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**Subject: Hwy 24 Mill Site Final Preliminary Assessment
Colorado Springs, El Paso County, Colorado
EPA Contract No. 68HE0820D0001
TD No: 2083-2208-02
DTN: 1028b**

Dear Ms. Wyatt:

Tetra Tech, Inc. Superfund Technical Assessment and Response Team is submitting the enclosed Draft Final Preliminary Assessment report for the Hwy 24 Mill site in Colorado Springs, El Paso County, Colorado. This report incorporates comments received from the Colorado Department of Public Health and the Environment regarding the draft final report. Supporting reference materials are also included with this submittal.

If you have any questions or comments regarding this submittal, please contact me at (215) 704-5675, or Brian Croft at (206) 300-0301.

Sincerely,

A handwritten signature in black ink that reads 'Nancy Shannon'.

Nancy Shannon
START V HRS Specialist

A handwritten signature in black ink that reads 'Brian Croft'.

Brian Croft
START V Project Manager

Enclosure

cc: Didi Fung, START V Program Manager
Clayton Longest, START V Document Control Coordinator

**FINAL
PRELIMINARY ASSESSMENT REPORT**

**HWY 24 MILL SITE
COLORADO SPRINGS, EL PASO COUNTY, COLORADO**

U.S. EPA ID NO. CON000821192

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 8
Denver, Colorado**

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA), under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), tasked the Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) to conduct a preliminary assessment (PA) of the Hwy 24 Mill site in Colorado Springs, El Paso County, Colorado (EPA Identification Number [No.] CON000821192). The PA proceeded under Contract No. 68HE0820D001, Technical Direction (TD) No. 2083-2208-02.

The purpose of a PA is to review existing information about a site and its environs to assess the threats, if any, posed to human health or the environment and to evaluate whether further investigation under CERCLA/SARA is warranted. The scope of the PA includes reviewing information available from federal, state, and local agencies. Based on these sources of information, the site is evaluated according to EPA Hazard Ranking System (HRS) criteria to assess the relative threat associated with actual or potential releases of hazardous substances at the site. EPA adopted the HRS to set priorities for evaluation and remedial action at hazardous waste sites. The HRS is the primary method of determining a site's eligibility for placement on the National Priorities List (NPL). The NPL identifies sites where EPA may conduct remedial response actions.

This PA report was prepared in accordance with EPA's *Guidance for Performing Preliminary Assessments under CERCLA* (EPA 1991), *Guidance for Performing Site Inspections under CERCLA* (EPA 1992), and *Hazard Ranking System Final Rule* (EPA 2017).

2.0 OBJECTIVES

The objectives of this document were designed to support an assessment of hazardous conditions at the site based on current understanding. In addition to reviewing existing information and evaluating current conditions, the PA report also includes an evaluation of analytical results from soil samples collected as part of a recent removal sampling event.

The objectives of this PA were to:

- Assess current and historical conditions at the site, including any industrial uses;
- Evaluate previously collected site data, records, and reference materials, as well as recently collected soil samples to identify sources of contamination and assess migration and exposure pathways;

- Evaluate migration and exposure pathways that could potentially be impacted by hazardous substances, affecting human and environmental health; and
- Identify whether the site warrants further investigation under CERCLA.

3.0 SITE BACKGROUND

This section discusses the site background, including location, description, previous investigations, and removal actions.

3.1 SITE LOCATION AND DESCRIPTION

The Hwy 24 Mill site is located at 1025 Garner Street, Colorado Springs, Colorado, as shown on **Figure 1**. The geographic coordinates of the site are 38.832490 north latitude and -104.845400 west longitude, as measured from a central point within the area of observed soil contamination at the A-1 Mobile Home Village. The focus of this PA was the A-1 Mobile Village, that encompasses 11.4 acres, and that has documented soil contamination as a result of the deposition and migration of soils and mine tailings associated with the adjacent former Golden Cycle Mill mining facility and associated tailings pile.

The A-1 Mobile Village consists of 82 mobile home lots, as well as an office, garage, and miscellaneous common areas, as shown on **Figure 2** (El Paso County 2022a). The A-1 Mobile Village was constructed adjacent to the former Golden Cycle Mill mining facility and associated tailings pile, Gold Hill Tailings site (EPA ID: COD983801275), located immediately west of the mobile home village (Ecology and Environment [E&E] 1995). In historical aerial photographs from 1960, trailers appear on the property where A-1 Mobile Village is currently located (Environmental Data Resources, Inc. [EDR] 2022). The A-1 Mobile Home Village is bordered to the north and east by Fountain Creek, beyond which is U.S. Highway 24 (W. Cimmaron St.), to the south by a recreational vehicle park, and to the west by the tailings pile and the former Golden Cycle Mill property, which is in the process of being developed and consists of the Gold Hill Mesa housing development and Villa De Mesa condominiums.

3.2 TAILINGS PILE SITE HISTORY

The tailings pile, located immediately adjacent to the western boundary of the A-1 Mobile Home Village, historically covered approximately 170 acres and consisted of tailings produced by the milling of ore from the Cripple Creek Mining District in Colorado. A total of 14.3 million tons of ore were processed yielding 12.5 million tons of tailings. The tailings were produced by the Golden Cycle Mill mining facility from

approximately 1901 until February 1949. The mill originally processed the ore using a bromide process. In 1907, the mill began using a roasting and cyanide method to process ore (Morrison Knudsen Corporation [Morrison Knudsen] 1993).

A Sanborn fire insurance map from 1907 shows seven furnaces, railroad spurs, various size process and storage tanks inside process buildings, a coal-fired electric generating plant, ore bins and machine and boiler shops. In 1929, a concentrator unit was constructed to treat complex sulfide ores that contain lead, copper, and zinc. Tailings from the concentrator were further treated with cyanide to recover additional gold and silver. In 1931, a small-capacity cyanide unit was added to the plant (Morrison Knudsen 1993).

In 1947, two sprinkler lines were installed on the tailings pile to reduce the amount of fine sand and dust that blew over Colorado Springs during windstorms. Residents near the mill continued to complain about dust blowing off the property. In 1950, approximately 357,440 tons of dirt from hills adjacent to the mill were used to cover the 170-acre tailings pile to a depth of 6 to 8 inches. The mill was dismantled in 1950 (Morrison Knudsen 1993). An aerial photograph from 1969 shows some units of the Villa de Mesa Condominiums completed (EDR 2022). Most of this 11.5-acre development was constructed on the tailings pile (Morrison Knudsen 1993).

In 1972, the Golden Cycle Corporation sold the property to William Wiley. William Wiley formed the Gold Hill Mesa Corporation and formed a joint venture with the Fountain Creek Corporation. The joint venture was granted a conditional use permit by the city of Colorado Springs. The permit allowed for the construction and operation of a pilot scale surface mining operation known as the Gold Hill Recycle Project located on 154 acres of property. This project was to test the feasibility of recovering additional gold and silver from the tailings. A five-acre plot in the southern portion of the property was revegetated in 1973 by Gold Hills Mesa Corporation. Additional revegetation work was conducted by Shuck Corporation in 1974. In 1992, Colorado Springs Regional Building Department condemned the facility due to unsafe conditions and frequent use by youths and transients (Morrison Knudsen 1993).

In 2000 and in 2002, ERSH, LLC, entered into a voluntary cleanup (VCUP) agreement with the Colorado Department of Public Health and the Environment (CDPHE) for the cleanup and reuse of the former Golden Cycle Mill property, including the associated tailings pile (i.e. Gold Hill Tailings site) (Spectrum 2000a; 2000b; 2002). Under the VCUP, the mine waste on the property was proposed to be capped with hardscape (i.e., sidewalks, driveways, parking lots, etc.) or with a landscaped engineered soil cap. The engineered soil cap was to be consisted of a geotextile warning barrier on top of mine waste (i.e., tailings), overlain with a variable thickness of a fill mixture of clay borrow and up to 25% tailings, which is in turn overlain with the

upper 12-inch layer of 100% clay borrow or topsoil depending on vegetation requirements (Newfields 2002). A review of aerial photographs show that construction of the Gold Hill Mesa housing development on the former Golden Cycle Mill property was underway by 2005 (EDR 2022). Most recent aerial photographs show that approximately three-quarters of the former mill property have been redeveloped and the large tailings pile has been significantly reduced and graded to continue expansion of the housing development. A 196-foot tall concrete smokestack associated with the former mill is still intact and present on the property (Morrison Knudsen 1993; Google Earth 2022).

3.3 PREVIOUS INVESTIGATIONS

In 1993, EPA conducted a PA of the Gold Hill Tailings site (EPA ID: COD983801275), which is described as consisting of the 170-acre tailings pile and the millsite of the former Golden Cycle Mill mining facility. During the PA, it was observed that the north and northeast sides of the tailings pile sloped steeply toward Fountain Creek, which is adjacent to the north of the tailings pile, and toward A-1 Mobile Village to the east, forming a depositional area. The edge of this depositional area extended onto the A-1 Mobile Village property and appeared to be within 200 feet of 17 trailers. At the time of the PA, it was unknown if cover material that was placed on the pile in 1949 and 1950 had been eroded to expose tailings material (Morrison Knudsen 1993).

In 1994, EPA conducted a site inspection of the Gold Hill Tailings site, which included the collection of soil samples from the mill area, tailings piles, A-1 Mobile Village as well as background soil samples for comparison. Contaminants in the soil samples collected from the mill, tailings pile, and mobile home village were considered significantly above background if concentrations were at least three times the concentrations in the background samples. Analytical results of these samples are summarized below (Morrison Knudsen 1994):

- Samples collected from the mill area indicated the presence of arsenic (up to 385 milligrams per kilogram [mg/kg]), lead (up to 1,630 mg/kg), mercury (up to 4.7 mg/kg), and cyanide (up to 393 mg/kg) at concentrations significantly above background.
- Samples collected from the tailings pile indicated the presence of arsenic (up to 290 mg/kg), lead (up to 1,240 mg/kg), mercury (up to 0.34 mg/kg), and cyanide (up to 25.4 mg/kg) at concentrations significantly above background.
- Samples collected from the depositional area at A-1 Mobile Village indicated the presence of arsenic (up to 103 mg/kg), lead (up to 779 mg/kg), mercury (up to 0.19 mg/kg), and cyanide (up to 1.7 mg/kg) at concentrations significantly above background.

In February 1995, EPA investigated the Gold Hill Tailings site that included the collection of soil samples from the A-1 Mobile Village and the tailings pile as well as interior dust samples from several mobile homes.

All soil samples were analyzed in the field using X-ray fluorescence (XRF); seven soil samples from the tailings pile and three soil samples from A-1 Mobile Village were submitted to a fixed laboratory for analysis. Laboratory analytical results of the samples are summarized below (E&E 1995):

- Dust samples collected from the interiors of several mobile homes indicated the presence of arsenic (up to 65.9 mg/kg) and lead (up to 432 mg/kg).
- Samples collected from the A-1 Mobile Village indicated the presence of arsenic (up to 80 mg/kg), lead (up to 527 mg/kg), and cyanide (up to 1.8 mg/kg).
- Samples collected from the area between the A-1 Mobile Village and the tailings pile indicated the presence of arsenic (up to 97 mg/kg), lead (up to 248 mg/kg), and cyanide (up to 10.1 mg/kg).
- Samples collected from the tailings pile indicated the presence of arsenic (up to 272 mg/kg), lead (up to 1,570 mg/kg), and cyanide (up to 13 mg/kg).

Historically, dust from the Gold Hill Tailings site, the former Golden Cycle Mill mining facility and the 170-acre tailings pile located on the mining facility property, appeared to be an issue to the nearby residential area. In 1996, EPA had developed a sampling plan to collect air samples from nearby residential areas to determine whether residential populations were being exposed to hazardous substances associated with contaminated soil at the mill property and tailings pile. However, during this time period, the project area was the subject of a CDPHE VCUP that resulted in soil cover and dust mitigation measures that were implemented during the voluntary clean-up at the Gold Hill Tailings site. Based on available information, it does not appear that EPA conducted air sampling in residential areas at this time.

4.0 SOURCE DESCRIPTION AND WASTE CHARACTERISTICS

This section describes the source at the site and provides information on waste source characteristics.

4.1 SOURCE DESCRIPTION

For HRS purposes, a source is defined as an area where a hazardous substance has been deposited, stored, or placed, as well as those soils that have become contaminated from the migration of a hazardous substance.

The sources associated with the Hwy 24 Mill site are described below and shown on **Figure 2**:

- Source 1:** Contaminated soil associated with the location of the former mill area on the former Golden Cycle Mill property.
- Source 2:** Contaminated soil associated with the 170-acre tailings pile located on the former Golden Cycle Mill property.#

As discussed in Section 2.2, the Golden Cycle Mill operated from approximately 1901 to 1949 milling ore. During its years of operation, an approximately 170-acre tailings pile was generated on the property. The tailings piled was covered with 6 to 8 inches of soil in 1950, once milling operations ceased. However, based on samples collected from the tailings pile in 1994, as discussed below, it is likely the soil cover placed on the tailings pile in 1950 eroded over time.

In 1994, soil samples collected from the mill area (Source 1) indicated the presence of arsenic (up to 385 mg/kg), lead (up to 1,630 mg/kg), mercury (up to 4.7 mg/kg), and cyanide (up to 393 mg/kg) and from the tailings pile (Source 2) indicated the presence of arsenic (up to 290 mg/kg), lead (up to 1,240 mg/kg), mercury (up to 0.34 mg/kg), and cyanide (up to 25.4 mg/kg) at concentrations significantly above background. Since 2000, the former mill and tailings pile have been the subject of a CDPHE VCUP, with the mine waste being capped by hardscape or engineered soil cap and a housing development constructed on the property.

Source 3: Contaminated soil at the A-1 Mobile Home Village.

As previously discussed, the A-1 Mobile Home Village is adjacent to the former mill property (Source 1). Additionally, the approximate 170-acre tailings pile (Source 2) abuts the mobile home park to the west. Historically, a portion of the tailings pile had been observed encroaching onto the A-1 Mobile Village property (Morrison Knudsen 1993). Six to 8 inches of soil were placed on the tailings pile in 1950 and a cap was installed in the early 2000s. However, prior to the soil coverage in 1950, contaminated soil from the tailings pile likely migrated onto the property that became A-1 Mobile Village by means of overland flow during periods of rain or by aerial deposition during windy periods. Runoff channels from the tailings pile toward A-1 Mobile Village can be seen on aerial photographs dating back to 1937 and continuing to the present (EDR 2022; Google Earth 2022).

Source 4: Potentially contaminated soil on nearby properties to the former mill and tailings pile.

Contaminated soil associated with Sources 1 and 2, as well as potential emissions from the smokestack during its years of operation, likely have been deposited onto nearby properties by means of air deposition prior to 1950. The cover on the tailings pile likely eroded over time, as evidenced by soil samples collected from the tailings pile in 1994 and 1995 containing high concentrations of arsenic, lead, mercury, and cyanide; therefore, the tailings pile likely continued to be a source for hazardous substances being deposited on nearby properties via air deposition until the early 2000s when the property was entered into the CDPHE VCUP. Information regarding the historic use and hazardous substances associated with the smokestack is not currently available.

4.2 WASTE CHARACTERISTICS

In May 2022, Tetra Tech, on behalf of EPA, collected soil samples from the A-1 Mobile Village to characterize the concentrations of metals—particularly lead and arsenic—in surface. Samples were collected from decision units (DU) using incremental sampling methodology (ISM). A total of 97 DUs are associated with the sampling including:

- 83 individual lots (including the 81 occupied trailer properties, one office property, and one vacant property); and
- 14 common areas such as unoccupied areas along roadways located throughout the mobile village.

In addition, three off-site (background) DUs were sampled to assess background for the site:

- Three areas located at Sondermann Park in Colorado Springs were selected approximately 2 miles north of the site.

During ISM sampling activities, 5-point composite soil samples were collected from two depth intervals at each sampled DU, including 0 to 1 inch below ground surface (bgs) and 1 to 6 inches bgs.

Concentrations of arsenic in background soils in the 0 to 1 inch depth interval ranged from 7.1 to 11 mg/kg, and lead ranged from 29 to 36 mg/kg. In the 1 to 6 inches depth interval, arsenic concentrations ranged from 7.4 to 11 mg/kg, and lead concentrations ranged from 22 to 37 mg/kg. These concentrations were in line with the U.S. Geological Survey published background level for El Paso County, Colorado of 35.2 mg/kg for lead, and 7.88 mg/kg for arsenic (USGS 2008).

Arsenic and lead in soils at the A-1 Mobile Home Village (Source 3) were consistently higher in concentration as compared to background. Concentrations of arsenic in soils in the 0 to 1 inch depth interval ranged from 19 to 100 mg/kg, and lead ranged from 50 to 640 mg/kg. In the 1 to 6 inches depth interval, arsenic concentrations ranged from 15 to 140 mg/kg, and lead concentrations ranged from 48 to 700 mg/kg. In addition to arsenic and lead, several other metals were also detected in soil samples at concentrations exceeding three times the background level, such as antimony, cadmium, copper, silver, and zinc.

Analytical results of the highest concentration of each analyte in the three background samples are summarized in **Table 1**. The background concentrations were used in this PA to identify whether samples met the observed contamination criteria for the soil exposure component of the soil exposure and subsurface intrusion pathway. The area of soil with observed contamination is defined as that in which metal concentrations equal or exceed three times background levels. When considering all inorganics, all collected samples had at least one inorganic analyte that meets the observed contamination criteria (**Table 1**).

Therefore, the entire A-1 Mobile Village property (Source 3), as shown on **Figure 2**, is considered the area of observed contamination.

Samples were not collected from the former mill property (Source 1) or tailings pile (Source 2) as part of this PA as those areas are currently being addressed under a CDPHE VCUP. Additionally, EPA has not yet collected soil samples from additional areas, such as the residential area to the north and northeast across Route 24 (Source 4), to determine whether an area of observed contamination is present beyond the A-1 Mobile Home Village.

5.0 MIGRATION AND EXPOSURE PATHWAYS

This section describes the migration and exposure pathway characteristics, provides information on potential targets associated with each pathway, and presents conclusions regarding the significance of each migration or exposure pathway.

5.1 GROUNDWATER MIGRATION PATHWAY

5.1.1 Geology and Hydrogeology

The site lies within the Denver Basin, a sub-basin of the South Platte River Basin. The site is underlain by the Pierre Shale Formation, which consists of medium to dark gray marine claystone, shale, siltstone, limestone, and sandstone that was deposited in a shallow seaway during the Cretaceous Period. The thickness of the Pierre Shale Formation ranges from 3,555 to 5,290 feet in the Denver Basin. The Pierre Shale Formation is underlain by the Niobrara Formation, which consists of shale in the upper portion of the formation, and a dense limestone in the lower portion. The Niobrara Formation has an apparent thickness of 300 feet. The Fox Hills Sandstone, a shaly sand, overlies the Pierre Shale Formation, and has an apparent thickness of approximately 200 feet. The southwest edge of the Denver Basin lies a few miles northeast of the site (Colorado Geological Survey [CGS] 1974, 1993, 2000; Morrison Knudsen 1993). Surficial geologic maps indicate that Fountain Creek, upstream and downstream from the site, is underlain by alluvium (CGS 2000). The surficial deposits on the east side of the site consist of windblown sands (CGS 2000).

West of the site is a geologically complex area where many formations outcrop at or near hogback ridges. These formations include the Morrison, Ralston Creek, Lykins, Lyons Sandstone, Pike's Peak Granite, Boulder Creek Granodiorite, Niobrara, Carlisle Shale, Greenhorn Limestone, and Graneros Shale formations (Morrison Knudsen 1993; CGS 1993, 2000).

The primary source of groundwater in the South Platte River basin is infiltration of precipitation. Part of the snowmelt and rain is carried by the streams, part evaporates, and the remainder infiltrates into the ground. The water that is not consumed by vegetation moves downward into the zone of saturation (the zone saturated with water under hydrostatic pressure) in the soil or rocks. Water in the zone of saturation percolates laterally through the more permeable consolidated rock formations and through the unconsolidated rock materials that overlie the bedrock, ultimately discharging at the surface through wells, seeps, and springs or by evapotranspiration. Groundwater is recharged mainly by subsurface inflow through unconsolidated rock materials; by seepage from streams, reservoirs, and canals; infiltration at irrigated tracts, and by infiltration of precipitation falling directly on the basin (CGS 1964). The depth to unconfined groundwater in valleys in the basin is related to the configuration of the land surface; generally, the depth is greater where the land surface is high, and least where the land surface is low. The depth to groundwater can range from 0 to 80 feet bgs in the unconfined alluvial aquifer (CGS 1964).

Most of the formations within 4 miles of the site are not considered important aquifers; however, the alluvium and Fox Hills Formation are considered important aquifers in the Denver Basin and may yield large quantities of water for public supply (CGS 1993). Alluvial aquifers in parts of the Denver Basin may have well yields of up to 1,000 gallons per minute (gpm) or more, and wells completed in the Fox Hills Formation have wells yields that vary from 100 to 600 gpm (CGS 1974).

5.1.2 Groundwater Targets and Conclusions

Potential groundwater targets can include people who obtain drinking water from private domestic wells within the 4-mile radius target distance limit (TDL) of the site; and people supplied drinking water from public water suppliers whose water source is from groundwater wells within the 4-mile TDL (see **Figure 3**).

Most people within a 4-mile radius of the site are supplied drinking water by Colorado Springs Utilities (Colorado Springs Utilities 2022a). The Colorado Springs Utilities water source is numerous surface water sources such as mountain streams, creeks, and reservoirs (Colorado Springs Utilities 2022b). A portion of the municipality of Manitou Springs is located within 4 miles of the site (see **Figure 3**) and is supplied drinking water by the municipality whose water source is a surface water reservoir on the slope of Pike's Peak located approximately 7 miles northwest of the Site (Manitou Springs 2022). Because the source of water for Colorado Springs Utilities and Manitou Springs are surface water sources, people supplied drinking water by these utilities are not considered targets associated with the groundwater migration pathway.

Garden Valley, a public water supplier, was identified in EPA's Safe Drinking Water Information System (Tetra Tech 2022a). Garden Valley's water source is 10 groundwater wells located between 3 and 4 miles

from the site; well locations are confidential and therefore are not depicted on **Figure 3** (Tetra Tech 2022a). Garden Valley supplies drinking water to approximately 900 people that reside at Garden Valley mobile home park (Tetra Tech 2022a; El Paso 2022b; Google Earth 2022).

Private domestic well information was not readily available; however, it is assumed that people outside of the Colorado Springs Utilities, Manitou Springs, and Garden Valley water distribution areas may rely on private domestic wells for drinking water. The area within the 4-mile radius not supplied drinking water by a public water supplier is very limited; therefore, it is anticipated there would be minimal potential targets associated with private domestic wells.

Groundwater samples have not been collected at the site to evaluate whether a release to groundwater attributable to the site has occurred. However, the groundwater migration pathway is not considered a significant pathway of concern at the site based on the minimal number of targets associated with the groundwater migration pathway and the distance of the groundwater supply wells—between 3 and 4 miles—from the site.

5.2 SURFACE WATER MIGRATION PATHWAY

5.2.1 Hydrologic Setting

The site is located within the Fountain Creek Watershed District. The Fountain Creek Watershed District drains approximately 930 square miles and extends through downtown Colorado Springs (Arkansas-Fountain Coalition 2019).

Surface water runoff from the source(s) would flow directly into Fountain Creek, which borders the former mill, tailings pile, and A-1 Mobile Home Village to the north and east. Fountain Creek flows south into the Arkansas River at Pueblo, CO, approximately 45 miles downstream from the Site. Fountain Creek in the vicinity of Colorado Springs has a mean flow rate that ranges from 51 cubic feet per second (cfs) near Colorado Springs to 86 cfs near the City of Fountain (USGS 2022a, 2022b). Fountain Creek is listed as an impaired stream under Section 303(d) of the Clean Water Act for arsenic, iron, manganese, selenium, zinc, and *e. coli* (Arkansas-Fountain Coalition 2019). Fountain Creek encompasses the 15-mile downstream TDL, as shown on **Figure 4.#**

5.2.2 Surface Water Targets and Conclusions

No surface water intakes are located within the 15-mile TDL (Tetra Tech 2022a). Colorado Springs Utilities, the main public water supplier in the vicinity of the site, has an intake in Fountain Creek; however, the intake

is located upstream of the site (Tetra Tech 2022a). The other water sources for Colorado Springs Utilities and Manitou Springs are surface water reservoirs outside the 15-mile TDL (Colorado Springs Utilities 2022b; Manitou Springs 2022).

Fountain Creek is not considered a fishery within the 15-mile TDL because of its severe impairment by heavy metals and *e coli*. However, Fountain Creek is fished for recreation. The following fish species have been caught within the 15-mile TDL: largemouth bass, trout (rainbow, bull, brown, and cutthroat), and northern pike (Fishbrain 2022).

The greenback cutthroat trout (*Oncorhynchus clarkia stomias*) and the pallid sturgeon (*Scaphirynchus albus*) are two federally threatened or endangered fish species known to occur within the 15-mile TDL (U.S. Fish and Wildlife [USFWS] 2022a). Additionally, within the 15-mile TDL, two mammal, three bird, and one plant federally threatened or endangered species are known to occur (USFWS 2022a).

Approximately 1,433 feet of wetland frontage are located within the 15-mile TDL along Fountain Creek—approximately 12 miles downstream of the site (Tetra Tech 2022b).

Surface water and sediment samples have not been collected associated with the site to evaluate whether a release attributable to the site has occurred.

The documented contaminated soil source associated with the A-1 Mobile Home Village, as well as contaminated soil at the former mill and tailings pile, are adjacent to the bank of Fountain Creek. Much of the source areas bordering the creek are not covered with hard surfaces, such as asphalt or concrete, and are sparsely vegetated or bare. Surface water runoff potentially containing hazardous substances associated with the site source(s), contaminated soil, would flow directly into Fountain Creek. Fountain Creek is not used for drinking water within the 15-mile TDL and is severely impaired because of heavy metals and *e coli*; however, while not a designated fishery, documented fishing occurs within Fountain Creek along the TDL. Therefore, there is the potential for human consumption of fish caught in the creek. Additionally, Fountain Creek may be a potential habitat for several federally threatened or endangered species that are noted as occurring within the 15-mile TDL.

5.3 SOIL EXPOSURE AND SUBSURFACE INTRUSION PATHWAY

This section discusses the soil exposure component of the soil exposure and subsurface intrusion pathway, as well as targets associated with this pathway. The subsurface intrusion component of this pathway was not evaluated because the source at the site consists of metals-contaminated soil.

5.3.1 Physical Characteristics

Four areas of contaminated or potentially contaminated soil have been identified associated with the Site. Two areas, former mill area and tailings pile, are being addressed under a CDPHE VCUP. Contaminated soil associated with the A-1 Mobile Home encompasses approximately 11.4 acres (El Paso County 2022). The A-1 Mobile Village consists of 81 occupied mobile home lots, an unoccupied lot, as well as an office, garage, and miscellaneous common areas (see **Figure 2**). The individual lots contain sparse vegetation and bare soil. Soil on the western portion of the mobile home village is classified as dump material and the eastern portion is classified as Chaseville-Midway complex, which is a gravelly sandy loam (U.S. Department of Agriculture 2022). Asphalt roads traverse the A-1 Mobile Village property. Access to the mobile home park is unrestricted. Additional areas of contaminated soil may be present as a result of air deposition of hazardous substances associated with the former smokestack at the mill or contaminated soil at the tailings pile; however, EPA has not yet conducted investigations in these areas.

5.3.2 Soil Exposure Component Targets and Conclusions

The A-1 Mobile Home Village includes approximately 81 occupied mobile home lots, one unoccupied mobile home lot, as well as an office, garage, and miscellaneous unoccupied areas (see **Figure 2**). As discussed in Section 4, all collected surface soil samples had concentrations of at least one metal at a concentration that meets the criterion for observed contamination (three times background concentration). In addition to meeting the criteria for observed contamination, concentrations of arsenic, cadmium, and manganese in soil samples collected from 64 occupied mobile home lots, 3 occupied mobile home lots, and 4 occupied mobile home lots, respectively, also exceeded applicable EPA's residential Regional Screening Levels (RSL) (EPA 2022). Concentrations of lead that meet the criterion for observed contamination also exceeded EPA's recommended soil lead level in samples collected from 15 occupied mobile home lots.

Using the El Paso County household average of 2.63 persons per household (U.S. Census Bureau 2022), a total of 213 (81 x 2.63) people reside within the area of observed contamination with 168.32 (64 x 2.63) people residing on property with arsenic, cadmium, or manganese levels exceeding the RSL. Approximately 9,192 people reside within 1 mile of the site (Tetra Tech 2022c).

Additional targets associated with the soil exposure pathway may be present in residential areas to the north and northeast across Route 24 from the former mill and tailings pile. Soil in these areas may have become contaminated as a result of the migration of hazardous substances from the tailings pile or smokestack by means of air deposition. The soil exposure component of the soil exposure and subsurface intrusion pathway is the primary pathway of concern at the site.

5.4 AIR MIGRATION PATHWAY

This section discusses the air migration pathway, as well as targets associated with this pathway.

5.4.1 Physical Characteristics

As previously discussed, the source(s) at the site consists of metals-contaminated soil. The documented contaminated soil present at the site is sparsely vegetated to bare soil; therefore, there is the potential for the contaminated soil to migrate by means of air deposition.

5.4.2 Air Migration Pathway Targets and Conclusions

The population that resides within a 4-mile radius of the site is described in the table below:

Radial Distance from Site (miles)	Population (number of persons)
0 - 0.25	534
>0.25 - 0.50	2,192
>0.50 - 1.0	6,466
>1.0 - 2.0	29,680
>2.0 - 3.0	35,165
>3.0 - 4.0	45,507

(Tetra Tech 2022c)

#

Several federally threatened or endangered species such as gray wolf (*Canis lupus*), Preble's meadow jumping mouse (*Zapus hudsonius preblei*), mexican spotted owl (*Strix occidentalis lucida*), and eastern black rail (*Laterallus jamaicensis*) are known to or potentially may occur within a 4-mile radius of the site (USFWS 2022b). The wetland acreage within a 4-mile radius of the site is provided in the table below:

Radial Distance from Site (miles)	Wetlands (acreage)
0 - 0.25	0
>0.25 - 0.50	0
>0.50 - 1.0	9.7
>1.0 - 2.0	3.116077
>2.0 - 3.0	23.254747
>3.0 - 4.0	32.236343

(Tetra Tech 2022b)

Air samples have not been collected at the site; however, dust samples collected from the interiors of several mobile homes in 1995 showed concentrations of arsenic at 65.9 mg/kg, and lead at 432 mg/kg. Because the

source(s) at the site are largely bare contaminated soil, the air migration pathway is a potential pathway of concern.

6.0 SUMMARY AND CONCLUSIONS

The focus of this PA was the A-1 Mobile Village, that encompasses 11.4 acres, and that has documented soil contamination as a result of the deposition and migration of soils and mine tailings associated with the adjacent former Golden Cycle Mill mining facility and tailings pile. The A-1 Mobile Village consists of 82 mobile home lots, as well as an office, garage, and miscellaneous common areas. The A-1 Mobile Village was constructed adjacent to the tailings pile, Gold Hill Tailings site (EPA ID: COD983801275), associated with the former Golden Cycle Mill located immediately west of the village. In historical aerial photographs from 1960, trailers appear on the property where A-1 Mobile Village is currently located. The A-1 Mobile Home Village is bordered to the north and east by Fountain Creek, beyond which is U.S. Highway 24 (W. Cimmaron St.), to the south by a recreational vehicle park, and to the west by the tailings pile and the former Golden Cycle Mill property, which is in the process of being developed and consists of the Gold Hill Mesa housing development and Villa De Mesa condominiums

Four areas of contaminated soil are source(s) associated with the site: 1) contaminated soil associated with the former mill area; 2) contaminated soil associated with the 170-acre tailings pile; 3) contaminated soil at the A-1 Mobile Home Village; and 4) potentially contaminated soil in other nearby areas. However, since 2000, the former mill (Source 1) and tailings pile (Source 2) have been the subject of a CDPHE VCUP. Contaminated soil at the A-1 Mobile Village and potentially other areas have not been addressed.

The primary pathway of concern at the site is the soil exposure component of the soil exposure and subsurface intrusion pathway. Arsenic and lead in soils at the A-1 Mobile Home Village were consistently higher in concentration as compared to background. In addition to arsenic and lead, several other metals were also detected in soil samples at concentrations exceeding three times the background level, such as antimony, cadmium, copper, silver, and zinc. In addition to meeting the criteria for observed contamination, concentrations of arsenic, cadmium, and manganese in soil samples collected from 64 occupied mobile home lots, 3 occupied mobile home lots, and 4 occupied mobile home lots, respectively, also exceeded applicable EPA's RSLs. Concentrations of lead that meet the criterion for observed contamination also exceeded EPA's recommended soil lead level in samples collected from 15 occupied mobile home lots.

Samples were not collected from the former mill property or tailings pile as part of this PA as those areas are currently being addressed under a CDPHE VCUP. Additionally, EPA has not yet collected soil samples

from additional areas, such as the residential area to the north and northeast across Route 24, to determine whether an area of observed contamination is present beyond the A-1 Mobile Home Village.

The surface water migration pathway and air migration pathway may be pathways of potential concern at the site. Surface water runoff potentially containing hazardous substances associated with the site would flow directly into Fountain Creek. Fountain Creek is not used for drinking water within the 15-mile TDL and is severely impaired because of heavy metals and *e coli*; however, while not a designated fishery, documented fishing occurs within Fountain Creek along the TDL. Therefore, there is the potential for human consumption of fish caught in the creek. Additionally, Fountain Creek may be a potential habitat for several federally threatened or endangered species that are noted as occurring within the 15-mile TDL.

The source at the site is largely bare soil; therefore, there is the potential for hazardous substances associated with the site to migrate via air migration pathway. Air samples have not been collected at the site; however, dust samples collected from the interiors of several mobile homes in 1995 showed concentrations of arsenic at 65.9 mg/kg and lead at 432 mg/kg.

Groundwater samples have not been collected at the site to evaluate whether a release to groundwater attributable to the site has occurred. However, the groundwater migration pathway is not considered a pathway of concern at the site based on the minimal number of targets associated with the groundwater migration pathway and the distance (between 3 and 4 miles) of groundwater supply wells from the site.

7.0 REFERENCES

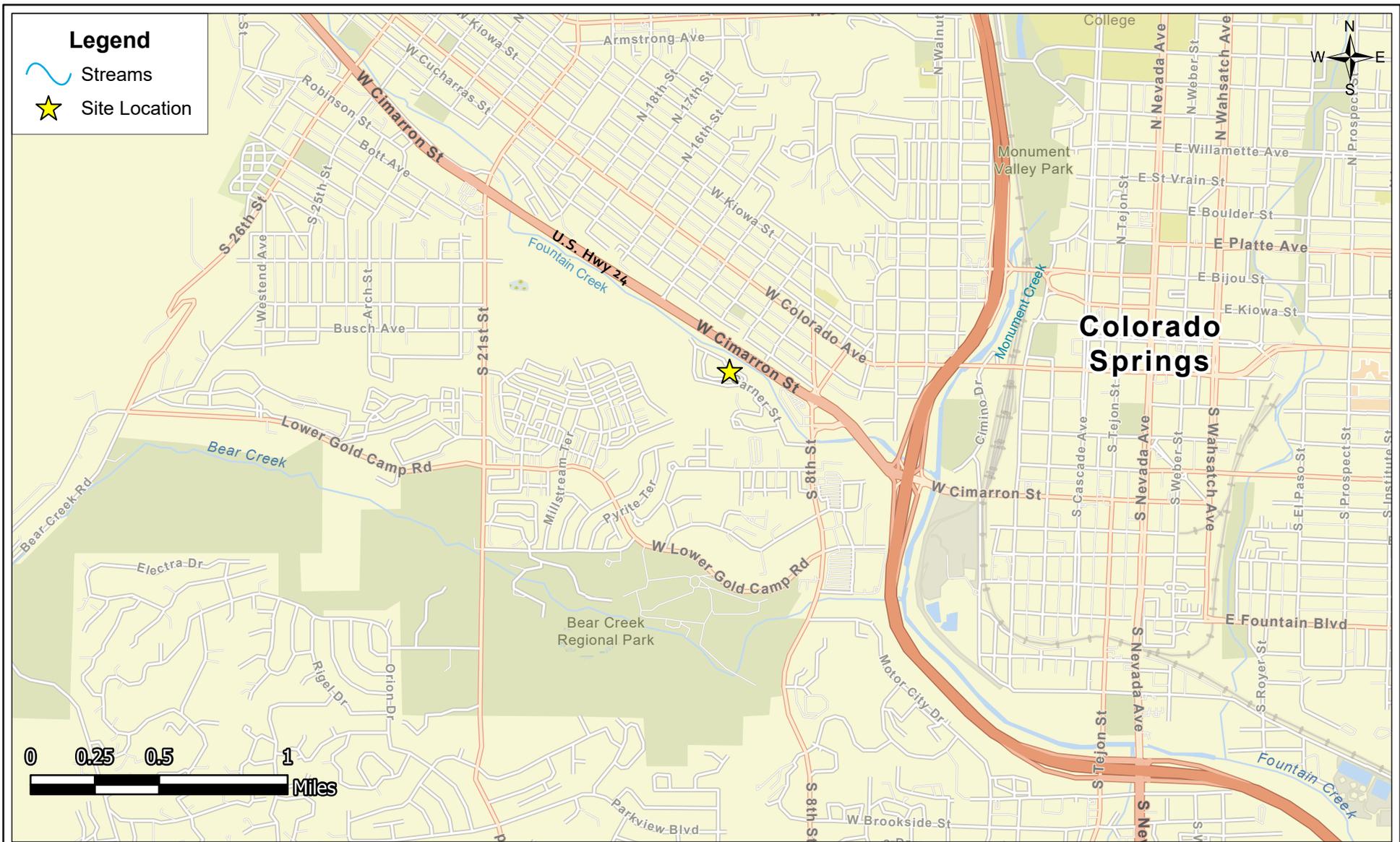
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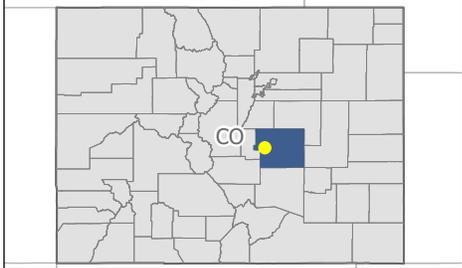
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APPENDIX A
FIGURES
(Four Pages)



Notes:

Source:
 Background: ESRI World Street Map Basemap
 Streams: USGS NHD Cached REST Service
 Parcels: El Paso County
 Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere
 Coordinate System




 United States
 Environmental
 Protection Agency

 Region 8 START V
 TD: 2083-2208-02


TETRA TECH

 Analyst: M. Caldwell
 Date: 11/22/2022

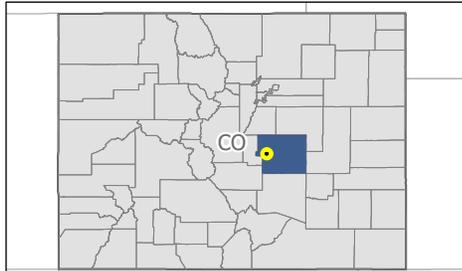
Hwy 24 Mill Site
Colorado Springs, El Paso County,
Colorado

Figure 1
Site Location



Notes:

Source:
 Background: ESRI World Imagery (2021)
 Sample and Site Locations: EPA Region 8 START V (Tetra Tech)
 Streams: USGS NHD Cached REST Service
 Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere
 Coordinate System



United States
 Environmental
 Protection Agency

Region 8 START V
 TD: 2083-2208-02

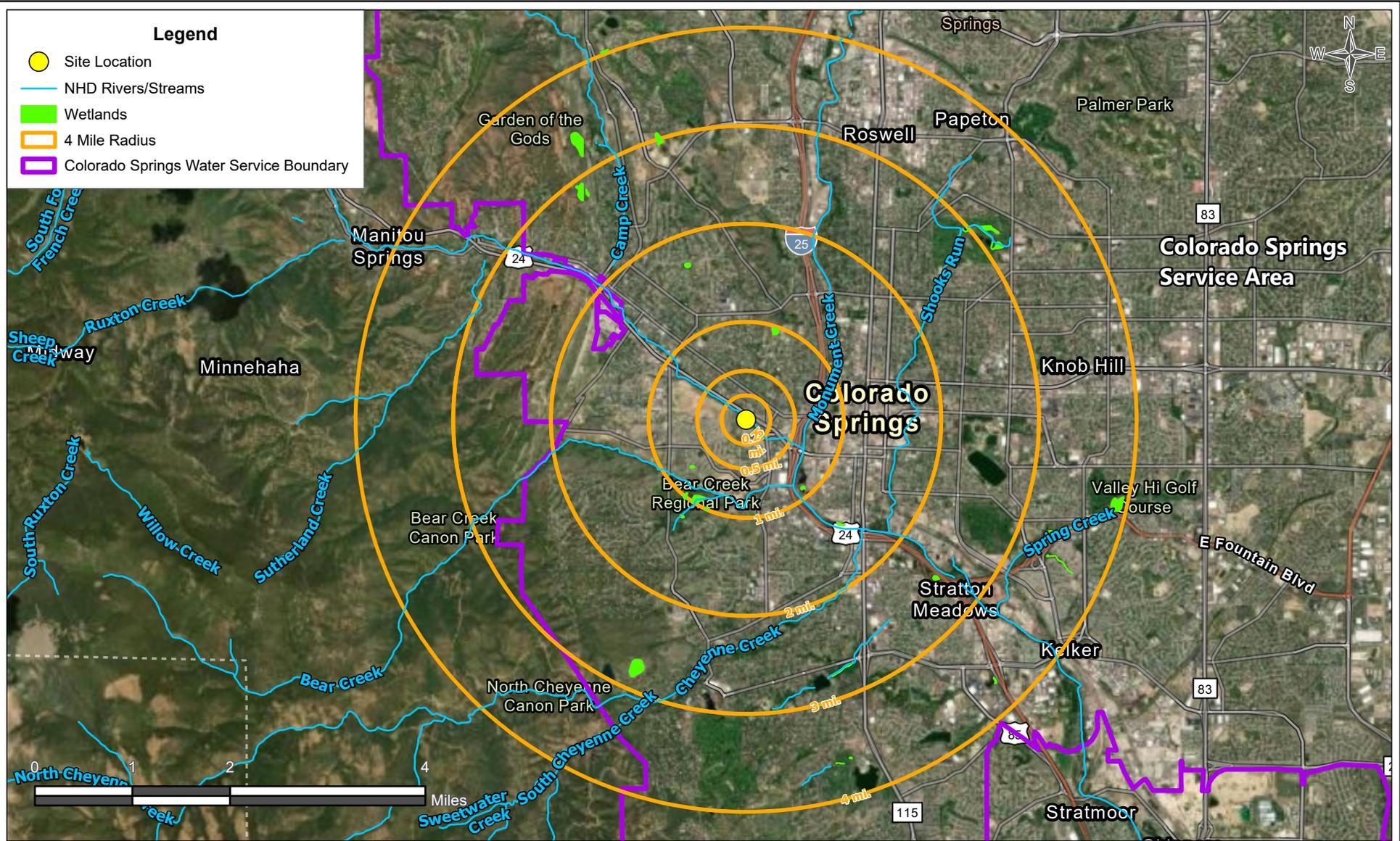


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Analyst: M. Caldwell
 Date: 11/22/2022

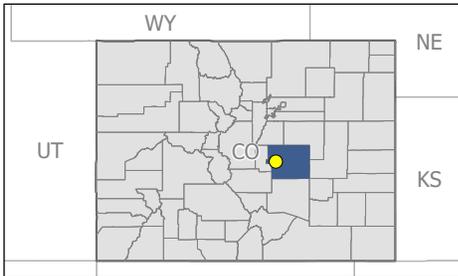
Hwy 24 Mill Site
 Colorado Springs, El Paso County,
 Colorado

Figure 2
Site Features



Notes:

Source:
 Background: ESRI World Imagery
 Rivers/Streams: USGS National Hydrography Data Set (NHD)
 Wetlands: US Fish and Wildlife NWI
 Spatial Reference: WGS 1984 Web Mercator Auxiliary Sphere Coordinate System



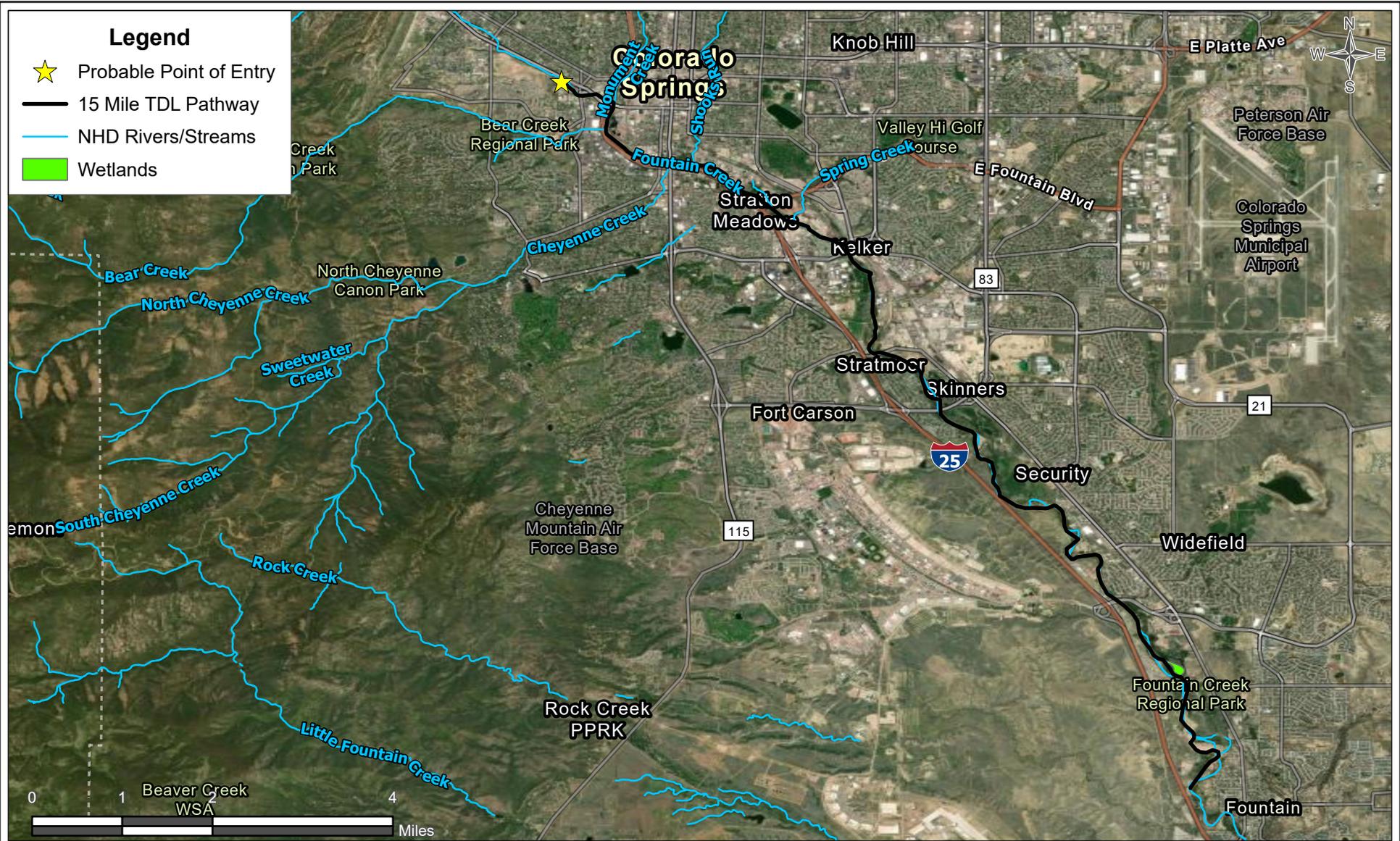
United States Environmental Protection Agency
 Region 8 START V
 TD: 2083-2208-02

TETRA TECH

Analyst: S. DeNeice
 Date: 11/22/2022

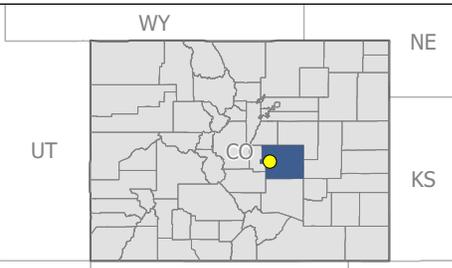
Hwy 24 Mill Site
 Colorado Springs, El Paso County,
 Colorado

Figure 3
4-Mile Radius Target Distance Limit



Notes:

Source:
 Background: ESRI World Imagery
 NHD Rivers/Streams: USGS National Hydrography Data Set (NHD)
 Wetlands: US Fish and Wildlife NWI
Spatial Reference: GCS WGS 1984 Coordinate System




 United States Environmental Protection Agency
 Region 8 START V
 TD: 2083-2208-02

TETRA TECH
 Analyst: S. DeNeice
 Date: 11/22/2022

Hwy 24 Mill Site
 Colorado Springs, El Paso County,
 Colorado
Figure 4
15 Mile Downstream Target
Distance Limit

APPENDIX B

TABLE

(59 Pages)

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-01A		GS-01B		GS-01E		GS-02A	
		00-01	01-06	00-01	01-06	00-01	01-06	00-01	01-06	00-01	01-06
Aluminum	77000	8300	8800	7100	6800	8000	9100	6500	7100	7300	7900
Antimony	31	0.25	0.25	0.69	0.62	1	0.51	1.2	0.99	0.56	0.55
Arsenic	0.68	11	11	29	24	46	25	54	45	24	26
Barium	15000	98	100	160	150	210	230	180	180	170	180
Beryllium	160	0.7	0.69	1	1	0.7	0.84	0.88	1	0.83	1.1
Cadmium	7.1	0.39	0.39	1.2	1.1	1.7	1.1	1.9	2	1.2	1.4
Calcium	NE	6400	6600	11000	11000	15000	11000	15000	18000	11000	11000
Chromium	120000	36	46	28	23	14	11	16	13	13	16
Cobalt	23	7.1	7.6	5.8	5.6	6.7	7.5	6.3	6.7	5.7	6.6
Copper	3100	18	20	36	33	47	33	63	40	28	30
Iron	55000	17000	18000	19000	18000	25000	25000	26000	25000	18000	20000
Lead	400	36	37	110	97	230	110	180	180	91	110
Magnesium	NE	3300	3500	4000	3900	3000	3100	4400	6000	3300	3900
Manganese	1800	450	430	580	540	560	610	850	900	630	690
Nickel	1500	27	34	18	18	23	46	14	23	13	15
Potassium	NE	2400	2400	3200	2700	2800	2500	2900	2400	3000	3000
Selenium	390	2.7	2.6	2.3	2.2	2.5	3.1	2.7	2.9	2.1	2.4
Silver	390	0.09J	0.098J	0.78	0.65	1.5	0.65	1.3	1.2	0.59	0.58
Sodium	NE	100U	100U	150 J+	130 J+	410	280	170 J+	140 J+	120 J+	120 J+
Thallium	0.78	0.17	0.19	0.28	0.26	0.3	0.26	0.31	0.33	0.25	0.28
Vanadium	390	20	21	27	25	34	31	35	30	25	26
Zinc	23000	75	77	320	230	390	230	460	390	310	320

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-02B-00-01	GS-02B-01-06	GS-02E-00-01	GS-02E-01-06	GS-03A-00-01	GS-03A-01-06	GS-03B-00-01	GS-03B-01-06
Aluminum	77000	8300	8800	8000	7400	7700	7500	7800	8900	7600	8400
Antimony	31	0.25	0.25	0.76	0.67	1.2	1.8	0.9	0.95	0.91	1.1
Arsenic	0.68	11	11	43	37	47	79	35	41	44	56
Barium	15000	98	100	150	110	200	160	180	240	220	210
Beryllium	160	0.7	0.69	0.76	0.83	0.94	0.97	0.86	0.98	0.75	0.84
Cadmium	7.1	0.39	0.39	1.5	1.2	2.1	2.7	1.4	1.3	2.2	3.1
Calcium	NE	6400	6600	22000	23000	12000	16000	11000	11000	12000	13000
Chromium	120000	36	46	13	11	14	13	15	23	14	13
Cobalt	23	7.1	7.6	12	12	8	8.6	7.5	9.2	8.7	10
Copper	3100	18	20	41	37	46	46	34	40	60	55
Iron	55000	17000	18000	31000	29000	26000	33000	21000	26000	29000	34000
Lead	400	36	37	130	110	170	280	120	120	160	240
Magnesium	NE	3300	3500	4400	4000	3300	2900	3500	4200	2700	3000
Manganese	1800	450	430	840	740	790	1100	690	790	830	1100
Nickel	1500	27	34	29	28	19	22	25	140	21	24
Potassium	NE	2400	2400	2300	2100	3200	2700	3100	2500	2200	2400
Selenium	390	2.7	2.6	3.6	3.8	2.7	2.9	2.2	2.7	3.1	3.5
Silver	390	0.09J	0.098J	0.87	0.75	1.1	1.9	0.83	1	3.5	2.6
Sodium	NE	100U	100U	190 J+	200 J+	130 J+	130 J+	140 J+	150 J+	130 J+	150 J+
Thallium	0.78	0.17	0.19	0.39	0.32	0.34	0.41	0.31	0.33	0.32	0.41
Vanadium	390	20	21	34	31	36	41	30	34	34	37
Zinc	23000	75	77	270	220	470	480	420	260	360	600

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-03E-00-01	GS-03E-01-06	GS-03E-00-01-DUP	GS-03E-01-06-DUP	GS-03E-00-01-TRI	GS-03E-01-06-TRI	GS-04A-00-01	GS-04A-01-06
Aluminum	77000	8300	8800	8000	8400	7700	8900	7500	8800	7800	8100
Antimony	31	0.25	0.25	1.2	1.3	1.1	0.92	1.3	1	0.57	0.54
Arsenic	0.68	11	11	44	44	39	43	42	48	29	26
Barium	15000	98	100	200	220	210	240	200	330	210	240
Beryllium	160	0.7	0.69	1	1.2	0.99	1.2	1	1.2	0.77	0.8
Cadmium	7.1	0.39	0.39	2.1	2.7	2.2	2.5	2.3	2.9	1.3	2
Calcium	NE	6400	6600	10000	12000	10000	10000	12000	13000	9500	9600
Chromium	120000	36	46	21	28	22	23	21	24	13	12
Cobalt	23	7.1	7.6	7.2	6.9	6.9	7.4	7	8.7	7.9	9.9
Copper	3100	18	20	41	47	40	45	39	53	41	33
Iron	55000	17000	18000	25000	25000	24000	27000	24000	28000	20000	25000
Lead	400	36	37	160	210	170	190	180	270	100	79
Magnesium	NE	3300	3500	3300	4000	3100	3700	3400	4800	3700	3900
Manganese	1800	450	430	720	770	670	760	660	870	620	710
Nickel	1500	27	34	16	26	17	31	15	27	17	35
Potassium	NE	2400	2400	3500	2900	3800	3100	3900	3200	3000	2300
Selenium	390	2.7	2.6	2.6	2.9	2.6	2.8	2.7	3.1	1.9	2.3
Silver	390	0.09J	0.098J	1.3	2.9	1.5	1.9	1.5	2.3	0.68	0.47
Sodium	NE	100U	100U	150 J+	130 J+	140 J+	160 J+	140 J+	170 J+	98 U	140 J+
Thallium	0.78	0.17	0.19	0.32	0.34	0.32	0.32	0.33	0.36	0.27	0.28
Vanadium	390	20	21	35	36	33	40	34	36	27	27
Zinc	23000	75	77	450	490	420	490	470	570	320	200

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-04A-00-01-DUP	GS-04A-01-06-DUP	GS-04A-00-01-TRI	GS-04A-01-06-TRI	GS-04B-00-01	GS-04B-01-06	GS-04E-00-01	GS-04E-01-06
Aluminum	77000	8300	8800	7500	8800	7700	8600	8100	8200	8100	8300
Antimony	31	0.25	0.25	0.74	0.54	0.69	0.44	1.4	1	0.96	1.1
Arsenic	0.68	11	11	28	27	30	27	75	55	46	44
Barium	15000	98	100	180	250	200	250	180	160	250	240
Beryllium	160	0.7	0.69	0.77	0.88	0.77	0.88	0.95	1.1	0.99	1.2
Cadmium	7.1	0.39	0.39	3.1	1.3	1.4	1.2	9.6	9.4	2.2	2.4
Calcium	NE	6400	6600	10000	11000	10000	11000	13000	32000	10000	8800
Chromium	120000	36	46	12	12	13	13	12	12	18	16
Cobalt	23	7.1	7.6	8	11	7.8	11	9.8	12	7.5	8.8
Copper	3100	18	20	35	36	36	38	58	62	44	42
Iron	55000	17000	18000	20000	26000	21000	24000	30000	28000	27000	29000
Lead	400	36	37	94	70	100	76	250	220	180	190
Magnesium	NE	3300	3500	3600	4500	3700	4600	6000	5800	3600	3400
Manganese	1800	450	430	620	770	660	760	2200	3100	740	900
Nickel	1500	27	34	18	52	21	50	19	36	16	27
Potassium	NE	2400	2400	2900	2300	3200	2400	3700	2800	3200	2900
Selenium	390	2.7	2.6	1.9	2.6	1.9	2.5	2.7	3.2	2.6	3.3
Silver	390	0.09J	0.098J	0.66	0.43	0.7	0.53	1.6	1.5	1.3	1.3
Sodium	NE	100U	100U	100 U	150 J+	100 J+	140 J+	500	350	200 J+	160 J+
Thallium	0.78	0.17	0.19	0.27	0.32	0.27	0.3	0.41	0.37	0.34	0.36
Vanadium	390	20	21	26	28	28	28	41	36	36	34
Zinc	23000	75	77	340	200	340	220	2400	1700	510	480

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-05A-00-01	GS-05A-01-06	GS-05B-00-01	GS-05B-01-06	GS-06A-00-01	GS-06A-01-06	GS-06B-00-01	GS-06B-01-06
Aluminum	77000	8300	8800	7100	8100	10000	9900	7300	8700	7500	8700
Antimony	31	0.25	0.25	0.67	0.49	0.96	1.2	0.47	0.39	1 J	0.65 J
Arsenic	0.68	11	11	31	24	53	55	19	17	50 J	56
Barium	15000	98	100	200	210	110	150	190	210	130	130
Beryllium	160	0.7	0.69	0.73	0.81	1.2	1	0.64	0.86	0.79	0.96
Cadmium	7.1	0.39	0.39	1.4	1.1	16	11	0.91	0.77	23	21
Calcium	NE	6400	6600	11000	10000	22000	13000	7500	7300	12000	22000
Chromium	120000	36	46	11	11	14	15	9.1	11	12	14
Cobalt	23	7.1	7.6	6.8	8.1	12	11	6.3	7.5	8.2	10
Copper	3100	18	20	31	32	86	76	25	27	41	52
Iron	55000	17000	18000	21000	21000	30000	29000	17000	20000	25000	29000
Lead	400	36	37	120	100	190	190	61	60	180	220
Magnesium	NE	3300	3500	4000	4200	4200	4600	2500	3000	6100	5700
Manganese	1800	450	430	570	550	4800	2800	480	480	2200	4000
Nickel	1500	27	34	15	49	42	25	15	63	33	40
Potassium	NE	2400	2400	3200	2300	2600	2900	2600	2300	2700	2400
Selenium	390	2.7	2.6	1.9	2.1	3.3	2.9	1.8	2.3	2.3	2.8
Silver	390	0.09J	0.098J	0.79	0.57	1.3	1.3	0.41	0.3	1.4	1.4
Sodium	NE	100U	100U	130 J+	120 J+	310	510	89 U	110 J+	1000	440
Thallium	0.78	0.17	0.19	0.24	0.26	0.38	0.34	0.22	0.26	0.3	0.31
Vanadium	390	20	21	28	25	39	40	23	25	34	35
Zinc	23000	75	77	360	200	2900	2600	230	180	5500	5100

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-06E-00-01	GS-06E-01-06	GS-07A-00-01	GS-07A-01-06	GS-07A1-00-01	GS-07A1-01-06	GS-07B-00-01	GS-07B-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	7800	8200	7400	7900	7500	7900	7100	8400
Antimony	31	0.25	0.25	0.71	1.2	0.47	0.34	0.35	0.29	0.97	0.94
Arsenic	0.68	11	11	37	70	22	19	22	18	56	60
Barium	15000	98	100	230	310	200	200	200	180	180	140
Beryllium	160	0.7	0.69	1	1.2	0.73	0.75	0.59	0.59	0.75	0.98
Cadmium	7.1	0.39	0.39	2.1	2.7	1	0.9	1	0.71	6.6	16
Calcium	NE	6400	6600	9500	7500	9900	11000	7200	6000	7800	21000
Chromium	120000	36	46	13	14	11	11	12	11	11	12
Cobalt	23	7.1	7.6	6.6	9.6	8.1	7.9	6.4	6.4	7.8	12
Copper	3100	18	20	36	44	32	30	30	26	43	56
Iron	55000	17000	18000	25000	35000	20000	21000	19000	18000	26000	30000
Lead	400	36	37	140	260	80	77	88	63	210	250
Magnesium	NE	3300	3500	2800	2900	3400	3400	2300	2200	3600	4400
Manganese	1800	450	430	660	1000	610	590	420	400	1600	3600
Nickel	1500	27	34	16	25	19	46	15	30	20	35
Potassium	NE	2400	2400	3200	2700	2500	2100	2800	2200	3000	2500
Selenium	390	2.7	2.6	2.5	3.5	2	2.1	1.7	1.7	2.4	2.6
Silver	390	0.09J	0.098J	0.96	1.9	0.46	0.43	0.47	0.37	2	1.8
Sodium	NE	100U	100U	200 J+	150 J+	120 J+	120 J+	170 J+	240	230	240
Thallium	0.78	0.17	0.19	0.31	0.4	0.24	0.24	0.23	0.22	0.33	0.38
Vanadium	390	20	21	30	39	27	27	26	25	36	38
Zinc	23000	75	77	370	400	290	210	240	160	1900	3700

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-07E-00-01	GS-07E-01-06	GS-08A-00-01	GS-08A-01-06	GS-08B-00-01	GS-08B-01-06	GS-08E-00-01	GS-08E-01-06
Aluminum	77000	8300	8800	7400	7500	7000	7700	7900	11000	7100	8200
Antimony	31	0.25	0.25	1.1	1.9	0.44	0.25	1.1	1.7	1.1	1.3
Arsenic	0.68	11	11	54	110	25	15	79	97	48	68
Barium	15000	98	100	200	290	190	200	140	130	220	280
Beryllium	160	0.7	0.69	1	0.96	0.61	0.55	0.79	1	1.1	1.3
Cadmium	7.1	0.39	0.39	2.6	2.8	1.1	0.64	3.7	7	2.7	2.6
Calcium	NE	6400	6600	8800	7500	7200	5800	14000	22000	14000	8900
Chromium	120000	36	46	13	14	12	9.9	12	14	16	15
Cobalt	23	7.1	7.6	7	8.6	5.9	5.5	6.8	7.9	6.1	7.7
Copper	3100	18	20	47	55	25	18	120	88	47	41
Iron	55000	17000	18000	28000	41000	18000	17000	42000	41000	26000	32000
Lead	400	36	37	240	430	100	54	440	460	190	240
Magnesium	NE	3300	3500	3000	2900	2500	2300	2700	2700	4400	3600
Manganese	1800	450	430	850	1200	490	370	770	1800	870	980
Nickel	1500	27	34	16	21	12	31	21	35	15	25
Potassium	NE	2400	2400	3200	2700	2400	1800	3000	3000	4200	3400
Selenium	390	2.7	2.6	2.6	3.3	1.6	1.6	2.8	3	2.6	3.2
Silver	390	0.09J	0.098J	1.7	3.2	0.72	0.37	3	3.2	1.3	1.8
Sodium	NE	100U	100U	170 J+	130 J+	99 U	100 U	490	400	340	210 J+
Thallium	0.78	0.17	0.19	0.35	0.43	0.23	0.2	0.49	0.5	0.33	0.4
Vanadium	390	20	21	34	45	27	25	39	49	34	40
Zinc	23000	75	77	500	530	210	120	820	1500	580	470

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-09B-00-01	GS-09B-01-06	GS-09E-00-01	GS-09E-01-06	GS-10B-00-01	GS-10B-01-06	GS-11B-00-01	GS-11B-01-06
Aluminum	77000	8300	8800	8300	8200	7400	7500	7200	7400	6400	7500
Antimony	31	0.25	0.25	1.1	1.1	0.9	1.3	1.4	1.6	1.6	2.1
Arsenic	0.68	11	11	79	99	53	79	99	110	95	120
Barium	15000	98	100	250	270	220	260	280	270	270	290
Beryllium	160	0.7	0.69	0.94	0.93	1.2	1.4	0.83	1	0.79	0.97
Cadmium	7.1	0.39	0.39	5.9	5.1	3.7	4.6	4.8	6.5	4.3	5.2
Calcium	NE	6400	6600	9500	7500	17000	21000	8500	8600	8300	8700
Chromium	120000	36	46	13	13	13	15	14	12	11	12
Cobalt	23	7.1	7.6	7.5	10	6.2	6.5	7.7	7.2	6.2	6.8
Copper	3100	18	20	73	83	42	53	64	86	73	87
Iron	55000	17000	18000	34000	38000	27000	34000	36000	45000	35000	44000
Lead	400	36	37	360	460	260	380	430	580	490	610
Magnesium	NE	3300	3500	3200	2900	7000	8900	2900	2800	2600	3200
Manganese	1800	450	430	1000	1400	1000	1300	1300	1500	960	1100
Nickel	1500	27	34	20	36	15	18	16	35	15	45
Potassium	NE	2400	2400	3200	2900	3000	2800	3400	3300	3100	3200
Selenium	390	2.7	2.6	2.8	2.7	2.7	2.9	2.4	2.9	2.4	3
Silver	390	0.09J	0.098J	2.5	3.3	1.6	2.6	3.2	4.3	3.4	4.5
Sodium	NE	100U	100U	370	270	110 J+	120 J+	200 J+	260	220	290
Thallium	0.78	0.17	0.19	0.45	0.52	0.36	0.39	0.5	0.59	0.51	0.62
Vanadium	390	20	21	43	45	32	35	46	43	40	43
Zinc	23000	75	77	1200	950	700	760	1000	1300	910	1100

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-11B-00-01-DUP	GS-11B-01-06-DUP	GS-11B-00-01-TRI	GS-11B-01-06-TRI	GS-11D-00-01	GS-11D-01-06	GS-12B-00-01	GS-12B-01-06
Aluminum	77000	8300	8800	6300	7300	6400	7100	6000	6400	6500	6900
Antimony	31	0.25	0.25	1.8	1.5	2	2.1	0.9	1.1	1.3	1.4
Arsenic	0.68	11	11	96	110	96	110	25	33	63	92
Barium	15000	98	100	260	310	260	290	160	180	240	290
Beryllium	160	0.7	0.69	0.79	0.93	0.79	0.92	0.85	1	0.84	0.84
Cadmium	7.1	0.39	0.39	4.2	5	4.3	5.1	1.1	1.5	2.5	3.2
Calcium	NE	6400	6600	8200	8500	8200	8500	12000	19000	8300	7900
Chromium	120000	36	46	11	12	12	11	9.3	11	12	12
Cobalt	23	7.1	7.6	6.2	6.7	6.4	6.6	4.7	5.2	5.7	6.2
Copper	3100	18	20	72	90	74	84	33	37	49	64
Iron	55000	17000	18000	35000	43000	36000	43000	16000	20000	28000	39000
Lead	400	36	37	490	590	490	600	92	150	340	570
Magnesium	NE	3300	3500	2600	3100	2700	3100	4200	6800	2500	2700
Manganese	1800	450	430	940	1000	940	1000	510	620	710	860
Nickel	1500	27	34	14	47	14	48	16	29	13	30
Potassium	NE	2400	2400	3100	3100	3100	3100	1800	1900	3300	3100
Selenium	390	2.7	2.6	2.3	2.7	2.4	2.9	2.1	2.4	2.4	2.6
Silver	390	0.09J	0.098J	3.4	4.3	3.4	4.3	0.64	2.1	2.4	4.1
Sodium	NE	100U	100U	220	280	220	280	95 U	130 J+	170 J+	240
Thallium	0.78	0.17	0.19	0.51	0.59	0.51	0.58	0.24	0.28	0.41	0.55
Vanadium	390	20	21	40	43	40	42	22	27	34	40
Zinc	23000	75	77	930	1000	940	1100	470	400	600	680

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-12D-00-01	GS-12D-01-06	GS-13B-00-01	GS-13B-01-06	GS-13D-00-01	GS-13D-01-06	GS-14B-00-01	GS-14B-01-06
Aluminum	77000	8300	8800	9800	8300	6400	7200	7500	7300	6000	6800
Antimony	31	0.25	0.25	0.87	1	1.5	1	1.3 J	1 J	1.4	1.4
Arsenic	0.68	11	11	37	43	60	72	61	52	68	72
Barium	15000	98	100	250	240	200	290	250	200	180	210
Beryllium	160	0.7	0.69	1.2	1.1	0.67	0.74	0.96	1.2	0.7	0.74
Cadmium	7.1	0.39	0.39	4.3	2.7	2.3	2.8	2.3	2	2.3	2.5
Calcium	NE	6400	6600	14000	14000	11000	8800	20000	13000	9400	9000
Chromium	120000	36	46	15	14	12	12	16	14	11	12
Cobalt	23	7.1	7.6	5.2	6.5	7	7.8	6.8	7.1	6.5	7.2
Copper	3100	18	20	39	45	46	60	55	45	56	57
Iron	55000	17000	18000	31000	27000	28000	37000	29000	29000	29000	35000
Lead	400	36	37	180	240	290	490	290	230	330	460
Magnesium	NE	3300	3500	3800	4700	3100	3400	4200	3800	3300	3300
Manganese	1800	450	430	820	720	730	890	690	800	750	790
Nickel	1500	27	34	29	35	17	72	19	23	18	28
Potassium	NE	2400	2400	3400	3000	3300	3200	3000	2600	3200	3000
Selenium	390	2.7	2.6	4.6	2.9	2.1	2.4	2.6	2.9	2.2	2.6
Silver	390	0.09J	0.098J	1.2	2.4	1.9	3.1	2	1.5	2.4	2.9
Sodium	NE	100U	100U	210 J+	220	160 J+	180 J+	250	170 J+	180 J+	200 J+
Thallium	0.78	0.17	0.19	0.44	0.38	0.35	0.47	0.38	0.38	0.38	0.44
Vanadium	390	20	21	33	35	38	40	35	31	35	37
Zinc	23000	75	77	420	370	630	590	520	400	530	510

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-14B-00-01-DUP	GS-14B-01-06-DUP	GS-14B-00-01-TRI	GS-14B-01-06-TRI	GS-14D-00-01	GS-14D-01-06	GS-15B-00-01	GS-15B-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	6600	6800	6700	6600	5500	6300	5700	7700
Antimony	31	0.25	0.25	1.4	1.4	1.4	1.4	0.95 J	0.88 J	1.1	1.2
Arsenic	0.68	11	11	72	73	72	71	42	42	44	56
Barium	15000	98	100	200	200	200	210	170	170	150	200
Beryllium	160	0.7	0.69	0.71	0.74	0.72	0.73	0.81	0.97	0.57	0.76
Cadmium	7.1	0.39	0.39	2.4	2.4	2.5	2.5	1.6	1.7	1.8	4.3
Calcium	NE	6400	6600	8700	8900	8800	8800	31000	22000	7500	11000
Chromium	120000	36	46	12	12	12	12	12	12	10	12
Cobalt	23	7.1	7.6	7	7.2	7.2	7.1	5.4	5.9	5.6	8.7
Copper	3100	18	20	64	59	60	57	49	40	40	46
Iron	55000	17000	18000	34000	35000	35000	35000	21000	24000	22000	28000
Lead	400	36	37	450	460	460	460	190	200	200	220
Magnesium	NE	3300	3500	3100	3200	3200	3200	6500	6000	2300	3900
Manganese	1800	450	430	780	780	800	790	630	640	570	1400
Nickel	1500	27	34	29	29	25	28	19	26	14	27
Potassium	NE	2400	2400	3000	3000	3000	3000	2100	2200	2500	2400
Selenium	390	2.7	2.6	2.5	2.6	2.6	2.5	1.8	2.2	1.8	2.6
Silver	390	0.09J	0.098J	3	3	3	3.1	1.3 J	1.4	1.4	1.6
Sodium	NE	100U	100U	200 J+	200 J+	200 J+	200 J+	260	160 J+	160 J+	170 J+
Thallium	0.78	0.17	0.19	0.45	0.46	0.45	0.45	0.28	0.31	0.27	0.35
Vanadium	390	20	21	36	36	36	36	27	26	30	37
Zinc	23000	75	77	520	510	520	510	450	340	450	880

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-16B-00-01	GS-16B-01-06	GS-16B1-00-01	GS-16B1-01-06	GS-16D-00-01	GS-16D-01-06	GS-17B-00-01	GS-17B-01-06
		00-01	01-06								
Aluminium	77000	8300	8800	6600	7800	7200	7900	7800	8600	6900	8400
Antimony	31	0.25	0.25	1.1	1.2	0.67	0.5	0.82	0.85	1	0.8
Arsenic	0.68	11	11	46	65	35	24	35	37	47	42
Barium	15000	98	100	170	210	200	210	180	210	190	240
Beryllium	160	0.7	0.69	0.75	0.85	0.69	0.75	0.71	0.8	0.69	0.81
Cadmium	7.1	0.39	0.39	1.6	2	1.1	1.2	1.8	1.8	1.6	1.5
Calcium	NE	6400	6600	9300	11000	10000	7900	12000	14000	15000	14000
Chromium	120000	36	46	11	14	13	9.3	13	11	13	15
Cobalt	23	7.1	7.6	8	9.7	6.5	7.4	5.9	6.6	8.1	10
Copper	3100	18	20	42	49	43	31	37	42	41	44
Iron	55000	17000	18000	25000	34000	19000	20000	22000	25000	24000	29000
Lead	400	36	37	180	250	92	79	150	180	160	150
Magnesium	NE	3300	3500	3100	3700	2900	2800	3600	4000	3400	4200
Manganese	1800	450	430	680	930	520	510	560	630	700	750
Nickel	1500	27	34	20	42	17	25	18	35	20	35
Potassium	NE	2400	2400	2600	2700	2700	2000	3300	2800	2900	2300
Selenium	390	2.7	2.6	2.5	3.2	2.1	2.3	2	2.4	2.3	3.1
Silver	390	0.09J	0.098J	1.3	1.8	0.68	0.53	1.1	1.1	1.1	1
Sodium	NE	100U	100U	170 J+	170 J+	240	160 J+	620	570	190 J+	180 J+
Thallium	0.78	0.17	0.19	0.31	0.37	0.23	0.23	0.28	0.31	0.29	0.32
Vanadium	390	20	21	31	38	27	25	32	35	33	36
Zinc	23000	75	77	390	400	290	260	340	320	350	290

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-17D-00-01	GS-17D-01-06	GS-18B-00-01	GS-18B-01-06	GS-18D-00-01	GS-18D-01-06	GS-19B-00-01	GS-19B-01-06
Aluminum	77000	8300	8800	7500	9600	7100	8100	7000	7800	7100	7500
Antimony	31	0.25	0.25	1.2	1.4	1.2	0.84	1.1	0.78	1.4	0.67
Arsenic	0.68	11	11	44	55	32	36	43	28	49	30
Barium	15000	98	100	210	270	180	230	190	200	180	190
Beryllium	160	0.7	0.69	0.87	1.1	0.73	0.83	0.72	0.97	0.77	0.85
Cadmium	7.1	0.39	0.39	2.3	2.6	1.1	1.5	1.9	2	1.9	1.3
Calcium	NE	6400	6600	15000	20000	11000	11000	12000	12000	10000	10000
Chromium	120000	36	46	13	17	13	15	11	11	14	11
Cobalt	23	7.1	7.6	8.1	9.9	6.7	9.7	6.6	5.9	7.9	8.6
Copper	3100	18	20	44	56	32	37	34	31	48	41
Iron	55000	17000	18000	26000	34000	21000	27000	23000	22000	27000	25000
Lead	400	36	37	160	210	110	120	170	130	190	110
Magnesium	NE	3300	3500	4500	5700	2900	3900	4000	4400	3000	4200
Manganese	1800	450	430	810	1000	530	740	690	640	680	600
Nickel	1500	27	34	19	37	18	40	15	37	22	44
Potassium	NE	2400	2400	3300	3100	2300	2100	2600	1800	2600	1900
Selenium	390	2.7	2.6	2.8	3.5	2.3	2.9	2.3	2.7	2.6	2.9
Silver	390	0.09J	0.098J	1.4	1.6	0.87	0.89	1.3	0.88	1.2	0.73
Sodium	NE	100U	100U	210 J+	200 J+	120 J+	160 J+	120 J+	160 J+	170 J+	140 J+
Thallium	0.78	0.17	0.19	0.34	0.42	0.26	0.32	0.29	0.28	0.31	0.28
Vanadium	390	20	21	33	42	28	32	31	26	34	27
Zinc	23000	75	77	420	470	260	270	380	320	430	230

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-20B-00-01	GS-20B-01-06	GS-20D-00-01	GS-20D-01-06	GS-21D-00-01	GS-21D-01-06	GS-22D-00-01	GS-22D-01-06
Aluminum	77000	8300	8800	6900	7700	7800	6900	7700	6900	7300	8000
Antimony	31	0.25	0.25	0.54	0.69	1.1	0.78	1.4	2.6	1.2	1.2
Arsenic	0.68	11	11	24	33	48	34	65	140	49	47
Barium	15000	98	100	170	200	210	190	220	260	190	210
Beryllium	160	0.7	0.69	0.63	0.79	0.76	0.73	0.77	0.66	0.7	0.78
Cadmium	7.1	0.39	0.39	1.2	1.8	2.5	1.6	2.9	2.5	1.8	2.1
Calcium	NE	6400	6600	6900	8200	13000	11000	8900	7100	13000	11000
Chromium	120000	36	46	8.7	9.8	24	14	13	12	14	12
Cobalt	23	7.1	7.6	6	7.4	8.2	6.6	8.4	8.1	8.6	9.4
Copper	3100	18	20	24	33	46	31	47	57	53	45
Iron	55000	17000	18000	17000	23000	29000	22000	32000	46000	27000	29000
Lead	400	36	37	85	130	200	120	640	500	160	180
Magnesium	NE	3300	3500	2200	3300	3500	3800	2900	2700	4000	3500
Manganese	1800	450	430	480	700	940	720	930	1100	800	850
Nickel	1500	27	34	14	34	46	24	23	26	18	23
Potassium	NE	2400	2400	2100	1900	2300	1700	2900	2700	3300	2600
Selenium	390	2.7	2.6	1.7	2.3	2.6	2.3	2.6	3	2.4	2.8
Silver	390	0.09J	0.098J	0.83	0.9	1.4	0.89	1.8	3.9	1.3	1.2
Sodium	NE	100U	100U	90 U	110 J+	170 J+	140 J+	180 J+	180 J+	570	180 J+
Thallium	0.78	0.17	0.19	0.23	0.28	0.33	0.26	0.36	0.48	0.31	0.33
Vanadium	390	20	21	25	28	34	27	36	48	35	36
Zinc	23000	75	77	200	260	470	280	540	520	460	410

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-23D-00-01	GS-23D-01-06	GS-24D-00-01	GS-24D-01-06	GS-25D-00-01	GS-25D-01-06	GS-26D-00-01	GS-26D-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	7700	8400	7000	7900	6800	7700	7300	7000
Antimony	31	0.25	0.25	1.5	1	1.1	1.2	1.2	1.2	1	1
Arsenic	0.68	11	11	58	48	48	46	50	58	47	46
Barium	15000	98	100	190	170	190	200	200	200	190	180
Beryllium	160	0.7	0.69	0.75	0.83	0.74	0.9	0.82	0.95	0.85	0.87
Cadmium	7.1	0.39	0.39	1.4	2.7	2	2.3	2.2	2.5	2	2.3
Calcium	NE	6400	6600	14000	17000	13000	11000	14000	16000	13000	14000
Chromium	120000	36	46	13	13	13	13	12	12	14	11
Cobalt	23	7.1	7.6	11	11	7.9	8.2	7.7	8.5	7	6.6
Copper	3100	18	20	42	45	46	42	45	44	66	47
Iron	55000	17000	18000	31000	31000	25000	28000	26000	31000	24000	25000
Lead	400	36	37	260	190	140	180	200	240	190	200
Magnesium	NE	3300	3500	4400	5100	3400	3900	4200	5800	3900	4700
Manganese	1800	450	430	840	1000	790	840	840	980	760	850
Nickel	1500	27	34	23	27	18	28	19	25	16	21
Potassium	NE	2400	2400	2200	2100	2600	2600	3700	3100	3200	2300
Selenium	390	2.7	2.6	2.7	3.1	2.5	3	2.3	2.8	2.2	2.3
Silver	390	0.09J	0.098J	1.6	1.3	1.2	1.2	1.3	1.6	1.2	1.4
Sodium	NE	100U	100U	240	160 J+	130 J+	120 J+	300	240	440	250
Thallium	0.78	0.17	0.19	0.36	0.35	0.32	0.35	0.32	0.37	0.31	0.31
Vanadium	390	20	21	39	36	34	33	34	36	32	31
Zinc	23000	75	77	280	380	510	440	410	410	500	590

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-27D-00-01	GS-27D-01-06	GS-28D-00-01	GS-28D-01-06	GS-29A4-00-01	GS-29A4-01-06	GS-29A5-00-01	GS-29A5-01-06
Aluminum	77000	8300	8800	7300	7600	6800	7700	5400	4400	4900	4100
Antimony	31	0.25	0.25	0.69	0.65	1.2	1.3	2	2.4	2.2	2.6
Arsenic	0.68	11	11	30	33	49	58	94	100	95	110
Barium	15000	98	100	200	190	170	180	190	160	160	170
Beryllium	160	0.7	0.69	0.72	0.79	1.1	1.5	0.86	0.78	0.65	0.55
Cadmium	7.1	0.39	0.39	1.4	1.5	2.2	2.5	1.6	1.8	2.5	2
Calcium	NE	6400	6600	9500	11000	9300	9200	14000	16000	7200	7600
Chromium	120000	36	46	11	10	13	14	28	27	11	19
Cobalt	23	7.1	7.6	6.8	6.1	6	6.6	6.5	5.8	6.5	5.6
Copper	3100	18	20	27	26	39	39	61	66	61	70
Iron	55000	17000	18000	20000	22000	23000	26000	38000	40000	37000	42000
Lead	400	36	37	110	130	180	200	550	610	500	700
Magnesium	NE	3300	3500	2700	2500	2800	3200	4700	4800	2100	2000
Manganese	1800	450	430	520	640	760	880	590	560	650	560
Nickel	1500	27	34	13	16	15	19	20	19	12	16
Potassium	NE	2400	2400	2900	2100	2800	2600	2700	2400	2600	2600
Selenium	390	2.7	2.6	2.1	2.1	2.4	2.6	2.1	2	2.1	2
Silver	390	0.09J	0.098J	0.77	0.95	1.3	1.3	3.6	4.1	3.3	4.4
Sodium	NE	100U	100U	340	280	240	240	260	250	210 J+	240
Thallium	0.78	0.17	0.19	0.25	0.24	0.34	0.37	0.52	0.51	0.47	0.54
Vanadium	390	20	21	27	26	33	37	37	37	38	38
Zinc	23000	75	77	270	260	430	430	370	390	460	420

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-29D-00-01	GS-29D-01-06	GS-29D-00-01-DUP	GS-29D-01-06-DUP	GS-29D-00-01-TRI	GS-29D-01-06-TRI	GS-30A-00-01	GS-30A-01-06
Aluminum	77000	8300	8800	7200	8600	7200	8700	7300	9100	5600	4500
Antimony	31	0.25	0.25	1.6	1.8	1.6	1.8	1.7	1.7	2.2	1.8
Arsenic	0.68	11	11	75	79	75	78	78	79	92	110
Barium	15000	98	100	190	220	190	220	180	250	160	190
Beryllium	160	0.7	0.69	1.4	1.7	1.4	1.8	1.3	1.8	0.66	0.5
Cadmium	7.1	0.39	0.39	4.4	3.8	4.4	3.8	4.3	3.9	2.3	1.9
Calcium	NE	6400	6600	9800	8100	10000	8100	10000	8200	7100	7500
Chromium	120000	36	46	13	14	13	14	13	15	17	16
Cobalt	23	7.1	7.6	6.9	7.3	7	7.3	7.2	7.6	7.3	6
Copper	3100	18	20	50	43	50	48	52	46	59	77
Iron	55000	17000	18000	30000	30000	31000	30000	31000	31000	38000	46000
Lead	400	36	37	370	280	370	280	370	290	480	650
Magnesium	NE	3300	3500	3700	3300	3800	3400	3800	3400	2300	1700
Manganese	1800	450	430	1100	1100	1100	1100	1100	1200	760	580
Nickel	1500	27	34	16	26	15	25	16	23	17	15
Potassium	NE	2400	2400	3300	3000	3300	3000	3300	3100	3100	2900
Selenium	390	2.7	2.6	2.5	2.9	2.5	2.9	2.4	3	2.2	2.1
Silver	390	0.09J	0.098J	2.4	2	2.5	2	2.5	2.2	3.2	4.2
Sodium	NE	100U	100U	210	160 J+	220	170 J+	220	170 J+	270	280
Thallium	0.78	0.17	0.19	0.42	0.45	0.43	0.44	0.42	0.45	0.48	0.53
Vanadium	390	20	21	38	45	38	45	39	47	41	39
Zinc	23000	75	77	760	590	780	600	770	620	450	460

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-31A-00-01	GS-31A-01-06	GS-32A-00-01	GS-32A-01-06	GS-33A-00-01	GS-33A-01-06	GS-34A-00-01	GS-34A-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	5400	5200	5900	5300	7200	6900	6200	6800
Antimony	31	0.25	0.25	2.1	2	1.7	1.9	1.1	1.6	1.7	1.4
Arsenic	0.68	11	11	100	100	88	96	83	96	89	77
Barium	15000	98	100	200	220	200	210	260	220	190	180
Beryllium	160	0.7	0.69	0.75	0.67	0.7	0.6	0.75	0.75	0.71	0.73
Cadmium	7.1	0.39	0.39	3	2.2	2	1.9	2.5	2.9	2.6	3.4
Calcium	NE	6400	6600	5900	4500	6900	6000	9600	7800	6300	6700
Chromium	120000	36	46	20	9.9	20	19	24	18	21	20
Cobalt	23	7.1	7.6	6	4.8	7.2	5.4	8.9	9	7.3	8.7
Copper	3100	18	20	69	75	65	71	55	60	64	57
Iron	55000	17000	18000	38000	43000	38000	42000	37000	41000	40000	39000
Lead	400	36	37	500	650	440	570	390	450	450	410
Magnesium	NE	3300	3500	2000	1500	2200	1700	2900	2400	2100	2300
Manganese	1800	450	430	740	520	660	450	850	880	710	770
Nickel	1500	27	34	12	20	17	14	23	20	18	20
Potassium	NE	2400	2400	3300	3100	2900	2700	2900	2900	3000	2700
Selenium	390	2.7	2.6	2.1	2.4	2.4	2.4	2.6	2.7	2.5	2.8
Silver	390	0.09J	0.098J	3.7	4.5	3.3	4.1	2.7	3.3	3.1	2.8
Sodium	NE	100U	100U	190 J+	220	280	260	260	260	230	240
Thallium	0.78	0.17	0.19	0.51	0.57	0.47	0.52	0.47	0.54	0.49	0.47
Vanadium	390	20	21	41	38	37	36	39	40	37	35
Zinc	23000	75	77	550	470	450	420	480	500	540	520

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-35A-00-01	GS-35A-01-06	GS-36A-00-01	GS-36A-01-06	GS-37A-00-01	GS-37A-01-06	GS-38A-00-01	GS-38A-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	6800	6800	6800	7200	7700	7900	8400	8500
Antimony	31	0.25	0.25	1.4	1.3	1.7	1.3	1.1	0.99	0.71	0.86
Arsenic	0.68	11	11	74	75	96	80	61	65	50	63
Barium	15000	98	100	230	210	220	240	210	260	170	180
Beryllium	160	0.7	0.69	0.77	0.8	0.82	0.85	0.83	0.87	0.94	1
Cadmium	7.1	0.39	0.39	2.3	2.9	3	2.6	3.4	3.8	6	5.6
Calcium	NE	6400	6600	7300	7000	8100	8000	8200	8400	13000	10000
Chromium	120000	36	46	27	22	20	20	22	24	28	19
Cobalt	23	7.1	7.6	7.7	8.2	7.7	7.9	8.4	8.9	8.4	8.1
Copper	3100	18	20	52	56	57	52	48	50	55	63
Iron	55000	17000	18000	34000	36000	36000	35000	29000	30000	30000	34000
Lead	400	36	37	320	370	350	320	240	270	160	240
Magnesium	NE	3300	3500	2300	2200	2500	2500	2600	2500	3800	3400
Manganese	1800	450	430	750	890	900	780	1100	1300	1000	940
Nickel	1500	27	34	22	19	18	19	21	22	24	19
Potassium	NE	2400	2400	3500	3400	3300	2800	3000	3000	3000	2800
Selenium	390	2.7	2.6	2.6	2.7	2.6	2.8	2.7	2.8	3.6	3.8
Silver	390	0.09J	0.098J	2.6	2.7	2.7	2.3	1.9	2.1	1.2	2.1
Sodium	NE	100U	100U	220	220	180 J+	170 J+	190 J+	200 J+	370	330
Thallium	0.78	0.17	0.19	0.45	0.48	0.5	0.48	0.41	0.44	0.36	0.42
Vanadium	390	20	21	37	36	44	39	36	39	33	35
Zinc	23000	75	77	440	490	550	490	550	570	1200	1200

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-39A-00-01	GS-39A-01-06	GS-40A-00-01	GS-40A-01-06	GS-40A1-00-01	GS-40A1-01-06	GS-40A1-00-01-DUP	GS-40A1-01-06-DUP
Aluminum	77000	8300	8800	9400	9700	8700	9000	7500	7700	7600	8300
Antimony	31	0.25	0.25	1.3	1.2	1.2	0.91	0.59	0.58	0.63	0.59
Arsenic	0.68	11	11	84	84	64	58	36	37	38	43
Barium	15000	98	100	220	250	180	180	180	180	180	190
Beryllium	160	0.7	0.69	0.96	0.96	0.81	0.82	0.69	0.71	0.72	0.76
Cadmium	7.1	0.39	0.39	7.6	6.8	4.8	5.3	1.3	1.3	1.6	1.6
Calcium	NE	6400	6600	13000	14000	17000	19000	11000	12000	10000	12000
Chromium	120000	36	46	22	25	21	15	16	24	18	25
Cobalt	23	7.1	7.6	10	10	12	13	9.3	10	9.5	11
Copper	3100	18	20	72	71	54	52	36	36	37	43
Iron	55000	17000	18000	33000	35000	36000	38000	25000	27000	25000	30000
Lead	400	36	37	250	270	190	200	95	98	100	110
Magnesium	NE	3300	3500	4000	4200	3800	3700	3400	3800	3500	4300
Manganese	1800	450	430	1200	1200	1100	1200	640	670	670	760
Nickel	1500	27	34	25	25	28	27	20	26	22	27
Potassium	NE	2400	2400	3400	3600	2900	2600	2400	2400	2500	2600
Selenium	390	2.7	2.6	3	3.1	3.2	3.6	2.9	3.1	3	3.3
Silver	390	0.09J	0.098J	2	2	1.4	1.5	0.76	0.82	1.1	0.96
Sodium	NE	100U	100U	370	390	270	260	330	320	380	390
Thallium	0.78	0.17	0.19	0.44	0.45	0.43	0.43	0.3	0.32	0.31	0.34
Vanadium	390	20	21	41	42	38	39	28	29	28	31
Zinc	23000	75	77	1600	1500	690	730	230	240	260	280

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-40A1-00-01-TRI	GS-40A1-01-06-TRI	GS-40A2-00-01	GS-40A2-01-06	GS-41A-00-01	GS-41A-01-06	GS-42A-00-01	GS-42A-01-06
Aluminum	77000	8300	8800	7400	8300	7800	8600	8900	8800	8500	8700
Antimony	31	0.25	0.25	0.58	0.52	0.59	0.52	0.51	0.48	0.52	0.54
Arsenic	0.68	11	11	34	37	34	29	35	32	29	29
Barium	15000	98	100	190	200	180	180	190	190	170	190
Beryllium	160	0.7	0.69	0.69	0.73	0.8	0.78	0.78	0.75	0.8	0.8
Cadmium	7.1	0.39	0.39	1.3	1.4	1.4	1.5	1.5	1.4	1.1	1.1
Calcium	NE	6400	6600	9700	12000	12000	13000	13000	12000	15000	16000
Chromium	120000	36	46	18	24	28	34	41	30	38	48
Cobalt	23	7.1	7.6	8.6	9.9	10	12	12	11	13	13
Copper	3100	18	20	33	36	39	41	40	43	39	38
Iron	55000	17000	18000	24000	27000	28000	30000	31000	31000	30000	31000
Lead	400	36	37	92	100	71	61	77	68	60	54
Magnesium	NE	3300	3500	3200	3900	4200	4400	4500	4400	4500	4700
Manganese	1800	450	430	600	670	670	650	660	610	740	720
Nickel	1500	27	34	20	25	28	33	36	32	35	39
Potassium	NE	2400	2400	2400	2400	2600	2500	2500	2600	2400	2400
Selenium	390	2.7	2.6	2.8	3	3.3	3.9	3.6	3.8	3.6	3.6
Silver	390	0.09J	0.098J	0.84	0.81	0.6	0.49	0.7	0.53	0.46	0.45
Sodium	NE	100U	100U	300	310	440	380	300	290	200 J+	220
Thallium	0.78	0.17	0.19	0.29	0.31	0.34	0.38	0.36	0.37	0.33	0.34
Vanadium	390	20	21	28	30	30	30	33	31	30	31
Zinc	23000	75	77	230	240	240	200	210	200	180	180

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-43A-00-01	GS-43A-01-06	GS-44A-00-01	GS-44A-01-06	GS-45A-00-01	GS-45A-01-06	GS-46A-00-01	GS-46A-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	8500	8900	6800	6600	7100	8000	7900	8300
Antimony	31	0.25	0.25	0.42 J	0.39 J	0.44	0.45	0.65	0.41	0.61	0.56
Arsenic	0.68	11	11	29	28	21	20	32	23	31	29
Barium	15000	98	100	170	170	190	170	190	200	200	220
Beryllium	160	0.7	0.69	0.75	0.78	0.66	0.65	0.72	0.79	0.79	0.83
Cadmium	7.1	0.39	0.39	1.2	1.2	0.83	0.79	1.3	1.1	1.4	1.4
Calcium	NE	6400	6600	13000	14000	11000	10000	7800	12000	12000	11000
Chromium	120000	36	46	15	20	22	34	13	12	19	28
Cobalt	23	7.1	7.6	14	15	7	6.7	9.7	11	12	12
Copper	3100	18	20	40	41	26	24	45	38	43	41
Iron	55000	17000	18000	29000	32000	19000	18000	24000	25000	27000	29000
Lead	400	36	37	53	50	50	48	86	61	84	71
Magnesium	NE	3300	3500	4300	4500	3200	2900	3200	3900	4400	4600
Manganese	1800	450	430	730	750	480	470	580	670	780	790
Nickel	1500	27	34	29	33	20	25	21	39	26	31
Potassium	NE	2400	2400	2200	2300	1900	1800	2900	2000	2400	2400
Selenium	390	2.7	2.6	3.9	4.1	2.1	2	3	3.3	3.1	3.4
Silver	390	0.09J	0.098J	0.39	0.35	0.45	0.37	0.67	0.45	0.62	0.78
Sodium	NE	100U	100U	220	250	170 J+	170 J+	550	410	390	450
Thallium	0.78	0.17	0.19	0.33	0.36	0.22	0.22	0.31	0.32	0.34	0.35
Vanadium	390	20	21	29	30 J	25	24	27	26	29	29
Zinc	23000	75	77	170	180	160	140	260	180	250	230

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-47A-00-01	GS-47A-01-06	GS-HOUSE-00-01	GS-HOUSE-01-06	GS-VACANT-00-01	GS-VACANT-01-06	GS-CA01-00-01	GS-CA01-01-06
Aluminum	77000	8300	8800	7000	7100	8100	8600	8600	8400	6100	6700
Antimony	31	0.25	0.25	0.67	0.61	1.1	1.2	1.1	1	1.5	1.3
Arsenic	0.68	11	11	27	26	49	52	60	58	64	60
Barium	15000	98	100	180	180	210	210	210	210	150	170
Beryllium	160	0.7	0.69	0.75	0.78	0.84	0.87	0.98	0.97	0.81	0.78
Cadmium	7.1	0.39	0.39	1.2	1.2	2.2	2.2	2.3	2.3	1.8	1.7
Calcium	NE	6400	6600	16000	16000	9100	8200	10000	9900	9200	11000
Chromium	120000	36	46	32	27	21	26	33	35	13	22
Cobalt	23	7.1	7.6	7.1	7.5	7.7	8	8.6	8.6	9.1	10
Copper	3100	18	20	30	29	40	40	40	40	52	57
Iron	55000	17000	18000	19000	20000	26000	28000	30000	29000	32000	36000
Lead	400	36	37	94	86	210	210	210	210	290	290
Magnesium	NE	3300	3500	5700	5400	2800	2800	3700	3600	2900	3000
Manganese	1800	450	430	570	600	850	890	870	870	740	710
Nickel	1500	27	34	23	22	18	21	29	30	17	25
Potassium	NE	2400	2400	2100	2000	4600	4400	3000	2900	2800	2500
Selenium	390	2.7	2.6	2.2	2.4	2.7	2.7	3.2	3.2	2.9	3.3
Silver	390	0.09J	0.098J	0.63	0.61	1.3	1.2	1.6	1.5	2	1.9
Sodium	NE	100U	100U	160 J+	170 J+	170 J+	180 J+	120 J+	120 J+	160 J+	180 J+
Thallium	0.78	0.17	0.19	0.27	0.27	0.34	0.34	0.45	0.44	0.4	0.42
Vanadium	390	20	21	27	27	37	39	35	35	35	36
Zinc	23000	75	77	230	210	410	420	390	380	370	340

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-CA02-00-01	GS-CA02-01-06	GS-CA03-00-01	GS-CA03-01-06	GS-CA04-00-01	GS-CA04-01-06	GS-CA04-00-01-DUP	GS-CA04-01-06-DUP
Aluminum	77000	8300	8800	7900	8300	6900	8000	6100	6200	5900	6300
Antimony	31	0.25	0.25	1.1	0.76	1.3	1	1.5	1.3	1.7	1.2
Arsenic	0.68	11	11	51	39	62	52	73	63	84	63
Barium	15000	98	100	170	160	170	180	170	170	160	180
Beryllium	160	0.7	0.69	0.76	0.76	0.83	0.83	0.72	0.79	0.73	0.78
Cadmium	7.1	0.39	0.39	1.7	1.5	2.1	2	2.5	2.3	2.7	2.2
Calcium	NE	6400	6600	15000	19000	20000	20000	13000	14000	12000	13000
Chromium	120000	36	46	14	15	16	19	19	24	19	26
Cobalt	23	7.1	7.6	12	14	10	12	8.1	7.7	7.4	8.1
Copper	3100	18	20	44	45	240	51	46	44	48	44
Iron	55000	17000	18000	34000	36000	31000	34000	29000	28000	31000	29000
Lead	400	36	37	160	120	230	180	250	260	310	260
Magnesium	NE	3300	3500	3600	3700	5200	4300	3600	4000	3600	3900
Manganese	1800	450	430	850	770	870	850	880	800	880	770
Nickel	1500	27	34	25	28	23	28	20	22	18	24
Potassium	NE	2400	2400	4000	2800	2400	2200	2800	2800	3000	2800
Selenium	390	2.7	2.6	3.8	4.5	2.9	3.6	2.5	2.7	2.5	2.6
Silver	390	0.09J	0.098J	1.1	0.83	1.6	1.3	2.1	1.8	2.3	1.8
Sodium	NE	100U	100U	170 J+	200 J+	180 J+	190 J+	150 J+	140 J+	160 J+	140 J+
Thallium	0.78	0.17	0.19	0.4	0.38	0.39	0.44	0.4	0.39	0.41	0.4
Vanadium	390	20	21	37	34	38	38	42	38	43	39
Zinc	23000	75	77	290	240	500	320	510	440	560	420

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-CA04-00-01-TRI	GS-CA04-01-06-TRI	GS-CA05-00-01	GS-CA05-01-06	GS-CA06-00-01	GS-CA06-01-06	GS-CA07-00-01	GS-CA07-01-06
		00-01	01-06								
Aluminum	77000	8300	8800	5800	5900	6600	7000	7500	7700	6700	6900
Antimony	31	0.25	0.25	1.7	1.3	1.3	1.2	1.3	1.1	0.52	0.47
Arsenic	0.68	11	11	84	62	69	67	69	60	23	21
Barium	15000	98	100	170	150	170	200	190	190	180	170
Beryllium	160	0.7	0.69	0.74	0.71	0.73	0.74	0.74	0.77	0.66	0.7
Cadmium	7.1	0.39	0.39	2.5	2	2.2	2.3	2.1	1.8	0.79	0.81
Calcium	NE	6400	6600	12000	15000	15000	14000	11000	12000	15000	15000
Chromium	120000	36	46	16	23	19	21	15	17	17	24
Cobalt	23	7.1	7.6	7.1	7.7	8.7	9.4	9.8	10	6.1	6.9
Copper	3100	18	20	48	44	47	46	44	45	23	25
Iron	55000	17000	18000	28000	28000	30000	31000	32000	33000	18000	19000
Lead	400	36	37	270	250	230	220	190	180	74	64
Magnesium	NE	3300	3500	3700	3800	4800	4200	3800	4000	5200	4900
Manganese	1800	450	430	900	730	820	840	870	830	500	520
Nickel	1500	27	34	16	21	22	23	21	22	15	20
Potassium	NE	2400	2400	3000	2600	2700	2700	3300	3600	2600	2600
Selenium	390	2.7	2.6	2.4	2.4	2.8	2.7	3.2	3.5	2.1	2.1
Silver	390	0.09J	0.098J	2	1.8	1.8	1.7	1.6	1.4	0.49	0.47
Sodium	NE	100U	100U	160 J+	130 J+	200 J+	190 J+	160 J+	170 J+	99 U	100 J+
Thallium	0.78	0.17	0.19	0.41	0.38	0.39	0.39	0.39	0.37	0.22	0.23
Vanadium	390	20	21	43	37	41	40	41	39	26	25
Zinc	23000	75	77	520	380	390	410	390	350	190	180

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b 00-01	Background ^b 01-06	GS-CA08-00-01	GS-CA08-01-06	GS-CA09-00-01	GS-CA09-01-06	GS-CA10-00-01	GS-CA10-01-06	GS-CA11-00-01	GS-CA11-01-06
Aluminum	77000	8300	8800	7400	7700	7000	7500	8000	7800	7300	7200
Antimony	31	0.25	0.25	0.91	0.81	0.93	0.83	0.87	0.8	1.1 J	1.3 J
Arsenic	0.68	11	11	44	42	51	47	48	49	54	68
Barium	15000	98	100	180	180	200	180	210	170	190	160
Beryllium	160	0.7	0.69	0.77	0.89	0.8	0.81	0.75	0.83	0.72	0.76
Cadmium	7.1	0.39	0.39	1.7	1.8	1.8	2.1	1.8	1.8	1.7	2.3
Calcium	NE	6400	6600	22000	24000	16000	17000	13000	18000	13000	15000
Chromium	120000	36	46	12	12	12	11	12	12	12	11
Cobalt	23	7.1	7.6	8.3	8.7	8.8	12	12	11	11	12
Copper	3100	18	20	37	41	41	38	41	44	44	50
Iron	55000	17000	18000	26000	27000	27000	29000	31000	33000	31000	36000
Lead	400	36	37	160	190	180	170	160	210	200	300
Magnesium	NE	3300	3500	5100	6700	5100	4600	4200	5000	4000	4000
Manganese	1800	450	430	760	830	810	1000	870	970	870	1100
Nickel	1500	27	34	20	25	20	28	25	27	22	28
Potassium	NE	2400	2400	2900	2400	3000	2400	2700	2200	2900	2300
Selenium	390	2.7	2.6	2.6	2.7	2.5	2.8	2.8	3.1	3.1	3.1
Silver	390	0.09J	0.098J	1.2	1.3	1.3	1.3	1.3	1.3	1.5	2.1 J
Sodium	NE	100U	100U	150 J+	170 J+	120 J+	120 J+	140 J+	160 J+	150 J+	170 J+
Thallium	0.78	0.17	0.19	0.34	0.35	0.36	0.35	0.39	0.43	0.38	0.48
Vanadium	390	20	21	33	32	33	31	33	32	35	35
Zinc	23000	75	77	280	290	340	320	300	310	310	360

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-CA12-00-01	GS-CA12-01-06	GS-CA12-00-01-DUP	GS-CA12-01-06-DUP	GS-CA12-00-01-TRI	GS-CA12-01-06-TRI
Aluminum	77000	8300	8800	7600	7700	7400	7700	7300	8200
Antimony	31	0.25	0.25	1.2	0.9	1.2	0.85	1.3	0.93
Arsenic	0.68	11	11	69	53	59	44	68	57
Barium	15000	98	100	160	130	170	130	160	130
Beryllium	160	0.7	0.69	0.78	0.83	0.78	0.84	0.77	0.85
Cadmium	7.1	0.39	0.39	2.4	1.8	1.8	1.5	2.3	2.2
Calcium	NE	6400	6600	12000	19000	16000	25000	13000	18000
Chromium	120000	36	46	13	12	13	12	13	13
Cobalt	23	7.1	7.6	11	10	11	11	10	11
Copper	3100	18	20	49	43	43	43	48	48
Iron	55000	17000	18000	31000	29000	30000	30000	30000	32000
Lead	400	36	37	210	170	180	140	190	190
Magnesium	NE	3300	3500	4600	6100	5200	6500	4700	5600
Manganese	1800	450	430	980	840	860	830	950	940
Nickel	1500	27	34	22	26	24	31	21	31
Potassium	NE	2400	2400	3000	2200	2700	2100	3000	2300
Selenium	390	2.7	2.6	2.9	2.9	2.9	3.2	2.8	3
Silver	390	0.09J	0.098J	1.6	1.9	1.3	0.93	1.5	1.2
Sodium	NE	100U	100U	160 J+	270	170 J+	280	150 J+	250
Thallium	0.78	0.17	0.19	0.39	0.35	0.37	0.35	0.37	0.38
Vanadium	390	20	21	39	34	38	32	39	35
Zinc	23000	75	77	400	300	330	240	390	340

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL^a	Background^b 00-01	Background^b 01-06	GS-CA13-00-01	GS-CA13-01-06	GS-CA13-00-01-DUP	GS-CA13-01-06-DUP	GS-CA13-00-01-TRI	GS-CA13-01-06-TRI
Aluminum	77000	8300	8800	8200	8100	7100	7100	7400	7300
Antimony	31	0.25	0.25	0.77	0.85	0.75	0.73	1.2	0.77
Arsenic	0.68	11	11	43	46	42	33	70	42
Barium	15000	98	100	200	200	150	160	160	180
Beryllium	160	0.7	0.69	0.88	0.96	0.76	0.84	0.78	0.81
Cadmium	7.1	0.39	0.39	1.5	1.1	1.4	1.2	2.3	1.5
Calcium	NE	6400	6600	16000	16000	17000	24000	14000	19000
Chromium	120000	36	46	14	15	18	13	14	13
Cobalt	23	7.1	7.6	9.6	8.7	8.4	8.4	8.7	8.9
Copper	3100	18	20	41	31	41	36	45	41
Iron	55000	17000	18000	27000	24000	25000	24000	28000	25000
Lead	400	36	37	130	110	130	120	190	130
Magnesium	NE	3300	3500	5200	4700	4800	7000	4300	5600
Manganese	1800	450	430	800	640	700	680	870	730
Nickel	1500	27	34	21	35	20	25	20	28
Potassium	NE	2400	2400	2900	2400	2400	2100	2500	2200
Selenium	390	2.7	2.6	2.8	2.8	2.5	2.5	2.7	2.6
Silver	390	0.09J	0.098J	0.93	0.76	0.98	0.68	1.5	0.93
Sodium	NE	100U	100U	140 J+	130 J+	160 J+	180 J+	160 J+	200 J+
Thallium	0.78	0.17	0.19	0.33	0.33	0.31	0.29	0.36	0.33
Vanadium	390	20	21	34	38	33	29	38	32
Zinc	23000	75	77	300	210	330	300	470	410

Table 1
Analytical Results Summary
(DU Samples)

Analyte	EPA RSL ^a	Background ^b		GS-CA14-00-01	GS-CA14-01-06	GS-CA14-00-01-DUP	GS-CA14-01-06-DUP	GS-CA14-00-01-TRI	GS-CA14-01-06-TRI
		00-01	01-06						
Aluminum	77000	8300	8800	6500	6600	7500	7900	6800	7900
Antimony	31	0.25	0.25	0.45	0.33	0.53	0.53	0.57	0.5
Arsenic	0.68	11	11	52	18	27	25	59	27
Barium	15000	98	100	150	140	180	190	160	190
Beryllium	160	0.7	0.69	0.66	0.59	0.81	0.91	0.66	0.93
Cadmium	7.1	0.39	0.39	0.76	0.64	0.83	0.94	0.83	0.91
Calcium	NE	6400	6600	8000	10000	12000	16000	8500	15000
Chromium	120000	36	46	22	9.7	14	13	23	14
Cobalt	23	7.1	7.6	5.2	6.8	6.7	8	5.5	7.6
Copper	3100	18	20	22	21	25	31	23	26
Iron	55000	17000	18000	14000	17000	19000	22000	15000	20000
Lead	400	36	37	68	58	68	83	75	72
Magnesium	NE	3300	3500	2600	3400	4300	5600	2800	5500
Manganese	1800	450	430	370	440	520	630	400	600
Nickel	1500	27	34	11 J+	14	15	22	11 J+	18
Potassium	NE	2400	2400	2300	2100	2700	2100	2300	2100
Selenium	390	2.7	2.6	2.1	1.9	2.4	2.6	2	2.6
Silver	390	0.09J	0.098J	0.35	0.25	0.42	0.47	0.39	0.42
Sodium	NE	100U	100U	100 U	110 J+	100 U	110 J+	100 U	100 J+
Thallium	0.78	0.17	0.19	0.2	0.21	0.25	0.28	0.2	0.27
Vanadium	390	20	21	21	22	25	27	23	26
Zinc	23000	75	77	120	120	160	170	140	160

Table 1
Analytical Results Summary
(DU Samples)

Notes

All concentrations in milligrams per kilogram (mg/kg)

Indicates concentration that exceeds three times background

bold Indicates concentration that exceeds the EPA RSL for residential soil

^a EPA RSL for residential soil (TR=1E-06, HQ=1), except where noted

^b Highest concentration for each analyte of the three background samples

bgs Below ground surface

CA Common Area

DU Decision Unit

GS Garner Street

J The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

NE None established

RSL Regional Screening Level