, CLEAR CREEK**

ADDRESS: **NEAR TOWN**
IDAHO SPRINGS, CO 80452

CONTROLS IN PLACE

OPERATIONAL UNIT: **02**
CONTAMINATION: **GROUNDWATER**
CONTROL: **ENGINEERING CONTROL, (N.O.S.) (ENGINEERING CONTROL)**
ACTION: **EXPLANATION OF SIGNIFICANT DIFFERENCES**
COMPLETION DATE: **19990901**

OPERATIONAL UNIT: **03**
CONTAMINATION: **SEDIMENT**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **EXPLANATION OF SIGNIFICANT DIFFERENCES**
COMPLETION DATE: **20050606**

OPERATIONAL UNIT: **03**
CONTAMINATION: **SURFACE WATER**
CONTROL: **DISCHARGE (ENGINEERING CONTROL)**
ACTION: **EXPLANATION OF SIGNIFICANT DIFFERENCES**
COMPLETION DATE: **20050606**

OPERATIONAL UNIT: **03**
CONTAMINATION: **SURFACE WATER**
CONTROL: **TREATMENT, (N.O.S.) (ENGINEERING CONTROL)**
ACTION: **EXPLANATION OF SIGNIFICANT DIFFERENCES**
COMPLETION DATE: **20050606**

OPERATIONAL UNIT: **01**
CONTAMINATION: **SURFACE WATER**
CONTROL: **DISCHARGE (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19870930**

OPERATIONAL UNIT: **01**
CONTAMINATION: **SURFACE WATER**
CONTROL: **ENGINEERED WETLAND (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19870930**

OPERATIONAL UNIT: **01**
CONTAMINATION: **SURFACE WATER**
CONTROL: **PRECIPITATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19870930**

OPERATIONAL UNIT: **02**

CONTAMINATION: **SOLID WASTE**
CONTROL: **SLOPE STABILIZATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19880331**

OPERATIONAL UNIT: **02**
CONTAMINATION: **SOLID WASTE**
CONTROL: **SURFACE DRAINAGE CONTROL (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19880331**

OPERATIONAL UNIT: **03**
CONTAMINATION: **GROUNDWATER**
CONTROL: **ALTERNATE DRINKING WATER, PERMANENT REPLACEMENT (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19910930**

OPERATIONAL UNIT: **03**
CONTAMINATION: **GROUNDWATER**
CONTROL: **PUMP AND TREAT (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19910930**

OPERATIONAL UNIT: **03**
CONTAMINATION: **SOLID WASTE**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19910930**

OPERATIONAL UNIT: **03**
CONTAMINATION: **SURFACE WATER**
CONTROL: **ENGINEERED WETLAND (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **19910930**

OPERATIONAL UNIT: **04**
CONTAMINATION: **GROUNDWATER**
CONTROL: **AERATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **GROUNDWATER**
CONTROL: **BIOREACTORS (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **GROUNDWATER**
CONTROL: **DISCHARGE (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **GROUNDWATER**

CONTROL: **EXTRACTION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **DISPOSAL (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **ENGINEERING CONTROL, (N.O.S.) (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **EXCAVATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **DISPOSAL (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **EXCAVATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **REVEGETATION (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **MONITORING (ENGINEERING CONTROL)**

ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **SURFACE WATER CONTROL (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **TREATMENT, (N.O.S.) (ENGINEERING CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**
OPERATIONAL UNIT: **03**
CONTAMINATION: **LEACHATE**
CONTROL: **MONITORING (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20030922**
OPERATIONAL UNIT: **03**
CONTAMINATION: **LEACHATE**
CONTROL: **NO ACTION (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20030922**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20060925**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **CONSOLIDATE (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20060925**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **LEACHATE CONTROL (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20060925**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **SURFACE DRAINAGE CONTROL (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**
COMPLETION DATE: **20060925**
OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **CAP (ENGINEERING CONTROL)**
ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20060925**

OPERATIONAL UNIT: **04**

CONTAMINATION: **SOLID WASTE**

CONTROL: **CONSOLIDATE (ENGINEERING CONTROL)**

ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20060925**

OPERATIONAL UNIT: **04**

CONTAMINATION: **SOLID WASTE**

CONTROL: **LEACHATE CONTROL (ENGINEERING CONTROL)**

ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20060925**

OPERATIONAL UNIT: **04**

CONTAMINATION: **SOLID WASTE**

CONTROL: **SURFACE DRAINAGE CONTROL (ENGINEERING CONTROL)**

ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20060925**

OPERATIONAL UNIT: **04**

CONTAMINATION: **GROUNDWATER**

CONTROL: **NON-FUNDAMENTAL CHANGE (ESD) (ENGINEERING CONTROL)**

ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20100429**

OPERATIONAL UNIT: **04**

CONTAMINATION: **SURFACE WATER**

CONTROL: **NON-FUNDAMENTAL CHANGE (ESD) (ENGINEERING CONTROL)**

ACTION: **ROD AMENDMENT**

COMPLETION DATE: **20100429**

OPERATIONAL UNIT: **03**

CONTAMINATION: **SOLID WASTE**

CONTROL: **INSTITUTIONAL CONTROLS, (N.O.S.) (INSTITUTIONAL CONTROL)**

ACTION: **RECORD OF DECISION**

COMPLETION DATE: **19910930**

OPERATIONAL UNIT: **04**

CONTAMINATION: **GROUNDWATER**

CONTROL: **COVENANT (INSTITUTIONAL CONTROL)**

ACTION: **RECORD OF DECISION**

COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**

CONTAMINATION: **GROUNDWATER**

CONTROL: **GROUNDWATER USE/WELL DRILLING REGULATION (INSTITUTIONAL CONTROL)**

ACTION: **RECORD OF DECISION**

COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**

CONTAMINATION: **GROUNDWATER**

CONTROL: **NOTICE IN NEWSPAPER (INSTITUTIONAL CONTROL)**

ACTION: **RECORD OF DECISION**

COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **GROUNDWATER**
CONTROL: **NOTICES TO STATE REGULATORS BEFORE CHANGES IN LAND USE (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **COVENANT (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **NOTICE IN NEWSPAPER (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **NOTICES TO STATE REGULATORS BEFORE CHANGES IN LAND OWNERSHIP (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SEDIMENT**
CONTROL: **ZONING REGULATION (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **COVENANT (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SOLID WASTE**
CONTROL: **ZONING REGULATION (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **COVENANT (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **NOTICE IN NEWSPAPER (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**

Federal Engineering Institutional Control Sites (EC)

CONTAMINATION: **SURFACE WATER**
CONTROL: **NOTICES TO STATE REGULATORS BEFORE CHANGES IN LAND USE (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

OPERATIONAL UNIT: **04**
CONTAMINATION: **SURFACE WATER**
CONTROL: **ZONING REGULATION (INSTITUTIONAL CONTROL)**
ACTION: **RECORD OF DECISION**
COMPLETION DATE: **20040929**

Back to Report Summary of Unlocatable Sites

Resource Conservation & Recovery Act - Non-Generator Facilities (RCRANGR08)

FACILITY INFORMATION

EPA ID#: **COR000005058*NG**

NAME:

ADDRESS:

,

CONTACT NAME:

CONTACT ADDRESS:

,

CONTACT PHONE:

NON-NOTIFIER:

DATE RECEIVED BY AGENCY:

OWNER TYPE: **NOT REPORTED**

OWNER NAME:

OPERATOR TYPE: **NOT REPORTED**

OPERATOR NAME:

CERTIFICATION **- NO CERTIFICATION REPORTED -**

INDUSTRY CLASSIFICATION (NAICS) **- NO NAICS INFORMATION REPORTED -**

ACTIVITY INFORMATION

GENERATOR STATUS:

SUBJECT TO CORRECTIVE ACTION UNIVERSE: **UNKNOWN**

TDSFs POTENTIALLY SUBJECT TO CORRECTIVE ACTION UNDER 3004 (u)/(v) UNIVERSE: **UNKNOWN**

TDSFs ONLY SUBJECT TO CORRECTIVE ACTION UNDER DISCRETIONARY AUTHORITIES UNIVERSE: **UNKNOWN**

NON TSDFs WHERE RCRA CORRECTIVE ACTION HAS BEEN IMPOSED UNIVERSE:

CORRECTIVE ACTION WORKLOAD UNIVERSE: **UNKNOWN**

IMPORTER: **NOT REPORTED**

MIXED WASTE GENERATOR: **NOT REPORTED**

RECYCLER: **NOT REPORTED**

TRANSPORTER: **NOT REPORTED**

ONSITE BURNER EXEMPTION: **NOT REPORTED**

FURNACE EXEMPTION: **NOT REPORTED**

USED OIL REFINER: **NOT REPORTED**

USED OIL TRANSFER FACILITY: **NOT REPORTED**

UNDERGROUND INJECTION: **NOT REPORTED**

UNIVERSAL WASTE DESTINATION FACILITY: **NOT REPORTED**

TRANSFER FACILITY: **NOT REPORTED**

USED OIL FUEL BURNER: **NOT REPORTED**

USED OIL PROCESSOR: **NOT REPORTED**

USED OIL FUEL MARKETER TO BURNER: **NOT REPORTED**

SPECIFICATION USED OIL MARKETER: **NOT REPORTED**

USED OIL TRANSPORTER: **NOT REPORTED**

COMPLIANCE, MONITORING AND ENFORCEMENT INFORMATION

EVALUATIONS **- NO EVALUATIONS REPORTED -**

VIOLATIONS **- NO VIOLATIONS REPORTED -**

ENFORCEMENTS **- NO ENFORCEMENTS REPORTED -**

HAZARDOUS WASTE

- NO HAZARDOUS WASTE INFORMATION REPORTED -

UNIVERSAL WASTE **- NO UNIVERSAL WASTE REPORTED -**

CORRECTIVE ACTION AREA **- NO CORECTIVE ACTION AREA INFORMATION REPORTED -**

CORRECTIVE ACTION EVENT **- NO CORECTIVE ACTION EVENT REPORTED -**

Back to Report Summary of Unlocatable Sites

Environmental Records Definitions - FEDERAL

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 03/04/13

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.

EC Federal Engineering Institutional Control Sites

VERSION DATE: 04/01/13

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. 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.

ERNSCO Emergency Response Notification System

VERSION DATE: 12/31/12

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.

HISTPST Historical Gas Stations

VERSION DATE: 07/01/30

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.

HMIRSR08 Hazardous Materials Incident Reporting System

VERSION DATE: 07/08/13

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.

LUCIS Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

NLRRCRAG No Longer Regulated RCRA Generator Facilities

VERSION DATE: 06/18/13

This database includes RCRA Generator 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 generated hazardous waste.
Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.
Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.
Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRAGR08 Resource Conservation & Recovery Act - Generator Facilities

VERSION DATE: 06/18/13

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act

(RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.
Large Quantity Generators: Generate 1,000 kg or more of hazardous waste during any calendar month; or Generate more than 1 kg of acutely hazardous waste during any calendar month; or Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.
Small Quantity Generators: Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.
Conditionally Exempt Small Quantity Generators: Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

RCRANGR08 Resource Conservation & Recovery Act - Non-Generator Facilities

VERSION DATE: 06/18/13

This database identifies RCRAInfo system sites that only handle hazardous waste without generating any amount hazardous waste. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). This database includes sites located in EPA Region 8. This region includes the following states: Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

RCRASC RCRA Sites with Controls

VERSION DATE: 06/25/12

This list of Resource Conservation and Recovery Act sites with institutional controls in place is provided by the U.S. Environmental Protection Agency.

Environmental Records Definitions - FEDERAL

TRI Toxics Release Inventory

VERSION DATE: 12/31/11

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 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.

BF Brownfields Management System

VERSION DATE: 07/03/13

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.

CERCLIS Comprehensive Environmental Response, Compensation & Liability Information System

VERSION DATE: 04/26/13

CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This United States Environmental Protection Agency database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.

NFRAP No Further Remedial Action Planned Sites

VERSION DATE: 04/26/13

This database includes sites which have been determined by the United States Environmental Protection Agency, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 06/18/13

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.

Environmental Records Definitions - FEDERAL

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 - Treatment, Storage & Disposal Facilities

VERSION DATE: 06/18/13

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

DNPL Delisted National Priorities List

VERSION DATE: 04/26/13

This database includes sites from the United States Environmental Protection Agency’s Final National Priorties 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.

NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 06/18/13

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.

NPL National Priorities List

VERSION DATE: 04/26/13

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: 04/26/13

Environmental Records Definitions - FEDERAL

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: 06/18/13

This database includes hazardous waste sites listed with corrective action activity in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The United States Environmental Protection Agency defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

RODS Record of Decision System

VERSION DATE: 07/01/13

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.

Environmental Records Definitions - STATE (CO)

AST Aboveground Storage Tank Facilities

VERSION DATE: 07/09/13

The Oil and Public Safety Division of the Colorado Department of Labor and Employment maintains this list of aboveground storage tank facilities.

CDL Clandestine Drug Laboratory Locations

VERSION DATE: 12/31/10

The North Metro Task Force provides this list of Methamphetamine labs seized between 2001 and 2010. The North Metro area includes the following Cities and Counties of Colorado: Adams County, Broomfield, Brighton, Commerce City, Federal Heights, Northglenn, Thornton, and Westminster. According to Section 2 of Colorado Revised Statutes: "25-18.5-103. Discovery of an illegal drug laboratory - property owner - clean-up - liability. (1) (a) Upon notification from a peace officer that chemicals, equipment, or supplies indicative of an illegal drug laboratory are located on a property, or when an illegal drug laboratory used to manufacture methamphetamine is otherwise discovered and the property owner has received notice, the owner of any contaminated property shall meet the cleanup standards for property established by the board in section 25-18.5-102".

COVENANTS Environmental Real Covenants List

VERSION DATE: 04/01/13

Senate Bill 01-145 gave authority to the Colorado Department of Public Health and Environment to approve requests to restrict the future use of a property using an enforceable agreement called an environmental covenant. These covenants, which are recorded with the deed and run with the land, provide a mechanism to ensure that institutional controls that are part of environmental remediation projects are properly implemented and that engineered structures are protected and maintained, so that implemented remedies continue to be protective of human health and the environment for as long as any residual contamination remains a risk.

HWSG Hazardous Waste Sites- Generator

VERSION DATE: 06/30/03

The Resource Conservation and Recovery Act (RCRA) was enacted by congress in 1976, followed by the promulgation of implementing regulations in 1980. In 1984, the State was authorized by EPA to implement the RCRA program in Colorado on their behalf. This facility listing includes RCRA sites listed as generators of hazardous waste (Small Quantity Generators and Large Quantity Generators) and was provided by the Colorado Department of Public Health and Environment.
Small Quantity Generators (SQG) generate, in any calendar month, more than 100 kg (220 lbs.) but less than 1,000 kg (2,200 lbs.) of RCRA hazardous waste; and generate, in any calendar month, or accumulate at any time, no more than 1 kg (2.2 lbs.) of acute hazardous waste and no more than 100 kg (220 lbs.) of material from the cleanup of a spill of acute hazardous waste; and accumulate on-site no more than 6000 kg (13,200 lbs) of hazardous waste at any one time; or, the site is a Small Quantity Generator if the site met all other criteria for a Conditionally Exempt Small Quantity Generator, but accumulated, at any time, more than 1,000 kg (2,200 lbs.) of RCRA hazardous waste.

Large Quantity Generators (LQG) generate, in any calendar month, 1,000 kg (2,200 lbs.) or more of RCRA hazardous waste; or generate, in any calendar month, or accumulated at any time, more than 1 kg (2.2 lbs.) of RCRA acute hazardous waste; or generate, in any calendar month, or accumulated at any time, more than 100 kg (220 lbs.) of spill cleanup material contaminated with RCRA acute hazardous waste.

SPILLS Spills Listing

VERSION DATE: 07/15/13

The Colorado Department of Public Health and Environment's Division of Emergency Preparedness and Response maintains this listing of chemical spills and/or releases.

UST Underground Storage Tank Facilities

VERSION DATE: 07/09/13

The Oil and Public Safety Division of the Colorado Department of Labor and Employment maintains this list of underground storage tank facilities.

HISTSWLF Historical Solid Waste Landfills

VERSION DATE: NR

This historical solid waste landfills database contains data from the Hazardous Materials Waste Management Division (HMWMD) of the Colorado Department of Public Health and other various state and local agencies. In the early 1980s, the HMWMD conducted a survey of staff members and local agencies to compile this listing of sites that were known or thought to have waste issues. This Solid Waste Historical Data is not considered complete or verifiable and has not been maintained since the late 1980s. The HMWMD is not responsible and shall not be liable to the used for damages of any kind arising out of the use of this data or information.

HWSTSD Hazardous Waste Sites- Treatment, Storage & Disposal

VERSION DATE: 06/30/03

The Resource Conservation and Recovery Act (RCRA) was enacted by congress in 1976, followed by the promulgation of implementing regulations in 1980. In 1984, the State was authorized by EPA to implement the RCRA program in Colorado on their behalf. TSD facilities treat, store, dispose, or recycle hazardous waste on site in units and therefore are subject to RCRA permitting requirements. Historic TSDs are facilities that have completed closure and/or post-closure of the RCRA Subtitle C Regulated Unit(s) or the Treatment/Storage/Disposal Unit is no longer regulated. This database was provided by the Colorado Department of Public Health and Environment.

LST Leaking Storage Tank Facilities

VERSION DATE: 07/09/13

The Oil and Public Safety Division of the Colorado Department of Labor and Employment maintains this list of

leaking aboveground and underground storage tank facilities.

LUSTTRUST Leaking Underground Storage Tanks Trust Fund Sites

VERSION DATE: 01/01/00

Suspected tank leaks have been discovered at the sites included in this database, but the facility responsible for the leak has not been identified. The state's investigtion and search for responsible parties is paid for out of the state's Leaking Underground Storage Tank (LUST) Trust Fund. This database was provided by the Colorado Department of Labor & Employment, Division of Oil and Public Safety, State Fund Section and is no longer updated.

METHANESITES Methane Gas Study Sites

VERSION DATE: 01/01/81

This Investigation of Methane Gas Hazards report was prepared by the Denver Office of Emergency Preparedness in 1981. The purpose of this study was to assess the actual and potential generation, migration, explosive and related problems associated with specified landfills, and to identify existing and potential problems, suggested strategies to prevent, abate, and control such problems and recommend investigative and monitoring functions as may be deemed necessary. The Colorado Department of Health selected eight landfills as priorities due to population density and potential hazards to population and property.

SWF Solid Waste Facilities

VERSION DATE: 12/31/12

The Colorado Department of Public Health and Environment maintains this database of active solid waste disposal facilities, transfer stations, recyclers, waste tire registrants, and waste grease registrants.

VCRA Voluntary Cleanup and Redevelopment Program Sites

VERSION DATE: 01/16/13

This site listing is provided by the Colorado Department of Public Health and Environment (CDPHE) and includes both voluntary cleanup and brownfield properties. The Voluntary Cleanup and Redevelopment program was created in 1994. The objective of the program is to facilitate the redevelopment and transfer of contaminated properties. Properties that sit untouched because of their real or perceived contamination can be rehabilitated using the CDPHE's Brownfields Program in conjunction with the Voluntary Cleanup Program. Cleanup decisions are based on existing standards and the proposed use of the property. The actual cleanup and verification is the owner's responsibility.

HWSCA Hazardous Waste Sites- Corrective Action

VERSION DATE: 06/30/03

The Resource Conservation and Recovery Act (RCRA) was enacted by congress in 1976, followed by the

promulgation of implementing regulations in 1980. In 1984, the Hazardous and Solid Waste Amendments (HSWA) were added to RCRA providing for corrective action at facilities subject to RCRA. That same year, the State was authorized by EPA to implement the RCRA program in Colorado on their behalf. Corrective action may be implemented as part of a RCRA Hazardous Waste Permit, an Order, or a Corrective Action Plan pursuant to the Colorado Hazardous Waste Regulations. Corrective action is the process by which regulated facilities investigate and remediate, as necessary, all contamination (soil, ground water, surface water, air) associated with their releases into the environment. Historic Corrective Action Sites are facilities that have completed the RCRA Subtitle C corrective Action process. This database was provided by the Colorado Department of Public Health and Environment.

SF Superfund Sites

VERSION DATE: 06/01/03

This listing contains active, deleted and proposed "Superfund" hazardous waste sites, as well as those sites identified through the Natural Resource Damages section of Superfund legislation and one Private Non-Superfund Cleanup site. A site qualifies for the National Priorities List (NPL or Superfund list) when the U.S. Environmental Protection Agency (EPA) determines there is a release or threatened release of hazardous substances that may endanger public health, welfare or the environment. In Colorado, the lead agency for Superfund remediation may be either the EPA or the Colorado Department of Public Health and Environment.

Environmental Records Definitions - TRIBAL

USTR08 Underground Storage Tanks On Tribal Lands

VERSION DATE: 02/01/13

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: 02/01/13

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: 01/01/00

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 B Resumes

Pinyon Environmental, Inc.

TALENT

Timothy R. Grenier
Environmental Engineer

AREAS OF EXPERTISE
Water Resources
Remediation
Phase II ESAs
Phase I ESAs
Lead Paint Surveys
Asbestos Surveys

EDUCATION
B.S., Environmental Engineering, University of Colorado at Boulder

CERTIFICATIONS
Lead-Based Paint Inspector/Risk Assessor, No. 17667, Colorado

Certified Asbestos Building Inspector, No. 18029, Colorado

40 Hour OSHA HAZWOPER, 8-hour refresher

PROFESSIONAL EXPERIENCE

Mr. Grenier is an Engineer in Training with expertise in Environmental Site Assessments (ESAs) and Demolition/Renovation Asbestos Surveys. He has completed numerous Phase I/II/III ESAs throughout the Rocky Mountain Region for a variety of clients including car dealerships, car parts suppliers, banks, and various other commercial properties. Mr. Grenier has conducted many pre-demolition and renovation asbestos surveys on buildings ranging from abandoned warehouses, medical facilities, office buildings, and commercial properties.

RELEVANT EXPERIENCE

Remediation. Mr. Grenier provided technical oversight and confirmatory clearance sampling during the excavation of contaminated soils at multiple locations in the Denver metro area.

Asbestos Surveys. Mr. Grenier has conducted asbestos inspections throughout Colorado, Utah, and Wyoming. He played a lead role in a demolition asbestos survey of a 250,000 square foot office building, and helped complete a demolition survey of a medical facility that required over 2,700 samples.

Phase II ESAs. Mr. Grenier has completed multiple Phase II Environmental Site Assessments throughout the Rocky Mountain Region. His project responsibilities have included: installation of groundwater and soil vapor sampling wells; completion of field data forms; groundwater, soil, and soil vapor sampling; generating tables from laboratory analytical data in reader friendly format; and, generating reports for each of the survey locations, including conclusions and recommendations based on gathered information.

Phase I ESAs. Mr. Grenier has been the project manager for multiple Phase I Environmental Site Assessments. His projects consisted of correspondence with necessary parties, site reconnaissance, historic and regulatory records review, and report preparation.

Lead Paint Surveys. Mr. Grenier has completed comprehensive lead-based paint surveys for multiple projects. His experience includes inspections are 60 elementary schools in the Denver Public School system, and at 15 buildings at the Fort Douglas Army Reserve Center in Salt Lake City, Utah.

Water Resources. Mr. Grenier has coordinated a number of water resources projects. His experience includes watershed monitoring activities for one of the nation's largest volunteer based water quality monitoring organizations, and analysis of water samples for pH, dissolved oxygen, alkalinity, hardness, and total dissolved and suspended solids. Mr. Grenier has also conducted training of proper sampling and analysis techniques.

Pinyon Environmental, Inc.

TALENT

Lauren E. Evans, P.E.
President

PROFESSIONAL EXPERIENCE

Ms. Evans has 31 years of consulting experience, in contaminant assessment and remediation, regulatory compliance, and NEPA studies. She has served as project manager on all phases of these projects. With respect to contamination investigations, she has completed projects for real estate due diligence studies, and under RCRA, CERCLA, Brownfields, and Colorado voluntary clean-up programs.

Ms. Evans has been involved with more than 3,000 Phase I Environmental Site Assessments nationwide and overseen remediation of sites contaminated by releases of petroleum products, chlorinated solvents, and metals. She has been involved during Environmental Impact Statements and Environmental Assessments of highway, transit, rail, and aviation projects, and had collected data and evaluated impacts of numerous resource areas.

Ms. Evans has also provided quality assurance/quality control review of the documents during all stages of the projects. Ms. Evans has assisted legal counsel with the technical aspects of numerous cases, including PRP evaluation at CERLCA sites, and on those involving regulatory compliance, consultant negligence, asbestos in soil, and other contaminant issues. Finally, Ms. Evans is the founder and president of Pinyon Environmental, Inc.

RELEVANT EXPERIENCE

NEPA EIS. Ms. Evans has worked on NEPA studies for various types of transportation projects, including rail, transit, highway and aviation. On the FasTracks program in Colorado, she worked on EIS documents for three corridors and for the redevelopment of Denver Union Station, and on EAs or their local equivalents for four corridors and the commuter rail maintenance facility. On these projects, Ms. Evans had varying levels of responsibility, from project management through quality review of draft and final documents. She collected and analyzed data for numerous resource areas, including hazardous materials, water quality, farmlands, floodplains, land use, environmental justice, energy use, safety, and air quality. She prepared technical memos and sections of the EIS and EA documents. On other projects, Ms. Evans was involved in public outreach activities, scoping, and development of purpose and need.

NEPA Cat Ex. Ms. Evans has been involved in completing categorical exclusion documentation for more than 30 road and highway projects, with development of data and information, assessment of potential impacts, and quality assurance review of prepared documents. These projects have been located throughout Colorado and in the state of New York, and have involved intersection improvements, bridge replacements, trail development and other transportation enhancements.

AREAS OF EXPERTISE
VCUP Experience
Phase II ESAs
NEPA EIS
NEPA Cat Ex
Brownfields Experience

EDUCATION
B.S., Geological Engineering, Colorado School of Mines

PE LICENSES
Colorado, License #27007 (1990)
Nebraska, License #E-11779
New York, License #085662
Nevada, License #020415

REGISTRATIONS
OPS Registered Consultant Program, Colorado, Individual Number 5131

CERTIFICATIONS
First Aid and CPR

Engineering Expert Witness (ACEC), No. EEW23

8-Hour OSHA Supervisor

40 Hour OSHA HAZWOPER

MEMBERSHIPS
ACEC Colorado, Chair of the ACEC/CO Energy Committee (2012 - present)

ACEC Colorado, National Director (2010 - 2012)

ACEC National Planning Cabinet, 2010 - 2012

ACEC National Environment & Energy Committee (2003 - present)

ACEC/CO Environmental Committee (past Chairperson)

Past President American Council of Engineering Companies of Colorado (ACEC/CO) (President from 2008 - 2009)

VOLUNTEER INVOLVEMENT

Colorado Water Quality Control Commission, Secretary and Water Quality Commissioner, 2011 - present

Colorado Dry Cleaner Committee, 2009 - present

Colorado Hazardous Waste Commission (governor appointment); Served 2000 - 2007; Chairperson 2004 - 2007

Iliff Ridge HOA, Lakewood, Colorado, 2000-present: president

Denver CASA (Court Appointed Special Advocate), Denver, Colorado, 1999-2006: Child Advocate

Socially Conscious Coffee, Denver, Colorado, 2006-Present: Chairperson, Board of Directors

Brownfields Experience. Ms. Evans has acted as project manager on several Brownfields sites in Colorado, with previous uses ranging from industrial to commercial/retail, with a variety of chemicals of concern. On these projects she prepared and reviewed quality assurance project plans (QAPPs) and sampling and analysis plans (SAPs), and oversaw the investigations. She defined the sampling and analysis strategy for soil, water and vapor sampling, and developed standard operating procedures for the sampling techniques. These plans were reviewed and approved by the US EPA prior to field work commencement. Many of these projects also received an NFA from the Colorado voluntary cleanup program. Finally, she evaluated the data and wrote the final reports for submittal to the client and to the US EPA.

VCUP Experience. Ms. Evans has managed several projects completed in order to obtain a finding of no further action (NFA) under the Colorado Voluntary Cleanup Program (VCUP). The contaminants on these projects included petroleum products, chlorinated solvents, and metals. The properties had previously been used as auto repair facilities, waste water treatment plants, junk yards and dry cleaners, or were impacted by adjacent industrial facilities. Ms. Evans has completed the subsurface investigations, Phase I ESAs, and the VCUP applications. She has successfully obtained an NFA determination on all of the projects she has worked on.

Phase II ESAs. Ms. Evans has conducted numerous Phase II assessments for evaluating soil and groundwater contamination. These projects have involved volatile and semi-volatile organic compounds, pesticides and herbicides, metals, radioactive elements, and biological contaminants. She has completed all aspects of these projects from sampling plan design and implementation through report preparation and closure. Ms. Evans has employed numerous sampling technologies, including multi-port sampling wells and random sampling schemes.

PROJECT EXPERIENCE

FasTracks Ms. Evans provided Independent Technical Review and impact evaluation for the RTD FasTracks Gold Line and North Metro Corridor EISs, the Commuter Rail Maintenance Facility EA, and the US 36 EIS. She has provided internal review for the I-225 Corridor and the Southeast/Southwest Corridor extension projects. Ms. Evans was hazardous materials manager for the Gold Line project and has been involved with the Environmental Evaluation for the Northwest Rail project. She has also developed budgets and the project management plans. In addition, Ms. Evans prepared the Scoping Report, assisted staff member Scott Epstein with the Purpose and Need, and prepared technical memos on affected environments, including those for hazardous materials and water resources. Ms. Evans provided similar services on the draft Denver Union Station EIS.

Appendix C Photographic Log

Photo 1. View of Silver Spruce Mine in the background.

Photo 2. View of Argo Water Treatment Facility and Clear Creek.

Photo 3. View of Idaho Springs and I-70, looking northwest.

Photo 4. View of typical pole mounted transformers found throughout the project vicinity. No pole mounted transformers were found on the Site.

Photo 5. View of I-70 looking east from Idaho Springs.

Photo 6. View of I-70 looking west from Idaho Springs.

Photo 7. View of structure F-14-E, bridge carrying SH-103 over I-70. Bridge will be replaced during project activities.

Photo 8. View of two automotive fueling stations located adjacent to bridge structure F-14-E. The automotive fueling stations are not expected to impact project activities.

Photo 9. View of I-70 looking west.

Photo 10. View of the Rockford Mine. Notice the yellow and red discolorations on the slope of the canyon.

Photo 11. View of the Stanley Smelter Complex.	

Appendix D Glossary of Terms

ACBM	Asbestos Containing Building Material. Any surfacing, thermal systems insulation or miscellaneous material found in or on interior structural members which contains more than one percent asbestos.
ACGIH	American Conference of Governmental Industrial Hygienists
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos School Hazard Re-Authorization Act
AST	Above-ground Storage Tank
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act, commonly referred to as Superfund.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CORRACTS	RCRA Corrective Action Site
COT	Chain of Title
CWA	Clean Water Act
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
Hazardous Materials	Hazardous material means any substance, waste, or material determined by any state, federal or local governmental authority to be capable of posing a risk of injury to health, safety and property, including, but not limited to, all substances, wastes and materials designated, defined or listed as hazardous, extremely hazardous or toxic pursuant to the Clean Water Act, 33 USC Sec. 1251, et seq.; Resource Conservation and Recovery Act, 42 USC Sec. 6901 et. seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 USC Sec. 9601, et. seq.; the United States Department of Transportation Hazardous Material Table, 49 CFR Part 172; regulations of the Environmental Protection Agency, 40 CFR Part 302; or such substances, materials and wastes that are or become regulated under

	any applicable local, state or federal law, and including any asbestos, petroleum and any petroleum fractions, urea formaldehyde foam insulation, chlorofluorocarbons (CFCs), or polychlorinated biphenyls (PCBs).
Hazardous Substance	Defined by CERCLA. Includes substances designated for special consideration under the CAA, the CWA, or the TSCA, and any hazardous wastes defined under RCRA. EPA can designate additional substances as hazardous if they present substantial danger to health and the environment.
Hazardous Waste	Waste defined in RCRA, which, due to its quantity, concentration, or physical, chemical or infectious characteristics, may present a hazard to human health or the environment.
LBP	Lead-Based Paint
LQG	Large Quantity Generator. Refers to a generator who generates more than 1,000 kilograms of hazardous waste in a calendar month.
LUST	Leaking Underground Storage Tank
mg/Kg	milligram per kilogram
mg/L	milligram per liter
NESHAP	National Emission Standard for Hazardous Air Pollutants
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List (Superfund sites)
NVLAP	National Voluntary Laboratory Accreditation Program
OIS	Oil Inspection Section, Colorado Department of Labor and Employment
OTHERHW	Listed RCRA Facilities but do not fit into category of CORRACTS, TSDs, or Generators; includes Transporters, Non-Notifiers, former Generators, and others.
OSHA	Occupational Safety and Health Administration
PA/SI	Preliminary Assessment/Site Investigation (CERCLA study)
PCB	Polychlorinated biphenyl

PEL	Permissible Exposure Limit
PLM	Polarized Light Microscopy, a method of analyzing bulk samples for asbestos.
ppb	Parts-per-billion
ppm	Parts-per-million
RECs	Recognized Environmental Conditions
RCRA	Resource Conservation and Recovery Act
RCRA-Viol	RCRA facilities with a reported violation
RCRIS	Resource Conservation and Recovery Information System
RCRIS- TSDC	RCRA TSD facilities subject to corrective action
RFA	RCRA Facility Assessment (RCRA study).
RFI	RCRA Facility Investigation (RCRA study).
RI/FS	Remedial Investigation/Feasibility Study (CERCLA study).
SCL	State CERCLIS Equivalent Site
SDWA	Safe Drinking Water Act
SPILLS	State spills list and federal ERNS list.
SPL	State NPL Equivalent Site
SQG	Small Quantity Generator. Refers to a generator who generate between 100 and 1,000 kilograms of hazardous waste in a calendar month.
SWLF	Solid Waste Landfill
TRIS	Toxic Release Inventory System
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TSD	Treatment, Storage or Disposal (refers to RCRA facilities).
μg/Kg	microgram per kilogram
μg/L	microgram per liter

USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank
Viol/Enf	Violations/Enforcement Actions (RCRA)
VSQ	Very Small Quantity Generator. Refers to a generator who generates less than 100 kilograms of hazardous waste in a calendar month.

Appendix E Origins Laboratory Soil Analytical Report

ORIGINS LABORATORY, INC

September 24, 2013

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - I-70/Hwy 103 Project Number - [none]

Attached are you analytical results for I-70/Hwy 103 received by Origins Laboratory, Inc. September 17, 2013. This project is associated with Origins project number X309058-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

THE NELAC INSTITUTE

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YA-01 @ 13.5-18.5	X309058-01	Soil	August 28, 2013 0:31	09/17/2013 11:50
B-3 @ 14-18	X309058-02	Soil	September 3, 2013 23:05	09/17/2013 11:50
B-4 @ 10-15	X309058-03	Soil	September 4, 2013 23:00	09/17/2013 11:50
B-4 @ 25-30	X309058-04	Soil	September 4, 2013 23:00	09/17/2013 11:50

Origins Laboratory, Inc.

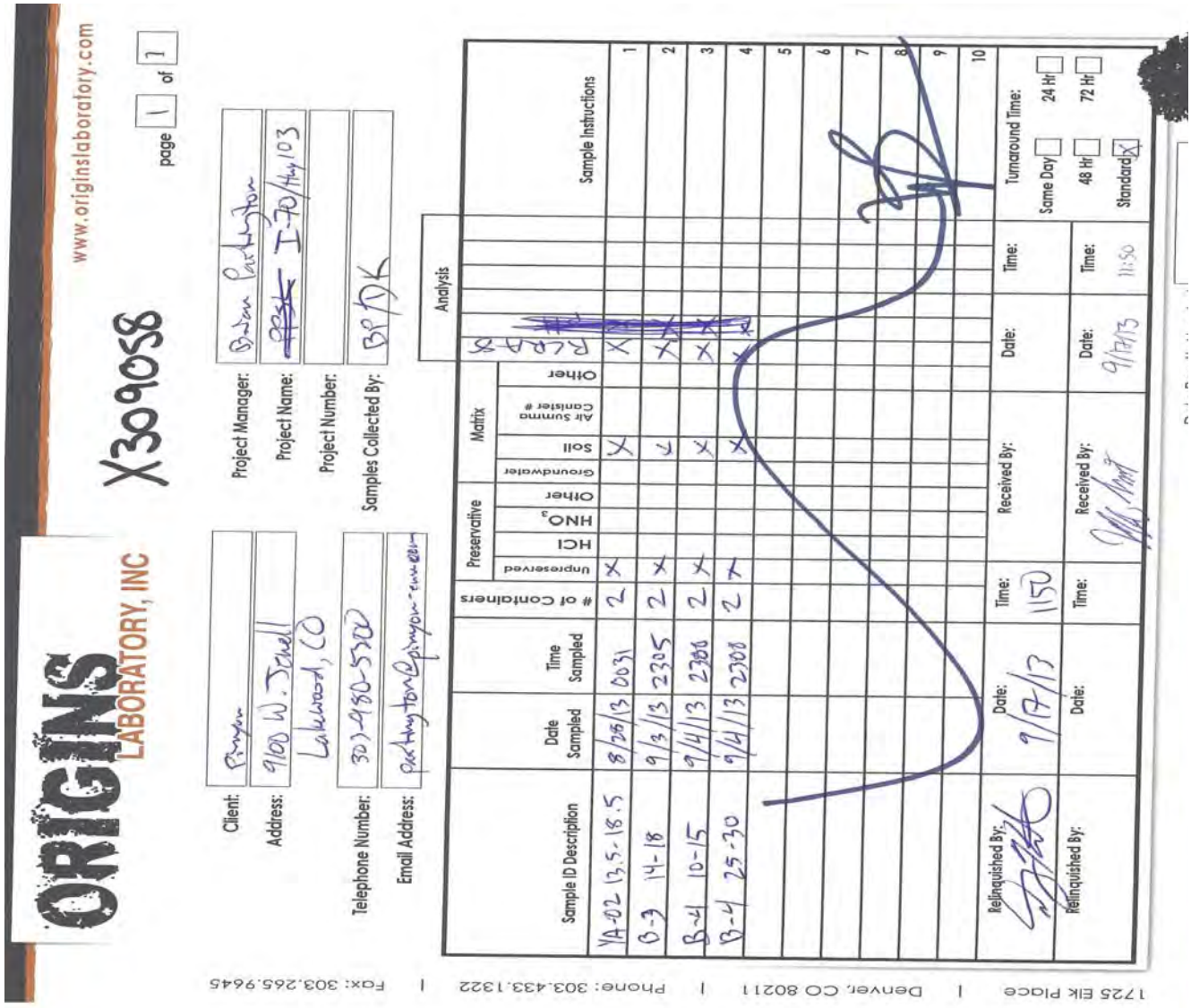
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X309058

Client: Pinyon
Client Project ID: I-70/Hwy 103

Checklist Completed by: Jose Santos
Date/time completed: 9/17/13 11:55

Shipped Via: H/D
Airbill #: NA (UPS, FedEx, Hand Delivered, Pick-up, etc.)

Matrix(s) Received: (Check all that apply): X Soil/Solid ____Water ____Other: ____

Cooler Number/Temperature: 1 /S3 °C ____/____ °C ____/____ °C ____/____ °C (Describe)

Thermometer ID: 7002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact[1]?	X			
Was adequate sample volume provided[1]?	X			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		X		
Is a chain-of-custody (COC) present and filled out completely[1]?	X			
Does the COC agree with the number and type of sample bottles received[1]?	X			
Do the sample IDs on the bottle labels match the COC[1]?	X			
Is the COC properly relinquished by the client with date and time recorded[1]?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			X	Soil
Are samples preserved that require preservation and was it checked [1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*			X	Soil
Additional Comments (if any):				

[1] *If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.*

Reviewed by: (Project Manager) 9-19-13 Date/Time Reviewed 1243

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

YA-01 @ 13.5-18.5
8/28/2013 12:31:00AM

GEL Laboratories, LLC

X309058-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Metals by SW846 3050B/6010C								
Arsenic	12.9	2.90	mg/kg dry	1	1332064	09/19/2013	09/20/2013	
Barium	166	0.484	"	"	"	"	"	
Cadmium	1.12	0.484	"	"	"	"	"	
Chromium	34.1	0.484	"	"	"	"	"	
Lead	99.9	0.968	"	"	"	"	"	
Selenium	ND	14.5	"	5	"	"	"	U
Silver	1.83	0.484	"	1	"	"	"	
Metals by SW846 7471A								
Mercury	0.0405	0.0129	mg/kg dry	1	1332280	"	09/20/2013	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

B-3 @ 14-18
9/3/2013 11:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

GEL Laboratories, LLC

X309058-02 (Soil)

Metals by SW846 3050B/6010C

Arsenic	ND	3.22	mg/kg dry	1	1332064	09/19/2013	09/20/2013	U
Barium	44.5	0.536	"	"	"	"	"	
Cadmium	0.351	0.536	"	"	"	"	"	J
Chromium	16.8	0.536	"	"	"	"	"	
Lead	11.1	1.07	"	"	"	"	"	
Selenium	ND	16.1	"	5	"	"	"	U
Silver	0.560	0.536	"	1	"	"	"	

Metals by SW846 7471A

Mercury	0.0112	0.0124	mg/kg dry	1	1332280	"	09/20/2013	J

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

B-4 @ 10-15
9/4/2013 11:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

GEL Laboratories, LLC

X309058-03 (Soil)

Metals by SW846 3050B/6010C

Arsenic	1.21	3.21	mg/kg dry	1	1332064	09/19/2013	09/20/2013	J
Barium	15.9	0.536	"	"	"	"	"	
Cadmium	0.159	0.536	"	"	"	"	"	J
Chromium	11.2	0.536	"	"	"	"	"	
Lead	9.95	1.07	"	"	"	"	"	
Selenium	ND	3.21	"	"	"	"	"	U
Silver	0.307	0.536	"	"	"	"	"	J

Metals by SW846 7471A

Mercury	0.0255	0.0131	mg/kg dry	1	1332280	"	09/20/2013	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

B-4 @ 25-30
9/4/2013 11:00:00PM

GEL Laboratories, LLC

X309058-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Metals by SW846 3050B/6010C								
Arsenic	3.96	3.30	mg/kg dry	1	1332064	09/19/2013	09/20/2013	
Barium	28.8	0.550	"	"	"	"	"	
Cadmium	0.294	0.550	"	"	"	"	"	J
Chromium	13.9	0.550	"	"	"	"	"	
Lead	10.8	1.10	"	"	"	"	"	
Selenium	ND	16.5	"	5	"	"	"	U
Silver	0.460	0.550	"	1	"	"	"	J
Metals by SW846 7471A								
Mercury	ND	0.0121	mg/kg dry	1	1332280	"	09/20/2013	U

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

Metals by SW846 3050B/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1332064 - SW846 3050B										
BLANK (1202950021-BLK)					Prepared: 09/19/2013 Analyzed: 09/20/2013					
Barium	ND	0.0986	mg/kg		0		-			U
Cadmium	ND	0.0986	"		0		-			U
Chromium	0.150	0.148	"		0		-			J
Lead	ND	0.325	"		0		-			U
Selenium	ND	0.493	"		0		-			U
Silver	ND	0.0986	"		0		-			U
Arsenic	ND	0.493	"		0		-			U
LCS (1202950022-BKS)					Prepared: 09/19/2013 Analyzed: 09/20/2013					
Silver	45.8	0.0896	mg/kg	44.8	0	102	80-120			
Arsenic	43.4	0.448	"	44.8	0	96.9	80-120			
Barium	45.1	0.0896	"	44.8	0	101	80-120			
Cadmium	46.4	0.0896	"	44.8	0	104	80-120			
Chromium	45.7	0.134	"	44.8	0	102	80-120			
Lead	45.9	0.296	"	44.8	0	103	80-120			
Selenium	48.3	0.448	"	44.8	0	108	80-120			
DUP (1202950023 D)		Source: X309058-01			Prepared: 09/19/2013 Analyzed: 09/20/2013					
Barium	156	0.0928	mg/kg dry		166		0-20	6.47	20	
Cadmium	0.836	0.0928	"		1.12		0-20	29.3	20	
Chromium	34.7	0.139	"		34.1		0-20	1.67	20	
Lead	72.3	0.306	"		99.9		0-20	32.1	20	
Selenium	ND	2.32	"		<2.32		0-20	39.9	20	U
Silver	2.04	0.0928	"		1.83		0-20	10.7	20	
Arsenic	10.2	0.464	"		12.9		0-20	23.5	20	
MS (1202950024 S)		Source: X309058-01			Prepared: 09/19/2013 Analyzed: 09/20/2013					

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

Metals by SW846 3050B/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1332064 - SW846 3050B										
MS (1202950024 S)		Source: X309058-01			Prepared: 09/19/2013 Analyzed: 09/20/2013					
Arsenic	56.2	0.517	mg/kg dry	51.7	12.9	83.7	75-125			
Barium	217	0.103	"	51.7	166	98.5	75-125			
Cadmium	49.6	0.103	"	51.7	1.12	93.8	75-125			
Chromium	84.3	0.155	"	51.7	34.1	97.1	75-125			
Lead	138	0.341	"	51.7	99.9	73.7	75-125			
Selenium	39.6	2.59	"	51.7	<2.59	76.6	75-125			
Silver	49.6	0.103	"	51.7	1.83	92.4	75-125			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

Metals by SW846 7471A - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1332280 - SW846 7471A Prep										
BLANK (1202950521-BLK)					Prepared: 09/19/2013 Analyzed: 09/20/2013					
Mercury	ND	0.00393	mg/kg		0		-			U
LCS (1202950522-BKS)					Prepared: 09/19/2013 Analyzed: 09/20/2013					
Mercury	0.117	0.00387	mg/kg	0.116	0	101	80-120			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: [none]
Project: I-70/Hwy 103

Notes and Definitions

U	Result not detected above the detection limit
J	Greater than the detection limit but less than the reporting limit
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Appendix F Origins Laboratory Water Analytical Report

ORIGINS LABORATORY, INC

October 21, 2013

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - I-70/US-40 at Empire Junction Project Number - 11319101

Attached are you analytical results for I-70/US-40 at Empire Junction received by Origins Laboratory, Inc. September 30, 2013. This project is associated with Origins project number X309172-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

THE NELAC INSTITUTE

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YA-B-5 (25)	X309172-01	Soil	September 26, 2013 23:30	09/30/2013 14:40
YA-B-5	X309172-02	Water	September 26, 2013 23:30	09/30/2013 14:40

Origins Laboratory, Inc.

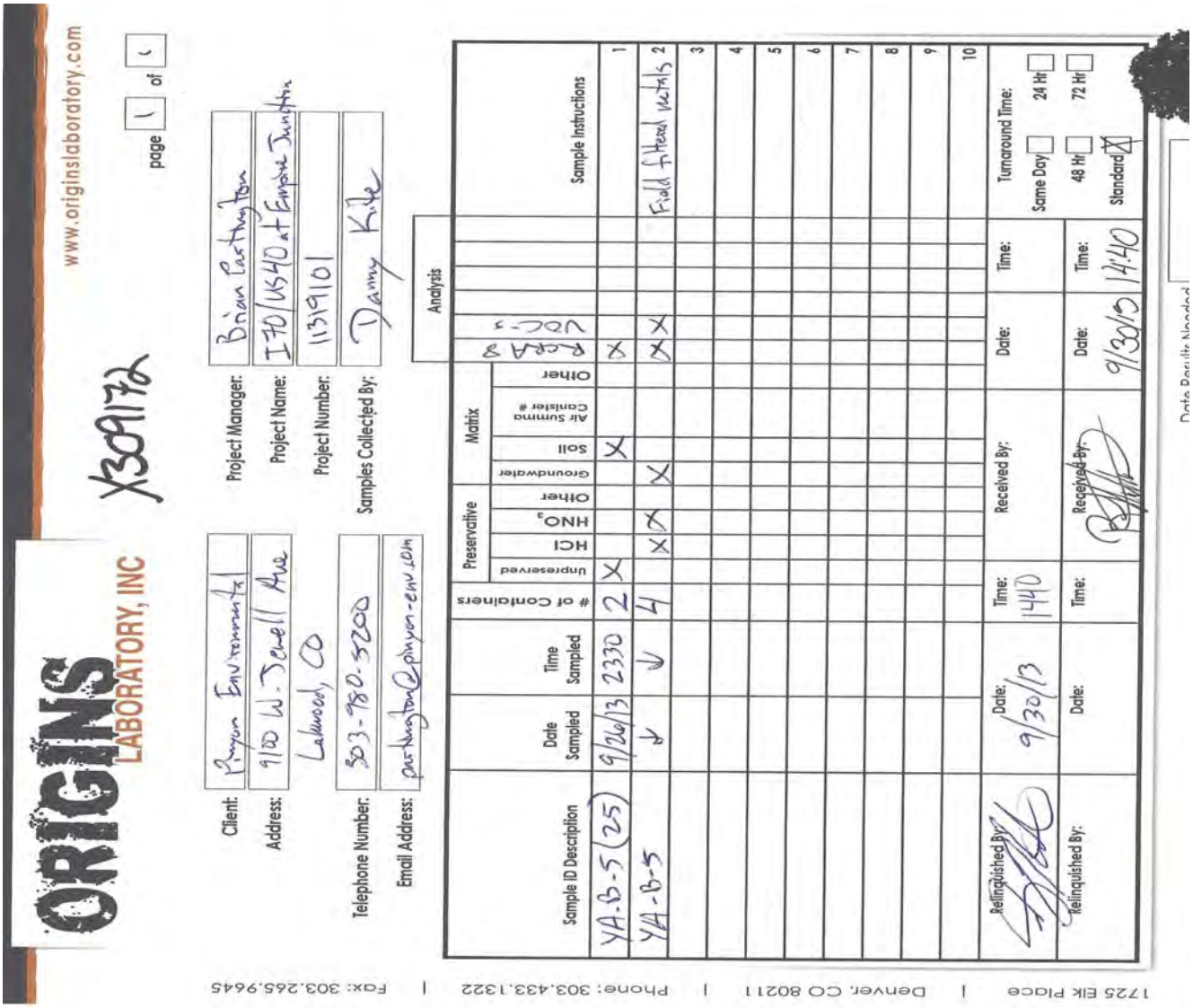
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X309178

Client: Pinyon
Client Project ID: I-70/US 40

Checklist Completed by: Jeff Smith
Shipped Via: H&D (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Date/time completed: 9/30/13 15:24
Airbill #: NA
Matrix(s) Received: (Check all that apply): X Soil/Solid X Water ____ Other: ____ (Describe)
Cooler Number/Temperature: ____/3.2°C ____/____°C ____/____°C ____/____°C
Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact[1]?	X			
Was adequate sample volume provided[1]?	X			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		X		
Is a chain-of-custody (COC) present and filled out completely[1]?	X			
Does the COC agree with the number and type of sample bottles received[1]?	X			
Do the sample IDs on the bottle labels match the COC[1]?	X			
Is the COC properly relinquished by the client with date and time recorded[1]?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**		X		
Are samples preserved that require preservation and was it checked[1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*	X			HCL, HNO3
Additional Comments (if any):				

[1] *If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.*

Reviewed by (Project Manager)

10-08-13 15:58
Date/Time Reviewed

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

YA-B-5 (25)
9/26/2013 11:30:00PM

GEL Laboratories, LLC
X309172-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Metals by SW846 3050B/6010C								
Arsenic	ND	3.26	mg/kg dry	1	1335304	10/02/2013	10/03/2013	U
Barium	76.4	0.543	"	"	"	"	"	
Cadmium	ND	0.543	"	"	"	"	"	U
Chromium	35.4	0.543	"	"	"	"	"	
Lead	11.2	1.09	"	"	"	"	"	
Selenium	ND	16.3	"	5	"	"	"	U
Silver	ND	0.543	"	1	"	"	"	U
Metals by SW846 7471A								
Mercury	ND	0.0143	mg/kg dry	1	1335525	"	10/03/2013	U
pH by SW9045C								
pH	7.34	0.100	SU	1	1340097		10/18/2013	H

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

YA-B-5
9/26/2013 11:30:00PM

Origins Laboratory, Inc.

X309172-02 (Water)

VOC by EPA 8260C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	3J02012	10/02/2013	10/03/2013	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

YA-B-5
9/26/2013 11:30:00PM

Origins Laboratory, Inc.

X309172-02 (Water)

VOC by EPA 8260C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
1,4-Dichlorobenzene	ND	1.0	ug/L	1	3J02012	10/02/2013	10/03/2013	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	
2-Butanone	ND	5.0	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	
2-Hexanone	ND	5.0	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	
4-Isopropyltoluene	ND	1.0	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.0	"	"	"	"	"	
Acetone	ND	8.0	"	"	"	"	"	
Benzene	ND	1.0	"	"	"	"	"	
Bromobenzene	ND	1.0	"	"	"	"	"	
Bromochloromethane	ND	1.0	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	
Carbon disulfide	ND	2.0	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

YA-B-5
9/26/2013 11:30:00PM

Origins Laboratory, Inc.

X309172-02 (Water)

VOC by EPA 8260C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Chloroform	3.94	1.0	ug/L	1	3J02012	10/02/2013	10/03/2013	
Chloromethane	ND	1.0	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	
Hexachlorobutadiene	ND	1.5	"	"	"	"	"	
Iodomethane	ND	2.0	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	
m,p-Xylene	ND	2.0	"	"	"	"	"	
Methylene Chloride	ND	5.0	"	"	"	"	"	
Methyl tert-Butyl Ether	ND	1.0	"	"	"	"	"	
Naphthalene	ND	10.0	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	
o-Xylene	ND	1.0	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

YA-B-5
9/26/2013 11:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Origins Laboratory, Inc.

X309172-02 (Water)

VOC by EPA 8260C

tert-Butylbenzene	ND	1.0	ug/L	1	3J02012	10/02/2013	10/03/2013	
Tetrachloroethene	ND	1.0	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*84-121*			"	"	"	
Surrogate: Toluene-d8	*105 %*	*85-115*			"	"	"	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*84-114*			"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Blank (3J02012-BLK1)							Prepared: 10/02/2013 Analyzed: 10/03/2013			
Isopropyl alcohol	ND	100	ug/L							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
2-Butanone	ND	5.0	"							
2-Chlorotoluene	ND	1.0	"							
2-Hexanone	ND	5.0	"							
4-Chlorotoluene	ND	1.0	"							

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Blank (3J02012-BLK1)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
4-Isopropyltoluene	ND	1.0	ug/L							
4-Methyl-2-pentanone	ND	5.0	"							
Acetone	ND	8.0	"							
Benzene	ND	1.0	"							
Bromobenzene	ND	1.0	"							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
Carbon disulfide	ND	2.0	"							
Carbon tetrachloride	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Hexachlorobutadiene	ND	1.5	"							
Iodomethane	ND	2.0	"							
Isopropylbenzene	ND	1.0	"							
m,p-Xylene	ND	2.0	"							
Methylene Chloride	17.8	5.0	"							O-01
Methyl tert-Butyl Ether	ND	1.0	"							

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Blank (3J02012-BLK1)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
Naphthalene	ND	10.0	ug/L							
n-Butylbenzene	ND	1.0	"							
n-Propylbenzene	ND	1.0	"							
o-Xylene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
Toluene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	*66*		"	*62.5*		*106*	*84-121*			
Surrogate: Toluene-d8	*65*		"	*62.5*		*104*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*60*		"	*62.5*		*96.3*	*84-114*			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
LCS (3J02012-BS1)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
1,1,1,2-Tetrachloroethane	44.9	1.0	ug/L	50.0		89.8	79-130			
1,1,1-Trichloroethane	56.4	1.0	"	50.0		113	79-122			
1,1,2,2-Tetrachloroethane	48.3	1.0	"	50.0		96.6	71-117			
1,1,2-Trichloroethane	52.2	1.0	"	50.0		104	77-115			
1,1-Dichloroethane	52.7	1.0	"	50.0		105	80-117			
1,1-Dichloroethene	57.1	1.0	"	50.0		114	73-127			
1,1-Dichloropropene	54.3	1.0	"	50.0		109	78-120			
1,2,3-Trichlorobenzene	40.1	5.0	"	50.0		80.1	66-130			
1,2,3-Trichloropropane	48.8	5.0	"	50.0		97.7	65-122			
1,2,4-Trichlorobenzene	44.6	1.0	"	50.0		89.3	73-123			
1,2,4-Trimethylbenzene	48.5	1.0	"	50.0		97.1	70-125			
1,2-Dibromo-3-chloropropane	43.4	5.0	"	50.0		86.8	73-116			
1,2-Dibromoethane (EDB)	46.2	1.0	"	50.0		92.3	78-125			
1,2-Dichlorobenzene	48.6	1.0	"	50.0		97.2	82-116			
1,2-Dichloroethane	54.7	1.0	"	50.0		109	72-119			
1,2-Dichloropropane	51.3	1.0	"	50.0		103	77-115			
1,3,5-Trimethylbenzene	55.4	1.0	"	50.0		111	71-130			
1,3-Dichlorobenzene	54.7	1.0	"	50.0		109	80-118			
1,3-Dichloropropane	44.8	1.0	"	50.0		89.6	78-120			
1,4-Dichlorobenzene	49.4	1.0	"	50.0		98.9	78-117			
2,2-Dichloropropane	56.4	1.0	"	50.0		113	76-128			
2-Butanone	244	5.0	"	250		97.5	66-122			
2-Chlorotoluene	49.7	1.0	"	50.0		99.5	70-130			
2-Hexanone	219	5.0	"	250		87.6	72-118			
4-Chlorotoluene	50.0	1.0	"	50.0		99.9	72-120			
4-Isopropyltoluene	57.6	1.0	"	50.0		115	74-126			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
LCS (3J02012-BS1)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
4-Methyl-2-pentanone	256	5.0	ug/L	250		103	61-120			
Acetone	267	8.0	"	250		107	68-124			
Benzene	50.6	1.0	"	50.0		101	74-130			
Bromobenzene	48.8	1.0	"	50.0		97.7	70-130			
Bromochloromethane	51.8	1.0	"	50.0		104	79-115			
Bromodichloromethane	55.6	1.0	"	50.0		111	73-123			
Bromoform	47.0	1.0	"	50.0		93.9	75-128			
Bromomethane	61.9	1.0	"	50.0		124	72-138			
Carbon disulfide	290	2.0	"	250		116	69-129			
Carbon tetrachloride	56.6	1.0	"	50.0		113	80-124			
Chlorobenzene	46.0	1.0	"	50.0		92.0	78-121			
Chloroethane	58.6	1.0	"	50.0		117	77-138			
Chloroform	51.4	1.0	"	50.0		103	75-117			
Chloromethane	54.3	1.0	"	50.0		109	72-130			
cis-1,2-Dichloroethene	53.2	1.0	"	50.0		106	78-118			
cis-1,3-Dichloropropene	52.8	1.0	"	50.0		106	73-122			
Dibromochloromethane	55.5	1.0	"	50.0		111	78-119			
Dibromomethane	51.9	1.0	"	50.0		104	79-116			
Ethylbenzene	50.1	1.0	"	50.0		100	78-130			
Hexachlorobutadiene	48.4	1.5	"	50.0		96.9	72-129			
Iodomethane	290	2.0	"	250		116	74-121			
Isopropylbenzene	50.2	1.0	"	50.0		100	75-128			
m,p-Xylene	102	2.0	"	100		102	75-134			
Methylene Chloride	72.8	5.0	"	50.0		146	84-122			O-01
Methyl tert-Butyl Ether	53.0	1.0	"	50.0		106	72-125			
Naphthalene	41.3	10.0	"	50.0		82.5	65-128			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
LCS (3J02012-BS1)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
n-Butylbenzene	50.6	1.0	ug/L	50.0		101	69-134			
n-Propylbenzene	56.4	1.0	"	50.0		113	74-132			
o-Xylene	50.7	1.0	"	50.0		101	76-129			
sec-Butylbenzene	55.7	1.0	"	50.0		111	74-128			
Styrene	51.2	1.0	"	50.0		102	74-126			
tert-Butylbenzene	49.2	1.0	"	50.0		98.5	72-123			
Tetrachloroethene	47.1	1.0	"	50.0		94.2	78-132			
Toluene	52.2	1.0	"	50.0		104	76-128			
trans-1,2-Dichloroethene	54.9	1.0	"	50.0		110	79-120			
trans-1,3-Dichloropropene	54.4	1.0	"	50.0		109	74-122			
Trichloroethene	52.2	1.0	"	50.0		104	76-125			
Trichlorofluoromethane	61.7	1.0	"	50.0		123	66-149			
Vinyl chloride	56.0	1.0	"	50.0		112	70-137			
Surrogate: 1,2-Dichloroethane-d4	*69*		"	*62.5*		*111*	*84-121*			
Surrogate: Toluene-d8	*66*		"	*62.5*		*106*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*57*		"	*62.5*		*91.6*	*84-114*			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike (3J02012-MS1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
1,1,1,2-Tetrachloroethane	46.8	1.0	ug/L	50.0	ND	93.7	82-130			
1,1,1-Trichloroethane	56.0	1.0	"	50.0	ND	112	81-125			
1,1,2,2-Tetrachloroethane	48.4	1.0	"	50.0	ND	96.8	74-120			
1,1,2-Trichloroethane	50.3	1.0	"	50.0	ND	101	80-118			
1,1-Dichloroethane	53.6	1.0	"	50.0	ND	107	79-120			
1,1-Dichloroethene	57.5	1.0	"	50.0	ND	115	73-130			
1,1-Dichloropropene	53.0	1.0	"	50.0	ND	106	77-124			
1,2,3-Trichlorobenzene	40.1	5.0	"	50.0	ND	80.3	55-144			
1,2,3-Trichloropropane	49.2	5.0	"	50.0	ND	98.4	67-126			
1,2,4-Trichlorobenzene	42.9	1.0	"	50.0	ND	85.8	56-141			
1,2,4-Trimethylbenzene	49.6	1.0	"	50.0	ND	99.3	62-132			
1,2-Dibromo-3-chloropropane	43.2	5.0	"	50.0	ND	86.5	56-142			
1,2-Dibromoethane (EDB)	47.8	1.0	"	50.0	ND	95.5	84-124			
1,2-Dichlorobenzene	47.6	1.0	"	50.0	ND	95.3	74-124			
1,2-Dichloroethane	52.9	1.0	"	50.0	ND	106	76-120			
1,2-Dichloropropane	51.2	1.0	"	50.0	ND	102	78-117			
1,3,5-Trimethylbenzene	54.6	1.0	"	50.0	ND	109	64-138			
1,3-Dichlorobenzene	54.4	1.0	"	50.0	ND	109	73-126			
1,3-Dichloropropane	45.9	1.0	"	50.0	ND	91.8	83-120			
1,4-Dichlorobenzene	48.9	1.0	"	50.0	ND	97.8	64-130			
2,2-Dichloropropane	54.8	1.0	"	50.0	ND	110	77-129			
2-Butanone	232	5.0	"	250	2.2	91.8	66-128			
2-Chlorotoluene	50.5	1.0	"	50.0	ND	101	71-130			
2-Hexanone	222	5.0	"	250	0.6	88.5	74-123			
4-Chlorotoluene	50.2	1.0	"	50.0	ND	100	66-128			
4-Isopropyltoluene	57.2	1.0	"	50.0	ND	114	60-140			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike (3J02012-MS1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
4-Methyl-2-pentanone	252	5.0	ug/L	250	1.5	100	65-125			
Acetone	257	8.0	"	250	12.8	97.7	63-134			
Benzene	52.5	1.0	"	50.0	ND	105	74-130			
Bromobenzene	50.5	1.0	"	50.0	ND	101	70-130			
Bromochloromethane	51.2	1.0	"	50.0	ND	102	80-118			
Bromodichloromethane	54.6	1.0	"	50.0	0.2	109	76-122			
Bromoform	48.9	1.0	"	50.0	ND	97.8	80-128			
Bromomethane	65.4	1.0	"	50.0	ND	131	69-144			
Carbon disulfide	297	2.0	"	250	ND	119	70-131			
Carbon tetrachloride	55.3	1.0	"	50.0	ND	111	81-130			
Chlorobenzene	47.6	1.0	"	50.0	ND	95.2	72-128			
Chloroethane	61.6	1.0	"	50.0	ND	123	79-140			
Chloroform	51.5	1.0	"	50.0	1.2	100	76-118			
Chloromethane	57.3	1.0	"	50.0	ND	115	72-128			
cis-1,2-Dichloroethene	52.5	1.0	"	50.0	ND	105	78-120			
cis-1,3-Dichloropropene	52.2	1.0	"	50.0	ND	104	79-120			
Dibromochloromethane	54.2	1.0	"	50.0	ND	108	81-121			
Dibromomethane	50.8	1.0	"	50.0	ND	102	84-115			
Ethylbenzene	53.0	1.0	"	50.0	ND	106	76-132			
Hexachlorobutadiene	46.9	1.5	"	50.0	ND	93.8	70-130			
Iodomethane	295	2.0	"	250	ND	118	72-127			
Isopropylbenzene	51.9	1.0	"	50.0	ND	104	66-135			
m,p-Xylene	106	2.0	"	100	ND	106	69-139			
Methylene Chloride	53.8	5.0	"	50.0	ND	108	87-118			
Methyl tert-Butyl Ether	51.4	1.0	"	50.0	ND	103	62-138			
Naphthalene	39.9	10.0	"	50.0	0.2	79.4	59-148			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike (3J02012-MS1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
n-Butylbenzene	49.5	1.0	ug/L	50.0	ND	98.9	52-146			
n-Propylbenzene	57.2	1.0	"	50.0	ND	114	66-141			
o-Xylene	51.8	1.0	"	50.0	ND	104	74-131			
sec-Butylbenzene	55.4	1.0	"	50.0	ND	111	63-138			
Styrene	52.5	1.0	"	50.0	ND	105	72-128			
tert-Butylbenzene	49.8	1.0	"	50.0	ND	99.5	67-129			
Tetrachloroethene	48.8	1.0	"	50.0	ND	97.6	76-134			
Toluene	52.2	1.0	"	50.0	0.3	104	73-131			
trans-1,2-Dichloroethene	54.1	1.0	"	50.0	ND	108	78-123			
trans-1,3-Dichloropropene	52.7	1.0	"	50.0	ND	105	75-125			
Trichloroethene	52.4	1.0	"	50.0	ND	105	73-131			
Trichlorofluoromethane	62.4	1.0	"	50.0	ND	125	83-141			
Vinyl chloride	59.6	1.0	"	50.0	ND	119	73-139			
Surrogate: 1,2-Dichloroethane-d4	*67*		"	*62.5*		*108*	*84-121*			
Surrogate: Toluene-d8	*66*		"	*62.5*		*106*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*59*		"	*62.5*		*94.5*	*84-114*			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike Dup (3J02012-MSD1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
1,1,1,2-Tetrachloroethane	46.4	1.0	ug/L	50.0	ND	92.9	82-130	0.858	20	
1,1,1-Trichloroethane	55.0	1.0	"	50.0	ND	110	81-125	1.80	20	
1,1,2,2-Tetrachloroethane	47.6	1.0	"	50.0	ND	95.2	74-120	1.69	20	
1,1,2-Trichloroethane	51.1	1.0	"	50.0	ND	102	80-118	1.66	20	
1,1-Dichloroethane	53.1	1.0	"	50.0	ND	106	79-120	0.900	20	
1,1-Dichloroethene	56.8	1.0	"	50.0	ND	114	73-130	1.17	20	
1,1-Dichloropropene	52.8	1.0	"	50.0	ND	106	77-124	0.492	20	
1,2,3-Trichlorobenzene	41.5	5.0	"	50.0	ND	83.1	55-144	3.40	20	
1,2,3-Trichloropropane	47.8	5.0	"	50.0	ND	95.5	67-126	2.95	20	
1,2,4-Trichlorobenzene	43.6	1.0	"	50.0	ND	87.2	56-141	1.64	20	
1,2,4-Trimethylbenzene	48.9	1.0	"	50.0	ND	97.8	62-132	1.54	20	
1,2-Dibromo-3-chloropropane	42.0	5.0	"	50.0	ND	84.1	56-142	2.84	20	
1,2-Dibromoethane (EDB)	49.1	1.0	"	50.0	ND	98.2	84-124	2.73	20	
1,2-Dichlorobenzene	47.9	1.0	"	50.0	ND	95.8	74-124	0.502	20	
1,2-Dichloroethane	51.9	1.0	"	50.0	ND	104	76-120	1.95	20	
1,2-Dichloropropane	51.2	1.0	"	50.0	ND	102	78-117	0.0781	20	
1,3,5-Trimethylbenzene	54.0	1.0	"	50.0	ND	108	64-138	1.07	20	
1,3-Dichlorobenzene	53.6	1.0	"	50.0	ND	107	73-126	1.63	20	
1,3-Dichloropropane	46.4	1.0	"	50.0	ND	92.8	83-120	1.17	20	
1,4-Dichlorobenzene	48.7	1.0	"	50.0	ND	97.4	64-130	0.410	20	
2,2-Dichloropropane	53.7	1.0	"	50.0	ND	107	77-129	2.19	20	
2-Butanone	231	5.0	"	250	2.2	91.6	66-128	0.203	20	
2-Chlorotoluene	50.8	1.0	"	50.0	ND	102	71-130	0.553	20	
2-Hexanone	221	5.0	"	250	0.6	88.2	74-123	0.325	20	
4-Chlorotoluene	50.5	1.0	"	50.0	ND	101	66-128	0.656	20	
4-Isopropyltoluene	56.5	1.0	"	50.0	ND	113	60-140	1.25	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike Dup (3J02012-MSD1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
4-Methyl-2-pentanone	253	5.0	ug/L	250	1.5	100	65-125	0.0475	20	
Acetone	253	8.0	"	250	12.8	96.2	63-134	1.45	20	
Benzene	52.2	1.0	"	50.0	ND	104	74-130	0.535	20	
Bromobenzene	50.0	1.0	"	50.0	ND	99.9	70-130	1.08	20	
Bromochloromethane	50.8	1.0	"	50.0	ND	102	80-118	0.961	20	
Bromodichloromethane	54.3	1.0	"	50.0	0.2	108	76-122	0.496	20	
Bromoform	46.8	1.0	"	50.0	ND	93.5	80-128	4.52	20	
Bromomethane	63.6	1.0	"	50.0	ND	127	69-144	2.85	20	
Carbon disulfide	293	2.0	"	250	ND	117	70-131	1.19	20	
Carbon tetrachloride	54.0	1.0	"	50.0	ND	108	81-130	2.45	20	
Chlorobenzene	48.2	1.0	"	50.0	ND	96.3	72-128	1.15	20	
Chloroethane	61.2	1.0	"	50.0	ND	122	79-140	0.635	20	
Chloroform	51.4	1.0	"	50.0	1.2	100	76-118	0.194	20	
Chloromethane	54.9	1.0	"	50.0	ND	110	72-128	4.32	20	
cis-1,2-Dichloroethene	52.7	1.0	"	50.0	ND	105	78-120	0.380	20	
cis-1,3-Dichloropropene	51.9	1.0	"	50.0	ND	104	79-120	0.538	20	
Dibromochloromethane	53.3	1.0	"	50.0	ND	107	81-121	1.62	20	
Dibromomethane	50.4	1.0	"	50.0	ND	101	84-115	0.909	20	
Ethylbenzene	52.9	1.0	"	50.0	ND	106	76-132	0.340	20	
Hexachlorobutadiene	47.5	1.5	"	50.0	ND	95.0	70-130	1.25	20	
Iodomethane	294	2.0	"	250	ND	118	72-127	0.404	20	
Isopropylbenzene	52.8	1.0	"	50.0	ND	106	66-135	1.76	20	
m,p-Xylene	105	2.0	"	100	ND	105	69-139	1.25	20	
Methylene Chloride	55.5	5.0	"	50.0	ND	111	87-118	3.04	20	
Methyl tert-Butyl Ether	51.4	1.0	"	50.0	ND	103	62-138	0.156	20	
Naphthalene	40.2	10.0	"	50.0	0.2	80.0	59-148	0.748	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02012 - EPA 5030B (Water)										
Matrix Spike Dup (3J02012-MSD1)		Source: X309169-01			Prepared: 10/02/2013 Analyzed: 10/03/2013					
n-Butylbenzene	49.0	1.0	ug/L	50.0	ND	98.0	52-146	0.975	20	
n-Propylbenzene	56.9	1.0	"	50.0	ND	114	66-141	0.473	20	
o-Xylene	52.2	1.0	"	50.0	ND	104	74-131	0.846	20	
sec-Butylbenzene	54.3	1.0	"	50.0	ND	109	63-138	2.00	20	
Styrene	53.2	1.0	"	50.0	ND	106	72-128	1.33	20	
tert-Butylbenzene	48.9	1.0	"	50.0	ND	97.7	67-129	1.80	20	
Tetrachloroethene	47.8	1.0	"	50.0	ND	95.6	76-134	2.05	20	
Toluene	53.6	1.0	"	50.0	0.3	107	73-131	2.74	20	
trans-1,2-Dichloroethene	54.0	1.0	"	50.0	ND	108	78-123	0.0555	20	
trans-1,3-Dichloropropene	53.4	1.0	"	50.0	ND	107	75-125	1.40	20	
Trichloroethene	52.2	1.0	"	50.0	ND	104	73-131	0.363	20	
Trichlorofluoromethane	60.3	1.0	"	50.0	ND	121	83-141	3.34	20	
Vinyl chloride	57.6	1.0	"	50.0	ND	115	73-139	3.33	20	
Surrogate: 1,2-Dichloroethane-d4	*66*		"	*62.5*		*105*	*84-121*			
Surrogate: Toluene-d8	*67*		"	*62.5*		*108*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*60*		"	*62.5*		*96.3*	*84-114*			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

pH by SW9045C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1340097 -										
LCS (1202969952-BKS)					Prepared: Analyzed: 10/18/2013					
pH	6.98	0.010	SU	7.00	0	99.7	99-101			
DUP (1202969953 D)		Source: X309172-01			Prepared: Analyzed: 10/18/2013					
pH	7.28	0.010	SU		7.34		0-10	0.821	10	H

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Metals by SW846 3050B/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335304 - SW846 3050B										
BLANK (1202958156-BLK)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
Silver	ND	0.0988	mg/kg		0		-			U
Arsenic	ND	0.494	"		0		-			U
Barium	ND	0.0988	"		0		-			U
Cadmium	ND	0.0988	"		0		-			U
Chromium	ND	0.148	"		0		-			U
Lead	ND	0.326	"		0		-			U
Selenium	ND	0.494	"		0		-			U
LCS (1202958157-BKS)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
Selenium	50.2	0.481	mg/kg	48.1	0	104	80-120			
Lead	49.4	0.317	"	48.1	0	103	80-120			
Chromium	46.8	0.144	"	48.1	0	97.3	80-120			
Cadmium	47.8	0.0962	"	48.1	0	99.4	80-120			
Arsenic	47.9	0.481	"	48.1	0	99.7	80-120			
Silver	47.8	0.0962	"	48.1	0	99.5	80-120			
Barium	47.2	0.0962	"	48.1	0	98.2	80-120			
DUP (1202958158 D)		Source: 334367001			Prepared: 10/02/2013 Analyzed: 10/03/2013					
Lead	10.4	0.320	mg/kg dry		15.7		0-20	40.5	20	
Silver	ND	0.0971	"		<0.0971		0-20	13.1	20	U
Selenium	ND	0.485	"		<0.485		0-20	16.7	20	U
Chromium	6.17	0.146	"		6.80		0-20	9.73	20	
Cadmium	ND	0.0971	"		<0.0971		0-20	5.05	20	U
Arsenic	1.27	0.485	"		1.16		0-20	9.21	20	J
Barium	80.7	0.0971	"		76.3		0-20	5.50	20	
MS (1202958159 S)		Source: 334367001			Prepared: 10/02/2013 Analyzed: 10/03/2013					

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Metals by SW846 3050B/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335304 - SW846 3050B										
MS (1202958159 S)		Source: 334367001			Prepared: 10/02/2013 Analyzed: 10/03/2013					
Arsenic	46.6	0.449	mg/kg dry	44.9	1.16	101	75-125			
Barium	125	0.0898	"	44.9	76.3	107	75-125			
Cadmium	45.0	0.0898	"	44.9	<0.0898	100	75-125			
Chromium	51.4	0.135	"	44.9	6.80	99.4	75-125			
Lead	55.9	0.296	"	44.9	15.7	89.5	75-125			
Selenium	43.8	0.449	"	44.9	<0.449	97.6	75-125			
Silver	46.1	0.0898	"	44.9	<0.0898	103	75-125			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Metals by SW846 7471A - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335525 - SW846 7471A Prep										
BLANK (1202958702-BLK)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
Mercury	ND	0.00402	mg/kg		0		-			U
LCS (1202958703-BKS)					Prepared: 10/02/2013 Analyzed: 10/03/2013					
Mercury	6.95	0.193	mg/kg	7.69	0	90.4	71.4-129			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: I-70/US-40 at Empire Junction

Notes and Definitions

U	Result not detected above the detection limit
O-01	This compound is a common laboratory contaminant.
J	Greater than the detection limit but less than the reporting limit
H	Holding time exceeded
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

March 04, 2014

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - PPSL Project Number - 11319101

Attached are your analytical results for PPSL received by Origins Laboratory, Inc. February 18, 2014. This project is associated with Origins project number X402136-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

THE NELAC INSTITUTE

ACCREDITED
TESTING CERT # 3494.01

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YA-B-1	X402136-01	Water	February 18, 2014 11:40	02/18/2014 13:45

Origins Laboratory, Inc.

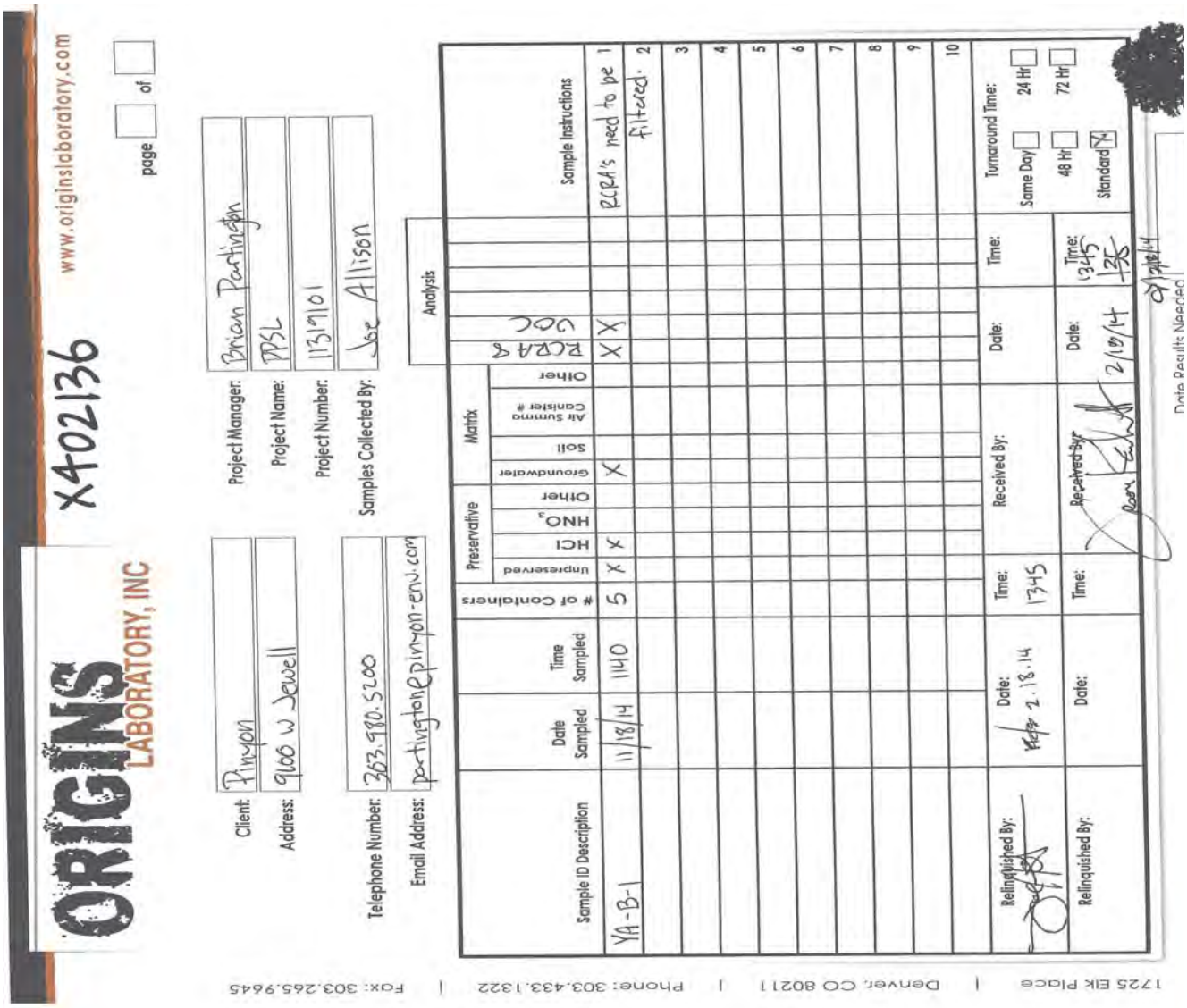
Noelle Doyle Mathis, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL



Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X402136

Client: PINYON

Client Project ID: PPSL

Checklist Completed by: JR

Shipped Via: H/D (UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 2/12/14 1408

Airbill #:

Matrix(s) Received: (Check all that apply): ____Soil/Solid X Water ____Other: ____ (Describe)

Cooler Number/Temperature: ____/3.6 °C ____/____ °C ____/____ °C ____/____ °C

Thermometer ID: T002

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?		✓		SAMPLED TODAY
Is there ice present (document if blue ice is used)	✓			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Were all samples received intact[1]?	✓			
Was adequate sample volume provided[1]?	✓			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		✓		
Is a chain-of-custody (COC) present and filled out completely[1]?	✓			
Does the COC agree with the number and type of sample bottles received[1]?	✓			
Do the sample IDs on the bottle labels match the COC[1]?	✓			
Is the COC properly relinquished by the client with date and time recorded[1]?	✓			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**		✓		
Are samples preserved that require preservation and was it checked [1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*	✓			ALL RCRA - VP
Additional Comments (if any):				

[1]If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) 2/13/14 1578 Date/Time Reviewed

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

YA-B-1
2/18/2014 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
GEL Laboratories, LLC								
X402136-01 (Water)								
Metals by SW846 3005A/6010C								
Arsenic	0.0233	0.030	mg/L	1	1367812	02/20/2014	02/24/2014	J
Barium	0.798	0.005	"	"	"	"	"	
Cadmium	0.00704	0.005	"	"	"	"	"	
Chromium	0.105	0.005	"	"	"	"	"	
Lead	0.139	0.010	"	"	"	"	"	
Selenium	0.00682	0.030	"	"	"	"	"	J
Silver	ND	0.005	"	"	"	"	"	U
Metals by SW846 7470A								
Mercury	ND	0.0002	mg/L	1	1367806	"	02/21/2014	U
VOC by EPA 8260C								
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1	4B18007	02/18/2014	02/18/2014	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

YA-B-1
2/18/2014 11:40:00AM

Origins Laboratory, Inc.

X402136-01 (Water)

VOC by EPA 8260C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
1,2,3-Trichloropropane	ND	5.0	ug/L	1	4B18007	02/18/2014	02/18/2014	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	
2-Butanone	17	5.0	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	
2-Hexanone	ND	5.0	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	
4-Isopropyltoluene	ND	1.0	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.0	"	"	"	"	"	
Acetone	78	8.0	"	"	"	"	"	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

YA-B-1
2/18/2014 11:40:00AM

Origins Laboratory, Inc.

X402136-01 (Water)

VOC by EPA 8260C

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Benzene	1.6	1.0	ug/L	1	4B18007	02/18/2014	02/18/2014	
Bromobenzene	ND	1.0	"	"	"	"	"	
Bromochloromethane	ND	1.0	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	
Carbon disulfide	ND	2.0	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	
Chloromethane	2.6	1.0	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	
Hexachlorobutadiene	ND	1.5	"	"	"	"	"	
Iodomethane	ND	2.0	"	"	"	"	"	
Isopropylbenzene	ND	1.0	"	"	"	"	"	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

YA-B-1
2/18/2014 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Origins Laboratory, Inc.

X402136-01 (Water)

VOC by EPA 8260C

m,p-Xylene	ND	2.0	ug/L	1	4B18007	02/18/2014	02/18/2014	
Methylene Chloride	ND	5.0	"	"	"	"	"	
Methyl tert-Butyl Ether	ND	1.0	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	
o-Xylene	ND	1.0	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	
Styrene	3.4	1.0	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	
Vinyl chloride	ND	1.0	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	*87.4 %*	*84-121*	"	"	"
Surrogate: Toluene-d8	*106 %*	*85-115*	"	"	"
Surrogate: 4-Bromofluorobenzene	*86.3 %*	*84-114*	"	"	"

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Blank (4B18007-BLK1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
2-Butanone	ND	5.0	"							
2-Chlorotoluene	ND	1.0	"							
2-Hexanone	ND	5.0	"							
4-Chlorotoluene	ND	1.0	"							
4-Isopropyltoluene	ND	1.0	"							

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Blank (4B18007-BLK1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
4-Methyl-2-pentanone	ND	5.0	ug/L							
Acetone	ND	8.0	"							
Benzene	ND	1.0	"							
Bromobenzene	ND	1.0	"							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
Carbon disulfide	ND	2.0	"							
Carbon tetrachloride	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Hexachlorobutadiene	ND	1.5	"							
Iodomethane	ND	2.0	"							
Isopropylbenzene	ND	1.0	"							
m,p-Xylene	ND	2.0	"							
Methylene Chloride	ND	5.0	"							
Methyl tert-Butyl Ether	ND	1.0	"							
Naphthalene	ND	10	"							

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Blank (4B18007-BLK1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
n-Butylbenzene	ND	1.0	ug/L							
n-Propylbenzene	ND	1.0	"							
o-Xylene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
Toluene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
Vinyl chloride	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	*52*		"	*62.5*		*82.4*	*84-121*			*S-GC*
Surrogate: Toluene-d8	*62*		"	*62.5*		*99.2*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*56*		"	*62.5*		*89.2*	*84-114*			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
LCS (4B18007-BS1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
1,1,1,2-Tetrachloroethane	42	1.0	ug/L	50.0		83.6	78.8-128			
1,1,1-Trichloroethane	54	1.0	"	50.0		109	82.3-118			
1,1,2,2-Tetrachloroethane	51	1.0	"	50.0		102	67.9-119			
1,1,2-Trichloroethane	56	1.0	"	50.0		112	75.4-116			
1,1-Dichloroethane	52	1.0	"	50.0		104	81.1-113			
1,1-Dichloroethene	42	1.0	"	50.0		83.3	79.4-118			
1,1-Dichloropropene	54	1.0	"	50.0		107	78-120			
1,2,3-Trichlorobenzene	55	5.0	"	50.0		110	63.8-134			
1,2,3-Trichloropropane	52	5.0	"	50.0		104	63.3-121			
1,2,4-Trichlorobenzene	55	1.0	"	50.0		110	70.4-125			
1,2,4-Trimethylbenzene	55	1.0	"	50.0		111	73.3-123			
1,2-Dibromo-3-chloropropane	56	5.0	"	50.0		111	71.6-114			
1,2-Dibromoethane (EDB)	49	1.0	"	50.0		98.5	74.7-127			
1,2-Dichlorobenzene	53	1.0	"	50.0		106	81.3-116			
1,2-Dichloroethane	54	1.0	"	50.0		109	71.1-120			
1,2-Dichloropropane	55	1.0	"	50.0		110	77.4-115			
1,3,5-Trimethylbenzene	54	1.0	"	50.0		109	71.9-128			
1,3-Dichlorobenzene	59	1.0	"	50.0		118	82.1-117			QM-11
1,3-Dichloropropane	48	1.0	"	50.0		96.7	75.1-123			
1,4-Dichlorobenzene	53	1.0	"	50.0		106	76.8-119			
2,2-Dichloropropane	55	1.0	"	50.0		110	84-120			
2-Butanone	260	5.0	"	250		103	64.9-123			
2-Chlorotoluene	53	1.0	"	50.0		106	66-133			
2-Hexanone	250	5.0	"	250		98.9	70.9-116			
4-Chlorotoluene	54	1.0	"	50.0		107	73.2-119			
4-Isopropyltoluene	60	1.0	"	50.0		121	79.8-120			QM-11

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
LCS (4B18007-BS1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
4-Methyl-2-pentanone	280	5.0	ug/L	250		112	58.5-122			
Acetone	220	8.0	"	250		88.8	65.4-125			
Benzene	53	1.0	"	50.0		106	75.5-116			
Bromobenzene	52	1.0	"	50.0		103	70-130			
Bromochloromethane	54	1.0	"	50.0		107	79-115			
Bromodichloromethane	57	1.0	"	50.0		114	73-123			
Bromoform	41	1.0	"	50.0		82.2	75-128			
Bromomethane	54	1.0	"	50.0		107	72-138			
Carbon disulfide	160	2.0	"	250		63.1	69-129			QM-11
Carbon tetrachloride	55	1.0	"	50.0		110	80-124			
Chlorobenzene	49	1.0	"	50.0		99.0	78-121			
Chloroethane	56	1.0	"	50.0		112	77-138			
Chloroform	52	1.0	"	50.0		104	75-117			
Chloromethane	58	1.0	"	50.0		117	72-130			
cis-1,2-Dichloroethene	55	1.0	"	50.0		111	78-118			
cis-1,3-Dichloropropene	57	1.0	"	50.0		115	73-122			
Dibromochloromethane	57	1.0	"	50.0		114	78-119			
Dibromomethane	56	1.0	"	50.0		112	79-116			
Ethylbenzene	52	1.0	"	50.0		103	78-130			
Hexachlorobutadiene	56	1.5	"	50.0		112	72-129			
Iodomethane	210	2.0	"	250		82.8	74-121			
Isopropylbenzene	52	1.0	"	50.0		104	75-128			
m,p-Xylene	110	2.0	"	100		106	75-134			
Methylene Chloride	49	5.0	"	50.0		97.0	84-122			
Methyl tert-Butyl Ether	53	1.0	"	50.0		106	72-125			
Naphthalene	52	10	"	50.0		105	65-128			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
LCS (4B18007-BS1)					Prepared: 02/18/2014 Analyzed: 02/18/2014					
n-Butylbenzene	57	1.0	ug/L	50.0		114	69-134			
n-Propylbenzene	54	1.0	"	50.0		109	74-132			
o-Xylene	52	1.0	"	50.0		105	76-129			
sec-Butylbenzene	55	1.0	"	50.0		110	74-128			
Styrene	44	1.0	"	50.0		87.3	74-126			
tert-Butylbenzene	53	1.0	"	50.0		106	72-123			
Tetrachloroethene	48	1.0	"	50.0		97.0	78-132			
Toluene	56	1.0	"	50.0		112	76-128			
trans-1,2-Dichloroethene	50	1.0	"	50.0		100	79-120			
trans-1,3-Dichloropropene	58	1.0	"	50.0		116	74-122			
Trichloroethene	54	1.0	"	50.0		107	76-125			
Trichlorofluoromethane	50	1.0	"	50.0		99.9	66-149			
Vinyl chloride	58	1.0	"	50.0		116	70-137			
Surrogate: 1,2-Dichloroethane-d4	*66*		*"*	*62.5*		*105*	*84-121*			
Surrogate: Toluene-d8	*66*		*"*	*62.5*		*105*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*60*		*"*	*62.5*		*96.7*	*84-114*			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike (4B18007-MS1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
1,1,1,2-Tetrachloroethane	48	1.0	ug/L	50.0	ND	96.2	82-130			
1,1,1-Trichloroethane	61	1.0	"	50.0	0.2	121	81-125			
1,1,2,2-Tetrachloroethane	57	1.0	"	50.0	ND	113	74-120			
1,1,2-Trichloroethane	59	1.0	"	50.0	ND	119	80-118			QM-05
1,1-Dichloroethane	61	1.0	"	50.0	1.8	119	79-120			
1,1-Dichloroethene	47	1.0	"	50.0	ND	93.1	73-130			
1,1-Dichloropropene	61	1.0	"	50.0	ND	121	77-124			
1,2,3-Trichlorobenzene	56	5.0	"	50.0	0.9	110	55-144			
1,2,3-Trichloropropane	58	5.0	"	50.0	ND	115	67-126			
1,2,4-Trichlorobenzene	59	1.0	"	50.0	0.2	118	56-141			
1,2,4-Trimethylbenzene	63	1.0	"	50.0	ND	126	62-132			
1,2-Dibromo-3-chloropropane	60	5.0	"	50.0	ND	121	56-142			
1,2-Dibromoethane (EDB)	55	1.0	"	50.0	ND	110	84-124			
1,2-Dichlorobenzene	59	1.0	"	50.0	ND	118	74-124			
1,2-Dichloroethane	59	1.0	"	50.0	ND	118	76-120			
1,2-Dichloropropane	60	1.0	"	50.0	ND	120	78-117			QM-05
1,3,5-Trimethylbenzene	63	1.0	"	50.0	ND	126	64-138			
1,3-Dichlorobenzene	67	1.0	"	50.0	ND	134	73-126			QM-05
1,3-Dichloropropane	55	1.0	"	50.0	ND	109	83-120			
1,4-Dichlorobenzene	60	1.0	"	50.0	ND	120	64-130			
2,2-Dichloropropane	60	1.0	"	50.0	ND	120	77-129			
2-Butanone	270	5.0	"	250	ND	109	66-128			
2-Chlorotoluene	61	1.0	"	50.0	ND	123	71-130			
2-Hexanone	280	5.0	"	250	ND	111	74-123			
4-Chlorotoluene	62	1.0	"	50.0	ND	124	66-128			
4-Isopropyltoluene	69	1.0	"	50.0	ND	139	60-140			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike (4B18007-MS1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
4-Methyl-2-pentanone	300	5.0	ug/L	250	0.1	119	65-125			
Acetone	270	8.0	"	250	ND	109	63-134			
Benzene	59	1.0	"	50.0	ND	118	74-130			
Bromobenzene	59	1.0	"	50.0	ND	118	70-130			
Bromochloromethane	60	1.0	"	50.0	ND	120	80-118			QM-05
Bromodichloromethane	61	1.0	"	50.0	ND	123	76-122			QM-05
Bromoform	46	1.0	"	50.0	ND	91.6	80-128			
Bromomethane	57	1.0	"	50.0	ND	115	69-144			
Carbon disulfide	180	2.0	"	250	ND	70.0	70-131			
Carbon tetrachloride	61	1.0	"	50.0	ND	122	81-130			
Chlorobenzene	56	1.0	"	50.0	ND	113	72-128			
Chloroethane	60	1.0	"	50.0	ND	121	79-140			
Chloroform	58	1.0	"	50.0	0.2	117	76-118			
Chloromethane	63	1.0	"	50.0	ND	126	72-128			
cis-1,2-Dichloroethene	62	1.0	"	50.0	0.2	124	78-120			QM-05
cis-1,3-Dichloropropene	61	1.0	"	50.0	ND	122	79-120			QM-05
Dibromochloromethane	59	1.0	"	50.0	ND	118	81-121			
Dibromomethane	59	1.0	"	50.0	ND	119	84-115			QM-05
Ethylbenzene	60	1.0	"	50.0	ND	120	76-132			
Hexachlorobutadiene	61	1.5	"	50.0	ND	122	70-130			
Iodomethane	230	2.0	"	250	ND	91.6	72-127			
Isopropylbenzene	60	1.0	"	50.0	ND	119	66-135			
m,p-Xylene	120	2.0	"	100	ND	121	69-139			
Methylene Chloride	46	5.0	"	50.0	0.0	91.7	87-118			
Methyl tert-Butyl Ether	57	1.0	"	50.0	ND	114	62-138			
Naphthalene	54	10	"	50.0	0.8	107	59-148			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike (4B18007-MS1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
n-Butylbenzene	65	1.0	ug/L	50.0	ND	130	52-146			
n-Propylbenzene	62	1.0	"	50.0	ND	125	66-141			
o-Xylene	59	1.0	"	50.0	ND	119	74-131			
sec-Butylbenzene	64	1.0	"	50.0	ND	127	63-138			
Styrene	49	1.0	"	50.0	ND	97.8	72-128			
tert-Butylbenzene	62	1.0	"	50.0	ND	125	67-129			
Tetrachloroethene	57	1.0	"	50.0	ND	114	76-134			
Toluene	60	1.0	"	50.0	ND	120	73-131			
trans-1,2-Dichloroethene	57	1.0	"	50.0	ND	114	78-123			
trans-1,3-Dichloropropene	61	1.0	"	50.0	ND	121	75-125			
Trichloroethene	60	1.0	"	50.0	ND	120	73-131			
Trichlorofluoromethane	54	1.0	"	50.0	ND	108	83-141			
Vinyl chloride	63	1.0	"	50.0	ND	127	73-139			
Surrogate: 1,2-Dichloroethane-d4	*64*		"	*62.5*		*103*	*84-121*			
Surrogate: Toluene-d8	*63*		"	*62.5*		*100*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*60*		"	*62.5*		*96.8*	*84-114*			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike Dup (4B18007-MSD1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
1,1,1,2-Tetrachloroethane	46	1.0	ug/L	50.0	ND	91.6	82-130	4.90	20	
1,1,1-Trichloroethane	60	1.0	"	50.0	0.2	120	81-125	0.843	20	
1,1,2,2-Tetrachloroethane	57	1.0	"	50.0	ND	115	74-120	0.947	20	
1,1,2-Trichloroethane	62	1.0	"	50.0	ND	124	80-118	4.66	20	QM-05
1,1-Dichloroethane	60	1.0	"	50.0	1.8	117	79-120	1.98	20	
1,1-Dichloroethene	46	1.0	"	50.0	ND	92.1	73-130	1.08	20	
1,1-Dichloropropene	60	1.0	"	50.0	ND	119	77-124	1.70	20	
1,2,3-Trichlorobenzene	59	5.0	"	50.0	0.9	116	55-144	4.70	20	
1,2,3-Trichloropropane	57	5.0	"	50.0	ND	114	67-126	0.593	20	
1,2,4-Trichlorobenzene	58	1.0	"	50.0	0.2	116	56-141	1.35	20	
1,2,4-Trimethylbenzene	59	1.0	"	50.0	ND	119	62-132	5.94	20	
1,2-Dibromo-3-chloropropane	62	5.0	"	50.0	ND	125	56-142	3.09	20	
1,2-Dibromoethane (EDB)	55	1.0	"	50.0	ND	111	84-124	0.854	20	
1,2-Dichlorobenzene	57	1.0	"	50.0	ND	114	74-124	3.39	20	
1,2-Dichloroethane	61	1.0	"	50.0	ND	122	76-120	3.34	20	QM-05
1,2-Dichloropropane	61	1.0	"	50.0	ND	122	78-117	1.37	20	QM-05
1,3,5-Trimethylbenzene	58	1.0	"	50.0	ND	117	64-138	7.39	20	
1,3-Dichlorobenzene	64	1.0	"	50.0	ND	128	73-126	4.70	20	QM-05
1,3-Dichloropropane	55	1.0	"	50.0	ND	109	83-120	0.0549	20	
1,4-Dichlorobenzene	58	1.0	"	50.0	ND	116	64-130	3.68	20	
2,2-Dichloropropane	59	1.0	"	50.0	ND	119	77-129	1.24	20	
2-Butanone	290	5.0	"	250	ND	117	66-128	6.62	20	
2-Chlorotoluene	57	1.0	"	50.0	ND	114	71-130	6.85	20	
2-Hexanone	280	5.0	"	250	ND	112	74-123	1.04	20	
4-Chlorotoluene	57	1.0	"	50.0	ND	115	66-128	7.26	20	
4-Isopropyltoluene	65	1.0	"	50.0	ND	130	60-140	6.77	20	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike Dup (4B18007-MSD1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
4-Methyl-2-pentanone	320	5.0	ug/L	250	0.1	126	65-125	6.41	20	QM-05
Acetone	290	8.0	"	250	ND	114	63-134	4.47	20	
Benzene	59	1.0	"	50.0	ND	118	74-130	0.119	20	
Bromobenzene	57	1.0	"	50.0	ND	115	70-130	2.83	20	
Bromochloromethane	60	1.0	"	50.0	ND	120	80-118	0.334	20	QM-05
Bromodichloromethane	63	1.0	"	50.0	ND	126	76-122	2.62	20	QM-05
Bromoform	46	1.0	"	50.0	ND	92.0	80-128	0.370	20	
Bromomethane	59	1.0	"	50.0	ND	118	69-144	2.34	20	
Carbon disulfide	170	2.0	"	250	ND	69.5	70-131	0.774	20	QM-05
Carbon tetrachloride	60	1.0	"	50.0	ND	121	81-130	1.09	20	
Chlorobenzene	53	1.0	"	50.0	ND	106	72-128	5.86	20	
Chloroethane	61	1.0	"	50.0	ND	122	79-140	1.02	20	
Chloroform	58	1.0	"	50.0	0.2	116	76-118	0.652	20	
Chloromethane	62	1.0	"	50.0	ND	124	72-128	1.29	20	
cis-1,2-Dichloroethene	62	1.0	"	50.0	0.2	123	78-120	1.32	20	QM-05
cis-1,3-Dichloropropene	63	1.0	"	50.0	ND	126	79-120	3.30	20	QM-05
Dibromochloromethane	63	1.0	"	50.0	ND	127	81-121	7.00	20	QM-05
Dibromomethane	63	1.0	"	50.0	ND	126	84-115	5.91	20	QM-05
Ethylbenzene	56	1.0	"	50.0	ND	113	76-132	5.98	20	
Hexachlorobutadiene	57	1.5	"	50.0	ND	114	70-130	6.27	20	
Iodomethane	230	2.0	"	250	ND	91.0	72-127	0.631	20	
Isopropylbenzene	55	1.0	"	50.0	ND	111	66-135	7.45	20	
m,p-Xylene	110	2.0	"	100	ND	114	69-139	5.57	20	
Methylene Chloride	47	5.0	"	50.0	0.0	93.5	87-118	1.90	20	
Methyl tert-Butyl Ether	60	1.0	"	50.0	ND	120	62-138	5.25	20	
Naphthalene	56	10	"	50.0	0.8	111	59-148	3.58	20	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4B18007 - EPA 5030B (Water)										
Matrix Spike Dup (4B18007-MSD1)		Source: X402133-01			Prepared: 02/18/2014 Analyzed: 02/18/2014					
n-Butylbenzene	60	1.0	ug/L	50.0	ND	120	52-146	7.38	20	
n-Propylbenzene	58	1.0	"	50.0	ND	116	66-141	7.59	20	
o-Xylene	56	1.0	"	50.0	ND	112	74-131	6.06	20	
sec-Butylbenzene	59	1.0	"	50.0	ND	118	63-138	7.24	20	
Styrene	46	1.0	"	50.0	ND	92.9	72-128	5.08	20	
tert-Butylbenzene	58	1.0	"	50.0	ND	116	67-129	7.20	20	
Tetrachloroethene	54	1.0	"	50.0	ND	107	76-134	6.44	20	
Toluene	61	1.0	"	50.0	ND	121	73-131	0.996	20	
trans-1,2-Dichloroethene	56	1.0	"	50.0	ND	112	78-123	2.18	20	
trans-1,3-Dichloropropene	64	1.0	"	50.0	ND	128	75-125	5.55	20	QM-05
Trichloroethene	59	1.0	"	50.0	ND	119	73-131	1.32	20	
Trichlorofluoromethane	54	1.0	"	50.0	ND	108	83-141	0.111	20	
Vinyl chloride	63	1.0	"	50.0	ND	126	73-139	1.11	20	
Surrogate: 1,2-Dichloroethane-d4	*69*		"	*62.5*		*110*	*84-121*			
Surrogate: Toluene-d8	*65*		"	*62.5*		*105*	*85-115*			
Surrogate: 4-Bromofluorobenzene	*61*		"	*62.5*		*96.8*	*84-114*			

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Metals by SW846 3005A/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1367812 - SW846 3005A										
BLANK (1203038660-BLK)					Prepared: 02/20/2014 Analyzed: 02/24/2014					
Chromium	ND	0.005	mg/L		0		-			U
Silver	ND	0.005	"		0		-			U
Lead	ND	0.010	"		0		-			U
Cadmium	ND	0.005	"		0		-			U
Arsenic	ND	0.030	"		0		-			U
Barium	ND	0.005	"		0		-			U
Selenium	ND	0.030	"		0		-			U
LCS (1203038661-BKS)					Prepared: 02/20/2014 Analyzed: 02/24/2014					
Silver	0.500	0.005	mg/L	0.500	0	99.9	80-120			
Arsenic	0.496	0.030	"	0.500	0	99.1	80-120			
Barium	0.501	0.005	"	0.500	0	100	80-120			
Cadmium	0.497	0.005	"	0.500	0	99.3	80-120			
Chromium	0.494	0.005	"	0.500	0	98.8	80-120			
Lead	0.505	0.010	"	0.500	0	101	80-120			
Selenium	0.481	0.030	"	0.500	0	96.2	80-120			
DUP (1203038662 D)		Source: X402136-01			Prepared: 02/20/2014 Analyzed: 02/24/2014					
Silver	ND	0.005	mg/L		<0.001		0-20	28.4	20	U
Selenium	ND	0.030	"		0.00682		0-20	53.8	20	U
Lead	0.135	0.010	"		0.139		0-20	2.28	20	
Chromium	0.102	0.005	"		0.105		0-20	3.09	20	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Metals by SW846 3005A/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1367812 - SW846 3005A										
DUP (1203038662 D)		Source: X402136-01			Prepared: 02/20/2014 Analyzed: 02/24/2014					
Cadmium	0.00687	0.005	mg/L		0.00704		0-20	2.56	20	
Arsenic	0.017	0.030	"		0.0233		0-20	31.0	20	J
Barium	0.775	0.005	"		0.798		0-20	2.84	20	
MS (1203038663 S)		Source: X402136-01			Prepared: 02/20/2014 Analyzed: 02/24/2014					
Silver	0.477	0.005	mg/L	0.500	<0.001	95.4	75-125			
Arsenic	0.511	0.030	"	0.500	0.0233	97.5	75-125			
Barium	1.26	0.005	"	0.500	0.798	92.7	75-125			
Cadmium	0.467	0.005	"	0.500	0.00704	92	75-125			
Chromium	0.568	0.005	"	0.500	0.105	92.5	75-125			
Lead	0.600	0.010	"	0.500	0.139	92.3	75-125			
Selenium	0.464	0.030	"	0.500	0.00682	91.4	75-125			
FLTB (343199002-BLK)					Prepared: 02/20/2014 Analyzed: 02/24/2014					
Chromium	ND	0.005	mg/L		0		-			U
Cadmium	ND	0.005	"		0		-			U
Barium	ND	0.005	"		0		-			U
Arsenic	ND	0.030	"		0		-			U
Lead	ND	0.010	"		0		-			U
Selenium	ND	0.030	"		0		-			U
Silver	ND	0.005	"		0		-			U

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Metals by SW846 7470A - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1367806 - SW846 7470A Prep										
BLANK (1203038619-BLK)					Prepared: 02/20/2014 Analyzed: 02/21/2014					
Mercury	ND	0.0002	mg/L		0		-			U
LCS (1203038620-BKS)					Prepared: 02/20/2014 Analyzed: 02/21/2014					
Mercury	0.00208	0.0002	mg/L	0.002	0	104	80-120			
LCSD (1203038630-BKSD)					Prepared: 02/20/2014 Analyzed: 02/21/2014					
Mercury	0.00211	0.0002	mg/L	0.002	0	106	80-120	1.62	20	
FLTB (343199002-BLK)					Prepared: 02/20/2014 Analyzed: 02/21/2014					
Mercury	ND	0.0002	mg/L		0		-			U

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Noelle Doyle Mathis, President

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 11319101
Project: PPSL

Notes and Definitions

U	Result not detected above the detection limit
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
QM-11	Spike recovery was outside acceptance limits for LCS, however samples are non-detect for this compound.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
J	Greater than the detection limit but less than the reporting limit
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.

Noelle Doyle Mathis, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.