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**MATERIALS CHARACTERIZATION REPORT
SAINT ANTHONY MINE SITE**

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1.0 INTRODUCTION

1.1 BACKGROUND

This Materials Characterization Report describes the objectives, scope of work, and results of the Materials Characterization conducted at the St. Anthony Mine (the Site), and nearby areas between April 2006 and July 2007. The Materials Characterization consisted of investigating surface and subsurface materials at various areas within and near the Site in accordance with the approved *Materials Characterization Work Plan* (MWH, 2007).

The St. Anthony Mine was an open pit and underground shaft uranium mine located on the Cebolleta Land Grant approximately 40 miles West of Albuquerque, New Mexico in Cibola County approximately 4.6 miles southeast of Seboyeta, New Mexico. The mine site is located in a very remote, sparsely populated area. The location of the Site is shown on Figure 1, *General Location Map*. UNC operated the St. Anthony Mine from 1975 to 1981, pursuant to a mineral lease with the Cebolleta Land Grant, the owner of the surface and mineral rights at the time. The original lease covered approximately 2,560 acres. This lease was obtained on February 10th, 1964 and was surrendered by a Release of Mineral Lease dated October 24, 1988. UNC has access to the Site through access agreements with the Cebolleta Land Grant and an adjacent landowner.

1.2 PURPOSE

The *Materials Characterization Work Plan* (MWH, 2007) was prepared in conjunction with the *St. Anthony Mine Closeout Plan* (MWH, 2006) submitted to the New Mexico Mining and Minerals Division (MMD) January 6, 2006. The purpose of the Materials Characterization was to determine soil suitability as a growth media and radiological risk. Modifications to the Closeout Plan may be made based on the actions required to mitigate any risks identified from data collected during the Materials Characterization. The Materials Characterization included a radiological survey of non-economic materials at the Site, drilling and sampling of non-economic materials and sampling of potential cover material borrow sources.

1.3 PHYSICAL SETTING

1.3.1 Site Description

The Site includes underground workings consisting of one shaft and one vent shaft that are sealed at the surface, two open pits (one containing a pond), five inactive ponds, seven piles of non-economical mine materials with some revegetation, numerous smaller piles of non-economical mine materials, and three topsoil piles. The underground mine workings have been sealed at the surface and no shafts or vents for the underground mines were located during the investigation activities. The layout of the Site is shown on Figure 2, *Site Layout*. The two open pits at the mine site are located in Sections 19 and 30, Township 11 North, Range 4 West, and the entrance to the underground mine is located in Section 24, Township 11 North, Range 5 West. The actively mined area encompasses approximately 430 acres and includes roads and other disturbed areas along with the open pits and non-economical mine materials piles.

The two open pits include a large pit on the west side of the Site that perennially contains standing water and a smaller pit southeast of the large pit, that intermittently contains pooled water. These pits have been identified in other documents (including the Stage 1 Abatement Plan [MWH, 2002]) as Pit #1 and Pit #2, respectively). There are several large overburden piles on the eastern portion of the Site, located next to Meyer Draw. Meyer Draw is an ephemeral drainage that runs only during and shortly after storms large enough to produce run-off. From the north boundary of the Site, the arroyo passes between the open pits and several large overburden piles in a southeasterly direction

and is joined by Arroyo de Pedro Padilla from the northeast before leaving the Site and entering the Laguna Pueblo, which is directly south of the Site.

The Site remains in the condition it was left at the time of lease termination as part of the terms of the Site lease from the Cebolleta Land Grant. There are no remaining building structures on the Site. Besides the pits and overburden piles, some of the mine infrastructure equipment and components still exist, including roads, utility lines across the Site, utility connection locations, a surface completion of an old well, and the slab of a former structure.

1.3.2 Physiography and Climate

This section provides a brief overview of the Physiography of the Site. The information in this section was adapted from the *Stage I Abatement Plan Investigation Report* (Intera, 2006).

The regional surface topography is a combination of steep-sided mesas separated by broad, gently sloping valleys. These valleys are infilled with alluvial and colluvial deposits, with primary stream channels incised through previously-deposited sediments. Regional drainage is to the south, first to Rio Moquino, then Rio Paguete, then into Rio San Jose, then Rio Puerco further south and east, and eventually into the Rio Grande in central New Mexico. To the north and northwest of the Site, surface topography is dominated by the Mount Taylor volcanic field, which consists of broad, gently sloping basaltic flows with steep sides at flow edges. Numerous volcanic plugs occur in the area, similar to Cerro Negro immediately north of the Site. To the south and east, topography consists of mesas and valleys.

The mine area receives a mean of 9.85 inches of precipitation annually, based on Laguna, New Mexico meteorological station data gathered between 1914 and 2006 (WRCC, 2007), which is the closest weather station of record to the Site. The state-wide annual means range from approximately 13 to 15 inches (WRCC, 2007). Approximately 51% of the precipitation recorded at the Laguna weather station occurs in the monsoonal months of July, August, and September. Mean monthly temperatures at the Laguna meteorological station range from a minimum of 19.5 degrees Fahrenheit (°F) in January to a maximum of 90.3°F in July.

Potential evaporation in New Mexico is much greater than mean precipitation. The mean annual net pan evaporation is approximately 63 inches, based on the Laguna, New Mexico meteorological station data gathered between 1914 and 2006 (WRCC, 2007). Maximum monthly evaporation (approximately 10-12 inches) occurs in June and July, and the minimum (no evaporation) occurs in December through March. Wind speeds over the state are usually moderate, although relatively strong winds often accompany occasional frontal activity during late winter and spring months (WRCC, 2007). Blowing dust and soil erosion is a concern during dry spells. Winds generally predominate from the southeast in summer and from the west in winter, but local surface wind directions will vary greatly because of local topography and mountain and valley breezes. Based on data from Grants (WRCC, 2007), mean wind speeds range from 7.2 to 10.9 miles per hour.

1.3.3 Geology

The Site is located in the southeastern part of the San Juan Basin, a large structural basin covering parts of New Mexico, Colorado, Arizona, and Utah within the regional Colorado Plateau Province. Stratigraphy at the Site includes, from oldest to youngest, the Morrison Formation (Late Jurassic), the Dakota Sandstone (Cretaceous), the Mancos Shale (Late Cretaceous), and Quaternary Alluvium. Quaternary Alluvium is found in Meyer Draw, which runs through the Site in a northwest to southeast direction. The units are relatively flat lying, with a minor dip to the north-northwest at approximately 1.5 degrees Fahrenheit. The Mancos Shale covers much of the surface, while the Dakota Sandstone and Jackpile sandstone are exposed southeast of the Site along Meyer Draw

(outside the mining lease), and in the open pits. The information in this section was adapted from the *Stage I Abatement Plan Investigation Report* (Intera, 2006), which provides additional details of the geology of the Site.

2.0 FIELD INVESTIGATION METHODS

2.1 INTRODUCTION

The materials characterization focused on the borrow and stockpile sources, non-economic materials piles, and mine facilities within the western Shaft Area. The areas included in the materials characterization are listed below, and shown on Figure 2:

Background Area, Borrow Sources, and Topsoil Stockpiles

- Background Area
- Borrow South
- Lobo Tract Borrow Area
- Topsoil South
- Topsoil North
- Topsoil/Overburden Pile

Additionally, former Borrow Areas 1 and 2 were included in the gamma survey.

Non-Economic Materials Storage Piles

- Piles 3 through 7
- West Disturbance Area
- Crusher Stockpile Area

Western Shaft Area

- Mine Dump
- Shaft Pad
- Storage Area
- Ponds 1 through 5
- Ore Storage Areas 1 and 2
- Access Road

Several methods were employed in conducting this field investigation. Initially, a gamma exposure rate survey was conducted in each area on a regular grid, with a grid interval between 100 and 400 feet, depending on the size of the feature being surveyed (actual intervals are presented in Section 3.0). Judgmental gamma measurements were collected in Pits 1 and 2 to characterize small non-economic piles located within the pits. The locations for the survey points are shown on Figure 3. Following the gamma survey, surface soil samples and subsurface soil samples were collected from the ground surface, test pits and drill holes.

Survey pin flags were used in the field to indicate static gamma measurement and soil sample locations. Each of the sampling points was located using a Differentially Corrected Global Positioning System (DGPS). The DGPS consisted of a Trimble Geo XT GPS receiver with real time differential correction using OMNI STAR satellite, Tripod Data System (TDS) Ranger data logger with SOLO surveying software capable of navigating to a point. The differential correction provided submeter accuracy of point locations.

2.2 GAMMA EXPOSURE RATE SURVEY

The radiological survey was designed to identify gamma exposure rates in each survey area. All gamma exposure rate measurements were collected by a certified Radiation Safety Officer (RSO) using a Ludlum Model 19 μR Meter. The meter was calibrated annually to a Cesium-137 source. A visual inspection of the instrument and a function check using a Cesium-137 source was conducted daily prior to usage, as necessary.

A grid was established at each facility where a gamma exposure survey was performed. The grid interval varied depending on the size of the facility. Three measurements were made at each location: shielded contact with the ground, shielded one-meter above ground, and unshielded one-meter above ground. Additionally, a portion of each soil sample collected in test pits and drill holes (see Section 2.3) was put into a plastic bag for contact shielded measurements of the gamma exposure rates. The gamma exposure rate was also measured on material in each area being sampled to estimate the ambient gamma exposure rates. The ambient exposure rates were measured prior to sampling from a test pit or drill hole. The exposure rates for the actual test pit or drill hole samples were then taken as the greater of the background exposure rate at the measurement location or the measured exposure rate for the sample.

Background gamma exposure rates were measured in an area where past mining activity was not conducted. The area for the background rate measurement was located to the north of the access road to the Shaft Area, as shown on Figure 2. Shielded contact, shielded one meter and unshielded one meter exposure rates were measured at identified locations in the background area.

2.3 SOIL SAMPLING

Soil sampling was conducted in test pits and drill holes. Test pits were co-located with the surface gamma survey points with the highest readings in each local area. Test pits were used, as opposed to drill holes, where native soil was anticipated to be present at less than 15 feet bgs. The test pits were excavated using a rubber-tired backhoe that was capable of reaching to a maximum depth of 15 feet bgs. Once the sampling was completed in each test pit, the excavation was backfilled with the excavated soils, and the surface was restored to similar conditions as before the work. Soils within the test pits were visually classified in the field, in accordance with the Unified Soil Classification System, and further described using the U.S. Department of Agriculture (USDA) methods.

Composite soil samples were generally collected from the test pits from the top two feet, two to four feet and one sample for every six feet to the bottom of the excavation, except in the background reference area and the potential borrow area. Test pits in the background reference area were excavated to a depth of four feet with representative samples collected of the material in the top two feet and the bottom two feet. Test pits in the potential borrow area were excavated to a depth of six feet with a representative composite sample collected of each soil strata encountered.

Drill holes were advanced to native ground in areas at the Site where native ground was expected to be present at greater than 15 feet bgs. The drill holes were drilled with an air rotary hammer rig. Composite soil samples were collected for gamma measurements and soil descriptions from the drill holes at depths of 0-2 feet, 2-4 feet, and every 8 feet thereafter to native ground. Drill cuttings were visually classified in the field, in accordance with the Unified Soil Classification System, and further described using the U.S. Department of Agriculture (USDA) methods.

Surface composite samples were collected for analysis of leachate using EPA Method 1312, Synthetic Precipitation Leaching Procedure (SPLP). The SPLP samples were collected by mixing 30 subsamples from the same area of interest (Smith, 2000) and blending them into one sample for analysis. The subsamples were collected on a regular grid within each area, grabbed with a clean

spoon, and blended with the other subsamples. The 30 subsamples were passed through a two millimeter (mm) sieve, and placed into gallon-sized plastic bags (doubled) for shipment to the laboratory; sample preservation was not required. The SPLP method simulates the conditions of rain water percolating through the soil.

The 30-point composite SPLP technique of sampling and analysis is biased towards over-predicting potential impacts to water quality because the sieving process isolates the less than 2-mm size fraction of the composite sample which is generally the most reactive and higher concentrations of chemical constituents can be leached from the small size fractions. Therefore, SPLP analyses from these samples would provide the most conservative scenario for evaluating potential environmental effects. The SPLP method is also an aggressive test that errs on the side of overestimating leachate concentrations because the samples are continuously agitated in a closed system. The method results in an average value for the area sampled.

2.4 ANALYTICAL PROGRAM

Samples selected for analysis were submitted to Energy Laboratories, Inc. (ELI) in Casper, Wyoming. A summary of the soil sampling program is included in Table 1, *Summary of Soil Sampling Program*. A minimum of two samples were submitted for analysis from each drill hole. Samples collected from the non-economic material piles and the Shaft Area test pits and drill holes were submitted to ELI based on the radiological survey. Gamma ray exposure measurements were made on all soil samples following the procedures presented in Section 2.1. The two samples from each location with the highest gamma readings were submitted for analysis, except from the Shaft Area Access Road where only one sample per location was submitted for analysis. A representative sample of each general material type encountered in the drill holes was collected, except where only one material type was encountered, in which case, representative samples from the upper five feet and the lower portion of the drill hole were collected for analysis. Alternatively, all samples from the topsoil and overburden piles and the borrow areas were submitted for analysis regardless of the gamma readings. Additionally, samples collected from the two background locations with the median ground contact radiation readings from the gamma radiation exposure survey were submitted for analysis.

Samples were analyzed for three groups of analytes, as listed below:

- Radiochemical parameters
- Metals in leachate (SPLP)
- Agronomic properties

The analytes, analytical methods, and detection limits are presented in Table 2, *Soil Analytical Program*.

One surface soil sample (≤ 0.5 feet below ground surface) and one subsurface soil sample was also collected from each survey area, except the borrow area, prepared for analysis of leachate (SPLP), and analyzed for the constituents shown in Table 2. One 30-point composite surface sample was collected from each survey area, as described in Section 2.3. One soil samples from each test pit and drill hole was also submitted for SPLP analysis, based on the gamma survey (i.e., the sample with the highest gamma concentration was submitted for SPLP analysis).

3.0 GAMMA EXPOSURE RATE SURVEY RESULTS

3.1 INTRODUCTION AND SUMMARY STATISTICS

The objective of the gamma exposure rate surveys was to characterize the nature and lateral extent of radium-226 surface concentrations, using an exposure rate meter fitted with (and without) a lead shield that serves to reduce the inclusion of scattered radiation from other than the material of interest. The following measurements were collected, as described in Section 2.0:

- Contact shielded (in contact with the ground surface)
- One-meter shielded
- One-meter unshielded

The results of the gamma survey are listed in Table 3, *Surface Gamma Radiation Survey Results*. Figure 3, *Results of Field Gamma Radiation Survey* presents the results graphically. The field data sheets are included in Appendix A.

For the purposes of this discussion, only contact shielded measurements will be presented in the text of this report, except in those instances where there appears to be a significant difference in the readings between the different methods. Contact shielded is discussed here as opposed to the other results, because this method gives results that are most representative of that specific location. Both the 1-meter shielded and the 1-meter unshielded are subject to a greater amount of radiation shine from side slopes or higher gamma values at nearby locations.

A total of 309 gamma measurements were collected at the Site, including the main mine area, where the open pits are, and the western Shaft Area. Table 4, *Descriptive Statistics*, provides a basic statistical summary of the entire gamma data set. The statistical summary shows that gamma measurements ranged from 5 to 800 $\mu\text{R/hr}$ (all measurement methods), with a mean of 55 to 100 $\mu\text{R/hr}$, depending on the measurement method. The standard deviations are relatively high, reflecting the heterogeneous nature of the distribution of gamma values within the materials at the Site, especially within the non-economic materials, as presented in the following sections. Figure 4, *Frequency of Gamma Value, Contact Shielded*, which shows the frequency of gamma measurements from all areas. As shown on Figure 4, the five highest gamma measurements (410 to 600 $\mu\text{R/hr}$) were detected on Pile 7, the Crusher Stockpile Area, and the Ore Storage Area 2. The 30 highest (10% of the dataset) gamma measurements (145 to 600 $\mu\text{R/hr}$) came from the following areas:

- Pile 7
- Crusher Stockpile Area
- West Disturbance Area
- Mine Dump
- Ore Storage Areas 1 and 2
- Ponds 1 and 4
- Shaft Access Road

Figure 4 also indicates that gamma readings from the background area, all borrow areas, and all topsoil piles ranged from 4 to 13 $\mu\text{R/hr}$, with a mean of approximately 7 $\mu\text{R/hr}$.

3.2 BACKGROUND, BORROW AND FORMER BORROW AREAS

The Background Area is located to the north of the mine site, as shown on Figures 1 and 3. A total of 18 gamma measurements were collected in the Background Area on grid with a 200-foot grid

spacing, as shown on Figure 3. Gamma measurements (contact shielded) ranged from 5 to 13 $\mu\text{R/hr}$ (mean 8 $\mu\text{R/hr}$), as shown in Table 3. The maximum 1-meter unshielded reading was 21 $\mu\text{R/hr}$.

Two borrow areas are currently being considered for use at the Site, Borrow Area South and the Lobo Tract Area, both shown on Figure 2. A total of 18 gamma measurements were collected in the Borrow Area South on a 200-foot grid, which ranged from 5 to 10 $\mu\text{R/hr}$ (mean 7 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 26 $\mu\text{R/hr}$.

A total of 21 gamma measurements were collected in the Lobo Tract Area on a 400-foot grid, which ranged from 5 to 8 $\mu\text{R/hr}$ (mean 7 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 17 $\mu\text{R/hr}$.

In addition to the two borrow areas discussed above, there are two areas to the east and northeast of the mine area that were formerly considered as borrow sources (former Borrow Areas 1 and 2). While these two areas are no longer being considered as borrow sources, gamma measurements had already been conducted in these areas. A total of 55 gamma measurements were collected in the two former borrow areas on a 400-foot grid; readings ranged from 4 to 7 $\mu\text{R/hr}$ (mean 5 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 13 $\mu\text{R/hr}$.

The ranges and mean values of gamma readings from the Background Area, the Borrow Area South, the Lobo Tract Area, and the two former borrow areas are similar, suggesting that they are all representative of background conditions. The gamma measurements from all five areas ranged from 4 to 13 $\mu\text{R/hr}$ (mean 6 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 26 $\mu\text{R/hr}$, from Borrow Area South.

3.3 TOPSOIL AND OVERBURDEN STOCKPILES

There are five topsoil or overburden piles at the Site, Topsoil North, Topsoil South, the Topsoil/Overburden Pile, and the Shale 1 and Shale 2 piles, as shown on Figure 2. Thirty-two gamma measurements were collected on a 400-foot grid, which ranged from 5 to 13 $\mu\text{R/hr}$ (mean 8 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 34 $\mu\text{R/hr}$ from the Topsoil/Overburden Pile. These values appear to be similar to background values, and suggest that these soils are similar to background and have not been impacted by mine materials.

Additionally, three gamma measurements were also collected in the arroyo located southwest of the Topsoil South pile ("FL Area"). The gamma readings from these three locations ranged from 17 to 35 $\mu\text{R/hr}$ (mean 26 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 34 $\mu\text{R/hr}$.

3.4 NON-ECONOMIC MATERIALS STORAGE PILES

A total of 201 gamma measurements were collected from the non-economic materials storages piles. The contact shielded gamma measurements from all of these piles ranged from 5 to 470 $\mu\text{R/hr}$ (mean 62 $\mu\text{R/hr}$), and had a standard deviation of 80 $\mu\text{R/hr}$. Measurements from the individual areas or piles were as described below (see Table 3).

Twenty gamma measurements were collected on Pile 3 on a 200-foot grid, which had readings ranging from 14 to 125 $\mu\text{R/hr}$ (mean 43 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 165 $\mu\text{R/hr}$. These results were consistent with the results of the contact, shielded measurements from the samples collected during drilling, which ranged from 70 to 135 $\mu\text{R/hr}$ (averaged 105 $\mu\text{R/hr}$). The readings were generally higher on the elevated, northern section of Pile 3 (maximum 125 $\mu\text{R/hr}$) compared with the lower southern portion of Pile 3 (maximum 40 $\mu\text{R/hr}$), as shown on Figure 3.

Ninety-one gamma measurements were collected on Pile 4 on a 200-foot grid, which had readings ranging from 5 to 40 $\mu\text{R/hr}$ (mean 13 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 65 $\mu\text{R/hr}$. These results were consistent with the results of the contact, shielded measurements from the samples collected during drilling, which ranged from 11 to 45 (averaged 27 $\mu\text{R/hr}$). The gamma concentrations were distributed relatively evenly across the whole pile without any obvious hot spots.

Six gamma measurements were collected on Pile 5 on a 200-foot grid, which had readings ranging from 45 to 105 $\mu\text{R/hr}$ (mean 74 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 180 $\mu\text{R/hr}$. The gamma readings evenly distributed across the pile with no obvious hotspots.

Eight gamma measurements were collected on Pile 6 on a 100-foot grid, which had readings ranging from 30 to 65 $\mu\text{R/hr}$ (mean 42 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 115 $\mu\text{R/hr}$. The gamma readings evenly distributed across the pile with no obvious hotspots.

Five gamma measurement were collected on Pile 7 on a 200-foot grid, which had readings ranging from 60 to 410 $\mu\text{R/hr}$ (mean 169 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 600 $\mu\text{R/hr}$. The gamma readings were fairly evenly distributed, with the exception of the one reading on the south side of the pile, which was twice the next highest reading from Pile 7.

The West Disturbance Area, west of Pile 6, consists of nine small piles less than 500 feet in diameter. A total of 21 gamma readings were taken from those nine piles on a 100-foot grid, which had readings ranging from 35 to 320 $\mu\text{R/hr}$ (mean 144 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 440 $\mu\text{R/hr}$. The gamma readings were not evenly distributed, with readings on one or two of the piles 1.5 to 3 times higher than readings on the other piles, as shown on Figure 3.

Forty-nine gamma measurements were collected on the Crusher Stockpile Area on a grid with a 100- to 200-foot grid spacing, which had readings ranging from 23 to 470 $\mu\text{R/hr}$ (mean 119 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 800 $\mu\text{R/hr}$. The gamma readings were fairly evenly distributed, but with slightly higher values in the southeastern half of the area.

Mine material storage piles located in Pit 1 were also surveyed. Eleven gamma measurements were collected in Pit 1 at judgmental locations, which had readings from 20 to 63 $\mu\text{R/hr}$ (mean 38 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 138 $\mu\text{R/hr}$. The gamma readings were relatively evenly distributed, with no apparent hot spots.

3.5 WESTERN SHAFT AREA

A total of 207 gamma measurements were collected from the western mine Shaft Area, which included readings taken along the Shaft Access Road, and the two Ore Storage Piles located along the access road (see Figure 3). The gamma measurements from the whole area ranged from 6 to 600 $\mu\text{R/hr}$ (mean 79 $\mu\text{R/hr}$), and had a standard deviation of 105 $\mu\text{R/hr}$. Measurements from the individual areas or piles were as described below (see Table 3).

Five gamma measurements were collected on the Mine Dump on a 100-foot grid, which had readings ranging from 65 to 250 $\mu\text{R/hr}$ (mean 144 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 230 $\mu\text{R/hr}$. These results were consistent with the results of the contact, shielded measurements from the samples collected during drilling, which ranged from 60 to 110 $\mu\text{R/hr}$ (averaged 89 $\mu\text{R/hr}$). The gamma readings were fairly evenly distributed, but with slightly higher values in the middle of the dump.

Five gamma measurements were collected on the Shaft Pad on a 100-foot grid, which had readings ranging from 20 to 48 $\mu\text{R/hr}$ (mean 34 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 70 $\mu\text{R/hr}$. The gamma readings were evenly distributed across the Shaft Pad.

Two gamma measurements were collected on the Shaft Storage Area spaced 100 feet apart. The contact-shielded readings 6 and 7 $\mu\text{R/hr}$. These values are within the range of background values, and suggests that this area has not been impacted by mine materials.

Seven gamma measurements were collected from the Shaft Area Settling Ponds (Ponds 1 through 5), one in each of Ponds 1 through 4, one between Ponds 2 and 3, and two in Pond 5 (100 feet apart). with readings ranging from 7 to 280 $\mu\text{R/hr}$ (mean 109 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 390 $\mu\text{R/hr}$. The gamma readings were highest in Ponds 1, 2 and 4 (140 to 280 $\mu\text{R/hr}$), and lowest in Pond 5 (7 to 9 $\mu\text{R/hr}$).

Twelve gamma measurements were collected on Ore Storage Areas 1 and 2 on a 100-foot grid, with readings ranging from 20 to 600 $\mu\text{R/hr}$ (mean 140 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 500 $\mu\text{R/hr}$. The gamma readings were unevenly distributed, with the highest concentrations from Ore Storage 1, except one reading in Ore Storage 2 (600 $\mu\text{R/hr}$).

Thirty-three gamma measurements were collected on the Shaft Access Road spaced 100 feet apart, with readings ranging from 6 to 270 $\mu\text{R/hr}$ (mean 46 $\mu\text{R/hr}$). The maximum 1-meter unshielded reading was 270 $\mu\text{R/hr}$. The gamma readings were fairly evenly distributed, but with the highest concentrations near the Ore Storage Areas, as well as one location at the east end of the road where it turns south (see Figure 3).

4.0 SOIL SAMPLING AND CHEMICAL ANALYTICAL RESULTS

4.1 SOIL DESCRIPTIONS

Soil samples were visually classified in the field, in accordance with the Unified Soil Classification System, and further described using the U.S. Department of Agriculture (USDA) methods, as discussed in Section 2.0. A summary of the soil samples collected from the test pits, as well as test pit and drill hole logs are included Appendix C.

Native soils at the Site observed in the background and borrow areas consist of well-drained silty sands (SM) and inorganic silts and clays (see Appendix C), characteristic of a semi-arid pinyon-juniper region. Soils in some areas, such as in the background area, contained some organic material. As per the American Soil Taxonomy classification system (USDA), these soils appeared to be aridisols.

Soils observed in the soil and overburden stockpiles primarily consisted of gravelly sands and silts (SM/GM). The topsoil/overburden pile contained abundant organic material in places. Since these piles represent displaced native materials, and are therefore primarily a chaotic mixture of materials, no soil horizons were present. These soils most closely resembled an aridisol, with the organic sections resembling a mollisol.

The remainder of the materials observed at the Site consisted of mine materials displaced from their place of origin, and placed into piles of mixed material. Most of these materials are not soils, as they are crushed or broken rock that came from the open pits or mine shaft, and were formerly bedrock. Most of the material observed (see Appendix C) consisted of gravelly sands and silts, with abundant boulder and cobble-sized material in places. Most of the material at a particular location was of similar nature, without distinct layering or varying soil types. Some minor exceptions were observed, such as in Pile 5, which primarily contained light brown, gravelly sands, but also contained two thin (less than six inches) greenish clayey silt layers. The water treatment ponds (Ponds 1-5) were originally filled with water and sediments, and therefore surface soils in these ponds represent sludge material from the mine waters (clays and silts). The Access Road contained varying mixtures of silt, sand, and gravel; some with a distinct grayish white color. Since these materials were formerly bedrock or materials from the mine pits and shaft, and have been displaced from their place of origin, they are not formal soils and therefore soil taxonomy is not applicable to them. However, these materials most closely resembled an aridisol.

Materials observed in Piles 3 and 4, which were drilled to native ground, were primarily varying mixtures of sand and gravel, with some silt-sized material, and abundant boulder and cobble sized material. No distinct layering was observed. The material was mostly medium to light brown in color, with some sections exhibiting more of a light gray color. The materials observed during drilling through the Mine Dump were similar, but tending towards finer grained (silty sands with gravel) and more of a light brown to buff color.

Table C-1 and the test pit logs in appendix C indicate the depths at which native ground was observed. All drill holes were advanced to native ground in Piles 3 and 4 and the Mine Dump (see Appendix C); native ground was observed at the following depths:

- Pile 3 : 90 to 119 feet bgs
- Pile 4: 105 to 154 feet bgs
- Mine Dump: 11 to 25 feet bgs

Additional details on the nature of the observed materials, and depths to native ground can be found in Appendix C.

4.2 SOIL RADIONUCLIDE ANALYTICAL RESULTS

4.2.1 Summary of Results

The objective of this sampling and analysis program was to characterize the distribution of concentrations of radionuclides in the materials at the Site. The results of the radionuclide analyses are shown in Table 5, *Soil Analytical Results, Radionuclides*. Figure 5, *Soil Analytical Results* presents the results graphically. [Note: the concentrations shown on Figure 5 are the maximum concentrations detected at each location, regardless of depth]. Additional samples were collected for analysis of metals by the SPLP method and agronomic parameters, as discussed in Section 2.0.

A total of 96 primary soil samples (not including duplicates) were collected for analysis of radionuclides at the Site, including the main mine area, where the open pits are, and the western Shaft Area. Table 6, *Descriptive Statistics, Soil Radionuclide Analytical Results* provides a basic statistical summary of the entire soil radionuclide data set. The statistical summary shows the following:

- Radium-226 ranged from non-detect to 611 pCi/g (mean 59.9 pCi/g)
- Uranium ranged from non-detect to 1,660 mg/kg (mean 164.2 mg/kg)
- Thorium ranged from non-detect to 602 pCi/g (mean 45.3 pCi/g)
- Gross alpha ranged from 4.6 to 2,490 pCi/g (mean 248.4)

For comparison, mean background values for radium-226, uranium, thorium-230 and gross alpha were 1.6 pCi/g, 3.8 mg/kg, 0.9 pCi/g, and 12.8 pCi/g, respectively.

Figure 6, *Frequency of Radium-226 Concentrations*, shows the frequency of radium-226 concentrations from all areas. As shown on Figure 6, the eight highest radium-226 concentrations (221 to 611 pCi/g) were detected on Pile 6, and Ponds 1 through 4. The 24 highest (25% of the dataset) radium-226 concentrations (52.2 to 611 pCi/g) came from the following areas:

- Piles 5, 6 and 7
- Mine Dump
- Ore Storage Area 2
- Ponds 1 through 4
- Shaft Access Road

Figure 6 also indicates that radium-226 concentrations from the background area, all borrow areas, and all topsoil piles ranged from non-detect to 3.4 pCi/g, with mean concentrations from 0.5 to 1.6 pCi/g. Figure 7, *Frequency of Uranium Concentrations*, shows a similar distribution.

Discussions of the analytical results for each area are included in the following sections. For the purposes of this report, only radium-226 and uranium concentrations are discussed (see Table 5). However, the analytical results of thorium-230 and gross alpha are also included in Tables 5 and 6.

4.2.2 Background and Borrow Areas

Eight soils samples were collected from four test pits in the background area (see Table 5). The samples were collected from two depths intervals in each test pit (0 to 2 feet bgs and 2 to 4 feet bgs). Concentrations of radium-226 ranged from non-detect to 3.4 pCi/g (mean 1.6 pCi/g). Uranium concentrations ranged from 0.7 to 9.2 mg/kg (mean 3.8 mg/kg). The concentrations of these analytes were relatively evenly distributed across the area. Concentrations were consistently higher in the 0- to 2-foot intervals than in the 2- to 4-foot intervals in test pits 1, 3 and 4.

Two soil samples were collected from two test pits from Borrow Area South (see Table 5), as a composite sample from 0 to 6 feet bgs. Radium-226 concentrations were non-detect, and uranium concentrations were 0.69 and 0.74 mg/kg. These concentrations are within the ranges of concentrations detected in the background area.

Five soil samples were collected from four test pits from the Lobo Tract Area (see Table 5). The samples were collected as composite samples from 0 to 6 feet bgs, 0 to 2 feet bgs, and/or 2 to 6 feet bgs, depending on soil conditions. Radium-226 concentrations ranged from non-detect to 1.5 pCi/g, and uranium concentrations ranged from 1.06 to 1.74 mg/kg. These concentrations are within the ranges of concentrations detected in the background area.

4.2.3 Topsoil and Overburden Stockpiles

Thirteen soil samples were collected from three test pits in the Topsoil/Overburden Pile, and the Topsoil North and Topsoil South piles (see Table 5). Radium-226 concentrations ranged from non-detect to 1 pCi/g (mean 0.5 pCi/g), and uranium concentrations ranged from 0.51 to 1.1 mg/kg (mean 0.7 mg/kg). These concentrations are within the ranges of concentrations detected in the background area.

4.2.4 Non-Economic Materials Storage Piles

Five soil samples were collected from two drill holes on Pile 3 (see Table 5). Both drill holes were drilled to native ground, and samples were collected for analysis of radionuclides at the depths with the highest gamma readings taken during drilling (see Appendix A), as described in Section 2.0. Radium-226 concentrations ranged from 11.9 to 34.6 pCi/g (mean 19.2 pCi/g) and uranium concentrations ranged from 27.4 to 125 mg/kg (mean 70.6 mg/kg). Concentrations appear to decrease slightly with depth in drill hole DH7, yet appear to increase slightly with depth in drill hole DH8. All concentrations were elevated compared to the concentrations detected in the background area.

Twelve soil samples were collected from six drill holes on Pile 4 (see Table 5). All drill holes were drilled to native ground, and samples were collected for analysis of radionuclides at the depths with the highest gamma readings taken during drilling (see Appendix A). Radium-226 concentrations ranged from 3.2 to 47.7 pCi/g (mean 16.9 pCi/g) and uranium concentrations ranged from 5.5 to 125 mg/kg (mean 45.8 mg/kg). In all but one drill hole (DH3), the deeper samples in each drill hole contained the higher concentration of radionuclides (see Table 5).

Two samples from one test pit were collected from Pile 5. Radium-226 concentrations were 55.1 and 70.7 pCi/g (mean 62.9 pCi/g), and uranium concentrations were 143 and 182 mg/kg (mean 162.5 mg/kg). The deeper sample contained the lower concentration of radium-226, while uranium, thorium-230 and gross alpha concentrations were all higher in the deeper sample.

Two soil samples from one test pit were collected from 0 to 2 and 10 feet bgs in Pile 6. The radium-226 concentrations ranged from 32.3 to 41.3 pCi/g (mean 36.8 pCi/g), and the uranium concentrations ranged from 75.5 to 80.9 mg/kg (mean 78.2 mg/kg).

Two samples from one test pit were collected in Pile 7. The radium-226 concentrations were 26.9 and 23.6 pCi/g (mean 25.3 pCi/g), and the uranium concentrations were 137 and 108 mg/kg (mean 122.5 mg/kg). The higher concentrations were detected in the shallower sample.

Ten soil samples were collected from five test pits in the West Disturbance Area. The West Disturbance Area consists of nine separate piles (see Figure 2). Radium-226 concentrations ranged from 24.8 to 590 pCi/g (mean 162.6 pCi/g) and uranium concentrations ranged from 46.1 to 1,660

mg/kg (mean 478.2 mg/kg). Concentrations were not consistently high or lower in the deeper samples from each test pit; however, the maximum concentrations, which were more than twice the next highest concentrations, were detected in test pit TP4. Test pit TP4 was located on one of the smaller piles in the middle portion of the West Disturbance Area.

Eight soil samples from four test pits were collected from the Crusher/Stockpile Area. Radium-226 concentrations ranged from 10 to 119 pCi/g (mean 57.5 pCi/g) and uranium concentrations ranged from 20.9 to 385 mg/kg (mean 211 mg/kg). Concentrations were not consistently higher or lower from either the upper or lower depth intervals from each test pit, except the 0 to 2 foot layer from test pit TP1, which had concentrations three to five times lower than the other samples from that area.

4.2.5 Shaft Area

Four soil samples were collected from two drill holes in the Mine Dump (see Table 5). Both drill holes were drilled to native ground, and samples were collected for analysis of radionuclides at the depths with the highest gamma readings taken during drilling (see Appendix A), as described in Section 2.0. Radium-226 concentrations ranged from 28.9 to 74.7 pCi/g (mean 45.3 pCi/g) and uranium concentrations ranged from 127 to 288 mg/kg (mean 173 mg/kg). The higher concentrations were detected in the shallower sample in both drill holes.

Two samples from the same depth (0 to 1 foot bgs) were collected from one test pit in the Shaft Pad. Native ground was encountered at one foot bgs. The mean radium-226 concentration was 37 pCi/g and the mean uranium concentration was 63.2 mg/kg.

Eleven samples were collected in five test pits from Ponds 1 through 5. Radium-226 concentrations ranged from non-detect to 611 pCi/g (mean 218 pCi/g) and uranium concentrations ranged from 7.5 to 1,090 mg/kg (mean 460.3 mg/kg). The higher concentrations were detected in the shallower sample in both drill holes. Concentrations were lowest in Pond 5, by an order of magnitude or more compared to concentrations detected in Ponds 1 through 4.

Seven soil samples were collected from three test pits in Ore Storage Areas 1 and 2. Radium-226 concentrations ranged from 2.4 to 181 pCi/g (mean 39.1 pCi/g) and uranium concentrations ranged from 7.5 to 573 mg/kg (mean 154.3 mg/kg).

Five soil samples were collected from five test pits in the Access Road. Radium-226 concentrations ranged from 7.2 to 94.3 pCi/g (mean 42.1 pCi/g) and uranium concentrations ranged from 17.8 to 286 mg/kg (mean 149.5 mg/kg).

Two soil samples were collected from one test pit in the Storage Area. The mean radium-226 concentration was 1.1 pCi/g, and the mean uranium concentration was 2.4 mg/kg.

4.3 SOIL LEACHATE ANALYTICAL RESULTS

The SPLP method was used to evaluate the relative potential for leaching metals into groundwater and surface waters. It will not enable a prediction of concentrations that might actually be found in water, however, for the reasons presented in Section 2.3. The results of the analyses conducted on SPLP samples are presented in Table 7, *Soil Analytical Results, Synthetic Precipitation Leaching Procedure*. A comparison of the SPLP results with New Mexico surface water standards (see NMAC 20.6.4), reveals that the only constituents with concentrations greater than the surface water standards for livestock watering, wildlife and aquatic life are gross alpha and radium-226. Aluminum concentrations were greater than the New Mexico groundwater standard for irrigation (NMAC 20.6.2). These data suggest that potential constituents of concern during site closure for protection of

surface water or groundwater may include gross alpha, radium-226 and possibly aluminum in limited areas of the Site. However, it is important to note that these results do not indicate that surface water or groundwater would be adversely impacted by site soils due to leaching, since the SPLP method is highly conservative and does not represent actual field conditions (see Section 2.3).

4.4 SOILS AGRONOMIC ANALYTICAL RESULTS

Soil samples were collected in the field and submitted to the laboratory for agronomic testing and constituent analysis. Surface and subsurface samples were analyzed for several elements to identify the potential risks to plant establishment based on the concentrations of constituents present. Results from the laboratory analysis were used to evaluate borrow source materials and to success of direct revegetation for several areas at the Site. Although toxicity thresholds of plants for each constituent will vary by individual species and life form (e.g. grasses, forbs, shrubs, trees), general toxicity guidelines and potential impacts on plant establishment for only constituents of concern are outlined below. The results of these analyses are presented in Table 8, *Agronomic Analytical Results*.

4.4.1 Arsenic

The concentration of arsenic that plants tolerate varies by plant species and life form. Although some species of grass are extremely tolerant of high concentrations of arsenic and maintain normal growth at very high concentrations, most plants will begin to exhibit symptoms of toxicity (reduction in plant biomass, decreased root growth, decreased germination) when arsenic concentrations in the soils reach 50 to 100 mg/kg. Studies evaluating the effect of arsenic toxicity on ryegrass, reported lowest observable effective concentration (LOEC) for arsenic in soils at 50 mg/kg, with substantial reductions in plant growth occurring at 250 mg/kg (Jiang and Singh 1994). Arsenic concentrations detected at the site ranged from 0.018 to 0.817 mg/kg, which are well below the toxicity threshold of 50 mg/kg reported in the literature and, therefore would not negatively impact plant establishment at the Site.

4.4.2 Copper

Although copper is one of the least mobile heavy metals in soil, it is abundant in soils of all types. The concentration of total copper that occurs naturally in soils within the United States varies and ranges from 3 to 300 mg/kg, with an average concentration of 26 mg/kg (Kabata-Pendias 2000). The portion of the total concentration available to plants is highly dependent upon the type of soil (physical properties and parent material), pH, and redox potential of the soil profile. Overall solubility of copper for both cationic and anionic forms increases below a neutral pH (Kabata-Pendias 2000).

The concentration of copper that plants tolerate varies by plant species and life form. In general, grasses and forbs tend to be less tolerant to excess copper than shrubs and trees. For example, the grass little bluestem, shows very little decrease in plant biomass at 5.74 mg/kg available copper, with a 68% reduction in plant growth occurring at 14.3 mg/kg available copper (Miles and Parker 1979a). For forbs, the study reported 100% mortality for black-eyed Susan seedlings at 28.6 mg/kg available copper during a 12-week study. Copper tolerance for these species are much lower when compared to species of pine (Jack pine, white pine), that have little disruption in plant growth at 35.7 mg/kg available copper (Miles and Parker 1979b). Kabata-Pendias report excessive concentrations of plant toxicity in soils when copper concentrations reach 60 to 100 mg/kg.

Copper concentrations at the Site ranged from non-detect to 2.7 mg/kg, with an average of 0.2 mg/kg site-wide. In the non-economic material storage pile test pits, copper concentrations were the highest and occurred in areas where the pH is acidic enough (below 5.5) where copper would be readily available for plant uptake. However, based on toxicity thresholds report in the literature, even

the highest concentration of 2.7 mg/kg is still below the concentration where plant toxicity should occur and therefore copper concentrations are not a concern for plants at the Site.

4.4.3 Radium-226

Radium-226 is the most abundant and stable radionuclide in the biosphere, with increased mobility and solubility in soils under extremely acidic conditions (Kabata-Pendias, 2000). Although results from the laboratory analysis report concentrations of radium-226 at the Site ranged from 3.2 pCi/g to 611 pCi/g, the impact of these concentrations on vegetation establishment cannot be determined. No information was uncovered in the literature that would provide an adequate way to measure the phytotoxicity of radium-226, therefore the impact of radium-226 on plant establishment cannot be evaluated.

4.4.4 Selenium

Selenium is a naturally occurring element found in rocks, soil and water. Selenium enters the soil profile through the weathering of selenium-rich rocks, moving through the soil until adsorbed on clay particles, iron hydroxides or organic particles. Selenite and selenates are produced in the soil by microorganisms from the less soluble forms of selenium. When selenium occurs in alkaline soils and becomes oxidized as selenate, the selenium becomes water-soluble. This form is highly toxic and easily leached from the soil, thus facilitating uptake of selenium by certain plants. Although some studies have shown sensitive species of ryegrass exhibiting selenium toxicity in sandy soils with selenate concentrations as low as 2 mg/kg (Smith et al. 1984), symptoms of selenium toxicity for most plants occur when selenium concentrations in the soils range from 10 to 20 mg/kg. Selenium concentrations detected at the Site ranged from less than 0.005 to 0.167 mg/kg. These concentrations are significantly lower than the toxicity thresholds of 10 to 20 mg/kg reported in the literature, and therefore will not impact plant establishment at the Site.

4.4.5 Thorium-230

Very little information is available on the impacts of thorium-230 on plant growth and sorption. In reference soils, thorium-230 concentrations are reported to be relatively high, ranging from 8 to 27 mg/kg in soils in China, and 3.8 to 12.4 in U.S. soils. Soluble fractions of thorium-230 seem to be readily absorbed by plants, with land plants ranging from less than 8 mg/kg to 1,330 mg/kg and vegetable containing thorium-230 ranging from less than 5 mg/kg to 20 mg/kg. Moss collected from Norway was found to have thorium-230 concentrations as high as 5,100 mg/kg (Kabata-Pendias, 2000). Although no literature values for thorium-230 are available, thorium-230 concentrations at the Site in the non-economic storage piles, Mine Dump, ore storage areas and Access Road, and the Shaft Area ponds contain concentrations significantly higher than the borrow and topsoil samples, suggesting that thorium-230 could potentially impact plant establishment and growth.

4.4.6 Uranium

Uranium is a naturally occurring element found in low concentrations within all rock, soil, and water, existing in +4 and +6 valence states in most geologic environments (Kabata-Pendias, 2000). Through the process of weathering, uranium forms mainly organic complexes in the soil that are easily soluble and mobile, with the distribution of uranium highly controlled by the oxidation state and Eh-pH of the system. Although few studies have been conducted to evaluate the toxicity of uranium on plants, one study conducted in 1995 found no adverse effect of uranium on native plant species at uranium concentrations of 5,000 mg/kg in soil (Meyer et al. 1997). Concentrations of uranium detected at the Site occurred in the non-economic storage piles, Shaft Area Mine Dump, ore storage areas, the Shaft Area Access Roads, and mine shaft ponds, and ranged from 288 to 1,660 mg/kg. These concentrations are below the no observable effective concentration (NOEC) of 5,000

mg/kg from the literature, indicating uranium concentrations in the soil would not negatively impact plant establishment at the Site.

4.4.7 Sulfate

Sulfates of metals are likely to occur in soils under oxidizing conditions. They are readily soluble and heavily involved in soil equilibrium processes. Sulfates are also readily available to plants (Kabata-Pendias, 2000). Although sulfate concentrations at the Site are higher than average concentrations found in soils, the elevated concentrations are likely due to abundant gypsum that occurs naturally in the soils of the region and are not due to mining activities. Therefore, plant establishment in these areas will likely be similar to the establishment success in the native soils where high concentrations of sulfate occur.

4.4.8 Soluble Salts, SAR and pH

Soluble salts, Sodium Absorption Ratio (SAR) and pH are important factors of soils and can impact the success of plant growth and establishment. When high amounts of soluble salts (calcium, magnesium, potassium) are present, severe plant growth problems can occur. In addition, soils high in sodium or elevated SAR can present physical restrictions in the soil for plant growth. When high concentrations of sodium are present, exchange sites on the soil particles become saturated with sodium, creating dense layers, restricting root development and plant growth.

Soil pH controls the solubility of ions and impacts plant growth under extreme alkaline or acidic conditions. Under acidic conditions, many soil minerals dissolve, increasing the concentration of metal ions in solution to toxic concentrations, inhibiting plant growth. Under alkaline conditions, the solubility of minerals can decrease to the point that nutrient deficiencies can occur, reducing plant biomass.

Laboratory analytical results report near neutral or slightly basic pH at the Site, and low soluble salts and SAR, except for one soil sample taken from test pit 5 in Pile 7 (see Table 8) where the SAR concentration was 19.1. When SAR concentrations fall within the range of 19 to 26, sodium buildup on most soil types occurs, restricting plant root growth and development, suggesting plant establishment may be stunted or restricted where excessive sodium is present. Since a majority of the soils samples are below a SAR of 19, impacts from elevated sodium are not expected to be problematic.

4.4.9 Other Constituents

Results from the agronomic analysis indicate that the remaining agronomic parameters (see below) pose no toxicity risk to plant growth (concentrations detected at the Site were less than the toxicity threshold for plants) or are not directly relevant to plant toxicity. However, for completeness, a brief explanation for each element and the toxicity threshold, where applicable, are provided below and is based on published literature (Kabata-Pendias, 2000).

- Calcium - nontoxic to plants.
- Chlorine - can be toxic to plants at greater than 500 mg/kg
- Cadmium - can be toxic to plants at 10-20 mg/kg
- Chromium - can be toxic to plants at 75-100 mg/kg
- Lead - can be toxic to plants at 100-200 mg/kg
- Mercury - can be toxic to plants at 0.3-5 mg/kg
- Nickel - can be toxic to plants at 100 mg/kg
- Zinc - can be toxic to plants at 70-400 mg/kg

Conductivity, which is a measure of the soils ability to transmit (conduct) an electrical charge, is and important parameter in ion/metals exchange; it is nontoxic to plants.

4.4.10 Summary of Agronomic Results

Contaminant concentrations at the Site are relatively low and the quality of the soil high, suggesting most areas at the Site would be able to support plant communities without additional soil cover. However, SAR samples exceeding the recommended range for plants indicate the Ore Storage Areas may not support vegetation establishment. Radium 226, thorium-230 and sulfates may also impact the success of direct revegetation at the Site, suggesting that additional soil cover may be required to provide an adequate growth medium for vegetation establishment.

5.0 SUMMARY AND CONCLUSIONS

This report describes the results of the Materials Characterization conducted at the Site and adjacent properties between April 2006 and July 2007. The Materials Characterization consisted of investigating surface and subsurface soils and sediments at various areas within and near the Site, in accordance with the Materials Characterization Work Plan. The materials characterization focused on the borrow and stockpile sources, non-economic materials piles, and mine facilities within the western Shaft Area. The areas included in the materials characterization are listed below:

Background Area, Borrow Sources, and Topsoil Stockpiles

- Background Area
- Borrow South
- Lobo Tract Borrow Area
- Topsoil South
- Topsoil North
- Topsoil/Overburden Pile

Additionally, former Borrow Areas 1 and 2 were included in the gamma survey.

Non-Economic Materials Storage Piles

- Piles 3 through 7
- West Disturbance Area
- Crusher Stockpile Area

Western Shaft Area

- Mine Dump
- Shaft Pad
- Storage Area
- Ponds 1 through 5
- Ore Storage Areas 1 and 2
- Access Road

Surface gamma surveying was conducted on a regular grid in each of these areas, and consisted of three measurements with a Ludlum Model 19 μR Meter: shielded contact with the ground, shielded one-meter above ground, and unshielded one-meter above ground. A total of 309 gamma measurements were collected at the Site, including the main mine area, where the open pits are, and the western Shaft Area. Gamma measurements ranged from 5 to 800 $\mu\text{R}/\text{hr}$ (all measurement methods), with a mean of 55 to 100 $\mu\text{R}/\text{hr}$. The standard deviations are relatively high, reflecting the heterogeneous nature of the distribution of gamma values within the materials at the Site, especially within the non-economic materials. The highest gamma measurements (145 to 600 $\mu\text{R}/\text{hr}$) came from the following areas:

- Pile 7
- Crusher Stockpile Area
- West Disturbance Area
- Mine Dump
- Ore Storage Areas 1 and 2

- Ponds 1 and 4
- Shaft Access Road

Soil sampling was conducted from the test pits and drill holes, as well as surface composite soil sampling for SPLP analysis. Test pits were co-located with the surface gamma survey points with the highest readings in each local area. Drill holes were advanced to native ground in areas at the Site where native ground was expected to be greater than 15 feet bgs. Composite soil samples were collected from the test pits and drill holes for gamma measurements, soil descriptions, and samples submitted for chemical analysis.

Surface composite samples were collected for SPLP analysis by mixing 30 subsamples collected on a grid and blending them into one sample for analysis for each area. The SPLP method simulates the conditions of rain water percolating through the soil and is biased towards over-predicting potential impacts to water quality, and provides a conservative scenario for evaluating potential environmental effects. The SPLP method is also an aggressive test that errs on the side of overestimating leachate concentrations because the samples are continuously agitated in a closed system.

Soil samples collected in the test pits and drill holes were visually classified in the field, in accordance with the USCS and USDA methods. Native soils at the Site observed in the background and borrow areas consist of well-drained silty sands and inorganic silts and clays. Soils in some areas, such as in the background area, contained some organic material. As per the American Soil Taxonomy classification system (USDA), these soils appeared to be aridisols.

Soils observed in the soil and overburden stockpiles primarily consisted of gravelly sands and silts (SM/GM). The topsoil/overburden pile contained abundant organic material in places. Since these piles represent displaced native materials, and are therefore primarily a chaotic mixture of materials, no soil horizons were present. These soils most closely resembled an aridisol, with the organic sections resembling a mollisol.

The remainder of the materials observed at the Site consisted of mine materials displaced from their place of origin, and placed into piles of mixed material. Most of these materials are not soils, as they are crushed or broken rock that came from the open pits or mine shaft, and were formerly bedrock. Most of the material observed consisted of gravelly sands and silts, with abundant boulder and cobble-sized material in places. Most of the material at a particular location was of a similar nature, without distinct layering or varying soil types.

Soil samples submitted to the laboratory were analyzed for radiochemical parameters, metals in leachate (SPLP), and agronomic properties. A total of 96 primary soil samples (not including duplicates) were collected for analysis of radionuclides at the Site, including the main mine area, where the open pits are, and the western Shaft Area. The analytical results showed the following:

- Radium-226 ranged from non-detect to 611 pCi/g (mean 59.9 pCi/g)
- Uranium ranged from non-detect to 1,660 mg/kg (mean 164.2 mg/kg)
- Thorium ranged from non-detect to 602 pCi/g (mean 45.3 pCi/g)
- Gross alpha ranged from 4.6 to 2,490 pCi/g (mean 248.4)

For comparison, mean background values for radium-226, uranium, thorium-230 and gross alpha were 1.6 pCi/g, 3.8 mg/kg, 0.9 pCi/g, and 12.8 pCi/g, respectively. The highest radium-226 concentrations (52.2 to 611 pCi/g) came from the following areas:

- Piles 5, 6 and 7
- Mine Dump

- Ore Storage Area 2
- Ponds 1 through 4
- Shaft Access Road

The results of the analyses conducted on SPLP samples were consistent with total soil concentrations. Comparison of the SPLP results with New Mexico surface water standards (see NMAC 20.6.4), reveals that the only constituents with concentrations greater than the surface water standards for livestock watering, wildlife and aquatic life are gross alpha and radium-226. Aluminum concentrations were greater than the New Mexico groundwater standard for irrigation (NMAC 20.6.2). These data suggest that potential constituents of concern during site closure for protection of surface water or groundwater may include gross alpha, radium-226 and possibly aluminum in limited areas of the Site. However, it is important to note that these results do not indicate that surface water or groundwater would be adversely impacted by site soils due to leaching, since the SPLP method is highly conservative and does not represent actual field conditions.

Agronomic parameter concentrations at the Site are relatively low and the quality of the soil high, suggesting some areas within the Site would be able to support plant communities without additional soil cover. However, SAR samples exceeding the recommended range for plants indicate that the Ore Storage Areas may not support vegetation establishment. Radium 226, thorium-230 and sulfates may also impact the success of direct revegetation at the Site, suggesting that additional soil cover may be required to provide an adequate growth medium for vegetation establishment.

Overall, the gamma and soil analytical results indicate that the non-economic materials storage piles and mine facilities in the western Shaft Area, contain concentrations of radionuclides above background concentrations. The areas with the highest concentrations include:

- Piles 5, 6 and 7
- Crusher Stockpile Area
- West Disturbance Area
- Mine Dump
- Ore Storage Areas 1 and 2
- Ponds 1 through 4
- Shaft Access Road

Additionally, the borrow sources and soil or overburden stockpiles all contain radionuclides at concentrations similar to background concentrations.

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TABLES

**Table 1
Summary of Soil Sampling Program**

	Sample Number	Location Type	Depth Interval	Date	Time	Gamma in µR/hr	Analysis			Notes
							Rads	SPLP	Agro	
Background Area										
Background Area	BG-TP1-124	Test Pit	0-2	6/21/07	1600	12	X			
	BG-TP1-125	Test Pit	2-4	6/21/07	1600	12	X			
	BG-TP2-126	Test Pit	0-2	6/21/07	1615	22	X			
	BG-TP2-127	Test Pit	2-4	6/21/07	1620	na	X			
	BG-TP3-120	Test Pit	0-2	6/21/07	1530	9	X			
	BG-TP3-310	Test Pit	0-2	6/21/07	1530	10	X			Rep. of BG-TP3-120
	BG-TP3-121	Test Pit	2-4	6/21/07	1535	9	X			
	BG-TP4-122	Test Pit	0-2	6/21/07	1545	10	X			
BG-TP4-123	Test Pit	2-4	6/21/07	1545	10	X				
Borrow Areas										
Borrow Area South	BS-TP1-041/042	Test Pit	0-6	6/19/07	1600	n/a	X		X	
	BS-TP2-069/070	Test Pit	0-6	6/20/07	1420	11	X		X	
	BS-TP2-305	Test Pit	0-6	6/20/07	1420	11	X			Rep. of BS-TP2-069/070
Lobo Tract	LOBO-TP1-130/131	Test Pit	0-6	6/22/07	1430	10	X		X	
	LOBO-TP2-132	Test Pit	0-2	6/21/07	1445	11	X			
	LOBO-TP2-133	Test Pit	2-6	6/21/07	1450	10	X			
	LOBO-TP3-134	Test Pit	0-6	6/22/07	1505	11	X			
	LOBO-TP3-135	Test Pit	0-6	6/22/07	1505	11	X			Rep. Of LOBO-TP3-134
	LOBO-TP4-136	Test Pit	0-6	6/22/07	1520	11	X			
Topsoil Stockpiles										
Topsoil South	TS-TP1-064/065	Test Pit	0-2	6/20/07	1320	10	X		X	
	TS-TP1-066	Test Pit	2-4	6/20/07	1325	11	X	X		
	TS-TP1-067	Test Pit	10	6/20/07	1335	10	X			
	TS-TP1-068	Test Pit	13	6/20/07	1350	10	X			
Topsoil North	TN-TP1-071	Test Pit	0-2	6/20/07	1500	11	X		X	
	TN-TP1-072	Test Pit	0-2	6/20/07	1500	11	X		X	
	TN-TP1-073	Test Pit	2-4	6/20/07	1505	11	X	X		
	TN-TP1-074	Test Pit	10	6/20/07	1515	10	X			
	TN-TP1-075	Test Pit	15	6/20/07	1530	10	X			
Topsoil/Overburden	TO-TP1-015/016	Test Pit	0-2	6/19/07	855	11	X		X	
	TO-TP1-017	Test Pit	2-4	6/19/07	905	11.5	X			
	TO-TP1-018	Test Pit	10	6/19/07	915	12	X			
	TO-TP1-019	Test Pit	15	6/19/07	955	11.5	X			
Non-Economic Materials Storage Areas										
Pile 3	P3-DH7-002	Drillhole	2-4	7/16/07	11:25	75	X		X	
	P3-DH7-009	Drillhole	52-60	7/16/07	12:00	70		X		
	P3-DH7-015	Drillhole	100-108	7/16/07	12:30	75	X			
	P3-DH8-001	Drillhole	0-2	7/6/07	16:10	135			X	
	P3-DH8-005	Drillhole	20-28	7/6/07	16:47	140	X	X		
	P3-DH8-007	Drillhole	36-44	7/6/07	16:57	125	X			
	P3-DH8-301	Drillhole	36-44	7/6/07	17:07	125				Rep. of P3-DH8-007.
	P3-DH8-010	Drillhole	60-68	7/16/07	8:05	130	X			
	P3-DH8-302	Drillhole	60-68	7/16/07	8:05	130	X			Rep. of MD-DH8-010.
	P3-DH8-014	Drillhole	92-100	7/16/07	8:30	120			X	
Pile 4	P4-DH1-001	Drillhole	0-2	7/3/07	8:10	13			X	
	P4-DH1-013	Drillhole	84-92	7/3/07	13:10	15	X			
	P4-DH1-015	Drillhole	100-108	7/3/07	13:35	25	X	X		
	P4-DH2-001	Drillhole	0-2	7/2/07	12:31	11			X	
	P4-DH2-010	Drillhole	60-68	7/2/07	13:55	23	X			
	P4-DH2-011	Drillhole	68-76	7/2/07	11:30	35	X	X		
	P4-DH3-001	Drillhole	0-2	7/1/07	10:55	25			X	
	P4-DH3-004	Drillhole	12-20	7/1/07	11:10	30	X	X		
	P4-DH3-005	Drillhole	20-28	7/1/07	11:10	30	X			
	P4-DH3-300	Drillhole	20-28	7/1/07	11:15	30	X			Rep. of P4-DH3-005.
	P4-DH4-001	Drillhole	0-2	7/4/07	8:34	18			X	
	P4-DH4-012	Drillhole	76-84	7/4/07	9:46	35	X			
	P4-DH4-014	Drillhole	92-100	7/4/07	10:04	45	X	X		
	P4-DH5-001	Drillhole	0-2	7/6/07	9:45	14			X	
	P4-DH5-007	Drillhole	36-44	7/6/07	10:15	30	X			
	P4-DH5-016	Drillhole	108-116	7/6/07	11:30	45	X	X		
	P4-DH6-001	Drillhole	0-2	7/4/07	14:09	16			X	
	P4-DH6-007	Drillhole	36-44	7/4/07	14:44	35	X			
	P4-DH6-008	Drillhole	44-52	7/4/07	14:52	40	X	X		

**Table 1
Summary of Soil Sampling Program**

	Sample Number	Location Type	Depth Interval	Date	Time	Gamma in µR/hr	Analysis			Notes
							Rads	SPLP	Agro	
Pile 5	P5-TP1-009	Test Pit	0-2	6/18/07	1610	90	--	--	--	Gamma only
	P5-TP1-010	Test Pit	0-2	6/18/07	1610	90	X	X		
	P5-TP1-011/012	Test Pit	2-4	6/18/07	1620	90	X		X	
	P5-TP1-013	Test Pit	10	6/18/07	1630	90	--	--	--	Gamma only
	P5-TP1-014	Test Pit	15	6/18/07	1720	90	--	--	--	
Pile 6	P6-TP1-027	Test Pit	0-2	6/19/07	1330	95	--	--	--	Gamma only
	P6-TP1-028	Test Pit	0-2	6/19/07	1330	95	X			
	P6-TP1-029	Test Pit	2-4	6/19/07	1335	90	--	--	--	Gamma only
	P6-TP1-030	Test Pit	10	6/19/07	1335	90	X	X		
	P6-TP1-301	Test Pit	10	6/19/07	1335	90	X			Rep. of P6-TP1-030
	P6-TP1-031	Test Pit	13.5	6/19/07	1410	90	--	--	--	
West Disturbance Area	P6-TP2-032/033	Test Pit	0-2	6/19/07	1425	160	X		X	
	P6-TP2-034	Test Pit	2-4	6/19/07	1435	155	--	--	--	Gamma only
	P6-TP2-035	Test Pit	10	6/19/07	1450	175	X	X		
	P6-TP2-036	Test Pit	15	6/19/07	1505	165	--	--	--	
	P6-TP3-037/038	Test Pit	0-2	6/19/07	1520	140	X		X	
	P6-TP3-039	Test Pit	2-4	6/19/07	1530	150	X	X		
	P6-TP3-040	Test Pit	9	6/19/07	1540	140	--	--	--	
	P6-TP3-302	Test Pit	9	6/19/07	1540	140	X			Rep. of P6-TP3-039
	P6-TP4-043/044	Test Pit	0-2	6/19/07	1620	250	X		X	
	P6-TP4-045	Test Pit	2-4	6/19/07	1630	150	--	--	--	Gamma only
	P6-TP4-046	Test Pit	10	6/19/07	1640	160	--	--	--	Gamma only
	P6-TP4-047	Test Pit	15	6/19/07	1650	175	X	X		
	P6-TP5-057/058	Test Pit	0-2	6/20/07	1045	120	X		X	
	P6-TP5-059	Test Pit	2-4	6/20/07	1050	125	X			
	P6-TP6-060	Test Pit	0-2	6/20/07	1115	190	X		X	
	P6-TP6-304	Test Pit	0-2	6/20/07	1115	170	X			Rep. of P6-TP6-060.
	P6-TP6-061	Test Pit	2-4	6/20/07	1120	160	X			
	P6-TP6-062	Test Pit	10	6/20/07	1130	150	--	--	--	Gamma only
P6-TP6-063	Test Pit	15	6/20/07	1145	150	--	--	--	Gamma only	
Pile 7	P7-TP2-020/021	Test Pit	0-2	6/19/07	1040	100	X		X	
	P7-TP2-300	Test Pit	0-2	6/19/07	1040	110	X			Rep. of P7-TP2-021/020
	P7-TP2-022	Test Pit	2-4	6/19/07	1045	110	X	X		
Crusher/ Stockpile Area	P7-TP1-001/002	Test Pit	0-2	6/18/07	1425	120	X		X	
	P7-TP1-003	Test Pit	2-4	6/18/07	1430	105	--	--	--	Gamma only
	P7-TP1-004	Test Pit	2-4	6/18/07	1430	120	--	--	--	Gamma only
	P7-TP1-005	Test Pit	10	6/18/07	1500	130	X	X		
	P7-TP1-006	Test Pit	10	6/18/07	1500	120	--	--	--	Gamma only
	P7-TP1-007	Test Pit	12.5	6/18/07	1520	120	--	--	--	
	P7-TP1-008	Test Pit	12.5	6/18/07	1520	120	--	--	--	Gamma only
	P7-TP3-023/024	Test Pit	0-2	6/19/07	1100	140	X		X	
	P7-TP3-025	Test Pit	2-4	6/19/07	1110	155	--	--	--	Gamma only
	P7-TP3-026	Test Pit	10	6/19/07	1120	155	X	X		
	P7-TP3-027	Test Pit	13.5	6/19/07	1135	145	--	--	--	
	P7-TP4-048/049	Test Pit	0-2	6/20/07	935	250	X		X	
	P7-TP4-050	Test Pit	2-4	6/20/07	940	220	X	X		
	P7-TP4-303	Test Pit	2-4	6/20/07	940	220	X			Rep. of P7-TP4-050.
	P7-TP4-051	Test Pit	10	6/20/07	950	220	--	--	--	Gamma only
P7-TP4-052	Test Pit	13	6/20/07	955	230	--	--	--		
P7-TP5-053/054	Test Pit	0-2	6/20/07	1010	145	X		X		
P7-TP5-055	Test Pit	2-4	6/20/07	1015	150	X	X			
P7-TP5-056	Test Pit	10	6/20/07	1025	145	--	--	--		
Western Shaft Area										
Mine Dump	MD-DH9-002	Drillhole	2-4	7/16/07	16:23	65	X			
	MD-DH9-003	Drillhole	4-12	7/16/07	16:28	60	X		X	
	MD-DH10-001	Drillhole	0-2	7/17/07	8:10	110		X		
	MD-DH10-002	Drillhole	2-4	7/17/07	8:12	110	X			
	MD-DH10-303	Drillhole	2-4	7/17/07	8:12	95	X			Rep. of MD-DH10-002.
	MD-DH10-004	Drillhole	12-20	7/17/07	8:23	95	X		X	
	Mine Dump	30-Pt Comp.	0.25	6/21/07	1130	n/a		X		All composite sample IDs end in "-SPLP-COMP"
Shaft Pad	SP-TP2-086/087	Test Pit	0-1	6/21/07	1030	55	X		X	
	SP-TP2-088	Test Pit	0-1	6/21/07	1030	55	X	X		

**Table 1
Summary of Soil Sampling Program**

	Sample Number	Location Type	Depth Interval	Date	Time	Gamma in $\mu\text{R/hr}$	Analysis			Notes
							Rads	SPLP	Agro	
Pond 1	PO1-TP1-099/100	Test Pit	0-2	6/21/07	1245	110	X		X	
	PO1-TP1-308	Test Pit	0-2	6/21/07	1245	130	X			Rep. of PO1-TP1-099/100
	PO1-TP1-101	Test Pit	2-4	6/21/07	1300	90	--	--	--	
	PO1-TP1-102	Test Pit	2-4	6/21/07	1300	90	--	--	--	Gamma only
	PO1-TP1-103	Test Pit	0-2	6/21/07	1300	95	X			
Pond 1	30-Pt Comp.	0.25	6/21/07	1245	n/a			X		All composite sample IDs end in "-SPLP-COMP"
Pond 2	PO2-TP2-104	Test Pit	0-2	6/21/07	1315	90	--	--	--	Gamma only
	PO2-TP2-105/110	Test Pit	0-2	6/21/07	1315	120	X		X	
	PO2-TP2-309	Test Pit	0-2	6/21/07	1330	90	X			Rep. of PO2-TP2-105/110.
	PO2-TP2-106	Test Pit	2-4	6/21/07	1320	70	X	X		
	PO2-TP2-107	Test Pit	2-4	6/21/07	1320	70	--	--	--	Gamma only
	PO2-TP2-108	Test Pit	6	6/21/07	1325	60	X			
	PO2-TP2-109	Test Pit	6	6/21/07	1325	45				Gamma only
Pond 2	30-Pt Comp.	0.25	6/21/07	1300	n/a			X		All composite sample IDs end in "-SPLP-COMP"
Pond 3	PO3-TP3-114/115	Test Pit	0-2	6/21/07	1420	65	X		X	
	PO3-TP3-116	Test Pit	0-2	6/21/07	1420	80	X	X		
	Pond 3	30-Pt Comp.	0.25	6/21/07	1315	n/a			X	All composite sample IDs end in "-SPLP-COMP"
Pond 4	PO4-TP4-111/112	Test Pit	0-2	6/21/07	1355	90	X		X	
	PO4-TP4-113	Test Pit	0-2	6/21/07	1355	120	X	X		
	Pond 4	30-Pt Comp.	0.25	6/21/07	1330	n/a			X	All composite sample IDs end in "-SPLP-COMP"
Pond 5	PO5-TP5-117/118	Test Pit	0-2	6/21/07	1440	n/a	X		X	
	PO5-TP5-119	Test Pit	0-2	6/21/07	1440	n/a	X	X		
	Pond 5	30-Pt Comp.	0.25	6/21/07	1230	n/a			X	All composite sample IDs end in "-SPLP-COMP"
Ore Storage 1	OS1-TP6-079/080	Test Pit	0-2	6/21/07	910	90	X		X	
	OS1-TP6-306	Test Pit	0-2	6/21/07	910	90	X			Rep. of 79/80 or 081?
	OS1-TP6-081	Test Pit	2-4	6/21/07	915	70	X	X		
	OS1-TP6-082	Test Pit	6	6/21/07	920	80	X			Very high gamma readings, 1000+ $\mu\text{R/hr}$ in the area.
	Ore Storage 1	30-Pt Comp.	0.25	7/1/07	9/26/02	n/a			X	All composite sample IDs end in "-SPLP-COMP"
Ore Storage 2	OS2-TP5-092/093	Test Pit	0-2	6/21/07	1110	90	X		X	
	OS2-TP5-094	Test Pit	2-4	6/21/07	1115	45	X	X		
	OS2-TP5-096	Test Pit	6	6/21/07	1120	50	X			
	OS2-TP5-098	Test Pit	0-2	6/21/07	1120	80	X			High gamma readings, around 600-700 $\mu\text{R/hr}$
	Ore Storage 2	30-Pt Comp.	0.25	7/1/07	10/26/02	n/a			X	All composite sample IDs end in "-SPLP-COMP"
Access Road	AR7-TP1-076	Test Pit	0-1.5	6/20/07	1545	60	X			
	AR15-TP1-077	Test Pit	0-1.5	6/20/07	1605	60	X			
	AR19-TP1-078	Test Pit	0-1.5	6/20/07	1610	n/a	X			
	AR24-TP1-083	Test Pit	0-1.5	6/21/07	940	70	X			
	AR34-TP1-084	Test Pit	0-1.5	6/21/07	1015	20	X			
	AR34-TP1-085	Test Pit	0-1.5	6/21/07	1015	21	--	--	--	
Storage Area	SA-TP1-089	Test Pit	0-1	6/21/07	1045	12	X		X	
	SA-TP1-090	Test Pit	0-1	6/21/07	1045	12	X		X	
	SA-TP1-307	Test Pit	0-1	6/21/07	1045	12	X			Rep. of SA-TP1-090
	SA-TP1-091	Test Pit	0-1	6/21/07	1045	12			X	
	Storage Area	30-Pt Comp.	0.25	6/21/07	1120	n/a			X	All composite sample IDs end in "-SPLP-COMP"

Notes:

Rads = radiochemical constituents, agro = agronomic parameters

SPLP = Synthetic Precipitation Leachate Procedure constituents

"Rep. = replicate, which are soil sample splits from the same sampling location and interval

Table 2 Soil Analytical Program		
Analyte	Detection Limit	Extraction/Analytical Method
Radiochemical Analytes		
Uranium	0.001 mg/g	EPA M6020, ICP/MS
Gross Alpha	2 pCi/g	ESM 4103
Radium 226	1.0 pCi/g	EPA M9315
Thorium 230	0.2 pCi/g	ESM 4506
Synthetic Precipitation Leachate Procedure Analytes		
Aluminum	0.1 mg/l	EPA 200.7, ICP
Arsenic	0.001 mg/l	EPA 200.7, ICP
Barium	0.010 mg/l	EPA 200.7, ICP
Calcium	0.20 mg/l	EPA 200.7, ICP
Lead	0.04 mg/l	EPA 200.7, ICP
Manganese	0.010 mg/l	EPA 200.7, ICP
Magnesium	0.020 mg/l	EPA 200.7, ICP
Molybdenum	0.001 mg/l	EPA 200.7, ICP
Potassium	3.0 mg/l	EPA 200.7, ICP
Selenium	0.001 mg/l	EPA 200.7, ICP
Sodium	5.0 mg/l	EPA 200.7, ICP
Uranium	0.0001 mg/l	EPA 200.8, ICP-MS
Vanadium	0.005 mg/l	EPA 200.7, ICP
Gross Alpha	1 pCi/l	EPA 900.0
Radium 226	1 pCi/l	EML HASL 300, 4.5.2.3
Radium 228	1.4 pCi/l	EML HASL 300, 4.5.2.3
Agronomic Analytes		
pH	0.01 s.u.	ASA No. 9, Method 10-3.2
Electrical Conductivity	0.01 mmhos/cm	ASA No. 9, Method 10-3.3
Saturation Percentage	0.10%	USDA Handbook 60, Method 27A
Texture	1%	ASA No. 9, Method 15-5
Rock Fragment Percentage	-	ASA No. 9, Method 15-5
Sodium Adsorption Ratio (SAR)	0.01	ASA No. 9, Method 10-3.4
Nitrate as N	1 mg/kg	ASA No. 9, Method 33-3
Phosphorous	1 mg/kg	ASA No. 9, Method 24-2
Potassium	1 mg/kg	EPA 200.7
Chloride	5 mg/kg	SW6010B
Sulfate	0.1 mg/kg	SW6010B
Organic Carbon	0.00%	ASA No. 9, Method 29-3.5.2
Arsenic	5 µg/Kg	Water Extraction
Cadmium	10 µg/Kg	DPTA Extraction
Chromium	50 µg/Kg	Total, SW-846
Copper	6 µg/Kg	DPTA-TEA Extraction
Lead	10 µg/Kg	DPTA Extraction
Mercury	5 µg/Kg	Total, SW-846
Selenium	5 µg/Kg	Water Extraction
Zinc	10 µg/Kg	DPTA Extraction
Nickel	10 µg/Kg	DPTA Extraction
Note:		
1. All SPLP parameters are for dissolved fraction.		

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Background and Borrow Areas			
Background Reference Area			
BCKA L1-1	5	6	11
BCKA L1-2	5	5	11
BCKA L1-3	5	6	11
BCKA L1-4	6	6	13
BCKA L1-5	6	6	14
BCKA L1-6	8	8	17
BCKA L2-1	6	6	13
BCKA L2-2	7	8	15
BCKA L2-3	9	8	17
BCKA L2-4	8	8	16
BCKA L2-5	9	9	18
BCKA L2-6	8	8	18
BCKA L3-1	13	12	21
BCKA L3-2	10	10	19
BCKA L3-3	9	9	19
BCKA L3-4	11	11	21
BCKA L3-5	11	11	21
BCKA L3-6	8	9	21
Mean	8	8	16
Minimum	5	5	11
Maximum	13	12	21
Borrow Area South			
BA3 L1-1	7	8	11
BA3 L1-2	10	11	26
BA3 L1-3	8	11	26
BA3 L1-4	9	10	25
BA3 L2-1	7	8	17
BA3 L2-2	6	7	16
BA3 L2-3	5	6	16
BA3 L2-4	6	6	16
BA3 L3-1	8	9	17
BA3 L3-2	6	6	13
BA3 L3-3	5	6	13
BA3 L3-4	6	7	15
BA3 L4-1	8	8	14
BA3 L4-2	6	6	13
BA3 L4-3	6	6	14
BA3 L4-4	7	7	17
BA3 L5-1	6	6	11
BA3 L5-2	7	7	14
Mean	7	8	16
Minimum	5	6	11
Maximum	10	11	26

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Lobo Tract Area			
L-1	6	7	16
L-2	6	6	7
L-3	5	6	13
L-4	7	7	15
L-5	6	6	13
L-6	6	6	12
L-7	6	6	12
L-8	5	5	10
L-9	5	5	11
L-10	7	7	15
L-11	7	7	15
L-12	7	7	15
L-13	7	7	15
L-14	7	7	15
L-15	8	8	17
L-16	7	7	16
L-17	8	7	15
L-18	7	7	14
L-19	7	8	14
L-20	7	8	15
L-21	7	7	14
	Mean	7	14
	Minimum	5	7
	Maximum	8	17
Former Borrow Areas			
Area 1			
BA1 L1-1	5	5	9
BA1 L1-2	5	5	11
BA1 L1-3	6	5	11
BA1 L1-4	7	8	13
BA1 L1-5	6	6	11
BA1 L2-1	6	5	10
BA1 L2-2	5	4	9
BA1 L2-3	6	6	11
BA1 L2-4	4	4	8
BA1 L2-5	6	6	11
BA1 L3-1	5	5	10
BA1 L3-2	5	5	9
BA1 L3-3	7	7	11
BA1 L3-4	4	4	8
BA1 L3-5	6	6	12
BA1 L4-1	5	5	11
BA1 L4-2	5	4	8
BA1 L4-3	5	5	10
BA1 L4-4	6	6	11
BA1 L4-5	4	5	9
BA1 L5-1	6	6	12
BA1 L5-2	4	4	9
BA1 L5-3	5	5	9
BA1 L5-4	5	5	10
BA1 L5-5	6	6	11

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Area 2			
BA2 L1-1	5	5	10
BA2 L1-2	5	5	9
BA2 L1-3	5	5	10
BA2 L1-4	4	4	9
BA2 L2-1	7	7	13
BA2 L2-2	5	5	10
BA2 L2-3	6	6	11
BA2 L2-4	4	4	8
BA2 L3-1	4	4	8
BA2 L3-2	6	6	11
BA2 L3-3	4	5	9
BA2 L4-1	6	5	10
BA2 L4-2	5	5	9
BA2 L4-3	6	6	10
BA2 L5-1	5	5	9
BA2 L5-2	5	5	9
BA2 L5-3	5	5	9
BA2 L5-4	6	6	10
BA2 L6-1	5	5	11
BA2 L6-2	5	6	11
BA2 L6-3	5	5	10
BA2 L6-4	5	5	9
BA2 L7-1	5	6	11
BA2 L7-2	5	5	9
BA2 L7-3	4	4	9
BA2 L7-4	7	6	13
BA2 L8-1	5	5	9
BA2 L8-2	5	5	8
BA2 L8-3	5	5	9
BA2 L9-1	5	5	9
Mean	5	5	10
Minimum	4	4	8
Maximum	7	8	13
Soil Stockpiles			
Shale 1			
S1 L1-1	7	8	14
S1 L1-2	6	6	13
S1 L1-3	13	11	16
S1 L2-1	6	7	13
S1 L2-2	7	6	14
S1 L3-1	7	8	14
Mean	8	8	14
Minimum	6	6	13
Maximum	13	11	16

Table 3 Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Shale 2			
S2 L1-1	6	5	11
S2 L1-2	5	5	12
S2 L1-3	11	8	14
S2 L2-1	8	8	14
S2 L2-2	13	11	19
S2 L3-2	5	5	12
S2 L3-3	6	6	13
Mean	8	7	14
Minimum	5	5	11
Maximum	13	11	19
Topsoil Pile South			
TS-110	5	6	12
TS-111	7	7	13
TS-112	5	5	12
TS-113	7	8	15
TS-267	6	6	13
TS-268	9	9	14
Mean	7	7	13
Minimum	5	5	12
Maximum	7	8	15
Top Soil Pile North			
TS L2-1	7	7	16
TS L2-2	6	7	19
TS L2-3	7	9	22
RSP TPL	6	7	18
Mean	7	8	19
Minimum	6	8	19
Maximum	6	8	20
Topsoil/Overburden Pile			
TS OB L1-1	9	11	25
TS OB L1-2	7	9	23
TS OB L1-3	9	9	22
TS OB L1-4	8	9	20
TS OB L1-5	7	8	16
TS OB L2-1	12	13	34
TS OB L2-2	13	14	34
TS OB L2-3	10	11	30
TS OB L2-4	10	11	25
Mean	9	11	25
Minimum	7	8	16
Maximum	13	14	34
FL Area			
FL-264	35	29	51
FL-265	26	25	46
FL-266	17	17	31

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Mine Area Non-Economic Materials Piles			
Pile 3			
P3	23	26	60
P3 NE 117	75	65	105
P3 NW 116	34	33	70
P3 SE 115	33	33	65
P3 SW 114	32	30	65
P3-278	50	42	75
P3-279	14	14	36
P3-280	20	21	46
P3-281	37	31	65
P3-282	26	27	60
P3-283	21	20	46
P3-284	27	32	62
P3-286	40	38	70
P3-287	46	46	98
P3-288	125	110	165
P3-289	55	70	125
P3-290	26	34	80
P3-291	40	46	105
P3-292	60	60	105
P3-293	85	75	135
Mean	43	43	82
Minimum	14	14	36
Maximum	125	110	165
Pile 4			
P4 L10-1	25	26	46
P4 L10-2	25	27	47
P4 L10-3	40	28	50
P4 L10-4	37	33	65
P4 L10-5	12	13	28
P4 L10-6	6	7	15
P4 L10-7	7	7	15
P4 L1-1	7	7	14
P4 L11-1	23	18	35
P4 L11-2	10	11	23
P4 L11-3	7	8	17
P4 L11-4	7	6	15
P4 L11-5	6	7	15
P4 L1-2	5	6	13
P4 L12-1	13	15	29
P4 L12-2	13	23	45
P4 L1-3	5	5	13
P4 L13-1	9	9	16
P4 L14-1	12	15	30
P4 L14-2	11	11	18
P4 L2-1	11	11	25
P4 L2-2	9	9	18
P4 L2-3	6	6	13
P4 L2-4	5	6	13
P4 L2-5	5	5	13
P4 L2-6	13	17	35
P4 L2-7	10	11	25

**Table 3
Summary of Gamma Radiation Survey Results**

Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
P4 L2-8	7	8	16
P4 L3-1	11	11	25
P4 L3-2	6	6	14
P4 L3-3	7	6	13
P4 L3-4	6	7	14
P4 L3-5	31	22	35
P4 L3-6	26	26	30
P4 L3-7	23	23	40
P4 L3-8	26	24	43
P4 L4-1	9	10	28
P4 L4-10	5	5	15
P4 L4-2	9	11	24
P4 L4-3	7	8	19
P4 L4-4	6	6	14
P4 L4-5	5	6	13
P4 L4-6	6	7	15
P4 L4-7	15	15	30
P4 L4-8	8	10	24
P4 L4-9	9	9	21
P4 L5-1	11	12	36
P4 L5-10	15	15	27
P4 L5-11	10	11	25
P4 L5-2	9	10	27
P4 L5-3	20	16	30
P4 L5-4	9	11	31
P4 L5-5	7	9	17
P4 L5-6	6	6	14
P4 L5-7	8	7	18
P4 L5-8	24	27	55
P4 L5-9	5	7	17
P4 L6-1	22	24	60
P4 L6-2	9	9	26
P4 L6-4	8	9	22
P4 L6-5	7	7	18
P4 L6-6	20	17	34
P4 L6-7	27	23	40
P4 L7-1	25	25	55
P4 L7-2	18	19	38
P4 L7-3	9	10	24
P4 L7-4	22	22	42
P4 L7-4	26	27	55
P4 L7-5	24	25	58
P4 L7-6	36	34	60
P4 L7-7	22	21	41
P4 L7-8	12	12	26
P4 L8-1	26	30	65
P4 L8-10	10	16	32
P4 L8-11	7	8	16
P4 L8-2	22	21	45
P4 L8-3	13	13	30
P4 L8-4	7	10	21
P4 L8-5	7	8	19
P4 L8-6	9	9	19

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
P4 L8-7	7	7	18
P4 L8-8	9	9	20
P4 L8-9	36	30	55
P4 L9-1	13	14	34
P4 L9-2	14	15	32
P4 L9-3	7	7	17
P4 L9-4	7	7	16
P4 L9-5	6	7	17
P4 L9-6	7	8	17
P4 L9-7	7	7	16
P4 L9-8	5	5	13
SW P-4	23	23	50
Mean	13	13	28
Minimum	5	5	13
Maximum	40	34	65
Pile 5			
P5 L1-1	105	105	180
P5 L1-2	45	50	105
P5 L2-1	80	90	180
P5 L2-2	90	90	170
P5 L2-3	70	70	125
P5 L3-1	55	60	125
Mean	74	78	148
Minimum	45	50	105
Maximum	105	105	180
Pile 6			
P6-234	34	34	80
P6-235	35	38	85
P6-236	45	45	100
P6-237	40	45	95
P6-238	65	50	95
P6-239	30	32	70
P6-240	55	57	115
P6-241	30	30	70
Mean	42	41	89
Minimum	30	30	70
Maximum	65	57	115
Pile 7			
P7-229	60	55	135
P7-230	130	150	230
P7-231	65	65	130
P7-232	180	135	245
P7-233	410	320	600
Mean	169	145	268
Minimum	60	55	130
Maximum	410	320	600

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
West Disturbance Area			
WDA-242	320	200	300
WDA-243	160	160	300
WDA-244	300	290	440
WDA-245	205	165	290
WDA-246	140	135	235
WDA-247	150	150	245
WDA-248	35	45	105
WDA-249	55	70	190
WDA-250	120	115	235
WDA-251	150	145	295
WDA-252	230	230	370
WDA-253	90	85	165
WDA-254	125	120	210
WDA-255	70	70	140
WDA-256	135	100	170
WDA-257	115	140	280
WDA-258	115	105	185
WDA-259	105	105	190
WDA-260	195	165	250
WDA-261	100	90	150
WDA-262	100	90	170
	Mean	144	132
	Minimum	35	105
	Maximum	320	290
Crusher/Stockpile Area			
CSA L1-1	33	32	75
CSA L1-2	25	25	65
CSA L1-3	28	32	79
CSA L1-4	23	28	75
CSA L1-5	35	35	85
CSA L1-6	60	62	105
CSA L2-1	120	125	190
CSA L2-2	40	45	105
CSA L2-3	90	85	175
CSA L2-4	70	90	195
CSA L2-5	95	100	195
CSA L2-6	105	105	205
CSA L2-7	65	70	140
CSA L3-1	65	65	135
CSA L3-2	45	45	120
CSA L3-3	110	115	220
CSA L3-4	175	175	320
CSA L3-5	110	110	220
CSA L3-6	125	130	240
CSA L3-7	185	180	265
CSA L4-1	165	160	280
CSA L4-2	470	330	490
CSA L4-3	80	75	175
CSA L4-4	115	110	215
CSA L4-5	435	460	800
CSA L4-6	210	210	350
CSA L4-7	235	210	330

Table 3			
Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
CSA L5-1	125	140	250
CSA L5-2	220	200	330
CSA L5-3	105	105	200
CSA L5-4	85	90	175
CSA L5-5	200	240	410
CSA L5-6	85	85	210
CSA L5-7	110	115	220
CSA L6-1	25	35	95
CSA L6-2	115	120	240
CSA L6-3	140	130	240
CSA L6-4	65	80	160
CSA L6-5	35	45	125
CSA L6-6	135	120	215
CSA L6-7	145	135	245
CSA L7-1	70	70	155
CSA L7-2	410	330	450
CSA L7-3	70	75	155
CSA L7-4	85	85	180
CSA L7-5	110	115	235
CSA L8-1	25	35	80
CSA L8-2	100	90	180
CSA L8-3	34	35	100
Mean	119	116	214
Minimum	23	25	65
Maximum	470	460	800
Open Pit 1			
Pit1-165	58	50	95
Pit1-166	50	45	85
Pit1-167	38	35	70
Pit1-168	33	35	70
Pit1-169	20	25	62
Pit1-170	40	47	80
Pit1-171	29	39	70
Pit1-172	26	27	60
Pit1-173	28	34	80
Pit1-174	32	37	79
Pit1-175	63	72	138
Mean	38	41	81
Minimum	20	25	60
Maximum	63	72	138
Western Shaft Area			
Mine Dump			
MD-1	90	85	140
MD-2	175	140	225
MD-3	250	160	230
MD-4	140	135	215
MD-6	65	75	140
Mean	144	119	190
Minimum	65	75	140
Maximum	250	160	230

Table 3 Summary of Gamma Radiation Survey Results			
Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
Shaft Pad			
SP-1	33	37	70
SP-2	48	40	70
SP-3	20	22	50
Mean	34	33	63
Minimum	20	22	50
Maximum	48	40	70
Storage Area			
SA-1	6	7	15
SA-2	7	7	15
Mean	7	7	15
Shaft Area Ponds			
SP1-1 (Pond 1)	260	210	300
SP2-2 (Pond 2)	140	150	260
SPM-6 (between Ponds 2 & 3)	7	8	22
SP3-3 (Pond 3)	45	50	95
SP4-4 (Pond 4)	280	260	390
P5-1 (Pond 5)	9	9	9
P5-2 (Pond 5)	24	24	24
Mean	109	102	157
Minimum	7	8	9
Maximum	280	260	390
Ore Storage Areas			
OS1-1	115	120	225
OS1-2	140	100	180
OS1-3	130	145	255
OS1-4	125	125	215
OS1-5	160	135	240
OS1-6	235	225	380
OS2-1	30	31	60
OS2-2	36	38	70
OS2-3	33	34	70
OS2-4	50	65	125
OS2-5	600	400	500
OS2-6	20	23	50
Mean	140	120	198
Minimum	20	23	50
Maximum	600	400	500
Shaft Area Access Road			
AR-01	13	12	24
AR-02	10	12	23
AR-03	20	17	30
AR-04	9	9	18
AR-05	7	7	17
AR-06	38	38	70
AR-07	270	210	270
AR-08	40	44	80
AR-10	27	27	49
AR-11	36	34	60
AR-12	26	24	43
AR-13	43	36	65
AR-14	50	45	75
AR-15	220	175	240

**Table 3
Summary of Gamma Radiation Survey Results**

Location ID	Contact Shielded	1-Meter Shielded	1-Meter Unshielded
AR-16	40	40	35
AR-17	46	43	75
AR-18	70	80	135
AR-19	130	90	135
AR-20	60	70	125
AR-21	10	14	36
AR-22	90	90	140
AR-23	31	38	100
AR-24	75	50	100
AR-25	21	25	60
AR-26	10	12	30
AR-27	7	9	22
AR-28	8	9	20
AR-29	6	8	22
AR-30	10	14	33
AR-31	13	16	40
AR-32	9	9	24
AR-33	6	7	17
AR-34	70	60	75
Mean	46	42	69
Minimum	6	7	17
Maximum	270	210	270

Notes:

1. Measurements are gamma exposure rate in $\mu\text{R/hr}$.
2. Measurements collected in the open pit area of the mine, and the former borrow areas 1 and 2 were collected by UNC in April 2006; the remaining measurements from the western Shaft Area and the Lobo Tract parcel were collected in June-July 2007.

Table 4			
Descriptive Statistics, Gamma Measurements			
	Contact Shielded	1-meter Shielded	1m Unshielded
Background Means	8	8	16
Minimum	5	5	9
Maximum	600	460	800
Mean	58	55	100
Standard Error	5	4	6
Median	26	27	60
Mode	7	7	13
Standard Deviation	81	69	111
Sample Variance	6,600	4,742	12,310
Kurtosis	12	8	7
Skewness	3	2	2
Range	595	455	791
Count	309	309	309
Notes:			
1. Measurements are gamma exposure rate in $\mu\text{R/hr}$.			

Table 5 Soil Analytical Results, Radionuclides						
Sample ID	Depth (ft bgs)	Facility	Radium-226 pCi/G	Uranium mg/kg	Thorium-230 pCi/g	Gross Alpha pCi/g
Background Area						
BG-TP1-124	0-2	Test pit	3.2	6.49	1.1	17.6
BG-TP1-125	2-4	Test pit	1.2	1.52	0.3	6.4
BG-TP2-126	0-2	Test pit	1	2.63	0.5	10.2
BG-TP2-127	2-4	Test pit	<1	0.95	0.3	11.3
BG-TP3-120	0-2	Test pit	<1	0.67	0.4	10.1
BG-TP3-310	0-2	Test pit	<1	0.67	0.4	5.7
BG-TP3-121	2-4	Test pit	1.2	1.47	0.3	7.7
BG-TP4-122	0-2	Test pit	3.4	9.18	2.2J	23.4
BG-TP4-123	2-4	Test pit	2	7.2	1.9	15.5
		Minimum	<1	0.67	0.3	6.4
		Maximum	3.4	9.18	2.2	23.4
		Mean	1.6	3.8	0.9	12.8
Borrow Areas						
BS-TP1-041/042	0-6	Borrow Area South	<1	0.69	0.7	5.8
BS-TP2-069/070	0-6	Borrow Area South	<1	0.74	0.3	5.8
BS-TP2-305	0-6	Borrow Area South	<1	0.74	0.2	5.8
LOBO-TP1-130/131	0-6	Lobo Tract	<1	7.79	0.2	9.8
LOBO-TP2-132	0-2	Lobo Tract	<1	1.25	0.3	12.7
LOBO-TP2-133	2-6	Lobo Tract	1.5	1.44	0.3	13.6
LOBO-TP3-134	0-6	Lobo Tract	1.3	1.74	0.4	9
LOBO-TP3-135	0-6	Lobo Tract	1.2	1.67	0.3	8.6
LOBO-TP4-136	0-6	Lobo Tract	<1	1.06	0.3	8.9
		Minimum	<1	0.69	0.2	5.8
		Maximum	1.5	7.79	0.7	13.6
		Mean	0.8	2.1	0.4	9.4
Topsoil Stockpiles						
TO-TP1-015/016	0-2	Topsoil/Overburden	<1	1.02	0.3	6.6
TO-TP1-017	2-4	Topsoil/Overburden	<1	0.83	0.2	7.8
TO-TP1-018	10	Topsoil/Overburden	<1	0.64	<0.2	4.6
TO-TP1-019	15	Topsoil/Overburden	<1	0.79	0.3	9.8
TN-TP1-071	0-2	Topsoil Pile North	<1	0.6	<0.2	7.4
TN-TP1-072	0-2	Topsoil Pile North	<1	0.63	0.2	5.6
TN-TP1-073	2-4	Topsoil Pile North	<1	0.63	<0.2	9.2
TN-TP1-074	10	Topsoil Pile North	<1	0.65	0.3	8.3
TN-TP1-075	15	Topsoil Pile North	<1	0.51	0.2	8.8
TS-TP1-064/065	0-2	Topsoil Pile South	1	1.1	0.3	5.8
TS-TP1-066	2-4	Topsoil Pile South	<1	0.84	0.3	6.2
TS-TP1-067	10	Topsoil Pile South	<1	0.91	0.2	8.5
TS-TP1-068	13	Topsoil Pile South	<1	0.58	<0.2	9.5
		Minimum	<1	0.51	<0.2	4.6
		Maximum	1	1.1	0.3	9.8
		Mean	0.5	0.7	0.2	7.5

Table 5 Soil Analytical Results, Radionuclides						
Sample ID	Depth (ft bgs)	Facility	Radium-226 pCi/G	Uranium mg/kg	Thorium-230 pCi/g	Gross Alpha pCi/g
Non-Economic Material Storage Piles						
Pile 3						
P3-DH7-002	2-4	Pile 3	34.6	125	28	197
P3-DH7-015	100-108	Pile 3	12.5	31.4	7.4	98.4
P3-DH8-005	20-28	Pile 3	11.9	27.4	7.6	69.6
P3-DH8-007	36-44	Pile 3	16.1	71.7	7.6	89.3
P3-DH8-301	36-44	Pile 3	16.1	71.7	6	79.6
P3-DH8-010	60-68	Pile 3	21.1	97.5	16	142
P3-DH8-302	60-68	Pile 3	20	78.5	9.3	112
Minimum			11.9	27.4	7.4	69.6
Maximum			34.6	125	28	197
Mean			19.2	70.6	13.3	119.3
Pile 4						
P4-DH1-013	84-92	Pile 4	3.3	5.53	0.5	16.5
P4-DH1-015	100-108	Pile 4	20	36.5	4.4	63.6
P4-DH2-010	60-68	Pile 4	7.9	36.1	5.7	39
P4-DH2-011	68-76	Pile 4	17.7	69.9	15	98.4
P4-DH3-004	12-20	Pile 4	6.7	17.2	3.8	37.5
P4-DH3-005	20-28	Pile 4	3.2	11.5	0.9J	30.4
P4-DH3-300	20-28	Pile 4	2.5	8.7	1.4J	19.2
P4-DH4-012	76-84	Pile 4	20.7	32.2	6.4	50.3
P4-DH4-014	92-100	Pile 4	47.7	125	21	115
P4-DH5-007	36-44	Pile 4	7.9	37.6	4.1	62.6
P4-DH5-016	108-116	Pile 4	12.7	43.5	11	57.8
P4-DH6-007	36-44	Pile 4	24.9	49.9	6.9	56.7
P4-DH6-008	44-52	Pile 4	29.8	84.8	10	79.2
Minimum			3.2	5.53	0.5	16.5
Maximum			47.7	125	21	115
Mean			16.9	45.8	7.5	58.9
Pile 5						
P5-TP1-010	0-2	Pile 5	70.7	143	27	225
P5-TP1-011/012	2-4	Pile 5	55.1	182	45	243
Mean			62.9	162.5	36	234
Pile 6						
P6-TP1-028	0-2	Pile 6	41.3	75.5	26	262
P6-TP1-030	10	Pile 6	32.3	80.9	23	169
P6-TP1-301	10	Pile 6	32.3	80.9	23	161
Minimum			32.3	75.5	23	161
Maximum			41.3	80.9	26	262
Mean			36.8	78.2	24.5	215.5

Table 5 Soil Analytical Results, Radionuclides						
Sample ID	Depth (ft bgs)	Facility	Radium-226 pCi/G	Uranium mg/kg	Thorium-230 pCi/g	Gross Alpha pCi/g
West Disturbance Area						
P6-TP2-032/033	0-2	West Disturbance Area ¹	79.7	343	74	491
P6-TP2-035	10	West Disturbance Area ¹	106	421	99	695
P6-TP3-037/038	0-2	West Disturbance Area ¹	65.8	201	47	365
P6-TP3-039	2-4	West Disturbance Area ¹	123	214	136	888
P6-TP3-302	2-4	West Disturbance Area ¹	112	172	136	608
P6-TP4-043/044	0-2	West Disturbance Area ¹	590	1660	602	2490
P6-TP4-047	15	West Disturbance Area ¹	383	1420	574	1640
P6-TP5-057/058	0-2	West Disturbance Area ¹	44.5	46.1	25	165
P6-TP5-059	2-4	West Disturbance Area ¹	24.8	70.2	21	148
P6-TP6-060	0-2	West Disturbance Area ¹	93.8	233	87	501
P6-TP6-304	0-2	West Disturbance Area ¹	89.3	233	63	386
P6-TP6-061	2-4	West Disturbance Area ¹	115	174	104	683
Minimum			24.8	46.1	21	148
Maximum			590	1660	602	2490
Mean			162.6	478.2	176.9	806.6
Pile 7						
P7-TP2-020/021	0-2	Pile 7	26.9	137	19	163
P7-TP2-300	0-2	Pile 7	26.9	87.4	18	163
P7-TP2-022	2-4	Pile 7	23.6	108	21	148
Mean			25.3	122.5	20	155.5
Crusher Stockpile Area						
P7-TP1-001/002	0-2	Crusher Stockpile Area ¹	10	20.9	5.3	58.6
P7-TP1-005	10	Crusher Stockpile Area ¹	44.2	136	29	218
P7-TP3-023/024	0-2	Crusher Stockpile Area ¹	35.6	175	28	186
P7-TP3-026	10	Crusher Stockpile Area ¹	65.5	332	65	555
P7-TP4-048/049	0-2	Crusher Stockpile Area ¹	119	385	107	706
P7-TP4-050	2-4	Crusher Stockpile Area ¹	98.1	302	54	498
P7-TP4-303	2-4	Crusher Stockpile Area ¹	98.1	302	54	441
P7-TP5-053/054	0-2	Crusher Stockpile Area ¹	39.8	182	34	196
P7-TP5-055	2-4	Crusher Stockpile Area ¹	47.4	154	21	261
Minimum			10	20.9	5.3	58.6
Maximum			119.0	385	107	706
Mean			57.5	211	42.9	334.8
Western Shaft Area						
Mine Dump						
MD-DH9-002	2-4	Mine Dump	39.9	127	38	260
MD-DH9-003	4-12	Mine Dump	28.9	139	26	289
MD-DH10-002	2-4	Mine Dump	74.4	288	71	599
MD-DH10-303	2-4	Mine Dump	74.4	214	71	599
MD-DH10-004	12-20	Mine Dump	38.1	138	31	248
Minimum			28.9	127	26	248
Maximum			74.4	288	71	599
Mean			45.3	173	42	349

Table 5 Soil Analytical Results, Radionuclides						
Sample ID	Depth (ft bgs)	Facility	Radium-226 pCi/G	Uranium mg/kg	Thorium-230 pCi/g	Gross Alpha pCi/g
Shaft Pad						
SP-TP2-086/087	0-1	Shaft Pad	40.1	76.4	13	115
SP-TP2-088	0-1	Shaft Pad	33.9	50.0	11	110
		Mean	37.0	63.2	12	113
Ponds						
PO1-TP1-099/100	0-2	Pond 1	611	578	200	1200
PO1-TP1-308	0-2	Pond 1	520	525	199	1080
PO1-TP1-103	0-2	Pond 1	498	525	221	797
PO2-TP2-105/110	0-2	Pond 2	242	721	144	733
PO2-TP2-309	0-2	Pond 2	49.7	448	63	419
PO2-TP2-106	2-4	Pond 2	42.3	269	31	133
PO2-TP2-108	6	Pond 2	<1	7.5	0.3	10.1
PO3-TP3-114/115	0-2	Pond 3	221	364	99	622
PO3-TP3-116	0-2	Pond 3	161	674	280	1140
PO4-TP4-111/112	0-2	Pond 4	352	1090	243	1170
PO4-TP4-113	0-2	Pond 4	266	809	155	985
PO5-TP5-117/118	0-2	Pond 5	2.3	7.59	0.9	16
PO5-TP5-119	0-2	Pond 5	8.3	18	4.7	26.9
		Minimum	<1	7.5	0.3	10.1
		Maximum	611	1090	280	1200
		Mean	218.6	460.3	125.4	621.2
Ore Storage Areas						
OS1-TP1-081	2-4	Ore Storage Area 1	13	47.9	6.7	59.7
OS1-TP6-079/080	0-2	Ore Storage Area 1	15.7	295	22	168
OS1-TP6-306	0-2	Ore Storage Area 1	15.7	295	22	168
OS1-TP6-082	6	Ore Storage Area 1	9.7	32.4	5.9	59
OS2-TP5-092/093	0-2	Ore Storage Area 2	181	573	123	653
OS2-TP5-094	2-4	Ore Storage Area 2	8.3	19	8.1	37.7
OS2-TP5-096	6	Ore Storage Area 2	2.4	7.48	1.3	16.4
OS2-TP5-098	0-2	Ore Storage Area 2	43.9	105	28	151
		Minimum	2.4	7.48	1.3	16.4
		Maximum	181	573	123	653
		Mean	39.1	154.3	27.9	163.5
Access Road						
AR7-TP1-076	0-1.5	Access Rd	94.3	286	71	530
AR15-TP1-077	0-1.5	Access Rd	42.7	99.1	50	181
AR19-TP1-078	0-1.5	Access Rd	52.2	254	39	230
AR24-TP1-083	0-1.5	Access Rd	7.2	17.8	4.2	45.1
AR34-TP1-084	0-1.5	Access Rd	14.3	90.7	13	61.5
		Minimum	7.2	17.8	4.2	45.1
		Maximum	94.3	286	71	530
		Mean	42.1	149.5	35.4	209.5
Storage Area						
SA-TP1-089	0-1	Storage Area	1.1	1.91	0.5	8
SA-TP1-090	0-1	Storage Area	1.1	2.85	0.5	3.9
SA-TP1-307	0-1	Storage Area	<1	1.44	-0.2	3.6
		Mean	1.1	2.4	0.5	6.0

Table 5 Soil Analytical Results, Radionuclides						
Sample ID	Depth (ft bgs)	Facility	Radium-226 pCi/G	Uranium mg/kg	Thorium-230 pCi/g	Gross Alpha pCi/g
Site-Wide Statistics						
Minimum			<1	0.51	<0.2	3.9
Maximum			611	1660	602	2490
Average			58.4	159.6	44.1	242.8
Standard Deviation			114.5	280.6	95.8	393.8
Notes:						
J - estimated						
1. Test pits in the West Disturbance Area were labeled in the field as Pile 6, and those in the Crusher Stockpile Area were labeled in the field as Pile 7.						
2. Replicate samples, which are included in this table, were not included in the statistical summaries.						

Table 6				
Descriptive Statistics - Soil Radionuclide Analytical Results				
Statistical Parameter	Radium-226	Uranium	Thorium-230	Gross Alpha
	pCi/g	mg/kg	pCi/g	pCi/g
Reporting Limits	1	0.2	0.2	2
Background Means	1.6	3.8	0.9	12.8
Minimum	<1	0.51	<0.2	4.6
Maximum	611	1,660	602	2,490
Mean	59.9	164.2	45.3	248.4
Standard Error	11.8	29.0	9.9	40.6
Median	18.85	49.95	10.5	84.25
Mode	0.5	182	0.3	5.8
Standard Deviation	115.9	283.7	97.0	398.1
Sample Variance	13,443.2	80,463.6	9,413.0	158,462.8
Kurtosis	11.2	11.9	19.8	11.2
Skewness	3.3	3.2	4.1	2.9
Range	610.5	1,659.5	601.9	2,485.4
Count	96	96	96	96
Notes:				
1. One-half the detection limit was used in this statistical analysis for non-detect results.				

**Table 7
Soil Analytical Results, Synthetic Precipitation Leaching Procedure**

Loc ID	Area	Type	Radionuclides				Metals											
			Gross Alpha	Radium 226	Radium 228	Uranium	Aluminum	Arsenic	Barium	Calcium	Lead	Magnesium	Manganese	Molybdenum	Potassium	Selenium	Sodium	Vanadium
			pCi/L	pCi/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Non-Economic Material Storage Areas																		
P3-DH7-009	Pile 3	Drill Hole	10.3	1	<1.4	0.0165	<0.1	<0.001	<0.01	27.9	<0.04	12.8	<0.01	<0.001	<3	<0.002	<5	<0.005
P3-DH8-005	Pile 3	Drill Hole	3.3	<1	5.4	0.0009	<0.1	<0.001	0.01	1.7	<0.04	0.58	<0.01	<0.001	<3	<0.002	6	<0.005
P4-DH1-015	Pile 4	Drill Hole	43.1	3.5	4.3	0.0473	<0.1	<0.001	<0.01	68.8	<0.04	19.1	0.07	<0.001	<3	<0.002	13	<0.005
P4-DH2-011	Pile 4	Drill Hole	2.7	<1	<1.4	0.0005	<0.1	<0.001	<0.01	6	0.05	1.6	0.04	<0.001	<3	<0.002	22	0.005
P4-DH3-004	Pile 4	Drill Hole	56.2	9.2	3.1	0.0651	0.5	<0.001	0.03	25	<0.04	10.4	0.53	<0.001	<3	0.0030	12	<0.005
P4-DH4-014	Pile 4	Drill Hole	133	3.9	3.1	0.087	<0.1	0.002	<0.01	2.1	<0.04	0.29	<0.01	<0.001	<3	<0.002	18	0.006
P4-DH5-016	Pile 4	Drill Hole	33.1	<1	3.3	0.0215	1.5	<0.001	<0.01	2.9	0.07	0.49	<0.01	<0.001	<3	<0.002	18	0.007
P4-DH6-008	Pile 4	Drill Hole	10.6	4.9	1.9	0.0016	<0.1	<0.001	0.01	32.2	<0.04	8.89	0.38	<0.001	<3	<0.002	21	<0.005
P5-TP1-010	Pile 5	Test Pit	23.4	2.4	<1.4	0.0308	2.0	<0.001	<0.01	1.8	<0.04	0.33	<0.01	<0.001	<3	<0.001	9	0.011
P6-TP1-030	Pile 6	Test Pit	18.3	2.7	<1.4	0.0235	0.3	<0.001	<0.01	0.5	<0.04	0.21	<0.01	<0.001	<3	<0.001	7	<0.005
P6-TP2-035	Pile 6	Test Pit	34.3	4	<1.4	0.0189	0.4	<0.001	<0.01	4.4	<0.04	2.72	<0.01	<0.001	<3	<0.001	13	0.007
P6-TP3-039	Pile 6	Test Pit	234	42.2	<1.4	0.204	<0.1	<0.001	0.03	7.7	<0.04	5.16	0.03	<0.001	<3	<0.001	6	<0.005
P6-TP4-047	Pile 6	Test Pit	2,060	385	<1.4	0.719	0.3	<0.001	0.02	24.1	<0.04	6.78	0.08	0.001	<3	<0.001	<5	<0.005
P7-TP1-005	Pile 7	Test Pit	90.6	35.3	<1.4	0.0262	<0.1	<0.001	0.02	9.8	<0.04	3.08	0.14	<0.001	<3	<0.001	10	<0.005
P7-TP2-022	Pile 7	Test Pit	48.3	2	<1.4	0.0886	0.2	<0.001	<0.01	30.6	<0.04	4.62	<0.01	0.001	<3	<0.001	17	<0.005
P7-TP3-026	Pile 7	Test Pit	48.2	17	<1.4	0.0101	<0.1	<0.001	0.01	11.9	<0.04	3.12	0.09	<0.001	<3	<0.001	14	<0.005
P7-TP4-050	Pile 7	Test Pit	85.9	9.2	<1.4	0.0346	0.5	0.002	<0.01	<0.2	<0.04	0.08	<0.01	<0.001	<3	<0.001	27	0.013
P7-TP5-055	Pile 7	Test Pit	199	4.4	<1.4	0.204	0.7	0.002	<0.01	0.8	<0.04	0.3	<0.01	<0.001	<3	<0.001	27	0.014
		Minimum	2.7	<1	<1.4	0.0005	<0.1	<0.001	<0.01	<0.2	<0.04	0.08	<0.01	<0.001	nd	<0.001	<5	<0.005
		Maximum	2,060	385	5.4	0.719	2.0	0.002	0.03	68.8	0.07	19.1	0.53	0.001	nd	0.0030	27	0.014
		Mean	#NAME?	29.3	1.6	0.1	0.4	0.001	0.010	14.4		4.5	0.1	0.0006	nd	0.0008	13.6	0.0050
Topsoil Stockpiles																		
TN-TP1-073	Topsoil North	Test Pit	<1	<1	<1.4	0.0002	0.9	<0.001	<0.01	6	<0.04	4.36	<0.01	<0.001	<3	<0.001	13	<0.005
TS-TP1-066	Topsoil South	Test Pit	<1	4.5	<1.4	0.0005	<0.1	<0.001	<0.01	18.8	<0.04	8.8	<0.01	0.002	<3	<0.001	11	<0.005
		Mean	<1	2.5	<1.4	0.0	0.5	<0.001	<0.01	12.4	<0.04	6.6	<0.01	0.0013	nd	<0.001	12.0	nd
Shaft Area Mine Dump & Pad																		
MD-DH10-001	Mine Dump	Drill Hole	246	25.7	<1.4	0.001	0.3	0.003	<0.01	4.7	<0.04	0.62	<0.01	0.003	<3	0.002	<5	0.006
MD-DH9-003	Mine Dump	Drill Hole	158	2.7	<1.4	0.14	5.2	0.001	<0.01	3.2	<0.04	0.54	<0.01	0.005	<3	<0.002	14	0.038
MD-SPLP-COMP	Mine Dump	Drill Hole	554	1.7	<1.4	0.694	0.9	<0.001	<0.01	14.1	<0.04	2.02	<0.01	0.009	<3	0.004	35	0.008
SP-TP2-088	Shaft Pad	Test Pit	26.7	<1	<1.4	0.0368	0.7	0.002	<0.01	6.5	<0.04	1.88	<0.01	0.003	<3	0.001	24	0.007
SP-SPLP-COMP	Shaft Pad	30-pt Composite	216	8.3	<1.4	0.19	2.3	0.002	<0.01	7.4	<0.04	0.8	<0.01	0.023	<3	<0.001	8	0.032
		Minimum	26.7	<1		0.001	0.3	<0.001	<0.01	3.2	<0.04	0.54	<0.01	0.003	nd	<0.001	<5	0.006
		Maximum	554	25.7		0.694	5.2	0.003	<0.01	14.1	<0.04	2.02	<0.01	0.023	nd	0.004	35	0.038
		Mean	240.1	7.8		0.2	1.9	0.002		7.2	<0.04	1.2	<0.01	0.009	nd	0.002	16.7	0.018
Shaft Ore Storage Areas																		
OS1-TP1-081	Ore Storage 1	Test Pit	47.5	5.8	<1.4	0.063	<0.1	<0.001	0.02	27	<0.04	4.57	0.03	<0.001	<3	<0.001	12	<0.005
OS2-TP5-094	Ore Storage 2	Test Pit	95.7	6	<1.4	0.156	14.4	<0.001	0.02	62.1	<0.04	42.4	1.22	<0.001	<3	0.001	6	<0.005
		Mean	71.6	5.9	nd	0.1	7.2	nd	0.0	44.6	nd	23.5	0.6	nd	nd	0.00075	9.0	nd
Shaft Area Ponds																		
PO1-SPLP-COMP	Pond 1	30-pt Composite	1,100	9.5	<1.4	1.32	1.7	0.003	0.02	14.4	<0.04	1.85	<0.01	0.032	4	0.002	9	0.015
PO2-TP2-106	Pond 2	Test Pit	224	5.2	<1.4	0.473	2.6	0.003	<0.01	4.3	<0.04	0.65	<0.01	0.026	<3	<0.001	33	0.018
PO2-SPLP-COMP	Pond 2	30-pt Composite	1,990	10.2	<1.4	2.7	3.2	0.004	<0.01	8	<0.04	1.26	<0.01	0.081	5	0.003	22	0.034
PO3-TP3-116	Pond 3	Test Pit	205	12.1	<1.4	0.155	1.7	0.003	<0.01	4.5	<0.04	1.03	<0.01	0.016	<3	0.001	21	0.099
PO 3-SPLP-COMP	Pond 3	30-pt Composite	226	7.1	<1.4	0.247	1.6	0.002	<0.01	9.2	<0.04	1.76	<0.01	0.006	3	<0.001	8	0.008
PO4-TP4-113	Pond 4	Test Pit	1,900	48.2	<1.4	1.54	1.5	0.007	<0.01	2	<0.04	0.56	<0.01	0.068	<3	0.003	58	0.095
PO 4-SPLP-COMP	Pond 4	30-pt Composite	1,640	5.6	<1.4	2.56	3.8	0.004	<0.01	7.3	<0.04	1.81	<0.01	0.102	4	0.004	32	0.027
PO5-TP5-119	Pond 5	Test Pit	7	1.1	<1.4	0.0051	1.7	0.002	<0.01	2.8	<0.04	0.6	<0.01	0.002	<3	<0.001	19	<0.005
PO 5-SPLP-COMP	Pond 5	30-pt Composite	11.5	1.2	<1.4	0.0107	1.4	0.003	<0.01	8.4	<0.04	1.71	<0.01	0.003	<3	<0.001	10	<0.005
		Minimum	7	1.1	nd	0.0051	1.4	0.002	<0.01	2	<0.04	0.56	<0.01	0.002	<3	<0.001	8	<0.005
		Maximum	1,990	48.2	nd	2.7	3.8	0.007	0.02	14.4	<0.04	1.85	<0.01	0.102	5	0.004	58	0.099

**Table 7
Soil Analytical Results, Synthetic Precipitation Leaching Procedure**

Loc ID	Area	Type	Radionuclides				Metals											
			Gross Alpha pCi/L	Radium 226 pCi/L	Radium 228 pCi/L	Uranium mg/L	Aluminum mg/L	Arsenic mg/L	Barium mg/L	Calcium mg/L	Lead mg/L	Magnesium mg/L	Manganese mg/L	Molybdenum mg/L	Potassium mg/L	Selenium mg/L	Sodium mg/L	Vanadium mg/L
Non-Economic Material Storage Areas																		
		Mean	811.5	11.1	nd	1.0	2.1	0.0	0.0	6.8	<0.04	1.2	<0.01	0.0	2.6	0.002	23.6	0.033
Shaft Storage Area																		
SA-TP1-091	Storage Area	Test Pit	<1	<1	<1.4	0.001	1.3	0.001	<0.01	10.8	<0.04	0.86	<0.01	0.001	<3	<0.001	26	<0.005
SA-SPLP-COMP	Storage Area	30-pt Composite	1.8	<1	<1.4	0.0025	2.1	0.002	0.01	10.6	<0.04	0.76	<0.01	0.002	5	<0.001	5	0.008
		Mean	1.15	nd	nd	0.00175	1.7	0.0015	0.0075	10.7	nd	0.81	nd	0.0015	3.3	nd	15.5	0.00525
Site-Wide Statistics																		
		Minimum	<1	<1	<1.4	0.0002	<0.1	<0.001	<0.01	0.1	<0.04	0.08	<0.1	<0.001	<3	<0.001	2.5	0.0025
		Maximum	2,060	385	5.4	2.7	14.4	0.007	0.03	68.8	0.07	42.4	1.22	0.102	5	0.004	58	0.099
		Mean	310.1	18.0	1.1	0.3	1.4	0.002	0.009	12.9	0.0	4.2	0.1	0.01	1.9	0.001	16.1	0.013
		Standard Deviation	588.0	62.2	1.1	0.7	2.5	0.001	0.007	15.4	0.0	7.6	0.2	0.02	1.0	0.001	11.2	0.022

**Table 8
Agronomic Analytical Results**

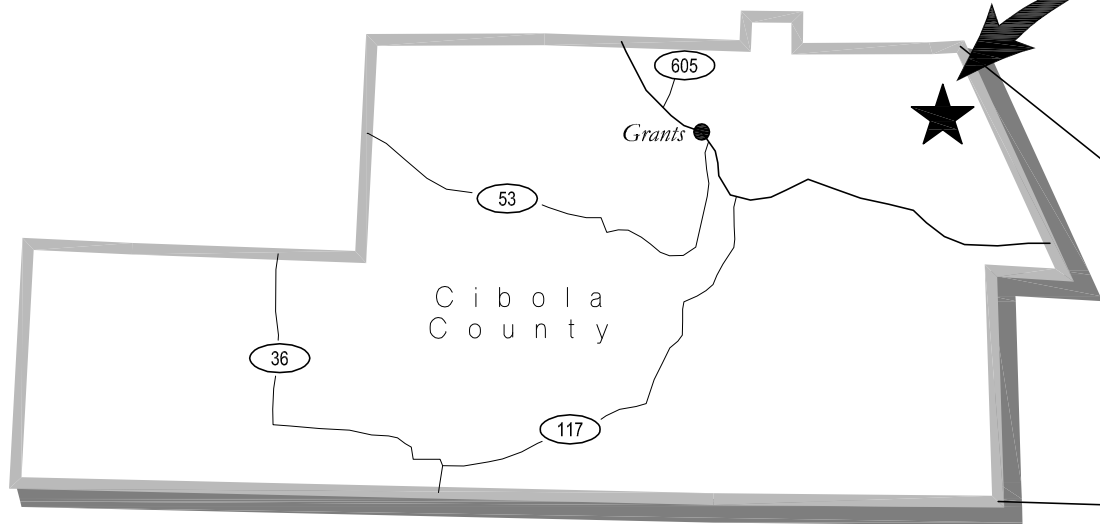
Table 8 Agronomic Analytical Results																		
Location ID	Type	Heavy Metals												Inorganic Parameters				
		Arsenic	Cadmium	Calcium, paste	Chloride, soluble	Chromium	Conductivity, paste	Copper	Lead	Magnesium, paste	Mercury	Nickel	Selenium	Zinc	Nitrogen, NO2 + NO3 as N	TOC	pH, sat. paste	Phosphorus, Olsen
		mg/kg	mg/kg	meq/l	mg/kg	mg/kg	mmhos/cm	mg/kg	mg/kg	meq/l	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%		mg/kg
Borrow Areas																		
BS-TP1-041/042	Test Pit	0.022	<0.7	1.5	<5	8.7	0.33	<0.6	0.3	0.93	<0.05	<3	<0.005	0.13	1.4	0.26	8.2	6
BS-TP2-069/070	Test Pit	0.045	<0.3	31	<5	13.8	2.64	<0.5	0.4	4.7	<0.05	<3	<0.005	0.14	3.1	0.3	7.7	<5
LOBO-TP1-130/131	Test Pit	0.034	<0.3	2.7	12.5	13.5	0.66	<0.6	0.3	3.4	<0.05	<3	0.007	0.1	1.2	0.3	8.1	<5
Topsoil Stockpiles																		
TN-TP1-071	Test Pit	0.028	<0.3	3.4	8.5	12.7	0.79	<0.5	0.3	3	<0.05	<0.9	0.005	0.1	1.1	0.24	8	11
TN-TP1-072	Test Pit	0.028	<0.3	3.7	9.1	12.3	0.76	<0.5	0.3	3	<0.05	<3	0.007	0.11	<1	0.25	8.1	8
TO-TP1-015/016	Test Pit	0.037	<0.7	27	19	20.4	3.86	<0.5	0.6	16	<0.05	<3	0.009	0.18	<1	0.15	7.4	7
TS-TP1-064/065	Test Pit	0.034	<0.7	26	13.4	14	5.46	0.7	0.6	39	<0.05	<3	0.036	0.31	1.1	0.22	7.4	<5
Non-Economic Material Storage Areas																		
P3-DH7-002	Drill Hole	0.129	<0.3	6.6	<5	5.1	1.12	0.2	1.2	6	<0.05	<3	<0.005	0.7		0	7.7	<5
P3-DH8-001	Drill Hole	0.018	<0.3	9.8	<5	2.7	1.35	<0.6	0.3	4.7	<0.05	<0.9	<0.005	1.45	2.1	0.05	7.2	<5
P3-DH8-014	Drill Hole	0.018	<0.3	28	11.4	8.4	4.84	1.7	2.2	29	0.05	0.76	<0.005	2.18	3.6	0.05	5.4	<5
P4-DH1-001	Drill Hole	0.152	<0.3	27	<5	13	4.49	1.4	<0.2	35	<0.05	1.3	0.007	2.12	4.1	0.28	6.2	9
P4-DH2-001	Drill Hole	0.041	<0.3	28	<5	14.3	3.29	<0.6	0.3	15	<0.05	<3	<0.005	6.46	2.4	0.24	7.7	<5
P4-DH3-001	Drill Hole	0.054	<0.3	5.2	<5	3.6	0.8	<0.6	1.1	1.5	<0.05	<3	<0.005	1.15	2.1	0.07	7.8	<5
P4-DH4-001	Drill Hole	0.027	<0.3	29	<5	7.7	3.19	0.7	<0.2	13	<0.05	<3	<0.005	1.9	4.1	0.29	5.7	5
P4-DH5-001	Drill Hole	0.031	<0.3	25	<5	10.2	4.25	0.8	<0.2	24	<0.05	<3	0.009	1.35	6.5	0.39	6.3	7
P4-DH6-001	Drill Hole	0.04	0.06	27	<5	12.1	3.78	0.4	0.3	19	<0.05	<3	<0.005	2.36	2.7	0.32	7.2	5
P5-TP1-011/012	Test Pit	0.054	<0.7	0.74	<5	4.9	0.34	<0.6	1.1	0.21	<0.05	<0.9	<0.005	0.73	1.6	0.28	8.1	<5
P6-TP2-032/033	Test Pit	0.328	<0.7	1.1	<5	5	0.57	<0.6	0.9	1.4	<0.05	<3	0.016	0.59	1.7	0.09	5.3	13
P6-TP3-037/038	Test Pit	0.084	<0.7	21	<5	3.7	2.77	<0.5	0.7	15	<0.05	<0.9	0.006	1.02	1.6	0.09	4	10
P6-TP4-043/044	Test Pit	0.817	<0.7	27	<5	4.6	2.67	1.7	0.7	4	0.06	<0.9	0.167	0.56	1.9	0.54	4.6	12
P6-TP5-057/058	Test Pit	0.346	<0.7	0.78	<5	2.2	0.19	1.1	<0.2	0.27	<0.05	<0.9	0.031	0.32	1.6	0.42	4.7	<5
P6-TP6-061	Test Pit	0.378	<0.3	23	<5	4.7	3.87	2.7	<0.2	25	<0.05	<0.9	0.049	1.07	1.4	0.49	4.3	7
P7-TP1-001/002	Test Pit	0.111	<0.3	0.94	<5	5.6	0.31	1.5	0.6	0.52	<0.05	<0.9	0.006	1.27	1.7	0.22	4	9
P7-TP2-020/021	Test Pit	0.02	<0.7	16	<5	2.2	2.13	<0.6	1.5	6.9	<0.05	<3	<0.005	0.48	1.7	0.15	4.5	6
P7-TP3-023/024	Test Pit	0.104	<0.7	3.3	<5	3.3	1.12	<0.5	3.2	3.7	<0.05	<0.9	<0.005	0.3	2	0.09	5.2	<5
P7-TP4-048/049	Test Pit	0.019	<0.3	11	<5	1.6	1.7	<0.6	0.7	2.8	<0.05	<3	<0.005	0.24	<1	0.1	4	6
P7-TP5-053/054	Test Pit	0.04	<0.7	0.21	<5	4.9	0.8	<0.6	1	0.11	<0.05	<3	<0.005	0.89	4.9	0.12	8.8	<5
Mine Dump & Shaft Pad																		
MD-DH10-004	Drill Hole	0.051	<0.3	1.5	7	4.7	1.52	0.9	6.7	0.36	<0.05	<3	0.01	3.33	2.7	0	8.4	<5
MD-DH9-002	Drill Hole	0.164	<0.3	0.4	<5	4.7	0.8	<0.6	4.3	0.16	<0.05	<3	0.011	0.92	3.8	0	8.6	<5
SP-TP2-086/087	Test Pit	0.043	<0.7	9.7	42.9	5.2	3.43	1	1.4	5	<0.05	<0.9	0.027	0.99	5.5	0.26	8.3	<5
Ore Storage Areas																		
OS1-TP6-079/080	Test Pit	0.068	<0.7	24	<5	4.8	2.68	<0.6	0.5	11	<0.05	<3	0.006	0.67	<1	0.18	5.9	20
OS2-TP5-092/093	Test Pit	0.134	<0.3	28	7	7.8	4.92	1.3	2.2	45	<0.05	<0.9	0.037	2.83	1.6	0.59	6.2	9
Shaft Storage Area																		
SA-TP1-089	Test Pit	0.038	<0.7	8.5	8	15.5	0.82	<0.5	0.4	0.98	<0.05	<3	0.005	1.06	2	0.82	7.7	12
SA-TP1-090	Test Pit	0.04	<0.7	6.2	6.4	13.7	0.6	<0.5	0.4	0.68	<0.05	<3	0.006	1.05	1.9	0.81	7.8	12
Shaft Area Ponds																		
PO1-TP1-099/100	Test Pit	0.323	<0.7	2.8	7.1	11.4	0.54	1.6	4.1	0.94	<0.05	<0.9	0.036	3.08	4.1	0.9	8.2	5
PO2-TP2-105/110	Test Pit	0.14	<0.7	1.4	5.2	14.6	0.88	<0.6	1.3	0.34	<0.05	<3	0.014	0.98	3.5	0.58	8.5	7
PO3-TP3-114/115	Test Pit	0.121	<0.7	1	<5	13.8	0.29	1.7	3.3	0.43	<0.05	<0.9	0.024	3.08	1.8	0.88	8.4	10
PO4-TP4-111/112	Test Pit	0.17	<0.7	0.89	11.4	14.6	0.97	1.2	3.7	0.29	<0.05	<3	0.062	3.02	4.7	0.64	8.8	13
PO5-TP5-117/118	Test Pit	0.049	<0.7	5.6	6.3	13.3	1.6	<0.5	0.5	2	<0.05	<0.9	<0.005	0.22	1.3	0.47	7.7	<5
Site-Wide Statistics																		
	Minimum	0.018	<0.3	0.21	<5	1.6	0.19	0.2	<0.2	0.11	0.025	0.15	<0.005	0.1	0.5	0	4	<5
	Maximum	0.817	0.35	31	42.9	20.4	5.46	2.7	6.7	45	0.06	1.3	0.167	6.46	6.5	0.9	8.8	20
	Mean	0.11	0.06	12.2	6	8.7	2.0	1.2	1.2	8.8	<0.05	1.0	0.02	1.3	2.6	0.3	6.9	6.4

**Table 8
Agronomic Analytical Results**

		Table 8 Agronomic Analytical Results									
Location ID	Type	Inorganic Parameters, cont.				Physical Parameters					
		Potassium, soluble	SAR	Sodium, paste	Sulfate, soluble	Clay	Coarse Frags	Sand	Silt	Moisture	Saturation
		mg/kg		meq/l	mg/kg	%	%	%	%	%	%
Borrow Areas											
BS-TP1-041/042	Test Pit	2.1	1.27	1.4	23.7	19	0	63	18	2.6	54.8
BS-TP2-069/070	Test Pit	9	0.13	0.54	856	24	0	46	30	3.6	54
LOBO-TP1-130/131	Test Pit	8.6	0.67	1.2	184	20	0	54	26	3.9	79.6
Topsoil Stockpiles											
TN-TP1-071	Test Pit	4.8	1.31	2.3	146	17	2.4	59	24	3.5	51.7
TN-TP1-072	Test Pit	5.9	1.12	2	176	20	2.3	65	15	3.7	63.5
TO-TP1-015/016	Test Pit	7.2	2.26	10	1370	33	13	40	27	6.1	61
TS-TP1-064/065	Test Pit	8.8	2.74	15	2320	27	8.4	47	26	6.2	66.4
Non-Economic Material Storage Areas											
P3-DH7-002	Drill Hole	3.8	0.56	1.4	220	16	1.5	67	17	7.7	38.4
P3-DH8-001	Drill Hole	4	0.39	1.1	204	12	18	83	5	4.1	32.5
P3-DH8-014	Drill Hole	13.6	1.24	6.6	1420	21	2.5	62	17	10.5	49.4
P4-DH1-001	Drill Hole	3.5	0.76	4.2	1160	24	41	57	19	7.6	43.2
P4-DH2-001	Drill Hole	5.6	0.65	3	886	23	18	45	32	3.5	42.2
P4-DH3-001	Drill Hole	4.4	0.79	1.4	116	15	26	73	12	4.2	34.5
P4-DH4-001	Drill Hole	6.1	0.29	1.3	786	20	23	68	12	6.6	41.7
P4-DH5-001	Drill Hole	5.8	1.95	9.6	1060	23	55	58	19	8	43.6
P4-DH6-001	Drill Hole	6.6	1.21	5.8	965	23	53	55	22	5	41.1
P5-TP1-011/012	Test Pit	3.6	3.39	2.3	38.2	13	1.5	78	9	7.5	48.6
P6-TP2-032/033	Test Pit	5	2.75	3	141	14	4.6	74	12	6.5	51.7
P6-TP3-037/038	Test Pit	24.1	0.21	0.87	1000	13	3.3	78	9	7.9	54.7
P6-TP4-043/044	Test Pit	4.2	0.04	0.16	989	16	1.9	73	11	5.3	55.6
P6-TP5-057/058	Test Pit	2.6	0.1	0.07	34.5	10	1.3	86	4	5.3	45.6
P6-TP6-061	Test Pit	6.3	0.07	0.32	1320	17	3.3	75	8	3.4	47
P7-TP1-001/002	Test Pit	4.7	0.36	0.3	104	15	3.4	73	12	6.8	72.3
P7-TP2-020/021	Test Pit	6.2	0.54	1.8	569	14	2	79	7	3.6	43.1
P7-TP3-023/024	Test Pit	3.9	1.85	3.5	278	16	1.7	77	7	4.6	45.9
P7-TP4-048/049	Test Pit	7.3	1.45	3.9	526	11	2.1	81	8	6.1	55.4
P7-TP5-053/054	Test Pit	4.7	19.1	7.6	183	14	1.6	78	8	5.9	71.5
Mine Dump & Shaft Pad											
MD-DH10-004	Drill Hole	3.8	13.9	13	227	14	1.4	77	9	8	36.6
MD-DH9-002	Drill Hole	1.7	14.4	7.5	81.9	12	2.1	79	9	3.9	31.5
SP-TP2-086/087	Test Pit	7.6	8.32	23	807	15	0	71	14	3.7	49.5
Ore Storage Areas											
OS1-TP6-079/080	Test Pit	5.7	0.4	1.7	803	6	2	89	5	5.6	49.8
OS2-TP5-092/093	Test Pit	8.5	1.1	6.6	2590	22	0	49	29	7.2	77.7
Shaft Storage Area											
SA-TP1-089	Test Pit	11.4	0.16	0.36	194	27	2.3	42	31	5.9	64.8
SA-TP1-090	Test Pit	9.9	0.16	0.3	117	34	2.5	41	25	5.5	63.7
Shaft Area Ponds											
PO1-TP1-099/100	Test Pit	12.7	1.45	2	227	29	0	27	44	15	122
PO2-TP2-105/110	Test Pit	3.4	8.12	7.5	158	56	0	21	23	11.7	62.1
PO3-TP3-114/115	Test Pit	11.6	1.79	1.5	101	44	0	21	35	21.7	177
PO4-TP4-111/112	Test Pit	6.1	12.6	9.6	240	59	0	7	34	19.1	91
PO5-TP5-117/118	Test Pit	10.2	5.14	9.9	405	26	0	49	25	5.5	65.2
Site-Wide Statistics											
	Minimum	1.7	0.04	0.07	23.7	6	0	7	4	2.6	31.5
	Maximum	24.1	19.1	23	2590	59	55	89	44	21.7	177
	Mean	6.8	2.9	4.5	590.4	21.4	8	60.69	17.9	6.7	58.4

FIGURES

ST. ANTHONY MINE

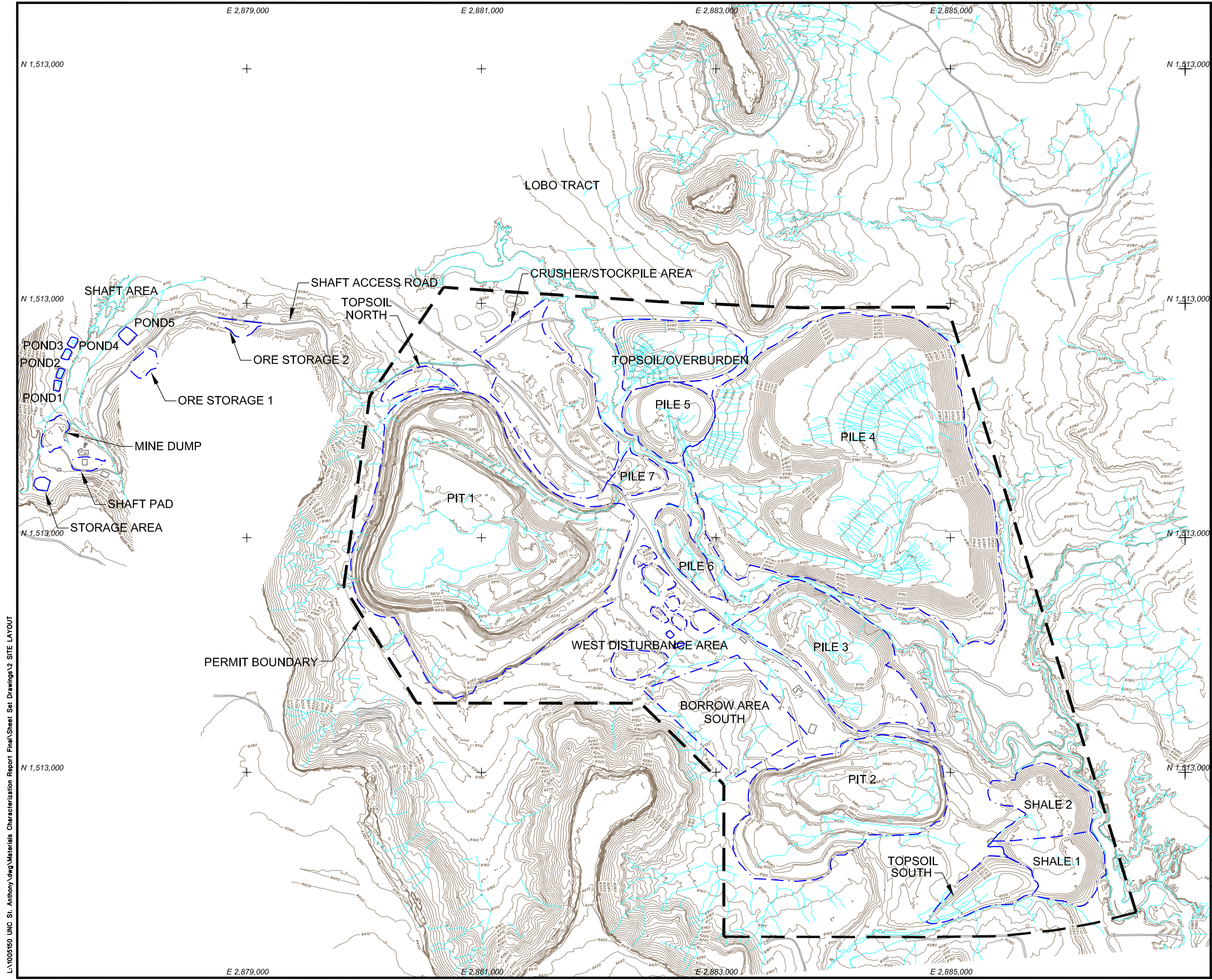


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SCALE: Not to Scale			FIGURE No: 1			



**ST. ANTHONY MINE
MATERIALS CHARACTERIZATION REPORT**

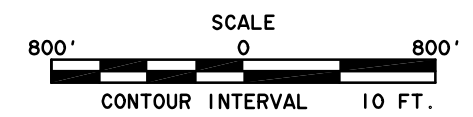
SITE LOCATION



LEGEND

- 6090 — CURRENT TOPOGRAPHY
- - - FACILITY BOUNDARY
- PERMIT BOUNDARY
- ROAD
- STREAM
- + E 2,881,000 COORDINATE GRID

NOTES:
 1. SURFACE TOPOGRAPHY GENERATED FROM AERIAL PHOTOGRAPHS DATED MAY 2007 BY COOPER AERIAL SURVEYS CO. NEW MEXICO WEST STATE PLANE COORDINATES, NAD 83.



1	Final	10/2007	T.Leason	C.Fowler	C.Fouk
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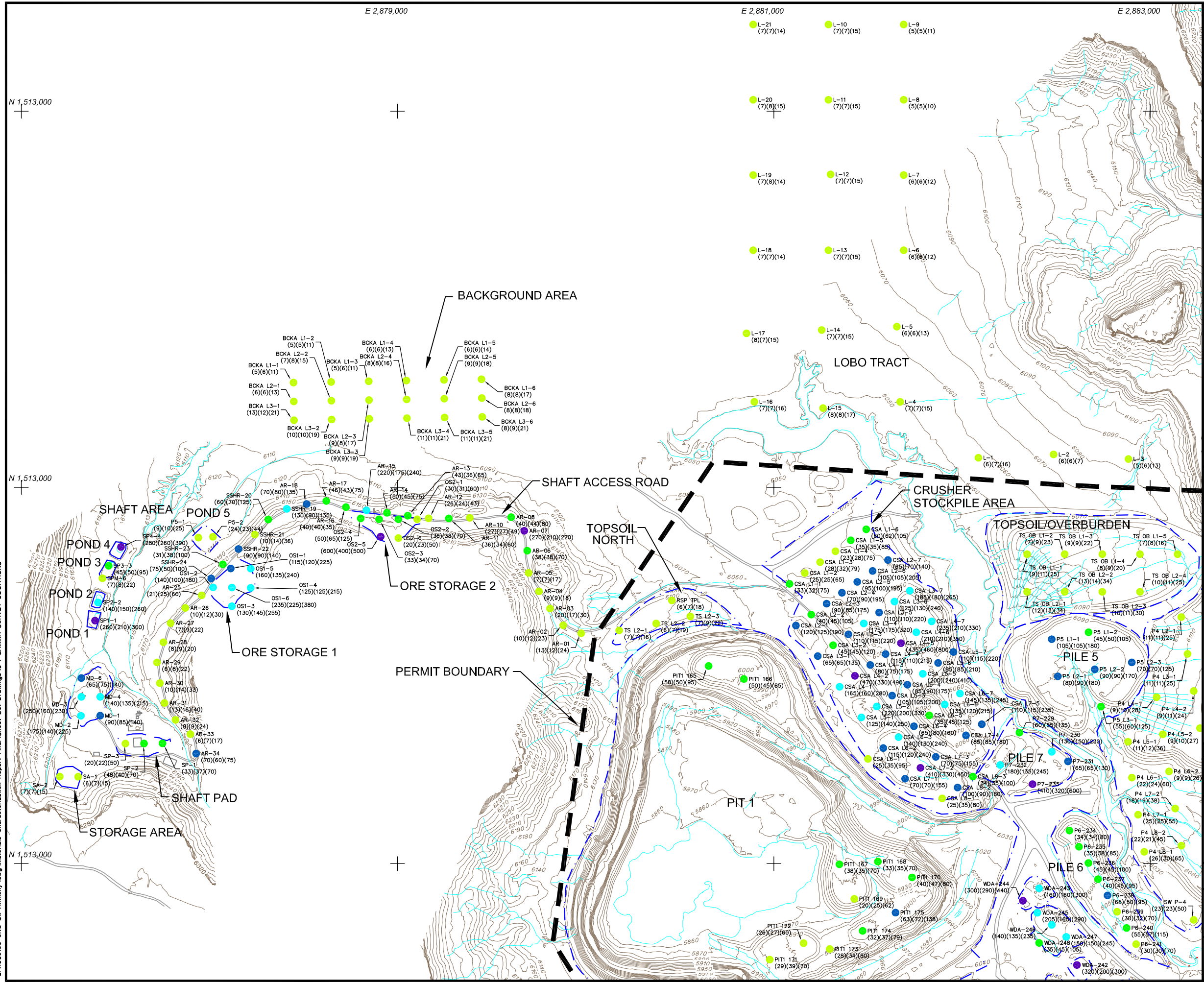
UNC P.O. BOX 3077
 Gallup, New Mexico 87305-3077
ST ANTHONY MINE

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Sheet 1 Of 1 Sheets
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 FIGURE No. 2

L:\1005450 UNC St. Anthony\dwg\Materials Characterization Report Final\Sheet Set Drawings\2 SITE LAYOUT



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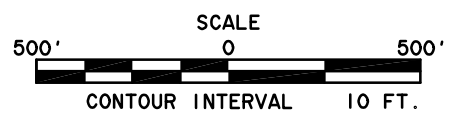
- 6090 CURRENT TOPOGRAPHY
- FACILITY BOUNDARY
- PERMIT BOUNDARY
- ROAD
- STREAM
- E 2,881,000 COORDINATE GRID

GAMMA SURVEY LOCATIONS (µR/hr)

- 0 ~ 30
 - 31 ~ 60
 - 61 ~ 120
 - 121 ~ 250
 - 250 ~ 600
- (6)(7)(16) (CS)(1mS)(1mU)

CS = CONTACT SHIELDED
 1mS = 1 METER SHIELDED
 1mU = 1 METER UNSHIELDED

NOTES:
 1. GAMMA MEASUREMENTS WITHIN, NORTH AND EAST OF THE PERMIT BOUNDARY WERE COLLECTED APRIL - MAY 2006. GAMMA MEASUREMENTS IN THE WESTERN SHAFT AREA AND THE LOBO TRACT BORROW AREA WERE COLLECTED JUNE 2007.



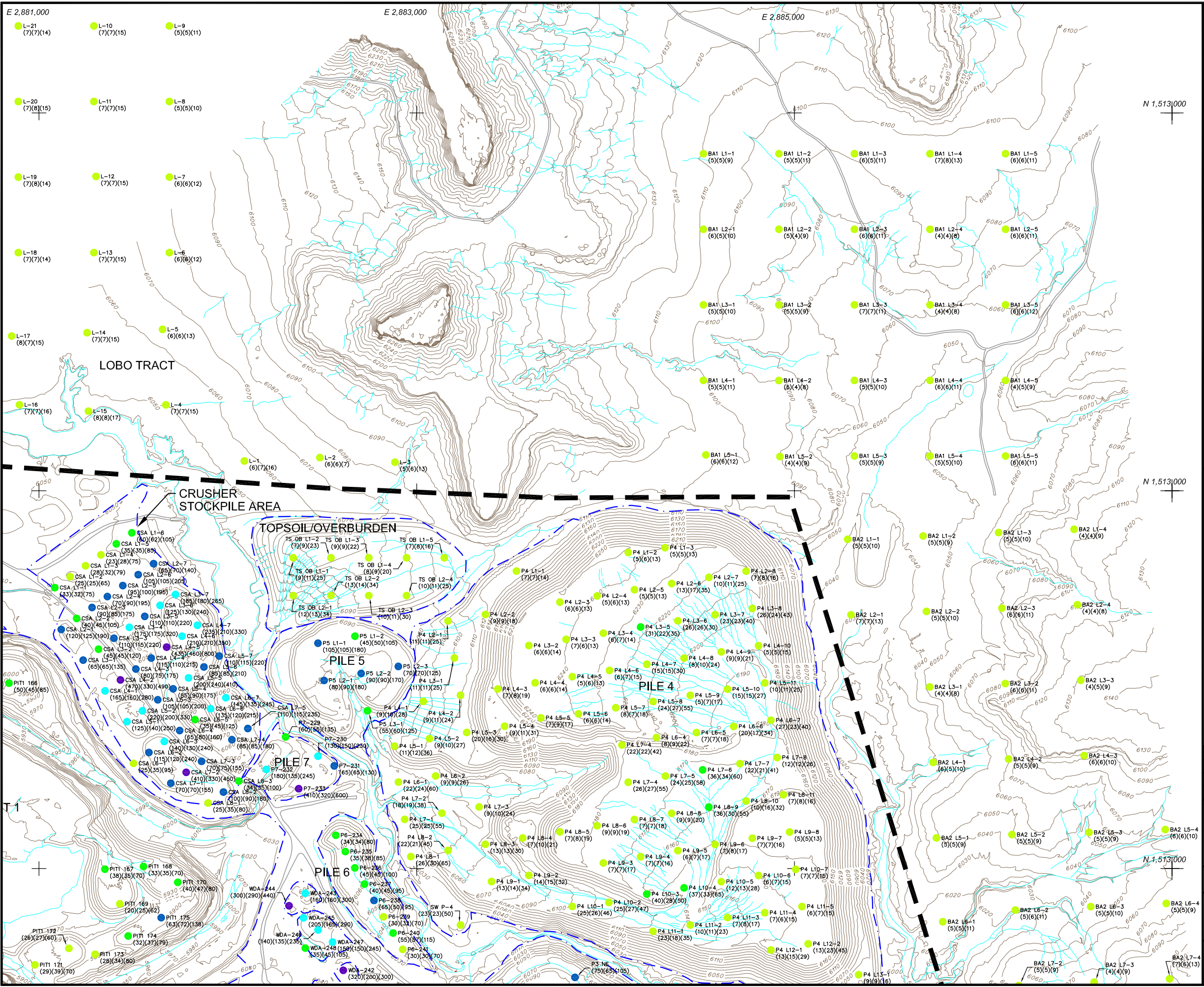
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 DRAWING TITLE: **RESULTS OF FIELD GAMMA RADIATION SURVEY**



L:\1005450 UNC St. Anthony.dwg Materials Characterization Report Final\Sheet Set Drawings\3-1 GAMMA SURVEY LOCATIONS

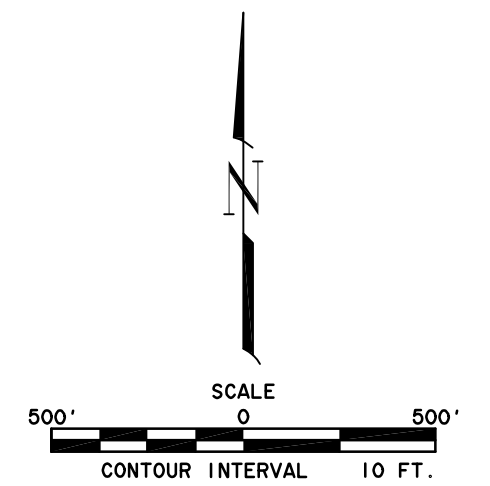


LEGEND

- 6090 CURRENT TOPOGRAPHY
- FACILITY BOUNDARY
- PERMIT BOUNDARY
- ROAD
- STREAM
- COORDINATE GRID

- GAMMA SURVEY LOCATIONS (μR/hr)
- 0 ~ 30
 - 31 ~ 60
 - 61 ~ 120
 - 121 ~ 250
 - 250 ~ 600
- (6)(7)(16) (CS)(1mS)(1mU)
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NOTES:
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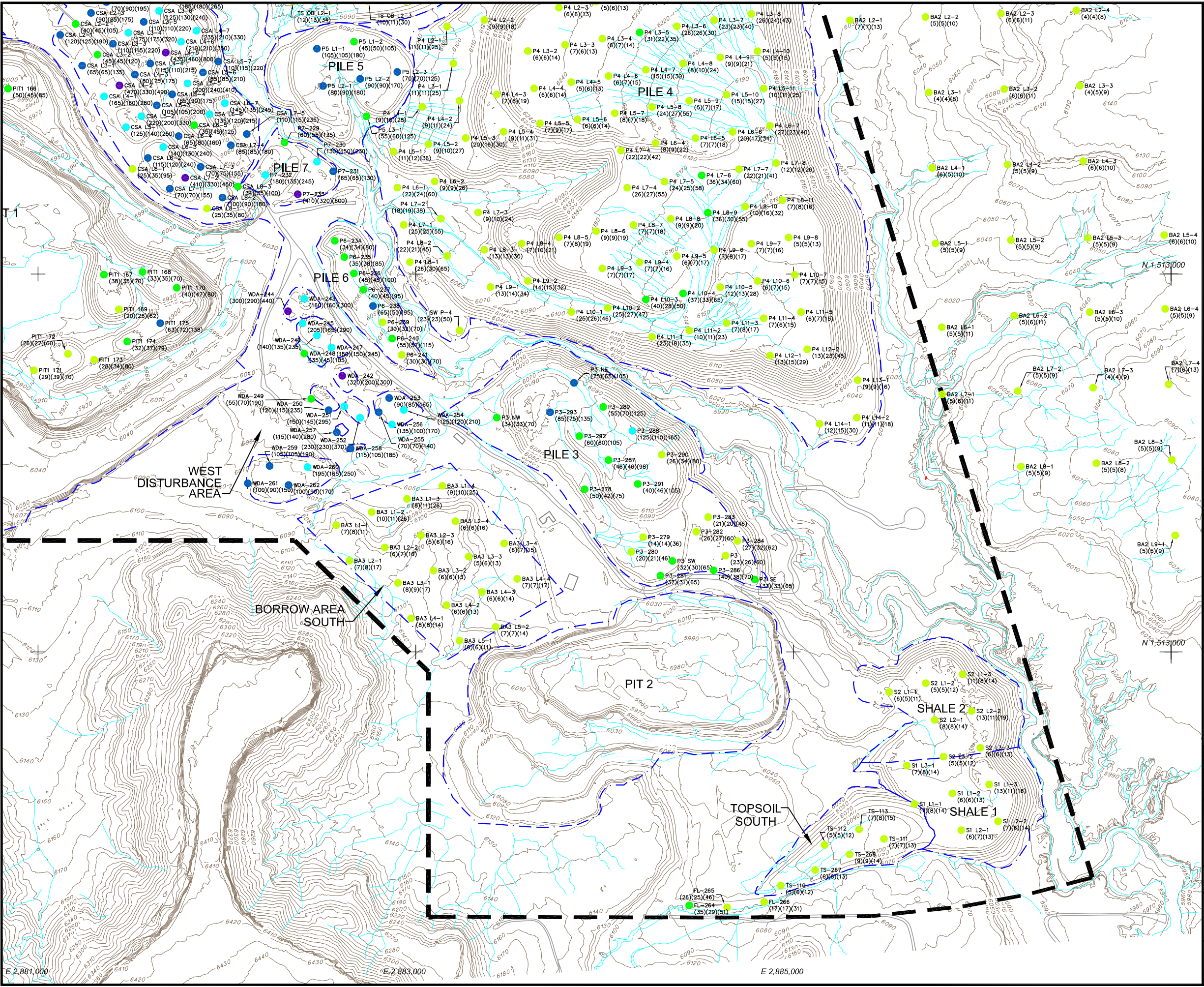
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Sheet **2** Of **3** Sheets
 SCALE: As Shown
 FIGURE No. **3**

L:\1005450 UNC St. Anthony.dwg Materials Characterization Report Final\Sheet Set Drawings\3-2 GAMMA SURVEY LOCATIONS

L:\1005450 UNC St. Anthony.dwg Materials Characterization Report Final\Sheet Set Drawings\3-3 RESULTS OF FIELD GAMMA RADIATION SURVEY

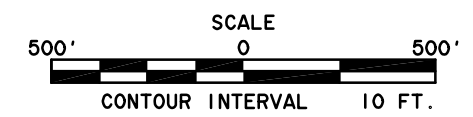


LEGEND

- 6090 CURRENT TOPOGRAPHY
- FACILITY BOUNDARY
- PERMIT BOUNDARY
- ROAD
- STREAM
- COORDINATE GRID

- GAMMA SURVEY LOCATIONS (μR/hr)
- 0 ~ 30
 - 31 ~ 60
 - 61 ~ 120
 - 121 ~ 250
 - 250 ~ 600
- (6)(7)(16) (CS)(1mS)(1mU)
- CS = CONTACT SHIELDED
 1mS = 1 METER SHIELDED
 1mU = 1 METER UNSHIELDED

NOTES:
 1. GAMMA MEASUREMENTS WITHIN, NORTH AND EAST OF THE PERMIT BOUNDARY WERE COLLECTED APRIL - MAY 2006. GAMMA MEASUREMENTS IN THE WESTERN SHAFT AREA AND THE LOBO TRACT BORROW AREA WERE COLLECTED JUNE 2007.



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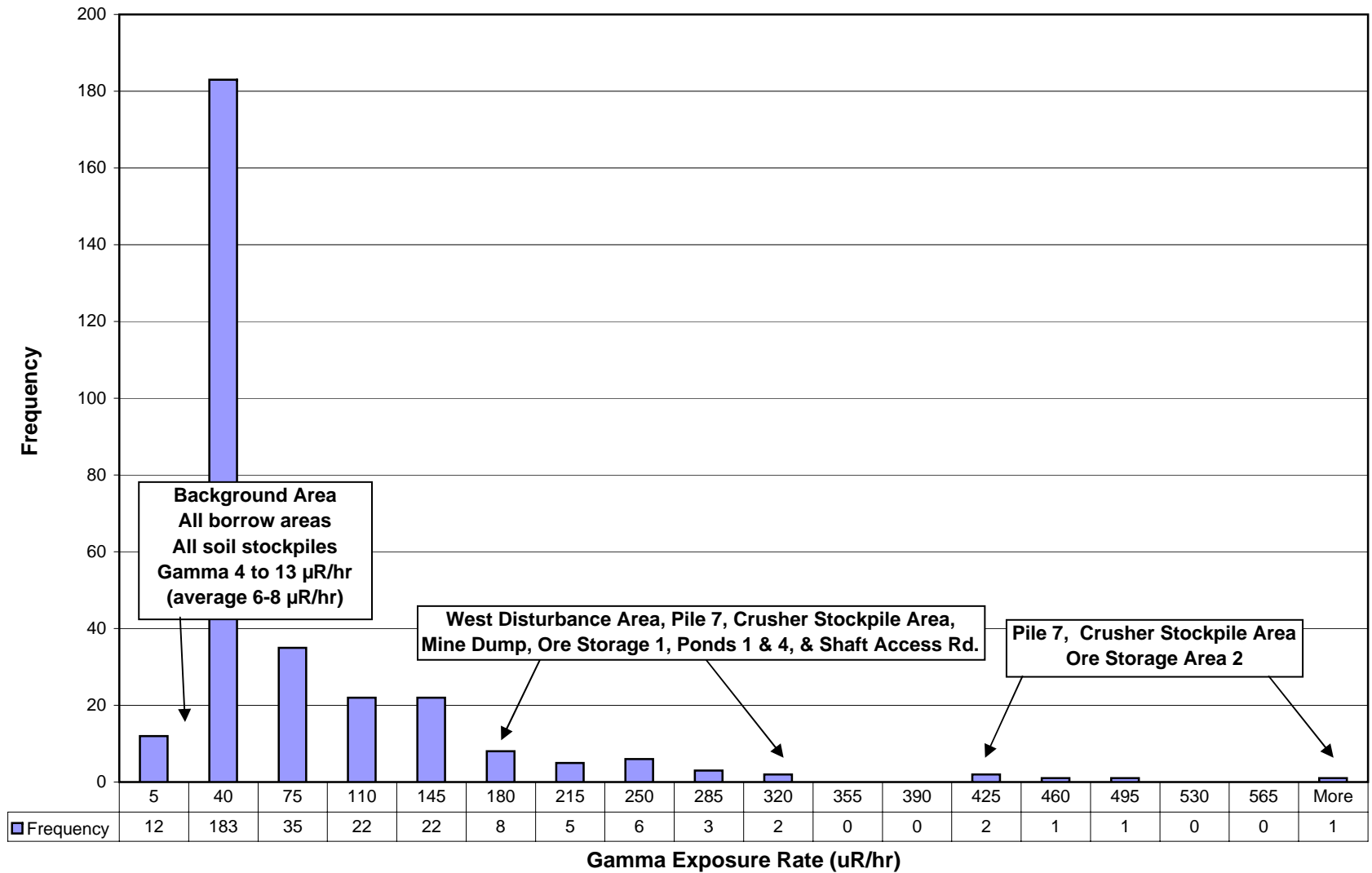


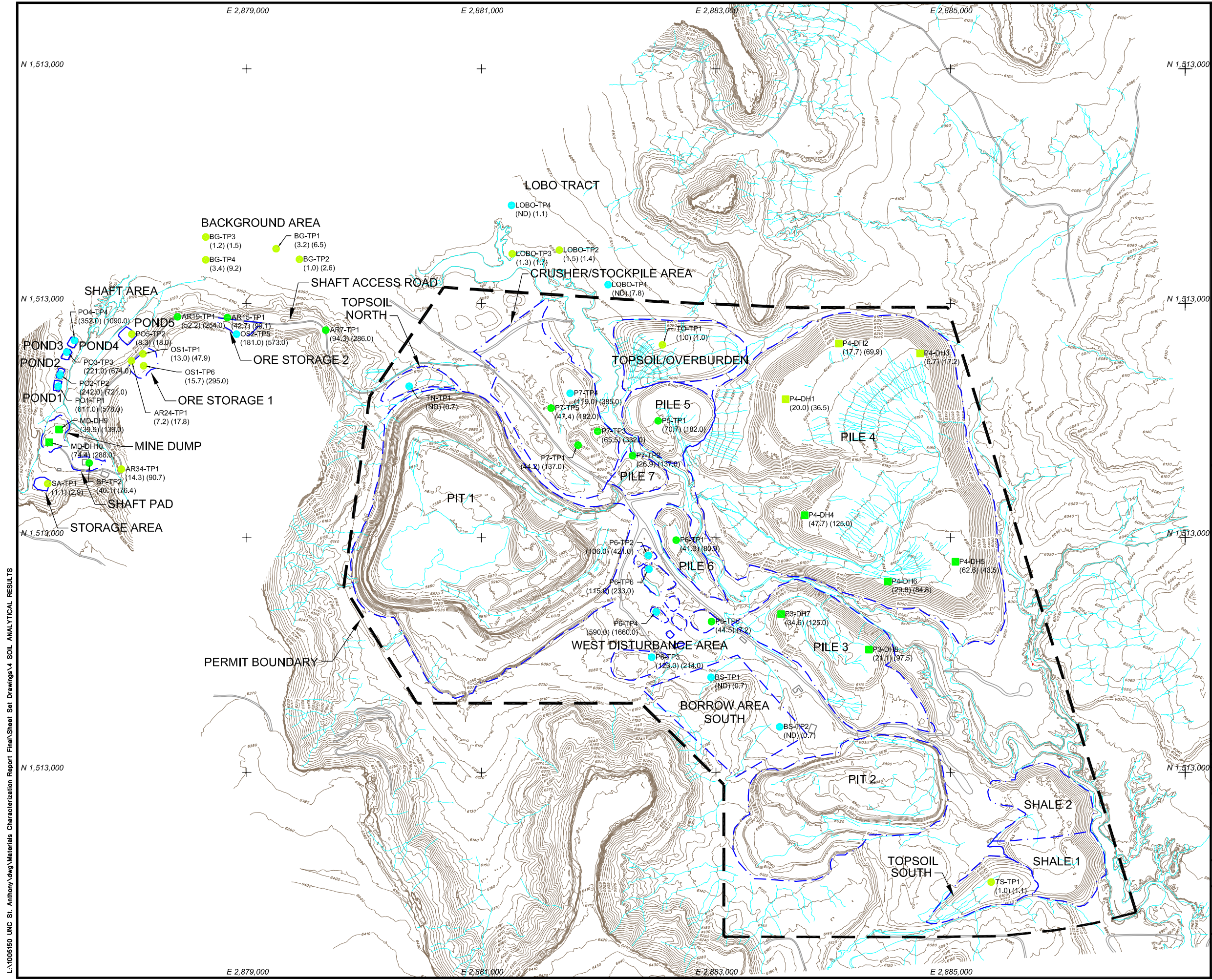
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Sheet **3** Of **3** Sheets
 SCALE: **As Shown** FIGURE No. **3**

Figure 4
Frequency of Gamma Values - Contact Shielded





LEGEND

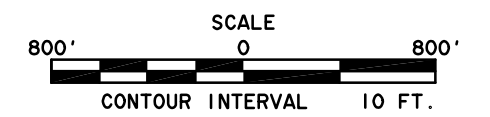
- 6090 CURRENT TOPOGRAPHY
- FACILITY BOUNDARY
- PERMIT BOUNDARY
- ROAD
- STREAM
- E 2,881,000 COORDINATE GRID
- TEST PIT
- DRILL HOLE

MAXIMUM SOIL ANALYTICAL RESULTS Ra-226 (pCi/g)

- <= 20
 - 21 ~ 100
 - > 100
- (17.7) (69.9) (Ra)(U)
(ND) NON DETECT

Ra = RADIUM-226 (pCi/g)
U = TOTAL URANIUM (mg/Kg)

NOTES:
1. THE CONCENTRATIONS SHOWN ARE THE HIGHEST DETECTED VERTICALLY IN ALL SAMPLES FROM EACH LOCATION. COMPLETE RESULTS ARE SHOWN IN TABLE 5.



1	Final	10/2007	T. Leeson	C. Fowler	C. Fouk
0	Draft	10/2007	T. Leeson	C. Fowler	C. Fouk
REV. No.	REVISIONS	DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



P.O. BOX 3077
Gallup, New Mexico 87305-3077
ST ANTHONY MINE

PROJECT: **MATERIALS CHARACTERIZATION REPORT**

DRAWING TITLE: **SOIL ANALYTICAL RESULTS**



Sheet **1** Of **1** Sheets
SCALE: **As Shown** FIGURE No. **5**

L:\1005450 UNC St. Anthony\dwg\Materials Characterization Report Final\Sheet Set Drawings\4. SOIL ANALYTICAL RESULTS

Figure 6
Frequency of Ra-226 Concentrations

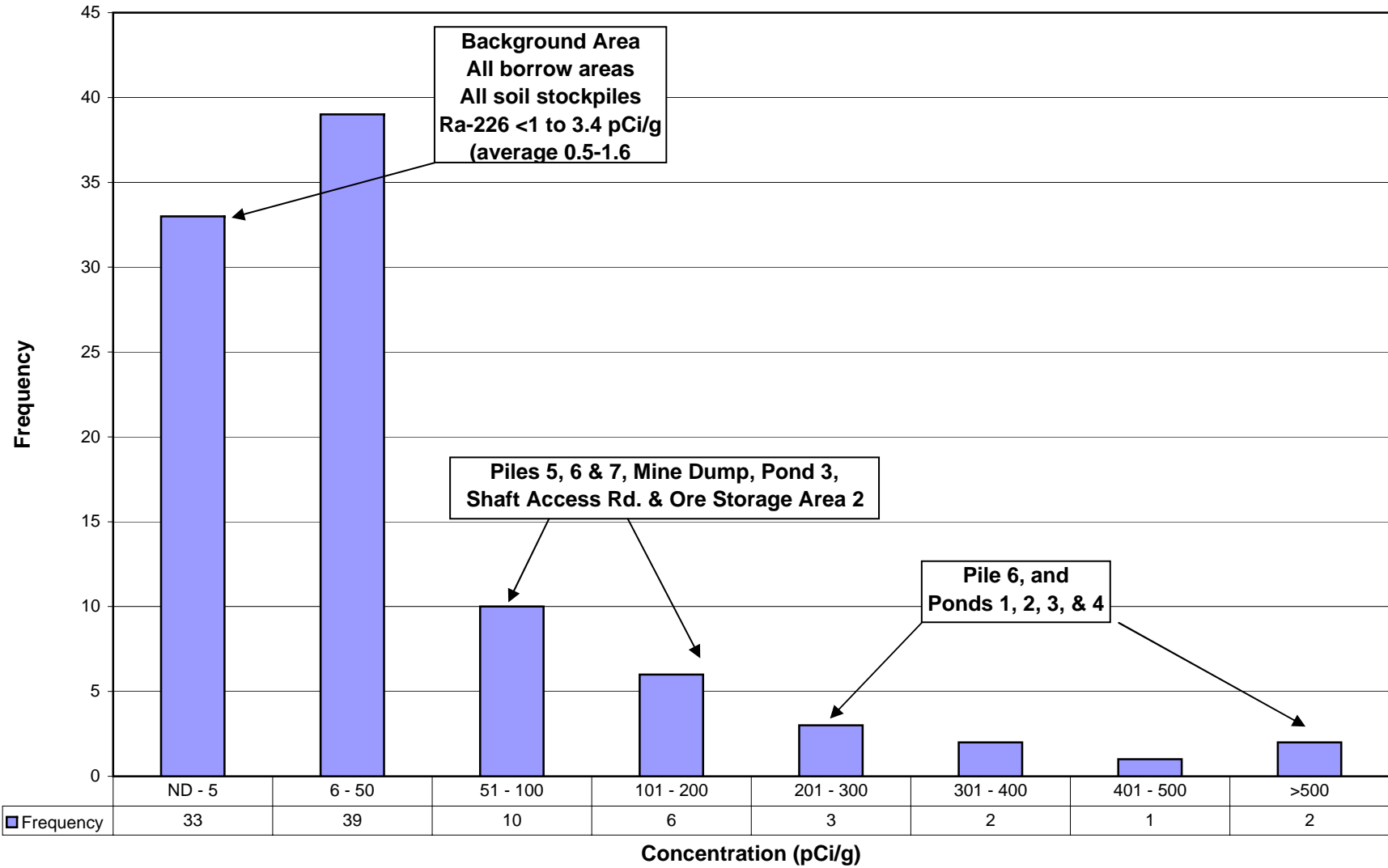
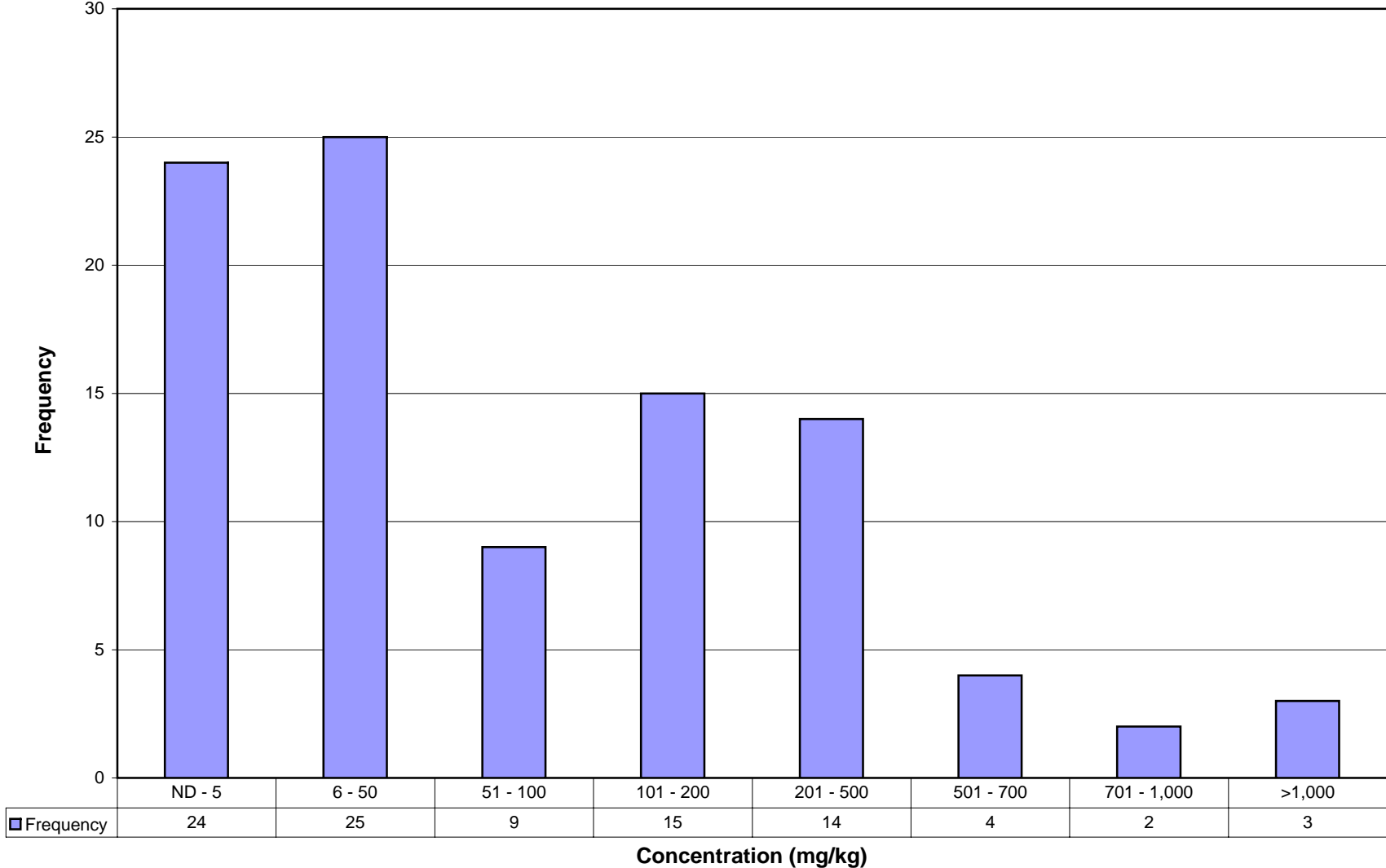


Figure 7
Frequency of Uranium Concentrations



APPENDICES

APPENDIX A
RADIATION SURVEY FIELD FORMS

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY

Sheet: 1 Of 4 Page 1
 Date: 6-18-07 & 6-19-07

Instr. Type/Serial No.: LUD 19/9180
 And Calibration Due Date: 2-1-08

Site ID: ST. ANTHONY MINE S. SHAFT
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): CONTACT W/SHIELD = 6
1 METER " = 7
NO SHIELD = 17

AREA: <u>ORE STORAGE 2</u>				AREA: <u>ORE STORAGE 1</u>			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>OS2-1</u>	<u>30</u>	<u>31</u>	<u>60</u>	<u>OS1-1</u>	<u>115</u>	<u>120</u>	<u>225</u>
<u>" -2</u>	<u>36</u>	<u>38</u>	<u>70</u>	<u>" 2</u>	<u>140</u>	<u>100</u>	<u>180</u>
<u>-3</u>	<u>33</u>	<u>34</u>	<u>70</u>	<u>" 3</u>	<u>130</u>	<u>145</u>	<u>255</u>
<u>-4</u>	<u>50</u>	<u>65</u>	<u>125</u>	<u>" 4</u>	<u>125</u>	<u>125</u>	<u>215</u>
<u>-5</u>	<u>600</u>	<u>400</u>	<u>500</u>	<u>" 5</u>	<u>160</u>	<u>135</u>	<u>240</u>
<u>-6</u>	<u>20</u>	<u>23</u>	<u>50</u>	<u>" 6</u>	<u>235</u>	<u>225</u>	<u>380</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY

Sheet: 2 Of 4 Page 2
Date: 6-19-07

Instr. Type/Serial No.: LVD 19/9180
And Calibration Due Date: 2-1-08

Site ID: ST. ANTHONY MINE S. SHAFT
Avg. Bkgd. Exposure Rate Reading (μR/hr): _____

AREA: <u>SHAFT PAD</u>				AREA: <u>STORAGE AREA</u>			
Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr	Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr
<u>SP-1</u>	<u>33</u>	<u>37</u>	<u>70</u>	<u>SA-1</u>	<u>6</u>	<u>7</u>	<u>15</u>
<u>" - 2</u>	<u>48</u>	<u>40</u>	<u>70</u>	<u>" - 2</u>	<u>7</u>	<u>7</u>	<u>15</u>
<u>" - 3</u>	<u>20</u>	<u>22</u>	<u>50</u>				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: M. CHISCHILLY

Sheet: 3 Of 4 Page 3
Date: 6-19-07

Instr. Type/Serial No.: LUD 19/9180
And Calibration Due Date: 2-1-08

Site ID: ST. ANTHONY MINE S, SHAFT
Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>MINE DUMP</u>				AREA: <u>SETTLING POND</u>			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>MD-1</u>	<u>90</u>	<u>85</u>	<u>140</u>	<u>SP-1</u>	<u>260</u>	<u>210</u>	<u>300</u>
<u>" - 2</u>	<u>175</u>	<u>140</u>	<u>225</u>	<u>" - 2</u>	<u>140</u>	<u>150</u>	<u>260</u>
<u>" - 3</u>	<u>250</u>	<u>160</u>	<u>230</u>	<u>" - 3</u>	<u>45</u>	<u>50</u>	<u>95</u>
<u>" - 4</u>	<u>140</u>	<u>135</u>	<u>215</u>	<u>" - 4</u>	<u>280</u>	<u>260</u>	<u>390</u>
<u>" - 5</u>	<u>75</u>	<u>85</u>	<u>155</u>	<u>" - 6</u>	<u>7</u>	<u>8</u>	<u>22</u>
<u>" - 6</u>	<u>65</u>	<u>75</u>	<u>140</u>				
				<u>(AREA : POND 5)</u>			
				<u>P5-1</u>	<u>9</u>	<u>10</u>	<u>25</u>
				<u>P5-2</u>	<u>24</u>	<u>23</u>	<u>44</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: M. CHISCHILLY

Sheet: 4 Of 4 Page 4
Date: 6-18-07

Instr. Type/Serial No.: LVD 19/9180
And Calibration Due Date: _____

Site ID: ST. ANTHONY MINE S. SHAFT
Avg. Bkgd. Exposure Rate Reading (μR/hr): _____

AREA: SOUTH SHAFT HAULAGE ROAD				AREA:			
Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr	Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr
SSHR-1	13	12	24				
" - 2	10	12	23				
" - 3	20	17	30				
" - 4	9	9	18				
" - 5	7	7	17				
" - 6	38	38	70				
" - 7	270	210	270				
" - 8	40	44	80				
" - 9	65	35	50				
" - 10	27	27	49				
" - 11	36	34	60				
" - 12	26	24	43				
" - 13	43	36	65				
" - 14	50	45	75				
" - 15	220	175	240				
" - 16	40	40	65				
" - 17	46	43	75				
" - 18	70	80	135				
" - 19	130	90	135				
" - 20	60	70	125				
" - 21	10	14	36				
" - 22	90	90	140				
" - 23	31	38	100				
" - 24	75	50	100				
" - 25	21	25	60				
" - 26	10	12	30				
" - 27	7	9	22				
" - 28	8	9	20				
" - 29	6	8	22				
" - 30	10	14	33				
" - 31	13	16	40				
" - 32	9	9	24				
" - 33	6	7	17				
" - 34	70	60	75				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY

Sheet: 1 Of 1 Page 1
Date: 6-20-07

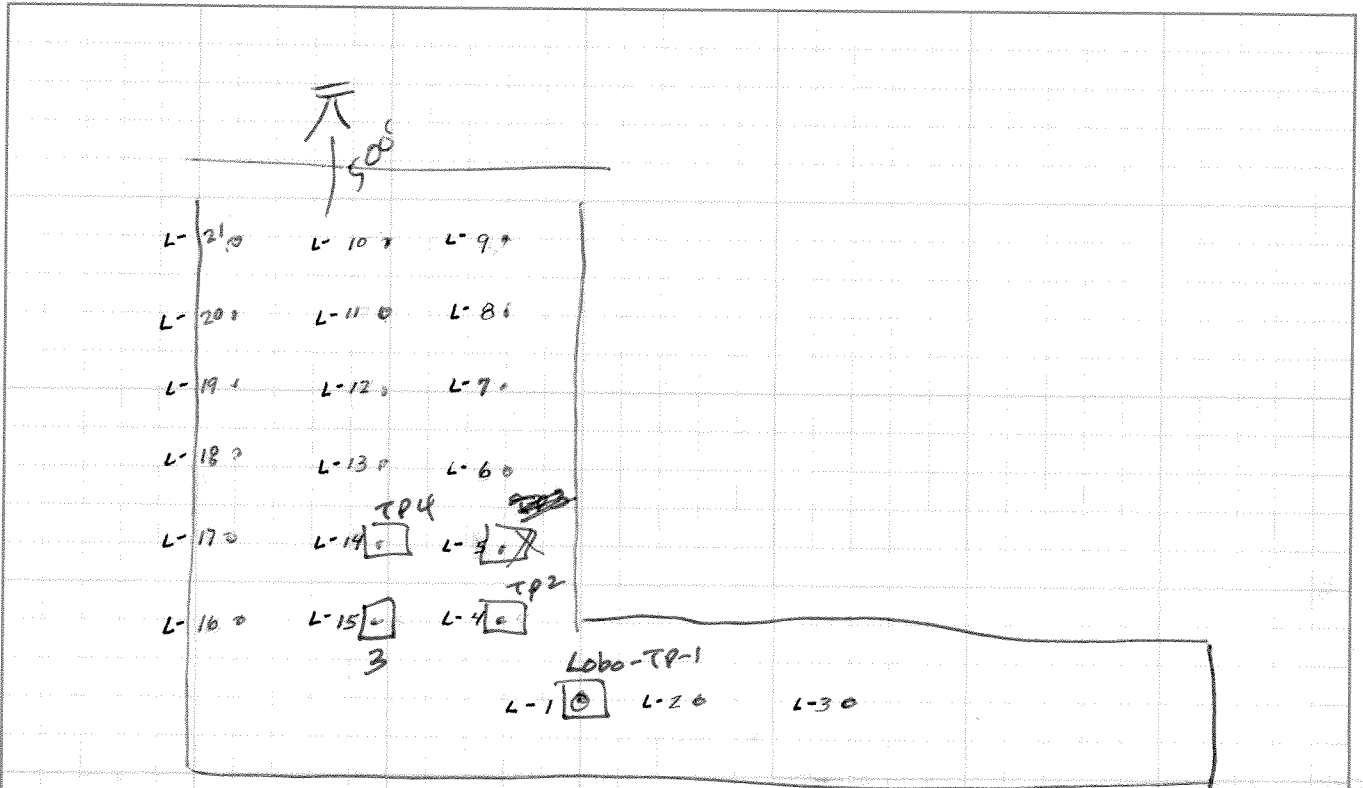
Instr. Type/Serial No.: LUD 19/9180
And Calibration Due Date: 2-1-08

Site ID: ST. ANTHONY MINE - LOBO AREA
Avg. Bkgd. Exposure Rate Reading (μR/hr): CONTACT SHIELD = 7

1 METER SHIELD = 8
1 METER UNSHIELD = 17

AREA: <u>LOBO</u>				AREA:			
Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr	Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr
L-1	6	7	16				
L-2	6	6	7				
L-3	5	6	13				
L-4	7	7	15				
L-5	6	6	13				
L-6	6	6	12				
L-7	6	6	12				
L-8	5	5	10				
L-9	5	5	11				
L-10	7	7	15				
L-11	7	7	15				
L-12	7	7	15				
L-13	7	7	15				
L-14	7	7	15				
L-15	8	8	17				
L-16	7	7	16				
L-17	8	7	15				
L-18	7	7	14				
L-19	7	8	14				
L-20	7	8	15				
L-21	7	7	14				

Comment: _____



<u>LOC.</u>	<u>CONTACT SHIELDED</u>	<u>1 METER SHIELDED</u>	<u>1 METER UNSHIELDED</u>
L-1	6	7	16
L-2	6	6	7
L-3	5	6	13
L-4	7	7	15
L-5	6	6	13
L-6	6	6	12
L-7	6	6	12
L-8	5	5	10
L-9	5	5	11
L-10	7	7	15
L-11	7	7	15
L-12	7	7	15
L-13	7	7	15
L-14	7	7	15
L-15	8	8	17
L-16	7	7	16
L-17	8	7	15
L-18	7	7	14
L-19	7	8	14
L-20	7	8	15
L-21	7	7	14

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM

Sheet: 1 Of 14 Page 1
 Date: 4-25-06

Instr. Type/Serial No.: LUDLUM 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading (μR/hr): Contact (w/s) = 6

1 meter (w/s) = 5
 1 meter (wo/s) = 13

AREA: TOPSOIL				AREA: SHALE 1			
Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr	Location Or Point ID	Contact Shielded Reading μR/hr	One Meter Shielded Reading μR/hr	One Meter Unshielded Reading μR/hr
TS - 110	5	6	12	51-L-2-1			
TS - 111	7	7	13	51-L-2-2	106	7	13
TS - 112	5	5	12	51-L-3-3	107	6	14
TS - 113	7	8	15	270	6	6	13
TS - 267	6	6	13	51-L-1-3	271	13	11
TS - 268	9	9	14	51-L-3-2	274	5	5
				51-L-1-2	275	6	6
				51-L-3-1	276	7	8
FL - 264	35	29	51	51-L-1-1	277	7	8
FL - 265	26	25	46				
FL - 266	17	17	31				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 2 Of 14 Page 2
 Date: 4-25-06 E 4-27-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>SHALE 2</u>				AREA: <u>PILE 3</u>			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>52-L-1-1</u>				<u>P3-SW</u>			
<u>108</u>	<u>6</u>	<u>5</u>	<u>11</u>	<u>114</u>	<u>32</u>	<u>30</u>	<u>65</u>
<u>52-L-1-3</u>				<u>P3-SE</u>			
<u>109</u>	<u>11</u>	<u>8</u>	<u>14</u>	<u>115</u>	<u>33</u>	<u>33</u>	<u>65</u>
<u>52-L-2-2</u>				<u>P3-NW</u>			
<u>269</u>	<u>13</u>	<u>11</u>	<u>19</u>	<u>116</u>	<u>34</u>	<u>33</u>	<u>70</u>
<u>52-L-1-2</u>				<u>P3-NE</u>			
<u>272</u>	<u>5</u>	<u>5</u>	<u>12</u>	<u>117</u>	<u>75</u>	<u>65</u>	<u>105</u>
<u>52-L-2-1</u>				<u>P3-</u>			
<u>273</u>	<u>8</u>	<u>8</u>	<u>14</u>	<u>278</u>	<u>50</u>	<u>42</u>	<u>75</u>
				<u>P3-</u>			
				<u>279</u>	<u>14</u>	<u>14</u>	<u>36</u>
				<u>P3-</u>			
				<u>280</u>	<u>20</u>	<u>21</u>	<u>46</u>
				<u>P3-</u>			
				<u>281</u>	<u>37</u>	<u>31</u>	<u>65</u>
				<u>P3-</u>			
				<u>282</u>	<u>26</u>	<u>27</u>	<u>60</u>
				<u>P3-</u>			
				<u>283</u>	<u>21</u>	<u>20</u>	<u>46</u>
				<u>P3-</u>			
				<u>284</u>	<u>27</u>	<u>32</u>	<u>62</u>
				<u>P3-</u>			
				<u>285</u>	<u>23</u>	<u>26</u>	<u>60</u>
				<u>P3-</u>			
				<u>286</u>	<u>40</u>	<u>38</u>	<u>70</u>
				<u>P3-</u>			
				<u>287</u>	<u>46</u>	<u>46</u>	<u>98</u>
				<u>P3-</u>			
				<u>288</u>	<u>125</u>	<u>110</u>	<u>165</u>
				<u>P3-</u>			
				<u>289</u>	<u>55</u>	<u>70</u>	<u>125</u>
				<u>P3-</u>			
				<u>290</u>	<u>26</u>	<u>34</u>	<u>80</u>
				<u>P3-</u>			
				<u>291</u>	<u>40</u>	<u>46</u>	<u>105</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 3 Of 14 Page 3
 Date: 4-25-06, 4-26-06 & 4-27-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>PILE 3</u>				AREA: <u>PILE 6</u>			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>P3-</u>				<u>P6-</u>			
<u>292</u>	<u>60</u>	<u>60</u>	<u>105</u>	<u>234</u>	<u>34</u>	<u>34</u>	<u>80</u>
<u>P3-</u>				<u>P6-</u>			
<u>293</u>	<u>85</u>	<u>75</u>	<u>135</u>	<u>235</u>	<u>35</u>	<u>38</u>	<u>85</u>
				<u>P6-</u>			
				<u>236</u>	<u>45</u>	<u>45</u>	<u>100</u>
				<u>P6-</u>			
				<u>237</u>	<u>40</u>	<u>45</u>	<u>95</u>
				<u>P6-</u>			
				<u>238</u>	<u>65</u>	<u>50</u>	<u>95</u>
				<u>P6-</u>			
				<u>239</u>	<u>30</u>	<u>32</u>	<u>70</u>
				<u>P6-</u>			
				<u>240</u>	<u>55</u>	<u>57</u>	<u>115</u>
				<u>P6-</u>			
				<u>241</u>	<u>30</u>	<u>30</u>	<u>70</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUOLUM

Sheet: 4 Of 14 Page 4
 Date: 4-26-06

Instr. Type/Serial No.: 19/9180 & 125/9073
 And Calibration Due Date: 1/18/07 & 12/13/06

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading (μ R/hr): _____

AREA: <u>PIT 1</u>				AREA: <u>TOP SOIL</u>			
Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr	Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr
<u>P1 - 165</u>	<u>58</u>	<u>50</u>	<u>95</u>	<u>TS-L-2-1 161</u>	<u>7</u>	<u>7</u>	<u>16</u>
<u>P1 - 166</u>	<u>50</u>	<u>45</u>	<u>85</u>	<u>TS-2-2-2 162</u>	<u>6</u>	<u>7</u>	<u>19</u>
<u>P1 - 167</u>	<u>38</u>	<u>35</u>	<u>70</u>	<u>TS-L-2-3 163</u>	<u>7</u>	<u>9</u>	<u>22</u>
<u>P1 - 168</u>	<u>33</u>	<u>35</u>	<u>70</u>	<u>RSP-TPL 164</u>	<u>6</u>	<u>7</u>	<u>18</u>
<u>P1 - 169</u>	<u>20</u>	<u>25</u>	<u>62</u>				
<u>P1 - 170</u>	<u>40</u>	<u>47</u>	<u>80</u>				
<u>P1 - 171</u>	<u>29</u>	<u>39</u>	<u>70</u>				
<u>P1 - 172</u>	<u>26</u>	<u>27</u>	<u>60</u>				
<u>P1 - 173</u>	<u>28</u>	<u>34</u>	<u>80</u>				
<u>P1 - 174</u>	<u>32</u>	<u>37</u>	<u>79</u>				
<u>P1 - 175</u>	<u>63</u>	<u>72</u>	<u>138</u>				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 5 Of 14 Page 5
 Date: 4-26-06 & 4-27-06

Instr. Type/Serial No.: 19/9180 & 125/9073
 And Calibration Due Date: 1/18/07 & 12/13/06

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading (μ R/hr): _____

AREA: <u>PILE 7</u>				AREA: <u>CRUSHER/STOCKPILE AREA</u>			
Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr	Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr
<u>P7 - 229</u>	<u>60</u>	<u>55</u>	<u>135</u>	<u>CSA-L-8-1 133</u>	<u>25</u>	<u>35</u>	<u>80</u>
<u>P7 - 230</u>	<u>130</u>	<u>150</u>	<u>230</u>	<u>CSA-L-8-3 134</u>	<u>34</u>	<u>35</u>	<u>100</u>
<u>P7 - 231</u>	<u>65</u>	<u>65</u>	<u>130</u>	<u>CSA-L-1-1 135</u>	<u>33</u>	<u>32</u>	<u>75</u>
<u>P7 - 232</u>	<u>180</u>	<u>135</u>	<u>245</u>	<u>CSA-L-1-6 136</u>	<u>60</u>	<u>62</u>	<u>105</u>
<u>P7 - 233</u>	<u>410</u>	<u>320</u>	<u>600</u>	<u>CSA-L-1-2 176</u>	<u>25</u>	<u>25</u>	<u>65</u>
				<u>CSA-L-1-3 177</u>	<u>28</u>	<u>32</u>	<u>79</u>
				<u>CSA-L-1-4 178</u>	<u>23</u>	<u>28</u>	<u>75</u>
				<u>CSA-L-1-5 179</u>	<u>35</u>	<u>35</u>	<u>85</u>
				<u>CSA-L-2-2 180</u>	<u>40</u>	<u>45</u>	<u>105</u>
				<u>CSA-L-3-2 181</u>	<u>45</u>	<u>45</u>	<u>120</u>
				<u>CSA-L-4-2 182</u>	<u>470</u>	<u>330</u>	<u>490</u>
				<u>CSA-L-5-2 183</u>	<u>220</u>	<u>200</u>	<u>330</u>
				<u>CSA-L-6-3 184</u>	<u>140</u>	<u>130</u>	<u>240</u>
				<u>CSA-L-7-2 185</u>	<u>410</u>	<u>330</u>	<u>450</u>
				<u>CSA-L-2-3 186</u>	<u>90</u>	<u>85</u>	<u>175</u>
				<u>CSA-L-2-4 187</u>	<u>70</u>	<u>90</u>	<u>195</u>
				<u>CSA-L-2-5 188</u>	<u>95</u>	<u>100</u>	<u>195</u>
				<u>CSA-L-2-6 189</u>	<u>105</u>	<u>105</u>	<u>205</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 6 Of 14 Page 6
 Date: 4-26-06 & 4-27-06

Instr. Type/Serial No.: 19/9180 & 125/9073
 And Calibration Due Date: 1/18/07 & 12/13/06

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading (µR/hr): _____

AREA: CRUSHER/STOCKPILE AREA				AREA: CRUSHER/STOCKPILE AREA			
Location Or Point ID	Contact Shielded Reading µR/hr	One Meter Shielded Reading µR/hr	One Meter Unshielded Reading µR/hr	Location Or Point ID	Contact Shielded Reading µR/hr	One Meter Shielded Reading µR/hr	One Meter Unshielded Reading µR/hr
CSA-L-2-7				CSA-L-5-6			
190	65	70	140	208	85	85	210
CSA-L-2-1				CSA-L-5-7			
191	120	125	190	209	110	115	220
CSA-L-3-3				CSA-L-6-1			
192	110	115	220	210	25	35	95
CSA-L-3-4				CSA-L-6-2			
193	175	175	320	211	115	120	240
CSA-L-3-5				CSA-L-6-4			
194	110	110	220	212	65	80	160
CSA-L-3-6				CSA-L-6-5			
195	125	130	240	213	35	45	125
CSA-L-3-7				CSA-L-6-6			
196	185	180	265	214	135	120	215
CSA-L-3-1				CSA-L-6-7			
197	65	65	135	215	145	135	245
CSA-L-4-3				CSA-L-7-1			
198	80	75	175	216	70	70	155
CSA-L-4-4				CSA-L-7-3			
199	115	110	215	217	70	75	155
CSA-L-4-5				CSA-L-7-4			
200	435	460	800	218	85	85	180
CSA-L-4-6				CSA-L-7-5			
201	210	210	350	219	110	115	235
CSA-L-4-7				CSA-L-8-2			
202	235	210	330	220	100	90	180
CSA-L-4-1							
203	165	160	280				
CSA-L-5-1							
204	125	140	250				
CSA-L-5-3							
205	105	105	200				
CSA-L-5-4							
206	85	90	175				
CSA-L-5-5							
207	200	240	410				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
 LUDLUM

Sheet: 7 Of 14 Page 7
 Date: 4-27-06 4-28-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>PILE 5</u>				AREA: <u>TOPSOIL/OVERBURDEN</u>			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>P5-L-3-1</u>				<u>TS08-L-2-1</u>			
<u>118</u>	<u>55</u>	<u>60</u>	<u>125</u>	<u>121</u>	<u>12</u>	<u>13</u>	<u>34</u>
<u>P5-L-1-1</u>				<u>TS08-L-2-4</u>			
<u>119</u>	<u>105</u>	<u>105</u>	<u>180</u>	<u>122</u>	<u>10</u>	<u>11</u>	<u>25</u>
<u>P5-L-1-2</u>				<u>TS08-L-1-1</u>			
<u>120</u>	<u>45</u>	<u>50</u>	<u>105</u>	<u>123</u>	<u>9</u>	<u>11</u>	<u>25</u>
<u>P5-L-2-2</u>				<u>TS08-L-1-5</u>			
<u>226</u>	<u>90</u>	<u>90</u>	<u>170</u>	<u>124</u>	<u>7</u>	<u>8</u>	<u>16</u>
<u>P5-L-2-1</u>				<u>TS08-L-1-2</u>			
<u>227</u>	<u>80</u>	<u>90</u>	<u>180</u>	<u>221</u>	<u>7</u>	<u>9</u>	<u>23</u>
<u>P5-L-2-3</u>				<u>TS08-L-1-3</u>			
<u>228</u>	<u>70</u>	<u>70</u>	<u>125</u>	<u>222</u>	<u>9</u>	<u>9</u>	<u>22</u>
				<u>TS08-L-1-4</u>			
				<u>223</u>	<u>8</u>	<u>9</u>	<u>20</u>
				<u>TS08-L-2-2</u>			
				<u>224</u>	<u>13</u>	<u>14</u>	<u>34</u>
				<u>TS08-L-2-3</u>			
				<u>225</u>	<u>10</u>	<u>11</u>	<u>30</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 8 Of 14 Page 8
 Date: 4-28-06 & 5-1-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>PILE 4</u>				AREA:			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>P4-5W</u>				<u>P4-L-3-6</u>			
<u>100</u>	<u>23</u>	<u>23</u>	<u>50</u>	<u>322</u>	<u>26</u>	<u>26</u>	<u>30</u>
<u>P4-L-14-2</u>				<u>P4-L-3-7</u>			
<u>101</u>	<u>11</u>	<u>11</u>	<u>18</u>	<u>323</u>	<u>23</u>	<u>23</u>	<u>40</u>
<u>P4-L-1-1</u>				<u>P4-L-3-8</u>			
<u>102</u>	<u>7</u>	<u>7</u>	<u>14</u>	<u>324</u>	<u>26</u>	<u>24</u>	<u>43</u>
<u>P4-L-1-3</u>				<u>P4-L-4-1</u>			
<u>103</u>	<u>5</u>	<u>5</u>	<u>13</u>	<u>325</u>	<u>9</u>	<u>10</u>	<u>28</u>
<u>P4-L-1-2</u>				<u>P4-L-4-2</u>			
<u>308</u>	<u>5</u>	<u>6</u>	<u>13</u>	<u>326</u>	<u>9</u>	<u>11</u>	<u>24</u>
<u>P4-L-2-1</u>				<u>P4-L-4-3</u>			
<u>309</u>	<u>11</u>	<u>11</u>	<u>25</u>	<u>327</u>	<u>7</u>	<u>8</u>	<u>19</u>
<u>P4-L-2-2</u>				<u>P4-L-4-4</u>			
<u>310</u>	<u>9</u>	<u>9</u>	<u>18</u>	<u>328</u>	<u>6</u>	<u>6</u>	<u>14</u>
<u>P4-L-2-3</u>				<u>P4-L-4-5</u>			
<u>311</u>	<u>6</u>	<u>6</u>	<u>13</u>	<u>329</u>	<u>5</u>	<u>6</u>	<u>13</u>
<u>P4-L-2-4</u>				<u>P4-L-4-6</u>			
<u>312</u>	<u>5</u>	<u>6</u>	<u>13</u>	<u>330</u>	<u>6</u>	<u>7</u>	<u>15</u>
<u>P4-L-2-5</u>				<u>P4-L-4-7</u>			
<u>313</u>	<u>5</u>	<u>5</u>	<u>13</u>	<u>331</u>	<u>15</u>	<u>15</u>	<u>30</u>
<u>P4-L-2-6</u>				<u>P4-L-4-8</u>			
<u>314</u>	<u>13</u>	<u>17</u>	<u>35</u>	<u>332</u>	<u>8</u>	<u>10</u>	<u>24</u>
<u>P4-L-2-7</u>				<u>P4-L-4-9</u>			
<u>315</u>	<u>10</u>	<u>11</u>	<u>25</u>	<u>333</u>	<u>9</u>	<u>9</u>	<u>21</u>
<u>P4-L-2-8</u>				<u>P4-L-4-10</u>			
<u>316</u>	<u>7</u>	<u>8</u>	<u>16</u>	<u>334</u>	<u>5</u>	<u>5</u>	<u>15</u>
<u>P4-L-3-1</u>				<u>P4-L-5-1</u>			
<u>317</u>	<u>11</u>	<u>11</u>	<u>25</u>	<u>335</u>	<u>11</u>	<u>12</u>	<u>36</u>
<u>P4-L-3-2</u>				<u>P4-L-5-2</u>			
<u>318</u>	<u>6</u>	<u>6</u>	<u>14</u>	<u>336</u>	<u>9</u>	<u>10</u>	<u>27</u>
<u>P4-L-3-3</u>				<u>P4-L-5-3</u>			
<u>319</u>	<u>7</u>	<u>6</u>	<u>13</u>	<u>337</u>	<u>20</u>	<u>16</u>	<u>30</u>
<u>P4-L-3-4</u>				<u>P4-L-5-4</u>			
<u>320</u>	<u>6</u>	<u>7</u>	<u>14</u>	<u>338</u>	<u>9</u>	<u>11</u>	<u>31</u>
<u>P4-L-3-5</u>				<u>P4-L-5-5</u>			
<u>321</u>	<u>31</u>	<u>22</u>	<u>35</u>	<u>339</u>	<u>7</u>	<u>9</u>	<u>17</u>

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 9 Of 14 Page 9
 Date: 4-28-06 & 5-1-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA:				AREA:			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
P4-L-5-6				P4-L-7-6			
340	6	6	14	358	36	34	60
P4-L-5-7				P4-L-7-7			
341	8	7	18	359	22	21	41
P4-L-5-8				P4-L-7-8			
342	24	27	55	360	12	12	26
P4-L-5-9				P4-L-8-1			
343	5	7	17	361	26	30	65
P4-L-5-10				P4-L-8-2			
344	15	15	27	362	22	21	45
P4-L-5-11				P4-L-8-3			
345	10	11	25	363	13	13	30
P4-L-6-1				P4-L-8-4			
346	22	24	60	364	7	10	21
P4-L-6-2				P4-L-8-5			
347	9	9	26	365	7	8	19
P4-L-7-4				P4-L-8-6			
348	22	22	42	366	9	9	19
P4-L-6-4				P4-L-8-7			
349	8	9	22	367	7	7	18
P4-L-6-5				P4-L-8-8			
350	7	7	18	368	9	9	20
P4-L-6-6				P4-L-8-9			
351	20	17	34	369	36	30	55
P4-L-6-7				P4-L-8-10			
352	27	23	40	370	10	16	32
P4-L-7-1				P4-L-8-11			
353	25	25	55	371	7	8	16
P4-L-7-2				P4-L-9-1			
354	18	19	38	372	13	14	34
P4-L-7-3				P4-L-9-2			
355	9	10	24	373	14	15	32
P4-L-7-4				P4-L-9-3			
356	26	27	55	374	7	7	17
P4-L-7-5				P4-L-9-4			
357	24	25	58	375	7	7	16

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM
 Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Sheet: 10 Of 14 Page 10
 Date: 5-1-06
 Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: <u>PILE 4</u>				AREA:			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
<u>P4-L-9-5</u>				<u>P4-L-13-1</u>			
<u>376</u>	<u>6</u>	<u>7</u>	<u>17</u>	<u>394</u>	<u>9</u>	<u>9</u>	<u>16</u>
<u>P4-L-9-6</u>				<u>P4-L-14-1</u>			
<u>377</u>	<u>7</u>	<u>8</u>	<u>17</u>	<u>395</u>	<u>12</u>	<u>15</u>	<u>30</u>
<u>P4-L-9-7</u>							
<u>378</u>	<u>7</u>	<u>7</u>	<u>16</u>				
<u>P4-L-9-8</u>							
<u>379</u>	<u>5</u>	<u>5</u>	<u>13</u>				
<u>P4-L-10-1</u>							
<u>380</u>	<u>25</u>	<u>26</u>	<u>46</u>				
<u>P4-L-10-2</u>							
<u>381</u>	<u>25</u>	<u>27</u>	<u>47</u>				
<u>P4-L-10-3</u>							
<u>382</u>	<u>40</u>	<u>28</u>	<u>50</u>				
<u>P4-L-10-4</u>							
<u>383</u>	<u>37</u>	<u>33</u>	<u>65</u>				
<u>P4-L-10-5</u>							
<u>384</u>	<u>12</u>	<u>13</u>	<u>28</u>				
<u>P4-L-10-6</u>							
<u>385</u>	<u>6</u>	<u>7</u>	<u>15</u>				
<u>P4-L-10-7</u>							
<u>386</u>	<u>7</u>	<u>7</u>	<u>15</u>				
<u>P4-L-11-1</u>							
<u>387</u>	<u>23</u>	<u>18</u>	<u>35</u>				
<u>P4-L-11-2</u>							
<u>388</u>	<u>10</u>	<u>11</u>	<u>23</u>				
<u>P4-L-11-3</u>							
<u>389</u>	<u>7</u>	<u>8</u>	<u>17</u>				
<u>P4-L-11-4</u>							
<u>390</u>	<u>7</u>	<u>6</u>	<u>15</u>				
<u>P4-L-11-5</u>							
<u>391</u>	<u>6</u>	<u>7</u>	<u>15</u>				
<u>P4-L-12-1</u>							
<u>392</u>	<u>13</u>	<u>15</u>	<u>29</u>				
<u>P4-L-12-2</u>							
<u>393</u>	<u>13</u>	<u>23</u>	<u>45</u>				

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUOLUUM

Sheet: 11 Of 14 Page 11
 Date: 5-1-06 & 5-2-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: BORROW AREA 3				AREA: BORROW AREA 1			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
BA 3-L-5-1				BA1-L-5-1			
157	6	6	11	141	6	6	12
BA3-L-5-2				BA1-L-5-5			
158	7	7	14	142	6	6	11
BA3-L-1-1				BA1-L-1-1			
159	7	8	11	143	5	5	9
BA3-L-1-4				BA1-L-1-5			
160	9	10	25	144	6	6	11
BA3-L-1-2				BA1-L-1-2			
294	10	11	26	421	5	5	11
BA3-L-1-3				BA1-L-1-3			
295	8	11	26	422	6	5	11
BA3-L-2-1				BA1-L-1-4			
296	7	8	17	423	7	8	13
BA3-L-2-2				BA1-L-2-1			
297	6	7	16	424	6	5	10
BA3-L-2-3				BA1-L-2-2			
298	5	6	16	425	5	4	9
BA3-L-2-4				BA1-L-2-3			
299	6	6	16	426	6	6	11
BA3-L-3-1				BA1-L-2-4			
300	8	9	17	427	4	4	8
BA3-L-3-2				BA1-L-2-5			
301	6	6	13	428	6	6	11
BA3-L-3-3				BA1-L-3-1			
302	5	6	13	429	5	5	10
BA3-L-3-4				BA1-L-3-2			
303	6	7	15	430	5	5	9
BA3-L-4-1				BA1-L-3-3			
304	8	8	14	431	7	7	11
BA3-L-4-2				BA1-L-3-4			
305	6	6	13	432	4	4	8
BA3-L-4-3				BA1-L-3-5			
306	6	6	14	433	6	6	12
BA3-L-4-4				BA1-L-4-1			
307	7	7	17	434	5	5	11

Comment: measurement on rock rim for BA3: 159 and 302.

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUDLUM

Sheet: 12 Of 14 Page 12
 Date: 5-2-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: BORROW AREA 1				AREA: BORROW AREA 2			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
BA1-L-4-2				BA2-L-8-1			
435	5	4	8	149	5	5	9
BA1-L-4-3				BA2-L-9-1			
436	5	5	10	150	5	5	9
BA1-L-4-4				BA2-L-1-1			
437	6	6	11	151	5	5	10
BA1-L-4-5				BA2-L-1-4			
438	4	5	9	152	4	4	9
BA1-L-5-2				BA2-L-1-2			
439	4	4	9	396	5	5	9
BA1-L-5-3				BA2-L-1-3			
440	5	5	9	397	5	5	10
BA1-L-5-4				BA2-L-2-1			
441	5	5	10	398	7	7	13
				BA2-L-2-2			
				399	5	5	10
				BA2-L-2-3			
				400	6	6	11
				BA2-L-2-4			
				401	4	4	8
				BA2-L-3-1			
				402	4	4	8
				BA2-L-3-2			
				403	6	6	11
				BA2-L-3-3			
				404	4	5	9
				BA2-L-4-1			
				405	6	5	10
				BA2-L-4-2			
				406	5	5	9
				BA2-L-4-3			
				407	6	6	10
				BA2-L-5-1			
				408	5	5	9
				BA2-L-5-2			
				409	5	5	9

Comment: measurement on rock area for BA2: 407, 404, 401 and 152.

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
 LUDLUM

Sheet: 13 Of 14 Page 13
 Date: 5-2-06 & 5-3-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST. ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading ($\mu\text{R/hr}$): _____

AREA: BORROW AREA 2				AREA: BACKGROUND AREA			
Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$	Location Or Point ID	Contact Shielded Reading $\mu\text{R/hr}$	One Meter Shielded Reading $\mu\text{R/hr}$	One Meter Unshielded Reading $\mu\text{R/hr}$
BAZ-L-5-3				BCKA-L-3-1			
410	5	5	9	129	13	12	21
BAZ-L-6-1				BCKA-L-3-6			
411	5	5	11	130	8	9	21
BAZ-L-6-2				BCKA-L-1-1			
412	5	6	11	131	5	6	11
BAZ-L-6-3				BCKA-L-1-6			
413	5	5	10	132	8	8	17
BAZ-L-6-4				BCKA-L-1-2			
414	5	5	9	442	5	5	11
BAZ-L-7-1				BCKA-L-1-3			
415	5	6	11	443	5	6	11
BAZ-L-7-2				BCKA-L-1-4			
416	5	5	9	444	6	6	13
BAZ-L-7-3				BCKA-L-1-5			
417	4	4	9	445	6	6	14
BAZ-L-7-4				BCKA-L-2-1			
418	7	6	13	446	6	6	13
BAZ-L-8-2				BCKA-L-2-2			
419	5	5	8	447	7	8	15
BAZ-L-8-3				BCKA-L-2-3			
420	5	5	9	448	9	8	17
BAZ-L-5-4				BCKA-L-2-4			
456	6	6	10	449	8	8	16
				BCKA-L-2-5			
				450	9	9	18
				BCKA-L-2-6			
				451	8	8	18
				BCKA-L-3-2			
				452	10	10	19
				BCKA-L-3-3			
				453	9	9	19
				BCKA-L-3-4			
				454	11	11	21
				BCKA-L-3-5			
				455	11	11	21

Comment: _____

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUOLUM

Sheet: 14 Of 14 Page 14
Date: 4-25-06, 4-26-06, 4-27-06 & 5-3-06

Instr. Type/Serial No.: 19/9180
And Calibration Due Date: 1-18-09

Site ID: ST. ANTHONY MINE
Avg. Bkgd. Exposure Rate Reading (µR/hr): _____

AREA: WEST DISTURBANCE AREA				AREA: WEST DISTURANCE AREA (EXTRA PT.) *			
Location Or Point ID	Contact Shielded Reading µR/hr	One Meter Shielded Reading µR/hr	One Meter Unshielded Reading µR/hr	Location Or Point ID	Contact Shielded Reading µR/hr	One Meter Shielded Reading µR/hr	One Meter Unshielded Reading µR/hr
WDA 242	320	200	300	WDA 245			
WDA 243	160	160	300	+29' E	130	130	240
WDA 244	300	290	440	WDA 249			
WDA 245	205	165	290	+35' N	430	360	600
WDA 246	140	135	235	WDA 261			
WDA 247	150	150	245	+55' E	70	73	139
WDA 248	35	45	105				
WDA 249	55	70	190				
WDA 250	120	115	235	WDA 248			
WDA 251	150	145	295	+48' N	200	145	250
WDA 252	230	230	370	WDA 250			
WDA 253	90	85	165	+34' N	260	250	440
WDA 254	125	120	210	WDA 251			
WDA 255	70	70	140	+5' N	280	210	340
WDA 256	135	100	170	WDA 257			
WDA 257	115	140	280	+20' N	430	410	700
WDA 258	115	105	185				
WDA 259	105	105	190				
WDA 260	195	165	250				
WDA 261	100	90	150				
WDA 262	100	90	170				
WDA 263							

Comment: * The above are new stake setup/ID from the original survey stake to be within the side or top of the pile (distance from the original survey stake point are approximated).

Measurement was not taken on WDA 263 due to an oversight and will be taken later on.

United Nuclear Corporation: Outdoor Gamma Ray Exposure Rate Survey Data Sheet

Survey Crew: MAX CHISCHILLY JR.
RONALD SAM
LUOLUVM

Sheet: _____ Of _____ Page _____
 Date: 4-25-06, 4-26-06, 4-27-06 & 5-3-06

Instr. Type/Serial No.: 19/9180
 And Calibration Due Date: 1-18-07

Site ID: ST ANTHONY MINE
 Avg. Bkgd. Exposure Rate Reading (μ R/hr): _____

AREA: WEST DISTURBANCE AREA				AREA: WEST DISTURBANCE AREA (EXTRA PT.) *			
Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr	Location Or Point ID	Contact Shielded Reading μ R/hr	One Meter Shielded Reading μ R/hr	One Meter Unshielded Reading μ R/hr
WDA 242	320	200	300	WDA 245			
WDA 243	160	160	300	+29' E			
WDA 244	300	290	440	WDA 249			
WDA 245	205	165	290	+35' N			
WDA 246	140	135	235	WDA 261			
WDA 247	150	150	245	+55' E			
WDA 248	35	45	105				
WDA 249	55	70	190				
WDA 250	120	115	235	WDA 248			
WDA 251	150	145	295	+48' N			
WDA 252	230	230	370	WDA 250			
WDA 253	90	85	165	+34' N			
WDA 254	125	120	210	WDA 251			
WDA 255	70	70	140	+5' N			
WDA 256	135	100	170	WDA 257			
WDA 257	115	140	280	+20' N			
WDA 258	115	105	185				
WDA 259	105	105	190				
WDA 260	195	165	250				
WDA 261	100	90	150				
WDA 262	100	90	170				
WDA 263							

Comment: _____

APPENDIX B

**LABORATORY ANALYTICAL DATA AND
DATA VALIDATION RESULTS**



ANALYTICAL SUMMARY REPORT

August 21, 2007

Montgomery Watson Harza
 1475 Pine Grove Road Ste 109
 PO Box 774018
 Steamboat Springs, CO 80477

Workorder No.: C07061467

Project Name: GE (UNC) St Anthony Mine Site

Energy Laboratories, Inc. received the following 123 samples from Montgomery Watson Harza on 6/27/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C07061467-001	LOBO-TP1-130	06/22/07 14:30	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-002	LOBO-TP1-131		06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-003	LOBO-TP2-132	06/22/07 14:45	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-004	LOBO-TP2-133	06/22/07 14:50	06/27/07	Soil	Same As Above



C07061467-005 LOBO-TP3-134	06/22/07 15:05 06/27/07	Soil	Same As Above
C07061467-006 LOBO-TP3-135 (dup)	06/22/07 15:05 06/27/07	Soil	Same As Above
C07061467-007 LOBO-TP4-136	06/22/07 15:20 06/27/07	Soil	Same As Above
C07061467-008 BS-TP1-041	06/19/07 16:00 06/27/07	Soil	Same As Above
C07061467-009 BS-TP1-042	06/19/07 16:00 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-010 BS-TP2-069	06/19/07 14:20 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-011 BS-TP2-070	06/19/07 14:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil



C07061467-012 BS-TP2-305	06/19/07 14:20	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-013 Shaft Pad-SPLP-Comp		06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved SPLP Extraction, Regular
C07061467-014 Mine Dump-SPLP-Comp	06/21/07 11:30	06/27/07	Soil	Same As Above
C07061467-015 Storage Area-SPLP-Comp	06/21/07 11:20	06/27/07	Soil	Same As Above
C07061467-016 Pond 1-SPLP-Comp	06/21/07 12:45	06/27/07	Soil	Same As Above
C07061467-017 Pond 2-SPLP-Comp	06/21/07 13:00	06/27/07	Soil	Same As Above
C07061467-018 Pond 3-SPLP-Comp	06/21/07 13:15	06/27/07	Soil	Same As Above
C07061467-019 Pond 4-SPLP-Comp	06/21/07 13:30	06/27/07	Soil	Same As Above
C07061467-020 Pond 5-SPLP-Comp	06/21/07 12:30	06/27/07	Soil	Same As Above
C07061467-021 TS-TP1-064	06/20/07 13:20	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-022 TS-TP1-065	06/20/07 13:20	06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil



C07061467-023 TS-TP1-066	06/20/07 13:25 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-024 TS-TP1-067	06/20/07 13:35 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-025 TS-TP1-068	06/20/07 13:50 06/27/07	Soil	Same As Above
C07061467-026 OS1-TP6-306	06/21/07 09:10 06/27/07	Soil	Same As Above
C07061467-027 OS1-TP1-081	06/21/07 09:15 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-028 OS1-TP6-082	06/21/07 09:20 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-029 PO5-TP5-117	06/21/07 14:40 06/27/07	Soil	Same As Above



C07061467-030 PO5-TP5-118	06/21/07 14:40 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-031 PO5-TP5-119	06/21/07 14:40 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-032 PO4-TP4-111	06/21/07 13:55 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-033 PO4-TP4-112

06/21/07 13:55 06/27/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO₃ Extractable
Metals, Soluble
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
ABDTPA Soil Extraction
CVAA Permanganate Digest
DTPA extraction for metals
KCL Soil Extract
NaHCO₃ Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Sodium Adsorption Ratio in Soil

C07061467-034 PO4-TP4-113

06/21/07 13:55 06/27/07 Soil

Metals by ICP/ICPMS, Dissolved
Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Alpha, Gross Beta
Gross Gamma
Radium 226, Dissolved
Radium 228, Dissolved
Thorium, Isotopic
SPLP Extraction, Regular

C07061467-035 PO3-TP3-114

06/21/07 14:20 06/27/07 Soil

Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic



C07061467-036 PO3-TP3-115	06/21/07 14:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-037 PO3-TP3-116	06/21/07 14:20 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-038 BG-TP1-124	06/21/07 16:00 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-039 BG-TP1-125	06/21/07 16:00 06/27/07	Soil	Same As Above
C07061467-040 BG-TP2-126	06/21/07 16:15 06/27/07	Soil	Same As Above
C07061467-041 BG-TP2-127	06/21/07 16:20 06/27/07	Soil	Same As Above
C07061467-042 BG-TP3-120	06/21/07 15:30 06/27/07	Soil	Same As Above
C07061467-043 BG-TP3-310	06/21/07 15:30 06/27/07	Soil	Same As Above
C07061467-044 BG-TP3-121	06/21/07 15:35 06/27/07	Soil	Same As Above
C07061467-045 TO-TP1-015	06/19/07 08:55 06/27/07	Soil	Same As Above



C07061467-046 TO-TP1-016	06/19/07 08:55 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-047 TO-TP1-017	06/19/07 09:05 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-048 TO-TP1-018	06/19/07 09:15 06/27/07	Soil	Same As Above
C07061467-049 TO-TP1-019	06/19/07 09:55 06/27/07	Soil	Same As Above
C07061467-050 OS1-TP6-079	06/21/07 09:10 06/27/07	Soil	Same As Above
C07061467-051 OS1-TP6-080	06/21/07 09:10 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil



C07061467-052 BG-TP4-122	06/21/07 00:00 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-053 BG-TP4-123	06/21/07 00:00 06/27/07	Soil	Same As Above
C07061467-054 TN-TP1-071	06/20/07 15:00 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Uranium, Total Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals Digestion For RadioChemistry ABDTPA Soil Extraction Gross Alpha, Gross Beta Sample Prep CVAA Permanganate Digest DTPA extraction for metals Gamma Sample Preparation KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic Sodium Adsorption Ratio in Soil
C07061467-055 TN-TP1-072	06/20/07 15:00 06/27/07	Soil	Same As Above
C07061467-056 TN-TP1-073	06/20/07 15:05 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-057 TN-TP1-074	06/20/07 15:15 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-058 TN-TP1-075	06/20/07 15:30	06/27/07	Soil	Same As Above
C07061467-059 AR7-TP1-076	06/20/07 15:45	06/27/07	Soil	Same As Above
C07061467-060 AR15-TP1-077	06/20/07 16:05	06/27/07	Soil	Same As Above
C07061467-061 AR19-TP1-078	06/20/07 16:10	06/27/07	Soil	Same As Above
C07061467-062 AR24-TP1-083	06/21/07 09:40	06/27/07	Soil	Same As Above
C07061467-063 AR34-TP1-084	06/21/07 10:15	06/27/07	Soil	Same As Above
C07061467-064 SA-TP1-089	06/21/07 10:45	06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO ₃ Extractable Metals, Soluble Uranium, Total Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals Digestion For RadioChemistry ABDTPA Soil Extraction Gross Alpha, Gross Beta Sample Prep CVAA Permanganate Digest DTPA extraction for metals Gamma Sample Preparation KCL Soil Extract NaHCO ₃ Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic Sodium Adsorption Ratio in Soil
C07061467-065 SA-TP1-090	06/21/07 10:45	06/27/07	Soil	Same As Above
C07061467-066 SA-TP1-307	06/21/07 10:45	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-067 SA-TP1-091	06/21/07 10:45	06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved SPLP Extraction, Regular



C07061467-068 P7-TP2-021	06/19/07 10:40 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-069 P7-TP2-020	06/19/07 10:40 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-070 P7-TP2-300	06/19/07 10:14 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-071 P7-TP2-022	06/19/07 10:45 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-072 P7-TP3-023	06/19/07 11:00 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-073 P7-TP3-024	06/19/07 11:00 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-074 P7-TP3-026	06/19/07 11:20 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-075 P7-TP4-048	06/20/07 09:35 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-076 P7-TP4-049	06/20/07 09:35 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-077 P7-TP4-050	06/20/07 09:40 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-078 P7-TP4-303	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-079 P7-TP5-053	06/20/07 10:10 06/27/07	Soil	Same As Above



C07061467-080 P7-TP5-054

06/20/07 10:10 06/27/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO₃ Extractable
Metals, Soluble
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
ABDTPA Soil Extraction
CVAA Permanganate Digest
DTPA extraction for metals
KCL Soil Extract
NaHCO₃ Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Sodium Adsorption Ratio in Soil

C07061467-081 P7-TP5-055

06/20/07 10:15 06/27/07 Soil

Metals by ICP/ICPMS, Dissolved
Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Alpha, Gross Beta
Gross Gamma
Radium 226, Dissolved
Radium 228, Dissolved
Thorium, Isotopic
SPLP Extraction, Regular

C07061467-082 P7-TP1-001

06/18/07 14:25 06/27/07 Soil

Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic



C07061467-083 P7-TP1-002	06/18/07 14:25 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-084 P7-TP1-005	06/18/07 15:00 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-085 P6-TP3-037	06/19/07 15:20 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-086 P6-TP3-038	06/19/07 15:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO ₃ Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO ₃ Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-087 P6-TP3-039	06/19/07 15:30 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-088 P6-TP3-302	06/19/07 15:40 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-089 P6-TP2-032	06/19/07 14:25 06/27/07	Soil	Same As Above



C07061467-090 P6-TP2-033	06/19/07 14:25 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-091 P6-TP2-035	06/19/07 14:50 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-092 P6-TP1-028	06/19/07 13:30 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-093 P6-TP1-030	06/19/07 13:55 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular



C07061467-094 P6-TP1-301	06/19/07 14:10 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-095 P6-TP4-043	06/19/07 16:20 06/27/07	Soil	Same As Above
C07061467-096 P6-TP4-044	06/19/07 16:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-097 P6-TP4-047	06/19/07 16:50 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-098 P6-TP5-057	06/20/07 10:45 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07061467-099 P6-TP5-058	06/20/07 10:50 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-100 P6-TP6-060	06/20/07 11:15 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-101 P6-TP6-061	06/20/07 11:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Uranium, Total Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals Digestion For RadioChemistry ABDTPA Soil Extraction Gross Alpha, Gross Beta Sample Prep CVAA Permanganate Digest DTPA extraction for metals Gamma Sample Preparation KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic Sodium Adsorption Ratio in Soil



C07061467-102 P6-TP6-304	06/20/07 11:15 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-103 OS2-TP5-092	06/21/07 11:00 06/27/07	Soil	Same As Above
C07061467-104 OS2-TP5-093	06/21/07 11:00 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-105 OS2-TP5-094	06/21/07 11:15 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-106 OS2-TP5-096	06/21/07 11:20 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-107 OS2-TP5-098	06/21/07 11:20 06/27/07	Soil	Same As Above
C07061467-108 PO2-TP2-105	06/21/07 13:30 06/27/07	Soil	Same As Above



C07061467-109 PO2-TP2-110	06/21/07 13:30 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-110 PO2-TP2-106	06/21/07 13:20 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-111 PO2-TP2-108	06/21/07 13:25 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-112 PO2-TP2-309	06/21/07 13:30 06/27/07	Soil	Same As Above
C07061467-113 PO1-TP1-099	06/21/07 12:45 06/27/07	Soil	Same As Above



C07061467-114 PO1-TP1-100	06/21/07 12:45 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-115 PO1-TP1-308	06/21/07 12:45 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-116 PO1-TP1-103	06/21/07 13:00 06/27/07	Soil	Same As Above
C07061467-117 SP-TP2-086	06/21/07 10:30 06/27/07	Soil	Same As Above
C07061467-118 SP-TP2-087	06/21/07 10:30 06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil



C07061467-119 SP-TP2-088	06/21/07 10:30 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07061467-120 P5-TP1-010	06/18/07 16:10 06/27/07	Soil	Same As Above
C07061467-121 P5-TP1-011	06/18/07 16:20 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07061467-122 P5-TP1-012	06/18/07 16:20 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07061467-123 P6-TP5-059	06/21/07 00:00 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call.

Report Approved By:

R.A. Leasing
PROCESS CONTROL SUPERVISOR



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-001
Client Sample ID: LOBO-TP1-130

Report Date: 08/21/07
Collection Date: 06/22/07 14:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	7.79	mg/kg-dry	D	0.02		SW6020	07/11/07 05:19 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	9.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.1		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.05	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-002
Client Sample ID LOBO-TP1-131

Report Date: 08/21/07
Collection Date: Not Provided
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.66	mmhos/cm		0.01		ASAM10-3	07/06/07 09:01 / jb
Saturation Percentage	79.6	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.1	s.u.		0.01		ASAM10-3.2	07/06/07 09:01 / jb
Nitrogen, Nitrate+Nitrite as N	1.2	mg/kg-dry		1.0		E353.2	07/13/07 14:18 / jal
Chloride, soluble	12.5	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	8.6	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	184	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	2.7	meq/L		0.02		SW6010B	07/12/07 15:24 / ts
Magnesium, sat. paste	3.4	meq/L		0.04		SW6010B	07/12/07 15:24 / ts
Sodium, sat. paste	1.2	meq/L		0.02		SW6010B	07/12/07 15:24 / ts
Sodium Adsorption Ratio (SAR)	0.67	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	3.9	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	13.5	mg/kg-dry	D	0.06		SW6020	07/09/07 15:57 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 13:40 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.034	mg/kg-dry		0.005		A3114 B	07/17/07 09:02 / kes
Selenium	0.007	mg/kg-dry		0.005		A3114 B	07/17/07 14:20 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/17/07 18:30 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 18:30 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 18:30 / sml
Zinc	0.10	mg/kg-dry		0.01		SW6020	07/23/07 14:39 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 18:07 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	54	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	26	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	20	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL - SCL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-002
Client Sample ID: LOBO-TP1-131

Report Date: 08/21/07
Collection Date: Not Provided
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.30	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-003
Client Sample ID: LOBO-TP2-132

Report Date: 08/21/07
Collection Date: 06/22/07 14:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.25	mg/kg-dry	D	0.03		SW6020	07/11/07 05:23 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	12.7	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.7	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.08	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-004
Client Sample ID: LOBO-TP2-133

Report Date: 08/21/07
Collection Date: 06/22/07 14:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.44	mg/kg-dry	D	0.03		SW6020	07/11/07 05:27 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.5	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	13.6	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.7	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.08	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-005
 Client Sample ID LOBO-TP3-134

Report Date: 08/21/07
 Collection Date: 06/22/07 15:05
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.74	mg/kg-dry	D	0.03		SW6020	07/11/07 05:31 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	9.0	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.4	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.08	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-006
 Client Sample ID LOBO-TP3-135 (dup)

Report Date: 08/21/07
 Collection Date: 06/22/07 15:05
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.67	mg/kg-dry	D	0.03		SW6020	07/11/07 05:35 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.6	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-007
 Client Sample ID LOBO-TP4-136

Report Date: 08/21/07
 Collection Date: 06/22/07 15:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.06	mg/kg-dry	D	0.03		SW6020	07/11/07 05:39 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.9	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-008
Client Sample ID BS-TP1-041

Report Date: 08/21/07
Collection Date: 06/19/07 16:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.69	mg/kg-dry	D	0.03		SW6020	07/11/07 06:00 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.7	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-009
 Client Sample ID BS-TP1-042

Report Date: 08/21/07
 Collection Date: 06/19/07 16:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.33	mmhos/cm		0.01		ASAM10-3	07/06/07 09:02 / jb
Saturation Percentage	54.8	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.2	s.u.		0.01		ASAM10-3.2	07/06/07 09:02 / jb
Nitrogen, Nitrate+Nitrite as N	1.4	mg/kg-dry		1.0		E353.2	07/13/07 14:23 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	2.1	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	23.7	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	1.5	meq/L		0.02		SW6010B	07/12/07 15:27 / ts
Magnesium, sat. paste	0.93	meq/L		0.04		SW6010B	07/12/07 15:27 / ts
Sodium, sat. paste	1.4	meq/L		0.02		SW6010B	07/12/07 15:27 / ts
Sodium Adsorption Ratio (SAR)	1.27	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	2.6	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	8.7	mg/kg-dry		0.05		SW6020	07/09/07 16:05 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:05 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.022	mg/kg-dry		0.005		A3114 B	07/17/07 09:05 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 14:22 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 18:35 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 18:35 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 18:35 / sml
Zinc	0.13	mg/kg-dry		0.01		SW6020	07/23/07 14:44 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	6	mg/kg-dry		5		SW6010B	07/17/07 18:17 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	63	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	18	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	19	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-009
Client Sample ID BS-TP1-042

Report Date: 08/21/07
Collection Date: 06/19/07 16:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.26	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-010
Client Sample ID BS-TP2-069

Report Date: 08/21/07
Collection Date: 06/19/07 14:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.67	mg/kg-dry	D	0.02		SW6020	07/11/07 06:04 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-011
 Client Sample ID BS-TP2-070

Report Date: 08/21/07
 Collection Date: 06/19/07 14:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	2.64	mmhos/cm		0.01		ASAM10-3	07/06/07 09:03 / jb
Saturation Percentage	54.0	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	7.7	s.u.		0.01		ASAM10-3.2	07/06/07 09:03 / jb
Nitrogen, Nitrate+Nitrite as N	3.1	mg/kg-dry		1.0		E353.2	07/13/07 14:26 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	9.0	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	856	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	31	meq/L		0.02		SW6010B	07/12/07 15:30 / ts
Magnesium, sat. paste	4.7	meq/L		0.04		SW6010B	07/12/07 15:30 / ts
Sodium, sat. paste	0.54	meq/L		0.02		SW6010B	07/12/07 15:30 / ts
Sodium Adsorption Ratio (SAR)	0.13	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	3.6	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	13.8	mg/kg-dry	D	0.06		SW6020	07/09/07 16:12 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:07 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.045	mg/kg-dry		0.005		A3114 B	07/17/07 09:07 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 14:24 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 15:09 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 18:40 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 18:40 / sml
Zinc	0.14	mg/kg-dry		0.01		SW6020	07/23/07 15:09 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 18:20 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	46	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	30	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	24	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	L			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-011
Client Sample ID: BS-TP2-070

Report Date: 08/21/07
Collection Date: 06/19/07 14:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.30	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-012
 Client Sample ID BS-TP2-305

Report Date: 08/21/07
 Collection Date: 06/19/07 14:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.74	mg/kg-dry	D	0.03		SW6020	07/11/07 06:08 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-013
 Client Sample ID Shaft Pad-SPLP-Comp

Report Date: 08/21/07
 Collection Date: Not Provided
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	7.4	mg/L		0.2		E200.7	07/25/07 14:18 / ts
Magnesium	0.80	mg/L	D	0.04		E200.7	07/25/07 14:18 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 14:18 / ts
Sodium	8	mg/L		5		E200.7	07/25/07 14:18 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	2.3	mg/L		0.1		E200.8	07/05/07 21:17 / sml
Arsenic	0.002	mg/L		0.001		E200.8	07/05/07 21:17 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 21:17 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:17 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:17 / sml
Molybdenum	0.023	mg/L		0.001		E200.8	07/05/07 21:17 / sml
Selenium	ND	mg/L		0.001		E200.8	07/05/07 21:17 / sml
Uranium	0.190	mg/L		0.0001		E200.8	07/05/07 21:17 / sml
Vanadium	0.032	mg/L		0.005		E200.8	07/05/07 21:17 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	216	pCi/L		1.0		E900.0	07/14/07 08:43 / res
Gross Alpha precision (±)	4.3	pCi/L				E900.0	07/14/07 08:43 / res
Radium 226	8.3	pCi/L		1.0		E903.0	07/15/07 19:22 / trs
Radium 226 precision (±)	1.6	pCi/L				E903.0	07/15/07 19:22 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 06:10 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-014
 Client Sample ID Mine Dump-SPLP-Comp

Report Date: 08/21/07
 Collection Date: 06/21/07 11:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	14.1	mg/L		0.2		E200.7	07/25/07 14:28 / ts
Magnesium	2.02	mg/L	D	0.04		E200.7	07/25/07 14:28 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 14:28 / ts
Sodium	35	mg/L		5		E200.7	07/25/07 14:28 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.9	mg/L		0.1		E200.8	07/05/07 21:24 / sml
Arsenic	ND	mg/L		0.001		E200.8	07/05/07 21:24 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 21:24 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:24 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:24 / sml
Molybdenum	0.009	mg/L		0.001		E200.8	07/05/07 21:24 / sml
Selenium	0.004	mg/L		0.001		E200.8	07/05/07 21:24 / sml
Uranium	0.694	mg/L		0.0001		E200.8	07/05/07 21:24 / sml
Vanadium	0.008	mg/L		0.005		E200.8	07/05/07 21:24 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	554	pCi/L		1.0		E900.0	07/14/07 08:43 / res
Gross Alpha precision (±)	6.5	pCi/L				E900.0	07/14/07 08:43 / res
Radium 226	1.7	pCi/L		1.0		E903.0	07/15/07 21:23 / trs
Radium 226 precision (±)	0.6	pCi/L				E903.0	07/15/07 21:23 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-015
 Client Sample ID Storage Area-SPLP-Comp

Report Date: 08/21/07
 Collection Date: 06/21/07 11:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	10.6	mg/L		0.2		E200.7	07/25/07 14:31 / ts
Magnesium	0.76	mg/L	D	0.04		E200.7	07/25/07 14:31 / ts
Potassium	5	mg/L		3		E200.7	07/25/07 14:31 / ts
Sodium	5	mg/L		5		E200.7	07/25/07 14:31 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	2.1	mg/L		0.1		E200.8	07/05/07 21:32 / sml
Arsenic	0.002	mg/L		0.001		E200.8	07/05/07 21:32 / sml
Barium	0.01	mg/L		0.01		E200.8	07/05/07 21:32 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:32 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:32 / sml
Molybdenum	0.002	mg/L		0.001		E200.8	07/05/07 21:32 / sml
Selenium	ND	mg/L		0.001		E200.8	07/05/07 21:32 / sml
Uranium	0.0025	mg/L		0.0001		E200.8	07/05/07 21:32 / sml
Vanadium	0.008	mg/L		0.005		E200.8	07/05/07 21:32 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	1.8	pCi/L		1.0		E900.0	07/14/07 08:43 / res
Gross Alpha precision (±)	0.6	pCi/L				E900.0	07/14/07 08:43 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/15/07 23:24 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-016
 Client Sample ID Pond 1-SPLP-Comp

Report Date: 08/21/07
 Collection Date: 06/21/07 12:45
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	14.4	mg/L		0.2		E200.7	07/25/07 14:35 / ts
Magnesium	1.85	mg/L	D	0.04		E200.7	07/25/07 14:35 / ts
Potassium	4	mg/L		3		E200.7	07/25/07 14:35 / ts
Sodium	9	mg/L		5		E200.7	07/25/07 14:35 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.7	mg/L		0.1		E200.8	07/05/07 21:39 / sml
Arsenic	0.003	mg/L		0.001		E200.8	07/05/07 21:39 / sml
Barium	0.02	mg/L		0.01		E200.8	07/05/07 21:39 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:39 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:39 / sml
Molybdenum	0.032	mg/L		0.001		E200.8	07/05/07 21:39 / sml
Selenium	0.002	mg/L		0.001		E200.8	07/05/07 21:39 / sml
Uranium	1.32	mg/L		0.0001		E200.8	07/05/07 21:39 / sml
Vanadium	0.015	mg/L		0.005		E200.8	07/05/07 21:39 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	1100	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	9.4	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	9.5	pCi/L		1.0		E903.0	07/16/07 00:24 / trs
Radium 226 precision (±)	1.6	pCi/L				E903.0	07/16/07 00:24 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-017
 Client Sample ID Pond 2-SPLP-Comp

Report Date: 08/21/07
 Collection Date: 06/21/07 13:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	8.0	mg/L		0.2		E200.7	07/25/07 14:38 / ts
Magnesium	1.26	mg/L	D	0.04		E200.7	07/25/07 14:38 / ts
Potassium	5	mg/L		3		E200.7	07/25/07 14:38 / ts
Sodium	22	mg/L		5		E200.7	07/25/07 14:38 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	3.2	mg/L		0.1		E200.8	07/05/07 21:46 / sml
Arsenic	0.004	mg/L		0.001		E200.8	07/05/07 21:46 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 21:46 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:46 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:46 / sml
Molybdenum	0.081	mg/L		0.001		E200.8	07/05/07 21:46 / sml
Selenium	0.003	mg/L		0.001		E200.8	07/05/07 21:46 / sml
Uranium	2.70	mg/L		0.0001		E200.8	07/05/07 21:46 / sml
Vanadium	0.034	mg/L		0.005		E200.8	07/05/07 21:46 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	1990	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	12.5	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	10.2	pCi/L		1.0		E903.0	07/16/07 01:25 / trs
Radium 226 precision (±)	1.7	pCi/L				E903.0	07/16/07 01:25 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-018
Client Sample ID Pond 3-SPLP-Comp

Report Date: 08/21/07
Collection Date: 06/21/07 13:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	9.2	mg/L		0.2		E200.7	07/25/07 14:42 / ts
Magnesium	1.76	mg/L	D	0.04		E200.7	07/25/07 14:42 / ts
Potassium	3	mg/L		3		E200.7	07/25/07 14:42 / ts
Sodium	8	mg/L		5		E200.7	07/25/07 14:42 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.6	mg/L		0.1		E200.8	07/05/07 21:54 / sml
Arsenic	0.002	mg/L		0.001		E200.8	07/05/07 21:54 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 21:54 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 21:54 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 21:54 / sml
Molybdenum	0.006	mg/L		0.001		E200.8	07/05/07 21:54 / sml
Selenium	ND	mg/L		0.001		E200.8	07/05/07 21:54 / sml
Uranium	0.247	mg/L		0.0001		E200.8	07/05/07 21:54 / sml
Vanadium	0.008	mg/L		0.005		E200.8	07/05/07 21:54 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	226	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	4.3	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	7.1	pCi/L		1.0		E903.0	07/16/07 02:25 / trs
Radium 226 precision (±)	1.5	pCi/L				E903.0	07/16/07 02:25 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-019
 Client Sample ID Pond 4-SPLP-Comp

Report Date: 08/21/07
 Collection Date: 06/21/07 13:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	7.3	mg/L		0.2		E200.7	07/25/07 14:52 / ts
Magnesium	1.81	mg/L	D	0.04		E200.7	07/25/07 14:52 / ts
Potassium	4	mg/L		3		E200.7	07/25/07 14:52 / ts
Sodium	32	mg/L		5		E200.7	07/25/07 14:52 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	3.8	mg/L		0.1		E200.8	07/05/07 22:01 / sml
Arsenic	0.004	mg/L		0.001		E200.8	07/05/07 22:01 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 22:01 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 22:01 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 22:01 / sml
Molybdenum	0.102	mg/L		0.001		E200.8	07/05/07 22:01 / sml
Selenium	0.004	mg/L		0.001		E200.8	07/05/07 22:01 / sml
Uranium	2.56	mg/L		0.0001		E200.8	07/05/07 22:01 / sml
Vanadium	0.027	mg/L		0.005		E200.8	07/05/07 22:01 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	1640	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	11.2	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	5.6	pCi/L		1.0		E903.0	07/16/07 03:26 / trs
Radium 226 precision (±)	1.3	pCi/L				E903.0	07/16/07 03:26 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-020
Client Sample ID Pond 5-SPLP-Comp

Report Date: 08/21/07
Collection Date: 06/21/07 12:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	8.4	mg/L		0.2		E200.7	07/25/07 14:55 / ts
Magnesium	1.71	mg/L	D	0.04		E200.7	07/25/07 14:55 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 14:55 / ts
Sodium	10	mg/L		5		E200.7	07/25/07 14:55 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.4	mg/L		0.1		E200.8	07/05/07 22:09 / sml
Arsenic	0.003	mg/L		0.001		E200.8	07/05/07 22:09 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 22:09 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 22:09 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 22:09 / sml
Molybdenum	0.003	mg/L		0.001		E200.8	07/05/07 22:09 / sml
Selenium	ND	mg/L		0.001		E200.8	07/05/07 22:09 / sml
Uranium	0.0107	mg/L		0.0001		E200.8	07/05/07 22:09 / sml
Vanadium	ND	mg/L		0.005		E200.8	07/05/07 22:09 / sml
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	11.5	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	1.1	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	1.2	pCi/L		1.0		E903.0	07/16/07 04:26 / trs
Radium 226 precision (±)	0.8	pCi/L				E903.0	07/16/07 04:26 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 07:49 / plj

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-021
 Client Sample ID TS-TP1-064

Report Date: 08/21/07
 Collection Date: 06/20/07 13:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.10	mg/kg-dry	D	0.03		SW6020	07/11/07 06:12 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.0	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.08	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-022
Client Sample ID TS-TP1-065

Report Date: 08/21/07
Collection Date: 06/20/07 13:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	5.46	mmhos/cm		0.01		ASAM10-3	07/06/07 09:03 / jb
Saturation Percentage	66.4	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	7.4	s.u.		0.01		ASAM10-3.2	07/06/07 09:03 / jb
Nitrogen, Nitrate+Nitrite as N	1.1	mg/kg-dry		1.0		E353.2	07/13/07 14:28 / jal
Chloride, soluble	13.4	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	8.8	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	2320	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	26	meq/L		0.02		SW6010B	07/12/07 15:34 / ts
Magnesium, sat. paste	39	meq/L		0.04		SW6010B	07/12/07 15:34 / ts
Sodium, sat. paste	15	meq/L		0.02		SW6010B	07/12/07 15:34 / ts
Sodium Adsorption Ratio (SAR)	2.74	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	6.2	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	14.0	mg/kg-dry	D	0.06		SW6020	07/09/07 16:49 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:09 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.034	mg/kg-dry		0.005		A3114 B	07/17/07 09:09 / kes
Selenium	0.036	mg/kg-dry		0.005		A3114 B	07/17/07 14:27 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/23/07 15:13 / sml
Copper	0.7	mg/kg-dry	D	0.5		SW6020	07/23/07 15:13 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 15:13 / sml
Zinc	0.31	mg/kg-dry		0.01		SW6020	07/23/07 15:13 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 18:23 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	47	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	26	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	27	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SCL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	8.4	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit. MCL - Maximum contaminant level.
Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-022
Client Sample ID TS-TP1-065

Report Date: 08/21/07
Collection Date: 06/20/07 13:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.22	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report
Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-023
Client Sample ID TS-TP1-066

Report Date: 08/21/07
Collection Date: 06/20/07 13:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	18.8	mg/L		0.2		E200.7	07/25/07 14:58 / ts
Magnesium	8.80	mg/L	D	0.04		E200.7	07/25/07 14:58 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 14:58 / ts
Sodium	11	mg/L		5		E200.7	07/25/07 14:58 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/05/07 22:16 / sml
Arsenic	ND	mg/L		0.001		E200.8	07/05/07 22:16 / sml
Barium	ND	mg/L		0.01		E200.8	07/05/07 22:16 / sml
Lead	ND	mg/L		0.04		E200.8	07/05/07 22:16 / sml
Manganese	ND	mg/L		0.01		E200.8	07/05/07 22:16 / sml
Molybdenum	0.002	mg/L		0.001		E200.8	07/05/07 22:16 / sml
Selenium	ND	mg/L		0.001		E200.8	07/05/07 22:16 / sml
Uranium	0.0005	mg/L		0.0001		E200.8	07/05/07 22:16 / sml
Vanadium	ND	mg/L		0.005		E200.8	07/05/07 22:16 / sml
METALS - TOTAL							
Uranium	0.84	mg/kg-dry	D	0.03		SW6020	07/11/07 06:16 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	ND	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Radium 226	4.5	pCi/L		1.0		E903.0	07/16/07 05:27 / trs
Radium 226 precision (±)	1	pCi/L				E903.0	07/16/07 05:27 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/10/07 06:10 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	6.2	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-024
Client Sample ID TS-TP1-067

Report Date: 08/21/07
Collection Date: 06/20/07 13:35
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.91	mg/kg-dry	D	0.03		SW6020	07/11/07 06:21 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.5	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.06	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-025
Client Sample ID TS-TP1-068

Report Date: 08/21/07
Collection Date: 06/20/07 13:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.58	mg/kg-dry	D	0.02		SW6020	07/11/07 06:25 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	9.5	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	ND	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-026
 Client Sample ID OS1-TP6-306

Report Date: 08/21/07
 Collection Date: 06/21/07 09:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	295	mg/kg-dry	D	0.03		SW6020	07/11/07 06:29 / bws
RADIONUCLIDES - GAMMA							
Radium 226	15.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.5	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	168	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	2.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	22	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.7	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-027
Client Sample ID OS1-TP1-081

Report Date: 08/21/07
Collection Date: 06/21/07 09:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	27.0	mg/L		0.2		E200.7	07/25/07 15:24 / ts
Magnesium	4.57	mg/L	D	0.04		E200.7	07/25/07 15:24 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:24 / ts
Sodium	12	mg/L		5		E200.7	07/25/07 15:24 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/09/07 15:34 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 15:34 / bws
Barium	0.02	mg/L		0.01		E200.8	07/09/07 15:34 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 15:34 / bws
Manganese	0.03	mg/L		0.01		E200.8	07/09/07 15:34 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 15:34 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 15:34 / bws
Uranium	0.0630	mg/L		0.0001		E200.8	07/09/07 15:34 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 15:34 / bws
METALS - TOTAL							
Uranium	47.9	mg/kg-dry	D	0.03		SW6020	07/11/07 06:33 / bws
RADIONUCLIDES - GAMMA							
Radium 226	13.0	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	47.5	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	2.0	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	5.8	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	1	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	59.7	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	6.7	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-028
Client Sample ID OS1-TP6-082

Report Date: 08/21/07
Collection Date: 06/21/07 09:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	32.4	mg/kg-dry	D	0.02		SW6020	07/11/07 06:54 / bws
RADIONUCLIDES - GAMMA							
Radium 226	9.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	59.0	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	5.9	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-029
 Client Sample ID PO5-TP5-117

Report Date: 08/21/07
 Collection Date: 06/21/07 14:40
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	7.59	mg/kg-dry	D	0.02		SW6020	07/11/07 07:22 / bws
RADIONUCLIDES - GAMMA							
Radium 226	2.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	16.0	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.8	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.9	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-030
 Client Sample ID PO5-TP5-118

Report Date: 08/21/07
 Collection Date: 06/21/07 14:40
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.60	mmhos/cm		0.01		ASAM10-3	07/06/07 09:05 / jb
Saturation Percentage	65.2	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	7.7	s.u.		0.01		ASAM10-3.2	07/06/07 09:05 / jb
Nitrogen, Nitrate+Nitrite as N	1.3	mg/kg-dry		1.0		E353.2	07/13/07 14:31 / jal
Chloride, soluble	6.3	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	10.2	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	405	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	5.6	meq/L		0.02		SW6010B	07/12/07 15:37 / ts
Magnesium, sat. paste	2.0	meq/L		0.04		SW6010B	07/12/07 15:37 / ts
Sodium, sat. paste	9.9	meq/L		0.02		SW6010B	07/12/07 15:37 / ts
Sodium Adsorption Ratio (SAR)	5.14	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	5.5	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	13.3	mg/kg-dry	D	0.06		SW6020	07/07/07 01:43 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:11 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.049	mg/kg-dry		0.005		A3114 B	07/17/07 09:11 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 14:29 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/23/07 15:18 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 18:49 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 18:49 / sml
Zinc	0.22	mg/kg-dry		0.01		SW6020	07/23/07 15:18 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 18:43 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	49	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	25	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	26	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SCL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-030
Client Sample ID PO5-TP5-118

Report Date: 08/21/07
Collection Date: 06/21/07 14:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.47	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-031
Client Sample ID PO5-TP5-119

Report Date: 08/21/07
Collection Date: 06/21/07 14:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	2.8	mg/L		0.2		E200.7	07/25/07 15:37 / ts
Magnesium	0.60	mg/L	D	0.04		E200.7	07/25/07 15:37 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:37 / ts
Sodium	19	mg/L		5		E200.7	07/25/07 15:37 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.7	mg/L		0.1		E200.8	07/09/07 16:01 / bws
Arsenic	0.002	mg/L		0.001		E200.8	07/09/07 16:01 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 16:01 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 16:01 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 16:01 / bws
Molybdenum	0.002	mg/L		0.001		E200.8	07/09/07 16:01 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 16:01 / bws
Uranium	0.0051	mg/L		0.0001		E200.8	07/09/07 16:01 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 16:01 / bws
METALS - TOTAL							
Uranium	18.0	mg/kg-dry	D	0.03		SW6020	07/11/07 07:27 / bws
RADIONUCLIDES - GAMMA							
Radium 226	8.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	7.0	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	0.9	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	1.1	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	0.4	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	26.9	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	1.0	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	4.7	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-032
Client Sample ID: PO4-TP4-111

Report Date: 08/21/07
Collection Date: 06/21/07 13:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1090	mg/kg-dry	D	0.03		SW6020	07/11/07 07:47 / bws
RADIONUCLIDES - GAMMA							
Radium 226	352	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	30.6	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	1170	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	6.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	243	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	6.0	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-033
 Client Sample ID PO4-TP4-112

Report Date: 08/21/07
 Collection Date: 06/21/07 13:55
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.97	mmhos/cm		0.01		ASAM10-3	07/06/07 09:05 / jb
Saturation Percentage	91.0	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.8	s.u.		0.01		ASAM10-3.2	07/06/07 09:05 / jb
Nitrogen, Nitrate+Nitrite as N	4.7	mg/kg-dry		1.0		E353.2	07/13/07 14:36 / jal
Chloride, soluble	11.4	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	6.1	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	240	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	0.89	meq/L		0.02		SW6010B	07/12/07 15:41 / ts
Magnesium, sat. paste	0.29	meq/L		0.04		SW6010B	07/12/07 15:41 / ts
Sodium, sat. paste	9.6	meq/L		0.02		SW6010B	07/12/07 15:41 / ts
Sodium Adsorption Ratio (SAR)	12.6	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	19.1	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	14.6	mg/kg-dry	D	0.06		SW6020	07/07/07 01:50 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:14 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.170	mg/kg-dry		0.005		A3114 B	07/17/07 09:13 / kes
Selenium	0.062	mg/kg-dry		0.005		A3114 B	07/17/07 14:31 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 18:54 / sml
Copper	1.2	mg/kg-dry	D	0.5		SW6020	07/17/07 18:54 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 18:54 / sml
Zinc	3.02	mg/kg-dry		0.01		SW6020	07/23/07 15:23 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	13	mg/kg-dry		5		SW6010B	07/17/07 18:46 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	7.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	34	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	59	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	C			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-033
Client Sample ID PO4-TP4-112

Report Date: 08/21/07
Collection Date: 06/21/07 13:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.64	%		0.02		ASA29-3	07/17/07 09:38 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-034
 Client Sample ID PO4-TP4-113

Report Date: 08/21/07
 Collection Date: 06/21/07 13:55
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	2.0	mg/L		0.2		E200.7	07/25/07 15:41 / ts
Magnesium	0.56	mg/L	D	0.04		E200.7	07/25/07 15:41 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:41 / ts
Sodium	58	mg/L		5		E200.7	07/25/07 15:41 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.5	mg/L		0.1		E200.8	07/09/07 16:08 / bws
Arsenic	0.007	mg/L		0.001		E200.8	07/09/07 16:08 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 16:08 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 16:08 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 16:08 / bws
Molybdenum	0.068	mg/L		0.001		E200.8	07/09/07 16:08 / bws
Selenium	0.003	mg/L		0.001		E200.8	07/09/07 16:08 / bws
Uranium	1.54	mg/L		0.0001		E200.8	07/09/07 16:08 / bws
Vanadium	0.095	mg/L		0.005		E200.8	07/09/07 16:08 / bws
METALS - TOTAL							
Uranium	809	mg/kg-dry	D	0.03		SW6020	07/11/07 07:51 / bws
RADIONUCLIDES - GAMMA							
Radium 226	266	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	23.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	1900	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	11.7	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	48.2	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	2.0	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	985	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	6.0	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	155	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	5.2	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-035
 Client Sample ID PO3-TP3-114

Report Date: 08/21/07
 Collection Date: 06/21/07 14:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	364	mg/kg-dry	D	0.02		SW6020	07/11/07 07:55 / bws
RADIONUCLIDES - GAMMA							
Radium 226	221	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	24.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	622	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	4.8	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	99	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	4.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-036
Client Sample ID PO3-TP3-115

Report Date: 08/21/07
Collection Date: 06/21/07 14:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.29	mmhos/cm		0.01		ASAM10-3	07/06/07 09:07 / jb
Saturation Percentage	177	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.4	s.u.		0.01		ASAM10-3.2	07/06/07 09:07 / jb
Nitrogen, Nitrate+Nitrite as N	1.8	mg/kg-dry		1.0		E353 2	07/13/07 14:38 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	11.6	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	101	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	1.0	meq/L		0.02		SW6010B	07/12/07 15:44 / ts
Magnesium, sat. paste	0.43	meq/L		0.04		SW6010B	07/12/07 15:44 / ts
Sodium, sat. paste	1.5	meq/L		0.02		SW6010B	07/12/07 15:44 / ts
Sodium Adsorption Ratio (SAR)	1.79	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	21.7	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	13.8	mg/kg-dry		0.05		SW6020	07/07/07 01:58 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:16 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.121	mg/kg-dry		0.005		A3114 B	07/17/07 09:15 / kes
Selenium	0.024	mg/kg-dry		0.005		A3114 B	07/17/07 14:33 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 19:19 / sml
Copper	1.7	mg/kg-dry	D	0.5		SW6020	07/17/07 19:19 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 19:19 / sml
Zinc	3.08	mg/kg-dry		0.01		SW6020	07/23/07 15:28 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	10	mg/kg-dry		5		SW6010B	07/17/07 18:50 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	21	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	35	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	44	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	C			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	ND	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-036
Client Sample ID PO3-TP3-115

Report Date: 08/21/07
Collection Date: 06/21/07 14:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.88	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-037
 Client Sample ID PO3-TP3-116

Report Date: 08/21/07
 Collection Date: 06/21/07 14:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	4.5	mg/L		0.2		E200.7	07/25/07 15:44 / ts
Magnesium	1.03	mg/L	D	0.04		E200.7	07/25/07 15:44 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:44 / ts
Sodium	21	mg/L		5		E200.7	07/25/07 15:44 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.7	mg/L		0.1		E200.8	07/09/07 16:41 / bws
Arsenic	0.003	mg/L		0.001		E200.8	07/09/07 16:41 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 16:41 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 16:41 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 16:41 / bws
Molybdenum	0.016	mg/L		0.001		E200.8	07/09/07 16:41 / bws
Selenium	0.001	mg/L		0.001		E200.8	07/09/07 16:41 / bws
Uranium	0.155	mg/L		0.0001		E200.8	07/09/07 16:41 / bws
Vanadium	0.099	mg/L		0.005		E200.8	07/09/07 16:41 / bws
METALS - TOTAL							
Uranium	674	mg/kg-dry	D	0.03		SW6020	07/11/07 08:00 / bws
RADIONUCLIDES - GAMMA							
Radium 226	161	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	17.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	205	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Gross Alpha precision (±)	4.1	pCi/L				E900.0	07/15/07 04:49 / res
Radium 226	12.1	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	1	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	1140	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	6.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	280	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	7.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-038
Client Sample ID: BG-TP1-124

Report Date: 08/21/07
Collection Date: 06/21/07 16:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	6.49	mg/kg-dry	D	0.03		SW6020	07/11/07 08:04 / bws
RADIONUCLIDES - GAMMA							
Radium 226	3.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.4	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	17.6	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.8	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	1.1	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-039
Client Sample ID BG-TP1-125

Report Date: 08/21/07
Collection Date: 06/21/07 16:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.52	mg/kg-dry	D	0.03		SW6020	07/11/07 08:08 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	6.4	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-040
Client Sample ID BG-TP2-126

Report Date: 08/21/07
Collection Date: 06/21/07 16:15
Date Received: 08/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	2.63	mg/kg-dry	D	0.02		SW6020	07/11/07 08:12 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.0	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	10.2	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.5	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-041
Client Sample ID BG-TP2-127

Report Date: 08/21/07
Collection Date: 06/21/07 16:20
DateReceived: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.95	mg/kg-dry	D	0.03		SW6020	07/11/07 08:16 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	11.3	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.7	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-042
Client Sample ID BG-TP3-120

Report Date: 08/21/07
Collection Date: 06/21/07 15:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.67	mg/kg-dry	D	0.02		SW6020	07/11/07 08:20 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	10.1	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-043
Client Sample ID BG-TP3-310

Report Date: 08/21/07
Collection Date: 06/21/07 15:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.67	mg/kg-dry	D	0.03		SW6020	07/11/07 08:41 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.7	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.4	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-044
Client Sample ID BG-TP3-121

Report Date: 08/21/07
Collection Date: 06/21/07 15:35
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.47	mg/kg-dry	D	0.03		SW6020	07/11/07 08:45 / bws
RADIONUCLIDES - GAMMA							
Radium 226	1.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	7.7	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-045
Client Sample ID TO-TP1-015

Report Date: 08/21/07
Collection Date: 06/19/07 08:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.02	mg/kg-dry	D	0.02		SW6020	07/11/07 08:49 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	6.6	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-046
 Client Sample ID TO-TP1-016

Report Date: 08/21/07
 Collection Date: 06/19/07 08:55
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.86	mmhos/cm		0.01		ASAM10-3	07/06/07 09:08 / jb
Saturation Percentage	61.0	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	7.4	s.u.		0.01		ASAM10-3.2	07/06/07 09:08 / jb
Nitrogen, Nitrate+Nitrite as N	ND	mg/kg-dry		1.0		E353.2	07/13/07 14:41 / jal
Chloride, soluble	19.0	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	7.2	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	1370	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	27	meq/L		0.02		SW6010B	07/12/07 15:47 / ts
Magnesium, sat. paste	16	meq/L		0.04		SW6010B	07/12/07 15:47 / ts
Sodium, sat. paste	10	meq/L		0.02		SW6010B	07/12/07 15:47 / ts
Sodium Adsorption Ratio (SAR)	2.26	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	6.1	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	20.4	mg/kg-dry	D	0.06		SW6020	07/07/07 02:05 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:18 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.037	mg/kg-dry		0.005		A3114 B	07/17/07 09:17 / kes
Selenium	0.009	mg/kg-dry		0.005		A3114 B	07/17/07 14:35 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/23/07 15:33 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 19:24 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 19:24 / sml
Zinc	0.18	mg/kg-dry		0.01		SW6020	07/23/07 15:33 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	7	mg/kg-dry		5		SW6010B	07/17/07 18:53 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	40	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	27	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	33	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	CL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	13	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-046
Client Sample ID TO-TP1-016

Report Date: 08/21/07
Collection Date: 06/19/07 08:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.15	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-047
Client Sample ID TO-TP1-017

Report Date: 08/21/07
Collection Date: 06/19/07 09:05
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.83	mg/kg-dry	D	0.03		SW6020	07/11/07 08:53 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	7.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-048
 Client Sample ID TO-TP1-018

Report Date: 08/21/07
 Collection Date: 06/19/07 09:15
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.64	mg/kg-dry	D	0.03		SW6020	07/11/07 08:58 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	4.6	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	ND	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-049
Client Sample ID TO-TP1-019

Report Date: 08/21/07
Collection Date: 06/19/07 09:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.79	mg/kg-dry	D	0.03		SW6020	07/11/07 09:43 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	9.8	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/18/07 15:00 / dmf
Thorium 230 precision (±)	0.08	pCi/g-dry				E907.0	07/18/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-050
Client Sample ID OS1-TP6-079

Report Date: 08/21/07
Collection Date: 06/21/07 09:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	76.0	mg/kg-dry	D	0.03		SW6020	07/11/07 09:47 / bws
RADIONUCLIDES - GAMMA							
Radium 226	13.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	61.3	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	11	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.5	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-051
Client Sample ID OS1-TP6-080

Report Date: 08/21/07
Collection Date: 06/21/07 09:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	2.68	mmhos/cm		0.01		ASAM10-3	07/06/07 09:09 / jb
Saturation Percentage	49.8	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	5.9	s.u.		0.01		ASAM10-3.2	07/06/07 09:09 / jb
Nitrogen, Nitrate+Nitrite as N	ND	mg/kg-dry		1.0		E353.2	07/13/07 14:43 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	5.7	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	803	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	24	meq/L		0.02		SW6010B	07/12/07 16:07 / ts
Magnesium, sat. paste	11	meq/L		0.04		SW6010B	07/12/07 16:07 / ts
Sodium, sat. paste	1.7	meq/L		0.02		SW6010B	07/12/07 16:07 / ts
Sodium Adsorption Ratio (SAR)	0.40	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	5.6	%		0.1		USDA26	07/03/07 08:12 / dcj
METALS - TOTAL							
Chromium	4.8	mg/kg-dry	D	0.06		SW6020	07/07/07 03:27 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:20 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.068	mg/kg-dry		0.005		A3114 B	07/17/07 09:19 / kes
Selenium	0.006	mg/kg-dry		0.005		A3114 B	07/17/07 14:38 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/23/07 15:38 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/23/07 15:38 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 15:38 / sml
Zinc	0.67	mg/kg-dry		0.01		SW6020	07/23/07 15:38 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	20	mg/kg-dry		5		SW6010B	07/17/07 18:56 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	89	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	5.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	6.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	S			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-051
Client Sample ID OS1-TP6-080

Report Date: 08/21/07
Collection Date: 06/21/07 09:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.18	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-052
Client Sample ID: BG-TP4-122

Report Date: 08/21/07
Collection Date: 06/21/07
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	9.18	mg/kg-dry	D	0.03		SW6020	07/11/07 09:51 / bws
RADIONUCLIDES - GAMMA							
Radium 226	3.4	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	23.4	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.9	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	2.2	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-053
Client Sample ID BG-TP4-123

Report Date: 08/21/07
Collection Date: 06/21/07
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	7.20	mg/kg-dry	D	0.02		SW6020	07/11/07 09:55 / bws
RADIONUCLIDES - GAMMA							
Radium 226	2.0	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	15.5	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.8	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	1.9	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-054
 Client Sample ID TN-TP1-071

Report Date: 08/21/07
 Collection Date: 06/20/07 15:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.79	mmhos/cm		0.01		ASAM10-3	07/06/07 09:10 / jb
Saturation Percentage	51.7	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.0	s.u.		0.01		ASAM10-3.2	07/06/07 09:10 / jb
Nitrogen, Nitrate+Nitrite as N	1.1	mg/kg-dry		1.0		E353.2	07/13/07 14:46 / jal
Chloride, soluble	8.5	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	4.8	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	146	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	3.4	meq/L		0.02		SW6010B	07/12/07 16:10 / ts
Magnesium, sat. paste	3.0	meq/L		0.04		SW6010B	07/12/07 16:10 / ts
Sodium, sat. paste	2.3	meq/L		0.02		SW6010B	07/12/07 16:10 / ts
Sodium Adsorption Ratio (SAR)	1.31	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	3.5	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	12.7	mg/kg-dry	D	0.07		SW6020	07/07/07 03:34 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:23 / kes
Uranium	0.60	mg/kg-dry	D	0.03		SW6020	07/11/07 10:00 / bws
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.028	mg/kg-dry		0.005		A3114 B	07/17/07 09:21 / kes
Selenium	0.005	mg/kg-dry		0.005		A3114 B	07/17/07 14:40 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/17/07 19:33 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 19:33 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 19:33 / sml
Zinc	0.10	mg/kg-dry		0.01		SW6020	07/23/07 15:43 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	11	mg/kg-dry		5		SW6010B	07/17/07 19:00 / cp
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	7.4	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	ND	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-054
Client Sample ID TN-TP1-071

Report Date: 08/21/07
Collection Date: 06/20/07 15:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	59	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	24	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	17	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.4	%		1.0		ASA15-5	07/18/07 08:49 / mkf
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.24	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-055
 Client Sample ID TN-TP1-072

Report Date: 08/21/07
 Collection Date: 06/20/07 15:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.76	mmhos/cm		0.01		ASAM10-3	07/06/07 09:11 / jb
Saturation Percentage	63.5	%		0.1		USDA27a	07/06/07 09:53 / jb
pH, sat. paste	8.1	s.u.		0.01		ASAM10-3.2	07/06/07 09:11 / jb
Nitrogen, Nitrate+Nitrite as N	ND	mg/kg-dry		1.0		E353.2	07/13/07 14:53 / jal
Chloride, soluble	9.1	mg/kg-dry		5.0		SW6010B	07/16/07 15:17 / sec
Potassium, soluble	5.9	mg/kg-dry		1.0		SW6010B	07/16/07 15:17 / sec
Sulfate, soluble	176	mg/kg-dry		0.10		SW6010B	07/16/07 15:17 / sec
Calcium, sat. paste	3.7	meq/L		0.02		SW6010B	07/12/07 16:14 / ts
Magnesium, sat. paste	3.0	meq/L		0.04		SW6010B	07/12/07 16:14 / ts
Sodium, sat. paste	2.0	meq/L		0.02		SW6010B	07/12/07 16:14 / ts
Sodium Adsorption Ratio (SAR)	1.12	unitless		0.01		Calculation	07/16/07 15:24 / dab
PHYSICAL PROPERTIES							
Moisture	3.7	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	12.3	mg/kg-dry	D	0.07		SW6020	07/07/07 03:42 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/09/07 14:25 / kes
Uranium	0.63	mg/kg-dry	D	0.03		SW6020	07/11/07 10:04 / bws
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.028	mg/kg-dry		0.005		A3114 B	07/17/07 09:36 / kes
Selenium	0.007	mg/kg-dry		0.005		A3114 B	07/17/07 14:55 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/17/07 19:53 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 19:53 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 19:53 / sml
Zinc	0.11	mg/kg-dry		0.01		SW6020	07/23/07 17:23 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	8	mg/kg-dry		5		SW6010B	07/17/07 19:03 / cp
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	5.6	pCi/g-dry		2.0		E900.0	07/09/07 10:00 / res
Gross Alpha precision (±)	0.5	pCi/g-dry				E900.0	07/09/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-055
Client Sample ID: TN-TP1-072

Report Date: 08/21/07
Collection Date: 06/20/07 15:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/20/07 15:00 / dmf
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	65	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	15	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	20	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL - SCL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.3	%		1.0		ASA15-5	07/18/07 08:49 / mkf
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.25	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-056
 Client Sample ID TN-TP1-073

Report Date: 08/21/07
 Collection Date: 06/20/07 15:05
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	6.0	mg/L		0.2		E200.7	07/25/07 15:47 / ts
Magnesium	4.36	mg/L	D	0.04		E200.7	07/25/07 15:47 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:47 / ts
Sodium	13	mg/L		5		E200.7	07/25/07 15:47 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.9	mg/L		0.1		E200.8	07/09/07 16:48 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 16:48 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 16:48 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 16:48 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 16:48 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 16:48 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 16:48 / bws
Uranium	0.0002	mg/L		0.0001		E200.8	07/09/07 16:48 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 16:48 / bws
METALS - TOTAL							
Uranium	0.63	mg/kg-dry	D	0.03		SW6020	07/11/07 10:08 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	ND	pCi/L		1.0		E900.0	07/15/07 04:49 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	9.2	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	ND	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-057
Client Sample ID TN-TP1-074

Report Date: 08/21/07
Collection Date: 06/20/07 15:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.65	mg/kg-dry	D	0.03		SW6020	07/11/07 10:29 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.3	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-058
Client Sample ID TN-TP1-075

Report Date: 08/21/07
Collection Date: 06/20/07 15:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	0.51	mg/kg-dry	D	0.03		SW6020	07/11/07 10:33 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.8	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	0.2	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.07	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-059
Client Sample ID AR7-TP1-076

Report Date: 08/21/07
Collection Date: 06/20/07 15:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	286	mg/kg-dry	D	0.03		SW6020	07/11/07 10:37 / bws
RADIONUCLIDES - GAMMA							
Radium 226	94.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.1	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	530	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	71	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-060
Client Sample ID AR15-TP1-077

Report Date: 08/21/07
Collection Date: 06/20/07 16:05
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	99.1	mg/kg-dry	D	0.03		SW6020	07/11/07 10:41 / bws
RADIONUCLIDES - GAMMA							
Radium 226	42.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.6	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	181	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	50	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-061
 Client Sample ID AR19-TP1-078

Report Date: 08/21/07
 Collection Date: 06/20/07 16:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	254	mg/kg-dry	D	0.03		SW6020	07/11/07 10:45 / bws
RADIONUCLIDES - GAMMA							
Radium 226	52.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	230	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.9	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	39	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-062
Client Sample ID AR24-TP1-083

Report Date: 08/21/07
Collection Date: 06/21/07 09:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	17.8	mg/kg-dry	D	0.03		SW6020	07/11/07 10:49 / bws
RADIONUCLIDES - GAMMA							
Radium 226	7.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.5	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	45.1	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	1.3	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	4.2	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-063
Client Sample ID: AR34-TP1-084

Report Date: 08/21/07
Collection Date: 06/21/07 10:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	90.7	mg/kg-dry	D	0.02		SW6020	07/11/07 10:54 / bws
RADIONUCLIDES - GAMMA							
Radium 226	14.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	61.5	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	13	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.5	pCi/g-dry				E907.0	07/20/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-064
Client Sample ID: SA-TP1-089

Report Date: 08/21/07
Collection Date: 06/21/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.82	mmhos/cm		0.01		ASAM10-3	07/10/07 09:41 / jb
Saturation Percentage	64.8	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	7.7	s.u.		0.01		ASAM10-3.2	07/10/07 09:41 / jb
Nitrogen, Nitrate+Nitrite as N	2.0	mg/kg-dry		1.0		E353.2	07/13/07 14:56 / jal
Chloride, soluble	8.0	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	11.4	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	194	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	8.5	meq/L		0.02		SW6010B	07/17/07 10:16 / ts
Magnesium, sat. paste	0.98	meq/L		0.04		SW6010B	07/17/07 10:16 / ts
Sodium, sat. paste	0.36	meq/L		0.02		SW6010B	07/17/07 10:16 / ts
Sodium Adsorption Ratio (SAR)	0.16	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	5.9	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	15.5	mg/kg-dry	D	0.06		SW6020	07/07/07 03:49 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 10:54 / kes
Uranium	1.91	mg/kg-dry	D	0.03		SW6020	07/11/07 10:58 / bws
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.038	mg/kg-dry		0.005		A3114 B	07/17/07 09:38 / kes
Selenium	0.005	mg/kg-dry		0.005		A3114 B	07/17/07 14:57 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 19:58 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 19:58 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 19:58 / sml
Zinc	1.06	mg/kg-dry		0.01		SW6020	07/23/07 17:28 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	12	mg/kg-dry		5		SW6010B	07/17/07 19:06 / cp
RADIONUCLIDES - GAMMA							
Radium 226	1.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	8.0	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.6	pCi/g-dry				E900.0	07/11/07 10:00 / res

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-064
Client Sample ID SA-TP1-089

Report Date: 08/21/07
Collection Date: 06/21/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Thorium 230	0.5	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/20/07 15:00 / dmf
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	42	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	31	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	27	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	CL - L			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.3	%		1.0		ASA15-5	07/18/07 08:49 / mkf
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.82	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-065
Client Sample ID: SA-TP1-090

Report Date: 08/21/07
Collection Date: 06/21/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.60	mmhos/cm		0.01		ASAM10-3	07/10/07 09:44 / jb
Saturation Percentage	63.7	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	7.8	s.u.		0.01		ASAM10-3.2	07/10/07 09:44 / jb
Nitrogen, Nitrate+Nitrite as N	1.9	mg/kg-dry		1.0		E353.2	07/13/07 14:58 / jal
Chloride, soluble	6.4	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	9.9	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	117	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	6.2	meq/L		0.02		SW6010B	07/17/07 10:20 / ts
Magnesium, sat. paste	0.68	meq/L		0.04		SW6010B	07/17/07 10:20 / ts
Sodium, sat. paste	0.30	meq/L		0.02		SW6010B	07/17/07 10:20 / ts
Sodium Adsorption Ratio (SAR)	0.16	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	5.5	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	13.7	mg/kg-dry	D	0.06		SW6020	07/07/07 03:57 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 10:56 / kes
Uranium	2.85	mg/kg-dry	D	0.03		SW6020	07/13/07 02:16 / bws
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.040	mg/kg-dry		0.005		A3114 B	07/17/07 09:40 / kes
Selenium	0.006	mg/kg-dry		0.005		A3114 B	07/17/07 14:59 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:22 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 20:22 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 20:22 / sml
Zinc	1.05	mg/kg-dry		0.01		SW6020	07/23/07 17:32 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	12	mg/kg-dry		5		SW6010B	07/17/07 19:09 / cp
RADIONUCLIDES - GAMMA							
Radium 226	1.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	3.9	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.4	pCi/g-dry				E900.0	07/11/07 10:00 / res

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-065
Client Sample ID SA-TP1-090

Report Date: 08/21/07
Collection Date: 06/21/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Thorium 230	0.5	pCi/g-dry		0.2		E907.0	07/20/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/20/07 15:00 / dmf
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	41	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	25	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	34	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	CL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.5	%		1.0		ASA15-5	07/18/07 08:49 / mkf
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.81	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-066
Client Sample ID SA-TP1-307

Report Date: 08/21/07
Collection Date: 06/21/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1.44	mg/kg-dry	D	0.03		SW6020	07/12/07 00:03 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	3.6	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	0.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	ND	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-067
 Client Sample ID SA-TP1-091

Report Date: 08/21/07
 Collection Date: 06/21/07 10:45
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	10.8	mg/L		0.2		E200.7	07/25/07 15:51 / ts
Magnesium	0.86	mg/L	D	0.04		E200.7	07/25/07 15:51 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:51 / ts
Sodium	26	mg/L		5		E200.7	07/25/07 15:51 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.3	mg/L		0.1		E200.8	07/09/07 16:55 / bws
Arsenic	0.001	mg/L		0.001		E200.8	07/09/07 16:55 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 16:55 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 16:55 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 16:55 / bws
Molybdenum	0.001	mg/L		0.001		E200.8	07/09/07 16:55 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 16:55 / bws
Uranium	0.0010	mg/L		0.0001		E200.8	07/09/07 16:55 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 16:55 / bws
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	ND	pCi/L		1.0		E900.0	07/15/07 04:50 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-068
 Client Sample ID P7-TP2-021

Report Date: 08/21/07
 Collection Date: 06/19/07 10:40
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	137	mg/kg-dry	D	0.03		SW6020	07/12/07 00:07 / bws
RADIONUCLIDES - GAMMA							
Radium 226	26.9	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.1	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	163	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	19	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.5	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-069
Client Sample ID: P7-TP2-020

Report Date: 08/21/07
Collection Date: 06/19/07 10:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	2.13	mmhos/cm		0.01		ASAM10-3	07/10/07 09:46 / jb
Saturation Percentage	43.1	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.5	s.u.		0.01		ASAM10-3.2	07/10/07 09:46 / jb
Nitrogen, Nitrate+Nitrite as N	1.7	mg/kg-dry		1.0		E353.2	07/13/07 15:01 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	6.2	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	569	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	16	meq/L		0.02		SW6010B	07/17/07 10:26 / ts
Magnesium, sat. paste	6.9	meq/L		0.04		SW6010B	07/17/07 10:23 / ts
Sodium, sat. paste	1.8	meq/L		0.02		SW6010B	07/17/07 10:23 / ts
Sodium Adsorption Ratio (SAR)	0.54	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	3.6	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	2.2	mg/kg-dry		0.05		SW6020	07/07/07 05:18 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 10:58 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.020	mg/kg-dry		0.005		A3114 B	07/17/07 09:42 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 15:02 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:27 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 20:27 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 20:27 / sml
Zinc	0.48	mg/kg-dry		0.01		SW6020	07/23/07 17:37 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	6	mg/kg-dry		5		SW6010B	07/17/07 19:13 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	79	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	7.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	14	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-069
Client Sample ID P7-TP2-020

Report Date: 08/21/07
Collection Date: 06/19/07 10:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.15	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-070
Client Sample ID: P7-TP2-300

Report Date: 08/21/07
Collection Date: 06/19/07 10:14
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	87.4	mg/kg-dry	D	0.03		SW6020	07/12/07 00:11 / bws
RADIONUCLIDES - GAMMA							
Radium 226	26.9	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.4	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	163	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	18	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	0.9	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL Increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-071
Client Sample ID: P7-TP2-022

Report Date: 08/21/07
Collection Date: 06/19/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	30.6	mg/L		0.2		E200.7	07/25/07 15:54 / ts
Magnesium	4.62	mg/L	D	0.04		E200.7	07/25/07 15:54 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 15:54 / ts
Sodium	17	mg/L		5		E200.7	07/25/07 15:54 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.2	mg/L		0.1		E200.8	07/09/07 17:02 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 17:02 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 17:02 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:02 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 17:02 / bws
Molybdenum	0.001	mg/L		0.001		E200.8	07/09/07 17:02 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:02 / bws
Uranium	0.0886	mg/L		0.0001		E200.8	07/09/07 17:02 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 17:02 / bws
METALS - TOTAL							
Uranium	108	mg/kg-dry	D	0.03		SW6020	07/12/07 00:15 / bws
RADIONUCLIDES - GAMMA							
Radium 226	23.6	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	48.3	pCi/L		1.0		E900.0	07/15/07 04:50 / res
Gross Alpha precision (±)	2.0	pCi/L				E900.0	07/15/07 04:50 / res
Radium 226	2.0	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	0.5	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	148	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.3	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	21	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.1	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-072
 Client Sample ID P7-TP3-023

Report Date: 08/21/07
 Collection Date: 06/19/07 11:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	175	mg/kg-dry	D	0.03		SW6020	07/12/07 00:20 / bws
RADIONUCLIDES - GAMMA							
Radium 226	35.6	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.4	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	186	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	28	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.2	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-073
Client Sample ID P7-TP3-024

Report Date: 08/21/07
Collection Date: 06/19/07 11:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.12	mmhos/cm		0.01		ASAM10-3	07/10/07 09:48 / jb
Saturation Percentage	45.9	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	5.2	s.u.		0.01		ASAM10-3.2	07/10/07 09:48 / jb
Nitrogen, Nitrate+Nitrite as N	2.0	mg/kg-dry		1.0		E353.2	07/13/07 15:03 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	3.9	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	278	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	3.3	meq/L		0.02		SW6010B	07/17/07 10:37 / ts
Magnesium, sat. paste	3.7	meq/L		0.04		SW6010B	07/17/07 10:37 / ts
Sodium, sat. paste	3.5	meq/L		0.02		SW6010B	07/17/07 10:37 / ts
Sodium Adsorption Ratio (SAR)	1.85	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	4.6	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	3.3	mg/kg-dry		0.05		SW6020	07/07/07 05:25 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:01 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.104	mg/kg-dry		0.005		A3114 B	07/17/07 09:45 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 15:04 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:32 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 20:32 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 20:32 / sml
Zinc	0.30	mg/kg-dry		0.01		SW6020	07/23/07 17:42 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 19:32 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	77	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	7.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	16	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	1.7	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-073
Client Sample ID: P7-TP3-024

Report Date: 08/21/07
Collection Date: 06/19/07 11:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.09	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-074
 Client Sample ID P7-TP3-026

Report Date: 08/21/07
 Collection Date: 06/19/07 11:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	11.9	mg/L		0.2		E200.7	07/25/07 16:04 / ts
Magnesium	3.12	mg/L	D	0.04		E200.7	07/25/07 16:04 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:04 / ts
Sodium	14	mg/L		5		E200.7	07/25/07 16:04 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/09/07 17:08 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 17:08 / bws
Barium	0.01	mg/L		0.01		E200.8	07/09/07 17:08 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:08 / bws
Manganese	0.09	mg/L		0.01		E200.8	07/09/07 17:08 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 17:08 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:08 / bws
Uranium	0.0101	mg/L		0.0001		E200.8	07/09/07 17:08 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 17:08 / bws
METALS - TOTAL							
Uranium	332	mg/kg-dry	D	0.03		SW6020	07/12/07 00:24 / bws
RADIONUCLIDES - GAMMA							
Radium 226	65.5	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	2.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	48.2	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	2.1	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	17.0	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	1.2	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	555	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.5	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	65	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	2.2	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit. MCL - Maximum contaminant level.
 Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-075
 Client Sample ID P7-TP4-048

Report Date: 08/21/07
 Collection Date: 06/20/07 09:35
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	385	mg/kg-dry	D	0.03		SW6020	07/12/07 00:44 / bws
RADIONUCLIDES - GAMMA							
Radium 226	119	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	706	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	5.0	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	107	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	3.0	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-076
 Client Sample ID P7-TP4-049

Report Date: 08/21/07
 Collection Date: 06/20/07 09:35
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.70	mmhos/cm		0.01		ASAM10-3	07/10/07 09:50 / jb
Saturation Percentage	55.4	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.0	s.u.		0.01		ASAM10-3.2	07/10/07 09:50 / jb
Nitrogen, Nitrate+Nitrite as N	ND	mg/kg-dry		1.0		E353.2	07/13/07 15:08 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	7.3	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	526	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	11	meq/L		0.02		SW6010B	07/17/07 10:40 / ts
Magnesium, sat. paste	2.8	meq/L		0.04		SW6010B	07/17/07 10:40 / ts
Sodium, sat. paste	3.9	meq/L		0.02		SW6010B	07/17/07 10:40 / ts
Sodium Adsorption Ratio (SAR)	1.45	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	6.1	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	1.6	mg/kg-dry	D	0.06		SW6020	07/07/07 05:33 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:03 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.019	mg/kg-dry		0.005		A3114 B	07/17/07 09:47 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 15:06 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/17/07 20:37 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 20:37 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 20:37 / sml
Zinc	0.24	mg/kg-dry		0.01		SW6020	07/23/07 17:47 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	6	mg/kg-dry		5		SW6010B	07/17/07 19:36 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	81	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	8.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	11	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	2.1	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-076
Client Sample ID P7-TP4-049

Report Date: 08/21/07
Collection Date: 06/20/07 09:35
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.10	%		0.02		ASA29-3	07/17/07 09:39 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-077
Client Sample ID: P7-TP4-050

Report Date: 08/21/07
Collection Date: 06/20/07 09:40
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	ND	mg/L		0.2		E200.7	07/25/07 16:08 / ts
Magnesium	0.08	mg/L	D	0.04		E200.7	07/25/07 16:08 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:08 / ts
Sodium	27	mg/L		5		E200.7	07/25/07 16:08 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.5	mg/L		0.1		E200.8	07/09/07 17:15 / bws
Arsenic	0.002	mg/L		0.001		E200.8	07/09/07 17:15 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 17:15 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:15 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 17:15 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 17:15 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:15 / bws
Uranium	0.0346	mg/L		0.0001		E200.8	07/09/07 17:15 / bws
Vanadium	0.013	mg/L		0.005		E200.8	07/09/07 17:15 / bws
METALS - TOTAL							
Uranium	293	mg/kg-dry	D	0.03		SW6020	07/12/07 00:48 / bws
RADIONUCLIDES - GAMMA							
Radium 226	91.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	85.9	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	2.8	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	9.2	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	0.9	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	498	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.2	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	48	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	2.0	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-078
Client Sample ID P7-TP4-303

Report Date: 08/21/07
Collection Date: Not Provided
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	302	mg/kg-dry	D	0.03		SW6020	07/12/07 00:52 / bws
RADIONUCLIDES - GAMMA							
Radium 226	98.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.6	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	441	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.0	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	54	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.9	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.

MCL - Maximum contaminant level.

Definitions: QCL - Quality control limit.

ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-079
Client Sample ID P7-TP5-053

Report Date: 08/21/07
Collection Date: 06/20/07 10:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	182	mg/kg-dry	D	0.03		SW6020	07/12/07 00:57 / bws
RADIONUCLIDES - GAMMA							
Radium 226	39.8	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.6	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	196	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	34	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.8	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-080
 Client Sample ID P7-TP5-054

Report Date: 08/21/07
 Collection Date: 06/20/07 10:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.80	mmhos/cm		0.01		ASAM10-3	07/10/07 09:52 / jb
Saturation Percentage	71.5	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	8.8	s.u.		0.01		ASAM10-3.2	07/10/07 09:52 / jb
Nitrogen, Nitrate+Nitrite as N	4.9	mg/kg-dry		1.0		E353.2	07/13/07 15:11 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	4.7	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	183	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	0.21	meq/L		0.02		SW6010B	07/17/07 10:43 / ts
Magnesium, sat. paste	0.11	meq/L		0.04		SW6010B	07/17/07 10:43 / ts
Sodium, sat. paste	7.6	meq/L		0.02		SW6010B	07/17/07 10:43 / ts
Sodium Adsorption Ratio (SAR)	19.1	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	5.9	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	4.9	mg/kg-dry	D	0.06		SW6020	07/07/07 06:10 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:24 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.040	mg/kg-dry		0.005		A3114 B	07/17/07 09:49 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/17/07 15:08 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:42 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 20:42 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 20:42 / sml
Zinc	0.89	mg/kg-dry		0.01		SW6020	07/23/07 17:52 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 19:39 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	78	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	8.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	14	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	1.6	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-080
Client Sample ID P7-TP5-054

Report Date: 08/21/07
Collection Date: 06/20/07 10:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.12	%		0.02		ASA29-3	07/17/07 09:40 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-081
 Client Sample ID P7-TP5-055

Report Date: 08/21/07
 Collection Date: 06/20/07 10:15
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	0.8	mg/L		0.2		E200.7	07/25/07 16:11 / ts
Magnesium	0.30	mg/L	D	0.04		E200.7	07/25/07 16:11 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:11 / ts
Sodium	27	mg/L		5		E200.7	07/25/07 16:11 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.7	mg/L		0.1		E200.8	07/09/07 17:22 / bws
Arsenic	0.002	mg/L		0.001		E200.8	07/09/07 17:22 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 17:22 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:22 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 17:22 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 17:22 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:22 / bws
Uranium	0.204	mg/L		0.0001		E200.8	07/09/07 17:22 / bws
Vanadium	0.014	mg/L		0.005		E200.8	07/09/07 17:22 / bws
METALS - TOTAL							
Uranium	154	mg/kg-dry	D	0.03		SW6020	07/12/07 01:01 / bws
RADIONUCLIDES - GAMMA							
Radium 226	47.4	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	199	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	4.0	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	4.4	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	0.7	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	261	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	3.1	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	21	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.4	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-082
Client Sample ID P7-TP1-001

Report Date: 08/21/07
Collection Date: 06/18/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	20.9	mg/kg-dry	D	0.03		SW6020	07/12/07 01:05 / bws
RADIONUCLIDES - GAMMA							
Radium 226	10	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.6	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	58.6	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	5.3	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	0.6	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-083
Client Sample ID P7-TP1-002

Report Date: 08/21/07
Collection Date: 06/18/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.31	mmhos/cm		0.01		ASAM10-3	07/10/07 09:53 / jb
Saturation Percentage	72.3	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.0	s.u.		0.01		ASAM10-3.2	07/10/07 09:53 / jb
Nitrogen, Nitrate+Nitrite as N	1.7	mg/kg-dry		1.0		E353.2	07/13/07 16:03 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	4.7	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	104	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	0.94	meq/L		0.02		SW6010B	07/17/07 10:47 / ts
Magnesium, sat. paste	0.52	meq/L		0.04		SW6010B	07/17/07 10:47 / ts
Sodium, sat. paste	0.30	meq/L		0.02		SW6010B	07/17/07 10:47 / ts
Sodium Adsorption Ratio (SAR)	0.36	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	6.8	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	5.6	mg/kg-dry		0.05		SW6020	07/07/07 06:18 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:26 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.111	mg/kg-dry		0.005		A3114 B	07/17/07 09:51 / kes
Selenium	0.006	mg/kg-dry		0.005		A3114 B	07/17/07 15:11 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/17/07 20:47 / sml
Copper	1.5	mg/kg-dry	D	0.6		SW6020	07/17/07 20:47 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 20:47 / sml
Zinc	1.27	mg/kg-dry		0.01		SW6020	07/23/07 17:57 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	9	mg/kg-dry		5		SW6010B	07/17/07 19:42 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	73	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	12	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	15	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	3.4	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-083
Client Sample ID: P7-TP1-002

Report Date: 08/21/07
Collection Date: 06/18/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.22	%		0.02		ASA29-3	07/17/07 09:40 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-084
Client Sample ID P7-TP1-005

Report Date: 08/21/07
Collection Date: 06/18/07 15:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	9.8	mg/L		0.2		E200.7	07/25/07 16:21 / ts
Magnesium	3.08	mg/L	D	0.04		E200.7	07/25/07 16:21 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:21 / ts
Sodium	10	mg/L		5		E200.7	07/25/07 16:21 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/09/07 17:28 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 17:28 / bws
Barium	0.02	mg/L		0.01		E200.8	07/09/07 17:28 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:28 / bws
Manganese	0.14	mg/L		0.01		E200.8	07/09/07 17:28 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 17:28 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:28 / bws
Uranium	0.0262	mg/L		0.0001		E200.8	07/09/07 17:28 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 17:28 / bws
METALS - TOTAL							
Uranium	136	mg/kg-dry	D	0.03		SW6020	07/13/07 02:20 / bws
RADIONUCLIDES - GAMMA							
Radium 226	44.2	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	90.6	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	2.8	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	35.3	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	1.8	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	218	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.8	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	29	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	1.6	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-085
 Client Sample ID P6-TP3-037

Report Date: 08/21/07
 Collection Date: 06/19/07 15:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	201	mg/kg-dry	D	0.03		SW6020	07/13/07 02:24 / bws
RADIONUCLIDES - GAMMA							
Radium 226	65.8	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	2.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	365	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	3.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	47	pCi/g-dry		0.2		E907.0	07/23/07 15:00 / dmf
Thorium 230 precision (±)	2.2	pCi/g-dry				E907.0	07/23/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-086
 Client Sample ID P6-TP3-038

Report Date: 08/21/07
 Collection Date: 06/19/07 15:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	2.77	mmhos/cm		0.01		ASAM10-3	07/10/07 09:58 / jb
Saturation Percentage	54.7	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.0	s.u.		0.01		ASAM10-3.2	07/10/07 09:58 / jb
Nitrogen, Nitrate+Nitrite as N	1.6	mg/kg-dry		1.0		E353.2	07/13/07 16:05 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	24.1	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	1000	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	21	meq/L		0.02		SW6010B	07/17/07 11:03 / ts
Magnesium, sat. paste	15	meq/L		0.04		SW6010B	07/17/07 11:03 / ts
Sodium, sat. paste	0.87	meq/L		0.02		SW6010B	07/17/07 10:59 / ts
Sodium Adsorption Ratio (SAR)	0.21	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	7.9	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	3.7	mg/kg-dry	D	0.06		SW6020	07/13/07 12:08 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:28 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.084	mg/kg-dry		0.005		A3114 B	07/17/07 09:53 / kes
Selenium	0.006	mg/kg-dry		0.005		A3114 B	07/17/07 15:13 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:51 / sml
Copper	ND	mg/kg-dry	D	0.5		SW6020	07/17/07 20:51 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 20:51 / sml
Zinc	1.02	mg/kg-dry		0.01		SW6020	07/23/07 18:02 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	10	mg/kg-dry		5		SW6010B	07/17/07 19:46 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	78	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	9.0	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	13	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	3.3	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report: RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-086
Client Sample ID P6-TP3-038

Report Date: 08/21/07
Collection Date: 06/19/07 15:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.09	%		0.02		ASA29-3	07/17/07 09:40 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-087
 Client Sample ID P6-TP3-039

Report Date: 08/21/07
 Collection Date: 06/19/07 15:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	7.7	mg/L		0.2		E200.7	07/25/07 16:24 / ts
Magnesium	5.16	mg/L	D	0.04		E200.7	07/25/07 16:24 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:24 / ts
Sodium	6	mg/L		5		E200.7	07/25/07 16:24 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/09/07 17:35 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 17:35 / bws
Barium	0.03	mg/L		0.01		E200.8	07/09/07 17:35 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 17:35 / bws
Manganese	0.03	mg/L		0.01		E200.8	07/09/07 17:35 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 17:35 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 17:35 / bws
Uranium	0.204	mg/L		0.0001		E200.8	07/09/07 17:35 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 17:35 / bws
METALS - TOTAL							
Uranium	214	mg/kg-dry	D	0.03		SW6020	07/13/07 02:28 / bws
RADIONUCLIDES - GAMMA							
Radium 226	123	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	4.0	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	234	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	4.5	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	42.2	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	1.9	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	888	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	5.6	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	125	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	5.0	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-088
 Client Sample ID P6-TP3-302

Report Date: 08/21/07
 Collection Date: 06/19/07 15:40
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	172	mg/kg-dry	D	0.03		SW6020	07/13/07 02:32 / bws
RADIONUCLIDES - GAMMA							
Radium 226	112	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	608	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.7	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	136	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	6.5	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-089
Client Sample ID P6-TP2-032

Report Date: 08/21/07
Collection Date: 06/19/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	343	mg/kg-dry	D	0.03		SW6020	07/13/07 02:36 / bws
RADIONUCLIDES - GAMMA							
Radium 226	79.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	2.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	491	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.2	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	74	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	4.1	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-090
Client Sample ID P6-TP2-033

Report Date: 08/21/07
Collection Date: 06/19/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.57	mmhos/cm		0.01		ASAM10-3	07/10/07 10:01 / jb
Saturation Percentage	51.7	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	5.3	s.u.		0.01		ASAM10-3.2	07/10/07 10:01 / jb
Nitrogen, Nitrate+Nitrite as N	1.7	mg/kg-dry		1.0		E353.2	07/13/07 16:08 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	5.0	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	141	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	1.1	meq/L		0.02		SW6010B	07/17/07 11:13 / ts
Magnesium, sat. paste	1.4	meq/L		0.04		SW6010B	07/17/07 11:13 / ts
Sodium, sat. paste	3.0	meq/L		0.02		SW6010B	07/17/07 11:13 / ts
Sodium Adsorption Ratio (SAR)	2.75	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	6.5	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	5.0	mg/kg-dry	D	0.07		SW6020	07/13/07 12:13 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:31 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.328	mg/kg-dry		0.005		A3114 B	07/17/07 09:55 / kes
Selenium	0.016	mg/kg-dry		0.005		A3114 B	07/17/07 15:15 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 20:56 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 20:56 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 20:56 / sml
Zinc	0.59	mg/kg-dry		0.01		SW6020	07/23/07 18:27 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	13	mg/kg-dry		5		SW6010B	07/17/07 19:49 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	74	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Silt	12	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Clay	14	%		1.0		ASA15-5	07/18/07 08:49 / mkf
Texture	SL			1.0		ASA15-5	07/18/07 08:49 / mkf
Coarse Fragments	4.6	%		1.0		ASA15-5	07/18/07 08:49 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-090
Client Sample ID: P6-TP2-033

Report Date: 08/21/07
Collection Date: 06/19/07 14:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.09	%		0.02		ASA29-3	07/17/07 09:40 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-091
Client Sample ID P6-TP2-035

Report Date: 08/21/07
Collection Date: 06/19/07 14:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	4.4	mg/L		0.2		E200.7	07/25/07 16:58 / ts
Magnesium	2.72	mg/L	D	0.04		E200.7	07/25/07 16:58 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 16:58 / ts
Sodium	13	mg/L		5		E200.7	07/25/07 16:58 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.4	mg/L		0.1		E200.8	07/09/07 12:39 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 12:39 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 12:39 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 12:39 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 12:39 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 12:39 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 12:39 / bws
Uranium	0.0189	mg/L		0.0001		E200.8	07/09/07 12:39 / bws
Vanadium	0.007	mg/L		0.005		E200.8	07/09/07 12:39 / bws
METALS - TOTAL							
Uranium	421	mg/kg-dry	D	0.03		SW6020	07/13/07 02:40 / bws
RADIONUCLIDES - GAMMA							
Radium 226	106	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	9.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	34.3	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	1.8	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	4.0	pCi/L		1.0		E903.0	07/24/07 13:10 / trs
Radium 226 precision (±)	0.6	pCi/L				E903.0	07/24/07 13:10 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 07:46 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	695	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	5.0	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	99	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	5.0	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
QCL - Quality control limit. ND - Not detected at the reporting limit.
D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-092
Client Sample ID: P6-TP1-028

Report Date: 08/21/07
Collection Date: 06/19/07 13:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	75.5	mg/kg-dry	D	0.03		SW6020	07/13/07 02:45 / bws
RADIONUCLIDES - GAMMA							
Radium 226	41.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	262	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	3.1	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	26	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-093
Client Sample ID: P6-TP1-030

Report Date: 08/21/07
Collection Date: 06/19/07 13:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	0.5	mg/L		0.2		E200.7	07/25/07 17:01 / ts
Magnesium	0.21	mg/L	D	0.04		E200.7	07/25/07 17:01 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:01 / ts
Sodium	7	mg/L		5		E200.7	07/25/07 17:01 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.3	mg/L		0.1		E200.8	07/09/07 13:13 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 13:13 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 13:13 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 13:13 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 13:13 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 13:13 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 13:13 / bws
Uranium	0.0235	mg/L		0.0001		E200.8	07/09/07 13:13 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 13:13 / bws
METALS - TOTAL							
Uranium	76.3	mg/kg-dry	D	0.03		SW6020	07/13/07 03:05 / bws
RADIONUCLIDES - GAMMA							
Radium 226	28.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	18.3	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	1.4	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	2.7	pCi/L		1.0		E903.0	07/24/07 16:15 / trs
Radium 226 precision (±)	0.7	pCi/L				E903.0	07/24/07 16:15 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/17/07 06:12 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	169	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.5	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	19	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	1.9	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-094
Client Sample ID P6-TP1-301

Report Date: 08/21/07
Collection Date: 06/19/07 14:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	80.9	mg/kg-dry	D	0.03		SW6020	07/13/07 03:09 / bws
RADIONUCLIDES - GAMMA							
Radium 226	32.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	2.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	161	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	23	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	2.0	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-095
Client Sample ID: P6-TP4-043

Report Date: 08/21/07
Collection Date: 06/19/07 16:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	1660	mg/kg-dry	D	0.03		SW6020	07/13/07 03:13 / bws
RADIONUCLIDES - GAMMA							
Radium 226	590	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	51.1	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	2490	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	9.5	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	602	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	12	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix Interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-096
Client Sample ID: P6-TP4-044

Report Date: 08/21/07
Collection Date: 06/19/07 16:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	2.67	mmhos/cm		0.01		ASAM10-3	07/10/07 10:00 / jb
Saturation Percentage	55.6	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.6	s.u.		0.01		ASAM10-3.2	07/10/07 10:00 / jb
Nitrogen, Nitrate+Nitrite as N	1.9	mg/kg-dry		1.0		E353.2	07/13/07 16:10 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	4.2	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	989	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	27	meq/L		0.02		SW6010B	07/17/07 11:20 / ts
Magnesium, sat. paste	4.0	meq/L		0.04		SW6010B	07/17/07 11:16 / ts
Sodium, sat. paste	0.16	meq/L		0.02		SW6010B	07/17/07 11:16 / ts
Sodium Adsorption Ratio (SAR)	0.04	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	5.3	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	4.6	mg/kg-dry	D	0.06		SW6020	07/13/07 12:18 / sml
Mercury	0.06	mg/kg-dry		0.05		SW7471A	07/13/07 11:33 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.817	mg/kg-dry	D	0.006		A3114 B	07/19/07 09:03 / kes
Selenium	0.167	mg/kg-dry		0.005		A3114 B	07/19/07 14:21 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 21:45 / sml
Copper	1.7	mg/kg-dry	D	0.5		SW6020	07/17/07 21:45 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 21:45 / sml
Zinc	0.56	mg/kg-dry		0.01		SW6020	07/21/07 19:30 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	12	mg/kg-dry		5		SW6010B	07/17/07 21:14 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	73	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	11	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	16	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	SL			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	1.9	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-096
Client Sample ID P6-TP4-044

Report Date: 08/21/07
Collection Date: 06/19/07 16:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.54	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-097
Client Sample ID: P6-TP4-047

Report Date: 08/21/07
Collection Date: 06/19/07 16:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	24.1	mg/L		0.2		E200.7	07/25/07 17:05 / ts
Magnesium	6.78	mg/L	D	0.04		E200.7	07/25/07 17:05 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:05 / ts
Sodium	ND	mg/L		5		E200.7	07/25/07 17:05 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.3	mg/L		0.1		E200.8	07/09/07 13:46 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 13:46 / bws
Barium	0.02	mg/L		0.01		E200.8	07/09/07 13:46 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 13:46 / bws
Manganese	0.08	mg/L		0.01		E200.8	07/09/07 13:46 / bws
Molybdenum	0.001	mg/L		0.001		E200.8	07/09/07 13:46 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 13:46 / bws
Uranium	0.719	mg/L		0.0001		E200.8	07/09/07 13:46 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 13:46 / bws
METALS - TOTAL							
Uranium	1420	mg/kg-dry	D	0.03		SW6020	07/13/07 03:17 / bws
RADIONUCLIDES - GAMMA							
Radium 226	383	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	33.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	2060	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	12.7	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	385	pCi/L		1.0		E903.0	07/17/07 13:45 / trs
Radium 226 precision (±)	7.1	pCi/L				E903.0	07/17/07 13:45 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/12/07 13:22 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	1640	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	7.7	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	574	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	14	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-098
Client Sample ID: P6-TP5-057

Report Date: 08/21/07
Collection Date: 06/20/07 10:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	46.1	mg/kg-dry	D	0.03		SW6020	07/13/07 03:22 / bws
RADIONUCLIDES - GAMMA							
Radium 226	44.5	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	165	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	25	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-099
Client Sample ID: P6-TP5-058

Report Date: 08/21/07
Collection Date: 06/20/07 10:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.19	mmhos/cm		0.01		ASAM10-3	07/10/07 10:04 / jb
Saturation Percentage	45.6	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.7	s.u.		0.01		ASAM10-3.2	07/10/07 10:04 / jb
Nitrogen, Nitrate+Nitrite as N	1.6	mg/kg-dry		1.0		E353.2	07/13/07 16:13 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	2.6	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	34.5	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	0.78	meq/L		0.02		SW6010B	07/17/07 11:23 / ts
Magnesium, sat. paste	0.27	meq/L		0.04		SW6010B	07/17/07 11:23 / ts
Sodium, sat. paste	0.07	meq/L		0.02		SW6010B	07/17/07 11:23 / ts
Sodium Adsorption Ratio (SAR)	0.10	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	5.3	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	2.2	mg/kg-dry	D	0.06		SW6020	07/13/07 15:00 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:35 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.346	mg/kg-dry		0.005		A3114 B	07/19/07 09:09 / kes
Selenium	0.031	mg/kg-dry		0.005		A3114 B	07/19/07 14:23 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 21:50 / sml
Copper	1.1	mg/kg-dry	D	0.6		SW6020	07/17/07 21:50 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 21:50 / sml
Zinc	0.32	mg/kg-dry		0.01		SW6020	07/21/07 19:35 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 21:18 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	86	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	4.0	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	10	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	LS			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	1.3	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-099
Client Sample ID P6-TP5-058

Report Date: 08/21/07
Collection Date: 06/20/07 10:50
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.42	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-100
Client Sample ID: P6-TP6-060

Report Date: 08/21/07
Collection Date: 06/20/07 11:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	202	mg/kg-dry	D	0.03		SW6020	07/13/07 03:26 / bws
RADIONUCLIDES - GAMMA							
Radium 226	93.8	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	8.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	501	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.3	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	87	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	4.0	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-101
 Client Sample ID P6-TP6-061

Report Date: 08/21/07
 Collection Date: 06/20/07 11:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.87	mmhos/cm		0.01		ASAM10-3	07/10/07 10:09 / jb
Saturation Percentage	47.0	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	4.3	s.u.		0.01		ASAM10-3.2	07/10/07 10:09 / jb
Nitrogen, Nitrate+Nitrite as N	1.4	mg/kg-dry		1.0		E353.2	07/13/07 16:18 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	6.3	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	1320	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	23	meq/L		0.02		SW6010B	07/17/07 11:30 / ts
Magnesium, sat. paste	25	meq/L		0.04		SW6010B	07/17/07 11:30 / ts
Sodium, sat. paste	0.32	meq/L		0.02		SW6010B	07/17/07 11:27 / ts
Sodium Adsorption Ratio (SAR)	0.07	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	3.4	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	4.7	mg/kg-dry		0.05		SW6020	07/13/07 15:05 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:37 / kes
Uranium	174	mg/kg-dry	D	0.03		SW6020	07/13/07 03:30 / bws
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.378	mg/kg-dry		0.005		A3114 B	07/19/07 09:07 / kes
Selenium	0.049	mg/kg-dry		0.005		A3114 B	07/19/07 14:25 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/21/07 19:59 / bws
Copper	2.7	mg/kg-dry	D	0.5		SW6020	07/17/07 21:55 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 21:55 / sml
Zinc	1.07	mg/kg-dry		0.01		SW6020	07/21/07 19:59 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	7	mg/kg-dry		5		SW6010B	07/17/07 21:21 / cp
RADIONUCLIDES - GAMMA							
Radium 226	115	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	10.1	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	683	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	5.0	pCi/g-dry				E900.0	07/11/07 10:00 / res

Report Definitions: RL - Analyte reporting limit.

QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-101
Client Sample ID: P6-TP6-061

Report Date: 08/21/07
Collection Date: 06/20/07 11:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Thorium 230	104	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	4.5	pCi/g-dry				E907.0	08/03/07 15:00 / dmf
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	75	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	8.0	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	17	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	SL			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	3.3	%		1.0		ASA15-5	07/19/07 16:12 / jb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.49	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-102
Client Sample ID: P6-TP6-304

Report Date: 08/21/07
Collection Date: 06/20/07 11:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	233	mg/kg-dry	D	0.03		SW6020	07/13/07 05:05 / bws
RADIONUCLIDES - GAMMA							
Radium 226	89.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	1.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	386	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	3.7	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	63	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	3.8	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-103
 Client Sample ID OS2-TP5-092

Report Date: 08/21/07
 Collection Date: 06/21/07 11:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	573	mg/kg-dry	D	0.03		SW6020	07/13/07 05:09 / bws
RADIONUCLIDES - GAMMA							
Radium 226	181	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	15.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	653	pCi/g-dry		2.0		E900.0	07/11/07 10:00 / res
Gross Alpha precision (±)	4.8	pCi/g-dry				E900.0	07/11/07 10:00 / res
Thorium 230	123	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	4.9	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-104
 Client Sample ID OS2-TP5-093

Report Date: 08/21/07
 Collection Date: 06/21/07 11:00
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.92	mmhos/cm		0.01		ASAM10-3	07/10/07 10:10 / jb
Saturation Percentage	77.7	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	6.2	s.u.		0.01		ASAM10-3.2	07/10/07 10:10 / jb
Nitrogen, Nitrate+Nitrite as N	1.6	mg/kg-dry		1.0		E353.2	07/13/07 16:20 / jal
Chloride, soluble	7.0	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	8.5	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	2590	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	28	meq/L		0.02		SW6010B	07/17/07 11:46 / ts
Magnesium, sat. paste	45	meq/L		0.04		SW6010B	07/17/07 11:46 / ts
Sodium, sat. paste	6.6	meq/L		0.02		SW6010B	07/17/07 18:24 / ts
Sodium Adsorption Ratio (SAR)	1.10	unitless		0.01		Calculation	07/18/07 12:09 / sec
PHYSICAL PROPERTIES							
Moisture	7.2	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	7.8	mg/kg-dry	D	0.07		SW6020	07/13/07 15:39 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:40 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.134	mg/kg-dry		0.005		A3114 B	07/19/07 09:11 / kes
Selenium	0.037	mg/kg-dry		0.005		A3114 B	07/19/07 14:27 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/21/07 20:04 / bws
Copper	1.3	mg/kg-dry	D	0.6		SW6020	07/17/07 22:00 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 22:00 / sml
Zinc	2.83	mg/kg-dry		0.01		SW6020	07/21/07 20:04 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	9	mg/kg-dry		5		SW6010B	07/17/07 21:24 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	49	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	29	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	22	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	L			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	ND	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-104
Client Sample ID OS2-TP5-093

Report Date: 08/21/07
Collection Date: 06/21/07 11:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.59	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-105
 Client Sample ID OS2-TP5-094

Report Date: 08/21/07
 Collection Date: 06/21/07 11:15
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	62.1	mg/L		0.2		E200.7	07/25/07 17:08 / ts
Magnesium	42.4	mg/L	D	0.04		E200.7	07/25/07 17:08 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:08 / ts
Sodium	6	mg/L		5		E200.7	07/25/07 17:08 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	14.4	mg/L		0.1		E200.8	07/09/07 13:53 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 13:53 / bws
Barium	0.02	mg/L		0.01		E200.8	07/09/07 13:53 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 13:53 / bws
Manganese	1.22	mg/L		0.01		E200.8	07/09/07 13:53 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 13:53 / bws
Selenium	0.001	mg/L		0.001		E200.8	07/09/07 13:53 / bws
Uranium	0.156	mg/L		0.0001		E200.8	07/09/07 13:53 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/09/07 13:53 / bws
METALS - TOTAL							
Uranium	19.0	mg/kg-dry	D	0.03		SW6020	07/13/07 05:13 / bws
RADIONUCLIDES - GAMMA							
Radium 226	8.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	95.7	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	2.1	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	6.0	pCi/L		1.0		E903.0	07/17/07 13:45 / trs
Radium 226 precision (±)	0.8	pCi/L				E903.0	07/17/07 13:45 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/12/07 13:22 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	37.7	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	1.2	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	8.1	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	1.5	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-106
Client Sample ID OS2-TP5-096

Report Date: 08/21/07
Collection Date: 06/21/07 11:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	7.48	mg/kg-dry	D	0.03		SW6020	07/13/07 05:18 / bws
RADIONUCLIDES - GAMMA							
Radium 226	2.4	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	16.4	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	0.9	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	1.3	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-107
 Client Sample ID OS2-TP5-098

Report Date: 08/21/07
 Collection Date: 06/21/07 11:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	105	mg/kg-dry	D	0.03		SW6020	07/13/07 05:22 / bws
RADIONUCLIDES - GAMMA							
Radium 226	43.9	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	151	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	28	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	1	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-108
 Client Sample ID PO2-TP2-105

Report Date: 08/21/07
 Collection Date: 06/21/07 13:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	721	mg/kg-dry	D	0.03		SW6020	07/13/07 05:26 / bws
RADIONUCLIDES - GAMMA							
Radium 226	242	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	21.1	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	733	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	5.3	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	144	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	3.2	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-109
Client Sample ID PO2-TP2-110

Report Date: 08/21/07
Collection Date: 06/21/07 13:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.88	mmhos/cm		0.01		ASAM10-3	07/10/07 10:13 / jb
Saturation Percentage	62.1	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	8.5	s.u.		0.01		ASAM10-3.2	07/10/07 10:13 / jb
Nitrogen, Nitrate+Nitrite as N	3.5	mg/kg-dry		1.0		E353.2	07/13/07 16:23 / jal
Chloride, soluble	5.2	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	3.4	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	158	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	1.4	meq/L		0.02		SW6010B	07/17/07 11:49 / ts
Magnesium, sat. paste	0.34	meq/L		0.04		SW6010B	07/17/07 11:49 / ts
Sodium, sat. paste	7.5	meq/L		0.02		SW6010B	07/17/07 11:49 / ts
Sodium Adsorption Ratio (SAR)	8.12	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	11.7	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	14.6	mg/kg-dry		0.05		SW6020	07/17/07 13:30 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:42 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.140	mg/kg-dry		0.005		A3114 B	07/19/07 09:13 / kes
Selenium	0.014	mg/kg-dry		0.005		A3114 B	07/19/07 14:29 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 22:05 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 22:05 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/17/07 22:05 / sml
Zinc	0.98	mg/kg-dry		0.01		SW6020	07/21/07 20:09 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	7	mg/kg-dry		5		SW6010B	07/17/07 21:27 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	21	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	23	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	56	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	C			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	ND	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-109
Client Sample ID: PO2-TP2-110

Report Date: 08/21/07
Collection Date: 06/21/07 13:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.58	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-110
 Client Sample ID PO2-TP2-106

Report Date: 08/21/07
 Collection Date: 06/21/07 13:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	4.3	mg/L		0.2		E200.7	07/25/07 17:18 / ts
Magnesium	0.65	mg/L	D	0.04		E200.7	07/25/07 17:18 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:18 / ts
Sodium	33	mg/L		5		E200.7	07/25/07 17:18 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	2.6	mg/L		0.1		E200.8	07/09/07 14:00 / bws
Arsenic	0.003	mg/L		0.001		E200.8	07/09/07 14:00 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 14:00 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 14:00 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 14:00 / bws
Molybdenum	0.026	mg/L		0.001		E200.8	07/09/07 14:00 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 14:00 / bws
Uranium	0.473	mg/L		0.0001		E200.8	07/09/07 14:00 / bws
Vanadium	0.018	mg/L		0.005		E200.8	07/09/07 14:00 / bws
METALS - TOTAL							
Uranium	269	mg/kg-dry	D	0.03		SW6020	07/13/07 05:46 / bws
RADIONUCLIDES - GAMMA							
Radium 226	42.3	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.8	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	224	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	4.1	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	5.2	pCi/L		1.0		E903.0	07/17/07 13:45 / trs
Radium 226 precision (±)	0.9	pCi/L				E903.0	07/17/07 13:45 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/12/07 13:22 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	133	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.3	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	31	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	1.6	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-111
Client Sample ID: PO2-TP2-108

Report Date: 08/21/07
Collection Date: 06/21/07 13:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	7.50	mg/kg-dry	D	0.03		SW6020	07/13/07 05:51 / bws
RADIONUCLIDES - GAMMA							
Radium 226	ND	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	10.1	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	0.7	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-112
Client Sample ID: PO2-TP2-309

Report Date: 08/21/07
Collection Date: 06/21/07 13:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	448	mg/kg-dry	D	0.03		SW6020	07/13/07 05:55 / bws
RADIONUCLIDES - GAMMA							
Radium 226	49.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	4.5	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	419	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	4.0	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	63	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	3.9	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-113
Client Sample ID: PO1-TP1-099

Report Date: 08/21/07
Collection Date: 06/21/07 12:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	578	mg/kg-dry	D	0.03		SW6020	07/13/07 05:59 / bws
RADIONUCLIDES - GAMMA							
Radium 226	611	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	45.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	1200	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	6.7	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	200	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	3.8	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-114
 Client Sample ID PO1-TP1-100

Report Date: 08/21/07
 Collection Date: 06/21/07 12:45
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.54	mmhos/cm		0.01		ASAM10-3	07/10/07 10:14 / jb
Saturation Percentage	122	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	8.2	s.u.		0.01		ASAM10-3.2	07/10/07 10:14 / jb
Nitrogen, Nitrate+Nitrite as N	4.1	mg/kg-dry		1.0		E353.2	07/13/07 16:25 / jal
Chloride, soluble	7.1	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	12.7	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	227	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	2.8	meq/L		0.02		SW6010B	07/17/07 11:53 / ts
Magnesium, sat. paste	0.94	meq/L		0.04		SW6010B	07/17/07 11:53 / ts
Sodium, sat. paste	2.0	meq/L		0.02		SW6010B	07/17/07 11:53 / ts
Sodium Adsorption Ratio (SAR)	1.45	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	15.0	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	11.4	mg/kg-dry	D	0.06		SW6020	07/17/07 13:35 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/13/07 11:44 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.323	mg/kg-dry		0.005		A3114 B	07/19/07 09:16 / kes
Selenium	0.036	mg/kg-dry		0.005		A3114 B	07/19/07 14:32 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 22:29 / sml
Copper	1.6	mg/kg-dry	D	0.5		SW6020	07/17/07 22:29 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 22:29 / sml
Zinc	3.08	mg/kg-dry		0.01		SW6020	07/21/07 20:14 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	5	mg/kg-dry		5		SW6010B	07/17/07 21:31 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	27	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	44	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	29	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	CL			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	ND	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-114
Client Sample ID: PO1-TP1-100

Report Date: 08/21/07
Collection Date: 06/21/07 12:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.90	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-115
 Client Sample ID PO1-TP1-308

Report Date: 08/21/07
 Collection Date: 06/21/07 12:45
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	525	mg/kg-dry	D	0.03		SW6020	07/13/07 06:03 / bws
RADIONUCLIDES - GAMMA							
Radium 226	520	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	38.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	1080	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	6.3	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	199	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	4.5	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-116
Client Sample ID PO1-TP1-103

Report Date: 08/21/07
Collection Date: 06/21/07 13:00
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	525	mg/kg-dry	D	0.03		SW6020	07/13/07 06:07 / bws
RADIONUCLIDES - GAMMA							
Radium 226	498	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	37.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	797	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	5.5	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	221	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	5.0	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-117
Client Sample ID SP-TP2-086

Report Date: 08/21/07
Collection Date: 06/21/07 10:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	76.4	mg/kg-dry	D	0.03		SW6020	07/13/07 06:11 / bws
RADIONUCLIDES - GAMMA							
Radium 226	40.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	3.2	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	115	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.1	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	13	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	0.9	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-118
Client Sample ID SP-TP2-087

Report Date: 08/21/07
Collection Date: 06/21/07 10:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.43	mmhos/cm		0.01		ASAM10-3	07/10/07 10:15 / jb
Saturation Percentage	49.5	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	8.3	s.u.		0.01		ASAM10-3.2	07/10/07 10:15 / jb
Nitrogen, Nitrate+Nitrite as N	5.5	mg/kg-dry		1.0		E353.2	07/13/07 16:28 / jal
Chloride, soluble	42.9	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	7.6	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	807	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	9.7	meq/L		0.02		SW6010B	07/17/07 11:56 / ts
Magnesium, sat. paste	5.0	meq/L		0.04		SW6010B	07/17/07 11:56 / ts
Sodium, sat. paste	23	meq/L		0.02		SW6010B	07/17/07 12:00 / ts
Sodium Adsorption Ratio (SAR)	8.32	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	3.7	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	5.2	mg/kg-dry	D	0.06		SW6020	07/13/07 16:28 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/15/07 12:49 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.043	mg/kg-dry		0.005		A3114 B	07/19/07 09:18 / kes
Selenium	0.027	mg/kg-dry		0.005		A3114 B	07/19/07 14:34 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 22:34 / sml
Copper	1.0	mg/kg-dry	D	0.5		SW6020	07/17/07 22:34 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 22:34 / sml
Zinc	0.99	mg/kg-dry		0.01		SW6020	07/21/07 20:19 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 21:34 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	71	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	14	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	15	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	SL			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	ND	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-118
Client Sample ID SP-TP2-087

Report Date: 08/21/07
Collection Date: 06/21/07 10:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.26	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-119
 Client Sample ID SP-TP2-088

Report Date: 08/21/07
 Collection Date: 06/21/07 10:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	6.5	mg/L		0.2		E200.7	07/25/07 17:22 / ts
Magnesium	1.88	mg/L	D	0.04		E200.7	07/25/07 17:22 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:22 / ts
Sodium	24	mg/L		5		E200.7	07/25/07 17:22 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.7	mg/L		0.1		E200.8	07/09/07 14:07 / bws
Arsenic	0.002	mg/L		0.001		E200.8	07/09/07 14:07 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 14:07 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 14:07 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 14:07 / bws
Molybdenum	0.003	mg/L		0.001		E200.8	07/09/07 14:07 / bws
Selenium	0.001	mg/L		0.001		E200.8	07/09/07 14:07 / bws
Uranium	0.0368	mg/L		0.0001		E200.8	07/09/07 14:07 / bws
Vanadium	0.007	mg/L		0.005		E200.8	07/09/07 14:07 / bws
METALS - TOTAL							
Uranium	50.0	mg/kg-dry	D	0.03		SW6020	07/13/07 06:15 / bws
RADIONUCLIDES - GAMMA							
Radium 226	33.9	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	2.7	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	26.7	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	1.6	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/17/07 13:45 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/12/07 15:00 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	110	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.1	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	11	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	0.6	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-120
 Client Sample ID P5-TP1-010

Report Date: 08/21/07
 Collection Date: 06/18/07 16:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	1.8	mg/L		0.2		E200.7	07/25/07 17:25 / ts
Magnesium	0.33	mg/L	D	0.04		E200.7	07/25/07 17:25 / ts
Potassium	ND	mg/L		3		E200.7	07/25/07 17:25 / ts
Sodium	9	mg/L		5		E200.7	07/25/07 17:25 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	2.0	mg/L		0.1		E200.8	07/09/07 14:13 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/09/07 14:13 / bws
Barium	ND	mg/L		0.01		E200.8	07/09/07 14:13 / bws
Lead	ND	mg/L		0.04		E200.8	07/09/07 14:13 / bws
Manganese	ND	mg/L		0.01		E200.8	07/09/07 14:13 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/09/07 14:13 / bws
Selenium	ND	mg/L		0.001		E200.8	07/09/07 14:13 / bws
Uranium	0.0308	mg/L		0.0001		E200.8	07/09/07 14:13 / bws
Vanadium	0.011	mg/L		0.005		E200.8	07/09/07 14:13 / bws
METALS - TOTAL							
Uranium	143	mg/kg-dry	D	0.03		SW6020	07/13/07 06:19 / bws
RADIONUCLIDES - GAMMA							
Radium 226	70.7	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	5.5	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	23.4	pCi/L		1.0		E900.0	07/16/07 01:18 / res
Gross Alpha precision (±)	1.5	pCi/L				E900.0	07/16/07 01:18 / res
Radium 226	2.4	pCi/L		1.0		E903.0	07/17/07 13:45 / trs
Radium 226 precision (±)	0.5	pCi/L				E903.0	07/17/07 13:45 / trs
Radium 228	ND	pCi/L		1.4		RA-05	07/12/07 15:00 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	225	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.9	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	27	pCi/g-dry		0.2		E907.0	08/03/07 15:00 / dmf
Thorium 230 precision (±)	2.6	pCi/g-dry				E907.0	08/03/07 15:00 / dmf

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-121
 Client Sample ID P5-TP1-011

Report Date: 08/21/07
 Collection Date: 06/18/07 16:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	182	mg/kg-dry	D	0.03		SW6020	07/13/07 06:40 / bws
RADIONUCLIDES - GAMMA							
Radium 226	55.1	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 226 precision (±)	4.9	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	243	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	3.0	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	45	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	2.1	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07061467-122
 Client Sample ID P5-TP1-012

Report Date: 08/21/07
 Collection Date: 06/18/07 16:20
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.34	mmhos/cm		0.01		ASAM10-3	07/10/07 10:17 / jb
Saturation Percentage	48.6	%		0.1		USDA27a	07/10/07 09:26 / jb
pH, sat. paste	8.1	s.u.		0.01		ASAM10-3.2	07/10/07 10:17 / jb
Nitrogen, Nitrate+Nitrite as N	1.6	mg/kg-dry		1.0		E353.2	07/13/07 16:35 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/18/07 13:48 / sec
Potassium, soluble	3.6	mg/kg-dry		1.0		SW6010B	07/18/07 13:48 / sec
Sulfate, soluble	38.2	mg/kg-dry		0.10		SW6010B	07/18/07 13:48 / sec
Calcium, sat. paste	0.74	meq/L		0.02		SW6010B	07/17/07 12:03 / ts
Magnesium, sat. paste	0.21	meq/L		0.04		SW6010B	07/17/07 12:03 / ts
Sodium, sat. paste	2.3	meq/L		0.02		SW6010B	07/17/07 12:03 / ts
Sodium Adsorption Ratio (SAR)	3.39	unitless		0.01		Calculation	07/18/07 12:06 / sec
PHYSICAL PROPERTIES							
Moisture	7.5	%		0.1		USDA26	07/03/07 08:13 / dcj
METALS - TOTAL							
Chromium	4.9	mg/kg-dry	D	0.06		SW6020	07/13/07 19:00 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/15/07 12:52 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.054	mg/kg-dry		0.005		A3114 B	07/19/07 09:20 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/19/07 14:36 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.7		SW6020	07/17/07 22:39 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/17/07 22:39 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/17/07 22:39 / sml
Zinc	0.73	mg/kg-dry		0.01		SW6020	07/21/07 20:24 / bws
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/17/07 21:37 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	78	%		1.0		ASA15-5	07/19/07 16:12 / jb
Silt	9.0	%		1.0		ASA15-5	07/19/07 16:12 / jb
Clay	13	%		1.0		ASA15-5	07/19/07 16:12 / jb
Texture	SL			1.0		ASA15-5	07/19/07 16:12 / jb
Coarse Fragments	1.5	%		1.0		ASA15-5	07/19/07 16:12 / jb

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-122
Client Sample ID P5-TP1-012

Report Date: 08/21/07
Collection Date: 06/18/07 16:20
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.28	%		0.02		ASA29-3	07/19/07 07:48 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07061467-123
Client Sample ID: P6-TP5-059

Report Date: 08/21/07
Collection Date: 06/21/07
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	70.2	mg/kg-dry	D	0.03		SW6020	07/13/07 07:09 / bws
RADIONUCLIDES - GAMMA							
Radium 226	24.8	pCi/g-dry		1.0		E901.1	07/18/07 06:15 / dpb
Radium 228 precision (±)	2.3	pCi/g-dry				E901.1	07/18/07 06:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	148	pCi/g-dry		2.0		E900.0	07/13/07 10:00 / res
Gross Alpha precision (±)	2.4	pCi/g-dry				E900.0	07/13/07 10:00 / res
Thorium 230	21	pCi/g-dry		0.2		E907.0	07/24/07 15:00 / dmf
Thorium 230 precision (±)	0.9	pCi/g-dry				E907.0	07/24/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: GrAB-0294		
Sample ID: RB-GrAB-0294	Method Blank								
Gross Alpha	ND	pCi/L	1						
									Run: G5000W_070710A 07/14/07 08:43
Sample ID: UNAT-GrAB-0294	Laboratory Control Sample								
Gross Alpha	300	pCi/L	1.0	109	70	130			07/14/07 08:43
									Run: G5000W_070710A 07/14/07 08:43
Sample ID: C07061467-013AMS	Sample Matrix Spike								
Gross Alpha	460	pCi/L	1.0	100	70	130			07/14/07 08:43
									Run: G5000W_070710A 07/14/07 08:43
Sample ID: C07061467-013AMSD	Sample Matrix Spike Duplicate								
Gross Alpha	470	pCi/L	1.0	102	70	130	0.8	12.7	07/14/07 08:43
									Run: G5000W_070710A 07/15/07 04:49
Sample ID: C07061467-019ADUP	Sample Duplicate								
Gross Alpha	1600	pCi/L	1.0				0.5	11.4	07/15/07 04:49
									Run: G5000W_070710A 07/15/07 04:50
Sample ID: C07061467-071ADUP	Sample Duplicate								
Gross Alpha	49	pCi/L	1.0				1.1	18.1	07/15/07 04:50
									Run: G5000W_070710A 07/15/07 04:50
Method: E903.0							Batch: RA226-2157		
Sample ID: C07061467-013ADUP	Sample Duplicate								
Radium 226	6.0	pCi/L	0.20				33	50.3	07/15/07 20:23
									Run: TENNELEC-2_070705A 07/15/07 22:24
Sample ID: C07061467-014AMS	Sample Matrix Spike								
Radium 226	18	pCi/L	0.20	79	70	130			07/15/07 22:24
									Run: TENNELEC-2_070705A 07/16/07 08:28
Sample ID: MB-RA226-2157	Method Blank								
Radium 226	ND	pCi/L	0.2						07/16/07 08:28
									Run: TENNELEC-2_070705A 07/16/07 09:28
Sample ID: LCS-RA226-2157	Laboratory Control Sample								
Radium 226	12	pCi/L	0.20	94	70	130			07/16/07 09:28
									Run: TENNELEC-2_070705A 07/16/07 09:28
Method: E903.0							Batch: RA226-2166		
Sample ID: C07061467-027AMS	Sample Matrix Spike								
Radium 226	26	pCi/L	0.20	96	70	130			07/24/07 13:10
									Run: G5000W_070709D 07/24/07 13:10
Sample ID: C07061467-027AMSD	Sample Matrix Spike Duplicate								
Radium 226	25	pCi/L	0.20	90	70	130	5.1	24.5	07/24/07 13:10
									Run: G5000W_070709D 07/24/07 16:15
Sample ID: MB-RA226-2166	Method Blank								
Radium 226	ND	pCi/L	0.2						07/24/07 16:15
									Run: G5000W_070709D 07/24/07 16:15
Sample ID: LCS-RA226-2166	Laboratory Control Sample								
Radium 226	13	pCi/L	0.20	106	70	130			07/24/07 16:15
									Run: G5000W_070709D 07/24/07 16:15

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: RA226-2167		
Sample ID: MB-RA226-2167 Radium 226	Method Blank ND pCi/L		0.2						
						Run: G5000W_070709C			07/17/07 14:58
Sample ID: LCS-RA226-2167 Radium 226	Laboratory Control Sample 11 pCi/L		0.20	89	70	130			
						Run: G5000W_070709C			07/17/07 14:58
Method: E907.0							Batch: 15253		
Sample ID: LCS-R87614 Thorium 230	Laboratory Control Sample 4.30 pCi/g-dry		0.10	88	70	130			
						Run: EGG-ORTEC_070718E			07/18/07 15:00
Sample ID: C07061467-049BMS Thorium 230	Sample Matrix Spike 1.94 pCi/g-dry		0.20	71	70	130			
						Run: EGG-ORTEC_070718E			07/18/07 15:00
Sample ID: C07061467-049BMSD Thorium 230	Sample Matrix Spike Duplicate 2.10 pCi/g-dry		0.20	78	70	130	7.9	30	
						Run: EGG-ORTEC_070718E			07/18/07 15:00
Sample ID: MB-R87614 Thorium 230	Method Blank ND pCi/g-dry		0.01						
						Run: EGG-ORTEC_070718E			07/18/07 15:00
Method: E907.0							Batch: 15279		
Sample ID: LCS-R87610 Thorium 230	Laboratory Control Sample 4.00 pCi/g-dry		0.10	82	70	130			
						Run: EGG-ORTEC_070718D			07/18/07 15:00
Sample ID: C07061467-025BMS Thorium 230	Sample Matrix Spike 2.03 pCi/g-dry		0.20	83	70	130			
						Run: EGG-ORTEC_070718D			07/18/07 15:00
Sample ID: C07061467-025BMSD Thorium 230	Sample Matrix Spike Duplicate 2.51 pCi/g-dry		0.20	104	70	130	21	30	
						Run: EGG-ORTEC_070718D			07/18/07 15:00
Sample ID: MB-R87610 Thorium 230	Method Blank ND pCi/g-dry		0.01						
						Run: EGG-ORTEC_070718D			07/18/07 15:00

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0							Batch: 15307		
Sample ID: LCS-R87685 Thorium 230	Laboratory Control Sample 3.80 pCi/g-dry		0.10	78	70	130			
					Run: EGG-ORTEC_070720A		07/20/07 15:00		
Sample ID: C07061467-052KMS Thorium 230	Sample Matrix Spike 3.90 pCi/g-dry		0.20	78	70	130			
					Run: EGG-ORTEC_070720A		07/20/07 15:00		
Sample ID: C07061467-052KMSD Thorium 230	Sample Matrix Spike Duplicate 3.59 pCi/g-dry		0.20	64	70	130	8.4	30	S
					Run: EGG-ORTEC_070720A		07/20/07 15:00		
Sample ID: MB-R87685 Thorium 230	Method Blank ND pCi/g-dry		0.01						
					Run: EGG-ORTEC_070720A		07/20/07 15:00		
Sample ID: LCS-R87686 Thorium 230	Laboratory Control Sample 3.90 pCi/g-dry		0.10	80	70	130			
					Run: EGG-ORTEC_070723B		07/23/07 15:00		
Sample ID: C07061467-071CMD Thorium 230	Sample Duplicate 26.1 pCi/g-dry		0.20		70	130	21	30	
					Run: EGG-ORTEC_070723B		07/23/07 15:00		
Sample ID: MB-R87686 Thorium 230	Method Blank ND pCi/g-dry		0.01						
					Run: EGG-ORTEC_070723B		07/23/07 15:00		
Method: E907.0							Batch: 15319		
Sample ID: LCS-R87955 Thorium 230	Laboratory Control Sample 3.50 pCi/g-dry		0.10	71	70	130			
					Run: EGG-ORTEC_070803A		08/03/07 15:00		
Sample ID: C07061467-094BMS Thorium 230	Sample Matrix Spike 45.2 pCi/g-dry		0.20	97	70	130			
					Run: EGG-ORTEC_070803A		08/03/07 15:00		
Sample ID: C07061467-094BMSD Thorium 230	Sample Matrix Spike Duplicate 44.1 pCi/g-dry		0.20	92	70	130	2.5	30	
					Run: EGG-ORTEC_070803A		08/03/07 15:00		
Sample ID: MB-R87955 Thorium 230	Method Blank ND pCi/g-dry		0.01						
					Run: EGG-ORTEC_070803A		08/03/07 15:00		

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E907.0									
Batch: 15322									
Sample ID: LCS-R87690 Thorium 230	Laboratory Control Sample 4.20	pCi/g-dry	0.10	86	70	130			Run: EGG-ORTEC_070724A 07/24/07 15:00
Sample ID: C07061467-123BDUP Thorium 230	Sample Duplicate 19.0	pCi/g-dry	0.20		70	130	10	30	Run: EGG-ORTEC_070724A 07/24/07 15:00
Sample ID: C07061467-123BDUP Thorium 230	Sample Duplicate 17.7	pCi/g-dry	0.20		70	130	17	30	Run: EGG-ORTEC_070724A 07/24/07 15:00
Sample ID: MB-R87690 Thorium 230	Method Blank ND	pCi/g-dry	0.01						Run: EGG-ORTEC_070724A 07/24/07 15:00
Method: RA-05									
Batch: RA228-1717									
Sample ID: LCS-228-RA226-2157 Radium 228	Laboratory Control Sample 8.0	pCi/L	1.0	105	70	130			Run: TENNELEC-3_070705A 07/10/07 06:10
Sample ID: MB-RA226-2157 Radium 228	Method Blank ND	pCi/L	1						Run: TENNELEC-3_070705A 07/10/07 06:10
Sample ID: C07061467-013ADUP Radium 228	Sample Duplicate ND	pCi/L	1.0						Run: TENNELEC-3_070705A 07/10/07 06:10
Sample ID: C07061467-023AMS Radium 228	Sample Matrix Spike 13	pCi/L	1.0	101	70	130			Run: TENNELEC-3_070705A 07/10/07 06:10
Method: RA-05									
Batch: RA228-1723									
Sample ID: LCS-228-RA226-2166 Radium 228	Laboratory Control Sample 7.47	pCi/L	1.0	98	70	130			Run: TENNELEC-3_070709C 07/17/07 06:12
Sample ID: MB-RA226-2166 Radium 228	Method Blank ND	pCi/L	1						Run: TENNELEC-3_070709C 07/17/07 06:12
Sample ID: C07061467-093AMS Radium 228	Sample Matrix Spike 11.5	pCi/L	1.0	91	70	130			Run: TENNELEC-3_070709C 07/17/07 06:12
Sample ID: C07061467-093AMSD Radium 228	Sample Matrix Spike Duplicate 10.8	pCi/L	1.0	85	70	130	6.0	39.7	Run: TENNELEC-3_070709C 07/17/07 06:12

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05							Batch: RA228-1724		
Sample ID: LCS-228-RA226-2167 Radium 228	Laboratory Control Sample 7.20pCi/L		1.0	95	70	130			Run: TENNELEC-3_070709A 07/12/07 13:22
Sample ID: MB-RA226-2167 Radium 228	Method Blank ND pCi/L		1						Run: TENNELEC-3_070709A 07/12/07 13:22
Sample ID: C07061601-026AMS Radium 228	Sample Matrix Spike 11.2pCi/L		1.0	88	70	130			Run: TENNELEC-3_070709A 07/12/07 13:22
Sample ID: C07061601-026AMSD Radium 228	Sample Matrix Spike Duplicate 11.6pCi/L		1.0	91	70	130	3.7	39.2	Run: TENNELEC-3_070709A 07/12/07 13:22
Method: SW6010B							Batch: 15097		
Sample ID: MB-15097 Calcium Magnesium Sodium	Method Blank ND mg/L ND mg/L 0.6 mg/L		0.06 0.05 0.06						Run: ICP1-C_070711B 07/11/07 16:37
Sample ID: LCS-15097 Calcium Magnesium Sodium	Laboratory Control Sample 580 mg/L 200 mg/L 240 mg/L		0.50 0.50 0.50	97 92 95	70 70 70	130 130 130			Run: ICP1-C_070711B 07/11/07 16:40
Sample ID: C07061467-046CMS Calcium Magnesium Sodium	Sample Matrix Spike 770 mg/L 420 mg/L 480 mg/L		0.50 0.50 0.50	94 93 97	75 75 75	125 125 125			Run: ICP1-C_070712A 07/12/07 15:51
Sample ID: C07061467-048CMSD Calcium Magnesium Sodium	Sample Matrix Spike Duplicate 770 mg/L 420 mg/L 480 mg/L		0.50 0.50 0.50	94 93 97	75 75 75	125 125 125	0.1 0.4 0.3	20 20 20	Run: ICP1-C_070712A 07/12/07 15:54

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B							Batch: 15148		
Sample ID: C07061467-069CMS	Sample Matrix Spike				Run: ICP1-C_070717A		07/17/07 10:30		
Calcium	520	mg/L	0.50	77	75	125			
Magnesium	300	mg/L	0.50	87	75	125			
Sodium	250	mg/L	0.50	84	75	125			
Sample ID: C07061467-069CMSD	Sample Matrix Spike Duplicate				Run: ICP1-C_070717A		07/17/07 10:33		
Calcium	570	mg/L	0.50	97	75	125	9.0	20	
Magnesium	340	mg/L	0.50	99	75	125	9.9	20	
Sodium	270	mg/L	0.50	92	75	125	7.3	20	
Sample ID: C07061467-086CMS	Sample Matrix Spike				Run: ICP1-C_070717A		07/17/07 11:06		
Calcium	640	mg/L	0.50	85	75	125			
Magnesium	400	mg/L	0.50	88	75	125			
Sodium	250	mg/L	0.50	91	75	125			
Sample ID: C07061467-086CMSD	Sample Matrix Spike Duplicate				Run: ICP1-C_070717A		07/17/07 11:10		
Calcium	640	mg/L	0.50	85	75	125	0.0	20	
Magnesium	400	mg/L	0.50	88	75	125	0.4	20	
Sodium	250	mg/L	0.50	91	75	125	0.1	20	
Sample ID: C07061467-122CMS	Sample Matrix Spike				Run: ICP1-C_070717A		07/17/07 12:39		
Calcium	68	mg/L	0.50	107	75	125			
Magnesium	56	mg/L	0.50	106	75	125			
Sodium	96	mg/L	0.50	85	75	125			
Sample ID: C07061467-122CMSD	Sample Matrix Spike Duplicate				Run: ICP1-C_070717A		07/17/07 12:43		
Calcium	66	mg/L	0.50	102	75	125	3.1	20	
Magnesium	53	mg/L	0.50	101	75	125	4.0	20	
Sodium	98	mg/L	0.50	89	75	125	2.1	20	
Sample ID: MB-15148	Method Blank				Run: ICP1-C_070717A		07/17/07 13:23		
Calcium	0.2	mg/L	0.06						
Magnesium	ND	mg/L	0.05						
Sodium	0.5	mg/L	0.06						
Calcium, sat. paste	0.008	meq/L	0.003						
Magnesium, sat. paste	ND	meq/L	0.004						
Sodium, sat. paste	0.02	meq/L	0.003						
Sample ID: LCS-15148	Laboratory Control Sample				Run: ICP1-C_070717A		07/17/07 13:26		
Calcium	580	mg/L	0.50		0	0			
Magnesium	210	mg/L	0.50		0	0			
Sodium	230	mg/L	0.50		0	0			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									
Batch: 15236									
Sample ID: MB-15236 Phosphorus	Method Blank 2	mg/kg-dry	0.6						
						Run: ICP2-C_070717A			07/17/07 17:54
Sample ID: C07061576-004CMS2 Phosphorus	Sample Matrix Spike 115	mg/kg-dry	5.0	112	75	125			07/17/07 20:25
						Run: ICP2-C_070717A			07/17/07 20:28
Sample ID: C07061576-004CMSD2 Phosphorus	Sample Matrix Spike Duplicate 115	mg/kg-dry	5.0	112	75	125	0.3	20	07/17/07 20:28
						Run: ICP2-C_070717A			07/17/07 21:41
Sample ID: C07061467-122EDUP Phosphorus	Sample Duplicate 2.04	mg/kg-dry	5.0				0.0	20	07/17/07 21:41
						Run: ICP2-C_070717A			07/17/07 21:41
Method: SW6010B									
Batch: 15237									
Sample ID: MB-15237 Phosphorus	Method Blank 2	mg/kg-dry	2						
						Run: ICP2-C_070717A			07/17/07 17:57
Sample ID: LCS-15237 Phosphorus	Laboratory Control Sample 23.1	mg/kg-dry	5.0	86	70	130			07/17/07 18:04
						Run: ICP2-C_070717A			07/17/07 18:10
Sample ID: C07061467-002EMS2 Phosphorus	Sample Matrix Spike 280	mg/kg-dry	5.0	111	75	125			07/17/07 18:10
						Run: ICP2-C_070717A			07/17/07 18:14
Sample ID: C07061467-002EMSD2 Phosphorus	Sample Matrix Spike Duplicate 270	mg/kg-dry	5.0	107	75	125	3.6	20	07/17/07 18:14
						Run: ICP2-C_070717A			07/17/07 18:14
Sample ID: C07061467-090EDUP Phosphorus	Sample Duplicate 11.1	mg/kg-dry	5.0				18	20	07/17/07 19:52
						Run: ICP2-C_070717A			07/17/07 19:52

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15101		
Sample ID: MB-15101	Method Blank								Run: ICPMS1-C_070709A 07/09/07 15:35
Chromium	0.003	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15101	Laboratory Control Sample								Run: ICPMS1-C_070709A 07/09/07 15:43
Chromium	0.024	mg/kg-dry	2.5	104	70	130			
Uranium	0.022	mg/kg-dry	0.15	108	70	130			
Sample ID: C07061467-022AMS4	Post Digestion Spike								Run: ICPMS1-C_070709A 07/09/07 16:57
Chromium	37	mg/kg-dry	2.5	97	75	125			
Uranium	26	mg/kg-dry	0.15	103	75	125			
Sample ID: C07061467-022MSD4	Post Digestion Spike Duplicate								Run: ICPMS1-C_070709A 07/09/07 17:04
Chromium	37	mg/kg-dry	2.5	94	75	125	1.9	20	
Uranium	26	mg/kg-dry	0.15	105	75	125	1.1	20	
Sample ID: MB-15101	Method Blank								Run: ICPMS2-C_070710A 07/11/07 05:06
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15101	Laboratory Control Sample								Run: ICPMS2-C_070710A 07/11/07 05:10
Uranium	0.0221	mg/kg-dry	0.015	111	75	125			
Sample ID: C07061467-028A MS4	Sample Matrix Spike								Run: ICPMS2-C_070710A 07/11/07 06:58
Uranium	50.1	mg/kg-dry	0.023	94	75	125			
Sample ID: C07061467-028A MSD4	Sample Matrix Spike Duplicate								Run: ICPMS2-C_070710A 07/11/07 07:02
Uranium	50.2	mg/kg-dry	0.023	95	75	125	0.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									
Batch: 15103									
Sample ID: MB-15103	Method Blank								
Chromium	0.002	mg/kg-dry	0.0001						
Uranium	0.0007	mg/kg-dry	6E-05						
Sample ID: LCS1-15103	Laboratory Control Sample								
Chromium	0.020	mg/kg-dry	2.5	89	70	130			
Uranium	0.023	mg/kg-dry	0.15	114	70	130			
Sample ID: C07061467-046AMS4	Post Digestion Spike								
Chromium	44	mg/kg-dry	2.5	96	75	125			
Uranium	27	mg/kg-dry	0.15	108	75	125			
Sample ID: C07061467-046AMSD4	Post Digestion Spike Duplicate								
Chromium	43	mg/kg-dry	2.5	95	75	125	0.5	20	
Uranium	27	mg/kg-dry	0.15	106	75	125	1.6	20	
Sample ID: MB-15103	Method Blank								
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15103	Laboratory Control Sample								
Uranium	0.0222	mg/kg-dry	0.015	111	75	125			
Sample ID: C07061467-048A MS4	Sample Matrix Spike								
Uranium	24.1	mg/kg-dry	0.027	105	75	125			
Sample ID: C07061467-048A MSD4	Sample Matrix Spike Duplicate								
Uranium	24.3	mg/kg-dry	0.027	106	75	125	0.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15104		
Sample ID: MB-15104 Chromium	Method Blank 0.002 mg/kg-dry		0.0001						Run: ICPMS1-C_070706A 07/07/07 03:04
Sample ID: LCS1-15104 Chromium	Laboratory Control Sample 0.022 mg/kg-dry		2.5	98	70	130			Run: ICPMS1-C_070706A 07/07/07 03:12
Sample ID: C07061467-065A MS4 Chromium	Post Digestion Spike 34 mg/kg-dry		2.5	95	75	125			Run: ICPMS1-C_070706A 07/07/07 04:34
Sample ID: C07061467-065A MSD4 Chromium	Post Digestion Spike Duplicate 33 mg/kg-dry		2.5	91	75	125	2.5	20	Run: ICPMS1-C_070706A 07/07/07 04:41
Sample ID: MB-15104 Uranium	Method Blank ND mg/kg-dry		6E-05						Run: ICPMS2-C_070710A 07/11/07 09:14
Sample ID: LCS1-15104 Uranium	Laboratory Control Sample 0.0219 mg/kg-dry		0.015	109	75	125			Run: ICPMS2-C_070710A 07/11/07 09:35
Sample ID: C07061467-064J MS4 Uranium	Sample Matrix Spike 28.6 mg/kg-dry		0.030	107	75	125			Run: ICPMS2-C_070710A 07/11/07 11:02
Sample ID: C07061467-064J MSD4 Uranium	Sample Matrix Spike Duplicate 28.4 mg/kg-dry		0.030	106	75	125	0.8	20	Run: ICPMS2-C_070710A 07/11/07 11:23

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15105		
Sample ID: MB-15105 Chromium	Method Blank 0.002	mg/kg-dry	0.0001						
						Run: ICPMS1-C_070706A			07/07/07 04:56
Sample ID: LCS1-15105 Chromium	Laboratory Control Sample 0.021	mg/kg-dry	2.5	95	70	130			07/07/07 05:03
Sample ID: C07061467-083A MS4 Chromium	Post Digestion Spike 24	mg/kg-dry	2.5	96	75	125			07/07/07 06:25
Sample ID: C07061467-083A MSD4 Chromium	Post Digestion Spike Duplicate 25	mg/kg-dry	2.5	101	75	125	4.1		07/07/07 06:32 20
Sample ID: MB-15105 Uranium	Method Blank ND	mg/kg-dry	6E-05						07/11/07 23:51
Sample ID: LCS1-15105 Uranium	Laboratory Control Sample 0.0222	mg/kg-dry	0.015	111	75	125			07/11/07 23:55
Sample ID: C07061467-082A MS4 Uranium	Sample Matrix Spike 45.3	mg/kg-dry	0.030	98	75	125			07/12/07 01:09
Sample ID: C07061467-082A MSD4 Uranium	Sample Matrix Spike Duplicate 45.9	mg/kg-dry	0.030	100	75	125	1.4		07/12/07 01:13 20

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15170		
Sample ID: MB-15170	Method Blank				Run: ICPMS1-C_070713A		07/13/07 11:54		
Chromium	0.0009	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15170	Laboratory Control Sample				Run: ICPMS1-C_070713A		07/13/07 11:59		
Chromium	0.023	mg/kg-dry	2.5	113	70	130			
Uranium	0.022	mg/kg-dry	0.15	111	70	130			
Sample ID: C07061467-101AMS4	Post Digestion Spike				Run: ICPMS1-C_070713A		07/13/07 15:10		
Chromium	28	mg/kg-dry	2.5	105	75	125			
Uranium	190	mg/kg-dry	0.15		75	125			A
Sample ID: C07061467-101AMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070713A		07/13/07 15:14		
Chromium	29	mg/kg-dry	2.5	108	75	125	2.4	20	
Uranium	190	mg/kg-dry	0.15		75	125	0.7	20	A
Sample ID: MB-15170	Method Blank				Run: ICPMS2-C_070712A		07/13/07 01:47		
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15170	Laboratory Control Sample				Run: ICPMS2-C_070712A		07/13/07 01:51		
Uranium	0.0235	mg/kg-dry	0.015	118	75	125			
Sample ID: C07061467-101J MS4	Sample Matrix Spike				Run: ICPMS2-C_070712A		07/13/07 03:34		
Uranium	197	mg/kg-dry	0.029		75	125			A
Sample ID: C07061467-101J MSD4	Sample Matrix Spike Duplicate				Run: ICPMS2-C_070712A		07/13/07 03:38		
Uranium	195	mg/kg-dry	0.029		75	125	0.8	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15171		
Sample ID: MB-15171	Method Blank			Run: ICPMS1-C_070713A			07/13/07 15:24		
Chromium	0.002	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15171	Laboratory Control Sample			Run: ICPMS1-C_070713A			07/13/07 15:29		
Chromium	0.023	mg/kg-dry	2.5	104	70	130			
Uranium	0.023	mg/kg-dry	0.15	113	70	130			
Sample ID: C07061467-118AMS4	Post Digestion Spike			Run: ICPMS1-C_070713A			07/13/07 16:08		
Uranium	91	mg/kg-dry	0.15	111	75	125			
Sample ID: C07061467-118AMSD4	Post Digestion Spike Duplicate			Run: ICPMS1-C_070713A			07/13/07 16:13		
Uranium	90	mg/kg-dry	0.15	104	75	125	1.9	20	
Sample ID: C07061467-118AMS4	Post Digestion Spike			Run: ICPMS1-C_070713A			07/13/07 16:33		
Chromium	29	mg/kg-dry	2.5	121	75	125			
Uranium	93	mg/kg-dry	0.15	119	75	125			
Sample ID: C07061467-118AMSD4	Post Digestion Spike Duplicate			Run: ICPMS1-C_070713A			07/13/07 16:37		
Chromium	29	mg/kg-dry	2.5	122	75	125	0.6	20	
Uranium	92	mg/kg-dry	0.15	116	75	125	0.8	20	
Sample ID: MB-15171	Method Blank			Run: ICPMS1-C_070717A			07/17/07 13:15		
Chromium	0.002	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15171	Laboratory Control Sample			Run: ICPMS1-C_070717A			07/17/07 13:20		
Chromium	0.023	mg/kg-dry	2.5	105	70	130			
Uranium	0.022	mg/kg-dry	0.15	110	70	130			
Sample ID: C07061467-114AMS4	Post Digestion Spike			Run: ICPMS1-C_070717A			07/17/07 13:40		
Chromium	32	mg/kg-dry	2.5	98	75	125			
Uranium	750	mg/kg-dry	0.15		75	125			A
Sample ID: C07061467-114AMSD4	Post Digestion Spike Duplicate			Run: ICPMS1-C_070717A			07/17/07 14:04		
Chromium	32	mg/kg-dry	2.5	98	75	125	0.2	20	
Uranium	730	mg/kg-dry	0.15		75	125	2.5	20	A
Sample ID: MB-15171	Method Blank			Run: ICPMS2-C_070712A			07/13/07 04:53		
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15171	Laboratory Control Sample			Run: ICPMS2-C_070712A			07/13/07 04:57		
Uranium	0.0234	mg/kg-dry	0.015	117	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									
Batch: 15171									
Sample ID: C07061467-121A MS4	Sample Matrix Spike				Run: ICPMS2-C_070712A		07/13/07 06:44		
Uranium	200	mg/kg-dry	0.029		75	125			A
Sample ID: C07061467-121A MSD4	Sample Matrix Spike Duplicate				Run: ICPMS2-C_070712A		07/13/07 06:48		
Uranium	202	mg/kg-dry	0.029		75	125	0.9	20	A
Method: SW6020									
Batch: 15172									
Sample ID: MB-15172	Method Blank				Run: ICPMS1-C_070713A		07/13/07 18:45		
Chromium	0.0006	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15172	Laboratory Control Sample				Run: ICPMS1-C_070713A		07/13/07 18:50		
Chromium	0.022	mg/kg-dry	2.5	109	70	130			
Uranium	0.022	mg/kg-dry	0.15	109	70	130			
Sample ID: C07061601-014A MS4	Post Digestion Spike				Run: ICPMS1-C_070713A		07/13/07 20:03		
Chromium	38	mg/kg-dry	2.5	94	75	125			
Uranium	25	mg/kg-dry	0.15	106	75	125			
Sample ID: C07061601-014A MSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070713A		07/13/07 20:08		
Chromium	38	mg/kg-dry	2.5	92	75	125	1.1	20	
Uranium	25	mg/kg-dry	0.15	106	75	125	0.3	20	
Sample ID: MB-15172	Method Blank				Run: ICPMS2-C_070712A		07/13/07 06:57		
Uranium	7E-05	mg/kg-dry	6E-05						
Sample ID: LCS1-15172	Laboratory Control Sample				Run: ICPMS2-C_070712A		07/13/07 07:01		
Uranium	0.0233	mg/kg-dry	0.015	116	75	125			
Sample ID: C07061601-013A MS4	Sample Matrix Spike				Run: ICPMS2-C_070712A		07/13/07 08:03		
Uranium	320	mg/kg-dry	0.028		75	125			A
Sample ID: C07061601-013A MSD4	Sample Matrix Spike Duplicate				Run: ICPMS2-C_070712A		07/13/07 08:07		
Uranium	318	mg/kg-dry	0.028		75	125	0.7	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15241		
Sample ID: MB-15241	Method Blank				Run: ICPMS1-C_070717A		07/17/07 18:15		
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.06						
Nickel	ND	mg/kg-dry	0.09						
Sample ID: LCS-15241	Laboratory Control Sample				Run: ICPMS1-C_070717A		07/17/07 18:20		
Cadmium	ND	mg/kg-dry	0.32		50	150			
Copper	1.32	mg/kg-dry	0.60	95	50	150			
Nickel	ND	mg/kg-dry	2.6		50	150			
Sample ID: C07061467-054BMS4	Post Digestion Spike				Run: ICPMS1-C_070717A		07/17/07 19:38		
Cadmium	1.03	mg/kg-dry	0.66	103	75	125			
Copper	1.14	mg/kg-dry	0.60	115	75	125			
Nickel	1.06	mg/kg-dry	0.93	106	75	125			
Sample ID: C07061467-054BMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070717A		07/17/07 19:43		
Cadmium	1.04	mg/kg-dry	0.66	104	75	125			
Copper	1.14	mg/kg-dry	0.60	115	75	125			
Nickel	1.04	mg/kg-dry	0.93	104	75	125			
Sample ID: MB-15241	Method Blank				Run: ICPMS1-C_070723A		07/23/07 13:15		
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.05						
Nickel	ND	mg/kg-dry	0.3						
Zinc	0.05	mg/kg-dry	0.0005						
Sample ID: LCS-15241	Laboratory Control Sample				Run: ICPMS1-C_070723A		07/23/07 13:20		
Cadmium	0.0842	mg/kg-dry	0.066	77	50	150			
Copper	1.34	mg/kg-dry	0.60	95	50	150			
Nickel	0.724	mg/kg-dry	0.093	94	50	150			
Zinc	0.601	mg/kg-dry	0.020	91	50	150			
Sample ID: C07061467-054BMS4	Post Digestion Spike				Run: ICPMS1-C_070723A		07/23/07 15:48		
Cadmium	1.07	mg/kg-dry	0.66	107	75	125			
Copper	1.20	mg/kg-dry	0.60	120	75	125			
Nickel	1.16	mg/kg-dry	0.93	116	75	125			
Zinc	1.15	mg/kg-dry	0.020	105	75	125			
Sample ID: C07061467-054BMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070723A		07/23/07 16:13		
Cadmium	1.02	mg/kg-dry	0.66	102	75	125			
Copper	1.20	mg/kg-dry	0.60	120	75	125			
Nickel	1.10	mg/kg-dry	0.93	110	75	125			
Zinc	1.15	mg/kg-dry	0.020	105	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 15241
Sample ID: C07061467-054BMSD4	Post Digestion Spike Duplicate					Run: ICPMS1-C_070723A			07/23/07 16:13

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15261		
Sample ID: MB-15261	Method Blank				Run: ICPMS1-C_070717A		07/17/07 21:31		
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.06						
Nickel	ND	mg/kg-dry	0.09						
Sample ID: LCS-15261	Laboratory Control Sample				Run: ICPMS1-C_070717A		07/17/07 21:35		
Cadmium	ND	mg/kg-dry	0.32		50	150			
Copper	1.47	mg/kg-dry	0.60	105	50	150			
Nickel	ND	mg/kg-dry	2.6		50	150			
Sample ID: C07061601-003BMS4	Post Digestion Spike				Run: ICPMS1-C_070717A		07/17/07 22:54		
Copper	1.30	mg/kg-dry	0.60	130	75	125			S
Nickel	0.998	mg/kg-dry	0.93	100	75	125			
- Matrix spike recoveries outside the acceptance criteria of 75 to 125 percent are considered matrix related, not system related. Reported values are within method specifications.									
Sample ID: C07061601-003BMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070717A		07/17/07 22:58		
Copper	1.34	mg/kg-dry	0.60	135	75	125			S
Nickel	0.989	mg/kg-dry	0.93	99	75	125			
- Matrix spike duplicate recoveries outside the acceptance criteria of 75 to 125 percent are considered matrix related, not system related. Reported values are within method specifications.									
Sample ID: MB-15261	Method Blank				Run: ICPMS1-C_070721A		07/21/07 19:15		
Cadmium	0.2	mg/kg-dry	0.003						
Copper	ND	mg/kg-dry	0.06						
Nickel	0.01	mg/kg-dry	0.009						
Zinc	0.06	mg/kg-dry	0.0005						
Sample ID: LCS-15261	Laboratory Control Sample				Run: ICPMS1-C_070721A		07/21/07 19:20		
Copper	1.49	mg/kg-dry	0.60	101	50	150			
Nickel	0.809	mg/kg-dry	0.093	98	50	150			
Zinc	0.666	mg/kg-dry	0.020	92	50	150			
Sample ID: C07061601-003BMS4	Post Digestion Spike				Run: ICPMS1-C_070721A		07/21/07 21:44		
Cadmium	1.17	mg/kg-dry	0.66	117	75	125			
Copper	1.42	mg/kg-dry	0.060	102	75	125			
Nickel	1.15	mg/kg-dry	0.93	115	75	125			
Zinc	1.28	mg/kg-dry	0.020	106	75	125			
Sample ID: C07061601-003BMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070721A		07/21/07 21:49		
Cadmium	1.13	mg/kg-dry	0.66	114	75	125			
Copper	1.42	mg/kg-dry	0.060	103	75	125			
Nickel	1.16	mg/kg-dry	0.93	117	75	125			
Zinc	1.27	mg/kg-dry	0.020	106	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15261		
Sample ID: C07061601-035BDUP	Sample Duplicate				Run: ICPMS1-C_070721A			07/21/07 23:08	
Cadmium	ND	mg/kg-dry	0.32				0.0	30	
Copper	1.15	mg/kg-dry	0.60				8.9	30	
Nickel	ND	mg/kg-dry	0.93				0.0	30	
Zinc	1.58	mg/kg-dry	0.020				1.3	30	
Method: SW7471A							Batch: 15131		
Sample ID: MB-15131	Method Blank				Run: CVAA-C201_070709A			07/09/07 13:17	
Mercury	ND	mg/kg-dry	0.04						
Sample ID: C07070196-001A MS	Sample Matrix Spike				Run: CVAA-C201_070709A			07/09/07 13:42	
Mercury	0.71	mg/kg-dry	0.050	113	85	115			
Sample ID: C07070196-001A MSD	Sample Matrix Spike Duplicate				Run: CVAA-C201_070709A			07/09/07 13:48	
Mercury	0.70	mg/kg-dry	0.050	109	85	115	1.0	30	
Sample ID: C07061467-055H MS	Sample Matrix Spike				Run: CVAA-C201_070709A			07/09/07 14:27	
Mercury	0.84	mg/kg-dry	0.050	108	85	115			
Sample ID: C07061467-055H MSD	Sample Matrix Spike Duplicate				Run: CVAA-C201_070709A			07/09/07 14:31	
Mercury	1.1	mg/kg-dry	0.050	104	85	115	23	30	
Sample ID: LCS-15131	Laboratory Control Sample				Run: CVAA-C201_070709A			07/09/07 14:34	
Mercury	0.53	mg/kg-dry	0.050	107	90	110			
Method: SW7471A							Batch: 15183		
Sample ID: MB-15183	Method Blank				Run: CVAA-C201_070713A			07/13/07 10:40	
Mercury	ND	mg/kg-dry	0.04						
Sample ID: C07070321-002C MS	Sample Matrix Spike				Run: CVAA-C201_070713A			07/13/07 11:05	
Mercury	0.83	mg/kg-dry	0.050	87	85	115			
Sample ID: C07070321-002C MSD	Sample Matrix Spike Duplicate				Run: CVAA-C201_070713A			07/13/07 11:09	
Mercury	0.80	mg/kg-dry	0.050	94	85	115	4.6	30	
Sample ID: C07061467-104H MS	Sample Matrix Spike				Run: CVAA-C201_070713A			07/13/07 11:47	
Mercury	0.89	mg/kg-dry	0.050	86	85	115			
Sample ID: C07061467-104H MSD	Sample Matrix Spike Duplicate				Run: CVAA-C201_070713A			07/13/07 11:51	
Mercury	0.66	mg/kg-dry	0.050	91	85	115	29	30	
Sample ID: LCS-15183	Laboratory Control Sample				Run: CVAA-C201_070713A			07/13/07 11:54	
Mercury	0.52	mg/kg-dry	0.050	105	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/21/07
Work Order: C07061467

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7471A							Batch: 15248		
Sample ID: MB-15248	Method Blank								Run: CVAA-C201_070715A 07/15/07 12:47
Mercury	ND	mg/kg-dry	0.04						
Sample ID: C07061601-009H MS	Sample Matrix Spike								Run: CVAA-C201_070715A 07/15/07 13:12
Mercury	1.0	mg/kg-dry	0.050	110	85	115			
Sample ID: C07061601-009H MSD	Sample Matrix Spike Duplicate								Run: CVAA-C201_070715A 07/15/07 13:16
Mercury	0.78	mg/kg-dry	0.050	106	85	115	28	30	
Sample ID: LCS-15248	Laboratory Control Sample								Run: CVAA-C201_070715A 07/15/07 14:03
Mercury	0.52	mg/kg-dry	0.050	103	90	110			
Method: USDA27a							Batch: SAT070705B		
Sample ID: LCS	Laboratory Control Sample								Run: SARTORIUS_070706B 07/06/07 09:53
Saturation Percentage	56.1	%	0.10	111	80	120			
Method: USDA27a							Batch: SAT070709A		
Sample ID: C07061601-004CDUP	Sample Duplicate								Run: SARTORIUS_070710B 07/10/07 09:26
Saturation Percentage	54.1	%	0.10				9.4	10	
Sample ID: LCS	Laboratory Control Sample								Run: SARTORIUS_070710B 07/10/07 09:26
Saturation Percentage	51.3	%	0.10	101	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <u>MWH</u> Report Mail Address: <u>Steamboat, CO</u> Invoice Address: <u>Same</u>	Project Name, PWS #, Permit #, Etc.: <u>St. Anthony</u> Contact Name, Phone, Fax, E-mail: <u>Toby Leeson</u>	Sampler Name if other than Contact: _____ Purchase Order #: _____ ELI Quote #: _____	Receipt Temp: <u>23.0°C</u> Cooler ID(s): <u>1175A</u> Custody Seal: <u>Y</u> Intact: <u>Y</u> Signature Match: <u>Y</u>	LABORATORY USE ONLY <u>LABORATORY</u>
Report Required For: <input type="checkbox"/> POTW/WTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other: _____ EDD/EDT <input type="checkbox"/> Format: _____	ANALYSIS REQUESTED Number of Containers: _____ Sample Type: A W S V B O _____ Air/Water/Solids/Vegetation _____ Blobssey/Other _____ MATRIX: _____	Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: _____ RUSH Turnaround (TAT): _____ Normal Turnaround (TAT): _____ SEE ATTACHED	Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: _____ RUSH Turnaround (TAT): _____ Normal Turnaround (TAT): _____ SEE ATTACHED	Lab ID: _____
1 <u>LO80-TP1-130+131</u> <u>6/22</u> <u>1430</u> 2 <u>LO80-TP2-132</u> <u>"</u> <u>1445</u> 3 <u>LO80-TP2-133</u> <u>"</u> <u>1450</u> 4 <u>LO80-TP2-134</u> <u>"</u> <u>1505</u> 5 <u>LO80-TP2-135(4)</u> <u>"</u> <u>1505</u> 6 <u>LO80-TP4-136</u> <u>"</u> <u>1520</u> 7 <u>BS-TP1-041+042</u> <u>6/19</u> <u>1600</u> 8 <u>BS-TP2-069+070</u> <u>6/19</u> <u>1420</u> 9 <u>BS-TP2-305</u> <u>6/19</u> <u>1420</u> 10 _____	Shipped by: <u>FEDEX</u> Shipped by: _____ Date/Time: <u>6/22/07 1600</u> Date/Time: _____	Received by: <u>CHUMISTON</u> Received by: _____ Date/Time: <u>6/27/07 10:00</u> Date/Time: _____	Received by: _____ Received by: _____ Date/Time: _____ Date/Time: _____	Lab Disposal: _____ Return to client: _____ Sample Disposal: _____
Custody Record MUST be Signed		LABORATORY USE ONLY		Sample Type: _____ # of fractions: _____

Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, & links.

Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <u>MWH</u> Report Mail Address: <u>Steamboat, CO</u> Invoice Address: <u>Steamboat, CO</u>		Project Name, PWS #, Permit #, Etc.: <u>St Anthony</u> Contact Name, Phone, Fax, E-mail: <u>Tobin Leason</u>		Purchase Order #: _____ ELLI Quote #: _____	
Report Required For: <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other: _____ EDD/EDT <input checked="" type="checkbox"/> Format <u>MWH</u>		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: _____		Receipt Temp: <u>50.0 C</u> Cooler ID(s): <u>001</u> Custody Seal: <u>Y</u> Intact: <u>Y</u> Signature Match: <u>Y</u> Lab ID: _____	
Number of Containers: _____ Sample Type: <input type="checkbox"/> A <input type="checkbox"/> W <input type="checkbox"/> S <input type="checkbox"/> V <input type="checkbox"/> B <input type="checkbox"/> O Air/Water/Soils/Solids/Vegetation/Biossey/Other: _____ MATRIX: _____		ANALYSIS REQUESTED (Grid with handwritten entries: S, S, S, S, S, S, S, S, S, S)		RUSH Turnaround (TAT): _____ Normal Turnaround (TAT): _____	
SAMPLE IDENTIFICATION (Name, Location, interval, etc.) Collection Date Collection Time		Shipped by: <u>FedEx</u> Shipped by: _____		Date/Time: <u>6/22/07</u> Date/Time: _____	
1. Shaft Rad - SPLP - Comp 6/21 1050 2. Mine Dump - SPLP - Comp 6/21 1130 3. Storage Area - SPLP - Comp 6/21 1120 4. Pond 1 - SPLP - Comp 6/21 1245 5. Pond 2 - SPLP - Comp 6/21 1300 6. Pond 3 - SPLP - Comp 6/21 1315 7. Pond 4 - SPLP - Comp 6/21 1330 8. Pond 5 - SPLP - Comp 6/21 1230 9. TS-064+065 6/20 1320 10. TS-066 6/20 1325		Requisitioned by: <u>[Signature]</u> Requisitioned by: _____		Received by: <u>[Signature]</u> Received by: _____	
Custody Record MUST be Signed		Sample Disposal: _____ Return to client: <input checked="" type="checkbox"/> Lab Disposal: <input checked="" type="checkbox"/>		LABORATORY USE ONLY (Grid for lab use)	



Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name:		Project Name, PWS #, Permit #, Etc.:	
Report Mail Address:		Contact Name, Phone, Fax, E-mail:	
Invoice Address:		Purchase Order #:	
Report Required For: POT/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____		Notify ELI prior to RUSH sample submittal for additional charges and scheduling	
Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____		Comments:	
EDD/EDT <input checked="" type="checkbox"/> Format <u>MWH</u>		RUSH Turnaround (TAT)	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Normal Turnaround (TAT)	
1 TS-067		SEE ATTACHED	
2 TS-068		RAD	
3		X	
4		X	
5			
6			
7			
8			
9			
10			
Relinquished by: <u>RS</u>		Shipped by: <u>FedEx</u>	
Relinquished by:		Shipped by:	
Date/Time: <u>6/20/07</u>		Date/Time: <u>6-27-07 10:00</u>	
Date/Time:		Date/Time:	
Custody Record MUST be Signed		LABORATORY USE ONLY	
Sample Disposal: Return to client: _____ Lab Disposal: <u>X</u>		Sample Type: _____ # of fractions _____	

Receipt Temp fedex
 Copier ID(s) 2222c
 Custody Seal 60511
 Intact Y
 Signature Match Y
 Lab ID 607061467

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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report.



Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <u>MNH</u>	Project Name, PWS #, Permit #, Etc.: <u>St. Anthony</u>	Sampler Name if other than Contact: <u>Toby Leeson</u>	Purchase Order #: <u> </u>	ELI Quote #: <u> </u>	
Report Mail Address: <u>Steamboat, CO</u>	Contact Name, Phone, Fax, E-mail: <u>Toby Leeson</u>	Notify ELI prior to RUSH sample submittal for additional charges and scheduling. Comments:			
Invoice Address: <u>Steamboat, CO</u>	Invoice Contact & Phone #: <u> </u>	SEE ATTACHED			
Report Required For: <input type="checkbox"/> POTW/WTP <input type="checkbox"/> DW <input type="checkbox"/> Other <u> </u>	Sample Type: A/W, S/V, B O Air Water, Soils/Solids, Vegetation Biossary Other	ANALYSIS REQUESTED			
Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/>	Number of Containers MATRIX	LABORATORY USE ONLY			
Other: <u> </u>		Custody Seal <u> </u> Intact <u> </u> Signature Match <u> </u> Lab ID <u> </u>			
EDD/EDT <input checked="" type="checkbox"/> Format <u>MNH</u>		Receipt Temp <u>30.0</u> °C Cooler ID(s) <u> </u>			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Notify ELI prior to RUSH sample submittal for additional charges and scheduling. Comments:		
1 OS1-TR6-306	6/21	0910	RUSH Turnaround (TAT)		
2 OS1-TR6-091	6/21	0915	Normal Turnaround (TAT)		
3 OS1-TR6-092	6/21	0920	RUSH Turnaround (TAT)		
4 POS-TPS-117, 118	6/21	1440	Normal Turnaround (TAT)		
5 POS-TPS-119	6/21	1440	RUSH Turnaround (TAT)		
6 PO4-TP4-111, 112	6/21	1355	Normal Turnaround (TAT)		
7 PO4-TP4-113	6/21	1355	RUSH Turnaround (TAT)		
8 PO3-TP3-114, 115	"	1420	Normal Turnaround (TAT)		
9 PO3-TP3-116	"	"	RUSH Turnaround (TAT)		
10			Normal Turnaround (TAT)		

Received by: Date/Time:
 Received by: Date/Time:

Shipped by: tedex Date/Time:
 Shipped by: Date/Time:

Relinquished by: Return to client:
 Relinquished by: Lab Disposal:

Custody Record MUST be Signed

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Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: MWH Project Name, PWS #, Permit #, Etc.: St. Anthony

Report Mail Address: Steamboat, CO Contact Name, Phone, Fax, E-mail: Toby Leeson

Invoice Address: Same Invoice Contact & Phone #: _____

Report Required For: POTWWTP DW Other _____

Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV
 Other _____

EDD/EDT Format _____

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Sample Type: A W S V B O Air Water Soils/Solids Vegetation Biosseay Other	ANALYSIS REQUESTED		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp <u>23.0</u> °C Cooler ID(s)
					Normal Turnaround (TAT)	RUSH Turnaround (TAT)		
1 BG-TP1-124	6/24	1600	S	MATRIX	X			Custody Seal <u>N</u> Intact <u>Y</u> Signature Match <u>Y</u> Lab ID <u>602061467</u>
2 BG-TP1-125	6/24	1600	S		X			
3 BG-TP2-126	"	1615	S		X			
4 BG-TP2-127	"	1620	S		X			
5 BG-TP3-120	"	1530	S		X			
6 BG-TP3-310	"	1530	S		X			
7 BG-TP3-121	"	1535	S		X			
8 TO-TP1-015 ¹⁰¹⁶	6/19	0855	S		X			
9 TO-TP1-017	"	0905	S		X			
10 TO-TP-018	"	0915	S		X			

Shipped by: FEDEX Date/Time: 6/27/07 1620
 Received by: W. J. ... Date/Time: 6-27-07 10:00

Relinquished by: Seasoft Date/Time: 6/27/07 1620
 Relinquished by: _____ Date/Time: _____

Custody Record **MUST be Signed**

Sample Disposal: _____ Return to client: Lab Disposal:

LABORATORY USE ONLY

Sample Type: _____ # of fractions: _____

Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: MWH Report Mail Address: Steamboat, CO Invoice Address: Same	Project Name, PWS #, Permit #, Etc.: St. Anthony Contact Name, Phone, Fax, E-mail: Toby Leeson	Report Required For: <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____ Special Report Formats - ELI must be notified prior to sample submittal for the following: NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other: _____ EDD/EDT <input type="checkbox"/> Format _____	Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments: _____ RUSH Turnaround (TAT) _____ Normal Turnaround (TAT) _____	Receipt Temp: 23.0 °C Cooler ID(s): 1-1754 Custody Seal: Y N Intact: Y N Signature Match: Y N Lab ID: _____
Purchase Order #: _____ ELI Quote #: _____		ANALYSIS REQUESTED		
Invoice Contact & Phone #: _____		Number of Containers: _____ Sample Type: A W S V B O _____ Air/Water/Solids/Vegetation/Biossay/Other _____ MATRIX: _____		
See Attached		RUSH Turnaround (TAT) _____ Normal Turnaround (TAT) _____		
Shipped by: FEDEX Date/Time: 6/22/07 1600		Received by: CHUMISTEN Date/Time: 6/27/07 16:00		
Relinquished by: _____ Date/Time: _____		Shipped by: _____ Date/Time: _____		
Sample Disposal: _____ Return to client: _____		Lab Disposal: _____ # of fractions: _____		
Custody Record MUST be Signed		LABORATORY USE ONLY		

LABORATORY USE ONLY

Custody Record MUST be Signed



Chain of Custody and Analytical Request Record



PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: MWH Project Name, PWS #, Permit #, Etc.: St. Anthony

Report Mail Address: Steamboat, CO Contact Name, Phone, Fax, E-mail: Toby Lessor

Invoice Address: Steamboat, CO Invoice Contact & Phone #: _____

Report Required For: POT/WWTP DW Other _____

Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC AZLA Level IV

Other _____
 EDD/EDT Format MWH

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Sample Type: A, W, S, B, O		MATRIX	ANALYSIS REQUESTED		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Purchase Order #:	ELI Quote #:
			Air Water	Soils/Solids		Vegetation	Bioassay			
1. Shaft Rad - SPLP - COMP	6/21	1050			S					
2. Mine Dump - SPLP - COMP	6/21	1130			S					
3. Storage Area - SPLP - COMP	6/21	1120			S					
4. Pond 1 - SPLP - COMP	6/21	1245			S					
5. Pond 2 - SPLP - COMP	6/21	1300			S					
6. Pond 3 - SPLP - COMP	6/21	1315			S					
7. Pond 4 - SPLP - COMP	6/21	1330			S					
8. Pond 5 - SPLP - COMP	6/21	1230			S					
9. TS-0647065	6/20	1320			S					
10. TS-066	6/20	1325			S					

Number of Containers: _____
 Date/TIME: 6/22/07
 Date/TIME: _____

Relinquished by: [Signature] Relinquished by: _____
 Date/TIME: 6/22/07 Date/TIME: _____

Shipped by: FedEx Shipped by: _____
 Date/TIME: _____ Date/TIME: _____

Received by: [Signature] Received by: _____
 Date/TIME: 6/27/07 Date/TIME: _____

Receipt Temp: 22.2 C
 Cooler ID(s): 118511
 Custody Seal: Y N
 Intact: Y N
 Signature Match: Y N
 Lab ID: _____

LABORATORY USE ONLY

Notify ELI prior to RUSH sample submittal for additional charges and scheduling
 Comments: _____

Sample Disposal: _____ Return to client: Lab Disposal:

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LABORATORY USE ONLY
 Sample Type: _____ # of fractions _____

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Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name: _____
 Report Mail Address: _____
 Invoice Address: _____
 Project Name, PWS #, Permit #, Etc.: _____
 Contact Name, Phone, Fax, E-mail: _____
 Sampler Name if other than Contact: _____
 Purchase Order #: _____
 ELI Quote #: _____

Report Required For: POT/WWTP DW Other _____
 Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV
 Other _____
 EDD/EDT Format MWH

Number of Containers	Sample Type: A W S V B O Air Water Soils/Solids Vegetation Blossom Other	MATRIX	ANALYSIS REQUESTED		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s) Custody Seal Intact Signature Match Lab ID
			Normal Turnaround (TAT)	RUSH Turnaround (TAT)		
1		S				
2		S				
3						
4						
5						
6						
7						
8						
9						
10						

Relinquished by: RS Date/Time: 6/20/07
 Relinquished by: _____ Date/Time: _____
 Shipped by: Redex Date/Time: 6-27-07
 Shipped by: _____ Date/Time: _____

Custody Record MUST be Signed

Sample Disposal: Return to client Lab Disposal: # of fractions _____

LABORATORY USE ONLY

Received by: _____ Date/Time: _____
 Received by: _____ Date/Time: _____

See Page 1

fedex

LABORATORY USE ONLY

Custody Record MUST be Signed



Chain of Custody and Analytical Request Record

Page 1 of



PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: MWH Project Name, PWS #, Permit #, Etc.: St. Anthony
Report Mail Address: Steamboat, CO Contact Name, Phone, Fax, E-mail: Toby Leeson
Invoice Address: Steamboat, CO Invoice Contact & Phone #:

Report Required For: POTWWTP DW Other
Special Report Formats - ELI must be notified prior to sample submittal for the following:
NELAC A2LA Level IV
Other
EDD/EDT Format MWH

Notify ELI prior to RUSH sample submittal for additional charges and scheduling
Comments: SEE ATTACHED

Normal Turnaround (TAT)
RUSH Turnaround (TAT)

Receipt Temp 22.0 °C
Cooler ID(s)
Custody Seal
Intact Y
Signature Match Y
Lab ID

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED									Shipped by:	Date/Time:	Shipped by:	Date/Time:	
				Number of Containers	Sample Type: A W S V B O	Dr. Water	Soils/Solids	Vegetation	Blossary	Other	AgRO	RAO					SPRP
¹ OS1 - TPG-306	6/21	0910	S														
² OS1 - TPG-091	6/21	0915	S	X													
³ OS1 - TPG-092	6/21	0920	S	X													
⁴ POS-TP5-117,118	6/21	1440	S	X	X												
⁵ POS-TP5-119	6/21	1440	S	X	X												
⁶ PO4-TP4-111,112	6/21	1355	S	X	X												
⁷ PO4-TP4-113	6/21	1355	S	X	X												
⁸ PO3-TP3-114,115	"	1420	S	X	X												
⁹ PO3-TP3-116	"	"	S	X	X												
¹⁰																	

LABORATORY USE ONLY
C07061467
6/21/19

Reinquisitioned by: Date/Time:
 Shipped by: Date/Time:
 Received by: Date/Time:
 Sample Type: # of fractions
 Custody Record MUST be Signed

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.



PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name: MWH
 Report Mail Address: Streambed, CO
 Invoice Address: Same
 Project Name, PWS #, Permit #, Etc.: St. Anthony
 Contact Name, Phone, Fax, E-mail: Foby Leeson
 Sampler Name if other than Contact: _____
 Purchase Order #: _____
 ELI Quote #: _____

Report Required For: POT/WWTP DW Other _____
 Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV
 Other _____
 EDD/EDT Format _____

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	MATRIX	ANALYSIS REQUESTED										Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s)	Custody Seal Intact Signature Match	Lab ID			
					Normal Turnaround (TAT)	RUSH Turnaround (TAT)	SEE ATTACHED	Ag-RO	RA-RO	AW	SV	B	O	Other					Other	Other	Other
1 BG-TP1-124	6/24	1600	S	S	X																
2 BG-TP1-125	6/24	1600	S	S	X																
3 BG-TP2-126	"	1615	S	S	X																
4 BG-TP2-127	"	1620	S	S	X																
5 BG-TP3-120	"	1530	S	S	X																
6 BG-TP3-310	"	1530	S	S	X																
7 BG-TP3-121	"	1535	S	S	X																
8 TO-TP1-015-1016	6/19	0855	S	S	X																
9 TO-TP1-017	"	0905	S	S	X																
10 TO-TP-018	"	0915	S	S	X																

Relinquished by: [Signature] Date/Time: 6/22/07 @ 1630
 Relinquished by: _____ Date/Time: _____
 Shipped by: FEB EX Date/Time: _____
 Shipped by: _____ Date/Time: _____

Requested by: [Signature] Date/Time: 6-27-07 10:00
 Received by: _____ Date/Time: _____

Sample Disposal: Return to client: _____ Lab Disposal:
 Sample Type: _____ # of fractions: _____

LABORATORY USE ONLY

Receipt Temp: 23.0 °C
 Cooler ID(s): _____
 Custody Seal: Y Y Y
 Intact: Y Y Y
 Signature Match: Y Y Y
 Lab ID: _____

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Visit our web site at www.energylab.com for additional information, downloadable fee schedule forms & links



Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name: MWH

Report Mail Address: _____

Invoice Address: See Page 1

Project Name, PWS #, Permit #, Etc.: _____

Contact Name, Phone, Fax, E-mail: _____

Sampler Name if other than Contact: _____

Invoice Contact & Phone #: _____

Purchase Order #: _____

ELI Quote #: _____

Report Required For: POT/WWTP DW Other _____

Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV Other _____

EDD/EDT Format _____

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Sample Type: A W S V B O Air Water, Soils/Solids, Vegetation Blossom Other	ANALYSIS REQUESTED										Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s)	Custody Seal Intact Signature Match Lab ID		
					Normal Turnaround (TAT)	RUSH Turnaround (TAT)													
1 TO-TP1-019	6/19	0955	S	MATRIX															
2 OSI-TP6-079+080	6/24	0910	S																
3 BG-TP4-122																			
4 BG-TP4-123																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: [Signature] Date/Time: 6/22/08 1630

Relinquished by: _____ Date/Time: _____

Shipped by: FedEx Date/Time: _____

Shipped by: _____ Date/Time: _____

Received by: [Signature] Date/Time: 6-27-08 10:00

Received by: _____ Date/Time: _____

Sample Disposal: _____ Return to client: _____ Lab Disposal: _____

Sample Type: _____ # of fractions: _____

Custody Record MUST be Signed

LABORATORY USE ONLY

TRACK# C07061467

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Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name: MWH
 Report Mail Address: Steamboat, CO
 Project Name, PWS #, Permit #, Etc.: St. Anthony
 Contact Name, Phone, Fax, E-mail: Toby Leeson
 Sampler Name if other than Contact: _____
 Invoice Address: Steamboat, CO
 Invoice Contact & Phone #: _____
 Purchase Order #: _____
 ELI Quote #: _____

Report Required For: POTW/WWT/P DW Other _____
 Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV
 Other: _____
 EDD/EDT Format MWH

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	ANALYSIS REQUESTED					Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s)	Custody Seal Intact Signature Match Lab ID	
			Number of Containers	Sample Type: A W S V B O	Air Water Soils/Solids Vegetation	Biossay Other	MATRIX				
1 TN-TPI-071	6/20/07	1500	S						23.0°C	Y Y Y	LABORATORY USE ONLY 6/20/07
2 TN-TPI-072	6/20/07	1500	S								
3 TN-TPI-073	6/20/07	1505	S								
4 TN-TPI-074	6/20/07	1515	S								
5 TN-TPI-075	6/20/07	1530	S								
6 AR7-TPI-076	6/20/07	1545	S								
7 AR15-TPI-077	6/20/07	1605	S								
8 AR19-TPI-078	6/20/07	1610	S								
9 AR24-TPI-083	6/21/07	0940	S								
10 AR34-TPI-084	6/21/07	1015	S								

Relinquished by: Robert Tubing Date/Time: 6/22/07
 Relinquished by: _____ Date/Time: _____
 Shipped by: Fed Ex Date/Time: 6-27-07 0:00
 Shipped by: _____ Date/Time: _____

Custody Record **MUST be Signed**
 Sample Disposal: _____ Return to client: _____
 Lab Disposal: **LABORATORY USE ONLY**
 Sample Type: _____ # of fractions: _____



Chain of Custody and Analytical Request Record

Page 2 of 2

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: _____ Project Name, PWS #, Permit #, Etc.: _____

Report Mail Address: _____ Contact Name, Phone, Fax, E-mail: _____ Sampler Name if other than Contact: _____

Invoice Address: _____ Invoice Contact & Phone #: _____ Purchase Order #: _____ ELI Quote #: _____

Report Required For: POT/WWTP DW Other _____

Special Report Formats - ELI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV Other _____

EDD/EDT Format MWH

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers		Sample Type: A W S V B O	MATRIX	ANALYSIS REQUESTED		Notify ELI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s)	Custody Seal Intact Signature Match Lab ID
			Air	Water			Normal Turnaround (TAT)	RUSH Turnaround (TAT)			
1 SA-TPI-089	6/21/07	1045	S	S	SWR	AGRO	X	SEE ATTACHED		23.0 C	Y Y Y
2 SA-TPI-090	6/21/07	1045	S	S	SWR	AGRO	X				
3 SA-TPI-307	6/21/07	1045	S	S	SWR	AGRO	X				
4 SA-TPI-091	6/21/07	1045	S	S	SWR	AGRO	X				
5											
6											
7											
8											
9											
10											

Relinquished by: John Paul Furbey Date/Time: 6/22/07
 Relinquished by: _____ Date/Time: _____

Shipped by: Red Ex Date/Time: _____
 Shipped by: _____ Date/Time: _____

Received by: SA Winstan Date/Time: 6-27-07 10:02
 Received by: _____ Date/Time: _____

Custody Record MUST be Signed

Sample Disposal: _____ Return to client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

LABORATORY USE ONLY

LABORATORY USE ONLY

LABORATORY USE ONLY

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Chain of Custody and Analytical Request Record

PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.

Company Name: <u>MWH</u>		Project Name, PWS #, Permit #, Etc.: <u>St. Anthony</u>	
Report Mail Address: <u>Stearns, CO</u>		Sampler Name if other than Contact: <u>Toby Leeson</u>	
Invoice Address: <u>Same</u>		Purchase Order #: _____	
Report Required For: <input type="checkbox"/> POTW/WTP <input type="checkbox"/> DW <input type="checkbox"/> Other _____		ELI Quote #: _____	
Special Report Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> NELAC <input type="checkbox"/> A2LA <input type="checkbox"/> Level IV <input type="checkbox"/> Other _____			
Other: _____			
EDD/EDT <input type="checkbox"/> Format _____			
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date	
Collection Time		Collection Time	
Number of Containers		MATRIX	
Sample Type: A W S V B O		Air Water Soils/Solids Vegetation	
Blossay Other		Other	
ANALYSIS REQUESTED		SEE ATTACHED	
Notify ELI prior to RUSH sample submittal for additional charges and scheduling		Comments:	
RUSH Turnaround (TAT)		Normal Turnaround (TAT)	
Receipt Temp <u>23.0 C</u>		Cooler ID(s)	
Custody Seal <u>Y N</u>		Intact <u>Y N</u>	
Signature Match <u>Y N</u>		Lab ID	
LABORATORY USE ONLY		LABORATORY USE ONLY	
Requested by: <u>ADMINISTRATOR 6-27-07</u>		Date/Time: <u>10:00</u>	
Received by:		Date/Time:	
Shipped by: <u>CLAYTON</u>		Date/Time: <u>6-27-07</u>	
Shipped by:		Date/Time:	
Relinquished by: <u>CLAYTON</u>		Date/Time: <u>6/20/07</u>	
Relinquished by:		Date/Time:	
Custody Record MUST be Signed		Sample Disposal: _____	
Return to client: _____		Lab Disposal: _____	
In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.		Sample Type: _____	
LABORATORY USE ONLY		# of fractions	

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PLEASE PRINT, provide as much information as possible. Refer to corresponding notes on reverse side.



Company Name: _____ Project Name, PWS#, Permit #, Etc.: _____
 Report Mail Address: _____ Contact Name, Phone, Fax, E-mail: _____
 Invoice Address: _____ Invoice Contact & Phone #: _____
 Purchase Order #: _____ EJI Quote #: _____
 Sampler Name if other than Contact: _____

Report Required For: POT/WWTP DW Other _____
 Special Report Formats - EJI must be notified prior to sample submittal for the following:
 NELAC A2LA Level IV
 Other: _____
 EDD/EDT Format _____

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	ANALYSIS REQUESTED			Notify EJI prior to RUSH sample submittal for additional charges and scheduling Comments:	Receipt Temp Cooler ID(s)	Custody Seal Intact Signature Match Lab ID											
			Number of Containers	Sample Type: A W S V B O	MATRIX				RUSH Turnaround (TAT)	Normal Turnaround (TAT)									
1 P7-TP1-001+002	6/18	1425	S	X	RADS	Agro	SPED												
2 P7-TP1-005	6/18	1500	S	X															
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Received by: Thumista Date/Time: 6/23/08
 Received by: _____ Date/Time: _____
 Shipped by: FedEx Date/Time: 6/23/08
 Shipped by: _____ Date/Time: _____

Requesting by: _____
 Relinquished by: _____

Sample Disposal: _____ Return to client: _____ Lab Disposal: _____

LABORATORY USE ONLY

Sample Type: _____ # of fractions: _____

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Chain of Custody and Analytical Request Record

Page 1 of 2

Company Name: MWH		Project Name, PWS, Permit, Etc. _____		Sample Origin State: _____		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: Steamboat, CO		Contact Name: _____		Email: _____		Sampler: (Please Print) _____	
Invoice Address: Same		Invoice Contact & Phone: _____		Purchase Order: _____		Quote/Bottle Order: _____	
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: <input type="checkbox"/> Other:				ANALYSIS REQUESTED _____ _____ _____		Contact ELI prior to RUSH sample submittal for charges and scheduling - See instruction Page Comments:	
<input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC				SEE ATTACHED Normal Turnaround (TAT)		Shipped by: FedEx Cooler ID(s): _____ Receipt Temp On Ice: <u>23.0c</u> Yes <input type="checkbox"/> No <input type="checkbox"/>	
Number of Containers Air Water Soils/Solids Vegetation Bioassay Other		MATRIX		LABORATORY USE ONLY Custody Seal <u>Y</u> <input type="checkbox"/> <u>N</u> <input type="checkbox"/> Intact <u>Y</u> <input type="checkbox"/> <u>N</u> <input type="checkbox"/> Signature Match <u>Y</u> <input type="checkbox"/> <u>N</u> <input type="checkbox"/>		Received by (print): _____ Received by (print): _____ Received by Laboratory: _____	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date		Collection Time		Received by (print): _____ Received by (print): _____ Received by Laboratory: _____	
¹ P6-TP3-037+038		6/19		1520		Date/Time: 6-27-07 10:00 Signature: [Signature]	
² P6-TP3-039		"		1530		Date/Time: Signature:	
³ P6-TP3-302		"		1540		Date/Time: Signature:	
⁴ P6-TP2-032+033		"		1425		Date/Time: Signature:	
⁵ P6-TP2-035		"		1450		Date/Time: Signature:	
⁶ P6-TP1-028		"		1330		Date/Time: Signature:	
⁷ P6-TP1-030		"		1355		Date/Time: Signature:	
⁸ P6-TP1-301		"		1410		Date/Time: Signature:	
⁹ P6-TP4-043+044		"		1620		Date/Time: Signature:	
¹⁰ P6-TP4-047		"		1650		Date/Time: Signature:	
Custody Record MUST be Signed		Relinquished by (print): _____ Relinquished by (print): _____		Relinquished by (print): _____ Relinquished by (print): _____		Relinquished by (print): _____ Relinquished by (print): _____	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Chain of Custody and Analytical Request Record

Company Name: _____
Project Name, PWS, Permit, Etc. _____
Report Mail Address: _____
Contact Name: _____
Phone/Fax: _____
Invoice Address: _____
Invoice Contact & Phone: _____
Sample Report/Formats - ELI must be notified prior to sample submittal for the following:
 DW A2LA
 GSA EDD/EDT (Electronic Data)
 POTW/WWTP **Format:** _____
 State: _____ LEVEL IV
 Other: _____ NELAC

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Matrix	Number of Containers	Sample Type: A W S V B Air Water Soils/Solids Vegetation Biscassay Other	ANALYSIS REQUESTED	SEE ATTACHED	Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Receipt Temp On Ice: <u>23.0 °C</u>	Shipped by: Cooler ID(s): <u>SPC</u>
¹ P6-TP5-057-050 G/20	"	1045	S	X	RADS	SPC						
² P6-TP5-059	"	1050	S	X	RADS	SPC						
³ P6-TP6-060	"	1115	S	X	RADS	SPC						
⁴ P6-TP6-061	"	1120	S	X	RADS	SPC						
⁵ P6-TP6-309	"	1115	S	X	RADS	SPC						
⁶												
⁷												
⁸												
⁹												
¹⁰												

Shipped by: _____
Receipt Temp: 23.0 °C
On Ice: Yes No
Custody Seal: Y N
Intact: Y N
Signature Match: Y N

LABORATORY USE ONLY

Received by (print): _____
Date/Time: 6-27-09 10:00
Signature: _____
Received by (print): _____
Date/Time: _____
Signature: _____

Received by Laboratory: _____
Date/Time: _____

Sample Disposal: _____
Return to Client: _____
Lab Disposal: _____

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Custody Record MUST be Signed



Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: MWH Project Name: St. Anthony Sample Origin State: NM EPA/State Compliance: Yes No

Report Mail Address: Steamboat, CO Contact Name: Toby Leeson Email: _____ Sampler: (Please Print) _____

Invoice Address: Same Invoice Contact & Phone: _____ Purchase Order: _____ Quote/Bottle Order: _____

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

DW A2LA GSA EDD/EDT (Electronic Data) POTW/WWTP State: _____ Other: _____

Format: _____
LEVEL IV NELAC

Custody Record MUST be Signed	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Number of Containers Sample Type: A W S V B O Vegetation Bioassay Other	ANALYSIS REQUESTED		SEE ATTACHED	Normal Turnaround (TAT)	R U S H	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Shipped by: Cooler ID(s):	Receipt Temp On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Custody Seal Intact Signature Match
						Agro	PCPD								
1	052-TP5-0921093	6/21	1100	S	X	X							fedex	23.0 °C	Y N
2	052-TP5-094	"	1115	S	X	X									Y N
3	052-TP5-096	"	1120	S	X	X									Y N
4	052-TP5-098	"	1120	S	X	X									Y N
5	P02-TP2-105+110	"	1330	S	X	X									Y N
6	P02-TP2-106	"	1320	S	X	X									Y N
7	P02-TP2-108	"	1325	S	X	X									Y N
8	P02-TP2-309	"	1330	S	X	X									Y N
9	P01-TP1-099+100	"	1245	S	X	X									Y N
10	P01-TP1-308	"	1245	S	X	X									Y N

Received by Laboratory: _____ Date/Time: _____ Signature: _____

Received by (print): _____ Date/Time: 6-27-07 10:00 Signature: Alumista

Received by Laboratory: _____ Date/Time: _____ Signature: _____

Sample Disposal: _____ Return to Client: _____ Lab Disposal: _____

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Chain of Custody and Analytical Request Record

Page 2 of 2

PLEASE PRINT - Provide as much information as possible.

Project Name, PWS, Permit, Etc. _____

Company Name: _____

Report Mail Address: _____

Invoice Address: _____

Contact Name: _____ Phone/Fax: _____

Sample Origin: _____ State: Yes No

Email: _____

Sampler: (Please Print) _____

Quote/Bottle Order: _____

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

DW A2LA EDD/EDT (Electronic Data) GSA POTW/WWTW State: _____ Other: _____

Format: LEVEL IV NELAC

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED			Normal Turnaround (TAT)	Comments:	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Shipped by: Cooler ID(s):	Receipt Temp On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Custody Seal Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Signature Match <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>
				Number of Containers	Sample Type: A W S V B O	Vegetation						
1. P01-TR1-703	6/21	1300	S	X								
2. SP-TR2-DB6+DB7	"	1030	S	X								
3. SP-TR2-DB8	"	"	S	X								
4. PS-TR1-010	6/18	1610	S	X								
5. PS-TR1-011+012	6/18	1620	S	X								
6. P												
7.												
8.												
9.												
10.												

Received by (print): _____ Date/Time: 6-23-07 10:00
Signature: [Signature]

Received by Laboratory: _____ Date/Time: _____
Signature: _____

Sample Disposal: _____ Return to Client: _____
Lab Disposal: _____

Signature: [Signature] Date/Time: 6/23/07 1045

Signature: [Signature] Date/Time: 6-23-07 10:00

Signature: [Signature]

Signature: [Signature]

LABORATORY USE ONLY

07061467

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Energy Laboratories Inc

Workorder Receipt Checklist



C07061467

Login completed by: Donny Juarez

Date and Time Received: 6/27/2007 10:00 AM

Reviewed by:

Received by: kh

Reviewed Date:

Carrier name: FedEx

- | | | | |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | 23.0°
C |
| Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

 Contact and Corrective Action Comments:

Samples BG-TP4-122 and BG-TP4-123 were not listed on the COC. These two Samples were originally logged for everything. Client called back 7-2-07 only R-Chem should be logged for those two samples.



Date: 21-Aug-07

CLIENT: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Sample Delivery Group: C07061467

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package. A copy of the submittal(s) has been included and tracked in the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

PCB ANALYSIS USING EPA 505

Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

The total number of pages of this report are indicated by the page number located in the lower right corner.



ANALYTICAL SUMMARY REPORT

August 14, 2007

Montgomery Watson Harza
1475 Pine Grove Road Ste 109
PO Box 774018
Steamboat Springs, CO 80477

Workorder No.: C07070359

Project Name: GE (UNC) St Anthony Mine Site

Energy Laboratories, Inc. received the following 23 samples from Montgomery Watson Harza on 7/10/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C07070359-001	P4-DH5-001	07/06/07 09:45	06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO ₃ Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO ₃ Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07070359-002	P4-DH5-007	07/06/07 10:15	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07070359-003 P4-DH5-016	07/06/07 11:30 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070359-004 P3-DH8-001	07/06/07 16:10 06/27/07	Soil	Metals by ICP/ICPMS, Total DTPA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07070359-005 P3-DH8-005	07/06/07 16:47 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070359-006 P3-DH8-007	07/06/07 16:57 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07070359-007 P3-DH8-301	07/06/07 17:07 06/27/07	Soil	Same As Above



C07070359-008 P4-DH3-004	07/01/07 11:10 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070359-009 P4-DH3-005	07/01/07 11:15 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07070359-010 P4-DH3-300	07/01/07 11:25 06/27/07	Soil	Same As Above
C07070359-011 P4-DH1-015	07/03/07 13:35 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070359-012 P4-DH1-013	07/03/07 13:10 06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07070359-013 P4-DH4-014	07/04/07 10:04 06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular



C07070359-014	P4-DH4-012	07/04/07 09:46	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07070359-015	P4-DH6-007	07/04/07 14:44	06/27/07	Soil	Same As Above
C07070359-016	P4-DH6-008	07/04/07 14:52	06/27/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070359-017	P4-DH4-001	07/04/07 08:34	06/27/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals ABDTPA Soil Extraction CVAA Permanganate Digest DTPA extraction for metals KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Sodium Adsorption Ratio in Soil
C07070359-018	P4-DH6-001	07/04/07 14:09	06/27/07	Soil	Same As Above
C07070359-019	P4-DH3-001	07/01/07 10:55	06/27/07	Soil	Same As Above
C07070359-020	P4-DH2-001	07/02/07 12:31	06/27/07	Soil	Same As Above
C07070359-021	P4-DH2-010	07/02/07 13:55	06/27/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07070359-022 P4-DH2-011

07/02/07 14:04 06/27/07 Soil

Metals by ICP/ICPMS, Dissolved
Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Alpha, Gross Beta
Gross Gamma
Radium 226, Dissolved
Radium 228, Dissolved
Thorium, Isotopic
SPLP Extraction, Regular

C07070359-023 P4-DH1-001

07/03/07 11:30 06/27/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO3 Extractable
Metals, Soluble
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
ABDTPA Soil Extraction
CVAA Permanganate Digest
DTPA extraction for metals
KCL Soil Extract
NaHCO3 Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Sodium Adsorption Ratio in Soil

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call.

Report Approved By:


ROGER GARLING
LABORATORY SUPERVISOR



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-001
Client Sample ID: P4-DH5-001

Report Date: 08/10/07
Collection Date: 07/06/07 09:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.25	mmhos/cm		0.01		ASAM10-3	07/18/07 08:34 / jb
Saturation Percentage	43.6	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	6.3	s.u.		0.01		ASAM10-3.2	07/18/07 08:34 / jb
Nitrogen, Nitrate+Nitrite as N	6.5	mg/kg-dry		1.0		E353.2	07/20/07 10:11 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	5.8	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	1060	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	25	meq/L		0.02		SW6010B	07/23/07 17:13 / ts
Magnesium, sat. paste	24	meq/L		0.04		SW6010B	07/23/07 17:13 / ts
Sodium, sat. paste	9.6	meq/L		0.02		SW6010B	07/23/07 17:00 / ts
Sodium Adsorption Ratio (SAR)	1.95	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	8.0	%		0.1		USDA26	07/11/07 14:27 / dcj
METALS - TOTAL							
Chromium	10.2	mg/kg-dry	D	0.06		SW6020	07/17/07 16:32 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:45 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.031	mg/kg-dry		0.005		A3114 B	07/20/07 13:23 / kes
Selenium	0.009	mg/kg-dry		0.005		A3114 B	07/20/07 10:43 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:01 / sml
Copper	0.8	mg/kg-dry	D	0.6		SW6020	07/23/07 19:01 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 19:01 / sml
Zinc	1.35	mg/kg-dry		0.01		SW6020	07/23/07 19:01 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	7	mg/kg-dry		5		SW6010B	07/18/07 22:33 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	58	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	19	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	23	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SCL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	55	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-001
Client Sample ID: P4-DH5-001

Report Date: 08/10/07
Collection Date: 07/06/07 09:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.39	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-002
 Client Sample ID: P4-DH5-007

Report Date: 08/10/07
 Collection Date: 07/06/07 10:15
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	37.6	mg/kg-dry	D	0.03		SW6020	07/19/07 20:58 / bws
RADIONUCLIDES - GAMMA							
Radium 226	7.9	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.5	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	62.6	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	4.1	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-001
Client Sample ID: P4-DH5-001

Report Date: 08/10/07
Collection Date: 07/06/07 09:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.25	mmhos/cm		0.01		ASAM10-3	07/18/07 08:34 / jb
Saturation Percentage	43.6	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	6.3	s.u.		0.01		ASAM10-3.2	07/18/07 08:34 / jb
Nitrogen, Nitrate+Nitrite as N	6.5	mg/kg-dry		1.0		E353.2	07/20/07 10:11 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	5.8	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	1060	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	25	meq/L		0.02		SW6010B	07/23/07 17:13 / ts
Magnesium, sat. paste	24	meq/L		0.04		SW6010B	07/23/07 17:13 / ts
Sodium, sat. paste	9.6	meq/L		0.02		SW6010B	07/23/07 17:00 / ts
Sodium Adsorption Ratio (SAR)	1.95	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	8.0	%		0.1		USDA26	07/11/07 14:27 / dcj
METALS - TOTAL							
Chromium	10.2	mg/kg-dry	D	0.06		SW6020	07/17/07 16:32 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:45 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.031	mg/kg-dry		0.005		A3114 B	07/20/07 13:23 / kes
Selenium	0.009	mg/kg-dry		0.005		A3114 B	07/20/07 10:43 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:01 / sml
Copper	0.8	mg/kg-dry	D	0.6		SW6020	07/23/07 19:01 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 19:01 / sml
Zinc	1.35	mg/kg-dry		0.01		SW6020	07/23/07 19:01 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	7	mg/kg-dry		5		SW6010B	07/18/07 22:33 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	58	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	19	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	23	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SCL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	55	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-001
Client Sample ID: P4-DH5-001

Report Date: 08/10/07
Collection Date: 07/06/07 09:45
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.39	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-002
Client Sample ID: P4-DH5-007

Report Date: 08/10/07
Collection Date: 07/06/07 10:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	37.6	mg/kg-dry	D	0.03		SW6020	07/19/07 20:58 / bws
RADIONUCLIDES - GAMMA							
Radium 226	7.9	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.5	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	62.6	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	4.1	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

**Report
Definitions:**

RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-003
 Client Sample ID: P4-DH5-016

Report Date: 08/10/07
 Collection Date: 07/06/07 11:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	2.9	mg/L		0.2		E200.7	07/24/07 14:20 / ts
Magnesium	0.49	mg/L	D	0.04		E200.7	07/24/07 14:20 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 14:20 / ts
Sodium	18	mg/L		5		E200.7	07/24/07 14:20 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	1.5	mg/L		0.1		E200.8	07/22/07 19:36 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 19:36 / bws
Barium	ND	mg/L		0.01		E200.8	07/22/07 19:36 / bws
Lead	0.07	mg/L		0.04		E200.8	07/22/07 19:36 / bws
Manganese	ND	mg/L		0.01		E200.8	07/22/07 19:36 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 19:36 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 19:36 / bws
Uranium	0.0215	mg/L		0.0001		E200.8	07/22/07 19:36 / bws
Vanadium	0.007	mg/L		0.005		E200.8	07/22/07 19:36 / bws
METALS - TOTAL							
Uranium	43.5	mg/kg-dry	D	0.03		SW6020	07/19/07 21:02 / bws
RADIONUCLIDES - GAMMA							
Radium 226	12.7	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	33.1	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	1.7	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/28/07 06:27 / plj
Radium 228	3.3	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	57.8	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	11	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.5	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-004
Client Sample ID: P3-DH8-001

Report Date: 08/10/07
Collection Date: 07/06/07 16:10
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.35	mmhos/cm		0.01		ASAM10-3	07/18/07 08:34 / jb
Saturation Percentage	32.5	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	7.2	s.u.		0.01		ASAM10-3.2	07/18/07 08:34 / jb
Nitrogen, Nitrate+Nitrite as N	2.1	mg/kg-dry		1.0		E353.2	07/20/07 10:13 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	4.0	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	204	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	9.8	meq/L		0.02		SW6010B	07/23/07 17:16 / ts
Magnesium, sat. paste	4.7	meq/L		0.04		SW6010B	07/23/07 17:16 / ts
Sodium, sat. paste	1.1	meq/L		0.02		SW6010B	07/23/07 17:16 / ts
Sodium Adsorption Ratio (SAR)	0.39	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	4.1	%		0.1		USDA26	07/11/07 14:28 / dcj
METALS - TOTAL							
Chromium	2.7	mg/kg-dry	D	0.07		SW6020	07/17/07 16:37 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:47 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.018	mg/kg-dry		0.005		A3114 B	07/20/07 13:25 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/20/07 10:46 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:06 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/23/07 19:06 / sml
Nickel	ND	mg/kg-dry	D	0.9		SW6020	07/23/07 19:06 / sml
Zinc	1.45	mg/kg-dry		0.01		SW6020	07/23/07 19:06 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/18/07 22:37 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	83	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	5.0	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	12	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	LS			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	18	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-004
 Client Sample ID: P3-DH8-001

Report Date: 08/10/07
 Collection Date: 07/06/07 16:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.05	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-005
 Client Sample ID: P3-DH8-005

Report Date: 08/10/07
 Collection Date: 07/06/07 16:47
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	1.7	mg/L		0.2		E200.7	07/24/07 14:49 / ts
Magnesium	0.58	mg/L	D	0.04		E200.7	07/24/07 14:49 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 14:49 / ts
Sodium	6	mg/L		5		E200.7	07/24/07 14:49 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/22/07 19:42 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 19:42 / bws
Barium	0.01	mg/L		0.01		E200.8	07/22/07 19:42 / bws
Lead	ND	mg/L		0.04		E200.8	07/22/07 19:42 / bws
Manganese	ND	mg/L		0.01		E200.8	07/22/07 19:42 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 19:42 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 19:42 / bws
Uranium	0.0009	mg/L		0.0001		E200.8	07/22/07 19:42 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/22/07 19:42 / bws
METALS - TOTAL							
Uranium	27.4	mg/kg-dry	D	0.03		SW6020	07/19/07 21:06 / bws
RADIONUCLIDES - GAMMA							
Radium 226	11.9	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.7	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	3.3	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	0.7	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/28/07 07:27 / plj
Radium 228	5.4	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.9	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	69.6	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.6	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	7.6	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-006
Client Sample ID: P3-DH8-007

Report Date: 08/10/07
Collection Date: 07/06/07 16:57
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	70.7	mg/kg-dry	D	0.03		SW6020	07/19/07 21:10 / bws
RADIONUCLIDES - GAMMA							
Radium 226	15.1	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.9	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	89.3	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.8	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	7.6	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-007
Client Sample ID: P3-DH8-301

Report Date: 08/10/07
Collection Date: 07/06/07 17:07
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	71.7	mg/kg-dry	D	0.03		SW6020	07/19/07 21:31 / bws
RADIONUCLIDES - GAMMA							
Radium 226	16.1	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	79.6	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.8	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	6.0	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-008
 Client Sample ID: P4-DH3-004

Report Date: 08/10/07
 Collection Date: 07/01/07 11:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	25.0	mg/L		0.2		E200.7	07/24/07 15:02 / ts
Magnesium	10.4	mg/L	D	0.04		E200.7	07/24/07 15:02 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 15:02 / ts
Sodium	12	mg/L		5		E200.7	07/24/07 15:02 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.5	mg/L		0.1		E200.8	07/22/07 19:49 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 19:49 / bws
Barium	0.03	mg/L		0.01		E200.8	07/22/07 19:49 / bws
Lead	ND	mg/L		0.04		E200.8	07/22/07 19:49 / bws
Manganese	0.53	mg/L		0.01		E200.8	07/22/07 19:49 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 19:49 / bws
Selenium	0.003	mg/L	D	0.002		E200.8	07/22/07 19:49 / bws
Uranium	0.0651	mg/L		0.0001		E200.8	07/22/07 19:49 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/22/07 19:49 / bws
METALS - TOTAL							
Uranium	17.2	mg/kg-dry	D	0.03		SW6020	07/19/07 21:35 / bws
RADIONUCLIDES - GAMMA							
Radium 226	6.7	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.5	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	56.2	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	2.1	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	9.2	pCi/L		1.0		E903.0	07/28/07 08:27 / plj
Radium 226 precision (±)	1.2	pCi/L				E903.0	07/28/07 08:27 / plj
Radium 228	3.1	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	37.5	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.2	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	3.8	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-009
Client Sample ID: P4-DH3-005

Report Date: 08/10/07
Collection Date: 07/01/07 11:15
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	11.5	mg/kg-dry	D	0.03		SW6020	07/19/07 21:39 / bws
RADIONUCLIDES - GAMMA							
Radium 226	3.2	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	30.4	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	1.1	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	0.9	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-010
Client Sample ID: P4-DH3-300

Report Date: 08/10/07
Collection Date: 07/01/07 11:25
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	8.70	mg/kg-dry	D	0.03		SW6020	07/19/07 21:43 / bws
RADIONUCLIDES - GAMMA							
Radium 226	2.5	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.3	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	19.2	pCi/g-dry		2.0		E900.0	07/18/07 10:00 / res
Gross Alpha precision (±)	0.9	pCi/g-dry				E900.0	07/18/07 10:00 / res
Thorium 230	1.4	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-011
 Client Sample ID: P4-DH1-015

Report Date: 08/10/07
 Collection Date: 07/03/07 13:35
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	68.8	mg/L		0.2		E200.7	07/24/07 15:15 / ts
Magnesium	19.1	mg/L	D	0.06		E200.7	07/24/07 15:15 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 15:15 / ts
Sodium	13	mg/L		5		E200.7	07/24/07 15:15 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/22/07 19:56 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 19:56 / bws
Barium	ND	mg/L		0.01		E200.8	07/22/07 19:56 / bws
Lead	ND	mg/L		0.04		E200.8	07/22/07 19:56 / bws
Manganese	0.07	mg/L		0.01		E200.8	07/22/07 19:56 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 19:56 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 19:56 / bws
Uranium	0.0473	mg/L		0.0001		E200.8	07/22/07 19:56 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/22/07 19:56 / bws
METALS - TOTAL							
Uranium	36.5	mg/kg-dry	D	0.03		SW6020	07/19/07 21:47 / bws
RADIONUCLIDES - GAMMA							
Radium 226	20.0	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	1.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	43.1	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	1.6	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	3.5	pCi/L		1.0		E903.0	07/28/07 09:28 / plj
Radium 226 precision (±)	0.7	pCi/L				E903.0	07/28/07 09:28 / plj
Radium 228	4.3	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.9	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	63.6	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	4.4	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.3	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-012
 Client Sample ID: P4-DH1-013

Report Date: 08/10/07
 Collection Date: 07/03/07 13:10
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	5.53	mg/kg-dry	D	0.03		SW6020	07/19/07 21:51 / bws
RADIONUCLIDES - GAMMA							
Radium 226	3.3	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.5	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	16.5	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	0.8	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	0.5	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-013
 Client Sample ID: P4-DH4-014

Report Date: 08/10/07
 Collection Date: 07/04/07 10:04
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	2.1	mg/L		0.2		E200.7	07/24/07 15:18 / ts
Magnesium	0.29	mg/L	D	0.06		E200.7	07/24/07 15:18 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 15:18 / ts
Sodium	18	mg/L		5		E200.7	07/24/07 15:18 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/22/07 20:03 / bws
Arsenic	0.002	mg/L		0.001		E200.8	07/22/07 20:03 / bws
Barium	ND	mg/L		0.01		E200.8	07/22/07 20:03 / bws
Lead	ND	mg/L		0.04		E200.8	07/22/07 20:03 / bws
Manganese	ND	mg/L		0.01		E200.8	07/22/07 20:03 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 20:03 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 20:03 / bws
Uranium	0.0870	mg/L		0.0001		E200.8	07/22/07 20:03 / bws
Vanadium	0.006	mg/L		0.005		E200.8	07/22/07 20:03 / bws
METALS - TOTAL							
Uranium	125	mg/kg-dry	D	0.03		SW6020	07/19/07 21:56 / bws
RADIONUCLIDES - GAMMA							
Radium 226	47.7	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	3.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	133	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	3.3	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	3.9	pCi/L		1.0		E903.0	07/28/07 10:28 / plj
Radium 226 precision (±)	0.8	pCi/L				E903.0	07/28/07 10:28 / plj
Radium 228	3.1	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	115	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	2.1	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	21	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	1.1	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-014
 Client Sample ID: P4-DH4-012

Report Date: 08/10/07
 Collection Date: 07/04/07 09:46
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	32.2	mg/kg-dry	D	0.03		SW6020	07/19/07 22:00 / bws
RADIONUCLIDES - GAMMA							
Radium 226	20.7	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	1.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	50.3	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.4	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	6.4	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-015
 Client Sample ID: P4-DH6-007

Report Date: 08/10/07
 Collection Date: 07/04/07 14:44
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	49.9	mg/kg-dry	D	0.03		SW6020	07/19/07 22:04 / bws
RADIONUCLIDES - GAMMA							
Radium 226	24.9	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	2.1	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	56.7	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.5	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	6.9	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-016
 Client Sample ID: P4-DH6-008

Report Date: 08/10/07
 Collection Date: 07/04/07 14:52
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	32.2	mg/L		0.2		E200.7	07/24/07 15:22 / ts
Magnesium	8.89	mg/L	D	0.04		E200.7	07/24/07 15:22 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 15:22 / ts
Sodium	21	mg/L		5		E200.7	07/24/07 15:22 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/22/07 20:09 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 20:09 / bws
Barium	0.01	mg/L		0.01		E200.8	07/22/07 20:09 / bws
Lead	ND	mg/L		0.04		E200.8	07/22/07 20:09 / bws
Manganese	0.38	mg/L		0.01		E200.8	07/22/07 20:09 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 20:09 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 20:09 / bws
Uranium	0.0016	mg/L		0.0001		E200.8	07/22/07 20:09 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/22/07 20:09 / bws
METALS - TOTAL							
Uranium	84.8	mg/kg-dry	D	0.02		SW6020	07/19/07 22:24 / bws
RADIONUCLIDES - GAMMA							
Radium 226	29.8	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	2.4	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	10.6	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	0.9	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	4.9	pCi/L		1.0		E903.0	07/28/07 11:29 / plj
Radium 226 precision (±)	0.8	pCi/L				E903.0	07/28/07 11:29 / plj
Radium 228	1.9	pCi/L		1.4		RA-05	07/23/07 09:28 / plj
Radium 228 precision (±)	0.8	pCi/L				RA-05	07/23/07 09:28 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	79.2	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.7	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	10	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.6	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-017
 Client Sample ID: P4-DH4-001

Report Date: 08/10/07
 Collection Date: 07/04/07 08:34
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.19	mmhos/cm		0.01		ASAM10-3	07/18/07 08:35 / jb
Saturation Percentage	41.7	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	5.7	s.u.		0.01		ASAM10-3.2	07/18/07 08:35 / jb
Nitrogen, Nitrate+Nitrite as N	4.1	mg/kg-dry		1.0		E353.2	07/20/07 10:16 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	6.1	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	786	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	29	meq/L		0.02		SW6010B	07/23/07 17:23 / ts
Magnesium, sat. paste	13	meq/L		0.04		SW6010B	07/23/07 17:23 / ts
Sodium, sat. paste	1.3	meq/L		0.02		SW6010B	07/23/07 17:20 / ts
Sodium Adsorption Ratio (SAR)	0.29	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	6.6	%		0.1		USDA26	07/11/07 14:29 / dcj
METALS - TOTAL							
Chromium	7.7	mg/kg-dry	D	0.06		SW6020	07/17/07 14:33 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:49 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.027	mg/kg-dry		0.005		A3114 B	07/20/07 13:27 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/20/07 10:48 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:31 / sml
Copper	0.7	mg/kg-dry	D	0.6		SW6020	07/23/07 19:31 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 19:31 / sml
Zinc	1.90	mg/kg-dry		0.01		SW6020	07/23/07 19:31 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	5	mg/kg-dry		5		SW6010B	07/18/07 22:40 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	68	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	12	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	20	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SL - SCL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	23	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-017
Client Sample ID: P4-DH4-001

Report Date: 08/10/07
Collection Date: 07/04/07 08:34
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.29	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-018
Client Sample ID: P4-DH6-001

Report Date: 08/10/07
Collection Date: 07/04/07 14:09
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.78	mmhos/cm		0.01		ASAM10-3	07/18/07 08:36 / jb
Saturation Percentage	41.1	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	7.2	s.u.		0.01		ASAM10-3.2	07/18/07 08:36 / jb
Nitrogen, Nitrate+Nitrite as N	2.7	mg/kg-dry		1.0		E353.2	07/20/07 10:36 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	6.6	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	965	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	27	meq/L		0.02		SW6010B	07/23/07 17:30 / ts
Magnesium, sat. paste	19	meq/L		0.04		SW6010B	07/23/07 17:30 / ts
Sodium, sat. paste	5.8	meq/L		0.02		SW6010B	07/23/07 17:26 / ts
Sodium Adsorption Ratio (SAR)	1.21	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	5.0	%		0.1		USDA26	07/11/07 14:30 / dcj
METALS - TOTAL							
Chromium	12.1	mg/kg-dry	D	0.06		SW6020	07/17/07 14:38 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:51 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.040	mg/kg-dry		0.005		A3114 B	07/20/07 13:29 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/20/07 10:50 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	0.06	mg/kg-dry	D	0.03		SW6020	07/23/07 19:35 / sml
Copper	0.40	mg/kg-dry	D	0.06		SW6020	07/23/07 19:35 / sml
Nickel	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:35 / sml
Zinc	2.36	mg/kg-dry		0.01		SW6020	07/23/07 19:35 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	5	mg/kg-dry		5		SW6010B	07/18/07 22:43 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	55	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	22	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	23	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SCL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	53	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-018
Client Sample ID: P4-DH6-001

Report Date: 08/10/07
Collection Date: 07/04/07 14:09
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.32	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-019
 Client Sample ID: P4-DH3-001

Report Date: 08/10/07
 Collection Date: 07/01/07 10:55
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.80	mmhos/cm		0.01		ASAM10-3	07/18/07 08:37 / jb
Saturation Percentage	34.5	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	7.8	s.u.		0.01		ASAM10-3.2	07/18/07 08:37 / jb
Nitrogen, Nitrate+Nitrite as N	2.1	mg/kg-dry		1.0		E353.2	07/20/07 10:38 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/24/07 16:46 / sec
Potassium, soluble	4.4	mg/kg-dry		1.0		SW6010B	07/24/07 16:46 / sec
Sulfate, soluble	116	mg/kg-dry		0.10		SW6010B	07/24/07 16:46 / sec
Calcium, sat. paste	5.2	meq/L		0.02		SW6010B	07/23/07 17:40 / ts
Magnesium, sat. paste	1.5	meq/L		0.04		SW6010B	07/23/07 17:40 / ts
Sodium, sat. paste	1.4	meq/L		0.02		SW6010B	07/23/07 17:40 / ts
Sodium Adsorption Ratio (SAR)	0.79	unitless		0.01		Calculation	07/24/07 12:54 / sec
PHYSICAL PROPERTIES							
Moisture	4.2	%		0.1		USDA26	07/11/07 14:31 / dcj
METALS - TOTAL							
Chromium	3.6	mg/kg-dry	D	0.06		SW6020	07/17/07 14:43 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:54 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.054	mg/kg-dry		0.005		A3114 B	07/20/07 13:31 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/20/07 10:52 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 19:55 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/23/07 19:55 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 19:55 / sml
Zinc	1.15	mg/kg-dry		0.01		SW6020	07/23/07 19:55 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/18/07 22:47 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	73	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	12	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	15	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	26	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-019
Client Sample ID: P4-DH3-001

Report Date: 08/10/07
Collection Date: 07/01/07 10:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.07	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-020
Client Sample ID: P4-DH2-001

Report Date: 08/10/07
Collection Date: 07/02/07 12:31
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	3.29	mmhos/cm		0.01		ASAM10-3	07/18/07 08:37 / jlb
Saturation Percentage	42.2	%		0.1		USDA27a	07/18/07 13:29 / jlb
pH, sat. paste	7.7	s.u.		0.01		ASAM10-3.2	07/18/07 08:37 / jlb
Nitrogen, Nitrate+Nitrite as N	2.4	mg/kg-dry		1.0		E353.2	07/20/07 10:41 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/26/07 14:46 / sec
Potassium, soluble	5.6	mg/kg-dry		1.0		SW6010B	07/26/07 14:46 / sec
Sulfate, soluble	886	mg/kg-dry		0.10		SW6010B	07/26/07 14:46 / sec
Calcium, sat. paste	28	meq/L		0.02		SW6010B	07/24/07 16:05 / ts
Magnesium, sat. paste	15	meq/L		0.04		SW6010B	07/24/07 16:05 / ts
Sodium, sat. paste	3.0	meq/L		0.02		SW6010B	07/24/07 15:56 / ts
Sodium Adsorption Ratio (SAR)	0.65	unitless		0.01		Calculation	07/25/07 16:16 / sec
PHYSICAL PROPERTIES							
Moisture	3.5	%		0.1		USDA26	07/11/07 14:32 / dcj
METALS - TOTAL							
Chromium	14.3	mg/kg-dry	D	0.06		SW6020	07/17/07 15:08 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:56 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.041	mg/kg-dry		0.005		A3114 B	07/20/07 13:33 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/20/07 10:54 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 20:00 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	07/23/07 20:00 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	07/23/07 20:00 / sml
Zinc	6.46	mg/kg-dry		0.01		SW6020	07/23/07 20:00 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/18/07 22:50 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	45	%		1.0		ASA15-5	07/20/07 17:02 / jlb
Silt	32	%		1.0		ASA15-5	07/20/07 17:02 / jlb
Clay	23	%		1.0		ASA15-5	07/20/07 17:02 / jlb
Texture	L			1.0		ASA15-5	07/20/07 17:02 / jlb
Coarse Fragments	18	%		1.0		ASA15-5	07/20/07 17:02 / jlb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-020
Client Sample ID: P4-DH2-001

Report Date: 08/10/07
Collection Date: 07/02/07 12:31
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.24	%		0.02		ASA29-3	07/13/07 08:46 / mkf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-021
Client Sample ID: P4-DH2-010

Report Date: 08/10/07
Collection Date: 07/02/07 13:55
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	36.1	mg/kg-dry	D	0.03		SW6020	07/19/07 22:57 / bws
RADIONUCLIDES - GAMMA							
Radium 226	7.9	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	0.8	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	39.0	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.2	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	5.7	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-022
 Client Sample ID: P4-DH2-011

Report Date: 08/10/07
 Collection Date: 07/02/07 14:04
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	6.0	mg/L		0.2		E200.7	07/24/07 15:25 / ts
Magnesium	1.60	mg/L	D	0.04		E200.7	07/24/07 15:25 / ts
Potassium	ND	mg/L		3		E200.7	07/24/07 15:25 / ts
Sodium	22	mg/L		5		E200.7	07/24/07 15:25 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/22/07 20:16 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/22/07 20:16 / bws
Barium	ND	mg/L		0.01		E200.8	07/22/07 20:16 / bws
Lead	0.05	mg/L		0.04		E200.8	07/22/07 20:16 / bws
Manganese	0.04	mg/L		0.01		E200.8	07/22/07 20:16 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/22/07 20:16 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/22/07 20:16 / bws
Uranium	0.0005	mg/L		0.0001		E200.8	07/22/07 20:16 / bws
Vanadium	0.005	mg/L		0.005		E200.8	07/22/07 20:16 / bws
METALS - TOTAL							
Uranium	69.9	mg/kg-dry	D	0.03		SW6020	07/19/07 23:18 / bws
RADIONUCLIDES - GAMMA							
Radium 226	17.7	pCi/g-dry		1.0		E901.1	08/01/07 05:15 / dpb
Radium 226 precision (±)	1.6	pCi/g-dry				E901.1	08/01/07 05:15 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	2.7	pCi/L		1.0		E900.0	07/29/07 06:00 / res
Gross Alpha precision (±)	0.6	pCi/L				E900.0	07/29/07 06:00 / res
Radium 226	ND	pCi/L		1.0		E903.0	07/28/07 12:29 / plj
Radium 228	ND	pCi/L		1.4		RA-05	07/23/07 07:51 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	98.4	pCi/g-dry		2.0		E900.0	07/20/07 10:00 / res
Gross Alpha precision (±)	1.9	pCi/g-dry				E900.0	07/20/07 10:00 / res
Thorium 230	15	pCi/g-dry		0.2		E907.0	07/26/07 15:00 / dmf
Thorium 230 precision (±)	0.6	pCi/g-dry				E907.0	07/26/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: GE (UNC) St Anthony Mine Site
 Lab ID: C07070359-023
 Client Sample ID: P4-DH1-001

Report Date: 08/10/07
 Collection Date: 07/03/07 11:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.49	mmhos/cm		0.01		ASAM10-3	07/18/07 08:38 / jb
Saturation Percentage	43.2	%		0.1		USDA27a	07/18/07 13:29 / jb
pH, sat. paste	6.2	s.u.		0.01		ASAM10-3.2	07/18/07 08:38 / jb
Nitrogen, Nitrate+Nitrite as N	4.1	mg/kg-dry		1.0		E353.2	07/20/07 10:43 / jal
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/26/07 14:46 / sec
Potassium, soluble	3.5	mg/kg-dry		1.0		SW6010B	07/26/07 14:46 / sec
Sulfate, soluble	1160	mg/kg-dry		0.10		SW6010B	07/26/07 14:46 / sec
Calcium, sat. paste	27	meq/L		0.02		SW6010B	07/24/07 16:33 / ts
Magnesium, sat. paste	35	meq/L		0.04		SW6010B	07/24/07 16:33 / ts
Sodium, sat. paste	4.2	meq/L		0.02		SW6010B	07/24/07 16:30 / ts
Sodium Adsorption Ratio (SAR)	0.76	unitless		0.01		Calculation	07/25/07 16:16 / sec
PHYSICAL PROPERTIES							
Moisture	7.6	%		0.1		USDA26	07/11/07 14:33 / dcj
METALS - TOTAL							
Chromium	13.0	mg/kg-dry	D	0.06		SW6020	07/17/07 15:12 / sml
Mercury	ND	mg/kg-dry		0.05		SW7471A	07/18/07 12:58 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.152	mg/kg-dry		0.005		A3114 B	07/20/07 13:35 / kes
Selenium	0.007	mg/kg-dry		0.005		A3114 B	07/20/07 10:57 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	07/23/07 20:05 / sml
Copper	1.4	mg/kg-dry	D	0.5		SW6020	07/23/07 20:05 / sml
Nickel	1.3	mg/kg-dry	D	0.9		SW6020	07/23/07 20:05 / sml
Zinc	2.12	mg/kg-dry		0.01		SW6020	07/23/07 20:05 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	9	mg/kg-dry		5		SW6010B	07/18/07 22:53 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	57	%		1.0		ASA15-5	07/20/07 17:02 / jb
Silt	19	%		1.0		ASA15-5	07/20/07 17:02 / jb
Clay	24	%		1.0		ASA15-5	07/20/07 17:02 / jb
Texture	SCL			1.0		ASA15-5	07/20/07 17:02 / jb
Coarse Fragments	41	%		1.0		ASA15-5	07/20/07 17:02 / jb

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Lab ID: C07070359-023
Client Sample ID: P4-DH1-001

Report Date: 08/10/07
Collection Date: 07/03/07 11:30
Date Received: 06/27/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.28	%		0.02		ASA29-3	07/13/07 08:49 / mkf

Report | RL - Analyte reporting limit.
Definitions: | QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									
Batch: 15291									
Sample ID: MB-15291	Method Blank								
Selenium	ND	mg/kg-dry	0.001						
Run: CVAA-C202_070720B 07/20/07 10:39									
Sample ID: C07070359-023DDUP	Sample Duplicate								
Selenium	0.00667	mg/kg-dry	0.0050				2.1	10	
Run: CVAA-C202_070720B 07/20/07 10:59									
Sample ID: C07070359-001DMS	Sample Matrix Spike								
Selenium	0.236	mg/kg-dry	0.0050	114	85	115			07/20/07 11:01
Run: CVAA-C202_070720B 07/20/07 11:03									
Sample ID: C07070359-001DMSD	Sample Matrix Spike Duplicate								
Selenium	0.240	mg/kg-dry	0.0050	116	85	115	1.7	10	07/20/07 11:03
Run: CVAA-C202_070720B 07/20/07 11:03									
Sample ID: MB-15291	Method Blank								
Arsenic	0.002	mg/kg-dry	0.001						07/20/07 13:19
Run: CVAA-C202_070720C 07/20/07 13:19									
Sample ID: C07070359-023DDUP	Sample Duplicate								
Arsenic	0.157	mg/kg-dry	0.0050				3.4	10	07/20/07 13:37
Run: CVAA-C202_070720C 07/20/07 13:37									
Sample ID: C07070359-001DMS	Sample Matrix Spike								
Arsenic	0.242	mg/kg	0.0050	106	85	115			07/20/07 13:40
Run: CVAA-C202_070720C 07/20/07 13:40									
Sample ID: C07070359-001DMSD	Sample Matrix Spike Duplicate								
Arsenic	0.243	mg/kg	0.0050	106	85	115	0.2	10	07/20/07 13:42
Run: CVAA-C202_070720C 07/20/07 13:42									
Method: ASA15-5									
Batch: 15339									
Sample ID: LCS-15339	Laboratory Control Sample								
Sand	28	%	1.0	77	85	115			S
Silt	36	%	1.0	122	85	115			S
Clay	36	%	1.0	105	85	115			
Run: PSA_070720A 07/20/07 17:02									
Sample ID: C07070359-023IDUP	Sample Duplicate								
Sand	58	%	1.0				1.7	20	
Silt	18	%	1.0				5.4	20	
Clay	24	%	1.0				0.0	20	
Texture	ND		1.0						
Run: PSA_070720A 07/20/07 17:02									
Method: ASA29-3									
Batch: 15204									
Sample ID: MBLK-15204	Method Blank								
Organic Carbon, Total (TOC)	ND	%	0.02						07/13/07 08:43
Run: HACH DR3000_070713A 07/13/07 08:43									
Sample ID: LCS-15204	Laboratory Control Sample								
Organic Carbon, Total (TOC)	0.86	%	0.10	78	70	120			07/13/07 08:43
Run: HACH DR3000_070713A 07/13/07 08:43									

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASAM10-3 Batch: 15285									
Sample ID: LCS-15285	Laboratory Control Sample			Run: COND1-C_070718A			07/18/07 08:30		
Conductivity, paste extract	3.92	mmhos/cm	0.010	103	80	120			
Sample ID: C07070359-023CDUP	Sample Duplicate			Run: COND1-C_070718A			07/18/07 08:39		
Conductivity, paste extract	4.55	mmhos/cm	0.010				1.3	20	
Method: ASAM10-3.2 Batch: 15285									
Sample ID: LCS-15285	Laboratory Control Sample			Run: COND1-C_070718A			07/18/07 08:30		
pH, sat. paste	6.9	s.u.	0.10	100	80	120			
Sample ID: C07070359-023CDUP	Sample Duplicate			Run: COND1-C_070718A			07/18/07 08:39		
pH, sat. paste	6.2	s.u.	0.10				0.2	20	
Method: ASAM10-3.2 Analytical Run: COND1-C_070718A									
Sample ID: CCV-A0707180824	Continuing Calibration Verification Standard						07/18/07 08:29		
pH, sat. paste	7.0	s.u.	0.10	100	90	110			
Method: E200.7 Batch: 15210									
Sample ID: MB-15210	Method Blank			Run: ICP1-C_070724A			07/24/07 14:13		
Calcium	0.6	mg/L	0.04						
Magnesium	0.06	mg/L	0.04						
Potassium	0.1	mg/L	0.08						
Sodium	4	mg/L	0.06						
Sample ID: C07070359-005AMS	Sample Matrix Spike			Run: ICP1-C_070724A			07/24/07 14:55		
Calcium	505	mg/L	0.50	101	70	130			
Magnesium	506	mg/L	0.50	101	70	130			
Potassium	476	mg/L	0.80	95	70	130			
Sodium	491	mg/L	0.63	96	70	130			
Sample ID: C07070359-005AMSD	Sample Matrix Spike Duplicate			Run: ICP1-C_070724A			07/24/07 14:59		
Calcium	498	mg/L	0.50	99	70	130	1.4	20	
Magnesium	500	mg/L	0.50	100	70	130	1.2	20	
Potassium	475	mg/L	0.80	95	70	130	0.1	20	
Sodium	491	mg/L	0.63	96	70	130	0.1	20	
Sample ID: LFB-ICP25304	Laboratory Fortified Blank			Run: ICP1-C_070724A			07/24/07 21:21		
Calcium	47.9	mg/L	0.50	96	85	125			
Magnesium	49.8	mg/L	0.50	100	85	125			
Potassium	46.6	mg/L	0.50	93	85	125			
Sodium	48.1	mg/L	0.50	95	85	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Llimit	High Llimit	RPD	RPDLimit	Qual
Method: E200.8									
Batch: 15210									
Sample ID: LFB	Laboratory Fortified Blank			Run: ICPMS2-C_070722A			07/22/07 16:27		
Aluminum	0.0556	mg/L	0.0010	111	85	115			
Arsenic	0.0537	mg/L	0.0010	107	85	115			
Barium	0.0531	mg/L	0.0010	106	85	115			
Lead	0.0537	mg/L	0.0010	107	85	115			
Manganese	0.0540	mg/L	0.0010	108	85	115			
Molybdenum	0.0530	mg/L	0.0010	106	85	115			
Selenium	0.0544	mg/L	0.0010	109	85	115			
Uranium	0.0522	mg/L	0.00030	104	85	115			
Vanadium	0.0541	mg/L	0.0010	108	85	115			
Sample ID: MB-15210	Method Blank			Run: ICPMS2-C_070722A			07/22/07 19:29		
Aluminum	0.02	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	0.002	mg/L	3E-05						
Lead	0.0002	mg/L	3E-05						
Manganese	0.002	mg/L	5E-05						
Molybdenum	ND	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Uranium	0.0008	mg/L	1E-05						
Vanadium	ND	mg/L	3E-05						
Sample ID: C07070359-022AMS4	Post Digestion Spike			Run: ICPMS2-C_070722A			07/22/07 20:50		
Aluminum	0.554	mg/L	0.10	107	70	130			
Arsenic	0.532	mg/L	0.0010	106	70	130			
Barium	0.525	mg/L	0.10	104	70	130			
Lead	0.579	mg/L	0.050	106	70	130			
Manganese	0.561	mg/L	0.010	104	70	130			
Molybdenum	0.527	mg/L	0.10	105	70	130			
Selenium	0.542	mg/L	0.0023	108	70	130			
Uranium	0.511	mg/L	0.00030	102	70	130			
Vanadium	0.532	mg/L	0.10	105	70	130			
Sample ID: C07070359-022AMSD4	Post Digestion Spike Duplicate			Run: ICPMS2-C_070722A			07/22/07 20:57		
Aluminum	0.555	mg/L	0.10	108	70	130	0.3	20	
Arsenic	0.524	mg/L	0.0010	105	70	130	1.4	20	
Barium	0.526	mg/L	0.10	105	70	130	0.3	20	
Lead	0.576	mg/L	0.050	106	70	130	0.4	20	
Manganese	0.566	mg/L	0.010	105	70	130	0.9	20	
Molybdenum	0.525	mg/L	0.10	105	70	130	0.4	20	
Selenium	0.538	mg/L	0.0023	108	70	130	0.8	20	
Uranium	0.509	mg/L	0.00030	102	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8 Batch: 15210									
Sample ID: C07070359-022AMSD4	Post Digestion Spike Duplicate								
Vanadium	0.536	mg/L	0.10	106	70	130	0.7	20	07/22/07 20:57
Method: E353.2 Batch: 15262									
Sample ID: MB-15262	Method Blank								
Nitrogen, Nitrate+Nitrite as N	1	mg/kg-dry	0.3						07/20/07 09:06
Sample ID: LCS-15262	Laboratory Control Sample								
Nitrogen, Nitrate+Nitrite as N	3.79	mg/kg-dry	1.0	60	75	125			S 07/20/07 09:08
Sample ID: C07070359-017FDUP	Sample Duplicate								
Nitrogen, Nitrate+Nitrite as N	4.22	mg/kg-dry	1.0				2.8	20	07/20/07 10:26
Sample ID: C07070359-023FMS	Sample Matrix Spike								
Nitrogen, Nitrate+Nitrite as N	23.8	mg/kg-dry	2.9	101	80	120			07/20/07 10:48
Sample ID: C07070359-023FMSD	Sample Matrix Spike Duplicate								
Nitrogen, Nitrate+Nitrite as N	24.3	mg/kg-dry	2.9	103	80	120	2.0	20	07/20/07 10:51
Method: E353.2 Batch: 15264									
Sample ID: MB-15264	Method Blank								
Nitrogen, Nitrate+Nitrite as N	2	mg/kg-dry	0.3						07/20/07 10:06
Sample ID: C07070359-023FDUP	Sample Duplicate								
Nitrogen, Nitrate+Nitrite as N	4.27	mg/kg-dry	1.0				3.7	20	07/20/07 10:46
Method: E900.0 Batch: GrAB-0298									
Sample ID: UNAT-GrAB-0298	Laboratory Control Sample								
Gross Alpha	300	pCi/L	1.0	107	70	130			07/27/07 02:41
Sample ID: C07070757-001AMS	Sample Matrix Spike								
Gross Alpha	200	pCi/L	1.0	81	70	130			07/27/07 02:41
Sample ID: C07070757-001AMSD	Sample Matrix Spike Duplicate								
Gross Alpha	200	pCi/L	1.0	84	70	130	4.6	13.3	07/27/07 02:41
Sample ID: C07070813-001ADUP	Sample Duplicate								
Gross Alpha	ND	pCi/L	1.0				0.0	438.1	07/29/07 06:00
Sample ID: RB-GRAB-0298	Method Blank								
Gross Alpha	ND	pCi/L	1						07/23/07 10:00

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0							Batch: RA226-2182		
Sample ID: C07061601-027AMS Radium 226	Sample Matrix Spike 24 pCi/L		0.20	91	70	130			Run: TENNELEC-2_070716C 07/27/07 20:23
Sample ID: C07061601-027AMSD Radium 226	Sample Matrix Spike Duplicate 28 pCi/L		0.20	108	70	130	14	28.9	Run: TENNELEC-2_070716C 07/27/07 18:22
Sample ID: MB-RA226-2182 Radium 226	Method Blank ND pCi/L		0.2						Run: TENNELEC-2_070716C 07/28/07 15:30
Sample ID: LCS-RA226-2182 Radium 226	Laboratory Control Sample 14 pCi/L		0.20	107	70	130			Run: TENNELEC-2_070716C 07/28/07 16:31
Method: E907.0							Batch: 15349		
Sample ID: LCS-R87505 Thorium 230	Laboratory Control Sample 4.40 pCi/g-dry		0.10	90	70	130			Run: EGG-ORTEC_070726A 07/26/07 15:00
Sample ID: C07070359-010BMS Thorium 230	Sample Matrix Spike 2.82 pCi/g-dry		0.20	61	70	130			Run: EGG-ORTEC_070726B 07/26/07 15:00 S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the low response is considered to be matrix related. The batch is approved.									
Sample ID: C07070359-010BMSD Thorium 230	Sample Matrix Spike Duplicate 2.71 pCi/g-dry		0.20	57	70	130	4.0	30	Run: EGG-ORTEC_070726B 07/26/07 15:00 S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the low response is considered to be matrix related. The batch is approved.									
Sample ID: MB-R87797 Thorium 230	Method Blank ND pCi/g-dry		0.01						Run: EGG-ORTEC_070726B 07/26/07 15:00
Method: RA-05							Batch: RA228-1731		
Sample ID: LCS-228-RA226-2182 Radium 228	Laboratory Control Sample 6.71pCi/L		1.0	88	70	130			Run: TENNELEC-3_070716C 07/23/07 07:51
Sample ID: MB-RA226-2182 Radium 228	Method Blank ND pCi/L		1						Run: TENNELEC-3_070716C 07/23/07 07:51
Sample ID: C07070359-022AMS Radium 228	Sample Matrix Spike 10.4pCi/L		1.0	82	70	130			Run: TENNELEC-3_070716C 07/23/07 07:51
Sample ID: C07070359-022AMSD Radium 228	Sample Matrix Spike Duplicate 11.8pCi/L		1.0	93	70	130	13	37.6	Run: TENNELEC-3_070716C 07/23/07 07:51

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B							Batch: 15285		
Sample ID: C07070359-018CMS	Sample Matrix Spike			Run: ICP1-C_070723A			07/23/07 17:33		
Calcium	750	mg/L	0.50	85	75	125			
Magnesium	450	mg/L	0.50	87	75	125			
Sodium	360	mg/L	0.50	88	75	125			
Sample ID: C07070359-018CMSD	Sample Matrix Spike Duplicate			Run: ICP1-C_070723A			07/23/07 17:37		
Calcium	760	mg/L	0.50	87	75	125	0.7	20	
Magnesium	450	mg/L	0.50	89	75	125	0.7	20	
Sodium	370	mg/L	0.50	91	75	125	1.8	20	
Sample ID: MB-15285	Method Blank			Run: ICP1-C_070723A			07/23/07 17:53		
Calcium	ND	mg/L	0.06						
Magnesium	ND	mg/L	0.05						
Sodium	ND	mg/L	0.06						
Sample ID: LCS-15285	Laboratory Control Sample			Run: ICP1-C_070723A			07/23/07 17:56		
Calcium	560	mg/L	0.50	93	70	130			
Magnesium	200	mg/L	0.50	89	70	130			
Sodium	220	mg/L	0.50	88	70	130			
Method: SW6010B							Batch: 15287		
Sample ID: MB-15287	Method Blank			Run: ICP2-C_070718A			07/18/07 19:22		
Phosphorus	0.7	mg/kg-dry	0.1						
Sample ID: LCS-15287	Laboratory Control Sample			Run: ICP2-C_070718A			07/18/07 19:29		
Phosphorus	9.64	mg/kg-dry	5.0	73	70	130			
Sample ID: C07070262-020EMS2	Sample Matrix Spike			Run: ICP2-C_070718A			07/18/07 21:24		
Phosphorus	102	mg/kg-dry	5.0	98	75	125			
Sample ID: C07070262-020EMSD2	Sample Matrix Spike Duplicate			Run: ICP2-C_070718A			07/18/07 21:28		
Phosphorus	101	mg/kg-dry	5.0	97	75	125	1.4	20	
Sample ID: C07070359-023EDUP	Sample Duplicate			Run: ICP2-C_070718A			07/18/07 22:57		
Phosphorus	9.61	mg/kg-dry	5.0				4.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 15233
Sample ID: MB-15233	Method Blank								Run: ICPMS1-C_070717A 07/17/07 15:34
Chromium	0.002	mg/kg-dry	0.0001						
Uranium	0.0003	mg/kg-dry	6E-05						
Sample ID: LCS1-15233	Laboratory Control Sample								Run: ICPMS1-C_070717A 07/17/07 15:39
Chromium	0.019	mg/kg-dry	2.5	84	70	130			
Uranium	0.017	mg/kg-dry	0.15	82	70	130			
Sample ID: LCS-15233	Laboratory Control Sample								Run: ICPMS1-C_070717A 07/17/07 15:43
Chromium	1.0	mg/kg-dry	2.5	102	85	115			
Uranium	0.95	mg/kg-dry	0.15	95	85	115			
Sample ID: C07070359-004A MS4	Post Digestion Spike								Run: ICPMS1-C_070717A 07/17/07 16:42
Chromium	29	mg/kg-dry	2.5	102	75	125			
Uranium	87	mg/kg-dry	0.15	101	75	125			
Sample ID: C07070359-004A MSD4	Post Digestion Spike Duplicate								Run: ICPMS1-C_070717A 07/17/07 16:47
Chromium	28	mg/kg-dry	2.5	101	75	125	0.7	20	
Uranium	85	mg/kg-dry	0.15	94	75	125	2.0	20	
Sample ID: MB-15233	Method Blank								Run: ICPMS2-C_070719A 07/19/07 20:41
Uranium	0.0004	mg/kg-dry	6E-05						
Sample ID: LCS1-15233	Laboratory Control Sample								Run: ICPMS2-C_070719A 07/19/07 20:45
Uranium	0.0187	mg/kg-dry	0.015	92	75	125			
Sample ID: LCS-15233	Laboratory Control Sample								Run: ICPMS2-C_070719A 07/19/07 20:50
Uranium	0.994	mg/kg-dry	0.015	99	75	125			
Sample ID: C07070359-016B MS4	Sample Matrix Spike								Run: ICPMS2-C_070719A 07/19/07 22:29
Uranium	107	mg/kg-dry	0.025		75	125			A
Sample ID: C07070359-016B MSD4	Sample Matrix Spike Duplicate								Run: ICPMS2-C_070719A 07/19/07 22:33
Uranium	106	mg/kg-dry	0.025		75	125	0.6	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020 Batch: 15234									
Sample ID: MB-15234	Method Blank								
Chromium	0.002	mg/kg-dry	0.0001						Run: ICPMS1-C_070717A 07/17/07 14:14
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15234	Laboratory Control Sample								Run: ICPMS1-C_070717A 07/17/07 14:19
Chromium	0.018	mg/kg-dry	2.5	82	70	130			
Uranium	0.017	mg/kg-dry	0.15	85	70	130			
Sample ID: LCS-15234	Laboratory Control Sample								Run: ICPMS1-C_070717A 07/17/07 14:24
Chromium	1.0	mg/kg-dry	2.5	101	85	115			
Uranium	0.96	mg/kg-dry	0.15	96	85	115			
Sample ID: C07070359-023A MS4	Post Digestion Spike								Run: ICPMS1-C_070717A 07/17/07 15:19
Chromium	36	mg/kg-dry	2.5	99	75	125			
Uranium	24	mg/kg-dry	0.15	98	75	125			
Sample ID: C07070359-023A MSD4	Post Digestion Spike Duplicate								Run: ICPMS1-C_070717A 07/17/07 15:24
Chromium	37	mg/kg-dry	2.5	100	75	125	0.3	20	
Uranium	24	mg/kg-dry	0.15	99	75	125	0.8	20	
Sample ID: MB-15234	Method Blank								Run: ICPMS2-C_070719A 07/19/07 22:41
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS1-15234	Laboratory Control Sample								Run: ICPMS2-C_070719A 07/19/07 22:45
Uranium	0.0185	mg/kg-dry	0.015	93	75	125			
Sample ID: LCS-15234	Laboratory Control Sample								Run: ICPMS2-C_070719A 07/19/07 22:49
Uranium	0.998	mg/kg-dry	0.015	100	75	125			
Sample ID: C07070359-022BMS	Sample Matrix Spike								Run: ICPMS2-C_070719A 07/19/07 23:22
Uranium	92.3	mg/kg-dry	0.025	106	75	125			
Sample ID: C07070359-022BMSD	Sample Matrix Spike Duplicate								Run: ICPMS2-C_070719A 07/19/07 23:26
Uranium	92.2	mg/kg-dry	0.025	106	75	125	0.1	20	

Qualifiers:

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ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020							Batch: 15289		
Sample ID: MB-15289	Method Blank				Run: ICPMS1-C_070723A		07/23/07 18:41		
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.06						
Nickel	ND	mg/kg-dry	0.09						
Zinc	0.06	mg/kg-dry	0.0005						
Sample ID: LCS-15289	Laboratory Control Sample				Run: ICPMS1-C_070723A		07/23/07 18:46		
Cadmium	0.134	mg/kg-dry	0.066	123	50	150			
Copper	1.47	mg/kg-dry	0.60	105	50	150			
Nickel	0.822	mg/kg-dry	0.093	106	50	150			
Zinc	0.616	mg/kg-dry	0.020	92	50	150			
Sample ID: C07070359-018BMS4	Post Digestion Spike				Run: ICPMS1-C_070723A		07/23/07 19:40		
Cadmium	1.14	mg/kg-dry	0.032	109	75	125			
Copper	1.40	mg/kg-dry	0.060	100	75	125			
Nickel	1.22	mg/kg-dry	0.26	122	75	125			
Zinc	3.38	mg/kg-dry	0.020	101	75	125			
Sample ID: C07070359-018BMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_070723A		07/23/07 19:45		
Cadmium	1.13	mg/kg-dry	0.032	107	75	125			
Copper	1.37	mg/kg-dry	0.060	98	75	125			
Nickel	1.18	mg/kg-dry	0.26	118	75	125			
Zinc	3.17	mg/kg-dry	0.020	81	75	125			
Sample ID: C07070359-023BDUP	Sample Duplicate				Run: ICPMS1-C_070723A		07/23/07 20:10		
Cadmium	ND	mg/kg-dry	0.66				0.0	30	
Copper	1.34	mg/kg-dry	0.60				5.6	30	
Nickel	1.31	mg/kg-dry	0.93				1.8	30	
Zinc	2.15	mg/kg-dry	0.020				1.2	30	
Method: SW7471A							Batch: 15309		
Sample ID: MB-15309	Method Blank				Run: CVAA-C201_070718C		07/18/07 12:40		
Mercury	ND	mg/kg-dry	0.04						
Sample ID: C07070720-001A MS	Sample Matrix Spike				Run: CVAA-C201_070718C		07/18/07 13:03		
Mercury	0.54	mg/kg-dry	0.050	86	85	115			
Sample ID: C07070720-001A MSD	Sample Matrix Spike Duplicate				Run: CVAA-C201_070718C		07/18/07 13:07		
Mercury	0.58	mg/kg-dry	0.050	87	85	115	8.0	30	
Sample ID: LCS-15309	Laboratory Control Sample				Run: CVAA-C201_070718C		07/18/07 13:11		
Mercury	0.47	mg/kg-dry	0.050	95	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site

Report Date: 08/10/07
Work Order: C07070359

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: USDA27a							Batch: SAT070717A		
Sample ID: C07070359-023C DUP	Sample Duplicate					Run: SARTORIUS CP3202_070718		07/18/07 13:29	
Saturation Percentage	41.2	%	0.10				4.7	10	
Sample ID: LCS	Laboratory Control Sample					Run: SARTORIUS CP3202_070718		07/18/07 13:29	
Saturation Percentage	49.6	%	0.10	98	80	120			

Qualifiers:
 RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: MWH AMERICAS, INC		Project Name, PWS, Permit, Etc. ST ANTHONY MINE		Sample Origin State: NM		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: 1475 PINE GARDEN RD, STE 109 SHEEP CREEK SMITHS, CO 80477		Contact Name: TERRY LEESON		Email: 970-879-6260		Sampler: (Please Print) Ryan Hurligan	
Invoice Address: SEE CONTRACT		Invoice Contact & Phone: SEE CONTRACT		Purchase Order: 18977		Quote/Bottle Order: 18977	
<input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: <input type="checkbox"/> Other:		<input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		Special Report/Formats - ELI must be notified prior to sample submittal for the following:		Shipped by: <input type="checkbox"/> RUSH <input type="checkbox"/> S <input type="checkbox"/> H	
Number of Containers Sample Type: A W S V B O Air Water Soils/Solids Vegetation Biosoay Other		ANALYSIS REQUESTED (SEE ATTACHED)		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page Comments:		Shipped by: <input type="checkbox"/> RUSH <input type="checkbox"/> S <input type="checkbox"/> H	
MATRIX 1 P4-DHS-001 2 P4-DHS-007 3 P4-DHS-016 4 P3-DH8-001 5 P3-DH8-008 6 P3-DH8-007 7 P3-DH8-301		X X X X X X X		X X X X X X X		X X X X X X X	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date 7/6/07 7/6/07 7/6/07 7/6/07 7/6/07 7/6/07		Collection Time 0945 1015 1130 1610 1647 1657 1707		RECEIVED BY (PRINT) RECEIVED BY (PRINT) RECEIVED BY (PRINT) RECEIVED BY (PRINT) RECEIVED BY (PRINT) RECEIVED BY (PRINT)	
Signature: Ryan Hurligan		Signature: Terry Leson		Signature: LABORATORY USE ONLY		Signature: LABORATORY USE ONLY	
Date/Time: 7/7/07 1130		Date/Time: 7/10/07 9:45		Date/Time: 7/10/07 9:45		Date/Time: 7/10/07 9:45	
Signature: Ryan Hurligan		Signature: Terry Leson		Signature: LABORATORY USE ONLY		Signature: LABORATORY USE ONLY	
Sample Disposal: Return to Client.		Lab Disposal:		Received by Laboratory:		Received by Laboratory:	

Custody Record MUST be Signed

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.



Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT - Provide as much information as possible.

Company Name: **MUSH AMERICAS, INC.**
 Report Mail Address: **1477 PINE GROVE RD, STE 109**
STREAMBOAT SPRINGS, CO 80477
 Invoice Address: **SEE CONTRACT**

Project Name: **ST ANTHONY MINE**
 State: **NM**
 Email: **TOBY LESSON 970-879-6260**
 Phone/Fax: **SEE CONTRACT**

EPA/State Compliance: Yes No
 Sampler: (Please Print) **RYAN HURSTEN**
 Quoter/Bottle Order: **18977**

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

- DW
- GSA
- POTW/MWTP
- State: _____
- Other: _____
- A2LA
- EDD/EDT (Electronic Data)
- Format: _____
- LEVEL IV
- NELAC

Number of Containers	Sample Type: A W S V B O	Vegetation	Air	Water	Soils	Solids	Other	ANALYSIS REQUESTED	Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Receipt Temp	On Ice:	Custody Seal Intact	Signature Match	Sipped by:	Cooler ID(s):	EPA/State Compliance:	
																			Y
1	PY-DH3-004							2-S	X										
2	PY-DH3-005							1-S	X										
3	PY-DH3-300							1-S	X										
4	PY-DH1-015							2-S	X										
5	PY-DH1-013							1-S	X										
6																			
7																			
8																			
9																			
10																			

Received by Laboratory: **RYAN HURSTEN** Date/Time: **7-10-07 9:45**
 Received by (print): **RYAN HURSTEN** Signature: **[Signature]**
 Received by Laboratory: _____ Date/Time: _____
 Received by (print): _____ Signature: _____
 Received by Laboratory: _____ Date/Time: _____
 Received by (print): _____ Signature: _____

Custody Record MUST be Signed

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Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT- Provide as much information as possible.

Company Name: MWH AMERICAS, INC		Project Name, PWS, Permit, Etc. ST ANTHONY MINE		Sample Origin State: NM		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: 1475 PINE GROVE RD, STE 109 SPRINGMOUNT SPRINGS, CO 80477		Contact Name: BOB LEESON		Email: 970-879-6260		Sampler: (Please Print) Ryan Hutteren	
Invoice Address: SEE CONTACT		Invoice Contact & Phone: SEE CONTACT		Purchase Order:		Quote/Bottle Order: 18977	
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> GSA <input type="checkbox"/> POT/WWTP <input type="checkbox"/> State: <input type="checkbox"/> Other: <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		ANALYSIS REQUESTED		SEE ATTACHED		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	
Number of Containers Sample Type: AWSVB0 Vegetation Bioassay Other		MATRIX		Normal Turnaround (TAT)		Shipped by: Cooler ID(s): Receipt Temp On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Custody Seal Intact Signature Match	
1		PY-DH4-014		X		C-2515	
2		PY-DH4-012		X		23.6°C	
3		PY-DH6-007		X		LABORATORY USE ONLY	
4		PY-DH6-008		X		LABORATORY USE ONLY	
5						LABORATORY USE ONLY	
6						LABORATORY USE ONLY	
7						LABORATORY USE ONLY	
8						LABORATORY USE ONLY	
9						LABORATORY USE ONLY	
10						LABORATORY USE ONLY	
Custody Record MUST be Signed		Relinquished by (print): Ryan Hutteren		Date/Time: 7/5/07 1500		Signature: <i>[Signature]</i>	
		Relinquished by (print):		Date/Time:		Signature:	
		Sample Disposal:		Return to Client:		Date/Time:	
		Lab Disposal:		Received by Laboratory:		Date/Time:	

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Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT- Provide as much information as possible.

Company Name: MWH AMERICAS, INC. Report Mail Address: 1475 PINE GROVE ROAD, STE 109 STEAMBOAT SPRINGS, CO 80477 Invoice Address: SEE CONTRACT	Project Name, PWS, Permit, Etc. ST ANTHONY MINE Contact Name: TOBY LESSON Phone/Fax: 970-879-6260 Invoice Contact & Phone: SEE CONTRACT	Sample Origin State: MM Email: Purchase Order: 18977	EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/> Sampler: (Please Print) RYAN HULTZGREN Quote/Bottle Order: 18977
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		Contact ELI prior to RUSH sample submittal for charges and scheduling - See instruction page Comments: R U S H	
Number of Containers Sample Type: A W S V B O Vegetation Air Waters Soils/Solids Other		Shipped by: fedex Cooler ID(s): C-2511 Receipt Temp: 23.6 c On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Custody Seal Intact: Y Signature Match: Y	
ANALYSIS REQUESTED SEE ATTACHED Normal Turnaround (TAT) X X X		Laboratory Use ONLY Z BAGS Z BAGS Z BAGS 007070359	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) 1 P4-DH4-001 7/4/07 0834 7/5/07 1430 2 P4-DH6-001 7/4/07 1409 3 P4-DH3-001 7/1/07 1055 4 5 6 7 8 9 10		Received by (print): RYAN HULTZGREN Date/Time: 7/5/07 1430 Received by (print): _____ Date/Time: _____ Received by Laboratory: _____ Date/Time: _____ Received by Client: _____ Date/Time: _____ Lab Disposal: _____	
Custody Record MUST be Signed		Signature: [Signature] Signature: _____ Signature: _____	

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Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: **MWH AMERICAS, INC.**
 Report Mail Address: **1475 PINEGROVE RD STE 109
P.O. BOX 774018
STAMPAUT SPRINGS, CO 80477**
 Invoice Address: **SEE CONTRACT**

Project Name: **ST ANTHONY MINE**
 Contact Name: **TOBY LEESEAN** Phone/Fax: **970-877-6260**
 Sample Origin State: **NM**
 Email: **RYAN HULTGREEN**
 EPA/State Compliance: Yes No
 Sampler: (Please Print) **RYAN HULTGREEN**
 Quote/Bottle Order: **18977**

Invoice Contact & Phone: **SEE CONTRACT (CONTACT TOBY LEESEAN)**
 Purchase Order: **18977**

Number of Containers: **0**
 Sample Type: **AWS/VS/O**
 Vegetation: **None**
 Air Water: **None**
 Soils/Solids: **None**
 Other: **None**

DW
 GSA
 POTW/WWTP
 State:
 Other: **CONTRACT**

A2LA
 EDD/EDT (Electronic Data)
 Format:
 LEVEL IV
 NELAC

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED	Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Shipped by: (Cooler ID#)	Receipt Temp	On Ice: Yes () No ()	Custody Seal Intact	Signature Match
1 PY-DH2-001	7/2/07	1231	SOIL	RAAS	X	SEE ATTACHED	2 BAGS	See file	23.6 °C	No	Intact	Match
2 PY-DH2-010	7/2/07	1355	SOIL	RAAS	X	SEE ATTACHED	1 BAG	See file	23.6 °C	No	Intact	Match
3 PY-DH2-011	7/2/07	1404	SOIL	RAAS	X	SEE ATTACHED	2 BAGS	See file	23.6 °C	No	Intact	Match
4 PY-DH1-001	7/3/07	1130	Z-S	RAAS	X	SEE ATTACHED	2 BAGS	See file	23.6 °C	No	Intact	Match
5 PY-DH1-013	7/3/07	1310	I-S	RAAS	X	SEE ATTACHED	1 BAG	See file	23.6 °C	No	Intact	Match
6 PY-DH1-015	7/3/07	1335	I-S	RAAS	X	SEE ATTACHED	1 BAG	See file	23.6 °C	No	Intact	Match
7						SEE ATTACHED						
8						SEE ATTACHED						
9						SEE ATTACHED						
10						SEE ATTACHED						

Received by (print): **RYAN HULTGREEN** Date/Time: **7/5/07 1435**
 Relinquished by (print): **RYAN HULTGREEN** Date/Time: **7/5/07 1435**
 Received by (print): **[Signature]** Date/Time: **7-10-07 9:45**
 Relinquished by (print): **[Signature]** Date/Time: **7-10-07 9:45**
 Received by Laboratory: **[Signature]** Date/Time: **7-10-07 9:45**
 Relinquished by Laboratory: **[Signature]** Date/Time: **7-10-07 9:45**
 Lab Disposal: **[Signature]** Date/Time: **7-10-07 9:45**
 Return to Client: **[Signature]** Date/Time: **7-10-07 9:45**
 Sample Disposal: **[Signature]** Date/Time: **7-10-07 9:45**
 Custody Record MUST be Signed

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Energy Laboratories Inc

Workorder Receipt Checklist



C07070359

Montgomery Watson Harza

Login completed by: Tim Hollen

Date and Time Received: 7/10/2007 12:00 AM

Reviewed by:

Received by: kh

Reviewed Date:

Carrier name: FedEx

- | | | | |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on shipping container/cooler? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | 23.6°C |
| Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

Contact and Corrective Action Comments:

None



Date: 14-Aug-07

CLIENT: Montgomery Watson Harza
Project: GE (UNC) St Anthony Mine Site
Sample Delivery Group: C07070359

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

Key to Texture Results:

C = Clay
SiC = Silty Clay
SiCL = Silty Clay Loam
SC = Sandy Clay
SCL = Sandy Clay Loam
CL = Clay Loam
Si = Silt
SiL = Silt Loam
L = Loam
S = Sand
LS = Loamy Sand
SL = Sandy Loam

ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package. A copy of the submittal(s) has been included and tracked in the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

PCB ANALYSIS USING EPA 505

Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some result requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

The total number of pages of this report are indicated by the page number located in the lower right corner.



ANALYTICAL SUMMARY REPORT

August 29, 2007

Montgomery Watson Harza
1475 Pine Grove Road Ste 109
PO Box 774018
Steamboat Springs, CO 80477

Workorder No.: C07070856
Project Name: St. Anthony Mine

Energy Laboratories, Inc. received the following 12 samples from Montgomery Watson Harza on 7/19/2007 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C07070856-001	MD-DH10-001	07/17/07 08:10	07/19/07	Soil	Metals by ICP/ICPMS, Dissolved Gross Alpha, Gross Beta Radium 226, Dissolved Radium 228, Dissolved SPLP Extraction, Regular
C07070856-002	MD-DH10-002	07/17/07 08:12	07/19/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic



C07070856-003 MD-DH10-004

07/17/07 08:23 07/19/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO₃ Extractable
Metals, Soluble
Uranium, Total
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
Digestion For RadioChemistry
ABDTPA Soil Extraction
Gross Alpha, Gross Beta Sample Prep
CVAA Permanganate Digest
DTPA extraction for metals
Gamma Sample Preparation
KCL Soil Extract
NaHCO₃ Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic
Sodium Adsorption Ratio in Soil

C07070856-004 MD-DH10-303

07/17/07 08:12 07/19/07 Soil

Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic



C07070856-005 MD-DH9-002	07/16/07 16:23 07/19/07	Soil	Metals by ICP/ICPMS, Total DPTA extractable metals Saturated Paste Electrical Conductivity Arsenic, DTPA Extractable Mercury, Total Selenium, DTPA Extractable Metals, NaHCO3 Extractable Metals, Soluble Uranium, Total Nitrate+Nitrite as N, KCL Extract Organic Carbon Soluble Metals from Paste Saturation Percentage Saturated Paste pH Percent Moisture Digestion, Total Metals Digestion For RadioChemistry ABDTPA Soil Extraction Gross Alpha, Gross Beta Sample Prep CVAA Permanganate Digest DTPA extraction for metals Gamma Sample Preparation KCL Soil Extract NaHCO3 Soil Extract Particle Size Analysis / Texture Prep Saturated Paste Total Organic Carbon Prep Particle Size Analysis / Texture Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic Sodium Adsorption Ratio in Soil
C07070856-006 MD-DH9-003	07/16/07 16:28 07/19/07	Soil	Metals by ICP/ICPMS, Dissolved Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Alpha, Gross Beta Gross Gamma Radium 226, Dissolved Radium 228, Dissolved Thorium, Isotopic SPLP Extraction, Regular
C07070856-007 P3-DH8-010	07/16/07 08:05 07/19/07	Soil	Uranium, Total Digestion, Total Metals Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Thorium, Isotopic
C07070856-008 P3-DH8-302	07/16/07 08:05 07/19/07	Soil	Same As Above



C07070856-009 P3-DH8-014

07/16/07 08:30 07/19/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO₃ Extractable
Metals, Soluble
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
ABDTPA Soil Extraction
CVAA Permanganate Digest
DTPA extraction for metals
KCL Soil Extract
NaHCO₃ Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Sodium Adsorption Ratio in Soil

C07070856-010 P3-DH7-002

07/16/07 11:25 07/19/07 Soil

Metals by ICP/ICPMS, Total
DPTA extractable metals
Saturated Paste Electrical Conductivity
Arsenic, DTPA Extractable
Mercury, Total
Selenium, DTPA Extractable
Metals, NaHCO₃ Extractable
Metals, Soluble
Uranium, Total
Nitrate+Nitrite as N, KCL Extract
Organic Carbon
Soluble Metals from Paste
Saturation Percentage
Saturated Paste pH
Percent Moisture
Digestion, Total Metals
Digestion For RadioChemistry
ABDTPA Soil Extraction
Gross Alpha, Gross Beta Sample Prep
CVAA Permanganate Digest
DTPA extraction for metals
Gamma Sample Preparation
KCL Soil Extract
NaHCO₃ Soil Extract
Particle Size Analysis / Texture Prep
Saturated Paste
Total Organic Carbon Prep
Particle Size Analysis / Texture
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic
Sodium Adsorption Ratio in Soil

C07070856-011 P3-DH7-009

07/16/07 12:00 07/19/07 Soil

Metals by ICP/ICPMS, Dissolved
Gross Alpha, Gross Beta
Radium 226, Dissolved
Radium 228, Dissolved
SPLP Extraction, Regular



C07070856-012 P3-DH7-015


07/16/07 12:30 07/19/07 Soil

Uranium, Total
Digestion, Total Metals
Digestion For RadioChemistry
Gross Alpha, Gross Beta Sample Prep
Gamma Sample Preparation
Gross Alpha, Gross Beta
Gross Gamma
Thorium, Isotopic

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call.

Report Approved By:



R.A. Gurling
ROGER GURLING
LABORATORY SUPERVISOR



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-001
 Client Sample ID: MD-DH10-001

Report Date: 08/29/07
 Collection Date: 07/17/07 08:10
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	4.7	mg/L		0.2		E200.7	08/02/07 15:32 / ts
Magnesium	0.62	mg/L	D	0.04		E200.7	08/02/07 15:32 / ts
Potassium	ND	mg/L		3		E200.7	08/02/07 15:32 / ts
Sodium	ND	mg/L		5		E200.7	08/02/07 15:32 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	0.3	mg/L		0.1		E200.8	07/24/07 00:27 / bws
Arsenic	0.003	mg/L		0.001		E200.8	07/24/07 00:27 / bws
Barium	ND	mg/L		0.01		E200.8	07/24/07 00:27 / bws
Lead	ND	mg/L		0.04		E200.8	07/24/07 00:27 / bws
Manganese	ND	mg/L		0.01		E200.8	07/24/07 00:27 / bws
Molybdenum	0.003	mg/L		0.001		E200.8	07/24/07 00:27 / bws
Selenium	0.002	mg/L	D	0.002		E200.8	07/24/07 00:27 / bws
Uranium	0.0010	mg/L		0.0001		E200.8	07/24/07 00:27 / bws
Vanadium	0.006	mg/L		0.005		E200.8	07/24/07 00:27 / bws
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	246	pCi/L		1.0		E900.0	08/02/07 02:38 / res
Gross Alpha precision (±)	4.6	pCi/L				E900.0	08/02/07 02:38 / res
Radium 226	25.7	pCi/L		1.0		E903.0	08/08/07 03:49 / trs
Radium 226 precision (±)	2.2	pCi/L				E903.0	08/08/07 03:49 / trs
Radium 228	ND	pCi/L		1.4		RA-05	08/02/07 10:51 / plj

Report: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-002
 Client Sample ID: MD-DH10-002

Report Date: 08/29/07
 Collection Date: 07/17/07 08:12
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	288	mg/kg-dry	D	0.03		SW6020	08/04/07 06:05 / sml
RADIONUCLIDES - GAMMA							
Radium 226	63.8	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	5.8	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	384	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	3.8	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	61	pCi/g-dry		0.2		E907.0	08/08/07 15:00 / dmf
Thorium 230 precision (±)	3.8	pCi/g-dry				E907.0	08/08/07 15:00 / dmf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-003
 Client Sample ID: MD-DH10-004

Report Date: 08/29/07
 Collection Date: 07/17/07 08:23
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.52	mmhos/cm		0.01		ASAM10-3	07/25/07 08:19 / jb
Saturation Percentage	36.6	%		0.1		USDA27a	07/25/07 08:09 / jb
pH, sat. paste	8.4	s.u.		0.01		ASAM10-3.2	07/25/07 08:19 / jb
Nitrogen, Nitrate+Nitrite as N	2.7	mg/kg-dry		1.0		E353.2	08/02/07 17:19 / ljl
Chloride, soluble	7.0	mg/kg-dry		5.0		SW6010B	07/31/07 18:37 / sec
Potassium, soluble	3.8	mg/kg-dry		1.0		SW6010B	07/31/07 18:37 / sec
Sulfate, soluble	227	mg/kg-dry		0.10		SW6010B	07/31/07 18:37 / sec
Calcium, sat. paste	1.5	meq/L		0.02		SW6010B	07/30/07 20:28 / ts
Magnesium, sat. paste	0.36	meq/L		0.04		SW6010B	07/30/07 20:28 / ts
Sodium, sat. paste	13	meq/L		0.02		SW6010B	07/30/07 20:28 / ts
Sodium Adsorption Ratio (SAR)	13.9	unitless		0.01		Calculation	07/31/07 13:31 / sec
PHYSICAL PROPERTIES							
Molsture	8.0	%		0.1		USDA26	07/20/07 12:44 / dcj
METALS - TOTAL							
Chromium	4.7	mg/kg-dry	D	0.06		SW6020	07/27/07 20:53 / bws
Mercury	ND	mg/kg-dry		0.05		SW7471A	08/01/07 10:27 / kes
Uranium	138	mg/kg-dry	D	0.03		SW6020	08/04/07 06:09 / sml
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.051	mg/kg-dry		0.005		A3114 B	08/04/07 11:06 / kes
Selenium	0.010	mg/kg-dry		0.005		A3114 B	07/26/07 09:38 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	08/01/07 01:03 / sml
Copper	0.9	mg/kg-dry	D	0.6		SW6020	08/01/07 01:03 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	08/01/07 01:03 / sml
Zinc	3.33	mg/kg-dry		0.01		SW6020	08/01/07 01:03 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/31/07 18:11 / cp
RADIONUCLIDES - GAMMA							
Radium 226	38.1	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	3.4	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	248	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	3.0	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	31	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.8	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-003
Client Sample ID: MD-DH10-004

Report Date: 08/29/07
Collection Date: 07/17/07 08:23
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	77	%		1.0		ASA15-5	07/25/07 16:07 / jb
Silt	9.0	%		1.0		ASA15-5	07/25/07 16:07 / jb
Clay	14	%		1.0		ASA15-5	07/25/07 16:07 / jb
Texture	SL			1.0		ASA15-5	07/25/07 16:07 / jb
Coarse Fragments	1.4	%		1.0		ASA15-5	07/25/07 16:07 / jb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	ND	%		0.02		ASA29-3	07/26/07 13:59 / mkf

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-004
 Client Sample ID: MD-DH10-303

Report Date: 08/29/07
 Collection Date: 07/17/07 08:12
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	214	mg/kg-dry	D	0.03		SW6020	08/04/07 06:13 / sml
RADIONUCLIDES - GAMMA							
Radium 226	74.4	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	6.6	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	599	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	4.7	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	71	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	2.4	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-005
Client Sample ID: MD-DH9-002

Report Date: 08/29/07
Collection Date: 07/16/07 16:23
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	0.80	mmhos/cm		0.01		ASAM10-3	07/25/07 08:20 / jb
Saturation Percentage	31.5	%		0.1		USDA27a	07/25/07 08:09 / jb
pH, sat. paste	8.6	s.u.		0.01		ASAM10-3.2	07/25/07 08:20 / jb
Nitrogen, Nitrate+Nitrite as N	3.8	mg/kg-dry		1.0		E353.2	08/02/07 17:21 / lji
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/31/07 18:37 / sec
Potassium, soluble	1.7	mg/kg-dry		1.0		SW6010B	07/31/07 18:37 / sec
Sulfate, soluble	81.9	mg/kg-dry		0.10		SW6010B	07/31/07 18:37 / sec
Calcium, sat. paste	0.40	meq/L		0.02		SW6010B	07/30/07 20:31 / ts
Magnesium, sat. paste	0.16	meq/L		0.04		SW6010B	07/30/07 20:31 / ts
Sodium, sat. paste	7.5	meq/L		0.02		SW6010B	07/30/07 20:31 / ts
Sodium Adsorption Ratio (SAR)	14.4	unitless		0.01		Calculation	07/31/07 13:31 / sec
PHYSICAL PROPERTIES							
Moisture	3.9	%		0.1		USDA26	07/20/07 12:45 / dcj
METALS - TOTAL							
Chromium	4.7	mg/kg-dry	D	0.07		SW6020	07/27/07 21:00 / bws
Mercury	ND	mg/kg-dry		0.05		SW7471A	08/01/07 10:29 / kes
Uranium	127	mg/kg-dry	D	0.03		SW6020	08/04/07 06:17 / sml
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.164	mg/kg-dry		0.005		A3114 B	08/04/07 11:09 / kes
Selenium	0.011	mg/kg-dry		0.005		A3114 B	07/26/07 09:40 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	08/01/07 01:10 / sml
Copper	ND	mg/kg-dry	D	0.6		SW6020	08/01/07 01:10 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	08/01/07 01:10 / sml
Zinc	0.92	mg/kg-dry		0.01		SW6020	08/01/07 01:10 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/31/07 18:37 / cp
RADIONUCLIDES - GAMMA							
Radium 226	39.9	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	3.6	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	260	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	3.1	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	38	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.8	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-005
 Client Sample ID: MD-DH9-002

Report Date: 08/29/07
 Collection Date: 07/16/07 16:23
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	79	%		1.0		ASA15-5	07/25/07 16:07 / jlb
Silt	9.0	%		1.0		ASA15-5	07/25/07 16:07 / jlb
Clay	12	%		1.0		ASA15-5	07/25/07 16:07 / jlb
Texture	SL			1.0		ASA15-5	07/25/07 16:07 / jlb
Coarse Fragments	2.1	%		1.0		ASA15-5	07/25/07 16:07 / jlb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	ND	%		0.02		ASA29-3	07/26/07 13:59 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-006
 Client Sample ID: MD-DH9-003

Report Date: 08/29/07
 Collection Date: 07/16/07 16:28
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	3.2	mg/L		0.2		E200.7	08/02/07 15:39 / ts
Magnesium	0.54	mg/L	D	0.04		E200.7	08/02/07 15:39 / ts
Potassium	ND	mg/L		3		E200.7	08/02/07 15:39 / ts
Sodium	14	mg/L		5		E200.7	08/02/07 15:39 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	5.2	mg/L		0.1		E200.8	07/24/07 00:33 / bws
Arsenic	0.001	mg/L		0.001		E200.8	07/24/07 00:33 / bws
Barium	ND	mg/L		0.01		E200.8	07/24/07 00:33 / bws
Lead	ND	mg/L		0.04		E200.8	07/24/07 00:33 / bws
Manganese	ND	mg/L		0.01		E200.8	07/24/07 00:33 / bws
Molybdenum	0.005	mg/L		0.001		E200.8	07/24/07 00:33 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/24/07 00:33 / bws
Uranium	0.140	mg/L		0.0001		E200.8	07/24/07 00:33 / bws
Vanadium	0.038	mg/L		0.005		E200.8	07/24/07 00:33 / bws
METALS - TOTAL							
Uranium	139	mg/kg-dry	D	0.03		SW6020	08/04/07 06:21 / sml
RADIONUCLIDES - GAMMA							
Radium 226	28.9	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	2.6	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	158	pCi/L		1.0		E900.0	08/02/07 02:38 / res
Gross Alpha precision (±)	3.5	pCi/L				E900.0	08/02/07 02:38 / res
Radium 226	2.7	pCi/L		1.0		E903.0	08/08/07 05:50 / trs
Radium 226 precision (±)	0.8	pCi/L				E903.0	08/08/07 05:50 / trs
Radium 228	ND	pCi/L		1.4		RA-05	08/02/07 09:14 / plj
RADIONUCLIDES - TOTAL							
Gross Alpha	289	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	3.3	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	26	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.7	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report RL - Analyte reporting limit. MCL - Maximum contaminant level.
 Definitions: QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-007
Client Sample ID: P3-DH8-010

Report Date: 08/29/07
Collection Date: 07/16/07 08:05
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	97.5	mg/kg-dry	D	0.03		SW6020	08/04/07 06:25 / sml
RADIONUCLIDES - GAMMA							
Radium 226	21.1	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	1.9	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	142	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	2.3	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	16	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.5	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-008
 Client Sample ID: P3-DH8-302

Report Date: 08/29/07
 Collection Date: 07/16/07 08:05
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	78.5	mg/kg-dry	D	0.03		SW6020	08/04/07 06:29 / sml
RADIONUCLIDES - GAMMA							
Radium 226	20.0	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	1.9	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	112	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	2.1	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	9.3	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report RL - Analyte reporting limit.
 Definitions: QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-009
Client Sample ID: P3-DH8-014

Report Date: 08/29/07
Collection Date: 07/16/07 08:30
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.84	mmhos/cm		0.01		ASAM10-3	07/26/07 10:02 / jb
Saturation Percentage	49.4	%		0.1		USDA27a	07/26/07 10:58 / jb
pH, sat. paste	5.4	s.u.		0.01		ASAM10-3.2	07/26/07 10:02 / jb
Nitrogen, Nitrate+Nitrite as N	3.6	mg/kg-dry		1.0		E353.2	08/02/07 17:39 / ljl
Chloride, soluble	11.4	mg/kg-dry		5.0		SW6010B	07/31/07 18:37 / sec
Potassium, soluble	13.6	mg/kg-dry		1.0		SW6010B	07/31/07 18:37 / sec
Sulfate, soluble	1420	mg/kg-dry		0.10		SW6010B	07/31/07 18:37 / sec
Calcium, sat. paste	28	meq/L		0.02		SW6010B	07/30/07 21:08 / ts
Magnesium, sat. paste	29	meq/L		0.04		SW6010B	07/30/07 21:08 / ts
Sodium, sat. paste	6.6	meq/L		0.02		SW6010B	07/30/07 21:08 / ts
Sodium Adsorption Ratio (SAR)	1.24	unitless		0.01		Calculation	07/31/07 13:31 / sec
PHYSICAL PROPERTIES							
Moisture	10.5	%		0.1		USDA26	07/20/07 12:47 / dcj
METALS - TOTAL							
Chromium	8.4	mg/kg-dry	D	0.06		SW6020	07/27/07 21:06 / bws
Mercury	0.05	mg/kg-dry		0.05		SW7471A	08/01/07 10:31 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.018	mg/kg-dry		0.005		A3114 B	08/04/07 11:11 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/26/07 09:43 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	08/01/07 02:31 / sml
Copper	1.7	mg/kg-dry	D	0.5		SW6020	08/01/07 02:31 / sml
Nickel	0.76	mg/kg-dry	D	0.09		SW6020	08/01/07 02:31 / sml
Zinc	2.18	mg/kg-dry		0.01		SW6020	08/01/07 02:31 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/31/07 18:41 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	62	%		1.0		ASA15-5	07/26/07 15:15 / jb
Silt	17	%		1.0		ASA15-5	07/26/07 15:15 / jb
Clay	21	%		1.0		ASA15-5	07/26/07 15:15 / jb
Texture	SCL			1.0		ASA15-5	07/26/07 15:15 / jb
Coarse Fragments	2.5	%		1.0		ASA15-5	07/26/07 15:15 / jb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.05	%		0.02		ASA29-3	07/26/07 13:59 / mkf

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-009
 Client Sample ID: P3-DH8-014

Report Date: 08/29/07
 Collection Date: 07/16/07 08:30
 Date Received: 06/27/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	4.84	mmhos/cm		0.01		ASAM10-3	07/26/07 10:02 / jb
Saturation Percentage	49.4	%		0.1		USDA27a	07/26/07 10:58 / jb
pH, sat. paste	5.4	s.u.		0.01		ASAM10-3.2	07/26/07 10:02 / jb
Nitrogen, Nitrate+Nitrite as N	3.6	mg/kg-dry		1.0		E353.2	08/02/07 17:39 / ljl
Chloride, soluble	11.4	mg/kg-dry		5.0		SW6010B	07/31/07 18:37 / sec
Potassium, soluble	13.6	mg/kg-dry		1.0		SW6010B	07/31/07 18:37 / sec
Sulfate, soluble	1420	mg/kg-dry		0.10		SW6010B	07/31/07 18:37 / sec
Calcium, sat. paste	28	meq/L		0.02		SW6010B	07/30/07 21:08 / ts
Magnesium, sat. paste	29	meq/L		0.04		SW6010B	07/30/07 21:08 / ts
Sodium, sat. paste	6.6	meq/L		0.02		SW6010B	07/30/07 21:08 / ts
Sodium Adsorption Ratio (SAR)	1.24	unitless		0.01		Calculation	07/31/07 13:31 / sec
PHYSICAL PROPERTIES							
Moisture	10.5	%		0.1		USDA26	07/20/07 12:47 / dcj
METALS - TOTAL							
Chromium	8.4	mg/kg-dry	D	0.06		SW6020	07/27/07 21:06 / bws
Mercury	0.05	mg/kg-dry		0.05		SW7471A	08/01/07 10:31 / kes
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.018	mg/kg-dry		0.005		A3114 B	08/04/07 11:11 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/26/07 09:43 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	08/01/07 02:31 / sml
Copper	1.7	mg/kg-dry	D	0.5		SW6020	08/01/07 02:31 / sml
Nickel	0.76	mg/kg-dry	D	0.09		SW6020	08/01/07 02:31 / sml
Zinc	2.18	mg/kg-dry		0.01		SW6020	08/01/07 02:31 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/31/07 18:41 / cp
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	62	%		1.0		ASA15-5	07/26/07 15:15 / jb
Silt	17	%		1.0		ASA15-5	07/26/07 15:15 / jb
Clay	21	%		1.0		ASA15-5	07/26/07 15:15 / jb
Texture	SCL			1.0		ASA15-5	07/26/07 15:15 / jb
Coarse Fragments	2.5	%		1.0		ASA15-5	07/26/07 15:15 / jb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	0.05	%		0.02		ASA29-3	07/26/07 13:59 / mkf

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
 QCL - Quality control limit. ND - Not detected at the reporting limit.
 D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-010
Client Sample ID: P3-DH7-002

Report Date: 08/29/07
Collection Date: 07/16/07 11:25
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGRONOMIC PROPERTIES							
Conductivity, paste extract	1.12	mmhos/cm		0.01		ASAM10-3	07/25/07 08:21 / jb
Saturation Percentage	38.4	%		0.1		USDA27a	07/25/07 08:09 / jb
pH, sat. paste	7.7	s.u.		0.01		ASAM10-3.2	07/25/07 08:21 / jb
Nitrogen, Nitrate+Nitrite as N	1.40	mg/L		0.10		E353.2	08/03/07 16:25 / ljl
Chloride, soluble	ND	mg/kg-dry		5.0		SW6010B	07/31/07 18:37 / sec
Potassium, soluble	3.8	mg/kg-dry		1.0		SW6010B	07/31/07 18:37 / sec
Sulfate, soluble	220	mg/kg-dry		0.10		SW6010B	07/31/07 18:37 / sec
Calcium, sat. paste	6.6	meq/L		0.02		SW6010B	07/30/07 20:54 / ts
Magnesium, sat. paste	6.0	meq/L		0.04		SW6010B	07/30/07 20:54 / ts
Sodium, sat. paste	1.4	meq/L		0.02		SW6010B	07/30/07 20:54 / ts
Sodium Adsorption Ratio (SAR)	0.56	unitless		0.01		Calculation	07/31/07 13:31 / sec
PHYSICAL PROPERTIES							
Moisture	7.7	%		0.1		USDA26	07/20/07 12:48 / dcj
METALS - TOTAL							
Chromium	5.1	mg/kg-dry	D	0.06		SW6020	07/27/07 21:13 / bws
Mercury	ND	mg/kg-dry		0.05		SW7471A	08/01/07 10:33 / kes
Uranium	125	mg/kg-dry	D	0.03		SW6020	08/04/07 06:50 / sml
METALS - ABDTPA EXTRACTABLE							
Arsenic	0.129	mg/kg-dry		0.005		A3114 B	08/04/07 11:15 / kes
Selenium	ND	mg/kg-dry		0.005		A3114 B	07/26/07 09:47 / kes
METALS - DTPA EXTRACTABLE							
Cadmium	ND	mg/kg-dry	D	0.3		SW6020	08/01/07 01:16 / sml
Copper	0.20	mg/kg-dry	D	0.05		SW6020	08/01/07 01:16 / sml
Nickel	ND	mg/kg-dry	D	3		SW6020	08/01/07 01:16 / sml
Zinc	0.70	mg/kg-dry		0.01		SW6020	08/01/07 01:16 / sml
METALS - NAHCO3 EXTRACTABLE							
Phosphorus, Olsen	ND	mg/kg-dry		5		SW6010B	07/31/07 18:47 / cp
RADIONUCLIDES - GAMMA							
Radium 226	34.6	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	3.1	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	197	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	2.8	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	28	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.7	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

D - RL increased due to sample matrix interference.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-010
 Client Sample ID: P3-DH7-002

Report Date: 08/29/07
 Collection Date: 07/16/07 11:25
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PARTICLE SIZE ANALYSIS / TEXTURE							
Sand	67	%		1.0		ASA15-5	07/25/07 16:07 / jb
Silt	17	%		1.0		ASA15-5	07/25/07 16:07 / jb
Clay	16	%		1.0		ASA15-5	07/25/07 16:07 / jb
Texture	SL			1.0		ASA15-5	07/25/07 16:07 / jb
Coarse Fragments	1.5	%		1.0		ASA15-5	07/25/07 16:07 / jb
ORGANIC CHARACTERISTICS							
Organic Carbon, Total (TOC)	ND	%		0.02		ASA29-3	07/26/07 13:59 / mkf

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
 Project: St. Anthony Mine
 Lab ID: C07070856-011
 Client Sample ID: P3-DH7-009

Report Date: 08/29/07
 Collection Date: 07/16/07 12:00
 Date Received: 07/19/07
 Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS - SPLP EXTRACTABLE							
Calcium	27.9	mg/L		0.2		E200.7	08/02/07 15:42 / ts
Magnesium	12.8	mg/L	D	0.04		E200.7	08/02/07 15:42 / ts
Potassium	ND	mg/L		3		E200.7	08/02/07 15:42 / ts
Sodium	ND	mg/L		5		E200.7	08/02/07 15:42 / ts
METALS - SPLP EXTRACTABLE							
Aluminum	ND	mg/L		0.1		E200.8	07/24/07 00:40 / bws
Arsenic	ND	mg/L		0.001		E200.8	07/24/07 00:40 / bws
Barium	ND	mg/L		0.01		E200.8	07/24/07 00:40 / bws
Lead	ND	mg/L		0.04		E200.8	07/24/07 00:40 / bws
Manganese	ND	mg/L		0.01		E200.8	07/24/07 00:40 / bws
Molybdenum	ND	mg/L		0.001		E200.8	07/24/07 00:40 / bws
Selenium	ND	mg/L	D	0.002		E200.8	07/24/07 00:40 / bws
Uranium	0.0165	mg/L		0.0001		E200.8	07/24/07 00:40 / bws
Vanadium	ND	mg/L		0.005		E200.8	07/24/07 00:40 / bws
RADIONUCLIDES - SPLP EXTRACTABLE							
Gross Alpha	10.3	pCi/L		1.0		E900.0	08/02/07 02:38 / res
Gross Alpha precision (±)	0.9	pCi/L				E900.0	08/02/07 02:38 / res
Radium 226	1.0	pCi/L		1.0		E903.0	08/08/07 06:50 / trs
Radium 226 precision (±)	0.7	pCi/L				E903.0	08/08/07 06:50 / trs
Radium 228	ND	pCi/L		1.4		RA-05	08/02/07 10:51 / plj

Report Definitions: RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



LABORATORY ANALYTICAL REPORT

Client: Montgomery Watson Harza
Project: St. Anthony Mine
Lab ID: C07070856-012
Client Sample ID: P3-DH7-015

Report Date: 08/29/07
Collection Date: 07/16/07 12:30
Date Received: 07/19/07
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Uranium	31.4	mg/kg-dry	D	0.03		SW6020	08/04/07 06:54 / smt
RADIONUCLIDES - GAMMA							
Radium 226	12.5	pCi/g-dry		1.0		E901.1	08/08/07 14:09 / dpb
Radium 226 precision (±)	1.2	pCi/g-dry				E901.1	08/08/07 14:09 / dpb
RADIONUCLIDES - TOTAL							
Gross Alpha	98.4	pCi/g-dry		2.0		E900.0	08/07/07 10:00 / res
Gross Alpha precision (±)	1.9	pCi/g-dry				E900.0	08/07/07 10:00 / res
Thorium 230	7.4	pCi/g-dry		0.2		E907.0	08/02/07 15:00 / dmf
Thorium 230 precision (±)	0.4	pCi/g-dry				E907.0	08/02/07 15:00 / dmf

Report Definitions:
 RL - Analyte reporting limit.
 QCL - Quality control limit.
 D - RL increased due to sample matrix interference.

MCL - Maximum contaminant level.
 ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3114 B									
Batch: 15394									
Sample ID: C07070856-010DDUP Selenium	Sample Duplicate 0.00241	mg/kg-dry	0.0050				0.0	10	
						Run: CVAA-C202_070726A			07/26/07 09:52
Sample ID: C07070856-003DMS Selenium	Sample Matrix Spike 0.234	mg/kg-dry	0.0050	112	85	115			07/26/07 09:54
						Run: CVAA-C202_070726A			07/26/07 09:56
Sample ID: C07070856-003DMSD Selenium	Sample Matrix Spike Duplicate 0.234	mg/kg-dry	0.0050	112	85	115	0.1	10	
						Run: CVAA-C202_070726A			07/26/07 10:03
Sample ID: LCS-15394 Selenium	Laboratory Control Sample 0.0424	mg/kg-dry	0.0050	85	85	115			
						Run: CVAA-C202_070726A			07/26/07 10:03
Sample ID: MB-15394 Arsenic	Method Blank 0.002	mg/kg	0.001						
						Run: CVAA-C202_070804A			08/04/07 11:03
Sample ID: C07070856-010DDUP Arsenic	Sample Duplicate 0.116	mg/kg	0.0050				11	10	R
						Run: CVAA-C202_070804A			08/04/07 11:17
Sample ID: C07070856-010DMS Arsenic	Sample Matrix Spike 0.329	mg/kg	0.0050	100	85	115			
						Run: CVAA-C202_070804A			08/04/07 11:19
Sample ID: C07070856-010DMSD Arsenic	Sample Matrix Spike Duplicate 0.332	mg/kg	0.0050	102	85	115	0.9	10	
						Run: CVAA-C202_070804A			08/04/07 11:21
Method: A3114 B									
Batch: 15415									
Sample ID: C07070856-009DDUP Selenium	Sample Duplicate 0.00277	mg/kg-dry	0.0050				0.0	10	
						Run: CVAA-C202_070726A			07/26/07 09:45
Sample ID: C07070856-009DMS Selenium	Sample Matrix Spike 0.232	mg/kg-dry	0.0050	114	85	115			07/26/07 09:58
						Run: CVAA-C202_070726A			07/26/07 09:58
Sample ID: C07070856-009DMSD Selenium	Sample Matrix Spike Duplicate 0.230	mg/kg-dry	0.0050	113	85	115	0.8	10	
						Run: CVAA-C202_070726A			07/26/07 10:00
Sample ID: MB-15415 Arsenic	Method Blank 0.004	mg/kg	0.001						
						Run: CVAA-C202_070804A			08/04/07 10:57
Sample ID: C07070856-009DDUP Arsenic	Sample Duplicate 0.0120	mg/kg	0.0050				40	10	R
						Run: CVAA-C202_070804A			08/04/07 11:13

Qualifiers:

RL - Analyte reporting limit.
 R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASA15-5 Batch: 15382									
Sample ID: C07070856-010IDUP	Sample Duplicate								
Sand	67	%	1.0				0.0	20	
Silt	17	%	1.0				0.0	20	
Clay	16	%	1.0				0.0	20	
Texture	ND		1.0						
Method: ASA15-5 Batch: 15420									
Sample ID: LCS-15420	Laboratory Control Sample								
Sand	27	%	1.0	74	85	115			S
Silt	37	%	1.0	126	85	115			S
Clay	36	%	1.0	105	85	115			
Sample ID: C07070856-009IDUP	Sample Duplicate								
Sand	62	%	1.0				0.0	20	
Silt	17	%	1.0				0.0	20	
Clay	21	%	1.0				0.0	20	
Texture	ND		1.0						
Method: ASA29-3 Batch: 15412									
Sample ID: MBLK-15412	Method Blank								
Organic Carbon, Total (TOC)	ND	%	0.02						
Sample ID: LCS-15412	Laboratory Control Sample								
Organic Carbon, Total (TOC)	0.73	%	0.10	67	70	120			S
Sample ID: C07070856-010GDUP	Sample Duplicate								
Organic Carbon, Total (TOC)	ND	%	0.10				0.0	20	
Method: ASAM10-3 Batch: 15406									
Sample ID: LCS-15406	Laboratory Control Sample								
Conductivity, paste extract	3.94	mmhos/cm	0.010	103	80	120			
Sample ID: C07070856-010CDUP	Sample Duplicate								
Conductivity, paste extract	1.13	mmhos/cm	0.010				0.8	20	
Method: ASAM10-3 Batch: 15421									
Sample ID: LCS-15421	Laboratory Control Sample								
Conductivity, paste extract	4.49	mmhos/cm	0.010	118	80	120			
Sample ID: C07070856-009CDUP	Sample Duplicate								
Conductivity, paste extract	4.89	mmhos/cm	0.010				1.0	20	

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: ASAM10-3.2							Batch: 15406		
Sample ID: LCS-15406 pH, sat. paste	Laboratory Control Sample					Run: COND1-C_070725A			07/25/07 08:19
	7.0	s.u.	0.10	102	80	120			
Sample ID: C07070856-010CDUP pH, sat. paste	Sample Duplicate					Run: COND1-C_070725A			07/25/07 08:22
	7.7	s.u.	0.10				0.1	20	
Method: ASAM10-3.2							Batch: 15421		
Sample ID: LCS-15421 pH, sat. paste	Laboratory Control Sample					Run: COND1-C_070726A			07/26/07 10:01
	7.0	s.u.	0.10	102	80	120			
Sample ID: C07070856-009CDUP pH, sat. paste	Sample Duplicate					Run: COND1-C_070726A			07/26/07 10:03
	5.3	s.u.	0.10				1.7	20	
Method: ASAM10-3.2							Analytical Run: COND1-C_070725A		
Sample ID: CCV-A0707250816 pH, sat. paste	Continuing Calibration Verification Standard								07/25/07 08:18
	7.0	s.u.	0.10	100	90	110			
Method: ASAM10-3.2							Analytical Run: COND1-C_070726A		
Sample ID: CCV-A0707261056 pH, sat. paste	Continuing Calibration Verification Standard								07/26/07 10:00
	7.0	s.u.	0.10	100	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza

Report Date: 08/29/07

Project: St. Anthony Mine

Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									
Batch: 15360									
Sample ID: MB-15360	Method Blank			Run: ICP1-C_070731A			07/31/07 16:31		
Calcium	0.1	mg/L	0.04						
Magnesium	ND	mg/L	0.04						
Potassium	0.3	mg/L	0.08						
Sodium	2	mg/L	0.06						
Sample ID: LCS-15162	Laboratory Control Sample			Run: ICP1-C_070802A			08/02/07 15:35		
Calcium	51.1	mg/L	0.50	102	85	115			
Magnesium	50.4	mg/L	0.50	101	85	115			
Potassium	48.2	mg/L	0.50	96	85	115			
Sodium	51.8	mg/L	0.50	104	85	115			
Sample ID: C07070856-011AMS	Sample Matrix Spike			Run: ICP1-C_070802A			08/02/07 15:45		
Calcium	82.4	mg/L	0.50	109	70	130			
Magnesium	66.5	mg/L	0.50	107	70	130			
Potassium	53.5	mg/L	0.50	105	70	130			
Sodium	54.9	mg/L	0.50	103	70	130			
Sample ID: C07070856-011AMSD	Sample Matrix Spike Duplicate			Run: ICP1-C_070802A			08/02/07 15:49		
Calcium	79.6	mg/L	0.50	103	70	130	3.5	20	
Magnesium	63.9	mg/L	0.50	102	70	130	4.0	20	
Potassium	51.3	mg/L	0.50	100	70	130	4.2	20	
Sodium	52.8	mg/L	0.50	99	70	130	3.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza

Report Date: 08/29/07

Project: St. Anthony Mine

Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									
Batch: 15498									
Sample ID: LRB	Method Blank			Run: ICP1-C_070730A			07/30/07 14:56		
Calcium	ND	mg/L	0.04						
Magnesium	0.07	mg/L	0.04						
Sodium	ND	mg/L	0.06						
Sample ID: C07070896-010AMS	Sample Matrix Spike			Run: ICP1-C_070730A			07/30/07 16:59		
Calcium	179	mg/L	0.50	115	70	130			
Magnesium	77.3	mg/L	0.50	98	70	130			
Sodium	92.4	mg/L	0.50	99	70	130			
Sample ID: C07070896-010AMSD	Sample Matrix Spike Duplicate			Run: ICP1-C_070730A			07/30/07 17:03		
Calcium	179	mg/L	0.50	114	70	130	0.3	20	
Magnesium	77.3	mg/L	0.50	98	70	130	0.0	20	
Sodium	92.4	mg/L	0.50	99	70	130	0.0	20	
Sample ID: LFB-ICP25304	Laboratory Fortified Blank			Run: ICP1-C_070730A			07/30/07 21:34		
Calcium	49.9	mg/L	0.50	100	85	125			
Magnesium	50.9	mg/L	0.50	102	85	125			
Sodium	48.9	mg/L	0.50	98	85	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									
Batch: 15360									
Sample ID: MB-15360	Method Blank			Run: ICPMS2-C_070723A			07/23/07 23:26		
Aluminum	0.008	mg/L	0.0001						
Arsenic	ND	mg/L	6E-05						
Barium	0.0004	mg/L	3E-05						
Lead	9E-05	mg/L	3E-05						
Manganese	0.0002	mg/L	5E-05						
Molybdenum	0.0003	mg/L	5E-05						
Selenium	ND	mg/L	0.0002						
Uranium	0.0001	mg/L	1E-05						
Vanadium	0.0001	mg/L	3E-05						
Sample ID: C07070856-011AMS4	Post Digestion Spike			Run: ICPMS2-C_070723A			07/24/07 00:47		
Aluminum	0.545	mg/L	0.10	104	70	130			
Arsenic	0.536	mg/L	0.0010	107	70	130			
Barium	0.533	mg/L	0.10	106	70	130			
Lead	0.527	mg/L	0.050	105	70	130			
Manganese	0.531	mg/L	0.010	106	70	130			
Molybdenum	0.515	mg/L	0.10	103	70	130			
Selenium	0.541	mg/L	0.0023	108	70	130			
Uranium	0.535	mg/L	0.00030	104	70	130			
Vanadium	0.532	mg/L	0.10	106	70	130			
Sample ID: C07070856-011AMSD4	Post Digestion Spike Duplicate			Run: ICPMS2-C_070723A			07/24/07 00:54		
Aluminum	0.583	mg/L	0.10	112	70	130	6.8	20	
Arsenic	0.529	mg/L	0.0010	106	70	130	1.3	20	
Barium	0.535	mg/L	0.10	106	70	130	0.4	20	
Lead	0.526	mg/L	0.050	104	70	130	0.2	20	
Manganese	0.531	mg/L	0.010	106	70	130	0.1	20	
Molybdenum	0.514	mg/L	0.10	103	70	130	0.2	20	
Selenium	0.536	mg/L	0.0023	107	70	130	0.8	20	
Uranium	0.534	mg/L	0.00030	104	70	130	0.1	20	
Vanadium	0.525	mg/L	0.10	105	70	130	1.3	20	
Sample ID: LCS-15325	Laboratory Control Sample			Run: ICPMS2-C_070723A			07/24/07 06:25		
Aluminum	0.519	mg/L	0.10	104	85	115			
Arsenic	0.519	mg/L	0.0010	104	85	115			
Barium	0.519	mg/L	0.10	104	85	115			
Lead	0.521	mg/L	0.050	104	85	115			
Manganese	0.502	mg/L	0.010	100	85	115			
Molybdenum	0.537	mg/L	0.10	107	85	115			
Selenium	0.526	mg/L	0.0020	105	85	115			
Uranium	0.518	mg/L	0.00032	104	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8 Batch: 15360									
Sample ID: LCS-15325	Laboratory Control Sample								
Vanadium	0.509	mg/L	0.10	102	85	115			07/24/07 06:25
Method: E353.2 Batch: 15396									
Sample ID: MB-15396	Method Blank								
Nitrogen, Nitrate+Nitrite as N	1	mg/kg-dry	0.3						08/02/07 17:14
Sample ID: LCS-15396	Laboratory Control Sample								
Nitrogen, Nitrate+Nitrite as N	4.90	mg/kg-dry	1.0	80	75	125			08/02/07 17:17
Sample ID: C07070856-010FDUP	Sample Duplicate								
Nitrogen, Nitrate+Nitrite as N	1.39	mg/L	0.10				0.7	10	08/03/07 16:27
Method: E353.2 Batch: 15419									
Sample ID: MB-15419	Method Blank								
Nitrogen, Nitrate+Nitrite as N	1	mg/kg-dry	0.3						08/02/07 17:34
Sample ID: LCS-15419	Laboratory Control Sample								
Nitrogen, Nitrate+Nitrite as N	4.80	mg/kg-dry	1.0	78	75	125			08/02/07 17:37
Sample ID: C07070856-009FDUP	Sample Duplicate								
Nitrogen, Nitrate+Nitrite as N	3.93	mg/kg-dry	1.0				8.1	20	08/02/07 17:41
Method: E900.0 Batch: 15408									
Sample ID: C07070856-005LMD	Sample Duplicate								
Gross Alpha	283	pCi/g-dry	2.0		70	130	8.5	30	08/07/07 10:00

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0 Batch: GrAB-0300									
Sample ID: RB-GrAB-0300	Method Blank								
Gross Alpha	ND	pCi/L	1						
Run: G5000W_070727D 08/01/07 02:05									
Sample ID: UNAT-GrAB-0300	Laboratory Control Sample								
Gross Alpha	300	pCi/L	1.0	104	70	130			
Run: G5000W_070727D 08/01/07 02:05									
Sample ID: C07070880-001AMS	Sample Matrix Spike								
Gross Alpha	200	pCi/L	1.0	61	70	130			S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the low response is considered to be matrix related. The batch is approved.									
Sample ID: C07070880-001AMSD	Sample Matrix Spike Duplicate								
Gross Alpha	100	pCi/L	1.0	55	70	130	10	13.7	S
- Spike response is outside of the acceptance range for this analysis. Since the LCS and the RPD for the MS MSD pair are acceptable, the low response is considered to be matrix related. The batch is approved.									
Sample ID: C07070856-006ADUP	Sample Duplicate								
Gross Alpha	160	pCi/L	1.0				0.5	14.4	
Gross Alpha precision (±)	3.5	pCi/L							
Method: E907.0 Batch: 15390									
Sample ID: LCS-R88040	Laboratory Control Sample								
Thorium 230	4.00	pCi/g-dry	0.10	82	70	130			
Run: EGG-ORTEC_070802A 08/02/07 15:00									
Sample ID: MB-R88040	Method Blank								
Thorium 230	ND	pCi/g-dry	0.01						
Run: EGG-ORTEC_070802A 08/02/07 15:00									
Method: E907.0 Batch: R88480									
Sample ID: LCS-R88480	Laboratory Control Sample								
Thorium 230	3.60	pCi/L	0.20	73	70	130			
Run: EGG-ORTEC_070808B 08/08/07 15:00									
Sample ID: C07070874-008AMS	Sample Matrix Spike								
Thorium 230	12.8	pCi/L	0.20	78	70	130			
Run: EGG-ORTEC_070808B 08/08/07 15:00									
Sample ID: C07070874-008AMSD	Sample Matrix Spike Duplicate								
Thorium 230	12.0	pCi/L	0.20	73	70	130	6.5	30	
Run: EGG-ORTEC_070808B 08/08/07 15:00									
Sample ID: MB-R88480	Method Blank								
Thorium 230	ND	pCi/L	0.2						
Run: EGG-ORTEC_070808B 08/08/07 15:00									

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05							Batch: RA228-1748		
Sample ID: LCS-228-RA226-2205 Radium 228	Laboratory Control Sample 0.57	pCi/g-dry	0.10	100	70	130			08/02/07 09:14
Sample ID: MB-RA226-2205 Radium 228	Method Blank ND	pCi/g-dry	0.05						08/02/07 09:14
Sample ID: C07070289-004ADUP Radium 228	Sample Duplicate ND	pCi/g-dry	0.10				0.0	208.3	08/02/07 09:14
Sample ID: C07070856-006AMS Radium 228	Sample Matrix Spike 19.9	pCi/g-dry	0.10	96	70	130			08/02/07 09:14
Method: SW6010B							Batch: 15397		
Sample ID: MB-15397 Phosphorus	Method Blank 2	mg/kg-dry	0.6						07/31/07 18:01
Sample ID: LCS-15397 Phosphorus	Laboratory Control Sample 9.58	mg/kg-dry	5.0	31	70	130			07/31/07 18:08 S
Sample ID: C07070856-003EMS2 Phosphorus	Sample Matrix Spike 106	mg/kg-dry	5.0	83	75	125			07/31/07 18:14
Sample ID: C07070856-003EMSD2 Phosphorus	Sample Matrix Spike Duplicate 107	mg/kg-dry	5.0	84	75	125	1.6	20	07/31/07 18:18

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B Batch: 15406									
Sample ID: MB-15106	Method Blank								
Calcium	ND	mg/L	0.06						
Magnesium	ND	mg/L	0.05						
Sodium	ND	mg/L	0.06						
Run: ICP1-C_070730A 07/30/07 20:21									
Sample ID: LCS-15106	Laboratory Control Sample								
Calcium	580	mg/L	0.50	97	75	125			
Magnesium	200	mg/L	0.50	93	75	125			
Sodium	230	mg/L	0.50	92	75	125			
Run: ICP1-C_070730A 07/30/07 20:24									
Sample ID: C07070856-005CMS	Sample Matrix Spike								
Calcium	260	mg/L	0.50	101	75	125			
Magnesium	260	mg/L	0.50	103	75	125			
Sodium	400	mg/L	0.50	97	75	125			
Run: ICP1-C_070730A 07/30/07 20:38									
Sample ID: C07070856-005CMSD	Sample Matrix Spike Duplicate								
Calcium	250	mg/L	0.50	98	75	125	2.9	20	
Magnesium	250	mg/L	0.50	100	75	125	3.1	20	
Sodium	390	mg/L	0.50	94	75	125	1.6	20	
Run: ICP1-C_070730A 07/30/07 20:41									
Sample ID: C07070856-010CDUP	Sample Duplicate								
Calcium	140	mg/L	0.50				1.7	20	
Magnesium	72	mg/L	0.50				0.7	20	
Sodium	32	mg/L	0.50				1.6	20	
Run: ICP1-C_070730A 07/30/07 20:57									
Method: SW6010B Batch: 15417									
Sample ID: MB-15417	Method Blank								
Phosphorus	2	mg/kg-dry	0.6						
Run: ICP2-C_070731A 07/31/07 17:58									
Sample ID: LCS-15417	Laboratory Control Sample								
Phosphorus	8.36	mg/kg-dry	5.0	26	70	130			S
Run: ICP2-C_070731A 07/31/07 18:05									
Sample ID: C07070856-009EDUP	Sample Duplicate								
Phosphorus	3.27	mg/kg-dry	5.0				0.0	20	
Run: ICP2-C_070731A 07/31/07 18:44									

Qualifiers:

RL - Analyte reporting limit.
 S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B							Batch: 15498		
Sample ID: MB-15421	Method Blank				Run: ICP1-C_070730A		07/30/07 21:01		
Calcium	ND	mg/L	0.06						
Magnesium	ND	mg/L	0.05						
Sodium	ND	mg/L	0.06						
Sample ID: LCS-15421	Laboratory Control Sample				Run: ICP1-C_070730A		07/30/07 21:04		
Calcium	590	mg/L	0.50	98	75	125			
Magnesium	210	mg/L	0.50	94	75	125			
Sodium	230	mg/L	0.50	92	75	125			
Sample ID: C07070856-009CDUP	Sample Duplicate				Run: ICP1-C_070730A		07/30/07 21:11		
Calcium	560	mg/L	0.50				0.4	20	
Magnesium	350	mg/L	0.50				0.6	20	
Sodium	150	mg/L	0.50				0.2	20	
Method: SW6020							Batch: 15395		
Sample ID: MB-15395	Method Blank				Run: ICPMS2-C_070731A		08/01/07 00:15		
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.05						
Nickel	ND	mg/kg-dry	0.3						
Zinc	0.04	mg/kg-dry							
Sample ID: LCS-15395	Laboratory Control Sample				Run: ICPMS2-C_070731A		08/01/07 00:29		
Copper	1.43	mg/kg-dry	0.60	102	50	150			
Zinc	0.598	mg/kg-dry	0.020	92	50	150			
Sample ID: C07070856-010BMS4	Post Digestion Spike				Run: ICPMS2-C_070731A		08/01/07 01:30		
Cadmium	1.07	mg/kg-dry	0.66	107	75	125			
Copper	1.26	mg/kg-dry	0.060	107	75	125			
Nickel	1.09	mg/kg-dry	0.93	109	75	125			
Zinc	1.75	mg/kg-dry	0.020	105	75	125			
Sample ID: C07070856-010BMSD4	Post Digestion Spike Duplicate				Run: ICPMS2-C_070731A		08/01/07 01:37		
Cadmium	1.05	mg/kg-dry	0.66	105	75	125			
Copper	1.26	mg/kg-dry	0.060	106	75	125			
Nickel	1.09	mg/kg-dry	0.93	109	75	125			
Zinc	1.73	mg/kg-dry	0.020	103	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
 Project: St. Anthony Mine

Report Date: 08/29/07
 Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 15401
Sample ID: MB-15401	Method Blank								Run: ICPMS2-C_070727A 07/27/07 19:25
Chromium	0.001	mg/kg-dry	0.0001						
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS-15401	Laboratory Control Sample								Run: ICPMS2-C_070727A 07/27/07 19:39
Chromium	1.0	mg/kg-dry	2.5	104	70	130			
Uranium	1.0	mg/kg-dry	0.15	105	70	130			
Sample ID: C07070856-010AMS4	Post Digestion Spike								Run: ICPMS2-C_070727A 07/27/07 21:20
Chromium	29	mg/kg-dry	2.5	103	75	125			
Uranium	150	mg/kg-dry	0.15		75	125			A
Sample ID: C07070856-010AMSD4	Post Digestion Spike Duplicate								Run: ICPMS2-C_070727A 07/27/07 21:27
Chromium	29	mg/kg-dry	2.5	102	75	125	0.9	20	
Uranium	150	mg/kg-dry	0.15		75	125	1.3	20	A
Sample ID: MB-15401	Method Blank								Run: ICPMS2-C_070803A 08/04/07 05:36
Uranium	ND	mg/kg-dry	6E-05						
Sample ID: LCS-15401	Laboratory Control Sample								Run: ICPMS2-C_070803A 08/04/07 05:44
Uranium	1.00	mg/kg-dry	0.015	100	75	125			
Sample ID: C07070856-012AMS4	Sample Matrix Spike								Run: ICPMS2-C_070803A 08/04/07 06:58
Uranium	56.8	mg/kg-dry	0.028	109	75	125			
Sample ID: C07070856-012AMSD4	Sample Matrix Spike Duplicate								Run: ICPMS2-C_070803A 08/04/07 07:02
Uranium	54.9	mg/kg-dry	0.028	100	75	125	3.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020 Batch: 15416									
Sample ID: MB-15416	Method Blank								
	Run: ICPMS2-C_070731A								08/01/07 02:11
Cadmium	ND	mg/kg-dry	0.07						
Copper	ND	mg/kg-dry	0.05						
Nickel	ND	mg/kg-dry	0.3						
Zinc	0.04	mg/kg-dry							
Sample ID: LCS-15416	Laboratory Control Sample								
	Run: ICPMS2-C_070731A								08/01/07 02:17
Copper	1.38	mg/kg-dry	0.60	99	50	150			
Zinc	0.578	mg/kg-dry	0.020	89	50	150			
Sample ID: C07070856-009BDUP	Sample Duplicate								
	Run: ICPMS2-C_070731A								08/01/07 02:38
Cadmium	ND	mg/kg-dry	0.32				0.0	30	
Copper	1.46	mg/kg-dry	0.60				14	30	
Nickel	0.684	mg/kg-dry	0.093				10.0	30	
Zinc	1.99	mg/kg-dry	0.020				9.5	30	
Sample ID: C07070856-009BMS4	Post Digestion Spike								
	Run: ICPMS2-C_070731A								08/01/07 02:44
Cadmium	1.06	mg/kg-dry	0.32	106	75	125			
Copper	2.71	mg/kg-dry	0.60	103	75	125			
Nickel	1.80	mg/kg-dry	0.093	104	75	125			
Zinc	3.18	mg/kg-dry	0.020	100	75	125			
Sample ID: C07070856-009BMSD4	Post Digestion Spike Duplicate								
	Run: ICPMS2-C_070731A								08/01/07 02:51
Cadmium	1.03	mg/kg-dry	0.32	103	75	125			
Copper	2.66	mg/kg-dry	0.60	98	75	125			
Nickel	1.76	mg/kg-dry	0.093	100	75	125			
Zinc	3.13	mg/kg-dry	0.020	95	75	125			
Method: SW7471A Batch: 15474									
Sample ID: MB-15474	Method Blank								
	Run: CVAA-C201_070801A								08/01/07 10:20
Mercury	ND	mg/kg-dry	0.04						
Sample ID: C07070856-003HMS	Sample Matrix Spike								
	Run: CVAA-C201_070801A								08/01/07 10:47
Mercury	0.86	mg/kg-dry	0.050	92	85	115			
Sample ID: C07070856-003HMSD	Sample Matrix Spike Duplicate								
	Run: CVAA-C201_070801A								08/01/07 10:51
Mercury	0.94	mg/kg-dry	0.050	97	85	115	8.7	30	
Sample ID: LCS-15474	Laboratory Control Sample								
	Run: CVAA-C201_070801A								08/01/07 10:55
Mercury	0.49	mg/kg-dry	0.050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Client: Montgomery Watson Harza
Project: St. Anthony Mine

Report Date: 08/29/07
Work Order: C07070856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: USDA27a							Batch: SAT070724A		
Sample ID: C07070856-010CDUP	Sample Duplicate								
Saturation Percentage	43.3	%	0.10				12	10	R
Run: SARTORIUS CP3202_070725							07/25/07 08:09		
Sample ID: LCS	Laboratory Control Sample								
Saturation Percentage	52.9	%	0.10	105	80	120			
Run: SARTORIUS CP3202_070725							07/25/07 08:09		
Method: USDA27a							Batch: SAT070725A		
Sample ID: C07070856-009CDUP	Sample Duplicate								
Saturation Percentage	46.9	%	0.10				5.4	10	
Run: SARTORIUS_070726A							07/26/07 10:58		
Sample ID: LCS	Laboratory Control Sample								
Saturation Percentage	53.9	%	0.10	107	80	120			
Run: SARTORIUS_070726A							07/26/07 10:58		

Qualifiers:

RL - Analyte reporting limit.
 R - RPD exceeds advisory limit.

ND - Not detected at the reporting limit.

Chain of Custody and Analytical Request Record

Company Name: MWH EPA/State Compliance: Yes No

Report Mail Address: Steamboat Springs, CO State: _____

Contact Name: St. Anthony Mine Phone/Fax: _____ Email: _____

Contact Name: Toby Leeson (970) 846-4068 Purchase Order: _____

Invoice Address: Same Quote/Bottle Order: _____

Sampler: (Please Print) Toby Leeson

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

DW A2LA EDD/EDT (Electronic Data) POTW/MWTP State: _____ Other: _____

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers Sample Type: AWS VB O Vegetation Brossay Other	MATRIX	ANALYSIS REQUESTED						Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Shipped by: <u>Fed Ex</u>	Cooler ID(s): <u>UWent</u>	Receipt Temp <u>28.4 °C</u>	On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Custody Seal Intact Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Signature Match Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
					SEE ATTACHED	X	X	X	X	X									
1 MD-DH10-001	7/17/07	0810		S	Rush	X				X									
2 MD-DH10-002	"	0812		S	Rush	X				X									
3 MD-DH10-004	"	0823		S	Rush	X				X									
4 MD-DH10-303	"	0812		S	Rush	X				X									
5 MD-DH9-002	7/16/07	1023		S	Rush	X				X									
6 MD-DH9-003	"	1028		S	Rush	X				X									
7 PB-DH8-010	"	0805		S	Rush	X				X									
8 PB-DH8-302	"	"		S	Rush	X				X									
9 PB-DH8-014	"	0830		S	Rush	X				X									
10 PB-DH7-002	"	1125		S	Rush	X				X									

Received by Laboratory: Toby Leeson Date/Time: 7-19-07 14:30

Signature: _____ Date/Time: _____

Signature: _____ Date/Time: _____

Signature: _____ Date/Time: _____

Signature: _____ Date/Time: _____

Sample Disposal: X Lab Disposal: _____ Return to Client: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.



Chain of Custody and Analytical Request Record

PLEASE PRINT - Provide as much information as possible.

Company Name: _____ Project Name, PWS, Permit, Etc. _____

Report Mail Address: _____ State: _____ EPA/State Compliance: Yes No

Contact Name: _____ Phone/Fax: _____ Email: _____ Sampler: (Please Print) _____

Invoice Address: _____ Purchase Order: _____

Special Report/Formats - ELI must be notified prior to sample submittal for the following:

DW A2LA GSA EDD/EDT (Electronic Data) POT/WWTP Format: _____ State: LEVEL IV Other: NELAC

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	ANALYSIS REQUESTED		Normal Turnaround (TAT)	Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	Comments:	Shipped by: Cooler ID(s):	Receipt Temp	On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Custody Seal Intact Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	Signature Match Y <input type="checkbox"/> N <input type="checkbox"/>
				Number of Containers	Sample Type: AWSVB Air Water Soils/Solids Vegetation Bioassay Other								
1 P3-DH7-009	7/16/07	1200	S			SEE ATTACHED							
2 P3-DH7-015	"	1230	S	X	RADs								
3				X	AGRO								
4					SPLD								
5													
6													
7													
8													
9													
10													

LABORATORY USE ONLY

Received by (print): _____ Date/Time: 7-19-07 14:30
Signature: _____

Received by (print): _____ Date/Time: _____
Signature: _____

Received by Laboratory: _____ Date/Time: _____
Signature: _____

Sample Disposal: _____ Return to Client: _____ Lab Disposal: _____

Signature: _____

Custody Record MUST be Signed

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.



Energy Laboratories Inc

Workorder Receipt Checklist



C07070856

Login completed by: Tim Hollen

Date and Time Received: 7/19/2007 2:30 PM

Reviewed by:

Received by: kh

Reviewed Date:

Carrier name: FedEx

- | | | | |
|---|---|-----------------------------|--|
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | 28.4°C |
| Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

 Contact and Corrective Action Comments:

None



Date: 29-Aug-07

CLIENT: Montgomery Watson Harza
Project: St. Anthony Mine
Sample Delivery Group: C07070856

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package. A copy of the submittal(s) has been included and tracked in the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

PCB ANALYSIS USING EPA 505

Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-f - Energy Laboratories, Inc. - Idaho Falls, ID
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER, WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

The total number of pages of this report are indicated by the page number located in the lower right corner.

Analytical Method/Analytes: RAD

Sample Collection Date(s): 07/18-22/07

Laboratory: Energy Laboratories

Batch Identification: C07061467

Matrix: Soil/Leachate

Field Duplicates:

BG-TP3-120	P6-TP3-039	PO1-TP1-099/100
LOBO-TP3-134	SA-TP1-090	P6-TP1-030
BS-TP2-069/070	P7-TP2-020/021	P6-TP6-060
OS1-TP6-079/080		P7-TP4-050

MS/MSD Parent(s):

TO-TP1-018	SP-TP2-086/087	P6-TP6-061
SHAFT PAD-SPLP-COMP	TO-TP1-019	P5-TP1-011/012
MINE DUMP-SPLP-COMP	BG-TP4-122	OS1-TP6-082
TS-TP1-064/065	SA-TP1-089	TO-TP1-015/016
TS-TP1-066	P7-TP1-001/002	TS-TP1-068

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
LOBO-TP1-130/131	C07061467-001				
LOBO-TP2-132	C07061467-003				
LOBO-TP2-133	C07061467-004				
LOBO-TP3-134	C07061467-005				
LOBO-TP3-135 (DUP)	C07061467-006				
LOBO-TP4-136	C07061467-007				
BS-TP1-041/042	C07061467-008				
BS-TP2-069/070	C07061467-010				
BS-TP2-305	C07061467-012				
SHAFT PAD-SPLP-COMP	C07061467-013				
MINE DUMP-SPLP-COMP	C07061467-014				
STORAGE AREA-SPLP-COMP	C07061467-015				
POND 1-SPLP-COMP	C07061467-016				
POND 2-SPLP-COMP	C07061467-017				
POND 3-SPLP-COMP	C07061467-018				
POND 4-SPLP-COMP	C07061467-019				
POND 5-SPLP-COMP	C07061467-020				
TS-TP1-064/065	C07061467-021				
TS-TP1-066	C07061467-023				
TS-TP1-067	C07061467-024				
TS-TP1-068	C07061467-025				
OS1-TP6-306	C07061467-026				
OS1-TP1-081	C07061467-027				
OS1-TP6-082	C07061467-028				
PO5-TP5-117/118	C07061467-029				
PO5-TP5-119	C07061467-031				
PO4-TP4-111/112	C07061467-032				
PO4-TP4-113	C07061467-034				
PO3-TP3-114/115	C07061467-035				
PO3-TP3-116	C07061467-037				
BG-TP1-124	C07061467-038				
BG-TP1-125	C07061467-039				
BG-TP2-126	C07061467-040				
BG-TP2-127	C07061467-041				

Analytical Method/Analytes: RAD

Sample Collection Date(s): 07/18-22/07

Laboratory: Energy Laboratories

Batch Identification: C07061467

Matrix: Soil/Leachate

Field Duplicates:

BG-TP3-120	P6-TP3-039	PO1-TP1-099/100
LOBO-TP3-134	SA-TP1-090	P6-TP1-030
BS-TP2-069/070	P7-TP2-020/021	P6-TP6-060
OS1-TP6-079/080		P7-TP4-050

MS/MSD Parent(s):

TO-TP1-018	SP-TP2-086/087	P6-TP6-061
SHAFT PAD-SPLP-COMP	TO-TP1-019	P5-TP1-011/012
MINE DUMP-SPLP-COMP	BG-TP4-122	OS1-TP6-082
TS-TP1-064/065	SA-TP1-089	TO-TP1-015/016
TS-TP1-066	P7-TP1-001/002	TS-TP1-068
		OS1-TP1-081

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
BG-TP3-120	C07061467-042				
BG-TP3-310	C07061467-043				
BG-TP3-121	C07061467-044				
TO-TP1-015/016	C07061467-045				
TO-TP1-017	C07061467-047				
TO-TP1-018	C07061467-048				
TO-TP1-019	C07061467-049				
OS1-TP6-079/080	C07061467-050				
BG-TP4-122	C07061467-052		J	MSD recovery low for Th-230	4
BG-TP4-123	C07061467-053				
TN-TP1-071	C07061467-054				
TN-TP1-072	C07061467-055				
TN-TP1-073	C07061467-056				
TN-TP1-074	C07061467-057				
TN-TP1-075	C07061467-058				
AR7-TP1-076	C07061467-059				
AR15-TP1-077	C07061467-060				
AR19-TP1-078	C07061467-061				
AR24-TP1-083	C07061467-062				
AR34-TP1-084	C07061467-063				
SA-TP1-089	C07061467-064				
SA-TP1-090	C07061467-065				
SA-TP1-307	C07061467-066				
SA-TP1-091	C07061467-067				
P7-TP2-020/021	C07061467-068				
P7-TP2-300	C07061467-070				
P7-TP2-022	C07061467-071				
P7-TP3-023/024	C07061467-072				
P7-TP3-026	C07061467-074				
P7-TP4-048/049	C07061467-075				
P7-TP4-050	C07061467-077				
P7-TP4-303	C07061467-078				
P7-TP5-053/054	C07061467-079				
P7-TP5-055	C07061467-081				

Analytical Method/Analytes: RAD

Sample Collection Date(s): 07/18-22/07

Laboratory: Energy Laboratories

Batch Identification: C07061467

Matrix: Soil/Leachate

Field Duplicates:

BG-TP3-120	P6-TP3-039	PO1-TP1-099/100
LOBO-TP3-134	SA-TP1-090	P6-TP1-030
BS-TP2-069/070	P7-TP2-020/021	P6-TP6-060
OS1-TP6-079/080		P7-TP4-050

MS/MSD Parent(s):

TO-TP1-018	SP-TP2-086/087	P6-TP6-061
SHAFT PAD-SPLP-COMP	TO-TP1-019	P5-TP1-011/012
MINE DUMP-SPLP-COMP	BG-TP4-122	OS1-TP6-082
TS-TP1-064/065	SA-TP1-089	TO-TP1-015/016
TS-TP1-066	P7-TP1-001/002	TS-TP1-068
		OS1-TP1-081

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
P7-TP1-001/002	C07061467-082				
P7-TP1-005	C07061467-084				
P6-TP3-037/038	C07061467-085				
P6-TP3-039	C07061467-087				
P6-TP3-302	C07061467-088				
P6-TP2-032/033	C07061467-089				
P6-TP2-035	C07061467-091				
P6-TP1-028	C07061467-092				
P6-TP1-030	C07061467-093				
P6-TP1-301	C07061467-094				
P6-TP4-043/044	C07061467-095				
P6-TP4-047	C07061467-097				
P6-TP5-057/058	C07061467-098				
P6-TP6-060	C07061467-100				
P6-TP6-061	C07061467-101			Sample concentration >4X spike concentration for MS, MSD, and PDS	1
P6-TP6-304	C07061467-102				
OS2-TP5-092/093	C07061467-103				
OS2-TP5-094	C07061467-105				
OS2-TP5-096	C07061467-106				
OS2-TP5-098	C07061467-107				
PO2-TP2-105/110	C07061467-108				
PO2-TP2-106	C07061467-110				
PO2-TP2-108	C07061467-111				
PO2-TP2-309	C07061467-112				
PO1-TP1-099/100	C07061467-113			Sample concentration >4X spike concentration for PDS	2
PO1-TP1-308	C07061467-115			Sample concentration >4X spike concentration for PDS	2
PO1-TP1-103	C07061467-116				
SP-TP2-086/087	C07061467-117				
SP-TP2-088	C07061467-119				
P5-TP1-010	C07061467-120				
P5-TP1-011/012	C07061467-121			Sample concentration >4X spike concentration for MS & MSD.	3

Analytical Method/Analytes: RAD

Sample Collection Date(s): 07/18-22/07

Laboratory: Energy Laboratories

Batch Identification: C07061467

Matrix: Soil/Leachate

Field Duplicates:

BG-TP3-120	P6-TP3-039	PO1-TP1-099/100
LOBO-TP3-134	SA-TP1-090	P6-TP1-030
BS-TP2-069/070	P7-TP2-020/021	P6-TP6-060
OS1-TP6-079/080		P7-TP4-050

MS/MSD Parent(s):

TO-TP1-018	SP-TP2-086/087	P6-TP6-061
SHAFT PAD-SPLP-COMP	TO-TP1-019	P5-TP1-011/012
MINE DUMP-SPLP-COMP	BG-TP4-122	OS1-TP6-082
TS-TP1-064/065	SA-TP1-089	TO-TP1-015/016
TS-TP1-066	P7-TP1-001/002	TS-TP1-068
		OS1-TP1-081

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
P6-TP5-059	C07061467-123				

Uranium

- 1 Sample concentration >4X spike concentration for MS, MSD and PDS. Recoveries not calculated
- 2 Sample concentration >4X spike concentration for PDS. Recoveries not calculated
- 3 Sample concentration >4X spike concentration for MS & MSD. Recoveries not calculated

Thorium

- 4 MSD recovery below acceptance criteria 64%(70-130). Qualify parent w/"J" potential low bias

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides										
	LOBO-TP1-130/131	LOBO-TP2-132	LOBO-TP2-133	LOBO-TP3-134	LOBO-TP3-135 (DUP)	LOBO-TP4-136	BS-TP1-041/042	BS-TP2-069/070	BS-TP2-305	SHAFT PAD-SPLP-COMP	MINE DUMP-SPLP-COMP
Laboratory ID	-1	-3	-4	-5	-6	-7	-8	-10	-12	-13	-14
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	A
Field Duplicate/Replicate	N/A	N/A	N/A	A	A	N/A	N/A	A	A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis	Radionuclides										
Sample ID	STORAGE AREA-SPLP- COMP	POND 1- SPLP- COMP	POND 2- SPLP- COMP	POND 3- SPLP- COMP	POND 4- SPLP- COMP	POND 5- SPLP- COMP	TS-TP1-064/065	TS-TP1-066	TS-TP1-067	TS-TP1-068	OS1-TP6-306
Laboratory ID	-15	-16	-17	-18	-19	-20	-21	-23	-24	-25	-26
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A	A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A	A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides							
	OS1-TP1-081	OS1-TP6-082	PO5-TP5-117/118	PO5-TP5-119	PO4-TP4-111/112	PO4-TP4-113	PO3-TP3-114/115	PO3-TP3-116
Laboratory ID	-27	-28	-29	-31	-32	-34	-35	-37
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	A	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	A	A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides									
	BG-TP1-124	BG-TP1-125	BG-TP2-126	BG-TP2-127	BG-TP3-120	BG-TP3-310	BG-TP3-121	TO-TP1-015/016	TO-TP1-017	TO-TP1-018
Laboratory ID	-38	-39	-40	-41	-42	-43	-44	-45	-47	-48
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	A	A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides									
	TO-TP1-019	OS1-TP6-079/080	BG-TP4-122	BG-TP4-123	TN-TP1-071	TN-TP1-072	TN-TP1-073	TN-TP1-074	TN-TP1-075	AR7-TP1-076
Laboratory ID	-49	-50	-52	-53	-54	-55	-56	-57	-58	-59
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	N/A	A ⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides								
	AR15-TP1-077	AR19-TP1-078	AR24-TP1-083	AR34-TP1-084	SA-TP1-089	SA-TP1-090	SA-TP1-307	SA-TP1-091	P7-TP2-020/021
Laboratory ID	-60	-61	-62	-63	-64	-65	-66	-67	-68
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	A	A	N/A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides								
	P7-TP2-300	P7-TP2-022	P7-TP3-023/024	P7-TP3-026	P7-TP4-048/049	P7-TP4-050	P7-TP4-303	P7-TP5-053/054	P7-TP5-055
Laboratory ID	-70	-71	-72	-74	-75	-77	-78	-79	-81
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Duplicate (lab specific)	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	A	N/A	N/A	N/A	N/A	A	A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides								
	P7-TP1-001/002	P7-TP1-005	P6-TP3-037/038	P6-TP3-039	P6-TP3-302	P6-TP2-032/033	P6-TP2-035	P6-TP1-028	P6-TP1-030
Laboratory ID	-82	-84	-85	-87	-88	-89	-91	-92	-93
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A
Post Digestion Spike	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A
Field Duplicate/Replicate	N/A	N/A	N/A	A	A	N/A	N/A	N/A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides								
	P6-TP1-301	P6-TP4-043/044	P6-TP4-047	P6-TP5-057/058	P6-TP6-060	P6-TP6-061	P6-TP6-304	OS2-TP5-092/093	OS2-TP5-094
Laboratory ID	-94	-95	-97	-98	-100	-101	-102	-103	-105
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	N/A	N/A	N/A	N/A	A ¹	N/A	N/A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A
Post Digestion Spike	A	N/A	N/A	N/A	N/A	A ¹	N/A	N/A	N/A
Field Duplicate/Replicate	A	N/A	N/A	N/A	A	N/A	A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides							
	OS2-TP5-096	OS2-TP5-098	PO2-TP2-105/110	PO2-TP2-106	PO2-TP2-108	PO2-TP2-309	PO1-TP1-099/100	PO1-TP1-308
Laboratory ID	-106	-107	-108	-110	-111	-112	-113	-115
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	A ²	A ²
Field Duplicate/Replicate	N/A	N/A	A	N/A	N/A	A	A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Radionuclides

Laboratory: Energy Laboratories

Batch Identification: C07061647

Analysis Sample ID	Radionuclides					
	PO1-TP1-103	SP-TP2-086/087	SP-TP2-088	P5-TP1-010	P5-TP1-011/012	P6-TP5-059
Laboratory ID	-116	-117	-119	-120	-121	-123
Hardcopy vs. Chain of Custody	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	A	N/A	N/A	A ³	N/A
Matrix Duplicate (lab specific)	N/A	N/A	N/A	N/A	N/A	A
Post Digestion Spike	N/A	A	N/A	N/A	A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: SPLP Metals

Sample Collection Date(s): 06/18-22/07

Laboratory: Energy Laboratories

MW Job Number:

Batch Identification: C07061467

Matrix: Leachate

Field Duplicates:

MS/MSD Parent:

SHAFT PAD-SPLP-COMP

P7-TP5-055

TS-TP1-066

P6-TP2-035

OS1-TP1-081

OS2-TP5-094

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
SHAFT PAD-SPLP-COMP	C07061467-013	Y	B	Na and U detected in method blank. Conc. < 50X	1
MINE DUMP-SPLP-COMP	C07061467-014	Y	B	Na and U detected in method blank. Conc. < 50X	1
STORAGE AREA-SPLP-COMP	C07061467-015	Y	B	Na and U detected in method blank. Conc. < 50X	1
POND 1-SPLP-COMP	C07061467-016	Y	B	Na and U detected in method blank. Conc. < 50X	1
POND 2-SPLP-COMP	C07061467-017	Y	B	Na and U detected in method blank. Conc. < 50X	1
POND 3-SPLP-COMP	C07061467-018	Y	B	Na and U detected in method blank. Conc. < 50X	1
POND 4-SPLP-COMP	C07061467-019	Y	B	Na and U detected in method blank. Conc. < 50X	1
POND 5-SPLP-COMP	C07061467-020	Y	B	Na and U detected in method blank. Conc. < 50X	1
TS-TP1-066	C07061467-023	Y	B	Na and U detected in method blank. Conc. < 50X	1
OS1-TP1-081	C07061467-027	Y			
PO5-TP5-119	C07061467-031	Y			
PO4-TP4-113	C07061467-034	Y			
PO3-TP3-116	C07061467-037	Y			
TN-TP1-073	C07061467-056	Y			
SA-TP1-091	C07061467-067	Y			
P7-TP2-022	C07061467-071	Y			
P7-TP3-026	C07061467-074	Y			
P7-TP4-050	C07061467-077	Y			
P7-TP5-055	C07061467-081	Y			
P7-TP1-005	C07061467-084	Y			
P6-TP3-039	C07061467-087	Y			
P6-TP2-035	C07061467-091	Y	B	U detected in associated MB. Conc. < 50X Sampl concentration > 4X spike concentration for Al	2 3
P6-TP1-030	C07061467-093	Y	B	U detected in associated MB. Conc. < 50X	2
P6-TP4-047	C07061467-097	Y		U detected in associated MB. Conc. > 50X	2
OS2-TP5-094	C07061467-105	Y		U detected in associated MB. Conc. > 50X	2
PO2-TP2-106	C07061467-110	Y		U detected in associated MB. Conc. > 50X	2
SP-TP2-088	C07061467-119	Y	B	U detected in associated MB. Conc. < 50X	2

Analytical Method/Analytes: SPLP Metals

Sample Collection Date(s): 06/18-22/07

Laboratory: Energy Laboratories

MW Job Number:

Batch Identification: C07061467

Matrix: Leachate

Field Duplicates:

MS/MSD Parent: **SHAFT PAD-SPLP-COMP** **P7-TP5-055**
 TS-TP1-066 **P6-TP2-035**
 OS1-TP1-081 **OS2-TP5-094**

Validation Complete: (Signature and Date)

09/17/07

Craig Moore

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
P5-TP1-010	C07061467-120	Y	B	U detected in associated MB. Conc. < 50X	2

- 1 MB (MB-15082) contains Na @ 3.31 mg/l and U @ 0.000352 mg/l. All detections less than 50X MB concentration. Qualify all associated detection w/ "B".
- 2 MB (MB-15082) contains U @ 0.00126 mg/l. No qualification for associated concentration > 50X MB concentration. Qualify all detection < 50X MB concentration w/"B".
- 3 Aluminum concentration in parent sample > 4X spike concentration for PDS. Recoveries not calculated.

Analytical Method/Analytes: Metals
Laboratory: Energy Laboratories
Batch Identification: C07061467

Analysis Sample ID	Total Metals										
	SHAFT PAD SPLP- COMP	MINE DUMP- SPLP- COMP	STORAGE AREA-SPLP COMP	POND 1- SPLP- COMP	POND 2- SPLP- COMP	POND 3- SPLP- COMP	POND 4- SPLP- COMP	POND 5- SPLP- COMP	TS-TP1-066	OS1-TP1-081	PO5-TP5-119
Laboratory ID	-13	-14	-15	-16	-17	-18	-19	-20	-23	-27	-31
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹
Laboratory Control Sample (all methods)	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A
Post Digestion Spike	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met
N/A Not applicable

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07061467

Analysis Sample ID	Total Metals									
	PO4-TP4-113	PO3-TP3-116	TN-TP1-073	SA-TP1-091	P7-TP2-022	P7-TP3-026	P7-TP4-050	P7-TP5-055	P7-TP1-005	P6-TP3-039
Laboratory ID	-34	-37	-56	-67	-71	-74	-77	-81	-84	-87
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample (all methods)	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07061467

Analysis	Total Metals						
	Sample ID						
	P6-TP2-035	P6-TP1-030	P6-TP4-047	OS2-TP5-094	PO2-TP2-106	SP-TP2-088	P5-TP1-010
Laboratory ID	-91	-93	-97	-105	-110	-119	-120
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A
Method Blank	A ²	A ²	A ²	A ²	A ²	A ²	A ²
Laboratory Control Sample (all methods)	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A	N/A	N/A	A	N/A	N/A	N/A
Post Digestion Spike	A ³	N/A	N/A	A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: RAD

Sample Collection Date(s): 07/16,17/07

Laboratory: Energy Laboratories

MW Job Number:

Batch Identification: C07061601

Matrix: Leachate

Field Duplicates:

BG-TP3-081

TW-TP1-020

Page: 1 of 2

MS/MSD Parent:

TE-TP1-001

TW-TP1-020

BM-COMP-090

TW-TP1-018/019

OE-TP2-010

TW-TP1-022

OSW-COMP-088

BG-TP2-075/076

TW-TP1-020A

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
TE-TP1-001	C07061601-001				
TE-TP1-002	C07061601-002				
TE-TP2-003	C07061601-004				
TE-TP2-004	C07061601-005				
TE-TP2-005	C07061601-006				
OE-TP1-006/008	C07061601-008				
OE-TP1-007	C07061601-010				
OE-TP2-010	C07061601-013			U sample concentration > 4x spike concentration for MS & MSD.	
BG-TP2-077	C07061601-015				
BG-TP3-078/079/080	C07061601-016				
BG-TP3-407	C07061601-018				
BG-TP3-081	C07061601-019				
BG-TP4-082/083/084	C07061601-020				
BG-TP4-085	C07061601-022				
BG-COMP-086	C07061601-023				
OSE-COMP-087	C07061601-024				
NE2-COMP-089	C07061601-025				
OSW-COMP-088	C07061601-026				
BM-COMP-090	C07061601-027				
TW-COMP-091	C07061601-028				
NE1-COMP-092	C07061601-029				
TE-COMP-093	C07061601-030				
OE-TP2-012	C07061601-032				
OE-TP2-013	C07061601-033				
OE-TP2-014	C07061601-034				
OW-TP1-015/016	C07061601-036				
OW-TP1-015/016	C07061601-037				
OW-TP1-017	C07061601-038				
TW-TP1-018/019	C07061601-040				
TW-TP1-018/019	C07061601-041		J	MS/MSD recovery low for Th-232.	2
TW-TP1-020	C07061601-042				
TW-TP1-401	C07061601-043				
TW-TP1-021	C07061601-044				
TW-TP1-022	C07061601-045				

1 U sample concentration > 4x spike concentration for MS & MSD. Recoveries not calculated

2 MS/MSD recoveries low for Th-232 (69%/60% {70-130}). Qualify parent sample w/ "J"; potential low bias.

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07061601

Analysis Sample ID	Radionuclides														
	TE-TP1-001	TE-TP1-002	TE-TP2-003	TE-TP2-004	TE-TP2-005	OE-TP1-006/008	OE-TP1-007	OE-TP2-010	BG-TP2-077	BG-TP3-078/079/080	BG-TP3-407	BG-TP3-081	BG-TP4-082/083/084	BG-TP4-085	BG-COMP-086
Laboratory ID	-1	-2	-4	-5	-6	-8	-10	-13	-15	-16	-18	-19	-20	-22	-23
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A ¹	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07061601

Analysis Sample ID	Radionuclides													
	OSE- COMP- 087	NE2- COMP- 089	OSW- COMP- 088	BM- COMP- 090	TW- COMP- 091	NE1- COMP- 092	TE-COMP- 093	OE-TP2- 012	OE-TP2- 013	OE-TP2- 014	OW-TP1- 015/016	OW-TP1- 015/016	OW-TP1- 017	TW-TP1- 018/019
Laboratory ID	-24	-25	-26	-27	-28	-29	-30	-32	-33	-34	-36	-37	-38	-40
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met
N/A Not applicable

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07061601

Analysis Sample ID	Radionuclides				
	TW-TP1- 018/019	TW-TP1- 020	TW-TP1- 401	TW-TP1- 021	TW-TP1- 022
Laboratory ID	-41	-42	-43	-44	-45
Hardcopy vs. Chain of Custody	A	A	A	A	A
Holding Time	A	A	A	A	A
Analyte List	A	A	A	A	A
Reporting Limits	A	A	A	A	A
Analysis Time	A	A	A	A	A
Method Blank	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A ²	A	N/A	N/A	A
Post Digestion Spike	A ²	A	N/A	N/A	A
Field Duplicate/Replicate	N/A	A	A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: SPLP Metals

Laboratory: Energy Laboratories

Batch Identification: C07061601

Field Duplicates:

MS/MSD Parent: BM-COMP-090

Validation Complete: (Signature and Date)

09/17/07

Craig Moore

Sample Collection Date(s): 06/25,26/07

MW Job Number:

Matrix: Leachate

Page: 1 of 2

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
TE-TP1-002	C07061601-002	Y	B	U detected in MB. Sample concentration < 50X	2
BG-COMP-086	C07061601-023	Y	B	U detected in MB. Sample concentration < 50X	2
OSE-COMP-087	C07061601-024	Y		U detected in MB. Sample concentration > 50X	2
NE2-COMP-089	C07061601-025	Y		U detected in MB. Sample concentration > 50X	2
OSW-COMP-088	C07061601-026	Y		U detected in MB. Sample concentration > 50X	2
BM-COMP-090	C07061601-027	Y	B	Na detected in MB. Sample concentration < 50X.	1
TW-COMP-091	C07061601-028	Y	B	Na detected in MB. Sample concentration < 50X.	1
NE1-COMP-092	C07061601-029	Y		Na detected in MB. Sample ND	1
TE-COMP-093	C07061601-030	Y	B	Na detected in MB. Sample concentration < 50X.	1
OE-TP2-014	C07061601-034	Y	B	Na detected in MB. Sample concentration < 50X.	1
OW-TP1-015/016	C07061601-036	Y	B	Na detected in MB. Sample concentration < 50X.	1
TW-TP1-018/019	C07061601-040	Y	B	Na detected in MB. Sample concentration < 50X.	1

1 MB (MB-15162) contains Na @ 2.67 mg/l. Qualify sample detection < 50X MB concentration w/"B". No qualification for NDs

2 MB (MB-15115) contains U @ 0.00126 mg/l. Qualify sample detection < 50X MB concentration w/"B". No qualification for sample if concentration > 50X MB concentration

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07061601

Analysis Sample ID	Total Metals											
	TE-TP1-002	BG-COMP-086	OSE-COMP-087	NE2-COMP-089	OSW-COMP-088	BM-COMP-090	TW-COMP-091	NE1-COMP-092	TE-COMP-093	OE-TP2-014	OW-TP1-015/016	TW-TP1-018/019
Laboratory ID	-2	-23	-24	-25	-26	-27	-28	-29	-30	-34	-36	-40
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A ²	A ²	A ²	A ²	A ²	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹
Laboratory Control Sample	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: RAD

Laboratory: Energy Laboratories

Batch Identification: C07070262

Field Duplicates: NE2-TP3-405 NE2-TP1-404

NE1-TP3-403 NE1-TP1-402

MS/MSD Parent: NE1-TP3-038 BM-TP1-026/027

NE1-TP3-038/039 NE1-TP1-031

Sample Collection Date(s): 06/25,26, 07/01/07

MW Job Number:

Matrix: Leachate

Validation Complete: (Signature and Date)

09/17/07



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
NE2-TP2-056/057/058	C07070262-001	Y			
NE2-TP2-059/060/061	C07070262-003	Y			
NE2-TP3-405	C07070262-005	Y			
NE2-TP3-064	C07070262-007	Y			
NE2-TP3-065	C07070262-008	Y			
NE2-TP4-066/067/068	C07070262-009	Y			
NE2-TP4-069	C07070262-011	Y			
BG-TP1-070/071/072	C07070262-012	Y			
BG-TP1-073	C07070262-015	Y			
BG-TP2-074	C07070262-016	Y			
NE1-TP2-035	C07070262-017	Y			
NE1-TP3-038	C07070262-019	Y		U sample cocentration > 4X spike concentration for MS, MSD, & PDS	1
NE1-TP3-040	C07070262-021	Y			
NE1-TP3-403	C07070262-022	Y			
NE1-TP4-042/043/044	C07070262-024	Y			
NE1-TP4-045/046/047	C07070262-026	Y			
NE2-TP1-048/049/055	C07070262-028	Y			
NE2-TP1-048/049/055	C07070262-029	Y			
NE2-TP1-050	C07070262-031	Y			
NE2-TP1-404	C07070262-032	Y			
NE2-TP1-051	C07070262-033	Y			
NE2-TP1-052	C07070262-034	Y			
OS1-SPLP-COMP	C07070262-036	Y			
OS2-SPLP-COMP	C07070262-037	Y			
TW-TP2-023/024	C07070262-038	Y			
TW-TP2-025	C07070262-040	Y			
BM-TP1-026/027	C07070262-042	Y		U sample cocentration > 4X spike concentration for MS, MSD, & PDS	2
BM-TP1-028	C07070262-044	Y			
NE1-TP1-030	C07070262-045	Y			
NE1-TP1-402	C07070262-046	Y			
NE1-TP1-031	C07070262-047	Y		U sample cocentration > 4X spike concentration for MS & MSD	3

1 U sample cocentration > 4X spike concentration for MS, MSD, & PDS. Recoveries not calculated.

2 U sample cocentration > 4X spike concentration for MS, MSD, & PDS. Recoveries not calculated.

3 U sample cocentration > 4X spike concentration for MS & MSD. Recoveries not calculated.

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07070262

Analysis	Radionuclides										
Sample ID	NE2-TP2-056/057/058	NE2-TP2-059/060/061	NE2-TP3-405	NE2-TP3-064	NE2-TP3-065	NE2-TP4-066/067/068	NE2-TP4-069	BG-TP1-070/071/072	BG-TP1-073	BG-TP2-074	NE1-TP2-035
Laboratory ID	-1	-3	-5	-7	-8	-9	-11	-12	-15	-16	-17
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met
N/A Not applicable

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07070262

Analysis	Radionuclides										
Sample ID	NE1-TP3-038	NE1-TP3-040	NE1-TP3-403	NE1-TP4-042/043/044	NE1-TP4-045/046/047	NE2-TP1-048/049/055	NE2-TP1-048/049/055	NE2-TP1-050	NE2-TP1-404	NE2-TP1-051	NE2-TP1-052
Laboratory ID	-19	-21	-22	-24	-26	-28	-29	-31	-32	-33	-34
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	A ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Post Digestion Spike	A ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Field Duplicate/Replicate	N/A	A	A	N/A	N/A	N/A	N/A	A	A	N/A	N/A

A indicates validation criteria were met
N/A Not applicable

Analytical Method/Analytes: Rad
Laboratory: Energy Laboratories
Batch Identification: C07070262

Analysis	Radionuclides								
Sample ID	OS1-SPLP-COMP	OS2-SPLP-COMP	TW-TP2-023/024	TW-TP2-025	BM-TP1-026/027	BM-TP1-028	NE1-TP1-030	NE1-TP1-402	NE1-TP1-031
Laboratory ID	-36	-37	-38	-40	-42	-44	-45	-46	-47
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	A ²	N/A	N/A	N/A	A ³
Post Digestion Spike	N/A	N/A	N/A	N/A	A ²	N/A	N/A	N/A	A
Field Duplicate/Replicate	N/A	N/A	N/A	N/A	N/A	N/A	A	A	N/A

A indicates validation criteria were met
N/A Not applicable

Analytical Method/Analytes: SPLP Metals

Laboratory: Energy Laboratories

Batch Identification: C07070262

Field Duplicates:

MS/MSD Parent: BM-TP1-028

Validation Complete: (Signature and Date)

09/17/07

Craig Moore

Sample Collection Date(s): 06/18-21/07

MW Job Number:

Matrix: Leachate

Page: 1 of 2

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
BG-TP1-073	C07070262-015				
NE2-TP1-048/049/055	C07070262-028				
OS1-SPLP-COMP	C07070262-036				
OS2-SPLP-COMP	C07070262-037				
BM-TP1-028	C07070262-044		B	Na detected in MB. Sample cocentration < 50X.	1

1 MB (MB-15162) contains Na @ 2.67 mg/l. Assoiated sample cocentration < 50X MB concentration. Qualify w/ "B"

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07070262

Analysis	SPLP Metals				
	Sample ID	BG-TP1-073	NE2-TP1-048/049/055	OS1-SPLP-COMP	OS2-SPLP-COMP
Laboratory ID	-15	-28	-36	-37	-44
Hardcopy vs. Chain of Custody	A	A	A	A	A
Holding Time	A	A	A	A	A
Analyte List	A	A	A	A	A
Reporting Limits	A	A	A	A	A
Analysis Time	A	A	A	A	A
Method Blank	A	A	A	A	A ¹
Laboratory Control Sample	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	N/A	N/A	A
Post Digestion Spike	N/A	N/A	N/A	N/A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: RAD

Laboratory: Energy Laboratories

Batch Identification: C07070359

Field Duplicates: P3-DH8-007 P4-DH3-005

MS/MSD Parent: P3-DH8-001 P4-DH6-008

P4-DH1-001 P4-DH3-005 P4-DH2-011

Validation Complete: (Signature and Date) 09/17/07

Sample Collection Date(s): 07/16,17/07

MW Job Number:

Matrix: Leachate

Page: 1 of 2



Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
P4-DH5-007	C07070359-002	Y			
P4-DH5-016	C07070359-003	Y			
P3-DH8-005	C07070359-005	Y			
P3-DH8-007	C07070359-006	Y			
P3-DH8-301	C07070359-007	Y			
P4-DH3-004	C07070359-008	Y			
P4-DH3-005	C07070359-009	Y	J	MS/MSD low for Th-232	1
P4-DH3-300	C07070359-010	Y	J	MS/MSD low for Th-232	1
P4-DH1-015	C07070359-011	Y			
P4-DH1-013	C07070359-012	Y			
P4-DH4-014	C07070359-013	Y			
P4-DH4-012	C07070359-014	Y			
P4-DH6-007	C07070359-015	Y			
P4-DH6-008	C07070359-016	Y		U concentration >4X spike concentration for MS/MSD	2
P4-DH2-010	C07070359-021	Y			
P4-DH2-011	C07070359-022	Y			

1 MS/MSD recovery low for Th-232 (61%/57% [70-130]). Qualify parent and FD w/ "J" potentially biased low.

2 U concentration >4X spike concentration for MS/MSD. Recoveries not calculated.

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07070359

Analysis	Radionuclides																			
	Sample ID				P4-DH5-007	P4-DH5-016	P3-DH8-005	P3-DH8-007	P3-DH8-301	P4-DH3-004	P4-DH3-005	P4-DH3-300	P4-DH1-015	P4-DH1-013	P4-DH4-014	P4-DH4-012	P4-DH6-007	P4-DH6-008	P4-DH2-010	P4-DH2-011
Laboratory ID	-2	-3	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-21	-22				
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	N/A	A	N/A	N/A	N/A	A ²	A ²	N/A	N/A	N/A	N/A	N/A	N/A	A ¹	N/A	N/A	N/A	N/A	A
Post Digestion Spike	N/A	N/A	A	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	N/A	N/A	A	N/A	N/A	N/A	N/A	A
Field Duplicate/Replicate	N/A	N/A	N/A	A	A	N/A	A	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: SPLP Metals

Laboratory: Energy Laboratories

Batch Identification: C07070359

Field Duplicates:

MS/MSD Parent:

P3-DH8-005

P4-DH2-011

Validation Complete: (Signature and Date)

09/17/07

Craig Moore

Sample Collection Date(s): 07/01-06/07

MW Job Number:

Matrix: Leachate

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
P4-DH5-016	C07070359-003	Y	B	Ca, Na, and U detected in MB. Sample concentration < 50X	1
P3-DH8-005	C07070359-005	Y	B	Ca, Na, and U detected in MB. Sample concentration < 50X	1
P4-DH3-004	C07070359-008	Y	B	Ca and Na detected in MB. Sample concentration < 50X. U detected in MB. Sample concentration > 50X.	1
P4-DH1-015	C07070359-011	Y	B	Na detected in MB. Sample concentration < 50X. Ca and U detected in MB. Sample concentration > 50X.	1
P4-DH4-014	C07070359-013	Y	B	Ca and Na detected in MB. Sample concentration < 50X. U detected in MB. Sample concentration > 50X.	1
P4-DH6-008	C07070359-016	Y	B	Ca, Na, and U detected in MB. Sample concentration < 50X	1
P4-DH2-011	C07070359-022	Y	B	Ca, Na, and U detected in MB. Sample concentration < 50X	1

1 MB(MB-15210) contains Ca @ 0.598 mg/l, Na @ 3.96 mg/l, and U @ 0.000828 mg/l. Qualify w/"B" if sample concentration < 50X MB concentration. No qualification if sample concentration > 50X MB concentration.

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07070262

Analysis	SPLP Metals						
	Sample ID	P4-DH5-016	P3-DH8-005	P4-DH3-004	P4-DH1-015	P4-DH4-014	P4-DH6-008
Laboratory ID	-3	-5	-8	-11	-13	-16	-22
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A
Method Blank	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A ¹
Laboratory Control Sample	A	A	A	A	A	A	A
Matrix Spike/Matrix Spike Duplicate	N/A	A	N/A	N/A	N/A	N/A	A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: RAD

Laboratory: Energy Laboratories

Batch Identification: C07070856

Field Duplicates:

MS/MSD Parent:

Validation Complete: (Signature and Date)

09/17/07



Sample Collection Date(s): 07/16,17/07

MW Job Number:

Matrix: Leachate

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
MD-DH10-001	C07070856-001	Y			
MD-DH10-002	C07070856-002	Y			
MD-DH10-004	C07070856-003	Y			
MD-DH10-303	C07070856-004	Y			
MD-DH9-002	C07070856-005	Y			
MD-DH9-003	C07070856-006	Y			
P3-DH8-010	C07070856-007	Y			
P3-DH8-302	C07070856-008	Y			
P3-DH7-002	C07070856-010	Y			
P3-DH7-009	C07070856-011	Y			
P3-DH7-015	C07070856-012	Y			

Analytical Method/Analytes: RAD

Laboratory: Energy Laboratories

Batch Identification: C07070856

Analysis	Radionuclides										
	MD-DH10-001	MD-DH10-002	MD-DH10-004	MD-DH10-303	MD-DH9-002	MD-DH9-003	P3-DH8-010	P3-DH8-302	P3-DH7-002	P3-DH7-009	P3-DH7-015
Sample ID											
Laboratory ID	-1	-2	-3	-4	-5	-6	-7	-8	-10	-11	-12
Hardcopy vs. Chain of Custody	A	A	A	A	A	A	A	A	A	A	A
Holding Time	A	A	A	A	A	A	A	A	A	A	A
Analyte List	A	A	A	A	A	A	A	A	A	A	A
Reporting Limits	A	A	A	A	A	A	A	A	A	A	A
Analysis Time	A	A	A	A	A	A	A	A	A	A	A
Method Blank	A	A	A	A	A	A	A	A	A	A	A
Laboratory Control Sample	A	A	A	A	A	A	A	A	A	A	A
Field Duplicate/Replicate	N/A	A	N/A	A	N/A	N/A	A	A	N/A	N/A	N/A

A indicates validation criteria were met

N/A Not applicable

Analytical Method/Analytes: SPLP Metals

Laboratory: Energy Laboratories

Batch Identification: C07070856

Field Duplicates:

MS/MSD Parent:

Validation Complete: (Signature and Date)

09/17/07



Sample Collection Date(s): 07/16,17/07

MW Job Number:

Matrix: Leachate

Sample Identification	Lab Identification	Hits (Y/N)	Quals	Comments	Foot Notes
MD-DH10-001	C07070856-001	Y	B	Mo and U detected in MB. Sample concentration < 50X.	1
MD-DH9-003	C07070856-006	Y	B	Mo detected in MB. Sample concentration < 50X. U detected in MB. Sample concentration > 50X.	1
P3-DH7-009	C07070856-011	Y		Mo and U detected in MB. U Sample concentration < 50X. Mo not detected in sample.	1

1 MB (MB-15360) contains Mo @ 0.0003 mg/l and U @ 0.0001 mg/l. Qualify w/ "B" where sample concentrations <50X MB concentration. No qualification where sample concentration > 50X MB concentration or where sample is ND.

Analytical Method/Analytes: Metals

Laboratory: Energy Laboratories

Batch Identification: C07070856

Analysis	SPLP Metals		
	Sample ID	MD-DH10-001	MD-DH9-003
Laboratory ID	-1	-6	-11
Hardcopy vs. Chain of Custody	A	A	A
Holding Time	A	A	A
Analyte List	A	A	A
Reporting Limits	A	A	A
Analysis Time	A	A	A
Method Blank	A ¹	A ¹	A ¹
Laboratory Control Sample	A	A	A
Matrix spike/MSD	N/A	A	A

A indicates validation criteria were met

N/A Not applicable

DATA VALIDATION RESULTS

B1.1 INTRODUCTION

This report presents a summary of the verification results for the sample data collected for General Electric (United Nuclear Corporation) at the St. Anthony and Section 27 mines.

Samples were analyzed by Energy Laboratories Incorporated of Casper, Wyoming. Samples were analyzed for at least one of the following:

- Various agronomic methods
- Uranium
- Radium-226
- Gross alpha
- Thorium 230
- Synthetic Precipitation Leaching Procedure (SPLP) metals
- Synthetic Precipitation Leaching Procedure (SPLP) radium-226, radium-228, and gross alpha.

The analytical results are expressed in terms of precision, accuracy, representativeness, comparability, and completeness (PARCC). This data evaluation is presented in terms of the PARCC criteria and was based on the criteria presented in the Quality Assurance Project Plans. The analytical data were verified and qualified based on the results of the following data evaluation parameters or quality control (QC) samples:

- Compliance with the QAPP
- Sample preservation
- Sample extraction and analytical holding times
- Laboratory blank sample results
- Reporting limits (RL)
- Field replicate sample results
- Matrix spike/matrix spike duplicate (MS/MSD) sample results
- Laboratory control sample (LCS) results
- Laboratory replicate sample results.

Data verification was performed on only the SPLP data and radionuclide data. The data from agronomic methods were not verified because QC criteria are not established for the methods.

The following sections describe the data verification procedures, discuss data that have significant QC problems (i.e., rejected data), and describe any analytical method or QAPP deviations.

The results of the sample analyses are summarized in the main body of this report. Sample data qualified due to the data verification are presented in Table B-1.

B2.0 DATA VERIFICATION RESULTS

B2.1 COMPLETENESS EVALUATION

B2.1.1 Sampling Completeness

B2.1.1.1 All samples and QC samples were collected as scheduled resulting in 100 percent completeness for this project.

B2.1.2 Analytical Completeness

B2.1.2.1. Analytical completeness was evaluated on a per analyte basis using the following equation:

$$\text{Completeness} = \frac{\text{Number of valid data points}}{\text{Total number of measurements}} \times 100$$

Where: The number of valid data points is the total number of valid analytical measurements based on the precision, accuracy, and holding time evaluation.

Based on the results of the data verification described in the following sections, all data are considered valid as qualified. Analytical completeness was 100 percent, which met the 95 percent analytical completeness goal established in the QAPP.

B2.2 REPRESENTATIVENESS EVALUATION

Representativeness is a qualitative expression of the degree to which sample data accurately and precisely represent a characteristic of a population, a sampling point, or an environmental condition. Representativeness is maximized by ensuring that, for a given project, the number and location of sampling points and the sample collection and analysis techniques are appropriate for the specific investigation, and that the sampling and analysis program provides information that reflects "true" site conditions. Laboratory data were evaluated for representativeness by assessing compliance with the following:

- Laboratory compliance with the QAPP
- Sample preservation
- Sample extraction and analyses holding times
- Laboratory method blank sample results
- Reporting limits
- Field replicates.

B2.2.1 Quality Assurance Project Plan Compliance Evaluation

Based on the data verification, all samples were analyzed following the quality control criteria specified in the QAPP.

B2.2.2 Sample Preservation Evaluation

All samples were preserved as specified in the QAPP.

B2.2.3 Holding Time Evaluation

Holding time reflects the length of time after sample collection that a sample or extract remains representative of environmental conditions. Depending on the analysis, either one or two holding times were evaluated.

- For the total radionuclides and metals analyses, the length of time between sample collection and sample analysis was evaluated.
- For the SPLP analyses the length of time from sample collection to sample leaching, and the length of time from sample leaching to sample analysis was evaluated.

Holding times were compared to standard method specific holding times specified in the QAPP. All holding times were met.

B2.2.4 Laboratory Blank Evaluation

The laboratory blank contains all the reagents used in the processing of samples and is carried through the complete analytical procedure used for the samples. If target analytes were detected in a laboratory blank and an associated investigative sample, data were evaluated and qualified using the following criteria:

- **Laboratory Contaminants.** If a target analyte was detected in a blank and in an associated sample, the sample datum was with a “B” flag to indicate the analyte was detected in an associated blank.
- **Sample Concentration Substantially Greater than Blank Concentration.** If a target analyte was detected in a blank and in an associated sample, and the concentration of the analyte in the environmental sample was greater than fifty times the concentration detected in the blank, sample data were not qualified because it was determined that the associated blank concentration could have no affect on data quality.

Sample data qualified due to laboratory blank results were qualified as described previously and are listed in Table B-1 with “LB” as the QC type.

B2.2.5 Reporting Limits

The RL is the lowest concentration that can be reliably achieved within limits of precision and accuracy during routine instrument operating conditions and is based on the method detection limit (MDL) for each analyte. For this project, all sample data were reported to the RL established in the QAPP, with the following exceptions:

- The SPLP selenium data for fourteen samples was reported to 0.0002 milligrams per liter (mg/l) instead of 0.001 mg/l.

B2.2.6 Field Replicate Evaluation

Field replicate samples were collected and analyzed to evaluate sampling and analytical precision. Because precision is affected by several variables including sample heterogeneity, sample collection procedures, sample preparation and sample analysis, the results of field replicates were used as additional evidence to support data quality rather than as a basis for accepting, qualifying or rejecting the data. The relative percent difference (RPD) was calculated only for those analytes that were detected above the RL in both the environmental and field replicate samples. The RPDs were less than the RPD guidance of 50 percent except for three uranium results, five gross alpha results, one radium-226 result, and six throumium-230 results. The RPD for these samples is most likely due to sample heterogeneity.

B2.3 ACCURACY EVALUATION

Accuracy is a measure of the bias of a method or the level of agreement between a measurement and a known true value. Accuracy is evaluated by percent recovery (%R), which is calculated using the following equation:

$$\%R = \frac{A - B}{C} \times 100$$

- Where:
- A = the measured concentration of the spiked analyte in a spiked sample
 - B = the measured concentration of the spiked analyte in an unspiked sample
 - C = the concentration of the analyte used for spiking.

Laboratory data were evaluated for accuracy by assessing compliance with the following:

- MS/MSD sample results
- LCS and LCD results.

B2.3.1 Matrix Spike/Matrix Spike Duplicate Samples Evaluation

Site specific MS/MSD samples were analyzed to assess accuracy and to identify possible adverse matrix effects. These samples were spiked with target analytes according to the QAPP before extraction or analysis. The percent recoveries of the spiked compounds were compared to the QAPP established QC limits. The following criteria were used to evaluate the MS/MSD samples:

- **MS and/or MSD Recovery Below Acceptance Criteria.** Matrix spike compounds below the acceptance criteria indicate a potential low bias during sample analysis. Therefore, if corresponding analytes were not detected in the parent sample, the sample data were qualified with a “UJ” flag indicating a possible false negative. If corresponding analytes were detected in the parent sample, the sample data were qualified with a “J” flag indicating the data are estimated and potentially biased low.
- **MS and/or MSD Recovery Above Acceptance Criteria.** Matrix spike/matrix spike duplicate recoveries above the acceptance criteria indicate a potential high bias during sample analysis. Therefore, if corresponding analytes were not detected in the parent sample, the sample data were not qualified because high recoveries indicate a high bias and do not affect non-detected analytes. If corresponding analytes were detected in the parent sample, the sample data were qualified with a “J” flag indicating the data are estimated and potentially biased high.
- **High Analyte Concentration in Parent Sample.** If the concentration in the parent sample was more than four times the spiked analyte concentration, the overall change in the MS/MSD concentration is not significant enough for the instrument to detect the spiked compound. Therefore, if the MS/MSD recoveries were outside the acceptance criteria, and the analyte concentrations in the parent sample were more than four times the spiked analyte concentration, no data were qualified.
- **High and Low MS/MSD Exceedences.** Bias cannot be determined if a spike recovery is above the acceptance criterion in the MS and below the acceptance criterion in the MSD or vice versa. Therefore, the following procedures were used to verify parent sample data. Parent sample data were not qualified if the analytes were not detected in the parent sample for the MS/MSD analytes that were outside acceptance criteria. Parent sample data were qualified with a “J” flag indicating the data are estimated if the MS/MSD analytes that were outside acceptance criteria were detected in the parent sample.

It should be noted that, typically, MS/MSD results are not used as the sole basis for evaluating data usability and are used in conjunction with other available QC data. Based on the other acceptable QC data available (i.e. LCS recoveries) the data qualified due to MS/MSD results should not affect the decision making process. Sample data qualified

due to MS and MSD results are listed in Table B-1 with “MS” and “MSD” as the QC types.

B2.3.2 Laboratory Control Sample Evaluation

Laboratory control samples were analyzed to assess accuracy in the absence of matrix effects. Laboratory grade sand was spiked with target analytes according to the QAPP before analysis. The percent recoveries of the spiked compounds were compared to the QAPP established QC limits. The same criteria used to evaluate the MS/MSD samples described previously were used to evaluate the LCS/LCD, except that all sample batch data associated with the LCS/LCD were qualified. All LCS/LCD recoveries were within the acceptance criteria.

B2.4 PRECISION EVALUATION

Precision measures the reproducibility of measurements under a given set of conditions. Laboratory precision was evaluated using the RPD calculated between the MS and MSD samples and between parent and field duplicate samples.

Relative percent difference is calculated using the following equation:

$$RPD = \left(\frac{|A - B|}{[A + B] / 2} \right) \times 100$$

Where: A and B are the reported concentrations for sample duplicate analyses.

B2.4.1 Matrix Spike/Matrix Spike Duplicate Sample Evaluation

The MS/MSD sample results were evaluated as follows. If the RPD exceeded the acceptance criteria, corresponding analytes detected in the parent sample were qualified with a “J” flag indicating the data are estimated. Because bias cannot be determined when target analytes are not detected in a sample, parent sample data for non-detected analytes were not qualified if other accuracy components were met. All MS/MSD RPDs were within acceptance criteria.

B2.4.2 Laboratory Replicate Sample Evaluation.

The RPD was calculated between the parent and laboratory replicate sample. The same criteria described above for the MS/MSD was used to evaluate RPD results between the parent and laboratory duplicate samples. All laboratory replicate RPDs were within acceptance criteria.

B2.4.3 Field Replicate Evaluation

As discussed previously field replicate samples were collected and analyzed to evaluate sampling and analytical precision. Because precision is affected by several variables including sample heterogeneity, sample collection procedures, sample preparation, and sample analysis, the results of field replicates were used as additional evidence to support data quality rather than as a basis for accepting, qualifying or rejecting the data. The RPD was calculated only for those analytes that were detected above the RL in both the environmental and field replicate samples. The RPDs were less than the RPD guidance of 50 percent except for three uranium results, five gross alpha results, one radium-226 result, and six thourium-230 results. The high RPD for these samples is most likely due to sample heterogeneity.

B2.5 COMPARABILITY EVALUATION

Comparability is a qualitative parameter that expresses the confidence that one data set may be compared to another. For this project, sample collection and analysis followed standard methods and the data were reported using standard units of measure as specified in the QAPP. In addition, QC data for this project indicate the data are comparable. As a result, the data from this project should be comparable to other data collected at this site using similar sample collection and analytical methodology.

B3.0 DATA VERIFICATION SUMMARY

Precision. Based on the MS/MSD sample, laboratory replicate sample, and field replicate results, the data are precise as reported.

Accuracy. Based on the MS/MSD and LCS the data are accurate as qualified.

Representativeness. Based on the results of the sample preservation and holding time evaluation; the laboratory method blank sample results; the field replicate sample evaluation; and the RL evaluation the data are considered representative of the site as qualified.

Comparability. Standard methods of sample collection and standard units of measure were used during this project. The analysis performed by the laboratory was in accordance with current EPA methodology and the QAPP.

Completeness. Based on the results of the data verification, all data are considered valid as qualified

TABLE B-1

**SUMMARY OF QUALIFIED DATA
UNITED NUCLEAR CORPORATION, ST ANTHONY AND SECTION 27 SITES
(Page 1 of 2)**

Field Sample Identification	Sample Date	Analysis Code	Analyte	Sample Result	Units	QC Type	QC Result	QC Limit	Added Flag	Comment
St. Anthony Mine										
BG-TP4-122	06/21/07	E907.0	Thorium 230	2.2	pCi/g	MSD	64%	70-130%	J	Datum is estimated, potentially biased low. MSD recovery below acceptance criteria.
MD-DH10-001	07/17/07	E900.0	Gross Alpha	246	pCi/l	MS MSD	61% 55%	70-130%	J	Datum is estimated, potentially biased low. MS/MSD recovery below acceptance criteria.
P4-DH3-005	07/01/07	E907.0	Thorium 230	0.9	pCi/g	MS MSD	61% 57%	70-130%	J	Datum is estimated, potentially biased low. MS/MSD recovery below acceptance criteria.
P4-DH3-300	07/01/07	E907.0	Thorium 230	1.4	pCi/g	MS MSD	61% 57%	70-130%	J	Datum is estimated, potentially biased low. MS/MSD recovery below acceptance criteria.
MD-DH10-001	07/17/07	E200.8	Molybdenum	0.003 D	mg/l	LB	0.0003 mg/l	N/A	B	Analyte detected in an associated laboratory blank
MD-DH10-001	07/17/07	E200.8	Uranium	0.001 D	mg/l	LB	0.0001 mg/l	N/A	B	Analyte detected in an associated laboratory blank
MD-DH9-003	07/16/07	E200.8	Molybdenum	0.005 D	mg/l	LB	0.0003 mg/l	N/A	B	Analyte detected in an associated laboratory blank
MINE DUMP-SPLP-COMP	06/21/07	E200.7	Sodium	35	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
MINE DUMP-SPLP-COMP	06/21/07	E200.8	Uranium	0.694	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P3-DH8-005	07/06/07	E200.7	Calcium	1.7	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P3-DH8-005	07/06/07	E200.7	Sodium	6	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P3-DH8-005	07/06/07	E200.8	Uranium	0.0009 D	mg/l	LB	0.000828 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH1-015	07/03/07	E200.7	Sodium	13	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH2-011	07/02/07	E200.7	Calcium	6	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH2-011	07/02/07	E200.7	Sodium	22	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH2-011	07/02/07	E200.8	Uranium	0.0005 D	mg/l	LB	0.000828 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH3-004	07/01/07	E200.7	Calcium	25	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH3-004	07/01/07	E200.7	Sodium	12	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH4-014	07/04/07	E200.7	Calcium	2.1	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH4-014	07/04/07	E200.7	Sodium	18	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH5-016	07/06/07	E200.7	Calcium	2.9	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH5-016	07/06/07	E200.7	Sodium	18	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH5-016	07/06/07	E200.8	Uranium	0.0215 D	mg/l	LB	0.000828 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH6-008	07/04/07	E200.7	Calcium	32.2	mg/l	LB	0.598 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH6-008	07/04/07	E200.7	Sodium	21	mg/l	LB	3.96 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P4-DH6-008	07/04/07	E200.8	Uranium	0.0016 D	mg/l	LB	0.000828 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P5-TP1-010	06/18/07	E200.8	Uranium	0.0308	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P6-TP1-030	06/19/07	E200.8	Uranium	0.0235	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
P6-TP2-035	06/19/07	E200.8	Uranium	0.0189	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 1-SPLP-COMP	06/21/07	E200.7	Sodium	9	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 1-SPLP-COMP	06/21/07	E200.8	Uranium	1.32	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 2-SPLP-COMP	06/21/07	E200.7	Sodium	22	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank

TABLE B-1

**SUMMARY OF QUALIFIED DATA
UNITED NUCLEAR CORPORATION, ST ANTHONY AND SECTION 27 SITES
(Page 2 of 2)**

Field Sample Identification	Sample Date	Analysis Code	Analyte	Sample Result	Units	QC Type	QC Result	QC Limit	Added Flag	Comment
POND 2-SPLP-COMP	06/21/07	E200.8	Uranium	2.7	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 3-SPLP-COMP	06/21/07	E200.7	Sodium	8	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 3-SPLP-COMP	06/21/07	E200.8	Uranium	0.247	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 4-SPLP-COMP	06/21/07	E200.7	Sodium	32	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 4-SPLP-COMP	06/21/07	E200.8	Uranium	2.56	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 5-SPLP-COMP	06/21/07	E200.7	Sodium	10	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
POND 5-SPLP-COMP	06/21/07	E200.8	Uranium	0.0107	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
SHAFT PAD-SPLP-COMP	06/21/07	E200.7	Sodium	8	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
SHAFT PAD-SPLP-COMP	06/21/07	E200.8	Uranium	0.19	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
SP-TP2-088	06/21/07	E200.8	Uranium	0.0368	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
STORAGE AREA-SPLP-COMP	06/21/07	E200.7	Sodium	5	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
STORAGE AREA-SPLP-COMP	06/21/07	E200.8	Uranium	0.0025	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TS-TP1-066	06/20/07	E200.7	Sodium	11	mg/l	LB	3.31 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TS-TP1-066	06/20/07	E200.8	Uranium	0.0005	mg/l	LB	0.000352 mg/l	N/A	B	Analyte detected in an associated laboratory blank
Section 27 Mine										
TW-TP1-018/019	06/25/07	E907.0	Thorium 230	0.3	pCi/g	MS MSD	69% 60%	70-130%	J	Datum is estimated, potentially biased low. MS/MSD recovery below acceptance criteria.
OE-TP2-014	06/25/07	E200.7	Sodium	82	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
OW-TP1-015/016	06/25/07	E200.7	Sodium	35	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
BM-COMP-090	06/26/07	E200.7	Sodium	8	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
BM-TP1-028	06/25/07	E200.7	Sodium	38	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
BG-COMP-086	06/26/07	E200.8	Uranium	0.0031	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TE-COMP-093	06/26/07	E200.7	Sodium	6	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TE-TP1-002	06/25/07	E200.8	Uranium	0.0072	mg/l	LB	0.00126 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TW-COMP-091	06/26/07	E200.7	Sodium	6	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank
TW-TP1-018/019	06/25/07	E200.7	Sodium	7	mg/l	LB	2.67 mg/l	N/A	B	Analyte detected in an associated laboratory blank

mg/l milligrams per liter

pCi/g picocuries per gram

pCi/l picocuries per liter

D Sample dilution required for analysis; reported values reflect the dilution.

LB Laboratory blank

MS Matrix spike

MSD Matrix spike duplicate

APPENDIX C

FIELD NOTES, BORING LOGS AND TEST PIT LOGS

**Table C-1
Soils Descriptions - Test Pits**

Area Name	Depth (ft bgs)	Test Pit No.	USCS Code	Soils Description
Background and Borrow Areas				
Background 1	0-4'	1	SM	Silty sand with some organic material
Background 2	0-4'	1	SM	Silty sand with some organic material
Background 3	0-4'	1	SM	Silty sand with some gravel and organic material
Background 4	0-4'	1	SM	Silty sand with some gravel and organic material, higher sand content than Background 3
Borrow Area South	0-6'	1	SM	Silty sand, composition consistent to 6' depth
Borrow Area South	0-6'	2	SM	Silty sand, some gravel
Lobo Tract	0-6'	1	SM	Sandy silt, some organic material and some gravel
Lobo Tract	0-2'	2	CL	Silt-clay, darker brown, difficult to dig through, some organic
Lobo Tract	2-6'	2	SM	More silt-sand and less clay, lighter colored than than the 0-2' interval
Lobo Tract	0-6'	3	SM	Sandy-silt with some organic and gravel, with lenses of dark brown clay-silt material throughout the 6' profile
Lobo Tract	0-6'	4	SM	Sandy silt with considerable clay, medium brown
Topsoil & Overburden Piles				
Topsoil South	0-4'	1	GM	Very gravelly silt-sand
Topsoil South	4-9'	1	GM	Gravel-silt-sand, increase in silt content
Topsoil South	9-13'	1	GC	Gravel-silt-clay, more yellowish in color, mostly fines, large rocks prevented excavation beyond 13 feet.
Topsoil North	0-15'	1		Sandy silts, some gravel, light brown in color
Topsoil / Overburden	0-3'	1	SM	Overburden material - organic, brown, some gravel but mostly silts and sands
Topsoil / Overburden	3-4'	1	SM	Topsoil - darker layers with higher organic content
Topsoil / Overburden	4-7'	1	SM	Overburden material - organic, brown, some gravel but mostly silts and sands
Topsoil / Overburden	7-8'	1	SM	Topsoil - darker layers with higher organic content
Topsoil / Overburden	8-11'	1	SM	Overburden material - organic, brown, some gravel but mostly silts and sands
Topsoil / Overburden	11-12'	1	SM	Topsoil - darker layers with higher organic content
Topsoil / Overburden	12-15'	1	SM	Overburden material - organic, brown, some gravel but mostly silts and sands
Non-Economic Material Piles				
Pile 5	0-3'	1	SP	Light brown, gravelly sand; 60% sand, 20% gravel, 15% silt, 5% clay
Pile 5	3-3.5'	1	GC-SC	Green clay/silt bands
Pile 5	3.5-7.5'	1	SP	Light brown, gravelly sand; 60% sand, 20% gravel, 15% silt, 5% clay
Pile 5	7.5-8'	1	GC-SC	Green clay/silt bands
Pile 5	8-15'	1	SP	Light brown, gravelly sand; 60% sand, 20% gravel, 15% silt, 5% clay
Pile 6	0-13.5'	1	SP	Gravel-sand-silt throughout, larger pieces of greenish silt-clay scattered, mostly below 4'; sandy gravel primarily
Pile 6	0-15'	2	SP	Gravelly sand/silt, chunks of green silt-clay
Pile 6	0-9'	3	SP	Gravelly sand/silt, lens of greenish-gray clay/silt from 3-4'
Pile 6	9+	3		Native soil
Pile 6	0-15'	4	SP	Gravelly sand, some silt; very dark brown/gray, almost black

**Table C-1
Soils Descriptions - Test Pits**

Area Name	Depth (ft bgs)	Test Pit No.	USCS Code	Soils Description
Pile 6	0-2'	5	GP	Very rocky, large rocks (1.5'+) with distinct light-colored sands and darker colored silt-sands
Pile 6	2-5'	5	GP	Smaller gravel, sands and silt-sands as in above notes
Pile 6	5'+	5		Native soil
Pile 6	0-15'	6	SW	Gravelly sand-silt, very dark colored (brown-gray, almost black), large rocks throughout
Pile 7	0-3'	1	SP	Black, very gravelly (up to 8" diameter) some fines.
Pile 7	3-7'	1	SW	Brown/yellow, sandy/gravelly
Pile 7	7-12.5'	1	GC-SC	Gray-clayey with gravel, increasing sand content with depth, large rocks prevented excavation beyond 12.5 feet
Pile 7	0-4'	2	GM	Gravel-sand-silt, light brown in color
Pile 7	4+	2		Native soil
Pile 7	5', 6-13.5'	3	GM	Gravel-silt-sand, light brown, large rocks prevented excavation beyond 13 feet
Pile 7	5-6'	3	CL	Layer of greenish clay
Pile 7	0-5'	4	GM	Gravelly silt-sand, some greenish silt-clay
Pile 7	5-9'	4	GP	Gravelly sand-silt
Pile 7	9+	4	GP	Darker sand-silt, some gravel
Pile 7	0-10'	5	GP	Gravelly sand-silt, decreasing gravel and increasing moisture with depth
Pile 7	10'+	5		Native soil
Shaft Area				
Pond 1	0-3'	1	ML	Dense clay, gray, medium-high plasticity, toward center of pond
Pond 1	0-3'	1	CL	Clay-silt-sand, less plasticity, toward edge of pond
Pond 1	3'+	1		Native soil
Pond 2	0-3'	1	ML	Gray, dense clay, medium-high plasticity
Pond 2	0-3'	1	CL	Clay mixed with silt and sand
Pond 2	3'+	1		Native soil
Pond 3	0-2'	1	ML	Gray, dense clay, medium-high plasticity, native at 2 ft
Pond 4	0-3'	1	ML	Gray, dense clay, drier than ponds 1 and 2, native soil sloping toward pond edge at a 1:1, medium-high plasticity
Pond 4	3'+	1		Native soil
Pond 5	0-0.5'	1	SM	Thin layer of ashy, dusty, light gray material, SM
Pond 5	5'+	1		Native soil
Ore Storage 1	0-3'	1	SM	Light gray silty material with an ashy appearance, horizontal block structure
Ore Storage 1	3-6'	1	SP	Much darker material, more sand and gravel with some silt
Ore Storage 2	0-3'	1	SM	Gray, silty layer, ashy appearance and texture
Ore Storage 2	3-6'	1	SP	Darker material, almost black with higher sand content
Access Road - 7	0-1.5'	1	GM	Very rocky, gravel and chunks of silt/sand; numerous colors, inconsistent, native soil at 1.5 feet.
Access Road - 15	0-1.5'	1	GM	Rocky, gravel with silt chunks and sand, inconsistent material/coloration, native soil at 1.5 feet.
Access Road - 19	0-1.5'	1	SM	Light gray, chunky, silty material, native soil at 1.5 feet.
Access Road - 24	0-1.5'	1	GM	Darker, sandy-silty gravel, native soil at 1.5 feet.
Access Road - 34	0-1.5'	1	OL	Silty, organic soil, native soil at 1.5 feet.

Table C-1
Soils Descriptions - Test Pits

Area Name	Depth (ft bgs)	Test Pit No.	USCS Code	Soils Description
Storage Area	0-1'	1	SM	Silty, organic native soil
Shaft Pad	0-1'	1	SM	Silty sand; light gray, ashy color with mostly fines
Shaft Pad	1'+	1		Native soil

GENERAL LOCATION: Background 1
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L Fohrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

SAMPLE No.	DEPTH	TIME
BG-TP1-129	0-2	1600
BG-TP1-125	2-4	1600

12
12

Pit Width: 3'
 Pit Length: 6'
 Pit Depth: 4'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silty sand w/some organic - OL (5m)

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No:			
SCALE					



GENERAL LOCATION: Background 2
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhng

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		1	

SAMPLE No.	DEPTH	TIME
BG-TP2-126	0'-2'	1615
BG-TP2-127	2'-4'	1620

Pit Width: 3'
 Pit Length: 6'
 Pit Depth: 4'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silty sand w/ some organic OL/SM

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No:			
SCALE					



GENERAL LOCATION: Background 3
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: CFJ/nj

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		1	

SAMPLE No.	DEPTH	TIME
BG-TP3-120	0-2'	1530
BG-TP3-310	0-2'	1550
BG-TP3-920	2-4'	1535

Pit Width: 3'
 Pit Length: 6'
 Pit Depth: 4'

9
16
9

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silty sand w/some gravel, organic - OL/sm

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No:			
SCALE					



GENERAL LOCATION: Background 4
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		1	

SAMPLE No.	DEPTH	TIME
BG-TPH-122	0-2'	1545
BG-TPH-123	2-4'	1545

10
10

Pit Width: 3'
 Pit Length: 5'
 Pit Depth: 4'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silty sand w/ some gravel organic - OL/SM higher sand content than BG3

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No:			
SCALE					



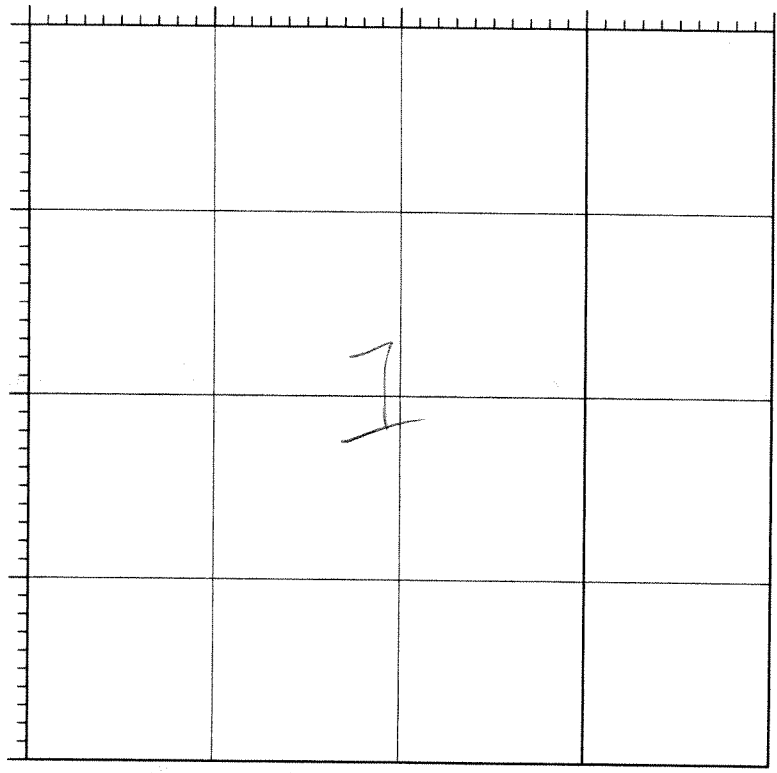
GENERAL LOCATION: Borrow Area South
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: L. Fehring

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
BS-TPI-041	6'	1600
BS-TPI-042	↓	1600

Pit Width: 3.5'
 Pit Length: 8'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
I	Silty sand, composition consistent to 6'

SPECIAL NOTES:
 Only one sample taken b/c no strata to 6' depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: SCALE FIGURE No.: FIGURE No.

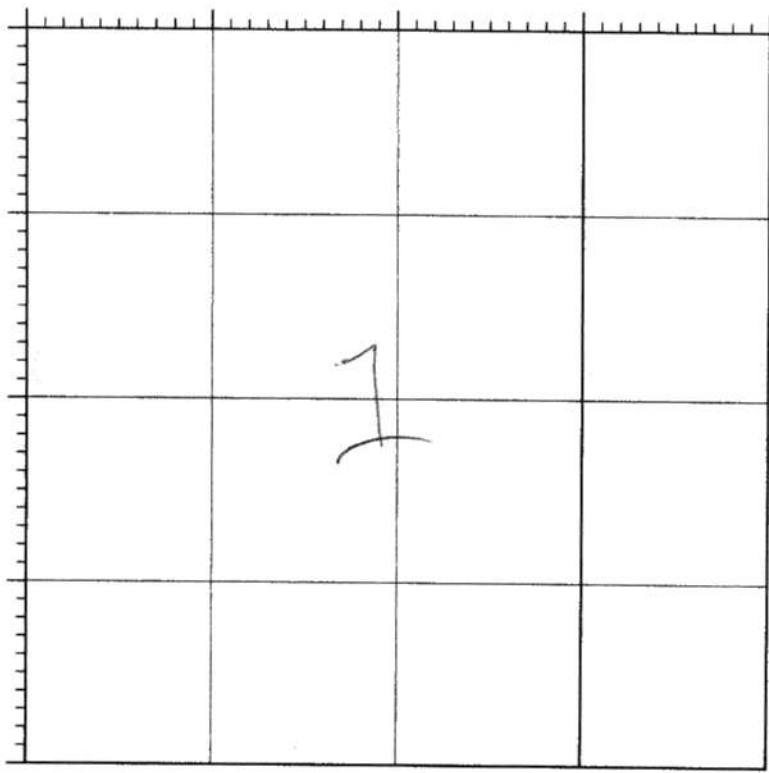
GENERAL LOCATION: Borrow Area South
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
BS-TP2-069	1420	0-6
BS-TP2-080	1420	0-6
BS-TP2-305	1420	0-6

11
17
13

Pit Width: 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT | **SOIL DESCRIPTION AND EXCAVATION NOTES**

1	1	Silty sand, some gravel, SM
---	---	-----------------------------

SPECIAL NOTES:

Consistent composition to 6'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER		AutoCAD FILE FILE NAME			
SCALE		FIGURE No.			
SCALE		SCALE			



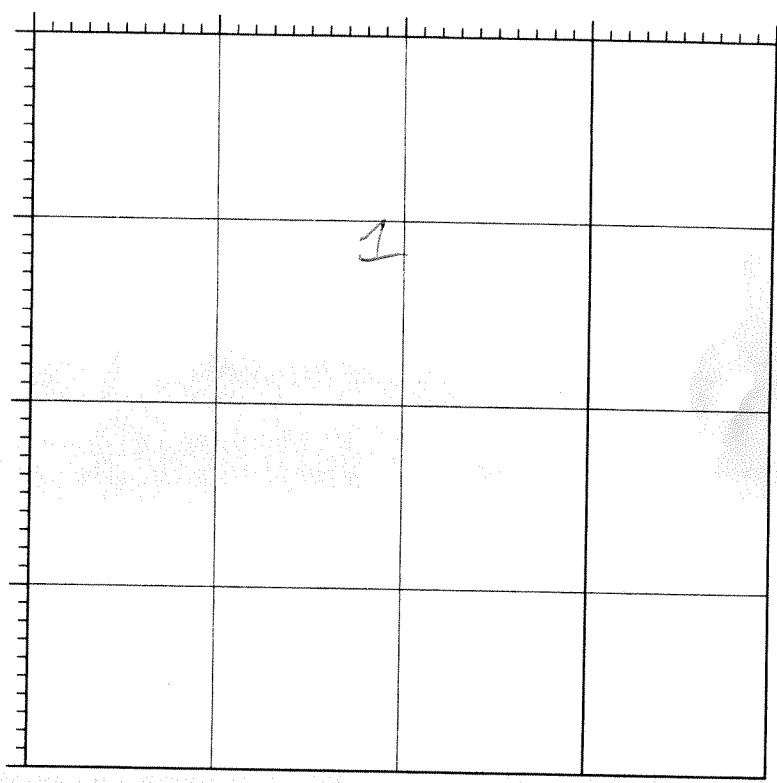
GENERAL LOCATION: Lobo Borrow
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/22/07
 FIELD ENGINEER: L. Fehrig ✓

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
LoBo-TP3-134	0-6'	1505
LoBo-TP3-150	0-6'	1505

Pit Width: 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Mostly sandy-silt with some organic and gravel (SM) but with lenses of darker brown clay-silt material scattered throughout the 6' profile

SPECIAL NOTES:
 inconsistent composition but no distinct layering

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE		FIGURE No.			
SCALE		SCALE			



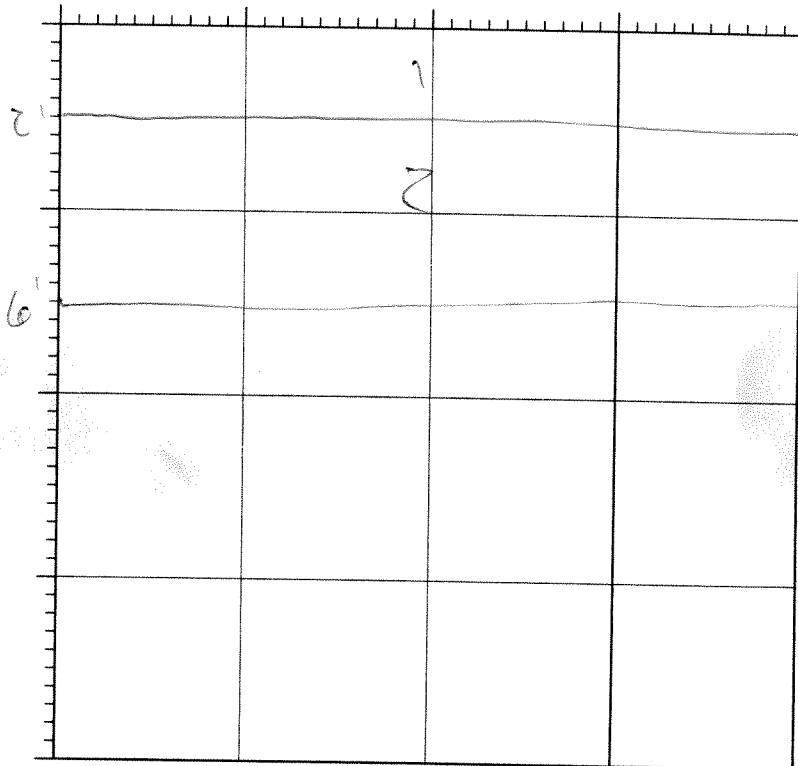
GENERAL LOCATION: LOBO BORROW
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: C. Fahrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
LSRS-TPC-132	0-2'	1445
LSRS-TPC-133	2-6'	1450

Pit Width: 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silt-clay, darker brown, difficult to dig through, some organic, OL
2	
	More silt-sand and less clay, lighter colored than first layer - SM/OL

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: FIGURE No:
 SCALE



GENERAL LOCATION: LOBOS BORROW
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 4/22/07
 FIELD ENGINEER: L. FOURIG

TEST PIT LOG ✓

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

	1		

SAMPLE No.	DEPTH	TIME	
LOBO-TP112	0-6'	1430	10
LOBO-TP113	4-6'	1430	10

Pit Width: 46 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Sandy silt, some organic material and some gravel SM/OL

SPECIAL NOTES:
 Consistent soil composition throughout excavated depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE		FIGURE No.			
SCALE					



GENERAL LOCATION: Lobo Bottom
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/27/07
 FIELD ENGINEER: L. Foharty

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL


		1	

SAMPLE No.	DEPTH	TIME
LOBO-TP4-176	0-6'	1520

Pit Width: 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	clayey sand sandy silt with considerable clay, mid-brown SM-OL

SPECIAL NOTES:
 consistent composition throughout excavated depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
		PROJECT No. PROJECT NUMBER AutoCAD FILE: FILE NAME SCALE: SCALE FIGURE No: FIGURE No			

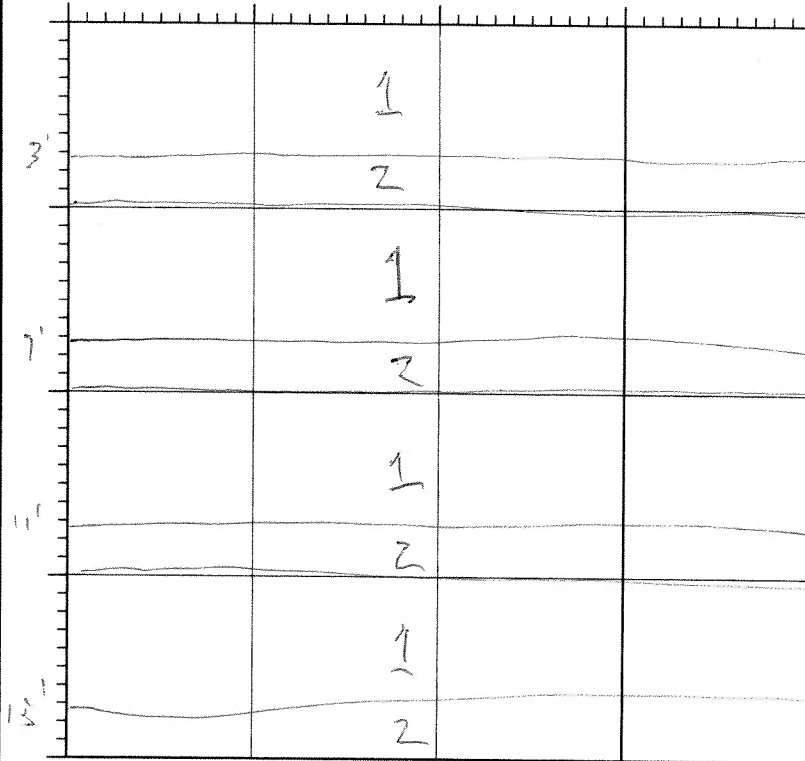
GENERAL LOCATION: Topsoil / overburden
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: L. Fokney

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
TO-TP1-015	2'	0855
TO-TP1-016	2'	0855
TO-TP1-017	4'	0905
TO-TP1-018	10'	0915
TO-TP1-019	15'	0955

11
 11
 11.5
 12
 16.5

Pit Width: 4'
 Pit Length: 10'
 Pit Depth: 15'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	overburden material - organic, brown, some gravel but mostly silts + sands - SM
Z	Topsoil - darker layers w/ higher organic content

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: FIGURE No.
 SCALE

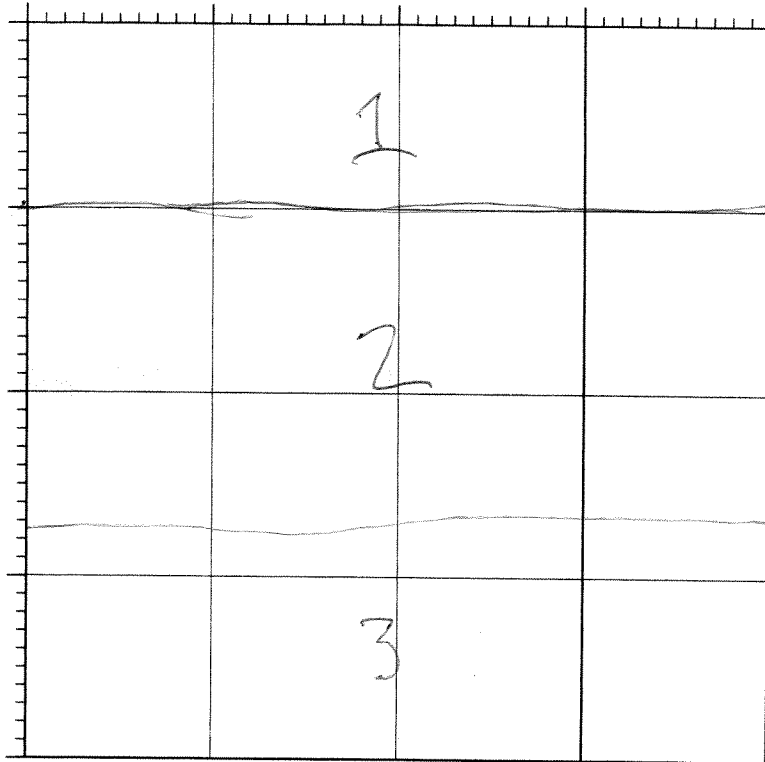
GENERAL LOCATION: Topsoil South
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fuhrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
TS-TPI-064	0-2'	1320	10
TS-TPI-065	0-2'	1320	11
TS-TPI-066	2-4'	1325	11
TS-TPI-067	10'	1335	10
TS-TPI-068	13'	1350	10

Pit Width: 3.5'
 Pit Length: 9'
 Pit Depth: 13'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Very Gravelly silt-sand, GM
2	Gravel-silt-sand, increase in silt content & GM
3	Gravel-silt-clay, more yellowish in color, mostly fines GC

SPECIAL NOTES:

Very rocky, unable to dig beyond 13'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER		AutoCAD FILE: FILE NAME			
SCALE:		FIGURE No.			
SCALE		SCALE			



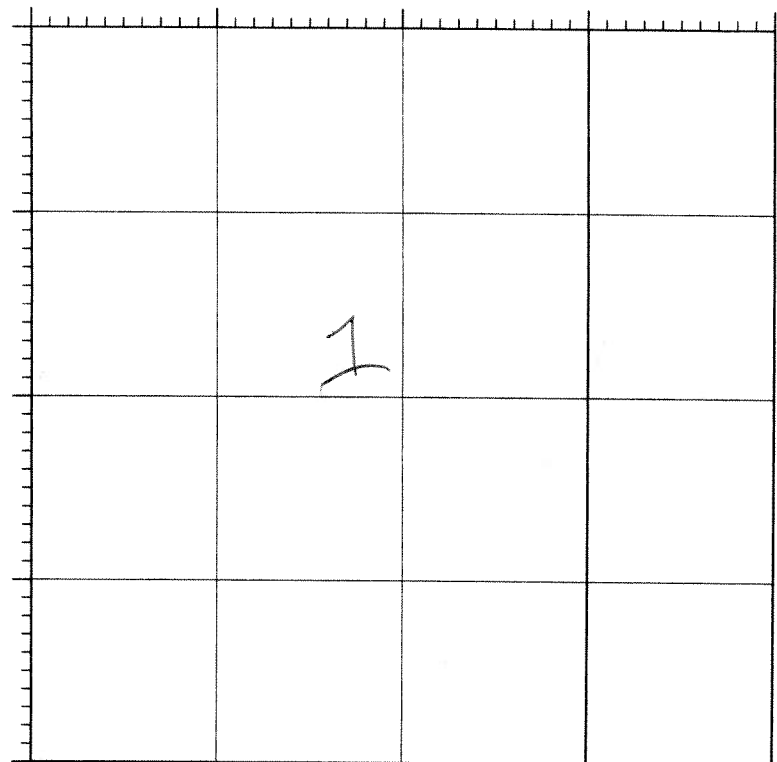
GENERAL LOCATION: Topsoil Area #4
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Ehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
TN-TPI-071	0-2'	1500	//
TN-TPI-072	0-2'	1500	//
TN-TPI-073	4'	1505	//
TN-TPI-074	10'	1515	10
TN-TPI-075	15'	1530	10

Pit Width: 3.5'
 Pit Length: 10'
 Pit Depth: 15'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	light brown silts sandy silts, some gravel light brown in color

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER					
AutoCAD FILE: FILE NAME					
SCALE:			FIGURE No:		
SCALE			FIGURE No:		

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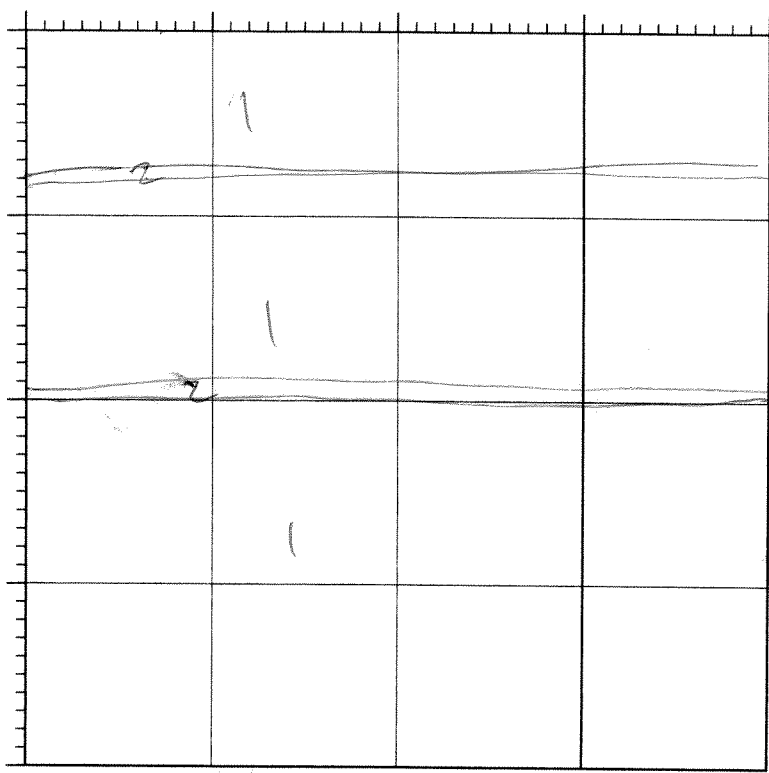
GENERAL LOCATION: Piles
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/18/07
 FIELD ENGINEER: L. Fehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
PS-TPI-009	2'	1610
PS-TPI-010	2'	1610
PS-TPI-011	4'	1620
PS-TPI-012	4'	1620
PS-TPI-013	10'	1630
PS-TPI-014	15'	1720

(dup
 splr
 90
 90
 90
 90
 90
 90

Pit Width: 4'
 Pit Length: 12'
 Pit Depth: 15'

SOIL UNIT | **SOIL DESCRIPTION AND EXCAVATION NOTES**

1	light brown, gravelly sand GOSA 20GR 15SL 5CL
2	Green clay/silt bands - GC/SC

SPECIAL NOTES:

greenish-gray chunks, clayey-silty

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: FIGURE No:
 SCALE

GENERAL LOCATION: Pile 6
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fuhling

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

	1		

SAMPLE No.	DEPTH	TIME	
✓ PG-TP6-060	0-2'	1115	170
1/2 PG-TP6-061	0-2'	1105	170
✓ PG-TP6-061	2-4'	1120	160
X PG-TP6-062	10'	1130	150
X PG-TP6-063	15'	1145	150

Pit Width: 4'
 Pit Length: 10'
 Pit Depth: 15'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravelly sand-silt, very dark colored (brown-gray, almost black). Large rocks throughout

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutocAD FILE: FILE NAME		
SCALE		FIGURE No.			
SCALE		SCALE			



Pile 6

GENERAL LOCATION: Pile 6
 PIT TREND: _____
 PIT FACE LOGGED: _____

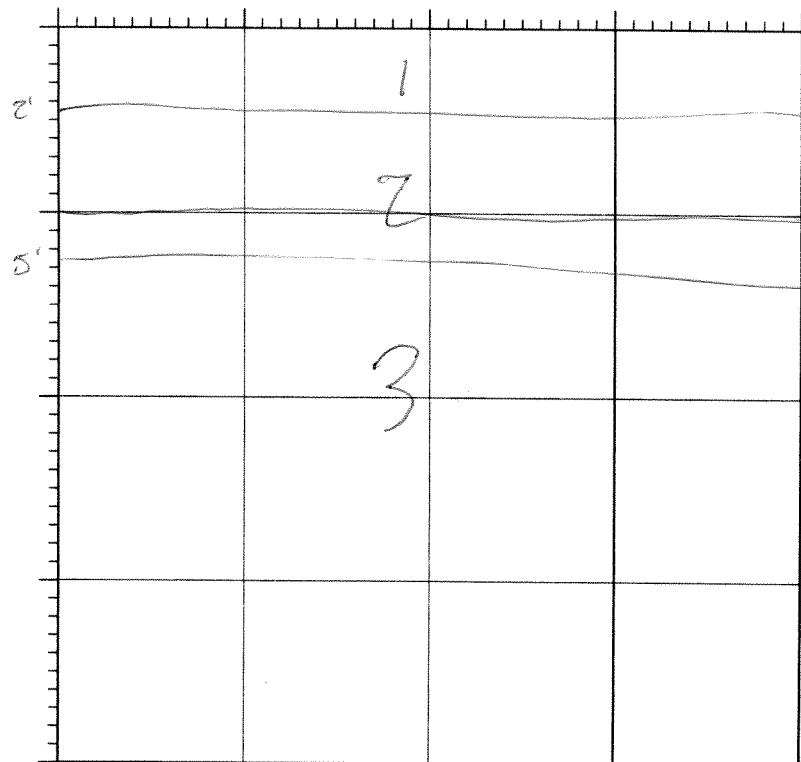
DATE: 6/20/07
 FIELD ENGINEER: L. Fehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

no SPLP



SAMPLE No.	DEPTH	TIME	
P6-TP5-051	0-2'	1045	120
P6-TP5-052	0-2'	1045	140
P6-TP5-053	2-4'	1050	125

Pit Width: 3.5
 Pit Length: 8'
 Pit Depth: 5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Very rocky, large rocks (1.5'+) with distinct light-colored sands and darker colored silt-sands - GP
2	Smaller gravel, sands and silt-sands as previously mentioned - GP
3	Native ground

SPECIAL NOTES:

Native ground encountered at 5' depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No.			
SCALE		FIGURE No.			



Pile 6

GENERAL LOCATION: Pit 6
PIT TREND: _____
PIT FACE LOGGED: _____

DATE: 6/19/07
FIELD ENGINEER: L. Fubry

TEST PIT LOG

LEGEND

SOIL HORIZON
HORIZON CONTRACT
GROUNDWATER LEVEL

		1	

SAMPLE No.	DEPTH	TIME	
(P6-TPH-043	0-2'	1620	250
P6-TPH-044	0-2'	1620	200
X P6-TPH-045	2-4'	1630	150
X P6-TPH-046	10'	1640	160
✓ P6-TPH-047	15'	1650	175

Pit Width: 4'
Pit Length: 10'
Pit Depth: 15'

SOIL UNIT

SOIL DESCRIPTION AND EXCAVATION NOTES

I

Gravelly sand, some silt; very dark brown/gray almost black. SP

SPECIAL NOTES:

Black, sandy, consistent composition throughout

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER			AutoCAD FILE FILE NAME		
SCALE		FIGURE No.			
SCALE					



Pile 6

GENERAL LOCATION: Pile 6
PIT TREND: _____
PIT FACE LOGGED: _____

DATE: 6/19/07
FIELD ENGINEER: L. Fubey

TEST PIT LOG

LEGEND

SOIL HORIZON
HORIZON CONTRACT
GROUNDWATER LEVEL

no agro

SAMPLE No.	DEPTH	TIME	
X PL6-TPI-027	2'	1330	95
X PL6-TPI-028	2'	1330	95
X PL6-TPI-029	4'	1335	90
✓ PL6-TPI-030	10'	1355	90
1/2 PL6-TPI-301	10'	1355	90
✓ PL6-TPI-031	13.5'	1410	90

Pit Width: 3.5'
Pit Length: 10'
Pit Depth: 13.5'

SOIL UNIT

SOIL DESCRIPTION AND EXCAVATION NOTES

1 Gravel-sand-silt throughout, larger pieces of greenish silt - clay scattered, mostly below 4'. Sandy gravel primarily, SP

SPECIAL NOTES:

Pit caved significantly, and backhoe operator became concerned that sides would completely cave in and bucket would get stuck

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No.			
SCALE		FIGURE No.			



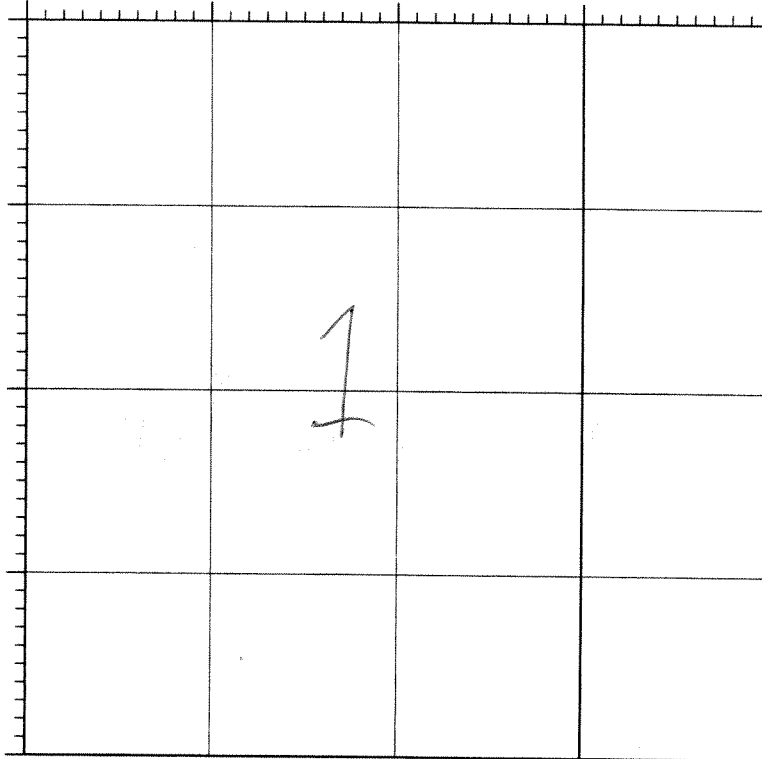
GENERAL LOCATION: Pile 6
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: L. Fishberg

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
PL6-TP2-032	2'	1425	160
PL6-TP2-033	2'	1425	160
X PL6-TP2-034	4'	1435	155
✓ PL6-TP2-035	10'	1450	175
X PL6-TP2-036	15'	1505	165

Pit Width: 4'
 Pit Length: 11'
 Pit Depth: 15.5

SOIL UNIT

SOIL DESCRIPTION AND EXCAVATION NOTES

1 Gravelly sand/silt, chunks of green silt-clay SP

SPECIAL NOTES:

Some caving while digging but target depth was attained.

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No.: PROJECT NUMBER	
AutoCAD FILE: FILE NAME	
SCALE:	FIGURE No:
SCALE	



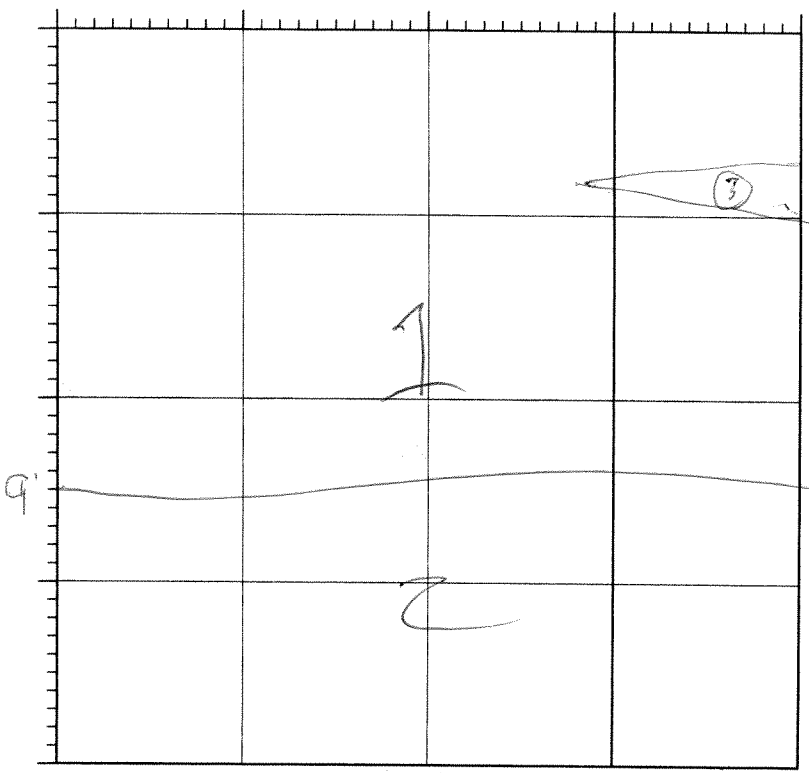
GENERAL LOCATION: Pile 6
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: L. Fabric

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
P6-TP3-037	2'	1520	140
P6-TP3-038	2'	1520	145
P6-TP3-039	4'	1530	150
X P6-TP3-040	9'	1540	140
1/2 P6-TP3-322	9'	1540	140

Pit Width: 3.5'
 Pit Length: 10'
 Pit Depth: 9'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravelly sand/silt, ³ band of greenish-gray clay/silt, SP
2	Native soil

SPECIAL NOTES:
 Reached native soil at 9 ft.

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: FIGURE No:
 SCALE

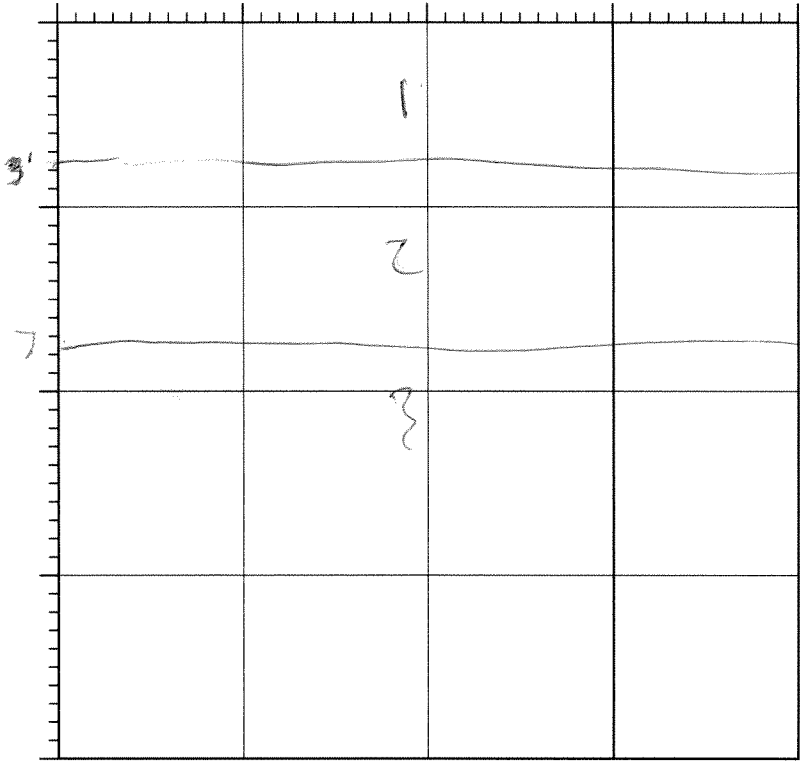
GENERAL LOCATION: Pile 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/18/07
 FIELD ENGINEER: L. Fohrty

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
(D7-TPI-001	2' by	1425	120
(D7-TPI-002	2'	1425	120
X D7-TPI-003	4'	1430	105
X D7-TPI-004	4'	1430	120
✓ D7-TPI-005	10'	1500	130
X D7-TPI-006	10'	1500	120
X D7-TPI-007	12.5'	1520	120
X D7-TPI-008	12.5'	1520	125

Pit Width: 6'
 Pit Length: 11'
 Pit Depth: 12.5'

SOIL UNIT | **SOIL DESCRIPTION AND EXCAVATION NOTES**

<p>1 2 3</p>	<p>Black - SP, very gravelly (up to 8" dia) some fines. silt etc brown/yellow - SW sandy / gravelly fine few gray - clayey w/ gravel, increasing sand content with depth GC - SC</p>
----------------------	---

SPECIAL NOTES:

large rock encountered at 7-8', widened hole to dig around
 could not excavate beyond 12.5' due to ~~large~~ large rocks

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
		PROJECT No.: PROJECT NUMBER		AutoCAD FILE: FILE NAME	
		SCALE:		FIGURE No.	
		SCALE			

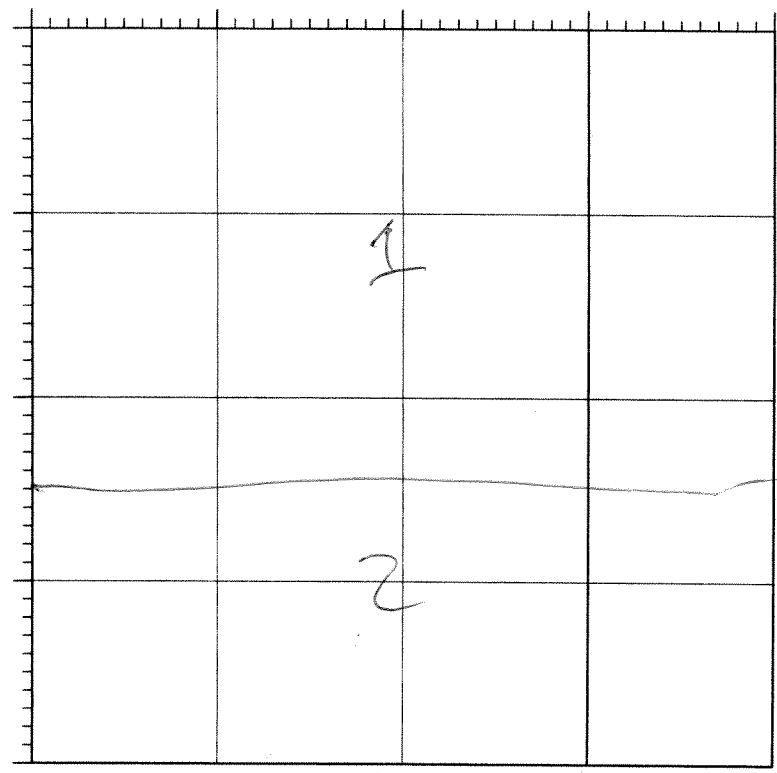
GENERAL LOCATION: Pile 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fehring

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
P7-TP5-053	0-2'	1010	145
P7-TP5-054	0-2'	1010	145
P7-TP5-055	2-4'	1015	150
P7-TP5-056	10'	1025	145
P7-TP5-057			

Pit Width: _____
 Pit Length: _____
 Pit Depth: _____

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravelly sand - silt, GP ... decreasing gravel and increasing moisture w/ depth.
2	Native soil

SPECIAL NOTES:

Native soil encountered at 10'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
		PROJECT No.: PROJECT NUMBER AutoCAD FILE: FILE NAME SCALE: SCALE FIGURE No: FIGURE No			

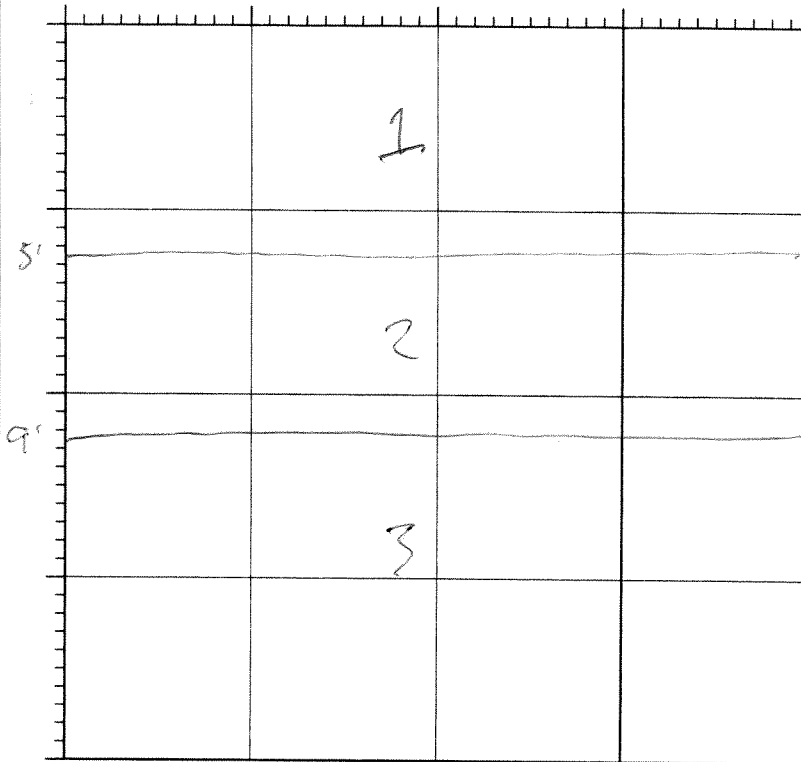
GENERAL LOCATION: Pile 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fuhning

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
✓ P7-TP4-0483	2'	0935	250
✓ P7-TP4-0490	2'	0935	240
✓ P7-TP4-0502	2-4'	0940	220
1/2 P7-TP4-308	2-4'	0940	220
X P7-TP4-051	10'	0950	220
X P7-TP4-052	13'	0955	230

Pit Width: 4'
 Pit Length: 10'
 Pit Depth: 13'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravelly silt-sand, some greenish silt-clay GM
2	Gravelly sand-silt, GP
3	Darker sand-silt, some gravel, GP

SPECIAL NOTES:

Encountered large dense rock at 13', unable to dig further

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No.			
SCALE		FIGURE No.			



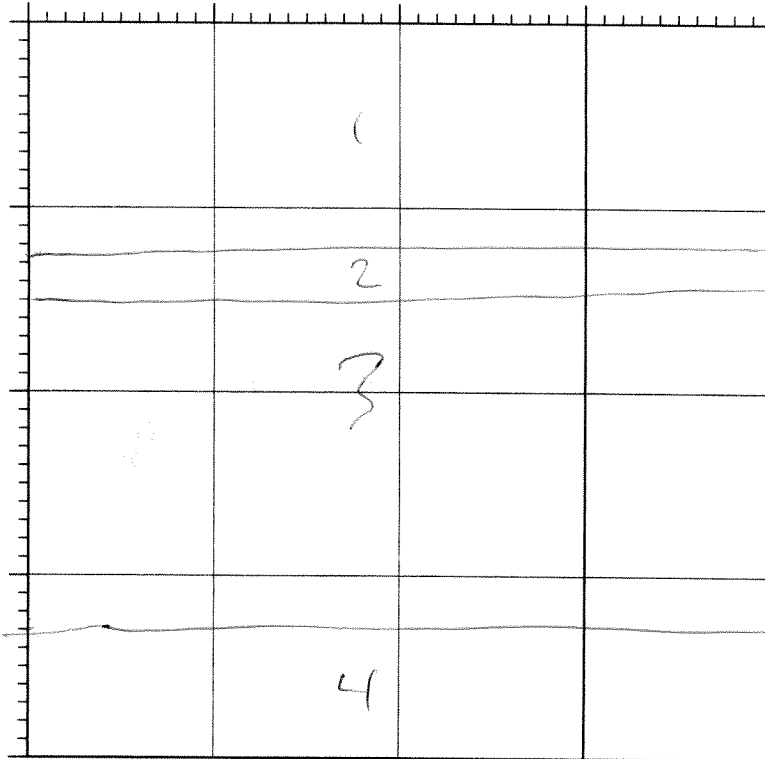
GENERAL LOCATION: Pile 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: L. Fuhrie

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
(P7-TP3-023	2'	1100	140
(P7-TP3-024	2'	1100	150
x P7-TP3-025	4'	1110	155
✓ P7-TP3-026	10'	1120	155
x P7-TP3-027	13.5'	1135	145

Pit Width: 3.5'
 Pit Length: 10'
 Pit Depth: 13.5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravel-silt-sand lt. brown, held together somewhat well, GM
2	layer of Greenish clay similar to that seen on pile 5.

SPECIAL NOTES:

Very rocky material - could not proceed beyond 13.5' depth.

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No.:			
SCALE		FIGURE No.			



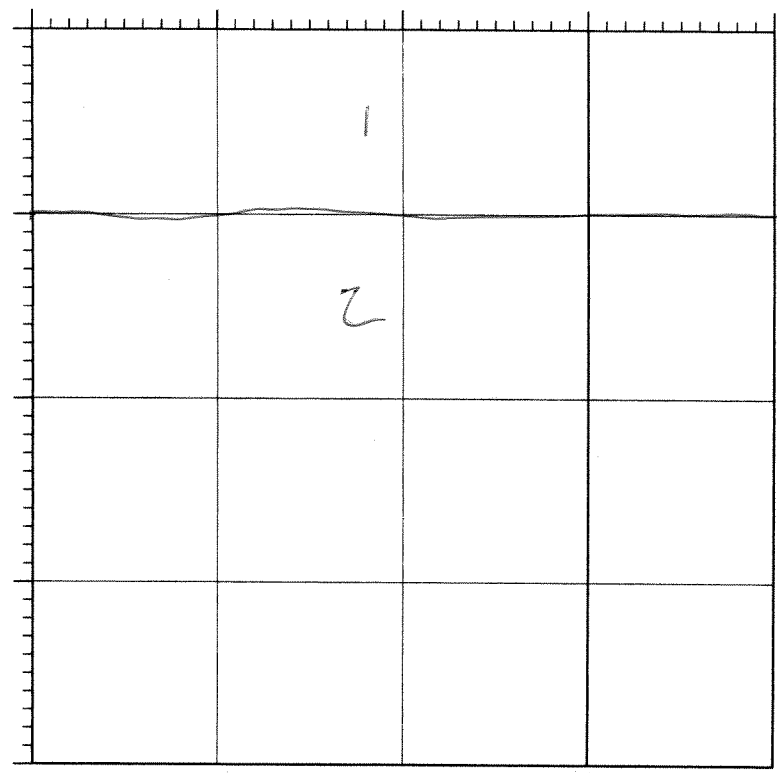
GENERAL LOCATION: Pile 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/19/07
 FIELD ENGINEER: E. Ehrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
P7-TP2-021	2'	1040
P7-TP2-020	2'	1040
P7-TP2-020	2'	1040
P7-TP2-022	4'	1045

Pit Width: 3'
 Pit Length: 8'
 Pit Depth: 5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gravel-sand-silt, light brown in color, GM
2	Native soil

SPECIAL NOTES:

Reached native soil at 4' depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER			AutoCAD FILE FILE NAME		
SCALE:		FIGURE No.			
SCALE					



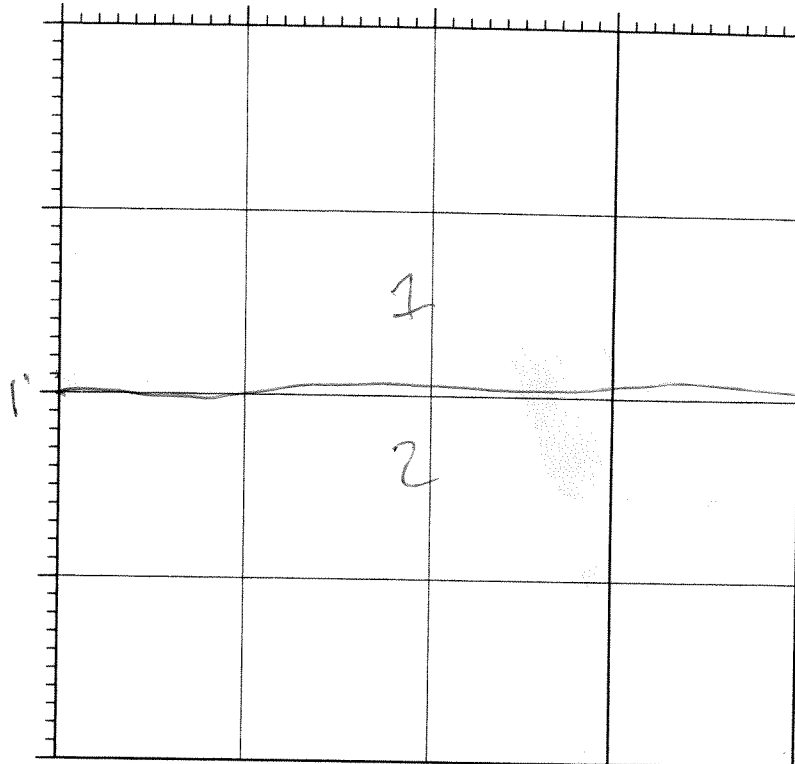
GENERAL LOCATION: Shaft Pad
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhry

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
SP-TP2-086	0-1	1030
SP-TP2-087	0-1	1030
SP-TP2-088	0-1	1030

55
55
55

Pit Width: 3'
 Pit Length: 3'
 Pit Depth: 2'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Silty sand, sm light gray, ashy color w/ mostly fines
2	Native Soil

SPECIAL NOTES:

Native soil encountered at 1' depth

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: FIGURE No:
 SCALE

GENERAL LOCATION: Storage Area
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		1	

SAMPLE No.	DEPTH	TIME
SA-TP1-089	0-1'	1045
SA-TP1-090	0-1'	1045
SA-TP1-207	0-1'	1045
SA-TP1-091	0-1'	1045

RAD SA-TP1-089 12
 SA-TP1-090 12
 RAD SA-TP1-207 12
 SA-TP1-091 12

Pit Width: 3'
 Pit Length: 3'
 Pit Depth: 2'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	silty, organic native soil - OL

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No:			
SCALE					



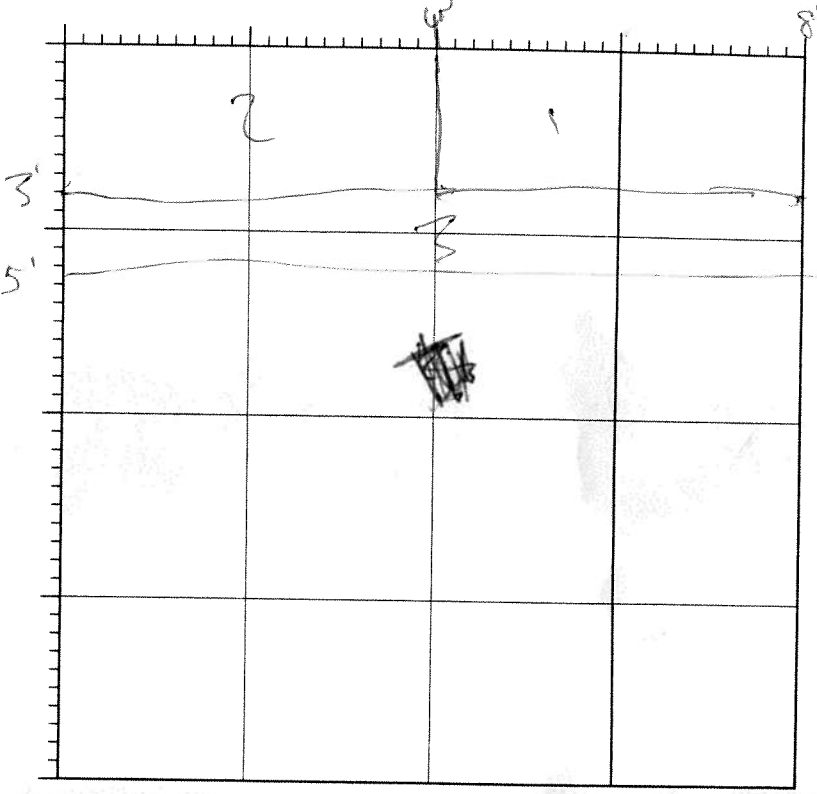
GENERAL LOCATION: Pond 1
 PIT TREND: _____
 PIT FACE LOGGED: N facing

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME	
(POI-TPI-099	0-2'	1245	110
(POI-TPI-100	0-2'	1245	110
(POI-TPI-308	0-2'	1245	130
x POI-TPI-101	2-4'	1300	90
x POI-TPI-102	2-4'	1300	90
POI-TPI-103	0-2'	1300	95

Pit Width: 3'
 Pit Length: 8'
 Pit Depth: 5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Dense clay, gray, med-high plasticity, ML
2	clay-silt-sand, less plasticity, CL
3	Native soil

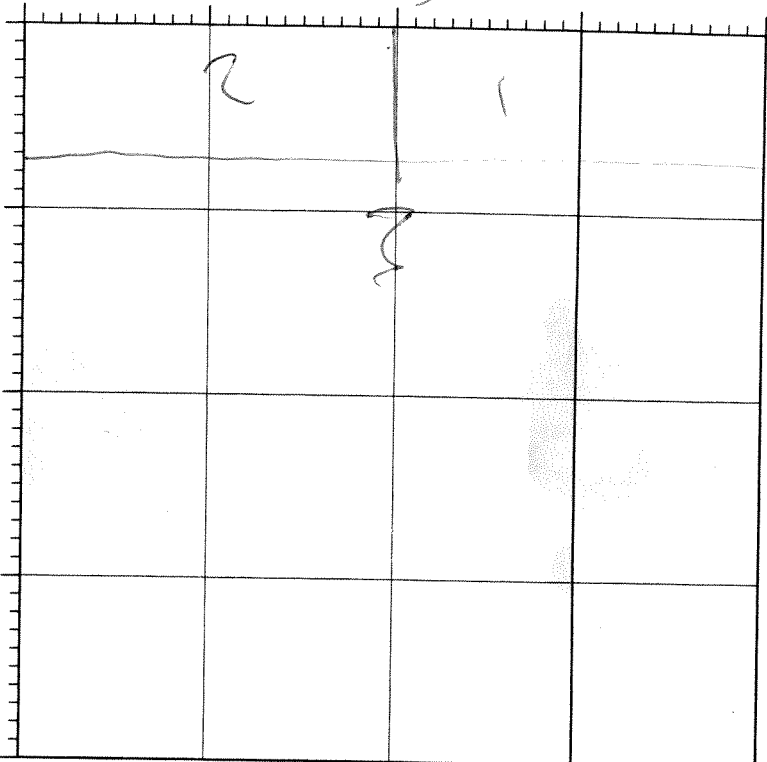
SPECIAL NOTES:

Encountered native soil after 3'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
			PROJECT No.: PROJECT NUMBER AutoCAD FILE: FILE NAME SCALE: SCALE FIGURE No: FIGURE NUMBER		

GENERAL LOCATION: Pond 2
 PIT TREND: _____
 PIT FACE LOGGED: E facing

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhrig



TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

SAMPLE No.	DEPTH	TIME	
(P02-TP2-104	0-2'	1315	90
P02-TP2-105	0-2'	1315	120
P02-TP2-106	2-4	1320	70
X P02-TP2-107	2-4	1320	70
X P02-TP2-108	6'	1325	60
X P02-TP2-109	6'	1325	45
- P02-TP2-110	0-2	1330	100
- P02-TP2-309	0-2	1330	90

Pit Width: 3'
 Pit Length: 7'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gray, dense clay, med-high plasticity, ML
2	Clay mixed w/ silt/sand, CL
3	Native Soil

SPECIAL NOTES:

Encountered native soil at 3'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE			FIGURE No.		

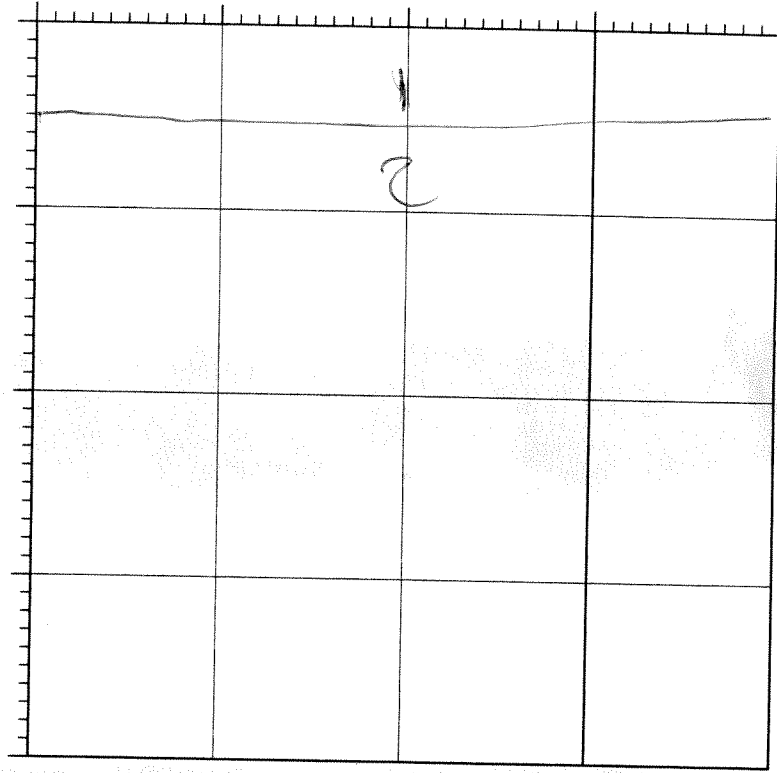
GENERAL LOCATION: Pond 3
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 4/21/07
 FIELD ENGINEER: LEJH/mg

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
P03-TP3-114	0-2'	1420 65
P03-TP3-115	0-2'	1420 70
P03-TP3-116	0-2'	1420 80

Pit Width: 3'
 Pit Length: 5'
 Pit Depth: 4'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gray, dense clay, med-high plasticity, MC Native Soil
2	

SPECIAL NOTES:
 Encountered Native soil at 2'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No. PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: SCALE FIGURE No.

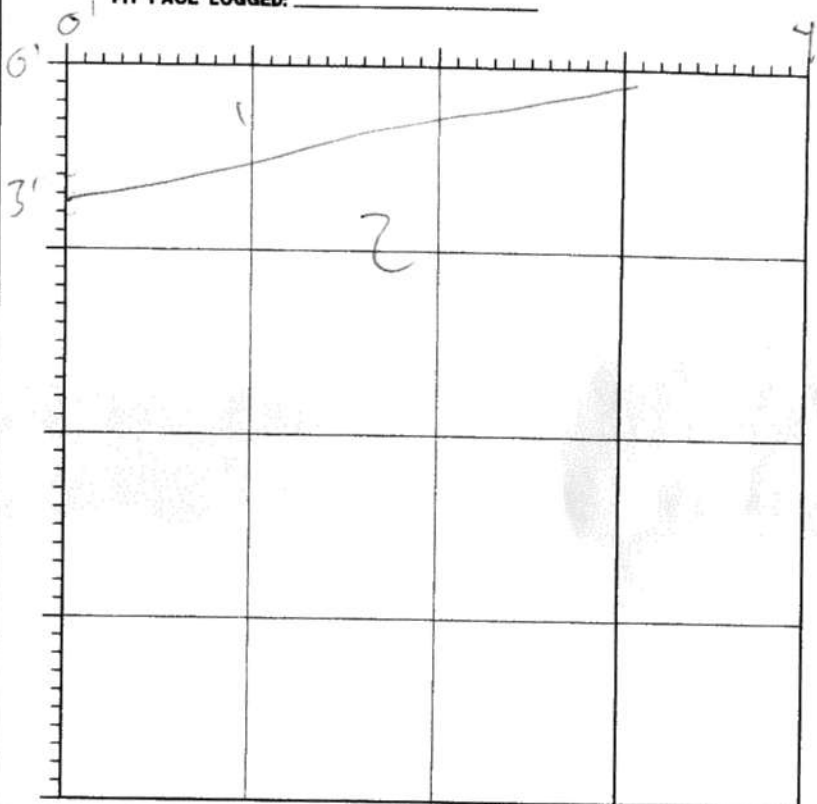
GENERAL LOCATION: Pond 4
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: C. Fuhry

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
P04-TP4-111	0-2'	1355
P04-TP4-112	0-2'	1355
P04-TP4-113	0-2'	1355

90
 100
 120

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 3.5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gray, dense clay, med-high plasticity, M _h Native Soil → drier than ponds 1+2
2	

SPECIAL NOTES:

Native soil encountered at 2-3'

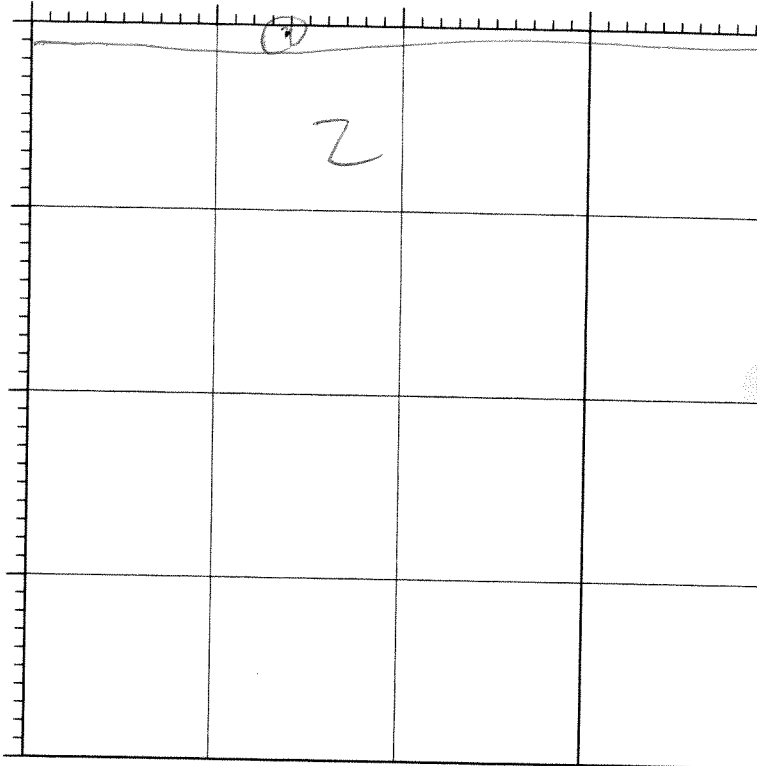
REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No. PROJECT NUMBER
 AutoCAD FILE FILE NAME
 SCALE: FIGURE No.
 SCALE

GENERAL LOCATION: Pond 15
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fuhrig



TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

SAMPLE No.	DEPTH	TIME
POS-TPS-117	0-2'	1440
POS-TPS-118	0-2'	1440
POS-TPS-119	0-2'	1440

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 3'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
①	Thin layer of ash, dust, etc. material, SM
2	Native soil

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No. PROJECT NUMBER
 AutoCAD FILE FILE NAME
 SCALE: FIGURE No.
 SCALE

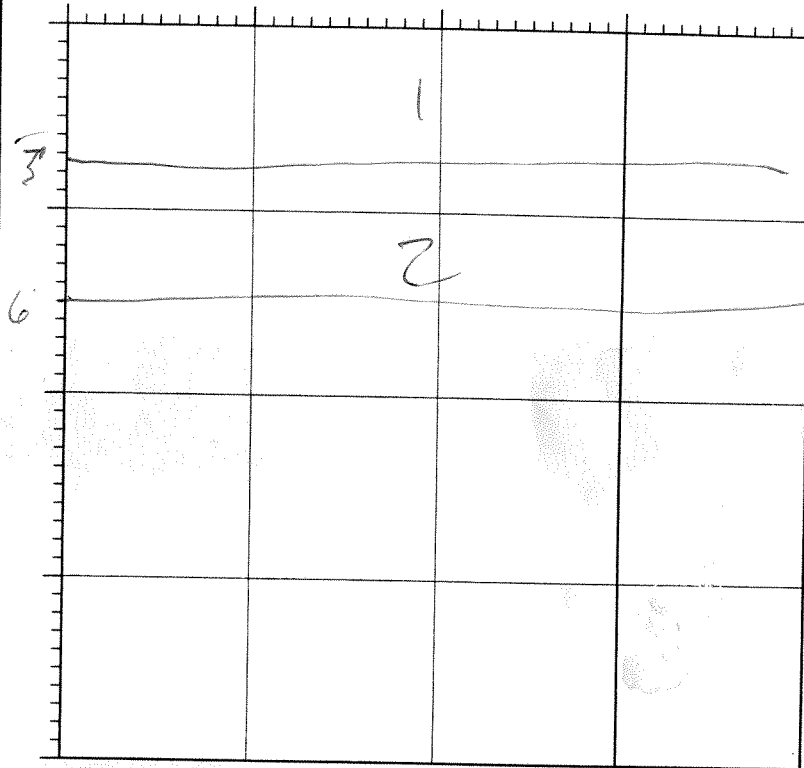
GENERAL LOCATION: Ore Storage 1
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: K. Fuhrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
OSI-TP607	0-2'	0910
OSI-TP608	0-2'	0910
OSI-TP630	0-2'	0910
OSI-TP608	2-4'	0915
OSI-TP6082	6'	0920

90 RAD/201
 90
 70 DOP
 70 RAD/SPLF
 80 RAD

Pit Width: 3'
 Pit Length: 6'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	light gray silty material with an ashy appearance, horizontal block structure, SM
2	Much darker material, more sand + gravel with some silt, SP

SPECIAL NOTES:
 Very hot, 1000+ R/hr in the area

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
			PROJECT No.: PROJECT NUMBER AutoCAD FILE: FILE NAME SCALE: SCALE FIGURE No.: FIGURE No.		

GENERAL LOCATION: Ore Storage 2
 PIT TREND: _____
 PIT FACE LOGGED: _____

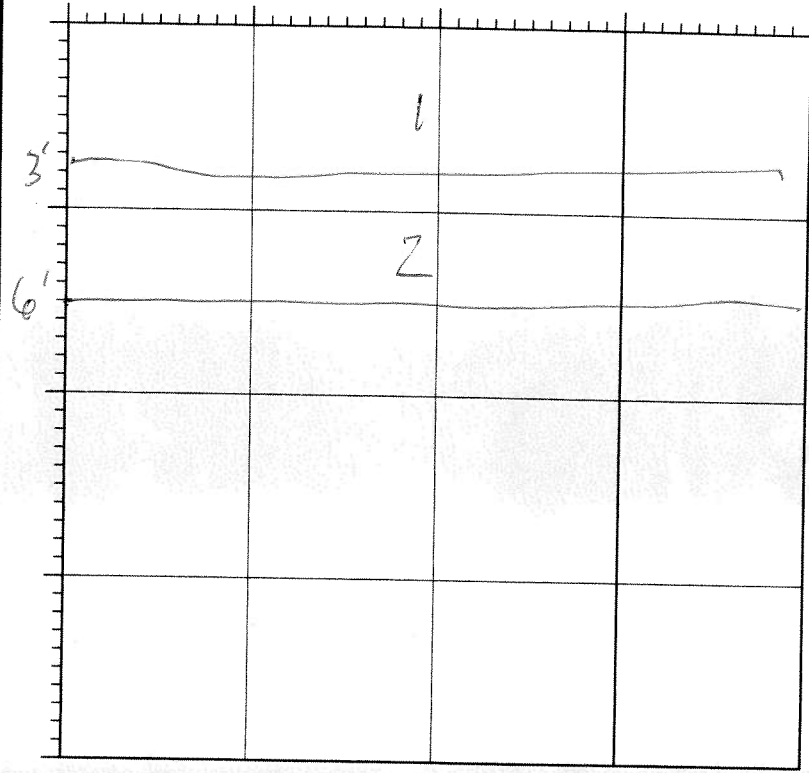
DATE: 6/21/02
 FIELD ENGINEER: L. Fehring

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

↓
 TFS



SAMPLE No.	DEPTH	TIME	
OS2-TFS-092	0-2'	1110	90
OS2-TFS-093	0-2'	1110	90
OS2-TFS-094	2-4'	1115	45
OS2-TFS-095	2-4'	1115	45
OS2-TFS-096	6'	1120	50
OS2-TFS-097	6'	1120	50
OS2-TFS-098	0-2'	1120	85

Pit Width: 3'
 Pit Length: 6'
 Pit Depth: 6'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	Gray silty layer, tan ashly appearance and texture. Sm
2	Darker gray material, almost black with higher sand content

SPECIAL NOTES:

High gamma readings, around 600-700 uR/hr

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER			AutoCAD FILE FILE NAME		
SCALE:		FIGURE No.			
SCALE					



GENERAL LOCATION: Access Road - 7
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Pulney

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

	1		

SAMPLE No.	DEPTH	TIME
AR7-TP1-076	0-1.5	1545 60

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 1.5'

**SOIL
UNIT**

SOIL DESCRIPTION AND EXCAVATION NOTES

1

Very rocky, gravel and chunks of silt / sand
 numerous colors, inconsistent, GM

SPECIAL NOTES:

Native ground encountered at 1.5'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No.: PROJECT NUMBER
 AutoCAD FILE: FILE NAME
 SCALE: SCALE FIGURE No: FIGURE NUMBER



GENERAL LOCATION: Access Road 15
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Feshariz

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		I	

SAMPLE No.	DEPTH	TIME
AR15-7P107	0-1.5	4:05 PM '07

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 1.5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
I	Rocky, gravel with silt chunks + sand, inconsistent material / coloration, GM

SPECIAL NOTES:

Native soil encountered at 1.5'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.: PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE		FIGURE No.			
SCALE					



GENERAL LOCATION: Access Road 19
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/20/07
 FIELD ENGINEER: L. Fisher

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL

		1							

SAMPLE No.	DEPTH	TIME
AR19-TP1-078	0-1.5	1610

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 1.5

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
1	light gray, chunky, silty material, SM

SPECIAL NOTES:

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY	PROJECT No.: PROJECT NUMBER			
						AutoCAD FILE: FILE NAME			
						SCALE	FIGURE No.		
						SCALE			



GENERAL LOCATION: Access Road-24

DATE: 6/21/07

PIT TREND: _____

FIELD ENGINEER: L. Fohry

PIT FACE LOGGED: _____

TEST PIT LOG

LEGEND

SOIL HORIZON
HORIZON CONTRACT
GROUNDWATER LEVEL

	2		

SAMPLE No.	DEPTH	TIME
AR24-TP1-083	0-1.5	0940

70

Pit Width: _____

Pit Length: _____

Pit Depth: _____

SOIL UNIT

SOIL DESCRIPTION AND EXCAVATION NOTES

1

Darker, sandy-silty gravel, GM

SPECIAL NOTES:

Native soil encountered at 1.5'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No. PROJECT NUMBER			AutoCAD FILE: FILE NAME		
SCALE:		FIGURE No.			
SCALE					



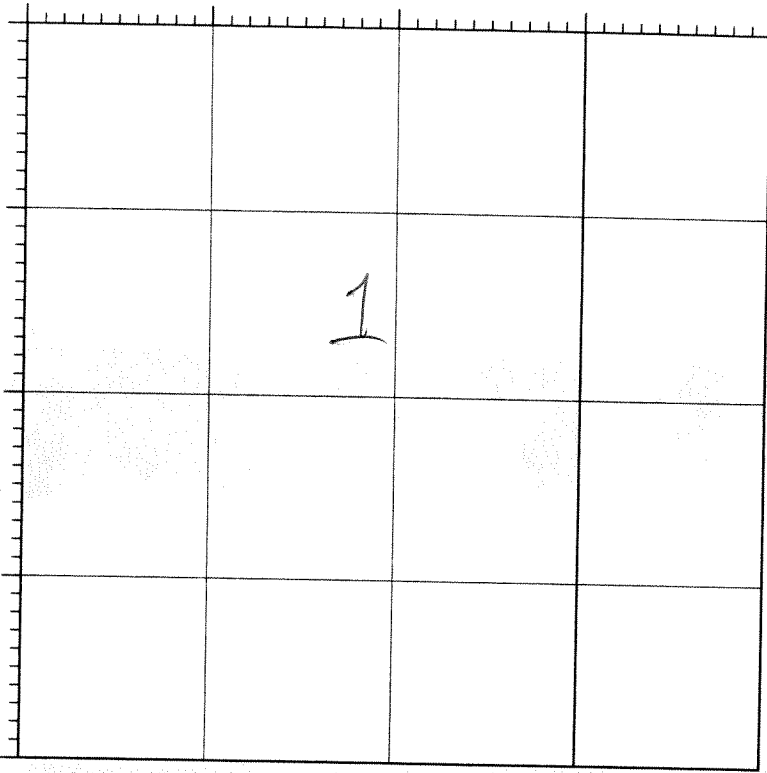
GENERAL LOCATION: Access Road - 34
 PIT TREND: _____
 PIT FACE LOGGED: _____

DATE: 6/21/07
 FIELD ENGINEER: L. Fohrig

TEST PIT LOG

LEGEND

SOIL HORIZON
 HORIZON CONTRACT
 GROUNDWATER LEVEL



SAMPLE No.	DEPTH	TIME
AR34-TP-094		
AR34-TP-094	0-1.5	10:15 20
AR34-TP-095	0-1.5	10:15 21

Pit Width: 3'
 Pit Length: 4'
 Pit Depth: 1.5'

SOIL UNIT	SOIL DESCRIPTION AND EXCAVATION NOTES
-----------	---------------------------------------

1	Silty, organic soil - OL
---	--------------------------

SPECIAL NOTES:

Native soil encountered at 1.5'

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
MWH			PROJECT No.: PROJECT NUMBER AutoCAD FILE: FILE NAME SCALE: SCALE FIGURE No: FIGURE No		

BORING LOG NUMBER:

P4-DH3

LOC. ID:

ELEVATION

DATUM:

SHEET 1 OF 3

PROJECT NAME

ST ANTHONY MINE

DRILL DATE: 5/1/07

INCLINATION

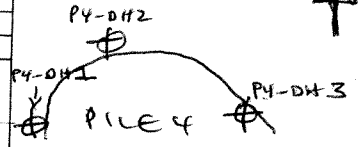
AZIMUTH

HAMMER WEIGHT:

DATE FINISHED 5/1/07

LOCATION SKETCH

N



DEPTH (UNITS)
BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

Gamma
R/hr
BLOW
COUNTS*

RECOVERY

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (1055) P4-DH3-001 - SILTY SAND, F-M SAND, POORLY GRADED, VERT PALE BROWN, DRY, W/F-C GRAVEL

SM 001 G 25 2'
SM 002 G 20 2'

P4-DH3-001 2 BAGS SAMPLED FOR AGR

2-4 (1057) P4-DH3-002 - SILTY SAND AS IN 0-2 FT. W/ 1/2 INCH TO 1-INCH F-C GRAVEL

SM 003 G 25 8'
~~SM 004~~

4-12 (1104) - SILTY SAND AS IN 2-4 FT P4-DH3-003

12-20 (1110) P4-DH3-004 - SILTY SAND, F-M SAND, GREYISH BROWN, DRY, SOME 6-INCH COBBLES, F-C GRAVEL

SM 004 G 30 8'

P4-DH3-004 1 BAG FOR RAD5 1 BAG FOR SPLP

20-28 (1115) P4-DH3-005 - SILTY SAND, AND F-C GRAVEL, M-C SAND, WELL GRADED, GREYISH BROWN, SUBROUNDED GRAVEL

SM 005 G 30 8'

P4-DH3-005 1 BAG FOR RAD5 COLLECTED DUPLICATE FOR RAD5 AS TIME P4-DH3-300 (1125)

28-36 (1125) P4-DH3-006 - SILTY SAND, W/F-C GRAVEL, W/ 3-5 IN COBBLES, GREY, DRY

SM 006 G 20 8'

36-44 (1145) P4-DH3-007 - SILTY SAND, F-M SAND, SOME F-C GRAVEL, TRACE 5-INCH COBBLES, 50/50 MIX OF BROWN + GREY, DRY

SM 007 G 20 8'

44-52 (1155) P4-DH3-008 - SILTY SAND, F-M SAND, ABUNDANT FINE TO COARSE GRAVEL, TRACE 5-INCH COBBLES, WELL GRADED, GREY/DK GREY

SM 008 G 20 8'

DEPTH UNITS: FEET BGGS

DRILLING CONTRACTOR: LAYNE-WESTERN

DRILLER: PAUL BOSHEKOVSKI

LOGGED BY: RYAN HULTZ, PEN

CHECKED BY:

SOIL BORING LOG FORM

REV No	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE:
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH3 m

LOCATION SKETCH

LOC. ID: SHEET 2 OF 3
 PROJECT NAME: ELEVATION: DATUM:
 INCLINATION: AZIMUTH: HAMMER WEIGHT: DRILL DATE: 7/1/07
 DATE FINISHED: 7/1/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE	GRAPHIC LOG	SAMPLES				RECOVERY	ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	GAMA NR/hr BLW COUNT/6		
50									NR/hr
55		S2-60 (1200) P4-DH3-009, SAND & GRAVEL, F-M SAND, F-C GRAVEL, W/SOME 3-5 INCH COBBLES DK GREY, DRY	SW GW 009	G	25	8'			25 NR/hr
60		60-68 (1210) P4-DH3-010, SAND & GRAVEL, F-M SAND, SOME COARSE SAND, F-C GRAVEL, LT BROWN DRY	SW GW 010	G	20	8'			20 NR/hr
70		68-76 (1218) P4-DH3-011, SAND & GRAVEL F-C SAND, F-M GRAVEL LT BROWN, DRY. POORLY SORTED (WELL GRADED)	SW GW 011	G	23	8'			23
75		012 76-84 (1255) P4-DH3- 012 - VERY DARK BROWN SAND W/F-M GRAVEL. F-M SAND, DRY, WELL SORTED	SP 012	G	25	8'			25
85		84-92 (1317) P4-DH3- 012 -013, SAND F-C SAND, POORLY SORTED, W/SOME F-C GRAVEL, GREY, DRY/WELL GRADED	SW 013	G	21	8'			21
95		92-100 92-100 (1328) P4-DH3-014 SAND & GRAVEL, F-C SAND, F-C GRAVEL, WELL GRADED, DRY, DK GREY	SW 014	G	19	8'			19

DEPTH UNITS: FEET BGS
 DRILLING CONTRACTOR: PAUL BOSH KOUSKIN
 DRILLER: LOYNE-WESTERN

LOGGED BY: RYAN HULTGREN
 CHECKED BY: _____

SOIL BORING LOG FORM

REV. NO.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.			AutoCAD FILE		
SCALE			FIGURE No.		



BORING LOG NUMBER:

P4-DH3

LOCATION SKETCH

LOC. ID:

ELEVATION

DATUM

SHEET 3 OF 3

PROJECT NAME

DRILL DATE: 7/1/07

INCLINATION:

AZIMUTH

HAMMER WEIGHT:

DATE FINISHED: 7/1/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

Gamma
r/hr
BLOW
COUNT/6'

RECOVERY

ADDITIONAL COMMENTS

100

100-109 (1335) P4-DH3-015
SAME AS 100-108 FT INTERVAL

SW
GW 015 G

20

8'

GAMMA (uR/hr)

20

105

110

108-116 (1400) P4-DH3-016
SAND, F-M, W/F - COARSE GRAVEL,
POORLY GRADED, DRY, GREY, TRACE
3-4" COBBLES

SP OK G

17

8'

17

115

120

116-124 (1415) P4-DH3-017
SAND, F-M W/SOME COARSE
SANDS, POORLY GRADED, BROWN/YT BROWN
DRY, SOME FINE TO COARSE GRAVEL,
SUBANGULAR. NOTE: VERY SLOW
PENETRATION LAST 1-2 FEET

SP OK G

21

8'

21

125

124-129 (1450) P4-DH3-018
SANDSTONE. PALE BROWN TO YELLOW
FINE SANDS ~~OK~~ FINE TO COARSE
GRAVEL, ANGULAR TO SUBANGULAR.

OK OK 18

5'

18

130

TOTAL DEPTH = 129 FEET.

135

140

145

DEPTH UNITS: FEET DGS

DRILLING CONTRACTOR: JAYNE WESTER

DRILLER: PAUL BOSHIKOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV NO. REVISIONS REV DATE DESIGN BY DRAWN BY REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE FIGURE No.

BORING LOG NUMBER

P4-DHZ

LOC. ID.

PROJECT NAME ST ANTHONY MINE

ELEVATION

DATUM

SHEET 1 OF 4

INCLINATION

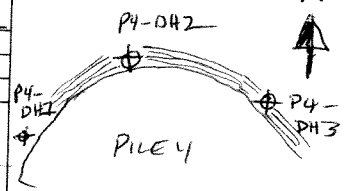
AZIMUTH

HAMMER WEIGHT

DRILL DATE: 7/2/07

DATE FINISHED: 7/2/07

LOCATION SKETCH



DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

SAMPLES

GRAPHIC LOG

USCS

NUMBER

TYPE

MR/hr
ALLOW
COUNT/75'

RECOVERY

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (1231) P4-DHZ-001 - SAND, F-M SAND, POORLY GRADED, W/F-C GRAVEL SUBANGULAR, LT BROWN, DRY

SP 001 G 11 2'

2-4 (1235) P4-DHZ-002 - SAND F-M SAND POORLY GRADED, W/F-C GRAVEL, SUBANG., GREY, DRY

SP 002 G 11 2'

4-12 (1242) P4-DHZ-003 - SAND AS IN 2-4 GRADED TO DARK GREY

SP 003 G 12 8'

12-20 (1248) P4-DHZ-004 - AS ABOVE (4-12 FT) SAND, TRACE 3"-6" COBBLES

SP 004 G 11 8'

20-28 (1253) P4-DHZ-005 SAND + GRAVEL, F-C SAND, F-C GRAVEL, WELL GRADED, DK GREY, DRY

SW GW 005 G 12 8'

28-36 (1300) P4-DHZ-006 SAME AS 20-28 FT INTERVAL

SW GW 006 G 10 8'

36-44 (1305) P4-DHZ-007 SAME AS 20-28 FT INTERVAL

SW GW 007 G 10 8'

44-52 (1335) P4-DHZ-008 SAME AS 20-28 FT INTERVAL

SW GW 008 G 11 8'

2 FULL BAG SAMPLES FOR AGES (P4-DHZ-001)

DEPTH UNITS: FEET AGS

DRILLING CONTRACTOR: LAYNE-WESTERN

DRILLER: PAUL BOSEK ROVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV. NO.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH2

LOCATION SKETCH

LOC. ID

SHEET 2 OF 4

PROJECT NAME

ELEVATION

DATUM

INCLINATION

AZIMUTH

HAMMER WEIGHT

DRILL DATE

7/2/07

DATE FINISHED

7/2/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

MR/HR
SLOW
COUNT/8"

RECOVERY

ADDITIONAL COMMENTS

50

55

60

65

70

75

80

85

90

95

52-60 (1350) P4-DH2-009
SAME AS 20-28 FT INTERVAL

SW
GW 009 G 10 8'

60-68 (1355) P4-DH2-010 ~~009~~ SAND,
F-M SAND, POORLY GRADED, TRACE
COARSE SAND, SOME FINE GRAVEL
50/50 GRAYISH WHITE + LIGHT BROWN,
DRY, ROUNDED

SP 010 G 23 8'

1 x 1/2 BAG,
SAMPLE FOR
RAOS
P4-DH2-010

68-76 (1404) P4-DH2-011 AS ABOVE
INTERVAL 60-68 FT, ~~MODERATE~~
GRADES TO VERY PALE BROWN

SP 011 G 35 8'

2 x 1/2 BAG SAMPLES
FOR RAOS +
SPLP
P4-DH2-011

76-84 (1415) P4-DH2-012 - SAND +
GRAVEL, WELL GRADED, F-C SAND
F-C GRAVEL, LT GREY, DRY

SW
GW 012 G 22 8'

84-92 (1500) P4-DH2-013 - SAME
SAND + GRAVEL
AS ABOVE 76-84 FT INTERVAL
WITH FEW 4-INCH COBBLES OF
ANGULAR ROCK. PENETRATION RATE
SLOWED DURING LAST 2 FEET
BLUSH GREY; POSSIBLE LARGE BOULDER.

SW
GW 013 G 14 8'

92-100 (1520) P4-DH2-014 -

SW
GW 014 G 16 8'

AS ABOVE ~~76-84~~ 84-92,
CONTINUES 4-INCH COBBLES,
ALL MATERIALS BLUSH GREY.

DEPTH UNITS: FEET & INCHES

DRILLING CONTRACTOR: LAYNE-WESTERN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE
FIGURE No.

BORING LOG NUMBER:

P4-DH2

LOCATION SKETCH

LOC. ID:

ELEVATION:

DATUM:

SHEET 3 OF 4

PROJECT NAME:

DRILL DATE:

7/2/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED:

7/2/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

M/R
BLOW COUNTS

RECOVERY

ADDITIONAL COMMENTS

100

105

110

115

120

125

130

135

140

145

100-108 (1525) P4-DH2-015
SAND & GRAVEL, WELL GRADED,
F-C SAND, F-C GRAVEL, SOME
3-6" COBBLES; SAND GRAYISH BROWN,
COBBLES WHITISH GREY EXTERIOR,
ORANGISH BROWN INTERIOR

SW GW 015 G 18 8'

108-116 (1535) P4-DH2-016
AS ABOVE

SW GW 016 G 16 8'

116-124 (1610) P4-DH2-017
SAND (F-C) & GRAVEL (FINE,
TRACE COARSE), WELL GRADED
DRY LT BROWNISH GREY
ANGULAR TO SUBANGULAR

SW GW 017 G 12 8'

124-132 (1616) P4-DH2-018
SAND & GRAVEL AS ABOVE
116-124, LT BROWNISH
GREY; ANGULAR/SUBANGULAR
GRAVELS

SW GW 018 G 10 8'

132-140 (1630) P4-DH2-019
SAND & GRAVEL, WELL GRADED,
ANGULAR/SUBANG. BREAKABLE
PIECES W/ PRESSURE (PINNED)
TRANSITION FROM LT BROWNISH
GREY TO LIGHT BROWN

SW GW 019 G 14 8'

140-148 (1638) P4-DH2-020
PENETRATION RATE SLOWING
GRAVEL W/ SAND, FINE GRAVEL
W/ SOME COARSE GRAVEL, AND
W/ F-M SAND. ANGULAR
LT GRAYISH BROWN, DRY

SW GW 020 G 12 8'

DEPTH UNITS:

DRILLING CONTRACTOR:

DRILLER:

LOGGED BY:

CHECKED BY:

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



MWH

PROJECT No.
AutoCAD FILE
SCALE: FIGURE No.

BORING LOG NUMBER

P4-D42

LOCATION SKETCH

LOC ID

ELEVATION

DATUM

SHEET 4 OF 4

PROJECT NAME

DRILL DATE: 7/2/07

INCLINATION

AZIMUTH

HAMMER WEIGHT

DATE FINISHED 7/2/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

SAMPLES

GRAPHIC LOG

USCS

NUMBER

TYPE

uR/
hr
SLOW
COUNTS

RECOVERY

ADDITIONAL COMMENTS

150

148-156 (1705) P4-D42-021
SAND + GRAVEL, WELL GRADED
E-C SAND, F-C GRAVEL,
LT BROWN, BREAKS EASILY,
DRY, SUBANGULAR

SW
4W

021

G

10

8'

155

156-164 (1712) P4-D42-022
SANDSTONE - RESEMBLY F-M SAND
W/FINE GRAVEL-SIZED PIECES OF
ROCK. VERY PALE YELLOW
@ 161 FEET PENETRATION RATE
SLOWS CONSIDERABLY

022

G

9

8'

160

165

164-166 (1736) P4-D42-023
SAME AS 156-164 INTERVAL
PENETRATION VERY SLOW - ALMOST
NO GAIN LAST 1 FOOT

023

G

9

2'

170

TOTAL DEPTH = 106 FEET BLS

175

180

185

190

195

DEPTH UNITS: FEET BLS

DRILLING CONTRACTOR: LAYNE WESTERN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: KIM HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD File:
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH1

LOC. ID:

PROJECT NAME: ST ANTHONY MINE

ELEVATION:

SHEET 1 OF 4

INCINATION:

AZIMUTH:

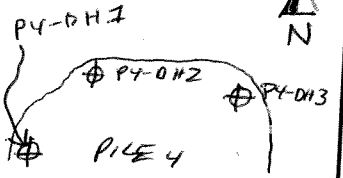
HAMMER WEIGHT:

DATUM:

DRILL DATE: 7/3/07

DATE FINISHED: 7/3/07

LOCATION SKETCH



DEPTH (UNITS):

BORING METHOD:

SOIL PROFILE

SOIL DESCRIPTION

GRAPHIC LOG

SAMPLES

USCS

NUMBER

TYPE

GAMMA
RATIO
COUNTS

RECOVERY

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (1130) P4-DH1-001 - SILTY SAND,
F-M SAND, SOME COARSE SAND, SOME
F-C GRAVEL; ~~WELL~~ GRA WELL GRADED,
OR GREYISH BROWN, DRY, TRACE 3" COBBLES

SM001 G 13 2'
SM002 G 15 2'

2-4 (1135) P4-DH1-002 - AS ABOVE
0-2 FT INTERVAL

SM003 G 12 8'

4-12 (1140) P4-DH1-003 - AS ABOVE
0-2 FT INTERVAL

12-20 (1180) P4-DH1-004 - AS ABOVE
TRANSITIONS TO DARK GREY
LESS SILT

SM004 G 13 8'

20-28 (1155) P4-DH1-005 - SAND,
F-M-C SAND, WELL GRADED, SOME
FINE-COARSE GRAVEL, SUBROUNDED
LT GREY, DRY

SW005 G 13 8'

28-36 (1200) P4-DH1-006 - SAND,
F-M SAND, POORLY GRADED, SOME
C SAND, LITTLE F-C GRAVEL, SUBROUNDED,
GREYISH BROWN, DRY

SP006 G 13 8'

36-44 (1206) P4-DH1-007 - SAND,
F-C SAND, SOME F-C GRAVEL,
TRACE 4" COBBLES, WELL GRADED,
GREYISH BROWN, DRY, SUBROUNDED

SW007 G 13 8'

44-52 (1215) P4-DH1-008 - SAND,
F-M, ~~SO~~ LITTLE C-SAND, SOME
F-C GRAVEL, ~~BROWN~~ POORLY GRADED.
BROWNISH GREY, DRY, SUBROUNDED
SOME GRAVEL LIGHT REDDISH/WHITE

SP008 G 14 8'

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: LARNE - WESTERN
DRILLER: PAUL BOSHKOWSKI

LOGGED BY: RYAN HULTBERG
CHECKED BY:

REV No	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.			AutoCAD FILE		
SCALE:			FIGURE No.		



SOIL BORING LOG FORM

BORING LOG NUMBER:

P4-DH1

LOCATION SKETCH

LOC. ID.

ELEVATION:

DATUM:

SHEET 2 OF 4

PROJECT NAME

INCLINATION:

AZIMUTH

HAMMER WEIGHT:

DRILL DATE: 7/13/07

DATE FINISHED: 7/31/07

DEPTH (UNITS):

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

SAMPLES

GRAPHIC LOG

USCS

NUMBER

TYPE

Gamma
NR/W
ALLOW
COUNT/6"

RECOVERY

ADDITIONAL COMMENTS

50

55

60

65

70

75

80

85

90

95

52-60 (1223) P4-DH1-009 SAND -
SAME AS 44-52' INTERVAL

SP 009 G 14 6'

60-68 (1229) P4-DH1-010 SAND -
SAME AS 44-52' INTERVAL

SP 010 G 13 4'

68-76 (1236) P4-DH1-011 SAND -
SAME AS 44-52' INTERVAL
POSSIBLY A 2 FT BOULDER AT APPROX
72-74 FEET BGS, (LITTLE 4-6" COBBLES
WITH THE SAND) PENETRATION RATE
SLOWED @ ~ 72-74 FEET BGS.

SP 011 G 12 8'

76-84 (1304) ~~P4-DH1-011~~ P4-DH1-012
SAND + GRAVEL, F-C SAND,
F-C GRAVEL, WELL GRADED, SUBANGULAR,
TRACE 3-5" COBBLES LIGHT BROWNISH
GREY, DRY

SW/GW 012 G 14 8'

84-92 (1310) P4-DH1-013 - SAND +
GRAVEL, F-C SAND, F-C GRAVEL,
TRACE 3" COBBLES, SUBROUNDED/
ROUNDED, LT BROWNISH GREY, DRY

SW/GW 013 G 15 8'

92-100 (1330) P4-DH1-014 - GRAVEL +
SAND, F-C GRAVEL, F-C SAND, TRACE
3-6" COBBLES, WELL GRADED, LT
BLuish GREY
~ 97/98 FEET PENETRATION RATE SLOWING.
POSSIBLE BOULDER?

GW/SW 014 G 14 8'

ADD'G TO PAUL B.
2 FOOT VOID
58-60' BGS

P4-DH1-013
1 BAG FOR RADDS

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: LAYNE-WESTERN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV No. REVISIONS REV. DATE DESIGN BY DRAWN BY REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE FIGURE No.

BORING LOG NUMBER:

P4-DH1

LOCATION SKETCH

LOC. ID

PROJECT NAME

ELEVATION

DATUM

SHEET 3 OF 4

INCLINATION

AZIMUTH

HAMMER WEIGHT

DRILL DATE: 7/3/07

DATE FINISHED: 7/9/07

DEPTH (UNITS)
BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

MR/HR
R/BW
COUNTS

RECOVERY

ADDITIONAL COMMENTS

100

105

110

115

120

125

130

135

140

145

100-108 (1335) P4-DH1-015 - SAND,
F-M SAND, SOME F-C GRAVEL,
POORLY GRADED, V. PALE BROWN TO
LT BROWN, DRY

SP 015 G 25 8'

P4-DH1-015
1 BAG FOR RAOS
1 BAG FOR SPLP

108-116 (1343) P4-DH1-016 -
SAND + GRAVEL, F-M SAND, F-C
GRAVEL, TRACE 3-4" COBBLES, WELL
GRADED, SUBROUNDED, LT ~~LT~~ BROWN
TO YELLOWISH BROWN

SW 016 G 15 8'

116-124 (1410) P4-DH1-017 - SAME
AS 108-116 FT INTERVAL. TRANSITIONS
~ 120 TO ~~LT BROWN~~ VERY PALE
GREYISH BROWN

SW 017 G 13 8'

124-132 (1418) P4-DH1-018
124-126 - SAME AS 108-116 FT

SW 018 G 14 8'

@ 126-129 ~~CLAY~~ SANDY CLAY, LOW ~~PL~~
PLASTICITY, MEDIUM STIFF, YELLOWISH
ORANGE, DRY

SW 019 G 12 8'

129-132 - SAME AS 108-116 FT
TRA COLOR TRANSITION TO GREY
FEW 6-7" COBBLES

SW 020 G 14 8'

132-140 (1437) - P4-DH1-019
SAND + GRAVEL, F-C SAND, FINE TO
COARSE GRAVEL, ~~LITTLE COARSE GRAVEL~~, 1 10"
COBBLE, WELL GRADED, LT ORANGE/GREY
ORANGISH GREY

SW 020 G 14 8'

140-148 (1450) - P4-DH1-020
SAME AS 132-140 FEET INTERVAL
NO COBBLES

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: LANE-WESTERN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: RYAN HULL, RSD

CHECKED BY:

SOIL BORING LOG FORM

REV NO.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE:
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH1

SHEET 4 OF 4

LOCATION SKETCH

LOC. ID: _____ ELEVATION: _____ DATUM: _____
 PROJECT NAME: _____ DRILL DATE: 7/3/07
 INCLINATION: _____ AZIMUTH: _____ HAMMER WEIGHT: _____ DATE FINISHED: 7/2/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE	GRAPHIC LOG	SAMPLES					ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	BLOW COUNT/6"	RECOVERY	
150		148-156 (1510) P4-DH1- 021 P4		SW	GW021	G	12	8'	
155		148-154 SAME AS 132-140 FT.		SR					
155		154-156 SAND, F-M SAND, POORLY GRADED, VERY PALE YELLOW PENETRATION RATE SLOWED @ 154'		SP	022	G	10	1'	
160		156- 156 157 (1525) P4-DH1-022							
165		SAME AS 154-156. VERY SLOW PENETRATION RATE							
165		TOTAL DEPTH = 157 FEET BGS							
170									
175									
180									
185									
190									
195									

DEPTH UNITS: FEET BGS
 DRILLING CONTRACTOR: LATHE-WESTERN
 DRILLER: PAUL BOSHILOVSKI

LOGGED BY: RYAN HANZL
 CHECKED BY: _____

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.					
AutoCAD FILE					
SCALE		FIGURE No.			



BORING LOG NUMBER

P4-DH4

LOC. ID

PROJECT NAME ST ANTHONY MINE

ELEVATION

SHEET 1 OF 3

INCLINATION

AZIMUTH

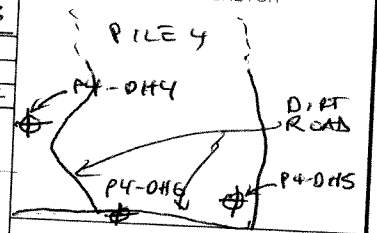
HAMMER WEIGHT

DATUM

DRILL DATE 7/4/07

DATE FINISHED 7/4/07

LOCATION SKETCH



DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

GRAPHIC LOG

SAMPLES

USCS

NUMBER

TYPE

Grain Size
MP/hr
BLOW
COUNT

RECOVERY

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (834) P4-DH4-001 - SILTY SAND
F-M SAND, SOME C. SAND, POORLY
GRADED, GREY, DRY, TRACE 3" COBBLES

SM 001 G 18 2'

2-4 (836) P4-DH4-002 - SAND,
F-M SAND, SOME C. SAND / F, GRAVEL,
GRAYISH BROWN, DRY, TRACE SILT

SW 002 G 16 2'

4-12 (845) P4-DH4-003 - AS ABOVE
IN 2-4' INTERVAL

SW 003 G 18 8'

12-16 - NO RECOVERY (848)

16-20 - SAME AS 2-4' INTERVAL.
(855) P4-DH4-004. 1x6" COBBLE.

NR

SW 004 G 16 4'

20-28 (857) P4-DH4-005 - SAND,
F-M SAND, SOME F-C GRAVEL, POORLY
GRADED SAND, MIX OF GRAYISH BROWN
TRANSITION TO LIGHT GRAY

SP 005 G 16 8'

28-36 (8903) P4-DH4-006 - SAND
+ GRAVEL, F-C SAND, F-C GRAVEL,
WELL GRADED, GRAYISH BROWN, DRY
SUB ROUNDED, TRACE SILT, LITTLE
3-5" COBBLES

SW GW 006 G 16 8'

36-44 (8911) P4-DH4-007 - SAME AS
28-36 FT INTERVAL

SW GW 007 G 17 8'

44-52 (8918) P4-DH4-008 - SAME AS
28-36 FT INTERVAL, GRAVEL IS
MORE SUB ANGULAR.

SW GW 008 G 15 8'

P4-DH4-001 2' PLUS
COR. ABOVE

DEPTH UNITS: FEET PLUS

DRILLING CONTRACTOR: LAINE-WESTERN

DRILLER: PAUL DZIKOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.					
AutoCAD FILE					
SCALE		FIGURE No.			



BORING LOG NUMBER:

P4-DH4-~~001~~ ⁰⁰⁹

LOCATION SKETCH

SHEET 2 OF 3

LOC. ID:

ELEVATION:

DATUM:

PROJECT NAME:

DRILL DATE: 7/4/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/11/07

DEPTH (UNITS):

BORING METHOD:

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

GAMMA
R/R/W
FLOW
COUNT/8'

RECOVERY

ADDITIONAL COMMENTS

50
55
60
65
70
75
80
85
90
95

52-60 (0927) P4-DH4-009
SAME AS 44-52 FT INTERVAL
SAND + GRAVEL, TRANSITION TO ~~CLAY~~
GREY

SW
GW 009 G 17 8'

60-68 (0938) P4-DH4-010
SAME AS 52-60 FT INTERVAL

SW
GW 010 G 16 8'

68-76 (0938) P4-DH4-011
SAME AS ABOVE 52-60 FT
INTERVAL. COLOR TRANSITIONS OF
GREY → VERY LIGHT GREY/WHITE →
VERY PALE BROWN

SW
GW 011 G 25 8'

76-84 (0946) P4-DH4-012 - SAND,
FUM, ~~SAND~~ LITTLE COARSE SAND,
LITTLE F-C GRAVEL, POORLY
GRADED, ROUNDED - SUB ROUNDED,
VERY DARK BROWN, DRY

SP 012 G 35 8'

P4-DH4-012
1 BAG RADS

84-92 (0955) P4-DH4-013 - SAND
AS IN 76-84 FT INTERVAL.
TRANSITION @ 80 FT TO LIGHT YELLOWISH
BROWN

SP 013 G 35 8'

92-100 (1004) P4-DH4-014 - SAND
AS IN 80-84 FT INTERVAL

SP 014 G 45 8'

P4-DH4-014
1 BAG RADS
1 BAG SPLR

DEPTH UNITS: FEET BGS
DRILLING CONTRACTOR: LAYNE-WESTERN
DRILLER: PAUL BOB H ROUSKI

LOGGED BY: RYAN HULTGREN
CHECKED BY:

SOIL BORING LOG FORM

REV NO.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT NO.
AutoCAD FILE
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH4 m

LOCATION SKETCH

LOC. ID:

ELEVATION:

DATUM:

SHEET 3 OF 3

PROJECT NAME:

DRILL DATE: 7/1/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED:

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE	SOIL DESCRIPTION	SAMPLES				RECOVERY	ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	COUNT/6"		
100		100-108 (1000) P4-DH4-015	SAND AS IN 80-84 FT INTERVAL TRANSITIONS TO YELLOWISH BROWN @ 102-108 FEET	SP 015 G	18	20	8'		
105		108-116 (1018) P4-DH4-016	SAND - F-M SAND, SOME FINE GRAVEL, POORLY GRADED, YELLOWISH BROWN, DRY, SUBANGULAR GRAVEL	SP 016 G	17	20	8'		
110		116-124 (1030) P4-DH4-017	SAME AS 108-116 FT INTERVAL	SP 017 G	20	20	8'		
115		124-132 (1038) P4-DH4-018	SAME AS 108-116 FT INTERVAL	SP 018 G	17	20	8'		
120		132-140 (1046) P4-DH4-019	132-134 - SAME AS 108-116 FT 134-140 - SAND, F-M SAND, SOME SAND/F GRAVEL, POORLY GRADED, LITTLE C GRAVEL LIKE SANDSTONE. RESISTANCE @ 134-136 FEET, SUBANGULAR	SP 019 G	15	20	8'		
125		140-148 (1052) P4-DH4-020	140-146 - SAME AS 134-140 146-148 - TRANSITION TO F-M SAND, LITTLE C GRAVEL, VERY FINE BROWN PENETRATION RATE SLOWED (146-148)	SP 020 G	14	20	8'		

TOTAL DEPTH = 148 FT BGS

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: JAYNE WESTERN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: RYAN HULLIGAN

CHECKED BY:

SOIL BORING LOG FORM

REV. NO.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
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PROJECT No.
AutoCAD FILE
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH6

SHEET 1 OF 3

LOC. ID:

ELEVATION:

DATUM:

PROJECT NAME

ST ANTHONY MINE

DRILL DATE:

7/4/07

INCLINATION:

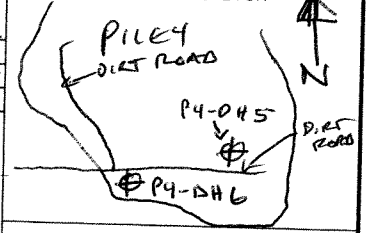
AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED

7/4/07

LOCATION SKETCH



DEPTH (UNITS):

BORING METHOD:

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

Gamma
nr/hr
BLOW
COUNT/6"

RECOVERY

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (1409) P4-DH6-001 - SAND,
F-M SAND, LITTLE F GRAVEL,
POORLY GRADED, V. PALE BROWN, DRY

2-4 (1410) P4-DH6-002 - SAND
AS IN 0-2 FT. TRANSITION TO DK GRAY

4-12 (1420) P4-DH6-003 - SAND,
F-C SAND, SOME F-C GRAVEL,
WELL GRADED, SUBROUND, DK GRAY, DRY

12-20 (1427) P4-DH6-004 - SAND AS
IN 4-12 FT. COLOR TRANSITION
TO LIGHT GRAY

20-28 (1430) P4-DH6-005 - ABOVE
SAND FROM 4-12 FT. COLOR TRANS.
TO LT YELLOWISH BROWN

28-36 (1437) P4-DH6-006 - SAND
FROM 4-12 FT, COLOR - DK GRAY

36-44 (1444) P4-DH6-007 - SAND
SAME AS 20-28 FEET (LT YELLOWISH
BROWN)

44-52 (1452) P4-DH6-008 - SAND,
SAME AS 20-28 FEET (LT
YELLOWISH BROWN)

SP 001	G	16	2'
SP 002	G	15	2'
SW 003	G	18	8'
SW 004	G	25	8'
SW 005	G	29	8'
SW 006	G	21	8'
SW 007	G	35	8'
SW 008	G	40	8'

P4-DH6-001 2 BAGS FOR AL-RO

P4-DH6-007 1x 1/2 BAG FOR RADS

P4-DH6-008 1x 1/2 BAG RADS 1x 1/2 BAG SACP

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: HANK-WESTERN

DRILLER: PAUL BOSCH KOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV NO	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No:
AutoCAD FILE:
SCALE: FIGURE No:



BORING LOG NUMBER:

P4-DHG

LOCATION SKETCH

LOC. ID

ELEVATION

DATUM:

SHEET 2 OF 3

PROJECT NAME

INCLINATION

AZIMUTH

HAMMER WEIGHT

DRILL DATE: 7/11/07

DATE FINISHED: 7/11/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

GRAPHIC LOG

SAMPLES

USCS

NUMBER

TYPE

BLOW COUNT/6"

RECOVERY

ADDITIONAL COMMENTS

50

55

60

65

70

75

80

85

90

95

52-60 (1459) P4-DHG-009 - SAND
SAME AS 20-28 FEET

SW009 G 30 8'

60-68 (1503) P4-DHG-010 -
SAND & GRAVEL, F-C SAND, F-C
GRAVEL, WELL GRADED, SUBGRAINED,
GREY, DRY

SW
GW 010 G 20 8'

68-76 (1530) P4-DHG-011 - SAND &
GRAVEL AS IN 60-68, LT BROWNISH
GREY

SW
GW 011 G 20 8'

76-84 (1537) P4-DHG-012, AS
ABOVE 60-68, LIGHT YELLOWISH BROWN

SW
GW 012 G 21 8'

84-92 (1545) P4-DHG-013, AS 60-68'
ABOVE, TRACE SILT, LT GREY,
LITTLE 5-6" COBBLES

SW
GW 013 G 21 8'

92-100 (1552) P4-DHG-014, SAME AS
84-92 FT INTERVAL

SW
GW 014 G 19 8'

DEPTH UNITS: FEET & IN

DRILLING CONTRACTOR: LANE-WESTERN

DRILLER: PAUL BOSHIKOWSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE:
SCALE: FIGURE No.

BORING LOG NUMBER:

P4-DH6

LOCATION SKETCH

LOC. ID:

ELEVATION:

DATUM:

SHEET 3 OF 3

PROJECT NAME:

DRILL DATE: 7/4/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/4/07

DEPTH (UNITS):

BORING METHOD:

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

CONC
MPT
BLW
COUNT/6"

RECOVERY

ADDITIONAL COMMENTS

100
105
110
115
120
125
130
135
140
145

102-108 (1614) P4-DH6-015
SAND/SANDSTONE. F-M SAND
POORLY GRADED, SOME 3-5" COBBLES
@ 102-104' PENETRATION RATE
SLOWED - PRODUCED BULKY GRAY
3-5" COBBLES.
PEN. RATE INCREASED ~~106-108~~ 104-108
PRODUCING F-M SAND + COBBLES,
SAND - V. PALE YELLOWISH BROWN

SP 015 G 16 8'

TOTAL DEPTH = 108 FEET BGS

DEPTH UNITS: FEET BGS

DRILLING CONTRACTOR: LEASE-WESTMAN

DRILLER: PAUL BOSHKOVSKI

LOGGED BY: RYAN HUCKLE

CHECKED BY:

SOIL BORING LOG FORM

REV No.	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY



PROJECT No. _____
 AutoCAD FILE: _____
 SCALE: _____ FIGURE No. _____

BORING LOG NUMBER:

P4-DHS

SHEET 1 OF 3

LOC. ID:

ELEVATION:

DATUM:

PROJECT NAME: ST ANTHONY MINE

DRILL DATE: 7/6/07

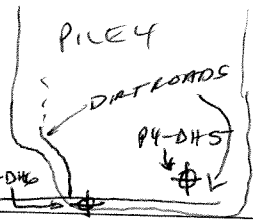
INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/6/07

LOCATION SKETCH



DEPTH (UNITS):
BORING METHOD:

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS NUMBER TYPE Gamma
r/r
BLOW
COUNT/6" RECOVERY

P4-DHS

ADDITIONAL COMMENTS

0
5
10
15
20
25
30
35
40
45

0-2 (0945) P4-DHS-001 - SILTY SAND,
F-C SAND, LITTLE F GRAVEL, WELL
GRADED DK GREYISH BROWN, SUBROUNDED
DRY
2-4 (0948) P4-DHS-002 - SAME AS
0-2 FT INTERVAL
4-12 (0955) P4-DHS-003 - SAME AS
0-2 FT INTERVAL

SM 001 G 14 2'
SM 002 G 16 2'
SM 003 G 14 8'

2 X BAGS FOR AGRD

12-20 (1000) P4-DHS-004 - SILTY SAND,
F-M SAND, POORLY GRADED, LITTLE
F-C GRAVEL, SUBROUNDED, DK
GREYISH BROWN, DRY

SM 004 G 14 8'

20-26 (1004) P4-DHS-005 - SAND,
F-M SAND, SOME C SAND, WELL
GRADED, LITTLE LITTLE F-C GRAVEL,
PALE LT BROWN TO P. PALE BROWN
SUBROUNDED, DRY

SW 005 G 26 8'

26-36 (1010) P4-DHS-006 - SAND
AS ABOVE TRANSITIONED TO
GREYISH BROWN (20-28 FT)

SW 006 G 25 8'

36-41 (1015) P4-DHS-007 - SAND
AS ABOVE, MIX OF GREYISH BROWN
→ LT BROWN → V. PALE BROWN (COLOR
CHANGES W/ DEPTH IN THAT ORDER)

SW 007 G 30 8'

P4-DHS-007
1 X 1/2 BAG FOR RADS

44-52 (1020) P4-DHS-008 - SAND
F-M SAND, LITTLE COARSE SAND,
LITTLE F GRAVEL, POORLY GRADED
LT BROWN, DRY, SUBROUNDED

SP 008 G 22 8'

DEPTH UNITS: FEET BGS
DRILLING CONTRACTOR: LANE-WESTERN
DRILLER: PAUL BOSKOVSKI

LOGGED BY: RYAN HULTGREN
CHECKED BY:

SOIL BORING LOG FORM

REV No REVISIONS REV DATE DESIGN BY DRAWN BY REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE FIGURE No.

BORING LOG NUMBER

P4-D45

LOCATION SKETCH

LOC. ID: SHEET 2 OF 3
 PROJECT NAME: ST ANTHONY MINE ELEVATION: DATUM:
 INCINATION: AZIMUTH: HAMMER WEIGHT: DRILL DATE: 7/6/07
 DATE FINISHED: 7/6/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE	GRAPHIC LOG	SAMPLES				RECOVERY	ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	GAMMA R/HR BLOW COUNT/6"		

50
55
60
65
70
75
80
85
90
95

52-60 (1025) P4-D45-009 - SAND
 SAME AS 44-52 FT INTERVAL

SP009 G 29 8'

60-68 (1040) P4-D45-010 - SAND
 SAME AS 44-52 FT INTERVAL
 YELLOWISH BROWN

SP010 G 23 8'

68-76 (1054) P4-D45-011 - SAND
 AS IN 60-68 FT INTERVAL

SP011 G 26 8'

76-84 (1102) P4-D45-012 - SAND
 AS IN 60-68 FT INTERVAL

SP012 G 26 8'

84-92 (1108) P4-D45-013 - SAND
 F-M SAND, TRACE FINE GRAVEL,
 POORLY GRADED, TRACE 3-6"
 (BOBBLES, SUBANGULAR, GREY), DRY

SP013 G 16 8'

92-100 (1118) P4-D45-014 - SAND
 AS IN 84-92 FT INTERVAL

SP014 G 16 8'

DEPTH UNITS: FEET PLUS
 DRILLING CONTRACTOR: LAYNE WESTERN
 DRILLER: PAUL BOSKOWSKI

LOGGED BY: RYAN HULTEREN
 CHECKED BY: _____

SOIL BORING LOG FORM

REV No	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No. _____
 AutoCAD FILE: _____
 SCALE: _____ FIGURE No. _____



BORING LOG NUMBER:

P4-DHS

LOCATION SKETCH

LOC. ID:

ELEVATION:

DATUM:

SHEET 3 OF 3

PROJECT NAME: ST ANTHONY MINE

DRILL DATE: 7/6/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/6/07

DEPTH (UNITS)

BORING METHOD

SOIL PROFILE

SOIL DESCRIPTION

GRAPHIC LOG

SAMPLES

USCS

NUMBER

TYPE

GAMMA
RADIATION
BLOW
COUNTS

RECOVERY

ADDITIONAL COMMENTS

100
105
110
115
120
125
130
135
140
145

100-108 (1123) P4-DHS-015 - SAND
AS IN 84-92 FT INTERVAL,
TRANSITIONED TO LT BROWN

SR 015 G 45 8'

108-116 (1130) P4-DHS-016 - SAND
AS IN 100-108 FT INTERVAL

SR 016 G 45 8'

P4-DHS-016
1x 1/2 BAG FOR RAD5
1x 1/2 BAG FOR SPLP

116-124 (1139) P4-DHS-017 - SAND
AS IN 100-108 FT INTERVAL

SR 017 G 45 8'

124-132 (1153) P4-DHS-018

124-126 - SAND AS IN 100-108 FT.

126-132 - SAND, F-M SAND, POORLY
GRADED, LITTLE F-C GRAVEL OR
SANDSTONE, SUBANGULAR, YELLOWISH
BROWN.

SR 018 G 18 8'

132-138 (1158) P4-DHS-019
SAND + GRAVEL, F-M SAND, SOME
F-C GRAVEL, SAND -> POORLY GRADED,
YELLOWISH BROWN, GRAVEL + TRACE
5" COBBLES ANGULAR - SUBANGULAR
PENETRATION RATE SLOWED @ 135'
AND EVEN MORE @ 137' BLS

SR 019 G 14 6'

TOTAL DEPTH = 138 FEET BLS

DEPTH UNITS: FEET BLS

DRILLING CONTRACTOR: LAYNE-WESTERN

DRILLER: PAUL BUSHKOVSKI

LOGGED BY: RYAN HULTGREN

CHECKED BY:

SOIL BORING LOG FORM

REV NO REVISIONS REV DATE DESIGN BY DRAWN BY REVIEWED AND SIGNED BY



PROJECT No.
AutoCAD FILE
SCALE: FIGURE No.

BORING LOG NUMBER

P3-DH8

LOCATION SKETCH

LOC. ID

ELEVATION

DATUM

SHEET 1 OF 2

PROJECT NAME ST ANTHONY MINE

DRILL DATE 7/6/07

INCLINATION

AZIMUTH

HAMMER WEIGHT

DATE FINISHED 7/16/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE SOIL DESCRIPTION	GRAPHIC LOG	SAMPLES				RECOVERY	ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	GAMMA R/HR FLOW COUNT/8'		
0-2		(1610) P3-DH8-001 - SAND, F-M SAND, POORLY GRADED, TRACE FINE GRAVEL, V. PALE BROWN, DRY		SP 001	G	135	2'		
2-4		(1615) P3-DH8-002 - SAND, AS IN 0-2 FT INTERVAL		SP 002	G	110	2'		
4-12		(1618) P3-DH8-003 - SAND, AS IN 0-2 FT INTERVAL, INCREASED AMT R-C GRAVEL, BROWNISH YELLOW		SP 003	G	120	8'		
12-20		(1621) P3-DH8-004 - SAND, SAME AS 4-12 FT INTERVAL		SP 004	G	120	8'		
20-28		(1647) P3-DH8-005 - SAND, SAME AS 4-12 FT INTERVAL		SP 005	G	140	8'		
28-36		(1652) P3-DH8-006 - SAND, SAME AS 4-12 FT INTERVAL		SP 006	G	120	8'		
36-44		(1657) P3-DH8-007 - SAND, SAME AS 4-12 FT INTERVAL, R-C GRAVEL HAS GREEN SHADE, CRUMBLES W/MODERATE PRESSURE, CLAYEY TEXTURE SANDSTONE RT		SP 007	G	125	8'		
44-52		(1705) P3-DH8-008 - SAND, SAME AS 4-12 FT, DARK BROWN		SP 008	G	115	8'		

DEPTH UNITS: FEET
 DRILLING CONTRACTOR: LAINE-WESTERN
 DRILLER: PAUL BOSTROVSKY

LOGGED BY: RYAN HULT, REN + TERRY LEESON
 CHECKED BY: _____

SOIL BORING LOG FORM

REV No	REVISIONS	REV DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No. _____
 AutoCAD FILE _____
 SCALE: _____ FIGURE No. _____



BORING LOG NUMBER:

P3-DHB

LOCATION SKETCH

SHEET 2 OF 2

LOC. ID:

ELEVATION:

DATUM:

PROJECT NAME: St. Anthony Mine

DRILL DATE: 7/6/07

INCLINATION:

AZMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/16/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE SOIL DESCRIPTION	GRAPHIC LOG	SAMPLES				ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	Gamma BEOW COUNT/6"	
50-0		52-60- Lt brown sand w/ trace silt, fine-med, collected on 7/14 - P3-DHB-009 ~ 20% gravel + small cobbles		SP/009 GW	G	120	8'	
60-10		60-68- As above, Lt brown gravelly sand		SW010	G	130	8'	RAO sample
70-20		68-76 - As above (A.A.)		SW011	G	120	8'	
80-30		76-84- AA		SW012	G	130	8'	
90-40		84-92- AA, at 90' hit a dark brown layer that appears to be soil, + chunks of weathered ss.		SW013	G	130	8'	
100-50		90-100- Dark brown clayey sand, w/ caliche + chunks of weathered ss		SW014	G	120	8'	Agro sample + Rads
100-100		100-108- ^{sandy} Brown silty clay w/ pieces of charcoal + caliche		SW015	G	120	8'	EOB = 108'

DEPTH UNITS: Feet
DRILLING CONTRACTOR: Layne
DRILLER: Raul B.

LOGGED BY: Toby Leeson
CHECKED BY: _____

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.:					
AutoCAD FILE:					
SCALE:		FIGURE No.:			



BORING LOG NUMBER:

P3-D47

SHEET 1 OF 3

LOCATION SKETCH

LOC. ID:

ELEVATION:

DATUM:

PROJECT NAME: St. Anthony Mine

DRILL DATE: 7/16/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/16/07

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE SOIL DESCRIPTION	SAMPLES					ADDITIONAL COMMENTS
			USCS	NUMBER	TYPE	Gamma BLOW-COUNT/8"	RECOVERY	
0								
0-2		lt brown gravelly sand w/ tr silt, sand fine med	SW	001	G	80	2'	
2-4		A.A.	SW	002	G	75	2'	Rads + agro 2-4'
4-12		A.A., grayish tint	SW	003	G	65	8'	11:30
12-20		A.A., med brown	SW	004	G	65	8'	11:35
20-28		A.A. mixed med brown & lt. gray, tr. pieces of shale	SW	005	G	70	8'	11:35
28-36		lt brown sandy gravel, gravelly sand, f.m., moist	SW	006	G	70	8'	11:42
36-44		med brown, sand w/ gravel, f.m., moist, trace small cobbles	SW	007	G	60	8'	11:45
44-52		As above	SW	008	G		8'	11:50

DEPTH UNITS: Feet
 DRILLING CONTRACTOR: Leysne
 DRILLER: Paul B.

LOGGED BY: Tobey Larson
 CHECKED BY: _____

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No.: _____
 AutoCAD FILE: _____
 SCALE: _____ FIGURE No.: _____



BORING LOG NUMBER: **P3-D47** SHEET **2** OF **3**

LOC. ID: _____ ELEVATION: _____ DATUM: _____

PROJECT NAME: _____ DRILL DATE: _____

INCLINATION: _____ AZIMUTH: _____ HAMMER WEIGHT: _____ DATE FINISHED: _____

LOCATION SKETCH

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE SOIL DESCRIPTION	GRAPHIC LOG	SAMPLES					ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	Blow Count/6"	RECOVERY	
50 0		44-52 - See p. 1							
60 10		52-60 - ^{RSB} As above Lt-med brown, gravelly sand, f-m, moist		SW 009	G	70	8'	1200	SPCP
70 20		60-68 - As above, mixed w/pieces of dark gray shale		SW 010	G	70	8'	1205	
80 30		68-76 - Dark brown, ^{+gray} sand w/gravel, f-m, moist, trace cobbles		SW 011	G	70	8'	1210	
90 40		76-84 - As above, med brown only		SW 012	G	65	8'	1215	
100 50		84-92 - As above		SW 013	G	65	8'	1220	
100 60		92-100 As above, piece of plastic mixed in.		SW 014	G	60	8'	1225	

DEPTH UNITS: _____ LOGGED BY: _____

DRILLING CONTRACTOR: _____ CHECKED BY: _____

DRILLER: _____

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
PROJECT No.:					
AutoCAD FILE:					
SCALE:		FIGURE No.:			



BORING LOG NUMBER:

P3-DH7

LOCATION SKETCH

LOC. ID:

ELEVATION:

SHEET 3 OF 3

PROJECT NAME:

St Anthony Mine

DATUM:

DRILL DATE: 7/16/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/16/07

DEPTH (UNITS)
BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS

NUMBER

TYPE

Gamma
BLOW
COUNT/6"

RECOVERY

ADDITIONAL COMMENTS

100

0

5

110

10

15

120

20

25

130

30

35

140

40

45

150

100-108 - med brown, gravelly sand,
f.m.t.r. coarse sand, trace small
cobbles

SW 015 G

75

8'

1230

Rads

108-116 - As above, w/ chunks of
black, layered silty clay

SW 016 G

70

8'

1240

contact ~119'

116-124 - Brown silty clay w/
caliche + charcoal

CL 017 G

60

8'

1255

EOB = 124'

DEPTH UNITS: _____
DRILLING CONTRACTOR: _____
DRILLER: _____

LOGGED BY: Toby Leeson
CHECKED BY: _____

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

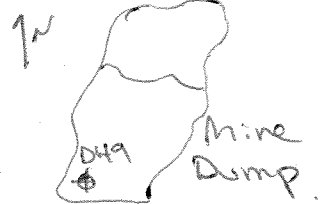


PROJECT No.:
AutoCAD FILE:
SCALE: FIGURE No.:

BORING LOG NUMBER:

MD-D49

LOCATION SKETCH



LOC. ID: Shaft Area

ELEVATION:

SHEET 1 OF 1

PROJECT NAME: St. Anthony Mine

DATUM:

DRILL DATE: 7/16/02

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED:

DEPTH (UNITS)	BORING METHOD	SOIL PROFILE	GRAPHIC LOG	SAMPLES					ADDITIONAL COMMENTS
				USCS	NUMBER	TYPE	Gamma BLOW COUNT/ft	RECOVERY	

0
5
10
15
20
25
30
35
40
45

0-2 - Lt gray, sand w/ gravel + trace silt, sand v.f.f, dry
2-4 AA.

4-12 - AA, grayish brown (appeared to be native @ ~11')

12-20 - Lt brown gravelly sand, f-m ultr. coarse, moist
EOB = 20'

SP001 G 60 2' 1620

SP002 G 65 2' 1623 Agro + Rad

SP003 G 60 8' 1628 Rad + EPLP

SW004 G — 8' 1635

native

DEPTH UNITS: Feet

DRILLING CONTRACTOR: Layne Western

DRILLER: Paul B.

LOGGED BY: Toby Larson

CHECKED BY: _____

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY

PROJECT No: _____
AutoCAD FILE: _____
SCALE: _____ FIGURE No: _____



BORING LOG NUMBER:

MD-DH10

SHEET 1 OF 1

LOCATION SKETCH

LOC. ID: Shaft Area

ELEVATION:

DATUM:

PROJECT NAME: St. Anthony Mine

DRILL DATE: 7/18/07

INCLINATION:

AZIMUTH:

HAMMER WEIGHT:

DATE FINISHED: 7/17



DEPTH (UNITS)
BORING METHOD

SOIL PROFILE

SAMPLES

SOIL DESCRIPTION

GRAPHIC LOG

USCS NUMBER TYPE Gamma BLOW COUNT/6" RECOVERY

ADDITIONAL COMMENTS

0	to bluff	0-2-ft brown sand w/ gravel, f-m. dry	SP 001	G	110	2'	0810	SPLP
5	to bluff	2-4-ft brown gravelly sand, f-m. dry	SP 002	G	110	2'	0812	Rad + Dup
10		4-12- A.A., moist, brownish gray	SP 003	G	100	8'	0818	
15								
20		12-20- A.A., moist, brownish gray	SP 004	G	95	8'	0823	Agro + Rad
25		med turned, brown @ 20'						
30		26-28- Med brown gravelly sand, moist, contains wire & other trash.	SP 005	G	85	8'	0825	
35		28-36- As above w/ clayey silt.	006	G	-	8'	0835	
40		EOB = 36'						
45								

Native

DEPTH UNITS: Feet

DRILLING CONTRACTOR: Layne Western

DRILLER: Paul R.

LOGGED BY: Tobey Leason

CHECKED BY:

SOIL BORING LOG FORM

REV. No.	REVISIONS	REV. DATE	DESIGN BY	DRAWN BY	REVIEWED AND SIGNED BY
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PROJECT No.
AutoCAD FILE:
SCALE: FIGURE No.