# ADDITIONAL CHARACTERIZATION OF METALS IN SOIL
# FORMER ORE MILL SITE – 29 ACRE PARCEL
# NORTH LA CHOLLA AND SPEEDWAY BOULEVARDS
# TUCSON, PIMA COUNTY, ARIZONA

**VOLUNTARY REMEDIATION PROGRAM**
**Site Code 508175-00**

Kleinfelder Project No: 80365

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## EXECUTIVE SUMMARY

The City of Tucson (COT) plans to redevelop the former ore mill site and surrounding property (Site) as open space parkland for public use. Previous investigations by Kleinfelder reported concentrations of lead, arsenic, and cadmium greater than the Arizona Department of Environmental Quality (ADEQ) Residential Soil Remediation Limits (RSRLs) in surficial soil on approximately 2.5 acres of the 29-acre Site. This study summarizes additional work by Kleinfelder to refine the horizontal extent and characterize the vertical extents of arsenic, cadmium and lead at concentrations above the RSRLs in soil at the Site.

*The conceptual site model (CSM) is based on the assumption that ore was stored, handled and processed at the ground surface and that soil at the site prior to any ore milling activities met the RSRLs. Based on the site-wide surface sampling conducted during a previous investigation, this assumption is reasonable. Surface and near–surface soils exceeded the RSRLs only where milling activities were concentrated, that is, in the north central portion of the site including the mill foundations in an area of about 2.5 acres. In the remaining 26 acres of the site, surface and near-surface soils met the RSRLs (with the exception of the two unauthorized dumping piles to the east). The aerial extent of RSRL exceedences suggests that there is a veneer of soil (the thickness of which is determined by this phase of the investigation) in the north central portion of the site that has been impacted by remnant ore while the surrounding portions of the site were not impacted and thus appear to reflect native soil conditions.*

Kleinfelder measured the concentrations of metals in soil using an X-ray fluorescence (XRF) instrument. Kleinfelder collected one soil sample for laboratory analysis at the depth at which the XRF measurement of lead was below 400 mg/kg, or at refusal, whichever came first. Eighteen (18) of the 50 samples were also submitted to the laboratory for Toxicity Characteristic Leaching Procedure (TCLP) Analysis.

To describe the conditions at the Site, the concentrations of these metals were grouped into four separate areas. The areas, shown on Figure 2, are:

**Area A.** The native desert located south of the existing ore mill building foundations. Soil samples collected from Area A contain lead, arsenic, and/or cadmium concentrations greater than the RSRLs from surface to depths of less than two feet below ground surface (bgs).

**Area B.** The existing building foundations and those portions of the property to the east, west and north, excluding the east-west trending Anklam wash. The soil samples collected from Area B contained lead, arsenic, and/or cadmium concentrations greater than the RSRLs at depths of two feet or more bgs.

**Area C.** The east-west trending Anklam wash on the northern perimeter of the Site and includes soil sample locations S-140 through S-144. The soil samples collected from Area C contain lead, arsenic, and/or cadmium concentrations greater than the RSRLs to a depth of three feet or more bgs.

**Area D.** The isolated dumping piles, which do not appear to be related to the ore milling activities, are located northeast of the main ore mill Site. The height of these piles above the native soil is visually discernable and was estimated to be approximately two feet.

The laboratory analytical data were used to prepare an isopach map depicting the thickness of soil exceeding the RSRLs. Kleinfelder estimated the volume of soil exceeding the RSRLs from this isopach map.

Data from the TCLP analysis were used to calculate site-specific Groundwater Protection Levels (GPLs) for cadmium and lead. In addition, the TCLP analysis identified some soil that would be considered as a hazardous waste if the material is removed from the site in the future.

The conclusions of this study are as follows:

- The laboratory results resulted in no appreciable change in the horizontal characterization of RSRL exceedences as presented in Kleinfelder's report titled: *Soil Quality Delineation, Former Ore Mill Site- 29 Acre parcel, North La Cholla and Speedway Boulevards* (Kleinfelder, 2006c)
- A total of 6,274 cubic yards of soil is estimated to exceed the RSRLs for lead, arsenic or cadmium. In general, cadmium and arsenic exceedences coincided with lead exceedences, with the exception of one sample location, S114.
- The thickness of soil exceeding the RSRLs has been adequately characterized in the south end of the investigation area, Area A. The thickness of soil exceeding RSRLs in the northern portion of the property, including the former ore mill foundations, has not been completely characterized due to auger refusal before RSRLs were met at several locations. These data gaps may be addressed when the area is remediated.
- Calculations of site specific groundwater protection levels for this site were 927.5 mg/kg for lead and 52.5 mg/kg for cadmium. Since these concentrations are above the RSRLs for lead and cadmium, the RSRLs (400 mg/kg lead, 39 mg/kg cadmium) are the appropriate cleanup goals for this site. The RSRL for arsenic is 10 mg/Kg. Because this is below the arsenic GPL of 290 mg/kg, the RSRL will be used as the cleanup goal for arsenic.
- TCLP analyses indicate that some soil may be classified as hazardous waste if it is disposed offsite. The total volume of soil that may be classified as hazardous waste is not quantifiable with any degree of certainty with the data collected to date. Additional characterization of these areas may be conducted if the area is excavated as part of the remedial actions.
- Kleinfelder recommends that the feasibility of remedial strategies be evaluated for the site. Possible strategies include excavation and disposal, treatment or stabilization of soils, capping, or some combination of these strategies.

# 1 INTRODUCTION

## 1.1. Project Objectives

The City of Tucson (COT) plans to redevelop the former ore mill site and surrounding property (Site) as open space parkland for public use. The Site is located on the north side of Speedway Boulevard between Greasewood and Silverbell Roads in Tucson, Pima County, Arizona (Figure 1). Previous investigations (Kleinfelder, 2006a, 2006b, 2006c, 2007a) reported concentrations of lead, arsenic, and cadmium greater than the Arizona Department of Environmental Quality (ADEQ) Residential Soil Remediation Limits (RSRLs) in surficial soil on a portion of the Site. Kleinfelder was contracted by City of Tucson Environmental Services (COT-ES) to conduct additional characterization of the distribution of arsenic, cadmium, lead and tungsten in soil at the Site. Kleinfelder prepared a *Work Plan for Characterization of Metals in Soil* (Work Plan) (Kleinfelder 2007b) for the Site. This report presents the results of the work plan.

The Work Plan presents a methodology for the characterization of the vertical extents and refines the horizontal extents of lead, arsenic, cadmium and tungsten concentrations in soils located on the Site. The horizontal extents of the lead, arsenic, and cadmium were characterized and documented in previous Kleinfelder reports (Kleinfelder 2006a, 2006b, 2006c, 2007a). The Work Plan was prepared in accordance with Arizona Revised Statues (A.R.S.) § 49-171 through § 49-188, and the Voluntary Remediation Program (VRP) Fee Rule (Arizona Administrative Code [A.A.C.] R18-7-501 through R18-7-507). The ADEQ approved the Work Plan on April 9, 2007. Kleinfelder was given the notice to proceed with the implementation of the Work Plan by the COT-ES on April 26, 2007.

The data collected through the implementation of the Work Plan, in conjunction with results of previous investigations, is to be used to formulate remedial options. This report discusses results of the Work Plan implementation, including soil sample collection methodology, screening of the soil by X-ray fluorescence (XRF)

measurements, the collection of soil samples for laboratory analysis, and a discussion of the horizontal and vertical distribution of metals at the site.

## 1.2. Conceptual Site Model

The scope of work and rationale for the drilling activities and decision matrix, as described in the Work Plan, were based on a conceptual site model (CSM). The CSM is partially based on the archeological report "History of the Ore Mill Site" prepared by Desert Archeology, Inc., (Desert Archeology, 2006) for the Site. The report stated that a portion of the property had been used as a mill to process tungsten ore during World War II.

The CSM is based on the assumption that ore was stored, handled and processed at the ground surface. There was no assumption that ore was ever covered by "clean soil". According to the CSM, the depth where XRF measurements indicated that concentrations of metals of concern are below the applicable RSRLs, it was concluded that remnant ore is no longer a major component of the soil. At this depth, drilling was stopped and the confirmatory laboratory sample was collected.

The CSM assumes that soil at the site prior to any ore milling activities met the RSRLs. Based on the site-wide surface sampling conducted during a previous investigation, this assumption is reasonable. Surface and near–surface soils exceeded the RSRLs only where milling activities were concentrated, that is, in the north central portion of the site including the mill foundations in an area of about 2.5 acres. In the remaining 26 acres of the site, surface and near-surface soils met the RSRLs (with the exception of the two unauthorized dumping piles to the east.). The aerial extent of RSRL exceedences suggests that there is a veneer of remnant ore (the thickness of which is determined by this phase of the investigation) in the north central portion of the site that has covered the native soils. Outside of the north central portion of the site, ore material was not stored and thus the surface soils appear to reflect native soil conditions. While the sampling data collected to date cannot preclude the possibility that there may be native

soil at the site that does not meet the RSRLs, there is no evidence at this time that such soil exists.

The CSM does not assume that metals concentrations will necessarily decline steadily with depth. Metals concentrations within the veneer of remnant ore may increase, decrease, or remain consistent with depth, depending on the ore that was being milled at the time. The CSM does assume that the metals concentrations will decline below the veneer of remnant ore to levels consistent with those in native soil surrounding the north central portion of the site.

# 2 SITE INFORMATION

## 2.1. Site Description

The Site is located on the north side of Speedway Boulevard between Greasewood and Silverbell Roads, near the proposed extension of La Cholla Boulevard. The cadastral description of the area is within the SW ¼ of Section 3, Township 14 South, Range 13 East of the Salt River Baseline and Meridian. Based on information provided by the COT-ES, the City of Tucson intends to improve the 29-acre property for use as an open space park with walking trails and interpretative signage.

The property is predominantly undeveloped land with native vegetation. Several dirt roads and walking trails cross the Site. An active wash, which trends approximately east-west, forms the northern portion of the property. An historic ore mill once operated at the Site. The physical above-grade structures and equipment for the ore mill no longer exist. However, two concrete features (possibly settling basins) and the concrete footings for the dirt floored former structure that contained at least four rooms are present. In addition, a circular slab, likely for a former water tank and a small brick foundation are also present at the Site. Apparent remnants of ore piles are located between a concrete slab and a small pit next to the footings. Possible ore fragments (dark gravel) are present on each side of the dirt road south of the mill. Two areas of apparent unauthorized dumping are present to the east of the former ore mill. These areas contain broken glass, pottery fragments, building debris, and evidence of fire damage including metal slag material. The City of Tucson posted warning signs at the property and erected fences to isolate the former ore mill and the two areas of apparent unauthorized dumping as a result of metals concentrations reported in the soil.

## 2.2. Regional and Site Geology

The Site is located in the Tucson Basin, which lies within the Basin and Range physiographic province of southern Arizona. The Tucson Basin is a structural

depression characterized by broad sloping valleys and north to northwesterly trending mountain ranges.

The Tucson Basin is an alluvial valley filled with Cenozoic sedimentary deposits. The alluvial deposits extend to a maximum depth of approximately 12,000 feet below ground surface (Oppenheimer, 1980) and consist of consolidated to unconsolidated sands and gravels with silt and clay layers. The sediments unconformably overlie various igneous, metamorphic, volcanic, and sedimentary rocks associated with the surrounding mountains.

Soils exposed at the Site generally consist of silts, sands and gravels. These materials are typical of alluvial deposits in the Tucson Basin.

## 2.3. Regional and Site Hydrogeology

The water-bearing formations in the Tucson Basin consist of the basin-fill sediments. The regional aquifer has been divided into an upper and lower unit, separated by a layer of interbedded fine-grained sediments. These sediments are considered to be a potentially semi-confining layer (Andersen, 1988).

The depth to groundwater in the area of the Site is approximately 90 to 145 feet bgs (Murphy 1982). The City of Tucson has an inactive water production well, PK-4, located approximately 1,500 feet east northeast of the ore mill foundations. In September 2006, COT-ES measured the depth to water in PK-4 at 165 feet (City of Tucson, 2007). The general direction of groundwater flow in the vicinity of the subject property is in a northwesterly direction (Murphy 1982).

## 2.4. Site Topography and Drainage

Anklam Wash, which flows from west to east, is present in the northern portion of the Site near the northern most extent of the former ore mill. There is approximately 30 feet of elevation difference between the floor of the wash and the location of the former ore mill Site. Also a small drainage channel, trending northeast-southwest, exists immediately to the south and east of the Site. Drainage from the Site is into these two channels and then to the east.

## 2.5. Previous Site Characterization

Historically, the ore mill operated in the north central portion of the property. The former ore mill processed tungsten ore during World War II (Desert Archaeology Inc, 2006). The Ore Mill has been abandoned and only remnants of the structures remain on the property.

The first evidence of elevated metal concentrations in soil was identified in July 2006, when Kleinfelder collected 18 soil samples at the Site, primarily in the immediate area of the former ore mill structures. The laboratory reported elevated concentrations of lead, arsenic and cadmium in the samples. Kleinfelder presented the sampling results in a *Limited Phase II Assessment* report dated August 30, 2006.

During September 2006, Kleinfelder conducted additional field activities over the entire property to characterize the areal extent of Resource Conservation and Recovery Act (RCRA) Eight Metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) and tungsten in the soil. The characterization was conducted in phases and included an X-Ray Fluorescence (XRF) survey on insitu samples and collection/laboratory analysis of soil samples. Ninety-three (93) XRF survey points and 78 laboratory analyses were included in the characterization. The results of the characterization indicate three areas where concentrations of lead, arsenic, and/or cadmium exceeded the ADEQ RSRLs. The ADEQ RSRLs for these metals are 400

milligrams per kilogram (mg/kg) for lead, 10 mg/kg for arsenic, and 39 mg/kg for cadmium.

Three portions of the site were reported to contain elevated concentrations of metals. The first portion of the Site investigated encompassed the former ore mill foundations and its periphery. Lead, arsenic, and cadmium are reported to exceed the RSRLs in the surficial soils in this area. In this area, the maximum lead concentration is reported at 28,000 mg/kg, the maximum arsenic concentration is reported at 1,500 mg/kg, and the maximum cadmium concentration is reported at 43 mg/kg. The areal extent of the arsenic and cadmium concentrations exceeding the RSRLs is contained within the areal extent of the lead concentrations exceeding the RSRLs (Kleinfelder, 2006a, 2006b, 2006c, 2007a).

The second and third portions of the Site apparently were unauthorized dumping piles. The piles were located to the east of the former ore mill site. They do not appear to be related to the tungsten ore milling activities and are limited in area. These two areas were not characterized horizontally or vertically. Lead concentrations in these areas range from 1,500 to 22,000 mg/kg (Kleinfelder, 2006a, 2006b, 2006c).

# 3 CHARACTERIZATION OF METALS IN SOIL

Following is a description of the additional characterization of metals in soil for the Ore Mill site. The concentration of arsenic, cadmium, lead and tungsten was screened by hand-held XRF instrumentation. These screening measurements were utilized in the selection of soil samples to be analyzed at a fixed-based laboratory. The data from the laboratory analytical samples were used for characterization of the metal concentrations in the soil. See Section 3.2.5 for the comparison of the XRF measurements and the laboratory concentrations. In addition, the laboratory concentrations of metals in soil, which exceeded a RSRL, were mapped. See Section 3.2.8 for the estimated volume of soil which may require remediation.

The reference values used for this characterization were the ADEQ RSRLs for lead, arsenic and cadmium. There is no ADEQ RSRL for tungsten. Based upon previous investigations at the Site, the areal boundaries of arsenic and cadmium concentrations that are greater than the RSRLs are contained within the areal boundary of lead concentrations that are greater than the RSRL for lead. The Site is characterized using lead as an indicator for the other metals of concern. Consideration was also given to the published ADEQ Groundwater Protection Levels (GPLs) and the site specification GPLs. These values are reported for comparison purposes on the tables and selected figures.

## 3.1. Sample Grid Layout

On May 2, 2007, Kleinfelder laid out the proposed 60 foot by 60 foot sampling grid at the Site. The grid was laid out according to Figure 2. Sample locations were modified based on direct push drilling rig access and the locations of previous sample points indicated in the field by colored flagging. The 50 soil sampling locations for the vertical characterization of metals in soil were marked by a red flag, to distinguish the soil sample locations from this sampling event from previous sampling events.

Layout of the soil sampling locations was first attempted using a Global Positioning System (GPS), 3–meter instrument. However, the accuracy on the GPS at that time of day on May 2, 2007 was between 16 and 26 feet. Therefore, the grid was laid out using a level and Brunton compass.

Kleinfelder found a wooden stake marking the location of former sample location B-4, a point in the 200 foot by 200 foot sampling grid from an earlier investigation phase. This point was used as the base point for the grid layout. The level was set-up over former sample location B-4 and the Brunton compass was used to orient the line of sight of the level south-to-north. This established visual control for the baseline from former sampling location B-4 through former sampling point B-3. At the northern end of the baseline, an orange flag marking the location for sample point S-35 was found. Once this baseline had been established, the level was moved north to sampling point S112. The grid lines to the east of the baseline were then established. This process was continued as the east-west grid lines north of S112 were placed from south to north. Due to terrain and vegetative conditions, the distance between each point was measured by pacing along the line maintained by line of sight from the level. An adjustment to the grid was made for sample locations S115 through S117. A flag marking the location of former soil sample location S-38 was located in the field and the location for soil sample S115 was changed to place S115 south of former soil sample location S-38. Once this modification to the orientation of the line between S114 and S115 had been made, it was maintained. Once this line from S114 to S117 had been established the north-south oriented grid lines were extended and measured from those sampling points.

For the sample points that were not located on the grid, they were placed based on previously existing flagged locations, accessibility, and geometric relationship between existing and new sample locations.

## 3.2. Site Characterization Activities

The following sections outline field and laboratory activities for the Site characterization. The layout of the soil sampling locations was completed on May 2, 2007. The XRF measurements and laboratory soil sampling were completed from May 8, 2007 through May 10, 2007.

### 3.2.1. Pre-field Work Preparation and Notifications

Before conducting intrusive investigation, Arizona Blue Stake was notified for the location of public utilities on the Site. Prior to beginning direct push sample collection, all public utilities responded with "no conflict" for public utilities located within the proposed investigation area.

### 3.2.2. Site Characterization Field Activities

The Site was characterized using an XRF field instrument with confirmatory fixed-based laboratory analysis. Specifically, XRF measurements were first conducted at surface and then at 6-inch depth sample intervals until either the:

- lead concentration was below the RSRL and the arsenic and cadmium were below their respective RSRLs *or* the instrument detection limit, or
- refusal of direct push or manual excavation.

The last XRF sample (i.e., deepest sample) was transferred to a laboratory supplied container for fixed-based laboratory analysis. Additional selected soil samples containing lead, cadmium or arsenic at XRF measured concentrations greater than the RSRL were analyzed for lead, arsenic, cadmium, and tungsten at a fixed-base laboratory for correlative purposes. Seven blind duplicate laboratory samples were also collected for laboratory quality control.

#### 3.2.2.1. Soil Sample Location

The position of each soil sample location was established by a handheld GPS, 3–meter instrument. The accuracy of the GPS ranged from 7 to 13 feet during the three days of soil sample collection.

#### 3.2.2.2. XRF Soil Sample Collection

Soil sample collection was first attempted by the direct push drill rig operated by Johnson Environmental Technologies (JET). Of the planned 50 soil sample locations, only 24 were accessible using the direct push drill rig. The direct push rig was positioned above the flag marking the sampling location. The macro-core sampler was pushed to a total depth of 3 feet bgs. If direct push refusal occurred, one adjacent boring was advanced in an attempt to get beyond the obstruction. If the second attempt failed to reach a depth of 3 feet bgs, no other attempts were made at that location.

The sampler was retrieved, opened and the plastic liner removed, capped and brought to the sample work station for testing with the XRF instrument and soil sample processing. The ground surface was marked on the outside of the plastic liner and the recovery within the liner was divided into six equal parts, each portion representing a 6-inch depth interval. The XRF measurements for the core samples were collected through the thin-walled plastic of the sampler at the distances that represented 6-inch depth intervals.

Due to the presence of the ore mill foundation and steep slopes surrounding and to the north of the foundation, the 26 remaining soil sample locations were excavated manually. The soil samples were excavated using a hand auger or other tools. The soil sample was placed into a plastic Ziploc bag and measured with the XRF instrument.

After the direct push or manual excavation was completed, the soil borings were backfilled with native materials and a red pin flag with the sample location name was placed at each sample location for future reference.

3.2.2.3. XRF Analyses

The XRF analyses were conducted using an Innov-X Systems, Inc. (Innov-X) 4000, Environmental Metals in Soil Analyzer mode. The unit was operated in accordance to the manufacturer's directions including field standardization prior to use and at the required frequency during the day. The measurement time was set for 90 seconds.

A surface data point was measured at each soil sample location on May 8, 2007 prior to soil sampling for vertical characterization. Each sample point was prepared by lightly brushing the ground surface to remove vegetation and loose soil and tamped down to create a smooth surface for the XRF instrument.

The vertical extent of metals in soil was characterized by screening the samples using the XRF instrument. The soil samples were collected by direct push and manual methods (see Section 3.2.2.2). Beginning with the first six inch interval, the soil was tested and the test results recorded both manually and electronically. The XRF instrument recorded the concentration of the metals in the soil within a range of accuracy of the measurement, expressed as a plus or minus value in mg/kg. If the XRF instrument measured lead at a concentration of 400 mg/kg or greater, including any positive accuracy adjustment to the measured concentration, the criteria to terminate sampling at this location was not met. Testing of the soil continued until the lead concentration was measured by the XRF instrument to be less than 400 mg/kg including any positive accuracy adjustment. Additional consideration was given to the XRF concentration for arsenic, cadmium, and tungsten. Should the reported concentration of arsenic significantly exceed 10 mg/kg, testing of the soil on six inch intervals continued until the concentration of arsenic was approximately 10 mg/kg and lead was less than 400 mg/kg.

#### 3.2.2.4. Limitations of the XRF instrument

The XRF instrument arrived from Innov-X calibrated for lead, cadmium, arsenic, and tungsten. The XRF instrument reported a concentration and an accuracy range for each metal. The limit of detection (LOD) and accuracy range for each metal varied from soil sample to soil sample (also see section 3.2.4).

### 3.2.3. Laboratory Soil Samples and Duplicates

After the XRF measurements were completed at a soil sample location, one soil sample for confirmatory laboratory analysis was collected. This confirmatory laboratory soil sample was collected at the shallowest depth where the XRF instrument measured the concentration of lead to be less than 400 mg/kg and the concentration of arsenic was approximately 10 mg/kg or less. For a soil sample collected by direct push, the plastic liner was cut and the soil poured into the laboratory supplied 4-ounce glass jar. For the soil samples collected by manual excavation, the Ziploc plastic bag was opened and the soil poured into the laboratory supplied 4-ounce glass jar.

The Work Plan outlined the collection of additional soil samples to support correlation between the results of the XRF measurements and the laboratory analysis. Fifteen (15) additional samples were collected at the soil sample locations according to one or more of these criteria:

- where the XRF instrument measured concentrations of arsenic, cadmium, lead and tungsten; or
- where the XRF instrument measured a concentration of one or more of the metals that was above, below or approximately equal to the applicable RSRL.

Three additional samples, plus the normal confirmatory laboratory soil sample, were collected at location S143 to provide a laboratory concentration based profile of the soils in the east-west trending wash on the northern perimeter of the Site. Seven blind laboratory duplicate samples were submitted to the laboratory.

The soil samples were submitted to a fixed base laboratory, Aerotech Environmental Laboratories (Aerotech) for total lead, total arsenic, total tungsten and total cadmium analyses by United States Environmental Protection Agency (U.S. EPA) Test Method 6010B. Aerotech reported the results as a Level IV data package.

### 3.2.4. XRF Measurements and Laboratory Results Discussion

A total of 50 confirmatory laboratory soil samples were collected. One confirmatory laboratory soil sample was collected from each soil boring. At 38 of the 50 locations, that sample was collected at the first depth which XRF instrument measured a concentration of lead that was less than 400 mg/kg. At 12 of the 50 locations, the confirmatory laboratory sample was collected before the XRF measured concentration of lead was less than 400 mg/kg due to refusal of the manual excavation.

Of the 38 soil samples collected, based on XRF measurements of the lead concentration of less than 400 mg/kg, the laboratory subsequently reported lead concentrations greater than 400 mg/kg in eight of those samples. In addition, the laboratory reported arsenic above the RSRL of 10 mg/kg in four samples where the XRF instrument measured the concentration of arsenic to be less than the LOD for that sample. Kleinfelder requested that the laboratory retest these samples for lead and arsenic. The laboratory was able to re-analyze the original digest for each of those samples. The results of the reanalysis tended to confirm the original laboratory results (see Section 3.2.6 for a discussion of the reanalysis).

Summaries of the XRF measurements and laboratory data are provided in Table 1 and Table 2, respectively. Table 3 presents a comparison of the XRF measurements and laboratory analytical data and the rationale for the collection confirmatory laboratory samples. Table 4 provides a comparison of the laboratory duplicate data.

#### 3.2.4.1. Distribution of Lead and Arsenic Concentrations above the Applicable RSRL

Based on the XRF screening data, the Site was divided into four areas. Area A is the native desert located south of the existing building foundations which contains soil samples locations S101 through S121. Area B includes the existing building foundations and those portions of the property to the east, west and north, excluding the east-west trending wash. It is defined as being north of Area A to the line of soil sample locations S135 through S139 (inclusive). Area C is the east-west trending wash on the northern perimeter of the Site and includes soil sample locations S140 through S144. Area D includes the isolated unauthorized dumping piles located northeast of the main ore mill Site. Figure 2 presents the locations of the additional characterization of metal in soils sampling locations and the divisions of the soil sampling locations into areas. A discussion of each area follows.

**Area A**

Except for soil sample location S119, the soil samples in Area A were collected by direct push drilling. The XRF measurements indicated that the concentration of lead was greater than 400 mg/kg at ground surface at these sample locations except sample locations S101 and S104. The XRF measurements indicated that the concentration of lead was less than 400 mg/kg at 0.5 feet bgs, except for soil sample location S119. At sample location S119, the concentration of lead exceeded 400 mg/kg until approximately 1.5 feet bgs. The XRF measurement of lead at 1.5 feet bgs was 359 mg/kg.

The XRF measurements indicated that the concentrations of lead and arsenic above the applicable RSRL were generally confined to the ground surface. However, the laboratory reported that the concentration of lead in the laboratory confirmatory soil samples from locations S107, S109, S111, S116, S117 and S119, collected from 0.5 feet bgs (1.5 feet bgs for location S119), exceeded 400 mg/kg. In addition, the laboratory reported the concentration of arsenic was above 10 mg/kg from sample

locations S109, S116 and S119, collected from 0.5 feet bgs (1.5 feet bgs for location S119). Kleinfelder requested that the laboratory re-analyze the six samples for lead and arsenic. The results of the reanalysis confirmed that the concentration of lead at those sample locations exceeded 400 mg/kg. The results of the reanalysis were, in general, consistent with the original data (see section 3.2.6).

**Area B**

For this area, sample locations S123, S124, S125, S127 and S130 were within the building foundation footprint. With the exception of sample locations S122, S123 and S128, the soil samples in this area were collected by manual excavation. The XRF measurements indicated that the concentration of lead was greater than 400 mg/kg at ground surface at the sample points, excluding S134 and S135. Within Area B, the maximum depth that the XRF measurements indicated the concentration of lead was greater than the RSRL, was 4.5 feet bgs. Arsenic was also reported by the laboratory at a concentration greater than 10 mg/kg in the laboratory confirmatory soil samples from S124, S125, S126 and S127.

Refusal to manual excavation occurred at soil sample locations S124, S125, S126, S127, S129, S131, S132, S133, S138 and S139, at depths ranging from 1 to 4.5 feet bgs, before a soil sample was measured by the XRF instrument to have a lead concentration of less than 400 mg/kg. The laboratory reported that the concentration of lead and arsenic in the laboratory confirmatory soil sample from location S122, collected from 0.5 feet bgs, exceeded the applicable RSRL. Kleinfelder requested that the laboratory reanalyze this sample for lead and arsenic. The results of the reanalysis were in general consistent with the original results (see Section 3.2.6).

**Area C**

Soil sample location S143 was at the confluence of two gullies that drain the western portion of the Site. Soil sample location S140 was located at the outfall of a gully that drains the eastern portion of the Site. At sample locations S140 and S143, the XRF

measurements indicated that the concentration of lead increased with depth. The concentration of lead then decreased but remained greater than 400 mg/kg, before increasing again with depth. At both of these locations, refusal to manual excavation was reached before a soil sample with XRF measurements less than the applicable RSRLs was obtained. Arsenic was also reported by the laboratory at a concentration greater than the RSRL in the laboratory confirmatory soil sample from S143 at 2.5 feet bgs. To verify the increase in lead concentration with depth, another soil boring S143-offset, was manually excavated to refusal, at a depth of two feet bgs, approximately 10 feet north of S143. The XRF measurements at S143-offset also showed the trend of increasing lead and arsenic concentrations with depth.

The CSM was developed to address the area within the ore processing facility, not within the area of Anklam Wash. Within the wash, the XRF measurements indicated a pattern of increasing then decreasing then increasing concentrations of lead in the soil within the wash. The upper sediments may have been deposited after cessation of operations at the Site. Ore material washed from the Site would have mixed with "clean" sediments being transported from areas upstream of the Site.

**Area D**

The soil samples in this area were collected by manual excavation. The XRF measurements indicated that the concentration of lead was less than 400 mg/kg at ground surface and at 0.5 feet bgs. At soil sample location S148, the XRF instrument measured the concentration of cadmium at 78 mg/kg. This concentration exceeded the RSRL of cadmium of 39 mg/kg so a soil sample was collected from 1 foot bgs at this location. The laboratory did not report a concentration of the any metal which exceeded the applicable RSRL. Based on the XRF and laboratory data, the horizontal extent of the soils in Area D has been characterized.

### 3.2.5. Data Review

Kleinfelder charted the XRF instrument measurements and laboratory data for each sample location. Charts 1 through 4 provide a visual comparison of the data for arsenic, cadmium, lead, and tungsten, respectively. The plots indicate that the XRF instrument tended to measure a higher concentration of arsenic and cadmium in the soil than the concentrations reported from the laboratory analysis. For lead and tungsten the XRF measurement tended to measure a lower concentration of lead and tungsten in the soil as compared to the laboratory analysis.

Kleinfelder conducted an in-house data review of the XRF and laboratory analytical results. The results of the laboratory confirmatory analysis and field XRF analysis were evaluated with a least squares regression analysis using the LINEST function in Excel®. LINEST was selected because it is an array function calculating the slope of the line, y-intercept and the coefficient of determination ($R^2$). The United States EPA Method 6200, Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment, section 9.7 states:

- "The correlation coefficient ($R^2$) for the results should be 0.7 or greater for the FPXRF data to be considered screening level data. If the $R^2$ is 0.9 or greater and inferential statistics indicate the FPXRF data and the confirmatory data are statistically equivalent at a 99 percent confidence level, the data could potentially meet definitive level data criteria."

The acronym FPXRF refers to "field portable X-ray fluorescence equipment" which was used in this study. Table 5 provides the rationale for the collection of the additional samples used to provide data for the least squares regression analysis.

To perform the least squares regression analysis, the data set was reduced to only those samples where both the XRF and laboratory reported concentrations of an analyte. For arsenic, 21 data points were evaluated. For cadmium, 6 data points were evaluated. For lead, 68 data points were evaluated. For tungsten, 37 data points were

evaluated. The data points used in the least squares regression analysis and the results of the analyses can be found in Table 6.

The laboratory analytical results review was performed by a Kleinfelder employee not involved in the project. Kleinfelder implemented procedures to provide that the laboratory data collected was of known and documented quality and useful for decision-making purposes. In accomplishing this goal, the data collected during the project was definitive data. Definitive data measures chemical analysis (inorganic parameters) using U.S. EPA procedures and produces information that can be used in risk assessments, site characterizations, and remedial alternative evaluations.

The soil samples were submitted to Aerotech for chemical analyses for arsenic, cadmium, lead and tungsten according to EPA method 6010B. Aerotech is a State of Arizona licensed laboratory for metals of concern, excluding tungsten. The reliability and credibility of analytical laboratory results is corroborated by Aerotech's in-house quality assurance and quality control (QA/QC) program. Regularly scheduled analyses of known duplicates, standards, and spike samples are a routine aspect of data reduction, validation, and reporting procedures.

A Case Narrative describing the analytical methods, laboratory accreditation, analytical comments and data qualifiers was provided by Aerotech. The analytical comments section of the narrative confirms that the method blanks and laboratory control spikes met method and quality control objectives for the analyses.

The data qualifier section of the narrative lists the qualifiers noted in the analytical report. The analytical samples required dilution by the laboratory for one or more of the analyses due to the matrix or high concentration of one or more of the target metals. The data qualifier D1 was noted if the sample was diluted due to the matrix. The data qualifier D2 was noted if the sample was diluted because of high concentration of one or more of the target metals. The data qualifier T2 was noted for the analyze tungsten for all samples, method blanks, laboratory control spikes and method spike samples.

The data qualifier T2 indicates that the cited ADHS license method does not contain tungsten as part of the method compound list. Three additional data qualifiers, which applied to the laboratory spike and duplicate samples, were listed in the case narrative. The result of the data review is that the laboratory data can be relied upon for use in determining the appropriate remedial action.

### 3.2.6. Laboratory Reanalysis of Select Samples

During the comparison of the laboratory and XRF data, Kleinfelder identified eight sample locations where the concentrations of lead, measured by the XRF instrument, were below 400 mg/kg. However, the laboratory reported concentrations of lead in the confirmatory samples which exceeded 400 mg/kg. In addition, the laboratory reported concentrations for arsenic and tungsten above the concentrations measured by the XRF instrument. Kleinfelder requested that the laboratory reanalyze eight samples from the original digested material to confirm the initial reported concentrations. The reanalysis confirmed the original concentrations for lead as being above 400 mg/kg. The results of the original analysis and reanalysis are summarized on Table 7.

### 3.2.7. Toxicity Characteristic Leaching Procedure (TCLP) Analysis

#### 3.2.7.1. Selection of Samples for Toxic Characteristic Leaching Procedure Analysis

In a letter to the COT-ES, dated June 21, 2007 the ADEQ refers to the requirements to qualify for a "No Further Action" determination. The ADEQ letter cites A.C.C. R18-7-203B: "all remediation must be completed so that the remaining contaminant concentrations are protective of groundwater, are not characteristic of hazardous wastes, and do not threaten ecological receptors." The letter further states that "The assumption that the rSRLs are the cleanup standards for this site is incorrect." The term rSRL is equivalent to the RSRL used in this report.

At the request of the COT-ES, Kleinfelder instructed Aerotech to analyze 18 soil samples using the Toxicity Characteristic Leaching Procedure (TCLP) in May 2007. TCLP analyses of selected samples were conducted to: 1) evaluate whether the soil would be considered a hazardous waste if it is to be removed; and 2) to allow for calculation of site specific groundwater protection levels. The TCLP is designed to evaluate the mobility of organic and inorganic compounds from solid or liquid materials. Should the measured concentration, in milligrams per liter (mg/L), exceed the listed maximum concentration of contaminants for toxicity characteristic (MCCTC), the material being tested is considered to exhibit characteristics of a hazardous waste. From the samples submitted for TCLP analysis during this investigation, the laboratory reported concentrations which exceed the MCCTC for lead in four soils samples collected from three separate locations. Additionally, for one of these soil samples, the laboratory reported a concentration of cadmium that exceeds the MCCTC. Table 8 provides a summary of the TCLP analytical results for July 2006 and May 2007.

Kleinfelder used TCLP data from July 2006 and May 2007 to calculate a site-specific groundwater protection level (GPL) for the Site. Kleinfelder used the procedure outlined in *Appendix C* of *A Screening Method to Determine Soil Concentrations Protective of Groundwater Quality*. For cadmium, where the laboratory reported a concentration of <0.25 mg/L, Kleinfelder did not use the TCLP data in the calculation of a site-specific GPL. The site-specific GPL calculated for lead was 927.5 mg/kg. The site specific GPL calculated for cadmium was 52.5 mg/kg. Table 9 provides the summary of the calculation of the site-specific GPL for lead and cadmium.

#### 3.2.7.2. Toxic Characteristic Leaching Procedure Results

Eighteen soil samples analyzed by TCLP methods during this investigation. Five surface soil samples were submitted for TCLP analyses during the July 2006 investigation at this site. The results of these analyses indicate that some soil may be considered hazardous waste because the TCLP result for lead and cadmium was greater than the MCCTC.

There was variation in the TCLP lead concentration for samples having total lead concentrations greater than about 4000 mg/kg, but samples having total lead less than 1000 mg/kg consistently had TCLP concentrations less than the 5 mg/L MCCTC for lead. Based on these results, should the selected remedial technology for this site require testing for hazardous waste characteristics, it is proposed that samples having total lead less than 1000 mg/kg be considered non-hazardous.

### 3.2.8. Estimated Volume of Material Exceeding RSRLs

Based on this study and previous studies, the horizontal extent of surface concentrations (i.e. ground surface to one foot bgs) of lead, arsenic and cadmium greater than their respective RSRLs is shown on Figure 3. The hatched area shows where lead concentrations exceed the 400 mg/kg RSRL at the surface. Areas of arsenic and cadmium RSRL exceedences are considerably smaller and contained entirely within the hatched area.

Figure 3 shows the thickness of soil exceeding any one of the lead, cadmium, or arsenic RSRLs based on the vertical sampling conducted for this investigation. Since refusal was met at many locations, as indicated in Table 3, before soil having concentrations below the RSRLs could be reached, there has been some interpretation in the drawing of the isopach thicknesses. The isopach contours likely overestimate the total volume of soil exceeding the RSRLs; this was done to be conservative.

The thickest soil identified at the site exceeding the RSRLs was at S127. At this location arsenic (2200 mg/kg) and lead (6700 mg/kg) exceeded their respective RSRLs at the refusal, on concrete, at a depth of 4.5 feet bgs. See Photographs 9 and 10 in Appendix A. The material at this location appeared as a mound of olive yellow, silty sand with fine gravel. Soil of a similar color was also present to the south and east of location S127. The soil thickness was contoured on Figure 3 as having a thickness of five feet.

The configuration of the soil thickness indicates that the thinner impacted soils are located in Area A, which is south of where the actual milling operations took place. There may have been some stockpiling of ore in this area, resulting in the presence of remnant ore in this area. The thickness of remnant ore in Areas B and C are greater because milling operations occurred there and the area is topographically lower than the remainder of the site.

In general, the isopach thickness map represents the lead exceedences. As was the case with the horizontal delineation of RSRLs, the cadmium and arsenic exceedences were within the lead footprint. There is one exception to this, however. In the soil sample collected at S114 at a depth of 1 foot, cadmium (140 mg/kg) exceeded the RSRL while lead and arsenic both met the RSRL in the confirmatory sample. This is the only location where this occurred, and it is the reason that S-114 falls within the 2-foot ispach contour on Figure 3. Cadmium exceeded the RSRL at only one other location, in the confirmatory sample at S131 (70 mg/kg), but lead also exceeded the RSRL at the confirmatory depth, due to refusal to manual excavation.

Arsenic exceedences of the 10 mg/kg RSRL occurred where lead also exceeded its RSRL. However not all samples with lead exceedences had arsenic exceedences.

Analyses conducted during this investigation confirm what was observed in previous phases of investigation. Occurrences of arsenic and cadmium appear to be associated with elevated lead concentrations. Arsenic and cadmium RSRL exceedences are considerably smaller and appear to be entirely within the volumes of lead exceedences.

The approximate volume of material which may require remediation is based on the RSRL for lead, arsenic and cadmium is approximately 6,274 cubic yards. The square footage and estimated cubic yardage is tabulated as follows:

| Remediation Area | Square Footage | Cubic Yards |
|---|---|---|
| 1 foot isopach contour | 76,149 | 2,723 |
| 2 foot isopach contour | 9,608 | 711 |
| 3 foot isopach contour | 14,543 | 1,616 |
| 4 foot isopach contour | 7,106 | 1,053 |
| 5 foot isopach contour | 924 | 171 |
| **Total soil exceeding Lead, Arsenic or Cadmium RSRLs** | **108,330** | **6,274** |

The results of the TCLP analysis for soil sample locations S127, S131 and S138 indicated that some of the soil at these locations would be considered a hazardous waste, if removed. The volume of potential hazardous material has not been estimated due to insufficient number of soil samples associated with the potentially hazardous material.

Should the remediation solution include excavation, screening with an XRF instrument and the collection of laboratory confirmatory soil samples should be included in that remedial action plan.

### 3.3. Summary and Conclusions

The *Work Plan for Additional Characterization of the Ore Mill Site* was implemented during May 2007. The laboratory data became available during late July 2007. The results of the XRF screening and confirmatory laboratory sampling indicate concentrations of lead, arsenic, and/or cadmium greater than the RSRLs. For convenience of description, the concentrations of these metals can be grouped in four separate areas. The areas are:

- Area A. The native desert located south of the existing building foundations and consists of soil samples locations S101 through S121.
- Area B. The existing building foundations and those portions of the property to the east, west and north, excluding the east-west trending wash. It is defined as being north of Area A to the line of soil sample locations S135 through S139 (inclusive).
- Area C. The east-west trending wash on the northern perimeter of the Site and includes soil sample locations S140 through S144.

- Area D. The isolated unauthorized dumping piles located northeast of the main ore mill Site.

Soil samples collected from Area A contain lead, arsenic, and/or cadmium concentrations greater than the RSRLs from surface to depths of less than two feet bgs. The XRF screening indicated that the lead, arsenic, and/or cadmium concentrations were below the RSRLs in some of the samples collected at 0.5 feet bgs. As per the Work Plan sampling was terminated at this depth and the bottom of boring samples were sent to the laboratory for confirmatory analyses. However, the results of the confirmatory analyses indicated that the lead and/or arsenic and cadmium concentrations were greater than the RSRLs for some of these samples. Review of the sampling results indicates no significant change in the previously established horizontal extent of the metals of concern for this area. The vertical extent of the metals of concern in this area is characterized at less than two feet bgs. However the data suggests that vertical limit for most of this area is likely less than 1 foot bgs.

The soil samples collected from Areas B and C contain lead, arsenic, and/or cadmium concentrations greater than the RSRLs to a depth of two feet or more. Based upon the results of this assessment the horizontal extent of the metals in the soil is generally consistent with the area as previously reported. Vertical characterization activities were limited due to refusal to manual excavation in the building foundations, north of the building foundations, and within the wash area.

Soil samples collected from Area D contain no lead, arsenic, and/or cadmium concentrations greater than the RSRLs in the perimeter area of the unauthorized dumping piles. Based upon the data collected at the Site, the horizontal extent of metals of concern is characterized. Based on the CSM, the vertical extent of the lead, arsenic, and/or cadmium concentrations greater than the RSRLs is expected to be at the original ground surface.

The volume of the areas potentially requiring remediation was conservatively estimated using the RSRL for lead and the site characterization work competed to date. This volume is estimated at approximately 6,274 cubic yards.

In summary, the conclusions of this study are as follows:

- The laboratory results showed no appreciable change in the horizontal delineation of RSRL exceedences as presented in Kleinfelder's report titled: *Soil Quality Delineation, Former Ore Mill Site- 29 Acre parcel, North La Cholla and Speedway Boulevards* (Kleinfelder, 2006c).
- A total of 6,274 cubic yards of soil is estimated to exceed the RSRLs for lead, arsenic or cadmium. In general, cadmium and arsenic exceedences coincided with lead exceedences, with the exception of one sample location, S114.
- The thickness of soil exceeding the RSRLs has been adequately delineated in the south end of the investigation area, Area A. The thickness of soil exceeding RSRLs in the northern portion of the property, including the former ore mill foundations, has not been completely delineated due to refusal before RSRLs were met at several locations. These data gaps may be addressed when the area is remediated in the future.
- Regarding Area D, the unauthorized dumping areas appear very limited in volume. The height of these piles above the native soil is visually discernable. The two-foot thickness of soil illustrated on Figure 3 is likely a conservative estimation of the volume.
- Calculations of site specific groundwater protection levels for this site were 927.5 mg/kg for lead and 52.5 mg/kg for cadmium. Since these concentrations are above the RSRLs for lead and cadmium, the RSRLs for lead and cadmium, (400 mg/kg lead, 39 mg/kg cadmium) are the appropriate cleanup goals for this site.
- TCLP analyses indicate that some soil may be classified as hazardous waste if excavated. The total volume of soil exceeding the 5 mg/L MCCTC for lead is not quantifiable with any degree of certainty with the data collected to date.

## 3.4. Recommendations

Using the data presented in this and previous reports, the COT-ES should complete a Feasibility Study (FS) for the Site, to move the project toward the goal of redeveloping the Site as open space parkland for public use.

Possible remedial strategies include:

1. Excavation and disposal off-site;
2. Excavation and treatment or stabilization on-site, replacement and compaction into the excavated areas;
3. Excavation and treatment or stabilization on another portion of the site, clean fill brought in to backfill the excavated areas; and
4. Capping of the soils in place.

Each of these possible remediation strategies should be evaluated in a FS. Any data gaps, such as the quantity of potentially hazardous waste in the vicinity of soil sample locations S127, S131 and S138, can be addressed as part of the FS.

# 4 LIMITATIONS

## 4.1. Limitations

This report was prepared in accordance with the scope of work described in Kleinfelder's proposal to COT-ES, dated March 26, 2007. The work conducted by Kleinfelder is limited to the services explicitly stated and agreed to in the proposal and no warranty, either expressed or implied, is made.

The information provided by Kleinfelder may be used by COT-ES, the ADEQ, and their affiliates for the purposes stated, within a reasonable time from its issuance. The scope of services performed during this investigation may not be appropriate for other users, and any use or re-use of this document or the findings presented herein are at the sole risk of said user. This report is intended for use in its entirety. No excerpts may be taken to be representative of the findings of this assessment. Land or facility use, on and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Any party other than the COT-ES, the ADEQ, and their affiliates who would like to rely on this report must notify Kleinfelder of such intended use and comply with Kleinfelder's standard third-party reliance requirements, up to and including performance of additional site work. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party and client agrees to defend, indemnify, and hold Kleinfelder harmless from any claim or liability associated with such unauthorized use or non-compliance.

The services performed by Kleinfelder were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in Arizona. The property owner is solely responsible for notifying governmental agencies, if required, and the public at large, of the existence, release, treatment or disposal of any hazardous materials observed at the project site, either before, during, or after performance of Kleinfelder's services.

Kleinfelder assumes no responsibility or liability for any claim, loss of property value, damage, or injury which results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials.

The discussion and conclusions presented in this report are based on the following:

- laboratory results provided by Aerotech Environmental Laboratories;
- field observations by Kleinfelder personnel;
- information provided by COT-ES; and
- an understanding of the regulations of the State of Arizona.

It is possible that variations in subsurface conditions could exist beyond the points explored in this investigation due to site subsurface conditions that influence the limit and selection of exploration points. Also, changes in conditions could occur at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors.

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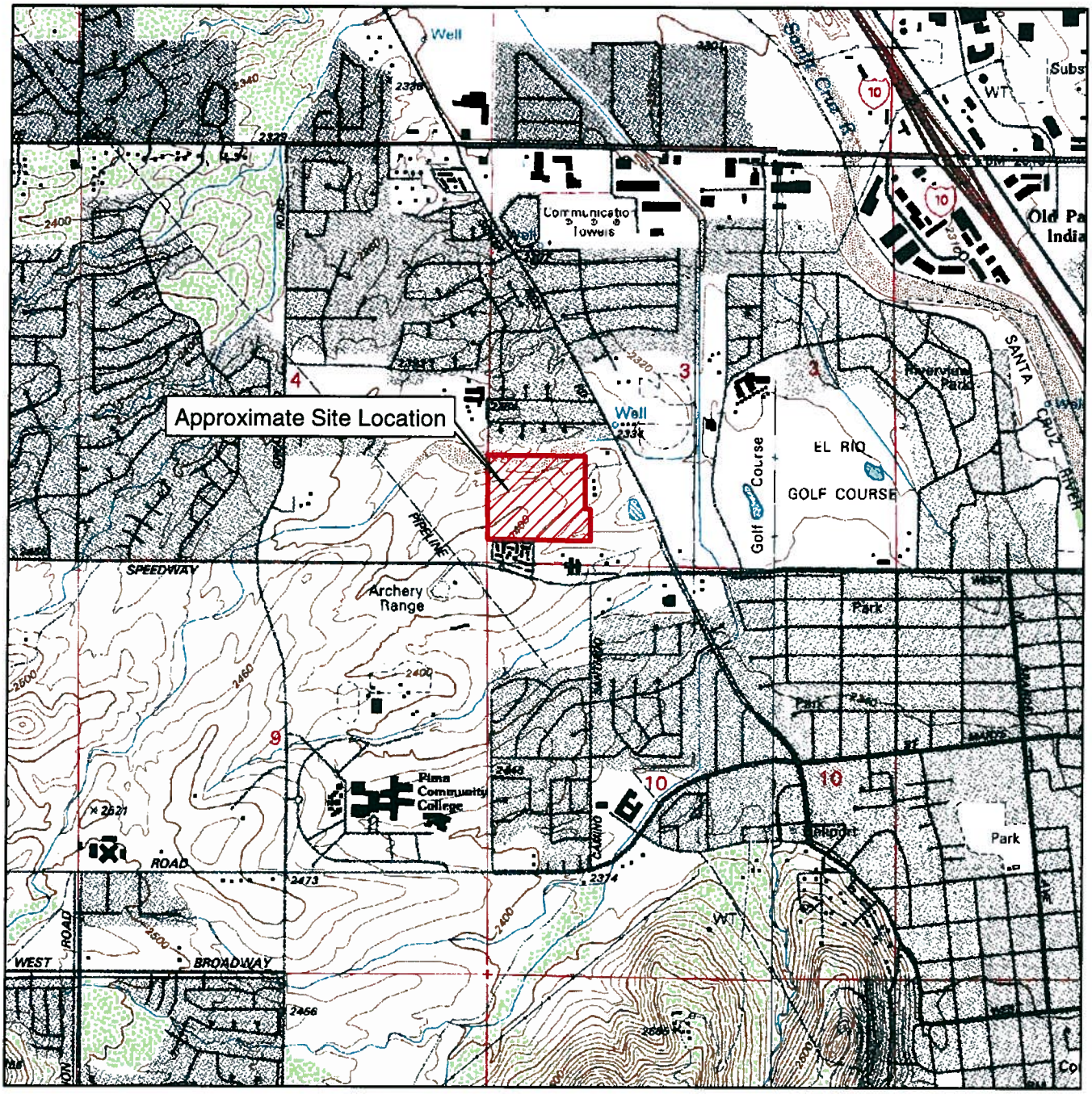
# FIGURES

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1 inch equals 2,000 feet


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# VICINITY MAP

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

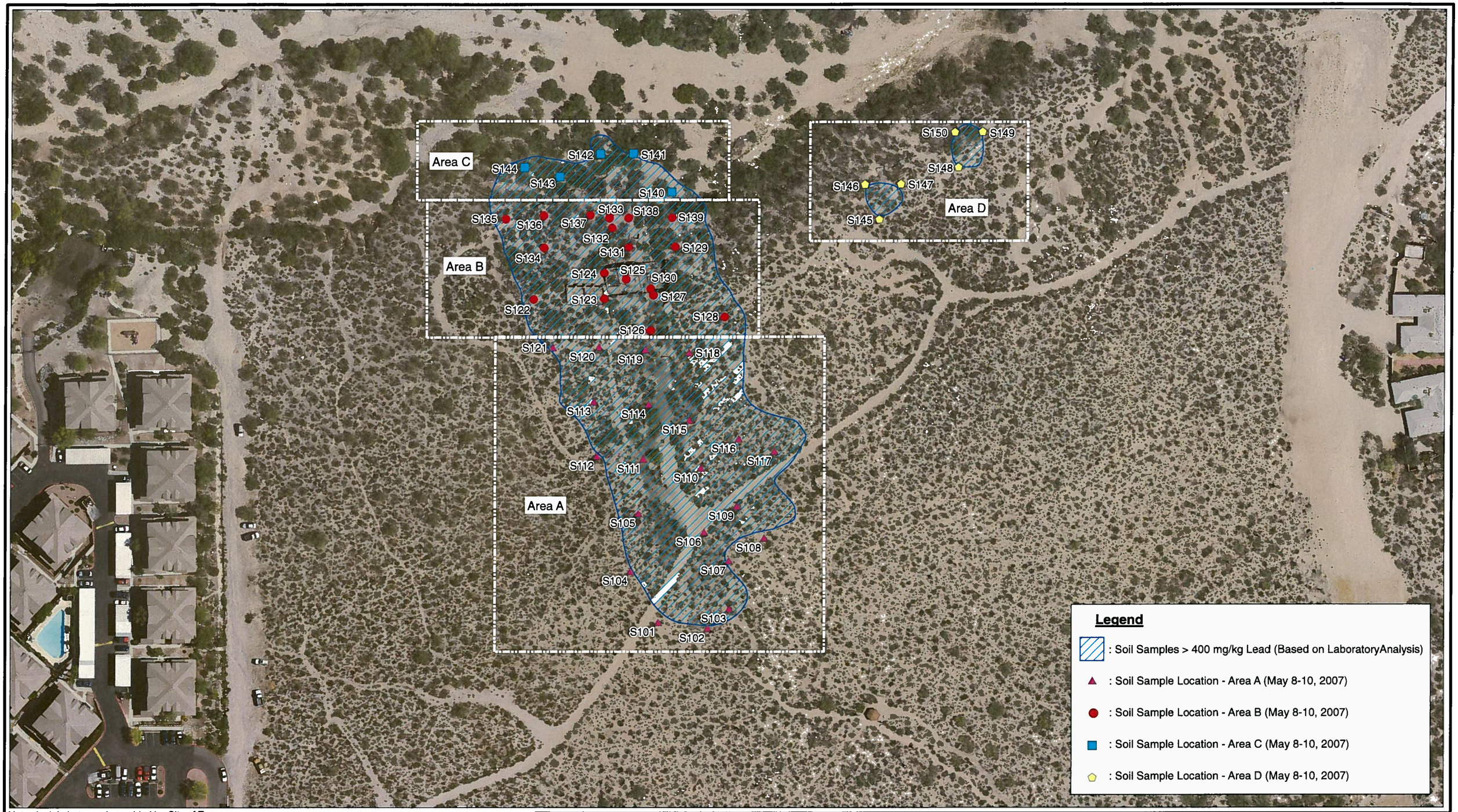
PROJECT NO: 80365 | FILE NAME: 80365-Fig1

DRAWN: 11/16/07 | REVISED:

DRAFTED BY: SAG

CHECKED BY: DEN

FIGURE: 1




Note: Aerial photograph provided by City of Tucson

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1 inch equals 100 feet

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|---|---|
| DATE DRAWN: 11/16/07 | DATE REVISED: |
| ANALYST: | DEN |
| CHECKED BY: | DEN |
| APPROVED BY: | DEM |

**Soil Sample Locations Within Areas For Characterization of Metals in Soil**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

PROJECT NUMBER: 80365 FILE NAME: 80365-Fig2.mxd

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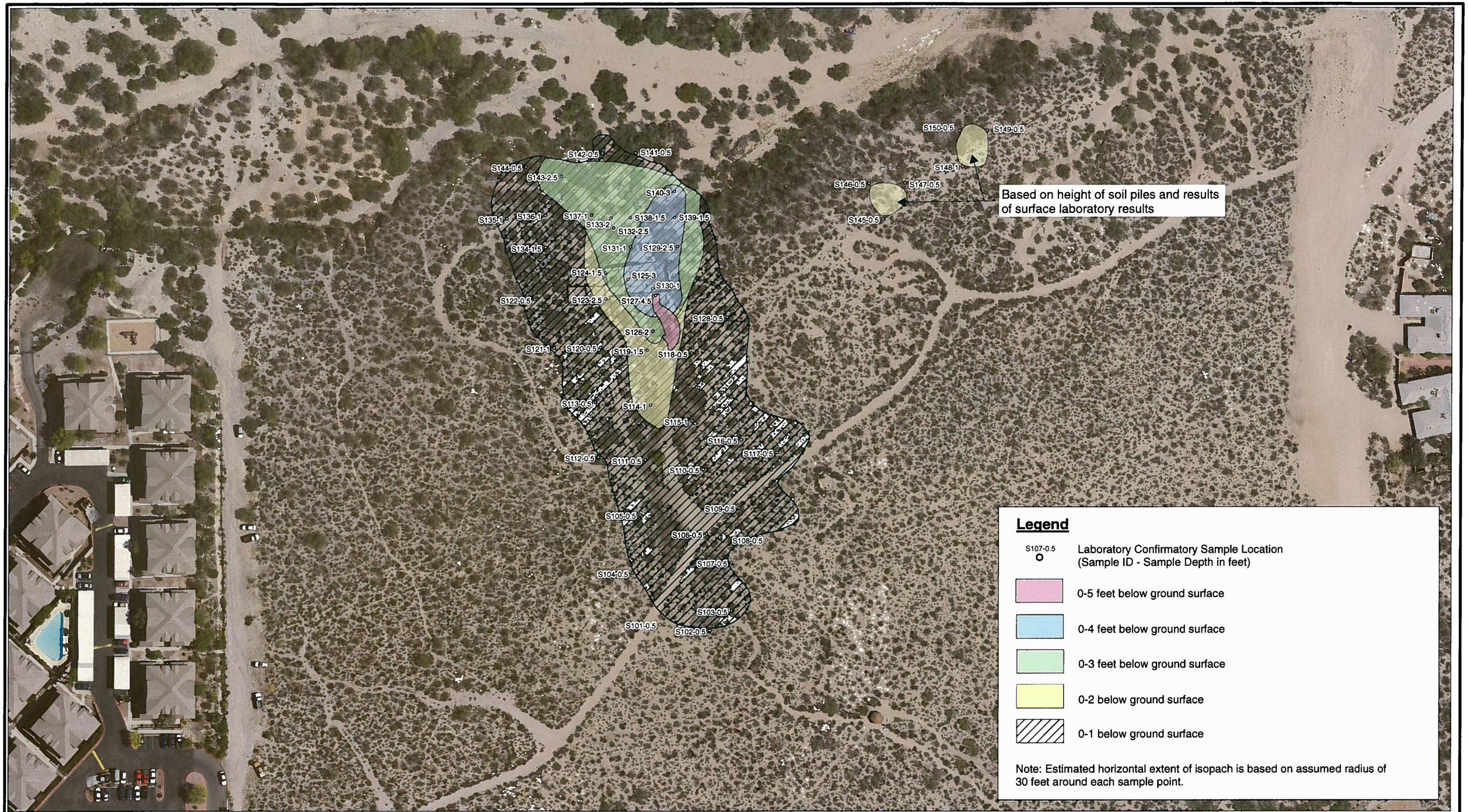
FIGURE

2




Note: Aerial photograph provided by City of Tucson

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0 50 100 200 Feet

1 inch equals 100 feet

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| ANALYST: | DEN |
| CHECKED BY: | DEN |
| APPROVED BY: | DEM |

**Isopach Map of Lead , Arsenic or Cadmium Concentrations Greater than the Residential Soil Remediation Level (RSRL)**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

PROJECT NUMBER: 80365 FILE NAME: 80365-Fig3.mxd

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FIGURE

3

# TABLES

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S101 | 00 | GS | 8-May-07 | <LOD | 15 | <LOD | 63 | 237 | 7 | 580 | 16 |
| S101 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <LOD | 61 | 22 | 3 | 14 | 4 |
| S102 | 00 | GS | 8-May-07 | 126 | 19 | <LOD | 65 | 3854 | 38 | 873 | 25 |
| S102 | 05 | 0.5 | 9-May-07 | 12 | 3 | <LOD | 59 | 50 | 4 | 64 | 6 |
| S103 | 00 | GS | 8-May-07 | <LOD | 24 | <LOD | 64 | 683 | 13 | 640 | 21 |
| S103 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 46 | 22 | 3 | 12 | 3 |
| S104 | 00 | GS | 8-May-07 | <LOD | 13 | <LOD | 59 | 205 | 6 | 268 | 11 |
| S104 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 46 | 24 | 3 | <LOD | 8 |
| S105 | 00 | GS | 8-May-07 | 26 | 8 | <LOD | 62 | 619 | 12 | 587 | 17 |
| S105 | 05 | 0.5 | 9-May-07 | <LOD | 10 | <LOD | 48 | 170 | 5 | 102 | 6 |
| S105 | 10 | 1.0 | 9-May-07 | <LOD | 4 | <LOD | 46 | 14 | 2 | <LOD | 6 |
| S106 | 00 | GS | 8-May-07 | <LOD | 45 | <LOD | 62 | 2655 | 28 | 186 | 15 |
| S106 | 05 | 0.5 | 9-May-07 | <LOD | 4 | <LOD | 48 | 16 | 3 | <LOD | 7 |
| S107 | 00 | GS | 8-May-07 | <LOD | 65 | <LOD | 69 | 4654 | 46 | 170 | 23 |
| S107 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 46 | 27 | 3 | <LOD | 7 |
| S108 | 00 | GS | 8-May-07 | <LOD | 37 | <LOD | 61 | 1834 | 21 | 469 | 17 |
| S108 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 47 | 20 | 3 | <LOD | 8 |
| S109 | 00 | GS | 8-May-07 | <LOD | 42 | <LOD | 63 | 2239 | 25 | 199 | 16 |
| S109 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 46 | 30 | 3 | <LOD | 8 |
| S110 | 00 | GS | 8-May-07 | <LOD | 19 | 59 | 19 | 507 | 10 | 41 | 7 |
| S110 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 46 | 30 | 3 | <LOD | 8 |
| S111 | 00 | GS | 8-May-07 | 130 | 29 | <LOD | 72 | 7604 | 70 | 379 | 30 |
| S111 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 48 | 16 | 3 | <LOD | 7 |
| S112 | 00 | GS | 8-May-07 | 28 | 6 | <LOD | 62 | 416 | 9 | 202 | 10 |
| S112 | 05 | 0.5 | 9-May-07 | <LOD | 4 | <LOD | 48 | 13 | 2 | <LOD | 7 |
| S113 | 00 | GS | 8-May-07 | 30 | 8 | <LOD | 63 | 755 | 13 | 46 | 9 |
| S113 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <LOD | 47 | 17 | 3 | <LOD | 8 |
| S113 | 10 | 1.0 | 10-May-07 | <LOD | 4 | <LOD | 46 | 16 | 2 | <LOD | 6 |

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S114 | 00 | GS | 8-May-07 | 456 | 33 | 87 | 24 | 10066 | 86 | 1174 | 34 |
| S114 | 05 | 0.5 | 10-May-07 | <LOD | 15 | <LOD | 48 | 397 | 8 | 913 | 17 |
| S114 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <LOD | 47 | 38 | 3 | 34 | 4 |
| S115 | 00 | GS | 8-May-07 | 94 | 14 | 64 | 21 | 2201 | 25 | 171 | 14 |
| S115 | 05 | 0.5 | 10-May-07 | 19 | 3 | <LOD | 46 | 179 | 5 | <LOD | 9 |
| S115 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <LOD | 46 | 24 | 3 | <LOD | 7 |
| S116 | 00 | GS | 8-May-07 | <LOD | 34 | <LOD | 63 | 1448 | 19 | 326 | 15 |
| S116 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <LOD | 47 | 21 | 3 | <LOD | 8 |
| S117 | 00 | GS | 8-May-07 | <LOD | 26 | <LOD | 60 | 943 | 14 | 60 | 8 |
| S117 | 05 | 0.5 | 9-May-07 | <LOD | 6 | <LOD | 48 | 31 | 3 | <LOD | 8 |
| S118 | 00 | GS | 8-May-07 | <LOD | 24 | 69 | 19 | 829 | 13 | 412 | 13 |
| S118 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <LOD | 46 | 22 | 3 | <LOD | 7 |
| S119 | 00 | GS | 8-May-07 | 80 | 13 | 65 | 21 | 2125 | 24 | 102 | 13 |
| S119 | 05 | 0.5 | 10-May-07 | 737 | 43 | <LOD | 79 | 12951 | 122 | <LOD | 130 |
| S119 | 10 | 1.0 | 10-May-07 | 204 | 50 | <LOD | 80 | 18355 | 166 | <LOD | 125 |
| S119 | 15 | 1.5 | 10-May-07 | <LOD | 16 | <LOD | 56 | 359 | 8 | 160 | 9 |
| S119 | 30 | 3.0 | 10-May-07 | 12 | 3 | <LOD | 57 | 57 | 4 | <LOD | 10 |
| S120 | 00 | GS | 8-May-07 | <LOD | 26 | <LOD | 61 | 907 | 14 | 137 | 10 |
| S120 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <LOD | 47 | 25 | 3 | <LOD | 8 |
| S121 | 00 | GS | 8-May-07 | <LOD | 40 | <LOD | 61 | 2212 | 24 | 133 | 14 |
| S121 | 05 | 0.5 | 10-May-07 | 14 | 4 | <LOD | 46 | 221 | 6 | 21 | 4 |
| S121 | 10 | 10.0 | 10-May-07 | <LOD | 6 | <LOD | 46 | 36 | 3 | <LOD | 8 |
| S122 | 00 | GS | 8-May-07 | <LOD | 45 | 66 | 21 | 2656 | 28 | 456 | 17 |
| S122 | 05 | 0.5 | 10-May-07 | <LOD | 8 | <LOD | 47 | 102 | 4 | 188 | 8 |
| S123 | 00 | GS | 8-May-07 | 201 | 16 | <LOD | 67 | 2539 | 29 | 6773 | 71 |
| S123 | 05 | 0.5 | 9-May-07 | 15 | 3 | <LOD | 55 | 109 | 5 | 57 | 5 |
| S123 | 10 | 1.0 | 9-May-07 | 20 | 3 | <LOD | 55 | 111 | 5 | 66 | 7 |
| S123 | 15 | 1.5 | 9-May-07 | 16 | 3 | <LOD | 56 | 101 | 5 | 51 | 5 |

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S123 | 20 | 2.0 | 9-May-07 | 10 | 3 | <LOD | 56 | 56 | 4 | 28 | 4 |
| S123 | 25 | 2.5 | 9-May-07 | 9 | 3 | <LOD | 56 | 60 | 4 | 23 | 4 |
| S124 | 00 | GS | 8-May-07 | 613 | 44 | <LOD | 77 | 14892 | 132 | 3233 | 54 |
| S124 | 05 | 0.5 | 9-May-07 | 1130 | 44 | <LOD | 75 | 14789 | 129 | 4268 | 61 |
| S124 | 10 | 1.0 | 9-May-07 | 707 | 31 | <LOD | 68 | 8960 | 75 | 2704 | 42 |
| S124 | 15 | 1.5 | 9-May-07 | 298 | 19 | <LOD | 63 | 3820 | 36 | 1059 | 24 |
| S125 | 00 | GS | 8-May-07 | 497 | 39 | <LOD | 82 | 10702 | 104 | 8863 | 107 |
| S125 | 05 | 0.5 | 9-May-07 | 49 | 7 | <LOD | 60 | 559 | 11 | 166 | 9 |
| S125 | 10 | 1.0 | 9-May-07 | 206 | 21 | 79 | 22 | 4627 | 44 | 2888 | 45 |
| S125 | 15 | 1.5 | 9-May-07 | 87 | 19 | 87 | 22 | 3826 | 38 | 3826 | 51 |
| S125 | 20 | 2.0 | 9-May-07 | 167 | 20 | <LOD | 65 | 4006 | 40 | 2713 | 43 |
| S125 | 25 | 2.5 | 9-May-07 | 155 | 17 | <LOD | 63 | 3141 | 32 | 2058 | 34 |
| S125 | 30 | 3.0 | 9-May-07 | 49 | 10 | <LOD | 60 | 1131 | 16 | 595 | 17 |
| S126 | 00 | GS | 8-May-07 | 200 | 16 | <LOD | 63 | 2619 | 28 | 549 | 19 |
| S126 | 05 | 0.5 | 9-May-07 | 354 | 17 | 72 | 20 | 3250 | 31 | 581 | 19 |
| S126 | 10 | 1.0 | 9-May-07 | 295 | 14 | <LOD | 59 | 2029 | 22 | 332 | 15 |
| S126 | 15 | 1.5 | 9-May-07 | 168 | 11 | <LOD | 59 | 1292 | 17 | 151 | 11 |
| S126 | 20 | 2.0 | 9-May-07 | 178 | 11 | <LOD | 60 | 1419 | 18 | 245 | 13 |
| S127 | 00 | GS | 8-May-07 | 1040 | 31 | <LOD | 73 | 6586 | 64 | 71 | 16 |
| S127 | 05 | 0.5 | 9-May-07 | 2283 | 26 | <LOD | 60 | 3038 | 30 | <LOD | 31 |
| S127 | 10 | 1.0 | 9-May-07 | 1787 | 30 | <LOD | 66 | 5961 | 53 | <LOD | 43 |
| S127 | 15 | 1.5 | 9-May-07 | 1609 | 25 | <LOD | 61 | 4462 | 40 | <LOD | 36 |
| S127 | 20 | 2.0 | 9-May-07 | 1982 | 30 | <LOD | 64 | 6110 | 53 | <LOD | 43 |
| S127 | 25 | 2.5 | 9-May-07 | 2734 | 31 | <LOD | 61 | 5098 | 44 | <LOD | 31 |
| S127 | 30 | 3.0 | 9-May-07 | 1993 | 29 | <LOD | 62 | 5677 | 48 | <LOD | 28 |
| S127 | 35 | 3.5 | 9-May-07 | 1201 | 22 | <LOD | 60 | 3935 | 35 | <LOD | 25 |
| S127 | 40 | 4.0 | 9-May-07 | 1927 | 28 | <LOD | 62 | 5394 | 46 | <LOD | 28 |
| S127 | 45 | 4.5 | 9-May-07 | 3038 | 39 | <LOD | 66 | 8677 | 71 | <LOD | 36 |

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S128 | 00 | GS | 8-May-07 | 30 | 8 | <LOD | 62 | 671 | 12 | 186 | 10 |
| S128 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <LOD | 48 | 23 | 3 | <LOD | 7 |
| S129 | 00 | GS | 8-May-07 | 49 | 11 | <LOD | 61 | 1516 | 19 | 254 | 12 |
| S129 | 05 | 0.5 | 10-May-07 | 95 | 12 | <LOD | 59 | 1941 | 21 | 500 | 16 |
| S129 | 10 | 1.0 | 10-May-07 | 99 | 12 | <LOD | 60 | 1662 | 20 | 499 | 16 |
| S129 | 15 | 1.5 | 10-May-07 | 44 | 6 | <LOD | 56 | 510 | 10 | 743 | 17 |
| S129 | 20 | 2.0 | 10-May-07 | 29 | 7 | 64 | 19 | 593 | 10 | 1068 | 20 |
| S129 | 25 | 2.5 | 10-May-07 | 26 | 6 | <LOD | 57 | 452 | 9 | 732 | 17 |
| S130 | 00 | GS | 8-May-07 | 363 | 17 | <LOD | 63 | 2997 | 30 | 204 | 15 |
| S130 | 05 | 0.5 | 9-May-07 | 62 | 5 | <LOD | 56 | 266 | 7 | 32 | 6 |
| S130 | 10 | 1.0 | 9-May-07 | 21 | 3 | <LOD | 57 | 93 | 5 | <LOD | 11 |
| S131 | 00 | GS | 8-May-07 | 245 | 29 | 115 | 25 | 7109 | 68 | 6883 | 82 |
| S131 | 05 | 0.5 | 10-May-07 | 123 | 18 | <LOD | 65 | 3583 | 35 | 836 | 27 |
| S131 | 10 | 1.0 | 10-May-07 | 84 | 19 | 86 | 23 | 3691 | 37 | 357 | 24 |
| S132 | 00 | GS | 8-May-07 | <LOD | 36 | <LOD | 63 | 1690 | 21 | 384 | 16 |
| S132 | 05 | 0.5 | 10-May-07 | 74 | 8 | <LOD | 60 | 827 | 13 | 896 | 20 |
| S132 | 10 | 1.0 | 10-May-07 | 25 | 5 | <LOD | 58 | 286 | 8 | 90 | 8 |
| S132 | 15 | 1.5 | 10-May-07 | 27 | 5 | <LOD | 56 | 321 | 8 | 61 | 9 |
| S132 | 20 | 2.0. | 10-May-07 | 13 | 3 | <LOD | 56 | 98 | 5 | 119 | 7 |
| S132 | 25 | 2.5 | 10-May-07 | 26 | 7 | <LOD | 59 | 525 | 10 | 28 | 7 |
| S133 | 00 | GS | 8-May-07 | 24 | 8 | <LOD | 59 | 703 | 12 | 118 | 9 |
| S133 | 05 | 0.5 | 10-May-07 | 132 | 24 | 80 | 22 | 6557 | 56 | 300 | 24 |
| S133 | 10 | 1.0 | 10-May-07 | 274 | 20 | <LOD | 62 | 4319 | 39 | 478 | 20 |
| S133 | 15 | 1.5 | 10-May-07 | 85 | 9 | <LOD | 60 | 1010 | 15 | 1973 | 30 |
| S133 | 20 | 2.0 | 10-May-07 | 81 | 10 | <LOD | 62 | 947 | 15 | 1756 | 29 |
| S134 | 00 | GS | 8-May-07 | 20 | 5 | <LOD | 65 | 218 | 7 | 266 | 12 |
| S134 | 05 | 0.5 | 9-May-07 | 25 | 3 | <LOD | 57 | 49 | 4 | 26 | 4 |
| S134 | 10 | 1.0 | 10-May-07 | 11 | 2 | <LOD | 58 | 31 | 3 | 12 | 4 |

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S134 | 15 | 1.5 | 10-May-07 | 11 | 2 | <LOD | 58 | 30 | 3 | 16 | 4 |
| S135 | 00 | GS | 8-May-07 | <LOD | 15 | <LOD | 57 | 332 | 8 | 42 | 6 |
| S135 | 05 | 0.5 | 10-May-07 | 20 | 5 | <LOD | 60 | 228 | 7 | 49 | 6 |
| S135 | 10 | | 10-May-07 | 12 | 2 | <LOD | 56 | 25 | 3 | <LOD | 10 |
| S136 | 00 | GS | 8-May-07 | <LOD | 17 | <LOD | 56 | 463 | 9 | 98 | 8 |
| S136 | 05 | 0.5 | 10-May-07 | 49 | 8 | <LOD | 58 | 702 | 12 | 435 | 13 |
| S136 | 10 | 1.0 | 10-May-07 | <LOD | 14 | <LOD | 58 | 240 | 7 | 149 | 8 |
| S137 | 00 | GS | 8-May-07 | 35 | 10 | <LOD | 60 | 1241 | 17 | 2789 | 36 |
| S137 | 05 | 0.5 | 10-May-07 | <LOD | 26 | <LOD | 56 | 1094 | 14 | 1096 | 20 |
| S137 | 10 | 1.0 | 10-May-07 | <LOD | 11 | <LOD | 55 | 146 | 5 | 220 | 9 |
| S138 | 00 | GS | 8-May-07 | 336 | 38 | 113 | 25 | 12634 | 110 | 2622 | 50 |
| S138 | 05 | 0.5 | 10-May-07 | 351 | 29 | <LOD | 66 | 8330 | 70 | 343 | 22 |
| S138 | 10 | 1.0 | 10-May-07 | 31 | 7 | <LOD | 57 | 649 | 11 | 38 | 6 |
| S138 | 15 | 1.5 | 10-May-07 | 18 | 4 | <LOD | 56 | 199 | 6 | 22 | 5 |
| S139 | 00 | GS | 8-May-07 | 43 | 8 | <LOD | 60 | 888 | 13 | 136 | 9 |
| S139 | 05 | 0.5 | 10-May-07 | 67 | 11 | <LOD | 60 | 1469 | 18 | 291 | 15 |
| S139 | 10 | 1.0 | 10-May-07 | <LOD | 44 | <LOD | 63 | 2525 | 27 | 532 | 19 |
| S139 | 15 | 1.5 | 10-May-07 | 30 | 5 | <LOD | 55 | 246 | 7 | 52 | 6 |
| S140 | 00 | GS | 8-May-07 | 178 | 15 | <LOD | 64 | 2348 | 26 | 263 | 17 |
| S140 | 05 | 0.5 | 10-May-07 | <LOD | 56 | 91 | 22 | 3817 | 37 | 447 | 25 |
| S140 | 10 | 1.0 | 10-May-07 | 70 | 12 | <LOD | 62 | 1866 | 21 | 377 | 20 |
| S140 | 15 | 1.5 | 10-May-07 | <LOD | 36 | 68 | 23 | 1466 | 20 | 384 | 28 |
| S140 | 20 | 2.0 | 10-May-07 | 151 | 27 | <LOD | 68 | 7363 | 65 | 382 | 27 |
| S140 | 25 | 2.5 | 10-May-07 | 203 | 34 | 81 | 25 | 9646 | 88 | 280 | 36 |
| S140 | 30 | 3.0 | 10-May-07 | <LOD | 15 | <LOD | 55 | 359 | 8 | 599 | 15 |
| S141 | 00 | GS | 8-May-07 | <LOD | 7 | <LOD | 58 | 31 | 3 | 13 | 4 |
| S141 | 05 | 0.5 | 9-May-07 | 7 | 2 | <LOD | 56 | 30 | 3 | <LOD | 11 |
| S142 | 00 | GS | 8-May-07 | 12 | 3 | <LOD | 58 | 71 | 4 | <LOD | 13 |

**Table 1**
**Summary of XRF Measurements**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 51 mg/Kg | | Site Specific GPL - 923 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | XRF Analysis | | XRF Analysis | | XRF Analysis | | XRF Analysis | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) |
| S142 | 05 | 0.5 | 9-May-07 | <LOD | 6 | <LOD | 56 | 25 | 3 | <LOD | 10 |
| S143 | 00 | GS | 8-May-07 | <LOD | 13 | 61 | 20 | 220 | 7 | 25 | 5 |
| S143 | 05 | 0.5 | 9-May-07 | 19 | 5 | <LOD | 58 | 323 | 8 | 81 | 7 |
| S143 | 10 | 1.0 | 10-May-07 | 39 | 8 | <LOD | 59 | 746 | 12 | 156 | 10 |
| S143 | 15 | 1.5 | 10-May-07 | 82 | 10 | <LOD | 58 | 1337 | 17 | 114 | 11 |
| S143 | 20 | 2.0 | 10-May-07 | 64 | 8 | <LOD | 59 | 741 | 12 | 118 | 9 |
| S143 | 25 | 2.5 | 10-May-07 | 63 | 9 | <LOD | 60 | 968 | 14 | 171 | 11 |
| S143-offset | 05 | 0.5 | 10-May-07 | 20 | 5 | <LOD | 57 | 316 | 8 | 36 | 6 |
| S143-offset | 10 | 1.0 | 10-May-07 | 25 | 8 | <LOD | 58 | 761 | 12 | 96 | 8 |
| S143-offset | 15 | 1.5 | 10-May-07 | 43 | 9 | <LOD | 58 | 1100 | 15 | 163 | 10 |
| S143-offset | 20 | 2.0 | 10-May-07 | 54 | 7 | <LOD | 59 | 571 | 11 | 98 | 8 |
| S144 | 00 | GS | 8-May-07 | <LOD | 7 | <LOD | 57 | 48 | 4 | <LOD | 11 |
| S144 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <LOD | 56 | 35 | 3 | <LOD | 10 |
| S145 | 00 | GS | 8-May-07 | 11 | 3 | <LOD | 58 | 91 | 5 | 20 | 4 |
| S145 | 05 | 0.5 | 9-May-07 | 11 | 3 | <LOD | 57 | 46 | 4 | <LOD | 11 |
| S146 | 00 | GS | 8-May-07 | 22 | 4 | <LOD | 60 | 199 | 6 | 19 | 5 |
| S146 | 05 | 0.5 | 9-May-07 | 8 | 2 | <LOD | 62 | 27 | 4 | <LOD | 11 |
| S147 | 00 | GS | 8-May-07 | 13 | 4 | <LOD | 58 | 177 | 6 | 22 | 5 |
| S147 | 05 | 0.5 | 9-May-07 | 9 | 2 | <LOD | 58 | 43 | 4 | <LOD | 11 |
| S148 | 00 | GS | 8-May-07 | 9 | 3 | <LOD | 60 | 77 | 5 | <LOD | 13 |
| S148 | 05 | 0.5 | 9-May-07 | <LOD | 6 | 78 | 20 | 16 | 3 | <LOD | 11 |
| S148 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <LOD | 49 | 14 | 3 | <LOD | 7 |
| S149 | 00 | GS | 8-May-07 | 10 | 3 | <LOD | 60 | 81 | 5 | <LOD | 12 |
| S149 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <LOD | 60 | 27 | 3 | <LOD | 10 |
| S150 | 00 | GS | 8-May-07 | <LOD | 13 | 62 | 20 | 220 | 7 | 19 | 6 |
| S150 | 05 | 0.5 | 9-May-07 | 11 | 3 | <LOD | 57 | 80 | 4 | <LOD | 11 |

# Table 1
# Summary of XRF Measurements
# Ore Mill Site, City of Tucson

## NOTES

| | |
|---|---|
| Location ID | The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets. |
| Depth ID | The two digit number after the dash in the Client Sample ID on the laboratory data sheets. |
| Sample Depth | The depth of the XRF or laboratory sample from the ground surface in feet. GS indicates the measurement was taken at the ground surface. |
| mg/Kg | milligrams per kilogram |
| RSRL | Residential Soil Remediation Limit (mg/Kg). |
| NRSRL | Non-residential Soil Remediation Limit (mg/Kg). |
| GPL | Groundwater Protection Level |
| XRF | The X-ray fluoresence testing method (soil mode). |
| XRF Instrument Concentration (mg/Kg) | The measured concentration of a metal. If <LOD, the measured concentration was less than the instrument Limit of Detection (LOD). |
| XRF Instrument Accuracy (+/- mg/Kg) | The measured accuracy range as plus or minus a Value in mg/Kg. If the XRF measurement was 12 +/-3, the concentration of a metal by XRF could be as low as 9 mg/Kg or as high as 15 mg/Kg. If the XRF measurement was <LOD, the detection limit is given under |

## Source of Regulatory Concentrations

| | |
|---|---|
| RSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| NRSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| GPL | Drywell Investigation Guidelines, August 2000 |
| Site Specific GPL | A Screening Method to Determine Soil Concnetrations Protective of Groundwater Quality, Appendix C, September 1996 |

**Table 2**
**Summary of Laboratory Analytical Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 64.1 mg/Kg | | Site Specific GPL - 1611 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | Laboratory Data | | Laboratory Data | | Laboratory Data | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S101 | 00 | GS | 8-May-07 | <5.0 | - | 4 | - | 250 | D2 | 950 | D2 |
| S101 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 12 | D1 | 21 | D1 |
| S102 | 05 | 0.5 | 9-May-07 | <5.0 | - | <2.5 | - | 56 | D2 | 120 | D2 |
| S103 | 05 | 0.5 | 9-May-07 | <5.0 | - | 3.5 | - | 210 | D2 | 650 | D2 |
| S104 | 00 | GS | 8-May-07 | <5.0 | - | 4 | - | 230 | D2 | 420 | D2 |
| S104 | 05 | 0.5 | 9-May-07 | <5.0 | - | <2.5 | - | 22 | - | 76 | D2 |
| S105 | 05 | 0.5 | 9-May-07 | 5.9 | D1 | <2.5 | D1 | 5.7 | D1 | <10 | D1 |
| S106 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 5.4 | D1 | <10 | D1 |
| S107 | 05 | 0.5 | 9-May-07 | <5.0 | - | <2.5 | - | **410** | D2 | 57 | D2 |
| S108 | 05 | 0.5 | 9-May-07 | 6 | D1 | <2.5 | D1 | 11 | D1 | <10 | D1 |
| S109 | 05 | 0.5 | 9-May-07 | **28** | - | 4.3 | - | **2100** | D2 | 160 | D2 |
| S110 | 05 | 0.5 | 9-May-07 | 5.6 | - | <2.5 | - | 260 | D2 | 240 | D2 |
| S111 | 05 | 0.5 | 9-May-07 | <5.0 | - | 7 | - | **610** | D2 | 920 | D2 |
| S112 | 00 | GS | 8-May-07 | <5.0 | - | 3.2 | - | 330 | D2 | 460 | D2 |
| S112 | 05 | 0.5 | 9-May-07 | 9.7 | D1 | <2.5 | D1 | 9.5 | D1 | <10 | D1 |
| S113 | 05 | 0.5 | 10-May-07 | <5.0 | - | <2.5 | - | 79 | D2 | 32 | - |
| S114 | 10 | 1.0 | 10-May-07 | <5.0 | - | **140** | D2 | 310 | D2 | 520 | D2 |
| S115 | 10 | 1.0 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | 23 | D1 | <10 | D1 |
| S116 | 05 | 0.5 | 9-May-07 | **17** | - | 2.7 | - | **520** | D2 | 380 | D2 |
| S117 | 05 | 0.5 | 9-May-07 | 5.7 | - | <2.5 | - | **740** | D2 | 75 | - |
| S118 | 05 | 0.5 | 10-May-07 | 5.7 | - | <2.5 | - | 240 | D2 | 160 | D2 |
| S119 | 15 | 1.5 | 10-May-07 | **21** | - | 3.1 | - | **2000** | D2 | 380 | D2 |
| S120 | 05 | 0.5 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | 26 | D1 | 25 | D1 |
| S121 | 10 | 1.0 | 10-May-07 | 5.3 | D1 | <2.5 | D1 | 26 | D1 | <10 | D1 |
| S122 | 00 | GS | 8-May-07 | *25* | - | 6.4 | - | *4000* | D2 | 970 | D2 |
| S122 | 05 | 0.5 | 10-May-07 | **14** | - | 3.2 | - | **2200** | D2 | 840 | D2 |
| S123 | 25 | 2.5 | 9-May-07 | 8 | - | <2.5 | - | 75 | D2 | 45 | D2 |
| S124 | 00 | GS | 8-May-07 | *120* | D2 | 17 | - | *19000* | D2 | 6300 | D2 |
| S124 | 15 | 1.5 | 9-May-07 | **20** | - | 4.8 | - | **2700** | D2 | 980 | D2 |

**Table 2**
**Summary of Laboratory Analytical Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 64.1 mg/Kg | | Site Specific GPL - 1611 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | Laboratory Data | | Laboratory Data | | Laboratory Data | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S125 | 00 | GS | 8-May-07 | *71* | D2 | 14 | - | *5400* | D2 | 3800 | D2 |
| S125 | 10 | 1.0 | 9-May-07 | 6.5 | - | 26 | - | *4900* | D2 | 2100 | D2 |
| S125 | 15 | 1.5 | 9-May-07 | *20* | - | 4.8 | - | *2700* | D2 | 980 | D2 |
| S125 | 30 | 3.0 | 9-May-07 | **26** | - | 11 | - | **1500** | D2 | 1100 | D2 |
| S126 | 20 | 2.0 | 9-May-07 | **100** | D2 | 4.8 | - | **1300** | D2 | 380 | D2 |
| S127 | 00 | GS | 8-May-07 | *1700* | D2 | 8.8 | - | *13000* | D2 | 80 | D2 |
| S127 | 30 | 3.0 | 9-May-07 | *2300* | D2 | 5.3 | - | *8600* | D2 | 37 | - |
| S127 | 45 | 4.5 | 9-May-07 | **2200** | D2 | 5.5 | - | **6700** | D2 | 50 | - |
| S128 | 05 | 0.5 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | 16 | D1 | <10 | D1 |
| S129 | 20 | 2.0 | 10-May-07 | <5.0 | - | 4 | - | *740* | D2 | 940 | D2 |
| S129 | 25 | 2.5 | 10-May-07 | <5.0 | - | 3.8 | - | **700** | D2 | 960 | D2 |
| S130 | 10 | 1.0 | 9-May-07 | 9.7 | - | <2.5 | - | 150 | D2 | 25 | - |
| S131 | 10 | 1.0 | 10-May-07 | 7.1 | - | **70** | D2 | **7700** | D2 | 1200 | D2 |
| S132 | 25 | 2.5 | 10-May-07 | <5.0 | | 6.9 | - | **780** | D2 | 160 | D2 |
| S133 | 20 | 2.0 | 10-May-07 | <5.0 | - | 18 | - | **920** | D2 | 1600 | D2 |
| S134 | 05 | 0.5 | 9-May-07 | 6.2 | D1 | <2.5 | D1 | 41 | D1 | 43 | D1 |
| S134 | 15 | 1.5 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | 24 | D1 | 17 | D1 |
| S135 | 10 | 1.0 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | 33 | D1 | 14 | D1 |
| S136 | 10 | 1.0 | 10-May-07 | <5.0 | - | <2.5 | - | 340 | D2 | 260 | D2 |
| S137 | 10 | 1.0 | 10-May-07 | 5.5 | - | <2.5 | - | 140 | D2 | 400 | D2 |
| S138 | 00 | GS | 8-May-07 | *40* | - | *44* | - | *11000* | D2 | 2600 | D2 |
| S138 | 15 | 1.5 | 10-May-07 | <5.0 | | 6.2 | - | **560** | D2 | 120 | D2 |
| S139 | 15 | 1.5 | 10-May-07 | <5.0 | - | 17 | - | **1600** | D2 | 580 | D2 |
| S140 | 30 | 3.0 | 10-May-07 | <5.0 | - | 13 | - | **440** | D2 | 860 | D2 |
| S141 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 30 | D1 | 13 | D1 |
| S142 | 00 | GS | 8-May-07 | <5 | - | <2.5 | - | 130 | D2 | 64 | D2 |
| S142 | 05 | 0.5 | 9-May-07 | 5.9 | D1 | <2.5 | D1 | 21 | D1 | <10 | D1 |
| S143 | 05 | 0.5 | 9-May-07 | 8.1 | - | <2.5 | - | *680* | D2 | 180 | D2 |
| S143 | 10 | 1.0 | 10-May-07 | 7.5 | - | <2.5 | - | *690* | D2 | 160 | D2 |

**Table 2**
**Summary of Laboratory Analytical Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 39 mg/Kg | | RSRL 400 mg/Kg | | RSRL None | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 850 mg/Kg | | NRSRL 800 mg/Kg | | NRSRL None | |
| | | | | GPL 290 mg/Kg | | GPL 29 mg/Kg | | GPL 290 mg/Kg | | GPL - None | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 64.1 mg/Kg | | Site Specific GPL - 1611 mg/Kg | | Site Specific GPL - Not Calculated | |
| | | | | Laboratory Data | | Laboratory Data | | Laboratory Data | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S143 | 15 | 1.5 | 10-May-07 | *16* | - | 4.9 | - | *1500* | D2 | 260 | D2 |
| S143 | 25 | 2.5 | 10-May-07 | **15** | - | 4 | - | **1400** | D2 | 370 | D2 |
| S143-offset | 20 | 2.0 | 10-May-07 | **11** | - | <2.5 | - | **930** | D2 | 280 | D2 |
| S144 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 28 | D1 | <10 | D1 |
| S145 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 46 | D1 | <10 | D1 |
| S146 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 13 | D1 | <10 | D1 |
| S147 | 05 | 0.5 | 9-May-07 | 7.1 | D1 | <2.5 | D1 | 27 | D1 | <10 | D1 |
| S148 | 05 | 0.5 | 9-May-07 | 5.5 | D1 | <2.5 | D1 | 8.2 | D1 | <10 | D1 |
| S148 | 10 | 1.0 | 10-May-07 | <5.0 | D1 | <2.5 | D1 | <5 | D1 | <10 | D1 |
| S149 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 19 | D1 | <10 | D1 |
| S150 | 05 | 0.5 | 9-May-07 | <5.0 | D1 | <2.5 | D1 | 71 | D1 | <10 | D1 |

# Table 2
# Summary of Laboratory Analytical Data
# Ore Mill Site, City of Tucson

## NOTES

| | |
|---|---|
| Location ID | The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets. |
| Depth ID | The two digit number after the dash in the Client Sample ID on the laboratory data sheets. |
| Sample Depth | The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface. |
| mg/Kg | milligrams per kilogram |
| RSRL | Residential Soil Remediation Limit (mg/Kg) |
| NRSRL | Non-residential Soil Remediation Limit (mg/Kg) |
| GPL | Groundwater Protection Level |
| **BOLD and Right** | Indicates that the concentration of the metal in the confirmatory laboratory sample exceeded the RSRL. |
| *Italic and Right* | Indicates that the concentration of the metal in the non-confirmatory laboratory sample exceeded the RSRL. |

## Laboratory Qualifiers

| | |
|---|---|
| D1 | Sample required dilution due to matrix. |
| D2 | Sample required dilution due to high concentration of target analyte. |
| T2 | Cited ADHS License method does not contain this analyte as part of the method compound list. |
| (*) | All Tungsten samples qualified T2. |
| - | No Data Qualifier |

## Source of Regulatory Concentrations

| | |
|---|---|
| RSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| NRSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| GPL | Drywell Investigation Guidelines, August 2000 |
| Site Specific GPL | A Screening Method to Determine Soil Concnetrations Protective of Groundwater Quality, Appendix C, September 1996 |

**Table 3**
**Comparision of XRF Measurements to Laboratory Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | | | Cadmium (Cd) | | | | Lead (Pb) | | | | Tungsten (W) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | | | RSRL 39 mg/Kg | | | | RSRL 400 mg/Kg | | | | RSRL None | | | |
| | | | | NRSRL 10 mg/Kg | | | | NRSRL 850 mg/Kg | | | | NRSRL 800 mg/Kg | | | | NRSRL None | | | |
| | | | | GPL 290 mg/Kg | | | | GPL 29 mg/Kg | | | | GPL 290 mg/Kg | | | | GPL - None | | | |
| | | | | Site Specific GPL - Not Calculated | | | | Site Specific GPL - 64.1 mg/Kg | | | | Site Specific GPL - 1611 mg/Kg | | | | Site Specific GPL - Not Calculated | | | |
| | | | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S101 | 00 | GS | 8-May-07 | <LOD | 15 | <5.0 | - | <LOD | 63 | 4 | - | 237 | 7 | 250 | D2 | 580 | 16 | 950 | D2 |
| S101 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <5.0 | D1 | <LOD | 61 | <2.5 | D1 | 22 | 3 | 12 | D1 | 14 | 4 | 21 | D1 |
| S102 | 00 | GS | 8-May-07 | 126 | 19 | | | <LOD | 65 | | | 3854 | 38 | | | 873 | 25 | | |
| S102 | 05 | 0.5 | 9-May-07 | 12 | 3 | <5.0 | - | <LOD | 59 | <2.5 | - | 50 | 4 | 56 | D2 | 64 | 6 | 120 | D2 |
| S103 | 00 | GS | 8-May-07 | <LOD | 24 | | | <LOD | 64 | | | 683 | 13 | | | 640 | 21 | | |
| S103 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <5.0 | - | <LOD | 46 | 3.5 | - | 22 | 3 | 210 | D2 | 12 | 3 | 650 | D2 |
| S104 | 00 | GS | 8-May-07 | <LOD | 13 | <5.0 | - | <LOD | 59 | 4 | - | 205 | 6 | 230 | D2 | 268 | 11 | 420 | D2 |
| S104 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <5.0 | - | <LOD | 46 | <2.5 | - | 24 | 3 | 22 | - | <LOD | 8 | 76 | D2 |
| S105 | 00 | GS | 8-May-07 | 26 | 8 | | | <LOD | 62 | | | 619 | 12 | | | 587 | 17 | | |
| S105 | 05 | 0.5 | 9-May-07 | <LOD | 10 | 5.9 | D1 | <LOD | 48 | <2.5 | D1 | 170 | 5 | 5.7 | D1 | 102 | 6 | <10 | D1 |
| S105 | 10 | 1.0 | 9-May-07 | <LOD | 4 | | | <LOD | 46 | | | 14 | 2 | | | <LOD | 6 | | |
| S106 | 00 | GS | 8-May-07 | <LOD | 45 | | | <LOD | 62 | | | 2655 | 28 | | | 186 | 15 | | |
| S106 | 05 | 0.5 | 9-May-07 | <LOD | 4 | <5.0 | D1 | <LOD | 48 | <2.5 | D1 | 16 | 3 | 5.4 | D1 | <LOD | 7 | <10 | D1 |
| S107 | 00 | GS | 8-May-07 | <LOD | 65 | | | <LOD | 69 | | | 4654 | 46 | | | 170 | 23 | | |
| S107 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <5.0 | - | <LOD | 46 | <2.5 | - | 27 | 3 | 410 | D2 | <LOD | 7 | 57 | D2 |
| S108 | 00 | GS | 8-May-07 | <LOD | 37 | | | <LOD | 61 | | | 1834 | 21 | | | 469 | 17 | | |
| S108 | 05 | 0.5 | 9-May-07 | <LOD | 5 | 6 | D1 | <LOD | 47 | <2.5 | D1 | 20 | 3 | 11 | D1 | <LOD | 8 | <10 | D1 |
| S109 | 00 | GS | 8-May-07 | <LOD | 42 | | | <LOD | 63 | | | 2239 | 25 | | | 199 | 16 | | |
| S109 | 05 | 0.5 | 9-May-07 | <LOD | 5 | 28 | - | <LOD | 46 | 4.3 | - | 30 | 3 | 2100 | D2 | <LOD | 8 | 160 | D2 |
| S110 | 00 | GS | 8-May-07 | <LOD | 19 | | | 59 | 19 | | | 507 | 10 | | | 41 | 7 | | |
| S110 | 05 | 0.5 | 9-May-07 | <LOD | 5 | 5.6 | - | <LOD | 46 | <2.5 | - | 30 | 3 | 260 | D2 | <LOD | 8 | 240 | D2 |
| S111 | 00 | GS | 8-May-07 | 130 | 29 | | | <LOD | 72 | | | 7604 | 70 | | | 379 | 30 | | |
| S111 | 05 | 0.5 | 9-May-07 | <LOD | 5 | <5.0 | - | <LOD | 48 | 7 | - | 16 | 3 | 610 | D2 | <LOD | 7 | 920 | D2 |
| S112 | 00 | GS | 8-May-07 | 28 | 6 | <5.0 | - | <LOD | 62 | 3.2 | - | 416 | 9 | 330 | D2 | 202 | 10 | 460 | D2 |
| S112 | 05 | 0.5 | 9-May-07 | <LOD | 4 | 9.7 | D1 | <LOD | 48 | <2.5 | D1 | 13 | 2 | 9.5 | D1 | <LOD | 7 | <10 | D1 |
| S113 | 00 | GS | 8-May-07 | 30 | 8 | | | <LOD | 63 | | | 755 | 13 | | | 46 | 9 | | |
| S113 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <5.0 | - | <LOD | 47 | <2.5 | - | 17 | 3 | 79 | D2 | <LOD | 8 | 32 | - |
| S113 | 10 | 1.0 | 10-May-07 | <LOD | 4 | | | <LOD | 46 | | | 16 | 2 | | | <LOD | 6 | | |
| S114 | 00 | GS | 8-May-07 | 456 | 33 | | | 87 | 24 | | | 10066 | 86 | | | 1174 | 34 | | |
| S114 | 05 | 0.5 | 10-May-07 | <LOD | 15 | | | <LOD | 48 | | | 397 | 8 | | | 913 | 17 | | |
| S114 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <5.0 | - | <LOD | 47 | 140 | D2 | 38 | 3 | 310 | D2 | 34 | 4 | 520 | D2 |
| S115 | 00 | GS | 8-May-07 | 94 | 14 | | | 64 | 21 | | | 2201 | 25 | | | 171 | 14 | | |
| S115 | 05 | 0.5 | 10-May-07 | 19 | 3 | | | <LOD | 46 | | | 179 | 5 | | | <LOD | 9 | | |
| S115 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <5.0 | D1 | <LOD | 46 | <2.5 | D1 | 24 | 3 | 23 | D1 | <LOD | 7 | <10 | D1 |
| S116 | 00 | GS | 8-May-07 | <LOD | 34 | | | <LOD | 63 | | | 1448 | 19 | | | 326 | 15 | | |
| S116 | 05 | 0.5 | 9-May-07 | <LOD | 5 | 17 | - | <LOD | 47 | 2.7 | - | 21 | 3 | 520 | D2 | <LOD | 8 | 380 | D2 |
| S117 | 00 | GS | 8-May-07 | <LOD | 26 | | | <LOD | 60 | | | 943 | 14 | | | 60 | 8 | | |
| S117 | 05 | 0.5 | 9-May-07 | <LOD | 6 | 5.7 | - | <LOD | 48 | <2.5 | - | 31 | 3 | 740 | D2 | <LOD | 8 | 75 | - |
| S118 | 00 | GS | 8-May-07 | <LOD | 24 | | | 69 | 19 | | | 829 | 13 | | | 412 | 13 | | |
| S118 | 05 | 0.5 | 10-May-07 | <LOD | 5 | 5.7 | - | <LOD | 46 | <2.5 | - | 22 | 3 | 240 | D2 | <LOD | 7 | 160 | D2 |
| S119 | 00 | GS | 8-May-07 | 80 | 13 | | | 65 | 21 | | | 2125 | 24 | | | 102 | 13 | | |
| S119 | 05 | 0.5 | 10-May-07 | 737 | 43 | | | <LOD | 79 | | | 12951 | 122 | | | <LOD | 130 | | |
| S119 | 10 | 1.0 | 10-May-07 | 204 | 50 | | | <LOD | 80 | | | 18355 | 166 | | | <LOD | 125 | | |
| S119 | 15 | 1.5 | 10-May-07 | <LOD | 16 | 21 | - | <LOD | 56 | 3.1 | - | 359 | 8 | 2000 | D2 | 160 | 9 | 380 | D2 |
| S119 | 30 | 3.0 | 10-May-07 | 12 | 3 | | | <LOD | 57 | | | 57 | 4 | | | <LOD | 10 | | |
| S120 | 00 | GS | 8-May-07 | <LOD | 26 | | | <LOD | 61 | | | 907 | 14 | | | 137 | 10 | | |
| S120 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <5.0 | D1 | <LOD | 47 | <2.5 | D1 | 25 | 3 | 26 | D1 | <LOD | 8 | 25 | D1 |
| S121 | 00 | GS | 8-May-07 | <LOD | 40 | | | <LOD | 61 | | | 2212 | 24 | | | 133 | 14 | | |
| S121 | 05 | 0.5 | 10-May-07 | 14 | 4 | | | <LOD | 46 | | | 221 | 6 | | | 21 | 4 | | |
| S121 | 10 | 1.0 | 10-May-07 | <LOD | 6 | 5.3 | D1 | <LOD | 46 | <2.5 | D1 | 36 | 3 | 26 | D1 | <LOD | 8 | <10 | D1 |
| S122 | 00 | GS | 8-May-07 | <LOD | 45 | 25 | - | 66 | 21 | 6.4 | - | 2656 | 28 | 4000 | D2 | 456 | 17 | 970 | D2 |
| S122 | 05 | 0.5 | 10-May-07 | <LOD | 8 | 14 | - | <LOD | 47 | 3.2 | - | 102 | 4 | 2200 | D2 | 188 | 8 | 840 | D2 |

**Table 3**
**Comparision of XRF Measurements to Laboratory Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | | | Cadmium (Cd) | | | | Lead (Pb) | | | | Tungsten (W) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | | | RSRL 39 mg/Kg | | | | RSRL 400 mg/Kg | | | | RSRL None | | | |
| | | | | NRSRL 10 mg/Kg | | | | NRSRL 850 mg/Kg | | | | NRSRL 800 mg/Kg | | | | NRSRL None | | | |
| | | | | GPL 290 mg/Kg | | | | GPL 29 mg/Kg | | | | GPL 290 mg/Kg | | | | GPL - None | | | |
| | | | | Site Specific GPL - Not Calculated | | | | Site Specific GPL - 64.1 mg/Kg | | | | Site Specific GPL - 1611 mg/Kg | | | | Site Specific GPL - Not Calculated | | | |
| | | | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S123 | 00 | GS | 8-May-07 | 201 | 16 | | | <LOD | 67 | | | 2539 | 29 | | | 6773 | 71 | | |
| S123 | 05 | 0.5 | 9-May-07 | 15 | 3 | | | <LOD | 55 | | | 109 | 5 | | | 57 | 5 | | |
| S123 | 10 | 1.0 | 9-May-07 | 20 | 3 | | | <LOD | 55 | | | 111 | 5 | | | 66 | 7 | | |
| S123 | 15 | 1.5 | 9-May-07 | 16 | 3 | | | <LOD | 56 | | | 101 | 5 | | | 51 | 5 | | |
| S123 | 20 | 2.0 | 9-May-07 | 10 | 3 | | | <LOD | 56 | | | 56 | 4 | | | 28 | 4 | | |
| S123 | 25 | 2.5 | 9-May-07 | 9 | 3 | 8 | - | <LOD | 56 | <2.5 | - | 60 | 4 | 75 | D2 | 23 | 4 | 45 | D2 |
| S124 | 00 | GS | 8-May-07 | 613 | 44 | 120 | D2 | <LOD | 77 | 17 | - | 14892 | 132 | 19000 | D2 | 3233 | 54 | 6300 | D2 |
| S124 | 05 | 0.5 | 9-May-07 | 1130 | 44 | | | <LOD | 75 | | | 14789 | 129 | | | 4268 | 61 | | |
| S124 | 10 | 1.0 | 9-May-07 | 707 | 31 | | | <LOD | 68 | | | 8960 | 75 | | | 2704 | 42 | | |
| S124 | 15 | 1.5 | 9-May-07 | 298 | 19 | 20 | - | <LOD | 63 | 4.8 | - | 3820 | 36 | 2700 | D2 | 1059 | 24 | 980 | D2 |
| S125 | 00 | GS | 8-May-07 | 497 | 39 | 71 | D2 | <LOD | 82 | 14 | - | 10702 | 104 | 5400 | D2 | 8863 | 107 | 3800 | D2 |
| S125 | 05 | 0.5 | 9-May-07 | 49 | 7 | | | <LOD | 60 | | | 559 | 11 | | | 166 | 9 | | |
| S125 | 10 | 1.0 | 9-May-07 | 206 | 21 | 6.5 | - | 79 | 22 | 26 | - | 4627 | 44 | 4900 | D2 | 2888 | 45 | 2100 | D2 |
| S125 | 15 | 1.5 | 9-May-07 | 87 | 19 | 20 | - | 87 | 22 | 4.8 | - | 3826 | 38 | 2700 | D2 | 3826 | 51 | 980 | D2 |
| S125 | 20 | 2.0 | 9-May-07 | 167 | 20 | | | <LOD | 65 | | | 4006 | 40 | | | 2713 | 43 | | |
| S125 | 25 | 2.5 | 9-May-07 | 155 | 17 | | | <LOD | 63 | | | 3141 | 32 | | | 2058 | 34 | | |
| S125 | 30 | 3.0 | 9-May-07 | 49 | 10 | 26 | - | <LOD | 60 | 11 | - | 1131 | 16 | 1500 | D2 | 595 | 17 | 1100 | D2 |
| S126 | 00 | GS | 8-May-07 | 200 | 16 | | | <LOD | 63 | | | 2619 | 28 | | | 549 | 19 | | |
| S126 | 05 | 0.5 | 9-May-07 | 354 | 17 | | | 72 | 20 | | | 3250 | 31 | | | 581 | 19 | | |
| S126 | 10 | 1.0 | 9-May-07 | 295 | 14 | | | <LOD | 59 | | | 2029 | 22 | | | 332 | 15 | | |
| S126 | 15 | 1.5 | 9-May-07 | 168 | 11 | | | <LOD | 59 | | | 1292 | 17 | | | 151 | 11 | | |
| S126 | 20 | 2.0 | 9-May-07 | 178 | 11 | 100 | D2 | <LOD | 60 | 4.8 | - | 1419 | 18 | 1300 | D2 | 245 | 13 | 380 | D2 |
| S127 | 00 | GS | 8-May-07 | 1040 | 31 | 1700 | D2 | <LOD | 73 | 8.8 | - | 6586 | 64 | 13000 | D2 | 71 | 16 | 80 | D2 |
| S127 | 05 | 0.5 | 9-May-07 | 2283 | 26 | | | <LOD | 60 | | | 3038 | 30 | | | <LOD | 31 | | |
| S127 | 10 | 1.0 | 9-May-07 | 1787 | 30 | | | <LOD | 66 | | | 5961 | 53 | | | <LOD | 43 | | |
| S127 | 15 | 1.5 | 9-May-07 | 1609 | 25 | | | <LOD | 61 | | | 4462 | 40 | | | <LOD | 36 | | |
| S127 | 20 | 2.0 | 9-May-07 | 1982 | 30 | | | <LOD | 64 | | | 6110 | 53 | | | <LOD | 43 | | |
| S127 | 25 | 2.5 | 9-May-07 | 2734 | 31 | | | <LOD | 61 | | | 5098 | 44 | | | <LOD | 31 | | |
| S127 | 30 | 3.0 | 9-May-07 | 1993 | 29 | 2300 | D2 | <LOD | 62 | 5.3 | - | 5677 | 48 | 8600 | D2 | <LOD | 28 | 37 | |
| S127 | 35 | 3.5 | 9-May-07 | 1201 | 22 | | | <LOD | 60 | | | 3935 | 35 | | | <LOD | 25 | | |
| S127 | 40 | 4.0 | 9-May-07 | 1927 | 28 | | | <LOD | 62 | | | 5394 | 46 | | | <LOD | 28 | | |
| S127 | 45 | 4.5 | 9-May-07 | 3038 | 39 | 2200 | D2 | <LOD | 66 | 5.5 | - | 8677 | 71 | 6700 | D2 | <LOD | 36 | 50 | - |
| S128 | 00 | GS | 8-May-07 | 30 | 8 | | | <LOD | 62 | | | 671 | 12 | | | 186 | 10 | | |
| S128 | 05 | 0.5 | 10-May-07 | <LOD | 5 | <5.0 | D1 | <LOD | 48 | <2.5 | D1 | 23 | 3 | 16 | D1 | <LOD | 7 | <10 | D1 |
| S129 | 00 | GS | 8-May-07 | 49 | 11 | | | <LOD | 61 | | | 1516 | 19 | | | 254 | 12 | | |
| S129 | 05 | 0.5 | 10-May-07 | 95 | 12 | | | <LOD | 59 | | | 1941 | 21 | | | 500 | 16 | | |
| S129 | 10 | 1.0 | 10-May-07 | 99 | 12 | | | <LOD | 60 | | | 1662 | 20 | | | 499 | 16 | | |
| S129 | 15 | 1.5 | 10-May-07 | 44 | 6 | | | <LOD | 56 | | | 510 | 10 | | | 743 | 17 | | |
| S129 | 20 | 2.0 | 10-May-07 | 29 | 7 | <5.0 | - | 64 | 19 | 4 | - | 593 | 10 | 740 | D2 | 1068 | 20 | 940 | D2 |
| S129 | 25 | 2.5 | 10-May-07 | 26 | 6 | <5.0 | - | <LOD | 57 | 3.8 | - | 452 | 9 | 700 | D2 | 732 | 17 | 960 | D2 |
| S130 | 00 | GS | 8-May-07 | 363 | 17 | | | <LOD | 63 | | | 2997 | 30 | | | 204 | 15 | | |
| S130 | 05 | 0.5 | 9-May-07 | 62 | 5 | | | <LOD | 56 | | | 266 | 7 | | | 32 | 6 | | |
| S130 | 10 | 1.0 | 9-May-07 | 21 | 3 | 9.7 | - | <LOD | 57 | <2.5 | - | 93 | 5 | 150 | D2 | <LOD | 11 | 25 | - |
| S131 | 00 | GS | 8-May-07 | 245 | 29 | | | 115 | 25 | | | 7109 | 68 | | | 6883 | 82 | | |
| S131 | 05 | 0.5 | 10-May-07 | 123 | 18 | | | <LOD | 65 | | | 3583 | 35 | | | 836 | 27 | | |
| S131 | 10 | 1.0 | 10-May-07 | 84 | 19 | 7.1 | - | 86 | 23 | 70 | D2 | 3691 | 37 | 7700 | D2 | 357 | 24 | 1200 | D2 |
| S132 | 00 | GS | 8-May-07 | <LOD | 36 | | | <LOD | 63 | | | 1690 | 21 | | | 384 | 16 | | |
| S132 | 05 | 0.5 | 10-May-07 | 74 | 8 | | | <LOD | 60 | | | 827 | 13 | | | 896 | 20 | | |
| S132 | 10 | 1.0 | 10-May-07 | 25 | 5 | | | <LOD | 58 | | | 286 | 8 | | | 90 | 8 | | |
| S132 | 15 | 1.5 | 10-May-07 | 27 | 5 | | | <LOD | 56 | | | 321 | 8 | | | 61 | 9 | | |
| S132 | 20 | 2.0. | 10-May-07 | 13 | 3 | | | <LOD | 56 | | | 98 | 5 | | | 119 | 7 | | |
| S132 | 25 | 2.5 | 10-May-07 | 26 | 7 | <5.0 | | <LOD | 59 | 6.9 | - | 525 | 10 | 780 | D2 | 28 | 7 | 160 | D2 |

**Table 3**
**Comparision of XRF Measurements to Laboratory Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | | | Cadmium (Cd) | | | | Lead (Pb) | | | | Tungsten (W) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | | | RSRL 39 mg/Kg | | | | RSRL 400 mg/Kg | | | | RSRL None | | | |
| | | | | NRSRL 10 mg/Kg | | | | NRSRL 850 mg/Kg | | | | NRSRL 800 mg/Kg | | | | NRSRL None | | | |
| | | | | GPL 290 mg/Kg | | | | GPL 29 mg/Kg | | | | GPL 290 mg/Kg | | | | GPL - None | | | |
| | | | | Site Specific GPL - Not Calculated | | | | Site Specific GPL - 64.1 mg/Kg | | | | Site Specific GPL - 1611 mg/Kg | | | | Site Specific GPL - Not Calculated | | | |
| | | | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S133 | 00 | GS | 8-May-07 | 24 | 8 | | | <LOD | 59 | | | 703 | 12 | | | 118 | 9 | | |
| S133 | 05 | 0.5 | 10-May-07 | 132 | 24 | | | 80 | 22 | | | 6557 | 56 | | | 300 | 24 | | |
| S133 | 10 | 1.0 | 10-May-07 | 274 | 20 | | | <LOD | 62 | | | 4319 | 39 | | | 478 | 20 | | |
| S133 | 15 | 1.5 | 10-May-07 | 85 | 9 | | | <LOD | 60 | | | 1010 | 15 | | | 1973 | 30 | | |
| S133 | 20 | 2.0 | 10-May-07 | 81 | 10 | <5.0 | - | <LOD | 62 | 18 | - | 947 | 15 | 920 | D2 | 1756 | 29 | 1600 | D2 |
| S134 | 00 | GS | 8-May-07 | 20 | 5 | | | <LOD | 65 | | | 218 | 7 | | | 266 | 12 | | |
| S134 | 05 | 0.5 | 9-May-07 | 25 | 3 | 6.2 | D1 | <LOD | 57 | <2.5 | D1 | 49 | 4 | 41 | D1 | 26 | 4 | 43 | D1 |
| S134 | 10 | 1.0 | 10-May-07 | 11 | 2 | | | <LOD | 58 | | | 31 | 3 | | | 12 | 4 | | |
| S134 | 15 | 1.5 | 10-May-07 | 11 | 2 | <5.0 | D1 | <LOD | 58 | <2.5 | D1 | 30 | 3 | 24 | D1 | 16 | 4 | 17 | D1 |
| S135 | 00 | GS | 8-May-07 | <LOD | 15 | | | <LOD | 57 | | | 332 | 8 | | | 42 | 6 | | |
| S135 | 05 | 0.5 | 10-May-07 | 20 | 5 | | | <LOD | 60 | | | 228 | 7 | | | 49 | 6 | | |
| S135 | 10 | 1.0 | 10-May-07 | 12 | 2 | <5.0 | D1 | <LOD | 56 | <2.5 | D1 | 25 | 3 | 33 | D1 | <LOD | 10 | 14 | D1 |
| S136 | 00 | GS | 8-May-07 | <LOD | 17 | | | <LOD | 56 | | | 463 | 9 | | | 98 | 8 | | |
| S136 | 05 | 0.5 | 10-May-07 | 49 | 8 | | | <LOD | 58 | | | 702 | 12 | | | 435 | 13 | | |
| S136 | 10 | 1.0 | 10-May-07 | <LOD | 14 | <5.0 | - | <LOD | 58 | <2.5 | - | 240 | 7 | 340 | D2 | 149 | 8 | 260 | D2 |
| S137 | 00 | GS | 8-May-07 | 35 | 10 | | | <LOD | 60 | | | 1241 | 17 | | | 2789 | 36 | | |
| S137 | 05 | 0.5 | 10-May-07 | <LOD | 26 | | | <LOD | 56 | | | 1094 | 14 | | | 1096 | 20 | | |
| S137 | 10 | 1.0 | 10-May-07 | <LOD | 11 | 5.5 | - | <LOD | 55 | <2.5 | - | 146 | 5 | 140 | D2 | 220 | 9 | 400 | D2 |
| S138 | 00 | GS | 8-May-07 | 336 | 38 | 40 | - | 113 | 25 | 44 | - | 12634 | 110 | 11000 | D2 | 2622 | 50 | 2600 | D2 |
| S138 | 05 | 0.5 | 10-May-07 | 351 | 29 | | | <LOD | 66 | | | 8330 | 70 | | | 343 | 22 | | |
| S138 | 10 | 1.0 | 10-May-07 | 31 | 7 | | | <LOD | 57 | | | 649 | 11 | | | 38 | 6 | | |
| S138 | 15 | 1.5 | 10-May-07 | 18 | 4 | <5.0 | | <LOD | 56 | 6.2 | - | 199 | 6 | 560 | D2 | 22 | 5 | 120 | D2 |
| S139 | 00 | GS | 8-May-07 | 43 | 8 | | | <LOD | 60 | | | 888 | 13 | | | 136 | 9 | | |
| S139 | 05 | 0.5 | 10-May-07 | 67 | 11 | | | <LOD | 60 | | | 1469 | 18 | | | 291 | 15 | | |
| S139 | 10 | 1.0 | 10-May-07 | <LOD | 44 | | | <LOD | 63 | | | 2525 | 27 | | | 532 | 19 | | |
| S139 | 15 | 1.5 | 10-May-07 | 30 | 5 | <5.0 | - | <LOD | 55 | 17 | - | 246 | 7 | 1600 | D2 | 52 | 6 | 580 | D2 |
| S140 | 00 | GS | 8-May-07 | 178 | 15 | | | <LOD | 64 | | | 2348 | 26 | | | 263 | 17 | | |
| S140 | 05 | 0.5 | 10-May-07 | <LOD | 56 | | | 91 | 22 | | | 3817 | 37 | | | 447 | 25 | | |
| S140 | 10 | 1.0 | 10-May-07 | 70 | 12 | | | <LOD | 62 | | | 1866 | 21 | | | 377 | 20 | | |
| S140 | 15 | 1.5 | 10-May-07 | <LOD | 36 | | | 68 | 23 | | | 1466 | 20 | | | 384 | 28 | | |
| S140 | 20 | 2.0 | 10-May-07 | 151 | 27 | | | <LOD | 68 | | | 7363 | 65 | | | 382 | 27 | | |
| S140 | 25 | 2.5 | 10-May-07 | 203 | 34 | | | 81 | 25 | | | 9646 | 88 | | | 280 | 36 | | |
| S140 | 30 | 3.0 | 10-May-07 | <LOD | 15 | <5.0 | - | <LOD | 55 | 13 | - | 359 | 8 | 440 | D2 | 599 | 15 | 860 | D2 |
| S141 | 00 | GS | 8-May-07 | <LOD | 7 | | | <LOD | 58 | | | 31 | 3 | | | 13 | 4 | | |
| S141 | 05 | 0.5 | 9-May-07 | 7 | 2 | <5.0 | D1 | <LOD | 56 | <2.5 | D1 | 30 | 3 | 30 | D1 | <LOD | 11 | 13 | D1 |
| S142 | 00 | GS | 8-May-07 | 12 | 3 | <5 | - | <LOD | 58 | <2.5 | - | 71 | 4 | 130 | D2 | <LOD | 13 | 64 | D2 |
| S142 | 05 | 0.5 | 9-May-07 | <LOD | 6 | 5.9 | D1 | <LOD | 56 | <2.5 | D1 | 25 | 3 | 21 | D1 | <LOD | 10 | <10 | D1 |
| S143 | 00 | GS | 8-May-07 | <LOD | 13 | | | 61 | 20 | | | 220 | 7 | | | 25 | 5 | | |
| S143 | 05 | 0.5 | 9-May-07 | 19 | 5 | 8.1 | - | <LOD | 58 | <2.5 | - | 323 | 8 | 680 | D2 | 81 | 7 | 180 | D2 |
| S143 | 10 | 1.0 | 10-May-07 | 39 | 8 | 7.5 | - | <LOD | 59 | <2.5 | - | 746 | 12 | 690 | D2 | 156 | 10 | 160 | D2 |
| S143 | 15 | 1.5 | 10-May-07 | 82 | 10 | 16 | - | <LOD | 58 | 4.9 | - | 1337 | 17 | 1500 | D2 | 114 | 11 | 260 | D2 |
| S143 | 20 | 2.0 | 10-May-07 | 64 | 8 | | | <LOD | 59 | | | 741 | 12 | | | 118 | 9 | | |
| S143 | 25 | 2.5 | 10-May-07 | 63 | 9 | 15 | - | <LOD | 60 | 4 | - | 968 | 14 | 1400 | D2 | 171 | 11 | 370 | D2 |
| S143-offset | 05 | 0.5 | 10-May-07 | 20 | 5 | | | <LOD | 57 | | | 316 | 8 | | | 36 | 6 | | |
| S143-offset | 10 | 1.0 | 10-May-07 | 25 | 8 | | | <LOD | 58 | | | 761 | 12 | | | 96 | 8 | | |
| S143-offset | 15 | 1.5 | 10-May-07 | 43 | 9 | | | <LOD | 58 | | | 1100 | 15 | | | 163 | 10 | | |
| S143-offset | 20 | 2.0 | 10-May-07 | 54 | 7 | 11 | - | <LOD | 59 | <2.5 | - | 571 | 11 | 930 | D2 | 98 | 8 | 280 | D2 |
| S144 | 00 | GS | 8-May-07 | <LOD | 7 | | | <LOD | 57 | | | 48 | 4 | | | <LOD | 11 | | |
| S144 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <5.0 | D1 | <LOD | 56 | <2.5 | D1 | 35 | 3 | 28 | D1 | <LOD | 10 | <10 | D1 |
| S145 | 00 | GS | 8-May-07 | 11 | 3 | | | <LOD | 58 | | | 91 | 5 | | | 20 | 4 | | |
| S145 | 05 | 0.5 | 9-May-07 | 11 | 3 | <5.0 | D1 | <LOD | 57 | <2.5 | D1 | 46 | 4 | 46 | D1 | <LOD | 11 | <10 | D1 |
| S146 | 00 | GS | 8-May-07 | 22 | 4 | | | <LOD | 60 | | | 199 | 6 | | | 19 | 5 | | |

**Table 3**
**Comparision of XRF Measurements to Laboratory Data**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | | | Cadmium (Cd) | | | | Lead (Pb) | | | | Tungsten (W) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | | | RSRL 39 mg/Kg | | | | RSRL 400 mg/Kg | | | | RSRL None | | | |
| | | | | NRSRL 10 mg/Kg | | | | NRSRL 850 mg/Kg | | | | NRSRL 800 mg/Kg | | | | NRSRL None | | | |
| | | | | GPL 290 mg/Kg | | | | GPL 29 mg/Kg | | | | GPL 290 mg/Kg | | | | GPL - None | | | |
| | | | | Site Specific GPL - Not Calculated | | | | Site Specific GPL - 64.1 mg/Kg | | | | Site Specific GPL - 1611 mg/Kg | | | | Site Specific GPL - Not Calculated | | | |
| | | | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | | XRF Analysis | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | XRF Instrument Concentration (mg/Kg) | XRF Instrument Accuracy (+/- mg/Kg) | Laboratory Concentration (mg/Kg) | Laboratory Qualifier(*) |
| S146 | 05 | 0.5 | 9-May-07 | 8 | 2 | <5.0 | D1 | <LOD | 62 | <2.5 | D1 | 27 | 4 | 13 | D1 | <LOD | 11 | <10 | D1 |
| S147 | 00 | GS | 8-May-07 | 13 | 4 | | | <LOD | 58 | | | 177 | 6 | | | 22 | 5 | | |
| S147 | 05 | 0.5 | 9-May-07 | 9 | 2 | 7.1 | D1 | <LOD | 58 | <2.5 | D1 | 43 | 4 | 27 | D1 | <LOD | 11 | <10 | D1 |
| S148 | 00 | GS | 8-May-07 | 9 | 3 | | | <LOD | 60 | | | 77 | 5 | | | <LOD | 13 | | |
| S148 | 05 | 0.5 | 9-May-07 | <LOD | 6 | 5.5 | D1 | 78 | 20 | <2.5 | D1 | 16 | 3 | 8.2 | D1 | <LOD | 11 | <10 | D1 |
| S148 | 10 | 1.0 | 10-May-07 | <LOD | 5 | <5.0 | D1 | <LOD | 49 | <2.5 | D1 | 14 | 3 | <5 | D1 | <LOD | 7 | <10 | D1 |
| S149 | 00 | GS | 8-May-07 | 10 | 3 | | | <LOD | 60 | | | 81 | 5 | | | <LOD | 12 | | |
| S149 | 05 | 0.5 | 9-May-07 | <LOD | 7 | <5.0 | D1 | <LOD | 60 | <2.5 | D1 | 27 | 3 | 19 | D1 | <LOD | 10 | <10 | D1 |
| S150 | 00 | GS | 8-May-07 | <LOD | 13 | | | 62 | 20 | | | 220 | 7 | | | 19 | 6 | | |
| S150 | 05 | 0.5 | 9-May-07 | 11 | 3 | <5.0 | D1 | <LOD | 57 | <2.5 | D1 | 80 | 4 | 71 | D1 | <LOD | 11 | <10 | D1 |

**NOTES**

| | |
|---|---|
| Location ID | The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets. |
| Depth ID | The two digit number after the dash in the Client Sample ID on the laboratory data sheets. |
| Sample Depth | The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface. |
| XRF | The X-ray fluoresence testing method (soil mode). |
| mg/Kg | milligrams per kilogram |
| RSRL | Residential Soil Remediation Limit (mg/Kg) |
| NRSRL | Non-residential Soil Remediation Limit (mg/Kg) |
| GPL | Groundwater Protection Level |
| XRF Instrument Concentration (mg/Kg) | The measured concentration of a metal. If <LOD, the measured concentration was less than the instrument Limit of Detection (LOD). |
| XRF Instrument Accuracy (+/- mg/Kg) | The measured accuracy range as plus or minus a Value in mg/Kg. If the measurement was 12 +/-3, the concentration of a metal could be as low as 9 mg/Kg or as high as 15 mg/Kg. If the measurement was <LOD, the detection limit is given under the XRF Instrument Accuracy column. If the measurement was <LOD 10, the concetration of the metal in the soil was less than 10 mg/Kg. |

Field rational for collection of laboratory confirmation soil sample

collected due to refusal of direct push or manual excavation

XRF measurement - concentration met the criteria of Pb<400, As +/-10 mg/Kg

XRF measurement - concentration met the criteria of Pb<400, As +/-10 mg/Kg
Confirmatory Lab concentration reported Pb>400 mg/Kg
Kleinfelder requested re-analysis/retesting by AeroTech for As, Pb (May 31, 2007)

**Laboratory Qualifiers**

| | |
|---|---|
| D1 | Sample required dilution due to matrix. |
| D2 | Sample required dilution due to high concentration of target analyte. |
| T2 | Cited ADHS License method does not contain this analyte as part of the method compound list. |
| (*) | All samples for Tungsten were qualified T2. |
| - | No Data Qualifier |

**Source of Regulatory Concentrations**

| | |
|---|---|
| RSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| NRSRL | Arizona Soil Remediatilon Standards Rule, May 5, 2007 |
| GPL | Drywell Investigation Guidelines, August 2000 |
| Site Specific GPL | A Screening Method to Determine Soil Concnetrations Protective of Groundwater Quality, Appendix C, September 1996 |

**Table 4**
**Comparison of Laboratory Duplicates**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungsten (W) | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Depth ID | Sample Depth (feet) | Date | Concentration (mg/Kg) | Qualifier | Concentration (mg/Kg) | Qualifier | Concentration (mg/Kg) | Qualifier | Concentration (mg/Kg) | Qualifier (*) |
| S105 | 05 | 0.5 | 9-May-07 | 5.9 | D1 | <2.5 | D1 | 5.7 | D1 | <10 | D1 |
| SD004 | 05 | | | 6 | D1 | <2.5 | D1 | 16 | D1 | 19 | D1 |
| S112 | 00 | GS | 8-May-07 | <5.0 | - | 3.2 | - | 330 | D2 | 460 | D2 |
| SD003 | 00 | | | <5.0 | - | 3.7 | - | 330 | D2 | 490 | D2 |
| S113 | 05 | 0.5 | 10-May-07 | <5.0 | - | <2.5 | - | 79 | D2 | 32 | - |
| SD007 | 05 | | | 8.5 | - | <2.5 | - | 110 | D2 | 45 | - |
| S125 | 00 | GS | 8-May-07 | 71 | D2 | 14 | - | 5400 | D2 | 3800 | D2 |
| SD002 | 00 | | | 61 | D2 | 14 | - | 5300 | D2 | 3800 | D2 |
| S127 | 00 | 0 | 8-May-07 | 1700 | D2 | 8.8 | - | 13000 | D2 | 80 | D2 |
| SD001 | 00 | | | 1800 | D2 | 8.5 | - | 9500 | D2 | 71 | D2 |
| S143 | 25 | 2.5 | 10-May-07 | 15 | - | 4 | - | 1400 | D2 | 370 | D2 |
| SD006 | 20(+) | | | 13 | - | 4.2 | - | 1300 | D2 | 350 | D2 |
| S148 | 05 | 0.5 | 9-May-07 | 5.5 | D1 | <2.5 | D1 | 8.2 | D1 | <10 | D1 |
| SD005 | 05 | | | <5.0 | D1 | <2.5 | D1 | 8.1 | D1 | 23 | D1 |

**NOTES**

| | |
|---|---|
| Location ID | The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets. SD prefix indicates Sample Duplicate |
| Depth ID | The two digit number after the dash in the Client Sample ID on the laboratory data sheets. |
| Sample Depth | The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface. |
| mg/Kg | milligrams per kilogram |

**Laboratory Qualifiers**

| | |
|---|---|
| D1 | Sample required dilution due to matrix. |
| D2 | Sample required dilution due to high concentration of target analyte. |
| T2 | Cited ADHS License method does not contain this analyte as part of the method compound list. |
| (*) | All samples for Tungsten were qualified T2. |
| (+) | The depth ID on the laboratory Chain of Custody written as 20. The sample was collected at a sample depth of 2.5 feet. |

**Table 5**
**Rationale for the Collection of Additional Soil Samples**
**Ore Mill Site, City of Tucson**

| Location ID | Depth ID | Sample Depth (feet) | Date | Rational for the Collection of an Additional Soil Sample for statistical analysis |
|---|---|---|---|---|
| S101 | 00 | GS | 8-May-07 | Lead concentration by XRF at less than the RSRL for lead |
| S104 | 00 | GS | 8-May-07 | Lead concentration by XRF at less than the RSRL for lead |
| S112 | 00 | GS | 8-May-07 | Lead concentration by XRF approximately equal to the RSRL for lead |
| S122 | 00 | GS | 8-May-07 | Lead concentration by XRF at greater than the RSRL for lead |
| S124 | 00 | GS | 8-May-07 | Lead concentration by XRF at greater than the RSRL for lead, Arsenic concentration by XRF at greater than the RSRL for arsenic, Tungsten concentration above average |
| S125 | 00 | GS | 8-May-07 | Lead concentration by XRF at greater than the RSRL for lead, Arsenic concentration by XRF at greater than the RSRL for arsenic, Tungsten concentration above average |
| S125 | 10 | 1 | 9-May-07 | Concentrations of As, Cd, Pb, W detected by XRF |
| S125 | 15 | 1.5 | 9-May-07 | Concentrations of As, Cd, Pb, W detected by XRF |
| S127 | 00 | GS | 8-May-07 | Lead concentration by XRF at greater than the RSRL for lead, Arsenic concentration by XRF at greater than the RSRL for arsenic |
| S127 | 30 | 3 | 9-May-07 | Original planned bottom of boring prior to XRF analysis, Lead concentration by XRF at greater than the RSRL for lead, Arsenic concentration by XRF at greater than the RSRL for arsenic |
| S129 | 20 | 2 | 10-May-07 | Concentrations of As, Cd, Pb, W detected by XRF |
| S134 | 05 | 0.5 | 9-May-07 | Lead concentration by XRF at less than the RSRL for lead, Arsenic concentration by XRF at greater than the RSRL for arsenic |
| S138 | 00 | GS | 8-May-07 | Concentrations of AS, Cd, Pb, W detected by XRF |
| S142 | 00 | GS | 8-May-07 | Lead concentration by XRF at less than the RSRL for lead, Arsenic concentration by XRF approximately equal to the RSRL for arsenic |
| S143 | 05 | 0.5 | 9-May-07 | Vertical Characterization of the Soil at Western Drainage in the Wash |
| S143 | 10 | 1 | 10-May-07 | Vertical Characterization of the Soil at Western Drainage in the Wash |
| S143 | 15 | 1.5 | 10-May-07 | Vertical Characterization of the Soil at Western Drainage in the Wash |
| S148 | 05 | 0.5 | 9-May-07 | Cadmium concentration by XRF approximately equal to the detection limit for cadmium |

**NOTES**

Location ID The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets.
Depth ID The two digit number after the dash in the Client Sample ID on the laboratory data sheets.
Sample Depth The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface.
XRF The X-ray fluoresence testing method (soil mode).
RSRL Residential Soil Remediation Limit (mg/Kg)
As Arsenic
Cd Cadmium
Pb Lead
W Tungsten

**Table 6**
**Least Squares Regression Analysis**
**Ore Mill Site, City of Tucson**

| XRF measurements and Laboratory Data used in the Least Squares Regressive Analysis | | | | | | | |
|---|---|---|---|---|---|---|---|
| Aresenic (As) | | Cadmium (Cd) | | Lead (Pb) | | Tungston (W) | |
| Laboratory (mg/Kg) | XRF (mg/Kg) | Laboratory (mg/Kg) | XRF (mg/Kg) | Laboratory (mg/Kg) | XRF (mg/Kg) | Laboratory (mg/Kg) | XRF (mg/Kg) |
| 8 | 9 | 6.4 | 66 | 250 | 237 | 950 | 580 |
| 120 | 613 | 26 | 79 | 12 | 22 | 21 | 14 |
| 20 | 298 | 4.8 | 87 | 56 | 50 | 120 | 64 |
| 71 | 497 | 4 | 64 | 210 | 22 | 650 | 12 |
| 6.5 | 206 | 70 | 86 | 230 | 205 | 420 | 268 |
| 20 | 87 | 44 | 113 | 22 | 24 | 460 | 202 |
| 26 | 49 | | | 5.7 | 170 | 520 | 34 |
| 100 | 178 | | | 5.4 | 16 | 380 | 160 |
| 1700 | 1040 | | | 410 | 27 | 970 | 456 |
| 2300 | 1993 | | | 11 | 20 | 840 | 188 |
| 2200 | 3038 | | | 2100 | 30 | 45 | 23 |
| 9.7 | 21 | | | 260 | 30 | 6300 | 3233 |
| 7.1 | 84 | | | 610 | 16 | 980 | 1059 |
| 6.2 | 25 | | | 330 | 416 | 3800 | 8863 |
| 40 | 336 | | | 9.5 | 13 | 2100 | 2888 |
| 8.1 | 19 | | | 79 | 17 | 980 | 3826 |
| 7.5 | 39 | | | 310 | 38 | 1100 | 595 |
| 16 | 82 | | | 23 | 24 | 380 | 245 |
| 15 | 63 | | | 520 | 21 | 80 | 71 |
| 11 | 54 | | | 740 | 31 | 940 | 1068 |
| 7.1 | 9 | | | 240 | 22 | 960 | 732 |
| | | | | 2000 | 359 | 1200 | 357 |
| | | | | 26 | 25 | 160 | 28 |
| | | | | 26 | 36 | 1600 | 1756 |
| | | | | 4000 | 2656 | 43 | 26 |
| | | | | 2200 | 102 | 17 | 16 |
| | | | | 75 | 60 | 260 | 149 |
| | | | | 19000 | 14892 | 400 | 220 |
| | | | | 2700 | 3820 | 2600 | 2622 |
| | | | | 5400 | 10702 | 120 | 22 |
| | | | | 4900 | 4627 | 580 | 52 |
| | | | | 2700 | 3826 | 860 | 599 |
| | | | | 1500 | 1131 | 180 | 81 |
| | | | | 1300 | 1419 | 160 | 156 |
| | | | | 13000 | 6586 | 260 | 114 |
| | | | | 8600 | 5677 | 370 | 171 |
| | | | | 6700 | 8677 | 280 | 98 |
| | | | | 16 | 23 | | |
| | | | | 740 | 593 | | |
| | | | | 700 | 452 | | |
| | | | | 150 | 93 | | |
| | | | | 7700 | 3691 | | |
| | | | | 780 | 525 | | |
| | | | | 920 | 947 | | |
| | | | | 41 | 49 | | |
| | | | | 24 | 30 | | |
| | | | | 33 | 25 | | |
| | | | | 340 | 240 | | |
| | | | | 140 | 146 | | |
| | | | | 11000 | 12634 | | |
| | | | | 560 | 199 | | |
| | | | | 1600 | 246 | | |
| | | | | 440 | 359 | | |
| | | | | 30 | 30 | | |
| | | | | 130 | 71 | | |
| | | | | 21 | 25 | | |
| | | | | 680 | 323 | | |
| | | | | 690 | 746 | | |
| | | | | 1500 | 1337 | | |
| | | | | 1400 | 968 | | |
| | | | | 930 | 571 | | |
| | | | | 28 | 35 | | |
| | | | | 46 | 46 | | |
| | | | | 13 | 27 | | |
| | | | | 27 | 43 | | |
| | | | | 8.2 | 16 | | |
| | | | | 19 | 27 | | |
| | | | | 71 | 80 | | |

| Least Squares Result<br>Slope of the best fit line | |
|---|---|
| As | 0.909 |
| Cd | 1.415 |
| Pb | 1.109 |
| W | 0.704 |

| Least Squares Result<br>Intercept | |
|---|---|
| As | -59.390 |
| Cd | -90.832 |
| Pb | 159.263 |
| W | 276.778 |

| Least Squares Result<br>$R^2$ | |
|---|---|
| As | 0.877 |
| Cd | 0.889 |
| Pb | 0.980 |
| W | 0.956 |

**NOTES**

| | |
|---|---|
| XRF | XRF Measurement |
| Laboratory | Laboratory Data |
| mg/Kg | milligrams per kilogram |
| As | Arsenic |
| Cd | Cadmium |
| Pb | Lead |
| W | Tungsten |

**Table 7**
**Comparision of Initial and Reanalyzed Laboratory Data for Arsenic and Lead**
**Ore Mill Site, City of Tucson**

| | | | | Arsenic (As) | | Lead (Pb) | |
|---|---|---|---|---|---|---|---|
| | | | | RSRL 10 mg/Kg | | RSRL 400 mg/Kg | |
| | | | | NRSRL 10 mg/Kg | | NRSRL 2,000 mg/Kg | |
| | | | | GPL 290 mg/Kg | | GPL 290 mg/Kg | |
| | | | | Site Specific GPL - Not Calculated | | Site Specific GPL - 1611 mg/Kg | |
| | | | | Laboratory Data | | Laboratory Data | |
| Location ID | Depth ID | Sample Depth (feet) | Date | Laboratory Concentration (mg/Kg) | Laboratory Qualifier | Laboratory Concentration (mg/Kg) | Laboratory Qualifier |
| S107 | 05 | 0.5 | 9-May-07 | <5.0 | - | **410** | D2 |
| | | | 6-Jun-07 | <5.0 | - | **640** | - |
| S109 | 05 | 0.5 | 9-May-07 | **28** | - | **2100** | D2 |
| | | | 6-Jun-07 | **19** | - | **2300** | - |
| S111 | 05 | 0.5 | 9-May-07 | <5.0 | - | **610** | D2 |
| | | | 6-Jun-07 | 6.9 | - | **400** | - |
| S116 | 05 | 0.5 | 9-May-07 | **17** | - | **520** | D2 |
| | | | 6-Jun-07 | **15** | - | **500** | - |
| S117 | 05 | 0.5 | 9-May-07 | 5.7 | - | **740** | D2 |
| | | | 6-Jun-07 | 9.4 | - | **1400** | - |
| S119 | 15 | 1.5 | 10-May-07 | **21** | - | **2000** | D2 |
| | | | 6-Jun-07 | **21** | - | **1800** | - |
| S122 | 05 | 0.5 | 10-May-07 | **14** | - | **2200** | D2 |
| | | | 6-Jun-07 | **10** | - | **1600** | - |
| S140 | 30 | 3.0 | 10-May-07 | <5.0 | - | **440** | D2 |
| | | | 6-Jun-07 | **<5** | - | **350** | - |

**NOTES**

Location ID The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets.
Depth ID The two digit number after the dash in the Client Sample ID on the laboratory data sheets.
Sample Depth The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface.
mg/Kg milligrams per kilogram
RSRL Residential Soil Remediation Limit (mg/Kg)
NRSRL Non-residential Soil Remediation Limit (mg/Kg)
GPL Groundwater Protection Level

**Laboratory Qualifiers**

D2 Sample required dilution due to high concentration of target analyte.
\- No Data Qualifier

**Source of Regulatory Concentrations**

RSRL Arizona Soil Remediatilon Standards Rule, May 5, 2007
NRSRL Arizona Soil Remediatilon Standards Rule, May 5, 2007
GPL Drywell Investigation Guidelines, August 2000
Site Specific GPL, Screening Method to Determine Soil Concnetrations Protective of Groundwater Quality, Appendix C, September 199

**Table 8**
**Summary of TCLP Analytical Data**
**Ore Mill Site, City of Tucson**

| | | | | TCLP Data | | | Corresponding Soil Data | |
|---|---|---|---|---|---|---|---|---|
| | | | | Arsenic (As) | Cadmium (Cd) | Lead (Pb) | Cadmium (Cd) | Lead (Pb) |
| | | | | MCCTC 5.0 (mg/L) | MCCTC 1.0 (mg/L) | MCCTC 5.0 (mg/L) | | |
| Location ID | Depth ID | Sample Depth (feet) | Date | Laboratory Concentration (mg/L) | Laboratory Concentration (mg/L) | Laboratory Concentration (mg/L) | Soil Laboratory Concentration (mg/kg) | Soil Laboratory Concentration (mg/kg) |
| S102 | 05 | 0.5 | 9-May-07 | <0.50 | <0.25 | <0.50 | <2.5 | 56 |
| S103 | 05 | 0.5 | 9-May-07 | <0.50 | <0.25 | <0.50 | 3.5 | 210 |
| S107 | 05 | 0.5 | 9-May-07 | <0.50 | <0.25 | <0.50 | <2.5 | 410 |
| S113 | 05 | 0.5 | 10-May-07 | <0.50 | <0.25 | <0.50 | <2.5 | 79 |
| S114 | 10 | 1.0 | 10-May-07 | <0.50 | <0.25 | <0.50 | 140 | 310 |
| S116 | 05 | 0.5 | 9-May-07 | <0.50 | <0.25 | <0.50 | 2.7 | 520 |
| S119 | 15 | 1.5 | 10-May-07 | <0.50 | <0.25 | <0.50 | 3.1 | 2,000 |
| S122 | 00 | GS | 8-May-07 | <0.50 | <0.25 | 4.9 | 6.4 | 4,000 |
| S122 | 05 | 0.5 | 10-May-07 | <0.50 | <0.25 | 0.52 | 3.2 | 2,200 |
| S123 | 25 | 2.5 | 9-May-07 | <0.50 | <0.25 | <0.50 | <2.5 | 75 |
| S127 | 00 | GS | 8-May-07 | <0.50 | <0.25 | **84*** | 8.8 | 13,000 |
| S127 | 30 | 3.0 | 9-May-07 | <0.50 | <0.25 | **12*** | 5.3 | 8,600 |
| S127 | 45 | 4.5 | 9-May-07 | <0.50 | <0.25 | 1.7 | 5.5 | 6,700 |
| S130 | 10 | 1.0 | 9-May-07 | <0.50 | <0.25 | 0.63 | <2.5 | 150 |
| S131 | 10 | 1.0 | 10-May-07 | <0.50 | **1.6*** | **70*** | 70 | 7,700 |
| S138 | 00 | GS | 8-May-07 | <0.50 | 0.92 | **47*** | 44 | 11,000 |
| S138 | 15 | 1.5 | 10-May-07 | <0.50 | <0.25 | 0.53 | 6.2 | 560 |
| S140 | 30 | 3.0 | 10-May-07 | <0.50 | <0.25 | <0.50 | 13 | 440 |
| s4 | 0.5-1.0 | 0.5-1.0 | July 2006 | Data not available | **1.2*** | **36*** | 43 | 2800 |
| s5 | 0.5-1.0 | 0.5-1.0 | | | <0.25 | **59*** | 6.4 | 8300 |
| s9 | 0.5-1.0 | 0.5-1.0 | | | <0.25 | **10*** | 21 | 13000 |
| s13 | 0.5-1.0 | 0.5-1.0 | | | <0.25 | 3.4 | 16 | 4100 |
| s14 | 0.5-1.0 | 0.5-1.0 | | | 0.54 | **30*** | 41 | 1900 |

**NOTES**

| | |
|---|---|
| Location ID | The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets. |
| Depth ID | The two digit number after the dash in the Client Sample ID on the laboratory data sheets. |
| Sample Depth | The depth of the XRF or laboratory sample from the ground surface in feet. GS means ground surface. |
| mg/L | milligrams per liter |
| mg/kg | milligrams per kilogram |
| TCLP | Toxic Characteristic Leaching Procedure EPA SW-846 Method 1311 |
| MCCTC | Maximum Concentration of Contaminants for Toxicity Characteristic |
| **BOLD and Right** | Indicates that the TCLP concentration of the metal exceeded the MCCTC |

**Laboratory Qualifiers**

| | |
|---|---|
| * | **Value exceeds the Maximum Concentration of Contaminants for Toxicity Characteristic** |

**Table 9**
**Calculation of Site-Specific GPL for Lead and Cadmium**
**Ore Mill Site, City of Tucson**

| Cadmium | | AWQS | 0.005 | mg/L |
|---|---|---|---|---|
| Location | Depth ID | Laboratory (mg/Kg) | TCLP (mg/L) | LAB/TCLP |
| s4 | 0.5-1.0 | 43 | 1.2 | 35.8 |
| s5 | 0.5-1.0 | 6.4 | <0.25 | NA |
| s9 | 0.5-1.0 | 21 | <0.25 | NA |
| s13 | 0.5-1.0 | 16 | <0.25 | NA |
| s14 | 0.5-1.0 | 41 | 0.54 | 75.9 |
| S131 | 10 | 70 | 1.6 | 43.8 |
| S138 | GS | 44 | 0.92 | 47.8 |
| S127 | GS | 8.8 | <0.25 | NA |
| S127 | 30 | 5.3 | <0.25 | NA |
| S122 | GS | 6.4 | <0.25 | NA |
| S127 | 45 | 5.5 | <0.25 | NA |

| Lead | | AWQS | 0.05 | mg/L |
|---|---|---|---|---|
| Location | Depth ID | Laboratory (mg/Kg) | TCLP (mg/L) | LAB/TCLP |
| s4 | 0.5-1.0 | 2800 | 36 | 77.8 |
| s5 | 0.5-1.0 | 8300 | 59 | 140.7 |
| s9 | 0.5-1.0 | 13000 | 10 | 1300.0 |
| s13 | 0.5-1.0 | 4100 | 3.4 | 1205.9 |
| s14 | 0.5-1.0 | 1900 | 30 | 63.3 |
| S131 | 10 | 7700 | 70 | 110.0 |
| S138 | 0 | 11000 | 47 | 234.0 |
| S127 | 0 | 13000 | 84 | 154.8 |
| S127 | 30 | 8600 | 12 | 716.7 |
| S122 | 0 | 4000 | 4.9 | 816.3 |
| S127 | 45 | 6700 | 1.7 | 3941.2 |

Cadmium Site Specific GPL **52.5 mg/Kg**

Lead Site Specific GPL **927.5 mg/Kg**

From Guidance* Xs=(292.9)r(AWQS)

Where - Xs is the site specific GPL
r is the lowest ratio between the lab and TCLP data
AWQS is the Aquifer Water Quality Standard.

r Value of the Lowest Ratio

**Notes**

GPL Groundwater Protection Level
Location ID The "S" followed by three numbers in the Client Sample ID on the laboratory data sheets.
Depth ID The two digit number after the dash in the Client Sample ID on the laboratory data sheets.
AWQS Aquifer Water Quality Standard
mg/Kg milligrams per kilogram
TCLP Toxic Characteristic Leaching Procedure EPA SW-846 Method 1311
mg/L milligrams per liter
LAB/TCLP ratio between the lab and TCLP data
GS Ground surface

This table utilizes the results from select TCLP analysis from site investigations completed in 2006 and 2007.
S# or S## TCLP sample analyzed in July 2006
S### TCLP sample analyzed in May 2007

**Source of Regulatory Concentrations**

AWQS Arizona Administrative Code R18-11-406, January 4, 1996
A Screening Method to Determine Soil Concnetrations Protective of Groundwater Quality, Appendix C, September 1996

* Site Specific GPL

# CHARTS

**CHART 1**
**Arsenic XRF Measurements and Laboratory Data**
**Ore Mill Site, City of Tucson**

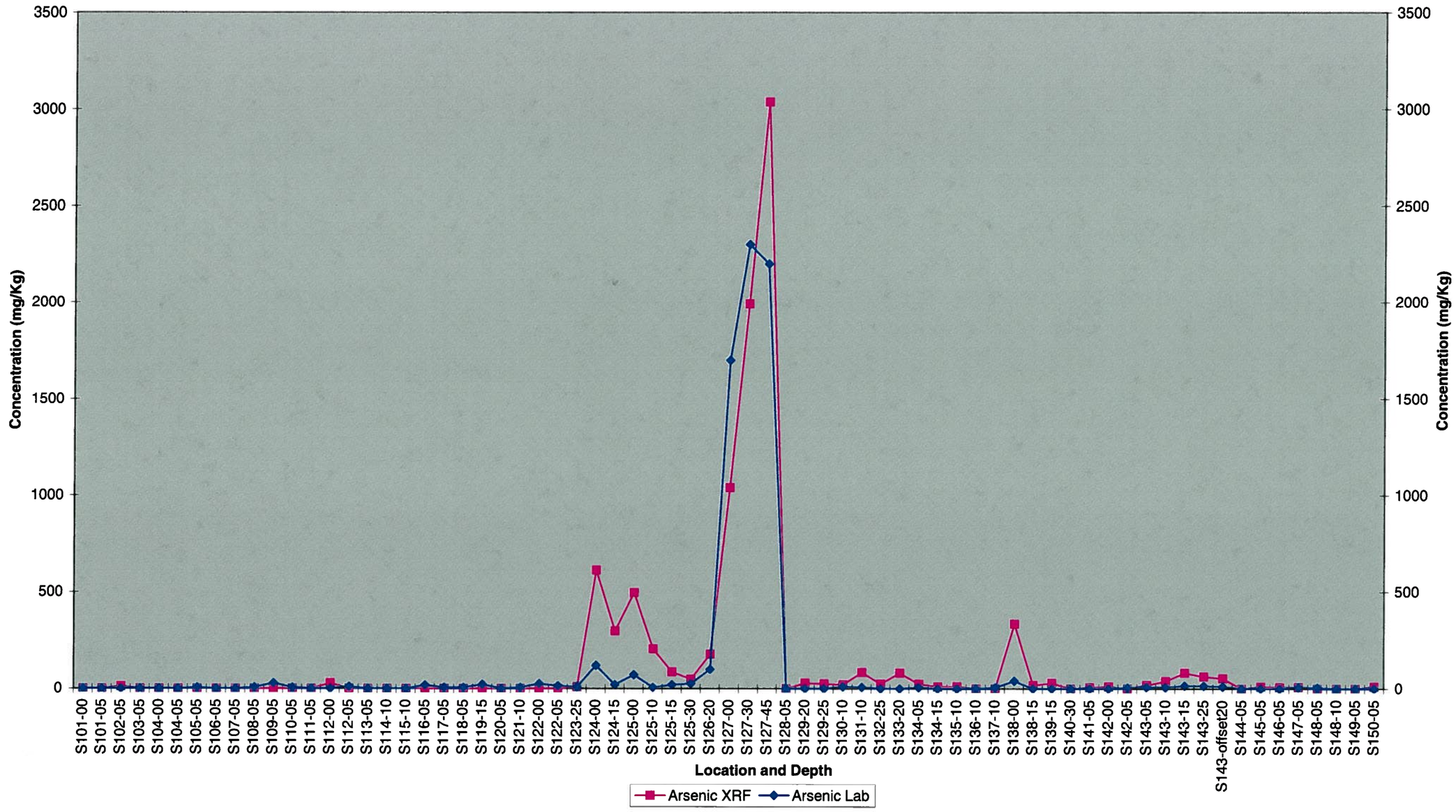


**CHART 2**
**Cadmium XRF Measurements and Laboratory Data**
**Ore Mill Site**
**City of Tucson**

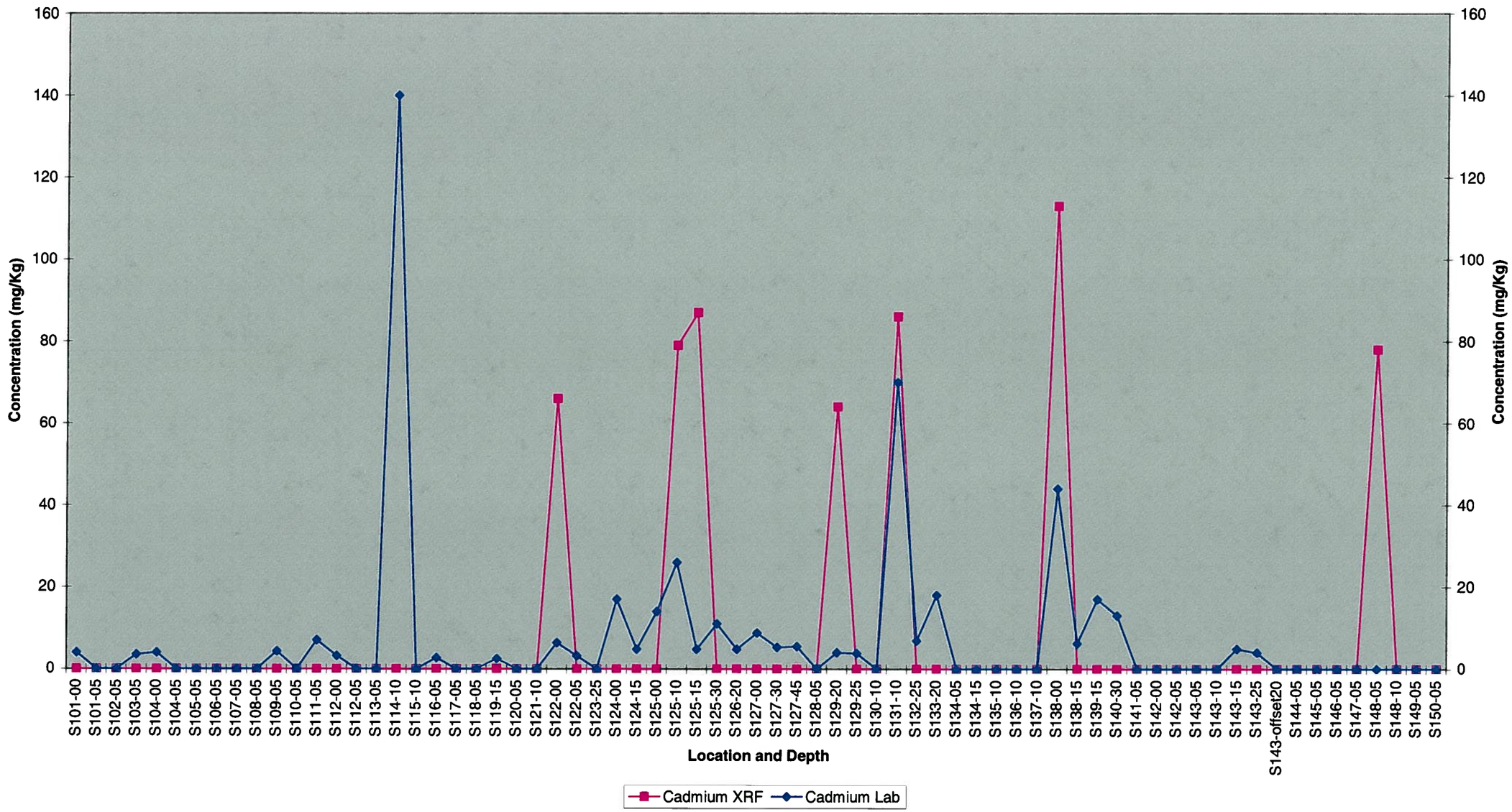


**CHART 3**
**Lead XRF Measurements and Laboratory Data**
**Ore Mill Site, City of Tucson**

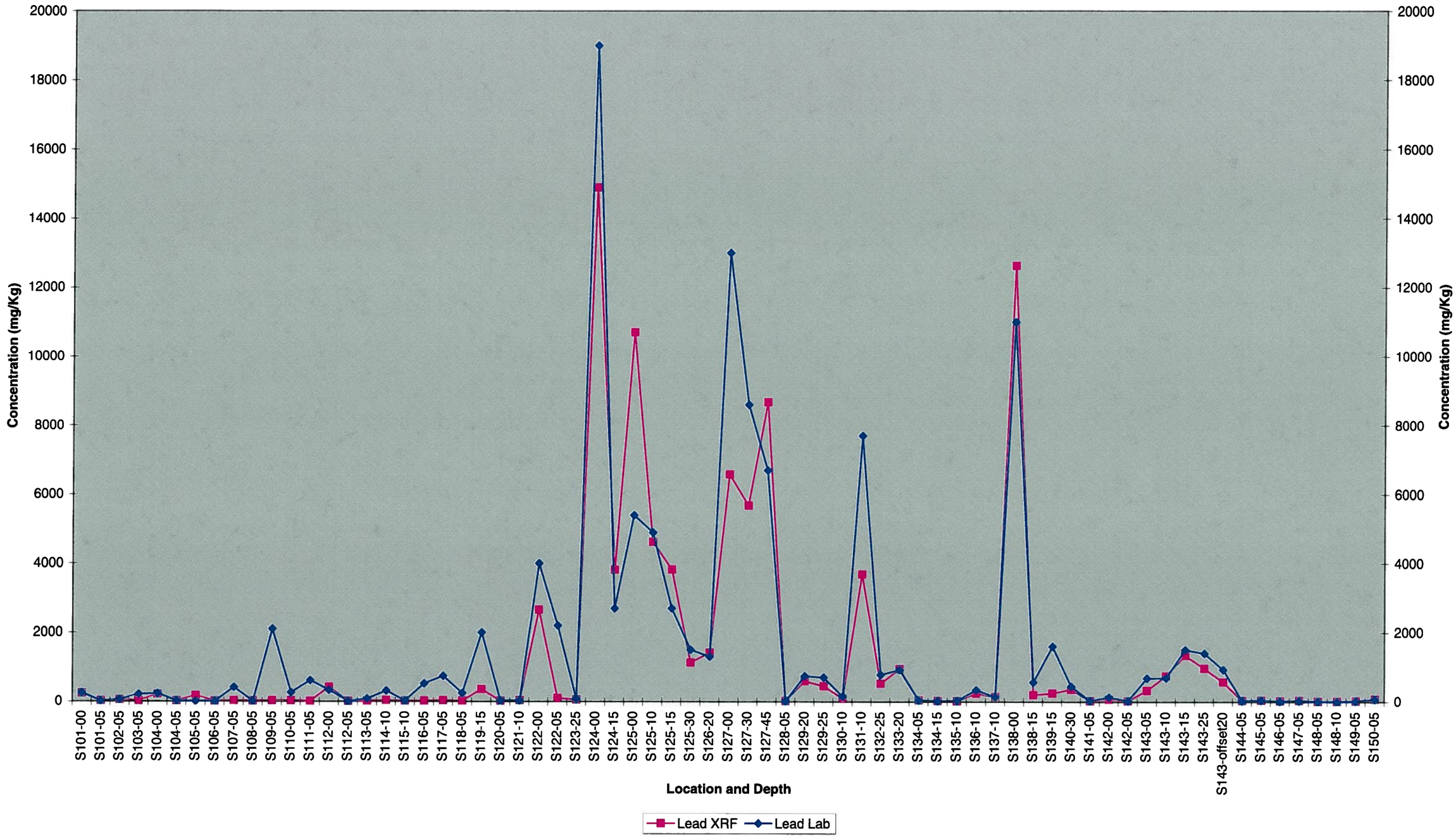
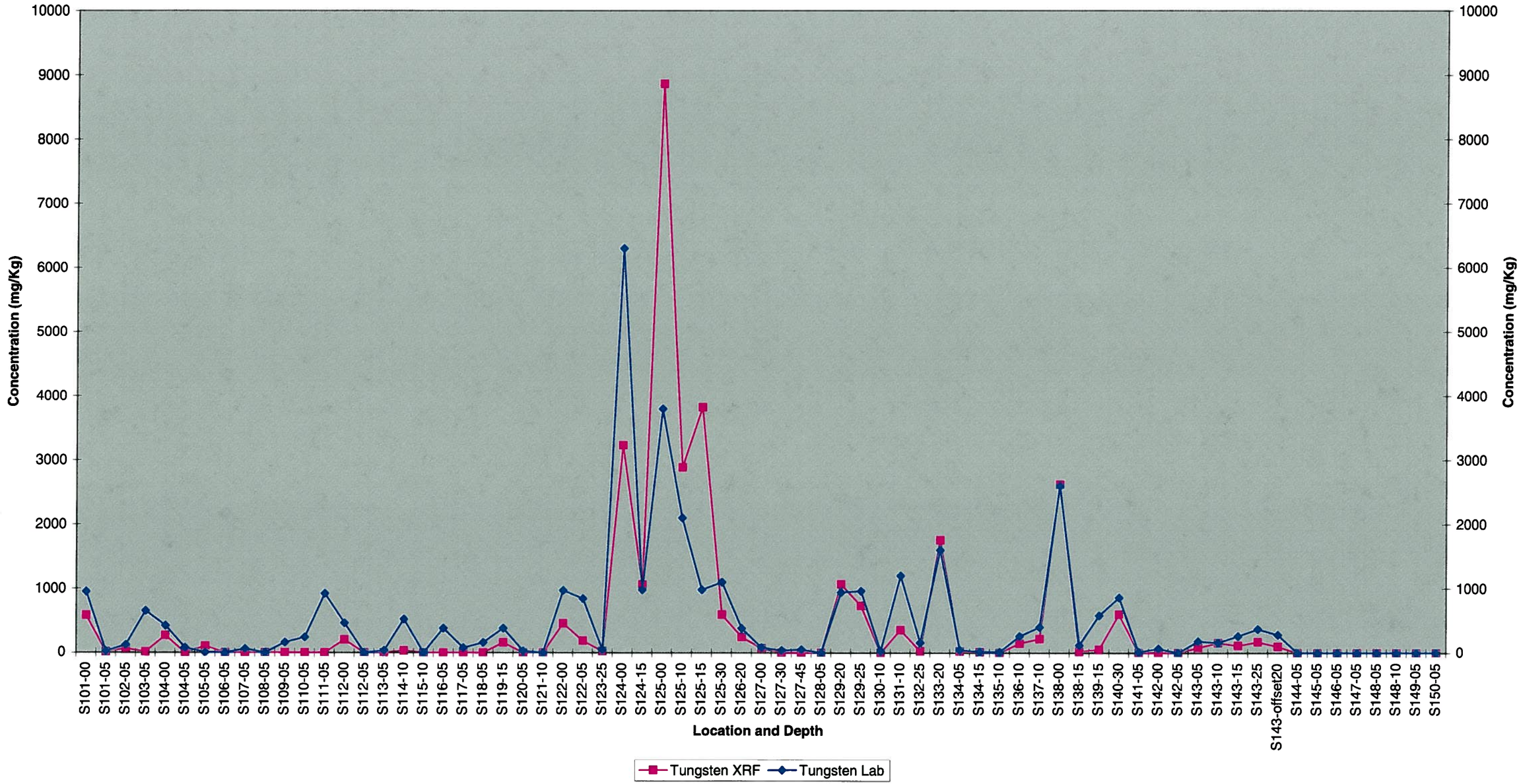


**CHART 4**
**Tungsten XRF Measurements and Laboratory Data**
**Ore Mill Site, City of Tucson**



# APPENDIX A

## Photographs

PHOTOGRAPH 1 - DEN - Facing East
Soil sample location S101, illustrating the sample work station and native vegetation in Area A.

PHOTOGRAPH 2 - EE - Facing North
Soil sample location S126 illustrating the direct push drilling rig.

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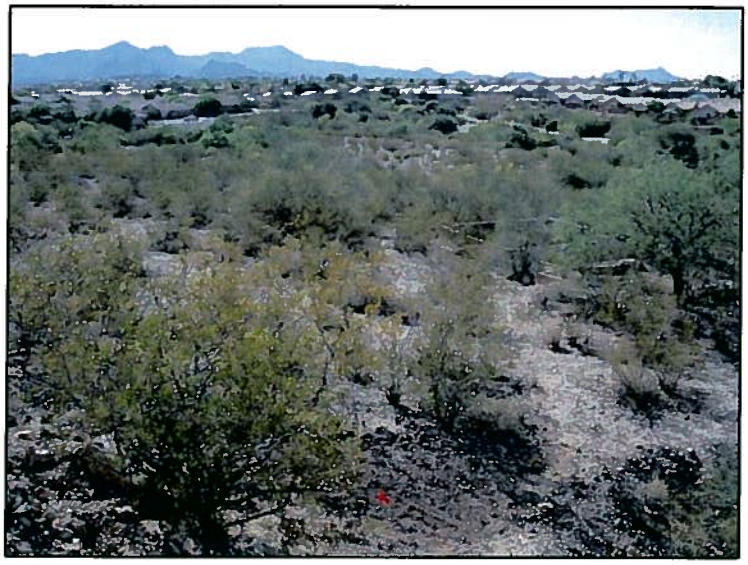
**SITE PHOTOGRAPHS**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

| | |
|---|---|
| DRAWN BY: | SAG |
| REVISED BY: | SAG |
| CHECKED BY: | DEN |
| APPENDIX | A |

DRAWN: 11/16/07 | APPROVED BY: _____ | PROJECT NO. 80365 | FILE NAME: 80365-AppA.dwg



PHOTOGRAPH 3 - EE - Facing Northwest
A view of Area B, illustrating the building foundations terrain and vegetation south of the building foundations. Soil sample location S119 at bottom center of the photograph

PHOTOGRAPH 4 - DEN - Facing South
A view of Area B, from soil sample location S137 with building retaining wall in the background.

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**SITE PHOTOGRAPHS**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

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| CHECKED BY: | DEN |
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PHOTOGRAPH 5 - DEN - Facing South
Manual excavation at soil sample location S130, located within Area B.

PHOTOGRAPH 6 - DEN - Facing North
Looking down-slope into the wash from soil sample location S139. Soil sample location S139 is within the drainage fro the eastern portion of the Site.
The northern perimeter fence in visible in the background.

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Tucson, Pima County, Arizona

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| CHECKED BY: | DEN |
| APPENDIX | A |

DRAWN: 11/16/07 | APPROVED BY: _____ | PROJECT NO. 80365 | FILE NAME: 80365-AppA.dwg

PHOTOGRAPH 7 - EE - Facing North
Soil sample location S145, within Area D, illustrating the fencing and warning sign around the ore piles, located northeast of the main ore mill site.

PHOTOGRAPH 8 - DEN - Facing South
Soil sample location S143 illustrating the typical flag type and markings for this sampling event. Soil Sample S143 was located at the outfall of two gullies which drain the western portion of the site.

CAD FILE: L:\2007\Projects\80365\Figures\Revision-110707\ LAYOUT: 4 of 5

ATTACHED XREFS: L:\2007

KLEINFELDER
1335 WEST AUTO DRIVE
TEMPE, AZ 85284
PH. 480-763-1200 FAX. 480-763-1212
www.kleinfelder.com

**SITE PHOTOGRAPHS**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

| | |
|---|---|
| DRAWN BY: | SAG |
| REVISED BY: | SAG |
| CHECKED BY: | DEN |
| APPENDIX | A |

DRAWN: 11/16/07 | APPROVED BY:_____ | PROJECT NO. 80365 | FILE NAME:80365-AppA.dwg

PHOTOGRAPH 9 - DEN - Facing West
Soil sample location S127. This mound of soil is the location where the concentrations of lead and arsenic exceeding the RSRLs, was determined to be the thickest. Refusal at this location was on concrete.

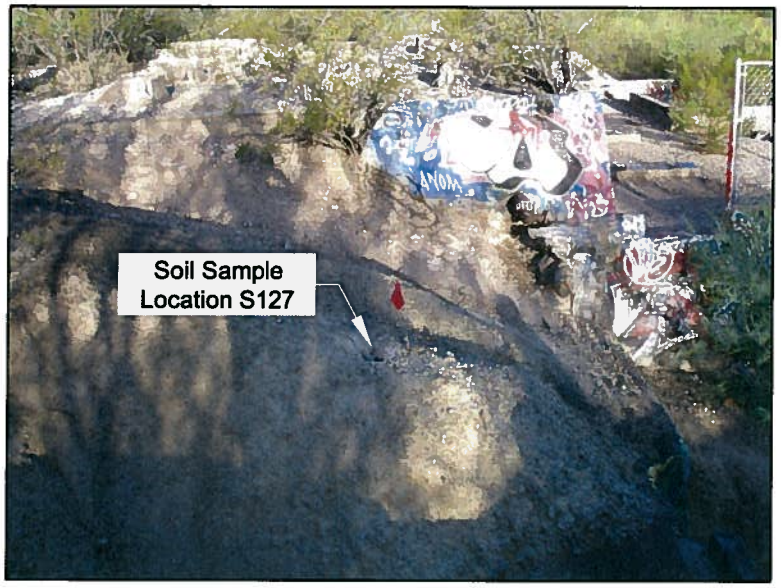
PHOTOGRAPH 10 - DEN - Facing Southeast
Illustrates the mound of soil at location S127 in relation to the foundations.

CAD FILE: L:\2007\Projects\80365\Figures\Revision-110707\ LAYOUT: 5 of 5

ATTACHED XREFS: L:\2007

| | | | |
|---|---|---|---|
| KLEINFELDER<br>1335 WEST AUTO DRIVE<br>TEMPE, AZ 85284<br>PH. 480-763-1200 FAX. 480-763-1212<br>www.kleinfelder.com | SITE PHOTOGRAPHS<br>Former Ore Mill Site - 29 Acre Parcel<br>North La Cholla and Speedway<br>Tucson, Pima County, Arizona | DRAWN BY: SAG<br>REVISED BY: SAG<br>CHECKED BY: DEN<br>APPENDIX<br>A | |
| DRAWN: 11/16/07 APPROVED BY:_____ | PROJECT NO. 80365 FILE NAME:80365-AppA.dwg | 5 of 5 | |

# APPENDIX B
# AEROTECH ENVIRONMENTAL LABORATORIES
# TUCSON ORE MILL DATA PACKAGE
# 07050523




PHOTOGRAPH 9 - DEN - Facing West
Soil sample location S127. This mound of soil is the location where the concentrations of lead and arsenic exceeding the RSRLs, was determined to be the thickest. Refusal at this location was on concrete.

PHOTOGRAPH 10 - DEN - Facing Southeast
Illustrates the mound of soil at location S127 in relation to the foundations.

CAD FILE: L:\2007\Projects\80365\Figures\Revision-110707\ LAYOUT: 5 of 5

ATTACHED XREFS: L:\2007

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TEMPE, AZ 85284
PH. 480-763-1200 FAX. 480-763-1212
www.kleinfelder.com

**SITE PHOTOGRAPHS**

Former Ore Mill Site - 29 Acre Parcel
North La Cholla and Speedway
Tucson, Pima County, Arizona

| | |
|---|---|
| DRAWN BY: | SAG |
| REVISED BY: | SAG |
| CHECKED BY: | DEN |
| APPENDIX | A |

DRAWN: 11/16/07 | APPROVED BY: _____ | PROJECT NO. 80365 | FILE NAME: 80365-AppA.dwg



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# APPENDIX B

## Aerotech Environmental Laboratories
## Tucson Ore Mill Data Package
## 07050523

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Wednesday, May 30, 2007

David Neidigh
Kleinfelder
1335 West Auto Loop
Tempe, Arizona 85284

TEL: 480-763-1200
FAX 480-763-1212

RECEIVED
MAY 31 2007

RE: Tucson Ore Mill/80365

Order No.: 07050523

Dear David Neidigh:

Aerotech Environmental Laboratories received 75 sample(s) on 5/14/2007 for the analyses presented in the following report.

This report includes the following information:
- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Michelle Johnston
Customer Service Manager (CSM)

## Aerotech Environmental Laboratories

**Date:** *30-May-07*

**CLIENT:** Kleinfelder
**Project:** Tucson Ore Mill/80365
**Lab Order:** 07050523

# CASE NARRATIVE

Analyses included in this report were performed by Aerotech Environmental Laboratories (AEL), 4645 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ.

AEL is licensed through the State of Arizona (License No. AZ0610), and holds NELAC accreditation (OR100001) through the State of Oregon for the analytical techniques noted on the scope of accreditation.

AEL is also accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation.

Samples were analyzed using methods outlined in references such as:
-Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.
-40 CFR, Part 136, July 2006. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.
-Methods for the Chemical Analysis of Water and Wastes, EPA/600/4-79-020, Revised March 1983.
-Methods for the Determination of Organic Compounds in Drinking Water: Supplement III, August 1995, EPA/600/R-95/131.
-Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA, 3rd Edition 1986, and Updates.
-Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA, Second Edition, 1999.
-NIOSH Manual of Analytical Methods, Fourth Edition, 1994. NIOSH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Analytical Comments:

All method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

Data Qualifiers:

Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

D1 Sample required dilution due to matrix.
D2 Sample required dilution due to high concentration of target analyte.
M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.

# CASE NARRATIVE

M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.00.
R9 Sample RPD exceeded the laboratory control limit.
T2 Cited ADHS license method does not contain this analyte as part of method compound list.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD001-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:00:00 PM |
| **Lab ID:** | 07050523-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 1800 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 8.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 9500 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 71 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD002-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:10:00 PM |
| **Lab ID:** | 07050523-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 61 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 14 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 5300 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 3800 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD003-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:20:00 PM |
| **Lab ID:** | 07050523-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 3.7 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 330 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 490 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:30:00 PM |
| **Lab ID:** | 07050523-04A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 1700 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 8.8 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 13000 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 80 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S125-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:40:00 PM |
| **Lab ID:** | 07050523-05A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 71 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 14 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 5400 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 3800 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S124-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:44:00 PM |
| **Lab ID:** | 07050523-06A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 120 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 17 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 19000 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 6300 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S138-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:47:00 PM |
| **Lab ID:** | 07050523-07A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 40 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 44 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 11000 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 2600 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S142-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:49:00 PM |
| **Lab ID:** | 07050523-08A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 130 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 64 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S122-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:54:00 PM |
| **Lab ID:** | 07050523-09A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 25 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 6.4 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 4000 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 970 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S112-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:59:00 PM |
| **Lab ID:** | 07050523-10A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 3.2 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 330 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 460 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S101-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 4:02:00 PM |
| **Lab ID:** | 07050523-11A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.0 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 250 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 950 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S104-00 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 4:06:00 PM |
| **Lab ID:** | 07050523-12A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.0 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 230 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 420 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-30 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 6:59:00 AM |
| **Lab ID:** | 07050523-13A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 2300 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 5.3 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 8600 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 37 | 10 | T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S126-20 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 7:28:00 AM |
| **Lab ID:** | 07050523-14A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 100 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.8 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1300 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 380 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S123-25 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 8:05:00 AM |
| **Lab ID:** | 07050523-15A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 8.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 75 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 45 | 10 | T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S125-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 8:20:00 AM |
| **Lab ID:** | 07050523-16A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 6.5 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 26 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 4900 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 2100 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S125-30 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 8:40:00 AM |
| **Lab ID:** | 07050523-17A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 26 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 11 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1500 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 1100 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD005-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 9:01:00 AM |
| **Lab ID:** | 07050523-18A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | 8.1 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 23 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S130-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 10:46:00 AM |
| **Lab ID:** | 07050523-19A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 9.7 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 150 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 25 | 10 | T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

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|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S124-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 10:06:00 AM |
| **Lab ID:** | 07050523-20A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 20 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.8 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 2700 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 980 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S101-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:29:00 AM |
| **Lab ID:** | 07050523-21A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 12 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 21 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S102-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:37:00 AM |
| **Lab ID:** | 07050523-22A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 56 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 120 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S103-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:49:00 AM |
| **Lab ID:** | 07050523-23A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | 3.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 210 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 650 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S106-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 12:04:00 PM |
| **Lab ID:** | 07050523-24A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 5.4 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD004-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 12:14:00 PM |
| **Lab ID:** | 07050523-25A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 6.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 16 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 19 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S105-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 12:37:00 PM |
| **Lab ID:** | 07050523-26A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.9 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 5.7 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S104-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 1:06:00 PM |
| **Lab ID:** | 07050523-27A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 22 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 76 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S112-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 1:29:00 PM |
| **Lab ID:** | 07050523-28A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 9.7 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 9.5 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S111-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 1:34:00 PM |
| **Lab ID:** | 07050523-29A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | 7.0 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 610 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 920 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S110-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 2:44:00 PM |
| **Lab ID:** | 07050523-30A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.6 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 260 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 240 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-45 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 3:02:00 PM |
| **Lab ID:** | 07050523-31A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 2200 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | 5.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 6700 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 50 | 10 | T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S116-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:09:00 PM |
| **Lab ID:** | 07050523-32A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 17 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | 2.7 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 520 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 380 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S117-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:14:00 PM |
| **Lab ID:** | 07050523-33A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.7 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 740 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 75 | 10 | T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S108-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:18:00 PM |
| **Lab ID:** | 07050523-34A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 6.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 11 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S109-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:23:00 PM |
| **Lab ID:** | 07050523-35A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 28 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | 4.3 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 2100 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 160 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S148-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:01:00 PM |
| **Lab ID:** | 07050523-36A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.5 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 8.2 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S146-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:12:00 PM |
| **Lab ID:** | 07050523-37A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 13 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S147-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:16:00 PM |
| **Lab ID:** | 07050523-38A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 7.1 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 27 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S149-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:21:00 PM |
| **Lab ID:** | 07050523-39A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 19 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S150-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:23:00 PM |
| **Lab ID:** | 07050523-40A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 71 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S145-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:27:00 PM |
| **Lab ID:** | 07050523-41A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 46 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S144-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:46:00 PM |
| **Lab ID:** | 07050523-42A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 28 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S134-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:43:00 PM |
| **Lab ID:** | 07050523-43A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 6.2 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 41 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 43 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S143-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:51:00 PM |
| **Lab ID:** | 07050523-44A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 8.1 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 680 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 180 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S142-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:55:00 PM |
| **Lab ID:** | 07050523-45A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.9 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 21 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S141-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 5:59:00 PM |
| **Lab ID:** | 07050523-46A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 30 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 13 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S107-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:54:00 AM |
| **Lab ID:** | 07050523-47A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 410 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 57 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S134-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 6:44:00 AM |
| **Lab ID:** | 07050523-48A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 24 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 17 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S135-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 6:59:00 AM |
| **Lab ID:** | 07050523-49A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/17/2007 |
| Lead | 33 | 5.0 | D1 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 14 | 10 | D1,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S136-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 7:13:00 AM |
| **Lab ID:** | 07050523-50A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/17/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/17/2007 |
| Lead | 340 | 5.0 | D2 | mg/Kg | 5 | 5/17/2007 |
| Tungsten (See Qualifier T 2) | 260 | 10 | D2,T2 | mg/Kg | 5 | 5/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S137-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 7:32:00 AM |
| **Lab ID:** | 07050523-51A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.5 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 140 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 400 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S143-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 7:42:00 AM |
| **Lab ID:** | 07050523-52A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 7.5 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 690 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 160 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S143-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 7:51:00 AM |
| **Lab ID:** | 07050523-53A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 16 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.9 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1500 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 260 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD006-20 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 8:03:00 AM |
| **Lab ID:** | 07050523-54A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 13 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.2 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1300 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 350 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S143-25 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 8:06:00 AM |
| **Lab ID:** | 07050523-55A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 15 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.0 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1400 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 370 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | SD007-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 8:30:00 AM |
| **Lab ID:** | 07050523-56A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 8.5 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 110 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 45 | 10 | T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S121-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 9:39:00 AM |
| **Lab ID:** | 07050523-57A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.3 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | 26 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S113-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 9:52:00 AM |
| **Lab ID:** | 07050523-58A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 79 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 32 | 10 | T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S114-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:01:00 AM |
| **Lab ID:** | 07050523-59A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 140 | 2.5 | D2 | mg/Kg | 5 | 5/21/2007 |
| Lead | 310 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 520 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S115-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:11:00 AM |
| **Lab ID:** | 07050523-60A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | 23 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S122-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:16:00 AM |
| **Lab ID:** | 07050523-61A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 14 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 3.2 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 2200 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 840 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S120-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:33:00 AM |
| **Lab ID:** | 07050523-62A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | 26 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 25 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S118-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:37:00 AM |
| **Lab ID:** | 07050523-63A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 5.7 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 240 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 160 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S128-05 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:41:00 AM |
| **Lab ID:** | 07050523-64A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | 16 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S148-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 11:10:00 AM |
| **Lab ID:** | 07050523-65A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | D1 | mg/Kg | 5 | 5/21/2007 |
| Lead | < 5.0 | 5.0 | D1 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | < 10 | 10 | D1,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S138-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 12:29:00 PM |
| **Lab ID:** | 07050523-66A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 6.2 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 560 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 120 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S133-20 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 12:43:00 PM |
| **Lab ID:** | 07050523-67A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 18 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 920 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 1600 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S132-25 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 1:07:00 PM |
| **Lab ID:** | 07050523-68A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 6.9 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 780 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 160 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S131-10 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 1:19:00 PM |
| **Lab ID:** | 07050523-69A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 7.1 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 70 | 2.5 | D2 | mg/Kg | 5 | 5/21/2007 |
| Lead | 7700 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 1200 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S129-20 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 3:17:00 PM |
| **Lab ID:** | 07050523-70A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 4.0 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 740 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 940 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S129-25 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 3:21:00 PM |
| **Lab ID:** | 07050523-71A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 3.8 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 700 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 960 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S139-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 3:23:00 PM |
| **Lab ID:** | 07050523-72A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 17 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 1600 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 580 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S119-15 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 4:49:00 PM |
| **Lab ID:** | 07050523-73A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 21 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 3.1 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 2000 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 380 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S143E-20 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 5:37:00 PM |
| **Lab ID:** | 07050523-74A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 11 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | < 2.5 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 930 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 280 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *22-May-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S140-30 |
| **Lab Order:** | 07050523 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 5:55:00 PM |
| **Lab ID:** | 07050523-75A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 5 | 5/21/2007 |
| Cadmium | 13 | 2.5 | | mg/Kg | 5 | 5/21/2007 |
| Lead | 440 | 5.0 | D2 | mg/Kg | 5 | 5/21/2007 |
| Tungsten (See Qualifier T 2) | 860 | 10 | D2,T2 | mg/Kg | 5 | 5/21/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **MB-29343** SampType: **MBLK** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87315**
Client ID: Batch ID: **29343** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032931**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <1.0 | 1.0 | | | | | | | | | |
| Cadmium | <0.50 | 0.50 | | | | | | | | | |
| Lead | <1.0 | 1.0 | | | | | | | | | |
| Tungsten (See Qualifier T 2) | <2.0 | 2.0 | | | | | | | | | T2 |

Sample ID: **MB-29344** SampType: **MBLK** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87317**
Client ID: Batch ID: **29344** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032981**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <1.0 | 1.0 | | | | | | | | | |
| Cadmium | <0.50 | 0.50 | | | | | | | | | |
| Lead | <1.0 | 1.0 | | | | | | | | | |
| Tungsten (See Qualifier T 2) | <2.0 | 2.0 | | | | | | | | | T2 |

Sample ID: **MB-29345** SampType: **MBLK** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87344**
Client ID: Batch ID: **29345** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033139**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <1.0 | 1.0 | | | | | | | | | |
| Cadmium | <0.50 | 0.50 | | | | | | | | | |
| Lead | <1.0 | 1.0 | | | | | | | | | |
| Tungsten (See Qualifier T 2) | <2.0 | 2.0 | | | | | | | | | T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **MB-29342** SampType: **MBLK** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87345**
Client ID: Batch ID: **29342** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033170**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <1.0 | 1.0 | | | | | | | | | |
| Cadmium | <0.50 | 0.50 | | | | | | | | | |
| Lead | <1.0 | 1.0 | | | | | | | | | |
| Tungsten (See Qualifier T 2) | <2.0 | 2.0 | | | | | | | | | T2 |

Sample ID: **LCS-29343** SampType: **LCS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87315**
Client ID: Batch ID: **29343** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032929**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 26.05 | 1.0 | 25 | 0 | 104 | 80 | 120 | | | | |
| Cadmium | 26.45 | 0.50 | 25 | 0 | 106 | 80 | 120 | | | | |
| Lead | 26.10 | 1.0 | 25 | 0 | 104 | 80 | 120 | | | | |
| Tungsten (See Qualifier T 2) | 27.50 | 2.0 | 25 | 0 | 110 | 80 | 120 | | | | T2 |

Sample ID: **LCS-29344** SampType: **LCS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87317**
Client ID: Batch ID: **29344** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032979**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.60 | 1.0 | 25 | 0 | 102 | 80 | 120 | | | | |
| Cadmium | 26.70 | 0.50 | 25 | 0 | 107 | 80 | 120 | | | | |
| Lead | 26.25 | 1.0 | 25 | 0 | 105 | 80 | 120 | | | | |
| Tungsten (See Qualifier T 2) | 26.20 | 2.0 | 25 | 0 | 105 | 80 | 120 | | | | T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **LCS-29345** SampType: **LCS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87344**
Client ID: Batch ID: **29345** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033137**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.50 | 1.0 | 25 | 0 | 102 | 80 | 120 | | | | |
| Cadmium | 25.65 | 0.50 | 25 | 0 | 103 | 80 | 120 | | | | |
| Lead | 25.65 | 1.0 | 25 | 0 | 103 | 80 | 120 | | | | |
| Tungsten (See Qualifier T 2) | 25.25 | 2.0 | 25 | 0 | 101 | 80 | 120 | | | | T2 |

Sample ID: **LCS-29342** SampType: **LCS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87345**
Client ID: Batch ID: **29342** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033168**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.05 | 1.0 | 25 | 0 | 100 | 80 | 120 | | | | |
| Cadmium | 25.90 | 0.50 | 25 | 0 | 104 | 80 | 120 | | | | |
| Lead | 25.55 | 1.0 | 25 | 0 | 102 | 80 | 120 | | | | |
| Tungsten (See Qualifier T 2) | 25.65 | 2.0 | 25 | 0 | 103 | 80 | 120 | | | | T2 |

Sample ID: **LCSD-29343** SampType: **LCSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87315**
Client ID: Batch ID: **29343** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032930**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 26.00 | 1.0 | 25 | 0 | 104 | 80 | 120 | 26.05 | 0.192 | 20 | |
| Cadmium | 26.50 | 0.50 | 25 | 0 | 106 | 80 | 120 | 26.45 | 0.189 | 20 | |
| Lead | 26.55 | 1.0 | 25 | 0 | 106 | 80 | 120 | 26.10 | 1.71 | 20 | |
| Tungsten (See Qualifier T 2) | 27.65 | 2.0 | 25 | 0 | 111 | 80 | 120 | 27.50 | 0.544 | 20 | T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **LCSD-29344** SampType: **LCSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87317**
Client ID: Batch ID: **29344** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032980**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.70 | 1.0 | 25 | 0 | 103 | 80 | 120 | 25.60 | 0.390 | 20 | |
| Cadmium | 26.75 | 0.50 | 25 | 0 | 107 | 80 | 120 | 26.70 | 0.187 | 20 | |
| Lead | 25.90 | 1.0 | 25 | 0 | 104 | 80 | 120 | 26.25 | 1.34 | 20 | |
| Tungsten (See Qualifier T 2) | 25.90 | 2.0 | 25 | 0 | 104 | 80 | 120 | 26.20 | 1.15 | 20 | T2 |

Sample ID: **LCSD-29345** SampType: **LCSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87344**
Client ID: Batch ID: **29345** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033138**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.05 | 1.0 | 25 | 0 | 100 | 80 | 120 | 25.50 | 1.78 | 20 | |
| Cadmium | 25.90 | 0.50 | 25 | 0 | 104 | 80 | 120 | 25.65 | 0.970 | 20 | |
| Lead | 25.05 | 1.0 | 25 | 0 | 100 | 80 | 120 | 25.65 | 2.37 | 20 | |
| Tungsten (See Qualifier T 2) | 25.10 | 2.0 | 25 | 0 | 100 | 80 | 120 | 25.25 | 0.596 | 20 | T2 |

Sample ID: **LCSD-29342** SampType: **LCSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87345**
Client ID: Batch ID: **29342** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033169**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 25.60 | 1.0 | 25 | 0 | 102 | 80 | 120 | 25.05 | 2.17 | 20 | |
| Cadmium | 25.95 | 0.50 | 25 | 0 | 104 | 80 | 120 | 25.90 | 0.193 | 20 | |
| Lead | 26.05 | 1.0 | 25 | 0 | 104 | 80 | 120 | 25.55 | 1.94 | 20 | |
| Tungsten (See Qualifier T 2) | 26.05 | 2.0 | 25 | 0 | 104 | 80 | 120 | 25.65 | 1.55 | 20 | T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **07050523-21A MS** SampType: **MS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87315**
Client ID: **S101-05** Batch ID: **29343** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032900**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 26.25 | 5.0 | 25 | 0 | 105 | 75 | 125 | | | | |
| Cadmium | 25.75 | 2.5 | 25 | 0 | 103 | 75 | 125 | | | | |
| Lead | 37.50 | 5.0 | 25 | 11.65 | 103 | 75 | 125 | | | | |
| Tungsten (See Qualifier T 2) | 48.75 | 10 | 25 | 20.82 | 112 | 75 | 125 | | | | T2 |

Sample ID: **07050523-41A MS** SampType: **MS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87317**
Client ID: **S145-05** Batch ID: **29344** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032967**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 30.75 | 5.0 | 25 | 0 | 123 | 75 | 125 | | | | |
| Cadmium | 26.25 | 2.5 | 25 | 0 | 105 | 75 | 125 | | | | |
| Lead | 96.25 | 5.0 | 25 | 46.25 | 200 | 75 | 125 | | | | M6 |
| Tungsten (See Qualifier T 2) | 31.50 | 10 | 25 | 0 | 126 | 75 | 125 | | | | M6,T2 |

Sample ID: **07050523-61A MS** SampType: **MS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87344**
Client ID: **S122-05** Batch ID: **29345** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033120**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 36.75 | 5.0 | 25 | 14.20 | 90.2 | 75 | 125 | | | | |
| Cadmium | 28.00 | 2.5 | 25 | 3.225 | 99.1 | 75 | 125 | | | | |
| Lead | 1935 | 5.0 | 25 | 2232 | -1190 | 75 | 125 | | | | M3 |
| Tungsten (See Qualifier T 2) | 927.5 | 10 | 25 | 835.0 | 370 | 75 | 125 | | | | M6,T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **07050523-01A MS** SampType: **MS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87345**
Client ID: **SD001-00** Batch ID: **29342** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033147**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1682 | 5.0 | 25 | 1782 | -400 | 75 | 125 | | | | M3 |
| Cadmium | 34.00 | 2.5 | 25 | 8.475 | 102 | 75 | 125 | | | | |
| Lead | 8850 | 5.0 | 25 | 9525 | -2700 | 75 | 125 | | | | M3 |
| Tungsten (See Qualifier T 2) | 99.00 | 10 | 25 | 71.00 | 112 | 75 | 125 | | | | T2 |

Sample ID: **07050523-21A MSD** SampType: **MSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87315**
Client ID: **S101-05** Batch ID: **29343** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032904**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 29.50 | 5.0 | 25 | 0 | 118 | 75 | 125 | 26.25 | 11.7 | 20 | |
| Cadmium | 26.00 | 2.5 | 25 | 0 | 104 | 75 | 125 | 25.75 | 0.966 | 20 | |
| Lead | 38.00 | 5.0 | 25 | 11.65 | 105 | 75 | 125 | 37.50 | 1.32 | 20 | |
| Tungsten (See Qualifier T 2) | 46.25 | 10 | 25 | 20.82 | 102 | 75 | 125 | 48.75 | 5.26 | 20 | T2 |

Sample ID: **07050523-41A MSD** SampType: **MSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87317**
Client ID: **S145-05** Batch ID: **29344** TestNo: **SW6010B** Analysis Date: **5/17/2007** SeqNo: **1032968**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 26.75 | 5.0 | 25 | 0 | 107 | 75 | 125 | 30.75 | 13.9 | 20 | |
| Cadmium | 27.00 | 2.5 | 25 | 0 | 108 | 75 | 125 | 26.25 | 2.82 | 20 | |
| Lead | 71.75 | 5.0 | 25 | 46.25 | 102 | 75 | 125 | 96.25 | 29.2 | 20 | R9 |
| Tungsten (See Qualifier T 2) | 32.75 | 10 | 25 | 0 | 131 | 75 | 125 | 31.50 | 3.89 | 20 | M6,T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *22-May-07*

**CLIENT:** Kleinfelder
**Work Order:** 07050523
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **07050523-61A MSD** SampType: **MSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87344**
Client ID: **S122-05** Batch ID: **29345** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033121**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 36.75 | 5.0 | 25 | 14.20 | 90.2 | 75 | 125 | 36.75 | 0 | 20 | |
| Cadmium | 26.75 | 2.5 | 25 | 3.225 | 94.1 | 75 | 125 | 28.00 | 4.57 | 20 | |
| Lead | 1825 | 5.0 | 25 | 2232 | -1630 | 75 | 125 | 1935 | 5.85 | 20 | M3 |
| Tungsten (See Qualifier T 2) | 875.0 | 10 | 25 | 835.0 | 160 | 75 | 125 | 927.5 | 5.83 | 20 | M6,T2 |

Sample ID: **07050523-01A MSD** SampType: **MSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **5/16/2007** RunNo: **87345**
Client ID: **SD001-00** Batch ID: **29342** TestNo: **SW6010B** Analysis Date: **5/21/2007** SeqNo: **1033148**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 1622 | 5.0 | 25 | 1782 | -640 | 75 | 125 | 1682 | 3.63 | 20 | M3 |
| Cadmium | 33.00 | 2.5 | 25 | 8.475 | 98.1 | 75 | 125 | 34.00 | 2.99 | 20 | |
| Lead | 11180 | 5.0 | 25 | 9525 | 6600 | 75 | 125 | 8850 | 23.2 | 20 | M3,R9 |
| Tungsten (See Qualifier T 2) | 94.50 | 10 | 25 | 71.00 | 94.0 | 75 | 125 | 99.00 | 4.65 | 20 | T2 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

Aerotech Environmental Laboratories Sample Receipt Checklist

Project Checked By: _____

| | |
|---|---|
| Laboratory Number: 07-05-0523 | Checklist completed by: Karen McCormick |
| Client Name: Kleinfelder | Signature/Date: 5/14/07 |
| Matrix: Soil / Carrier Name: Client | Date/Time Rec'd: 5/14/07 318 By: KM |

Temperature of Samples? 2.1 °C  Circle one: Blue Ice  Wet Ice  Not Present

| | Yes | No* | Not Present |
|---|---|---|---|
| Client or PM made aware temp. out of range? Yes / No | | | |
| Shipping container/cooler in good condition? | X | | |
| Custody seals intact on shipping container/cooler? | | | X |
| Custody seals intact on sample containers? | | | X |
| Chain of Custody present and relinquished/received properly? | X | | |
| Chain of Custody agrees with sample labels? | X | | |
| Samples in proper containers/bottles? | X | | |
| Sample containers intact? | X | | |
| All samples received within holding time? | X | | **See Comments about Chlorine and pH |
| Is there sufficient sample volume to perform the tests? | X | | |
| 40mL vials for volatiles & SOCs received with zero headspace? | | | X |

Soil Containers:
Brass Sleeve ____
Glass Jar X
Methanol ____
Plastic Bag ____
Encore Samplers ____
Sterile Plastic ____

| | |
|---|---|
| Total number of bottles received: 75 | IH sample media: |
| If applicable, how many sample bottles were shipped from AEL-Tucson? | N/A X |

*Number of containers received by preservative and by sample number: (If more than 15 samples are rec'd, please continue on separate sheet(s))*

| Preservative | Simple*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-General | 75 | | | | | | | | | | | | | | | |
| B-HNO3 | | | | | | | | | | | | | | | | |
| C-H2SO4 | | | | | | | | | | | | | | | | |
| D-HCl | | | | | | | | | | | | | | | | |
| E-Na2S2O3 | | | | | | | | | | | | | | | | |
| F-NaOH | | | | | | | | | | | | | | | | |
| G-Sulfide | | | | | | | | | | | | | | | | |
| H-Na Sulfite | | | | | | | | | | | | | | | | |
| I-MCAA | | | | | | | | | | | | | | | | |
| J-Methanol | | | | | | | | | | | | | | | | |
| K-HAA | | | | | | | | | | | | | | | | |
| L-Other | | | | | | | | | | | | | | | | |

Water-pH acceptable upon receipt? Yes  No  N/A X

| Preservative & pH | | pH of samples upon receipt | If pH requires adjustment, list sample number, and reagent I.D. number |
|---|---|---|---|
| Metals | <2 | | |
| Nutrients | <2 | | |
| Total Phenols | <2 | | |
| 1664 | <2 | | |
| Cyanide | >12 | | |
| Sulfide | >9 | | |

**Any No response must be detailed in the comments section below. Contact the PM immediately to determine how to proceed. Refer to SOP 11-001. Continue on back if additional space is needed.*

***The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.*

****The Simple box is only to be used when there is one bottle per reservative in equal sample sets.*

Comments:

Corrective Action:

# Aerotech Environmental Laboratories

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[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

Customer Number:
Page 1 of 8
Customer: Kleinfelder West Inc.
Sampler: David G. Neidigh
Address: 1335 W. Auto Dr.
Project Name: Tucson Ore Mill
City, State, Zip: Tempe AZ 85284
Project Number: 80365
Contact: David E. Neidigh
P.O. Number:
Phone: 480-763-1200 Fax: 480-763-1212
Fax Results: Y N
E-Mail Address: dNeidigh@kleinfelder.com
E-Mail Results: (Y) N

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead EPA 6010B | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SD001-00 | 5/8/07 | 1500 | S | X | X | X | X | 1 |
| 2 | SD002-00 | 5/8/07 | 1510 | S | X | X | X | X | 1 |
| 3 | SD003-00 | 5/8/07 | 1520 | S | X | X | X | X | 1 |
| 4 | S127-00 | 5/8/07 | 1530 | S | X | X | X | X | 1 |
| 5 | S125-00 | 5/8/07 | 1540 | S | X | X | X | X | 1 |
| 6 | S124-00 | 5/8/07 | 1544 | S | X | X | X | X | 1 |
| 7 | S138-00 | 5/8/07 | 1547 | S | X | X | X | X | 1 |
| 8 | S142-00 | 5/8/07 | 1549 | S | X | X | X | X | 1 |
| 9 | S122-00 | 5/8/07 | 1554 | S | X | X | X | X | 1 |
| 10 | S112-00 | 5/8/07 | 1559 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:02A | [signature] | [signature] |
| 5/14/07 | 3:18 | [signature] | [signature] |

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# Aerotech Environmental Laboratories

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[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

Customer Number:
Page 2 of 8
Customer: Kleinfelder West Inc.
Sampler: David E Neidigh
Address: 1335 W. Auto Dr
Project Name: Tucson Ore Mill
City, State, Zip: Tempe AZ 85284
Project Number: 80365
Contact: David E Neidigh
P.O. Number:
Phone: 480-763-1200 Fax: 480-763-1212
Fax Results: Y N
E-Mail Address: dneidigh@kleinfelder.com
E-Mail Results: (Y) N

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead EPA 6010B | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 11 | S101-00 | 5/8/07 | 1602 | S | X | X | X | X | 1 |
| 12 | S104-00 | 5/8/07 | 1606 | S | X | X | X | X | 1 |
| 13 | S127-30 | 5/9/07 | 0659 | S | X | X | X | X | 1 |
| 14 | S126-20 | 5/9/07 | 0728 | S | X | X | X | X | 1 |
| 15 | S123-25 | 5/9/07 | 0805 | S | X | X | X | X | 1 |
| 16 | S125-10 | 5/9/07 | 0820 | S | X | X | X | X | 1 |
| 17 | S125-30 | 5/9/07 | 0840 | S | X | X | X | X | 1 |
| 18 | SD005-05 | 5/9/07 | 0901 | S | X | X | X | X | 1 |
| 19 | S130-10 | 5/9/07 | 1046 | S | X | X | X | X | 1 |
| 20 | S124 ~~0-10~~ -15 5/9/07 | 5/9/07 | 1006 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date: | Time: | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:01A | David E Neidigh | [illegible] |
| 5/14/07 | 3:18P | [illegible] | [illegible] |

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# Aerotech Environmental Laboratories

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

Customer Number:
Page 3 of 8
Customer: Kleinfelder West, Inc
Sampler: David E Neidigh
Address: 1335 W. Auto Dr
Project Name: Tucson one mill
City, State, Zip: Tempe AZ 85284
Project Number: 80365
Contact: David E Neidigh
P.O. Number:
Phone: 480-763-1200 Fax: 480-763-1212
Fax Results: Y N
E-Mail Address: dneidigh@kleinfelder.com
E-Mail Results: (Y) N

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 21 | S101-05 | 5/9/07 | 1129 | S | X | X | X | X | 1 |
| 22 | S102-05 | 5/9/07 | 1137 | S | X | X | X | X | 1 |
| 23 | S103-05 | 5/9/07 | 1149 | S | X | X | X | X | 1 |
| 24 | S106-05 | 5/9/07 | 1204 | S | X | X | X | X | 1 |
| 25 | SD004-05 | 5/9/07 | 1214 | S | X | X | X | X | 1 |
| 26 | S105-05 | 5/9/07 | 1237 | S | X | X | X | X | 1 |
| 27 | S104-05 | 5/9/07 | 1306 | S | X | X | X | X | 1 |
| 28 | S112-05 | 5/9/07 | 1329 | S | X | X | X | X | 1 |
| 29 | S111-05 | 5/9/07 | 1334 | S | X | X | X | X | 1 |
| 30 | S110-05 | 5/9/07 | 1444 | S | X | X | X | X | 1 |

nstructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | David E Neidigh | R Nolte |
| 5/14/07 | 3:18P | R Nolte | Karen McClelland |

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# Aerotech Environmental Laboratories

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[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

| | |
|---|---|
| Customer Number: | Page 4 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto DR | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 31 | S127-45 | 5/9/07 | 1502 | S | X | X | X | X | 1 |
| 32 | S116-05 | 5/9/07 | 1609 | S | X | X | X | X | 1 |
| 33 | S117-05 | 5/9/07 | 1614 | S | X | X | X | X | 1 |
| 34 | S108-05 | 5/9/07 | 1618 | S | X | X | X | X | 1 |
| 35 | S109-05 | 5/9/07 | 1623 | S | X | X | X | X | 1 |
| 36 | S148-05 | 5/9/07 | 1701 | S | X | X | X | X | 1 |
| 37 | S146-05 | 5/9/07 | 1712 | S | X | X | X | X | 1 |
| 38 | S147-05 | 5/9/07 | 1716 | S | X | X | X | X | 1 |
| 39 | S149-05 | 5/9/07 | 1721 | S | X | X | X | X | 1 |
| 40 | S150-05 | 5/9/07 | 1723 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:07A | David E Neidigh | [illegible] |
| 5/14/07 | 3:18P | [illegible] | Karen McCormick |

All services are performed subject to the Terms & Conditions on the reverse side.

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05 0523

| | |
|---|---|
| Customer Number: | Page 5 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson ore mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No____
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 41 | S145-05 | 5/9/07 | 1727 | S | X | X | X | X | 1 |
| 42 | S144-05 | 5/9/07 | 1746 | S | X | X | X | X | 1 |
| 43 | S134-05 | 5/9/07 | 1743 | S | X | X | X | X | 1 |
| 44 | S143-05 | 5/9/07 | 1751 | S | X | X | X | X | 1 |
| 45 | S142-05 | 5/9/07 | 1755 | S | X | X | X | X | 1 |
| 46 | S141-05 | 5/9/07 | 1759 | S | X | X | X | X | 1 |
| 47 | S107-05 | 5/9/07 | 1154 | S | X | X | X | X | 1 |
| 48 | S134-15 | 5/10/07 | 0644 | S | X | X | X | X | 1 |
| 49 | S135-10 | 5/10/07 | 0659 | S | X | X | X | X | 1 |
| 50 | S136-10 | 5/10/07 | 0713 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date: | Time: | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:06A | David Neidigh | [illegible] |
| 5/14/07 | 3:18P | David Neidigh | Lynn McCormick |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

| | |
|---|---|
| Customer Number: | Page 6 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 51 | S137-10 | 5/10/07 | 0732 | S | X | X | X | X | 1 |
| 52 | S143-10 | 5/10/07 | 0742 | S | X | X | X | X | 1 |
| 53 | S143-15 | 5/10/07 | 0751 | S | X | X | X | X | 1 |
| 54 | SD006-20 | 5/10/07 | 0803 | S | X | X | X | X | 1 |
| 55 | S143-25 | 5/10/07 | 0806 | S | X | X | X | X | 1 |
| 56 | SD007-05 | 5/10/07 | 0830 | S | X | X | X | X | 1 |
| 57 | S121-10 | 5/10/07 | 0939 | S | X | X | X | X | 1 |
| 58 | S113-05 | 5/10/07 | 0952 | S | X | X | X | X | 1 |
| 59 | S114-10 | 5/10/07 | 1001 | S | X | X | X | X | 1 |
| 60 | S115-10 | 5/10/07 | 1011 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date: | Time: | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:05 | David E Neidigh | R Nolt |
| 5/14/07 | 3:28P | R Nolt | Karen McCarron |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 0705-0523

| | |
|---|---|
| Customer Number: | Page 7 of 8 |
| Customer: Klein Felder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 73

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 61 | S122-05 | 5/10/07 | 1016 | S | X | X | X | X | 1 |
| 62 | S120-05 | 5/10/07 | 1033 | S | X | X | X | X | 1 |
| 63 | S118-05 | 5/10/07 | 1037 | S | X | X | X | X | 1 |
| 64 | S128-05 | 5/10/07 | 1041 | S | X | X | X | X | 1 |
| 65 | S148-10 | 5/10/07 | 1110 | S | X | X | X | X | 1 |
| 66 | S138-15 | 5/10/07 | 1229 | S | X | X | X | X | 1 |
| 67 | S133-20 | 5/10/07 | 1243 | S | X | X | X | X | 1 |
| 68 | S132-25 | 5/10/07 | 1307 | S | X | X | X | X | 1 |
| 69 | S131-10 | 5/10/07 | 1319 | S | X | X | X | X | 1 |
| 70 | S129-20 | 5/10/07 | 1517 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date: | Time: | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:02A | David E Neidigh | R Neel |
| 5/14/07 | 3:18P | R Neel | Karen McLamore |

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**Lab Number:** 07-05-0523

| | |
|---|---|
| Customer Number: | Page 8 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 71 | S129-25 | 5/10/07 | 1524 | S | X | X | X | X | 1 |
| 72 | S 139-15 | 5/10/07 | 1523 | S | X | X | X | X | 1 |
| 73 | S 119-15 | 5/10/07 | 1649 | S | X | X | X | X | 1 |
| 74 | S 143E-20 | 5/10/07 | 1737 | S | X | X | X | X | 1 |
| 75 | S140-30 | 5/10/07 | 1755 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date: | Time: | Samples Relinquished By: | Received By: |
|---|---|---|---|
| ~~5/10/07~~ 5/14/07 | 10:03A | David E Neidigh | R Nalbert |
| 5/14/07 | 3:58P | R Nalbert | Hanson |

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RECEIVED
JUL 3 1 2007

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Wednesday, July 25, 2007

David Neidigh
Kleinfelder
1335 West Auto Loop
Tempe, Arizona 85284

TEL: 480-763-1200
FAX 480-763-1212

RE: Tucson Ore Mill/80365

Order No.: 07070421

Dear David Neidigh:

Aerotech Environmental Laboratories received 5 sample(s) on 5/14/2007 for the analyses presented in the following report.

This report includes the following information:
- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Michelle Johnston
Customer Service Manager (CSM)

Main Laboratory: 4645 E. Cotton Center Boulevard, Building 3, Suite 189 Phoenix, AZ 85040 Phone: 602.437.3340 Toll Free: 866.772.5227 Fax. 623.445.6192
Tucson Facility: 4455 S. Park Ave. Ste. 110 Tucson, AZ 85714 Phone: 520.807.3801 Fax: 520.807.3803 www.aeroenvirolabs.com

## Aerotech Environmental Laboratories

**Date:** *25-Jul-07*

**CLIENT:** Kleinfelder
**Project:** Tucson Ore Mill/80365
**Lab Order:** 07070421

# CASE NARRATIVE

Analyses included in this report were performed by Aerotech Environmental Laboratories (AEL), 4645 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ.

AEL is licensed through the State of Arizona (License No. AZ0610), and holds NELAC accreditation (OR100001) through the State of Oregon for the analytical techniques noted on the scope of accreditation.

AEL is also accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation.

Samples were analyzed using methods outlined in references such as:
-Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.
-40 CFR, Part 136, July 2006. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.
-Methods for the Chemical Analysis of Water and Wastes, EPA/600/4-79-020, Revised March 1983.
-Methods for the Determination of Organic Compounds in Drinking Water: Supplement III, August 1995, EPA/600/R-95/131.
-Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA, 3rd Edition 1986, and Updates.
-Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA, Second Edition, 1999.
-NIOSH Manual of Analytical Methods, Fourth Edition, 1994. NIOSH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Analytical Comments:
All method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

On 7/12/2007, a request was received from the client to add TCLP Arsenic, Cadmium, and Lead to samples S116-05, S107-05, S122-05, S119-15, and S140-30, originally submitted under Aerotech Environmental ID 07060002-02, -05, -06, -07, and -08.

Data Qualifiers:
Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

* Value exceeds Maximum Contaminant Level.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *25-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S116-05 |
| **Lab Order:** | 07070421 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:09:00 PM |
| **Lab ID:** | 07070421-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/18/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *25-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S107-05 |
| **Lab Order:** | 07070421 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:54:00 AM |
| **Lab ID:** | 07070421-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/18/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *25-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S122-05 |
| **Lab Order:** | 07070421 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:16:00 AM |
| **Lab ID:** | 07070421-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/18/2007 |
| Lead | 0.52 | 0.50 | | mg/L | 1 | 7/18/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *25-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S119-15 |
| **Lab Order:** | 07070421 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 4:49:00 PM |
| **Lab ID:** | 07070421-04A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/18/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *25-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S140-30 |
| **Lab Order:** | 07070421 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 5:55:00 PM |
| **Lab ID:** | 07070421-05A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/18/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/18/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

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**Date:** *25-Jul-07*

**CLIENT:** Kleinfelder
**Work Order:** 07070421
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 1311_M**

Sample ID: **MB-29933** SampType: **MBLK** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054816**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <0.50 | 0.50 | | | | | | | | | |
| Cadmium | <0.25 | 0.25 | | | | | | | | | |
| Lead | <0.50 | 0.50 | | | | | | | | | |

Sample ID: **LCS-29933** SampType: **LCS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054814**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.590 | 0.50 | 2.5 | 0 | 104 | 85 | 115 | | | | |
| Cadmium | 2.535 | 0.25 | 2.5 | 0 | 101 | 85 | 115 | | | | * |
| Lead | 2.530 | 0.50 | 2.5 | 0 | 101 | 85 | 115 | | | | |

Sample ID: **LCSD-29933** SampType: **LCSD** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054815**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.555 | 0.50 | 2.5 | 0 | 102 | 85 | 115 | 2.590 | 1.36 | 20 | |
| Cadmium | 2.535 | 0.25 | 2.5 | 0 | 101 | 85 | 115 | 2.535 | 0 | 20 | * |
| Lead | 2.515 | 0.50 | 2.5 | 0 | 101 | 85 | 115 | 2.530 | 0.595 | 20 | |

Sample ID: **07070428-01A MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054802**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.100 | 0.50 | 2.5 | 3.435 | 107 | 54.8 | 139 | | | | * |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

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**Date:** *25-Jul-07*

**CLIENT:** Kleinfelder
**Work Order:** 07070421
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 1311_M**

Sample ID: **07070428-01A MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054802**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 2.420 | 0.25 | 2.5 | 0 | 96.8 | 85.9 | 115 | | | | * |
| Lead | 2.380 | 0.50 | 2.5 | 0 | 95.2 | 78.7 | 119 | | | | |

Sample ID: **07070428-01A MSD** SampType: **MSD** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/18/2007** RunNo: **89158**
Client ID: Batch ID: **29933** TestNo: **SW1311/6010** Analysis Date: **7/18/2007** SeqNo: **1054803**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.150 | 0.50 | 2.5 | 3.435 | 109 | 54.8 | 139 | 6.100 | 0.816 | 20 | * |
| Cadmium | 2.430 | 0.25 | 2.5 | 0 | 97.2 | 85.9 | 115 | 2.420 | 0.412 | 20 | * |
| Lead | 2.420 | 0.50 | 2.5 | 0 | 96.8 | 78.7 | 119 | 2.380 | 1.67 | 20 | |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

Re-accession 07-07-0421

~~Re-accession 07-06-0002~~

Aerotech Environmental Laboratories Sample Receipt Checklist

Project Checked By: _____

| | |
|---|---|
| Laboratory Number: 07-05-0523 | Checklist completed by: Karen McCormick |
| Client Name: Kleinfelder | Signature/Date: 5/14/07 |
| Matrix: Soil / Carrier Name: Client | Date/Time Rec'd: 5/14/07 3:18 By: KM |

Temperature of Samples? 2.1 °C | Circle one: Blue Ice | Wet Ice | Not Present

| | Yes | No* | Not Present |
|---|---|---|---|
| Client or PM made aware temp. out of range? Yes / No | | | |
| Shipping container/cooler in good condition? | X | | |
| Custody seals intact on shipping container/cooler? | | | X |
| Custody seals intact on sample containers? | | | X |
| Chain of Custody present and relinquished/received properly? | X | | |
| Chain of Custody agrees with sample labels? | X | | |
| Samples in proper containers/bottles? | X | | |
| Sample containers intact? | X | | |
| All samples received within holding time? | X | | |
| Is there sufficient sample volume to perform the tests? | X | | |
| 40mL vials for volatiles & SOCs received with zero headspace? | | | X |

Soil Containers:
Brass Sleeve ____
Glass Jar X
Methanol ____
Plastic Bag ____
Encore Samplers ____
Sterile Plastic ____

*See Comments about Chlorine and pH

Total number of bottles received: 75 | IH sample media:

If applicable, how many sample bottles were shipped from AEL-Tucson? N/A X

*Number of containers received by preservative and by sample number. (If more than 15 samples are rec'd, please continue on separate sheet(s)).*

| Preservative | Simple*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-General | 75 | | | | | | | | | | | | | | | |
| B-HNO3 | | | | | | | | | | | | | | | | |
| C-H2SO4 | | | | | | | | | | | | | | | | |
| D-HCl | | | | | | | | | | | | | | | | |
| E-Na2S2O3 | | | | | | | | | | | | | | | | |
| F-NaOH | | | | | | | | | | | | | | | | |
| G-Sulfide | | | | | | | | | | | | | | | | |
| H-Na Sulfite | | | | | | | | | | | | | | | | |
| I-MCAA | | | | | | | | | | | | | | | | |
| J-Methanol | | | | | | | | | | | | | | | | |
| K-HAA | | | | | | | | | | | | | | | | |
| L-Other | | | | | | | | | | | | | | | | |

Water pH acceptable upon receipt? Yes / No / N/A X

| Preservative & pH | | pH of samples upon receipt | If pH requires adjustment, list sample number, and reagent I.D. number |
|---|---|---|---|
| Metals | <2 | | |
| Nutrients | <2 | | |
| Total Phenols | <2 | | |
| 1664 | <2 | | |
| Cyanide | >12 | | |
| Sulfide | >9 | | |

*Any No response must be detailed in the comments section below. Contact the PM immediately to determine how to proceed. Refer to SOP 11-001. Continue on back if additional space is needed.*

***The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.*

****The Simple box is only to be used when there is one bottle per preservative in equal sample sets.*

Comments:

Corrective Action:

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~~07-06-0002~~

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 1 of 8 |
| Customer: Kleinfelder West Inc. | Sampler: David G. Neidigh |
| Address: 1335 W. Auto Dr. | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E. Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dNeidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Total Recoverable Boron 6/14/07 6010B EPA | Arsenic 6010B EPA | Tungsten 6010B EPA | Cadmium 6010B EPA 6/14/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SD001-00 | 5/8/07 | 1500 | S | X | X | X | X | 1 |
| 2 | SD002-00 | 5/8/07 | 1510 | S | X | X | X | X | 1 |
| 3 | SD003-00 | 5/8/07 | 1520 | S | X | X | X | X | 1 |
| 4 | S127-00 | 5/8/07 | 1530 | S | X | X | X | X | 1 |
| 5 | S125-00 | 5/8/07 | 1540 | S | X | X | X | X | 1 |
| 6 | S124-00 | 5/8/07 | 1544 | S | X | X | X | X | 1 |
| 7 | S138-00 | 5/8/07 | 1547 | S | X | X | X | X | 1 |
| 8 | S142-00 | 5/8/07 | 1549 | S | X | X | X | X | 1 |
| 9 | S122-00 | 5/8/07 | 1554 | S | X | X | X | X | 1 |
| 10 | S112-00 | 5/8/07 | 1559 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:024 | [signature] | [signature] |
| 5/14/07 | 3:18 | [signature] | [signature] |

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

| | |
|---|---|
| Customer Number: | Page 2 of 8 |
| Customer: Kleinfelder West Inc. | Sampler: David E Neidigh |
| Address: 1335 W. Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead EPA 6010B | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 11 | S101-00 | 5/8/07 | 1602 | S | X | X | X | X | 1 |
| 12 | S104-00 | 5/8/07 | 1606 | S | X | X | X | X | 1 |
| 13 | S127-30 | 5/9/07 | 0659 | S | X | X | X | X | 1 |
| 14 | S126-20 | 5/9/07 | 0728 | S | X | X | X | X | 1 |
| 15 | S123-25 | 5/9/07 | 0805 | S | X | X | X | X | 1 |
| 16 | S125-10 | 5/9/07 | 0820 | S | X | X | X | X | 1 |
| 17 | S125-30 | 5/9/07 | 0840 | S | X | X | X | X | 1 |
| 18 | SD005-05 | 5/9/07 | 0901 | S | X | X | X | X | 1 |
| 19 | S130-10 | 5/9/07 | 1046 | S | X | X | X | X | 1 |
| 20 | S124 ~~0-00~~ -15 5/9/07 | 5/9/07 | 1006 | S | X | X | X | X | 1 |

Cd 6/1/07

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:01A | David E Neidigh | [illegible] |
| 5/14/07 | 3:18P | D Neidigh | [illegible] |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-050523~~

| | |
|---|---|
| Customer Number: | Page 3 of 8 |
| Customer: Kleinfelder West, Inc | Sampler: David E Neidigh |
| Address: 1335 W. Ruby Dr | Project Name: Tucson one Mixt |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested: Lead 6010B, Arsenic 6010B, Tungsten 6010B, Cadmium 6010B, 6010 As, 6010 Pb, MY 7/12/07

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | MY 7/12/07 | # of Sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | S101-05 | 5/9/07 | 1129 | S | X | X | X | X | | | | 1 |
| 22 | S102-05 | 5/9/07 | 1137 | S | X | X | X | X | | | | 1 |
| 23 | S103-05 | 5/9/07 | 1149 | S | X | X | X | X | | | | 1 |
| 24 | S106-05 | 5/9/07 | 1204 | S | X | X | X | X | | | | 1 |
| 25 | SD004-05 | 5/9/07 | 1214 | S | X | X | X | X | | | | 1 |
| 26 | S105-05 | 5/9/07 | 1237 | S | X | X | X | X | | | | 1 |
| 27 | S104-05 | 5/9/07 | 1306 | S | X | X | X | X | | | | 1 |
| 28 | S112-05 | 5/9/07 | 1329 | S | X | X | X | X | | | | 1 |
| 29 | S111-05 | 5/9/07 | 1334 | S | X | X | X | X | X | X | | 1 |
| 30 | S110-05 | 5/9/07 | 1444 | S | X | X | X | X | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | David Neidigh | [illegible] |
| 5/14/07 | 3:18P | [illegible] | Karen McCoy |

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**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 4 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**

DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**

Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No N/A
Total # of Containers: 75

**Turn Around Request**

____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | | TCLP As Cd Pb Hg 7/12/07 | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | S127-45 | 5/9/07 | 1502 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 1 ~~32~~ | S116-05 | 5/9/07 | 1609 | S | X | X | X | X | X | X | | X | | | | | | | | 1 |
| 3 33 | S117-05 | 5/9/07 | 1614 | S | X | X | X | X | X | X | | | | | | | | | | 1 |
| ~~34~~ | S108-05 | 5/9/07 | 1618 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 4 35 | S109-05 | 5/9/07 | 1623 | S | X | X | X | X | X | X | | | | | | | | | | 1 |
| 36 | S148-05 | 5/9/07 | 1701 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 37 | S146-05 | 5/9/07 | 1712 | S | X | X | X | X | | | | | | | | | | | | 1 |
| ~~38~~ | S147-05 | 5/9/07 | 1716 | S | X | X | X | X | | | | | | | | | | | | 1 |
| ~~39~~ | S149-05 | 5/9/07 | 1721 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 40 | S150-05 | 5/9/07 | 1723 | S | X | X | X | X | | | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:07A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 5 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson ore mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other

**Sample Receipt**
Temperature 7.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | TCLP As Cd Pb 7471 7/12/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | S145-05 | 5/9/07 | 1727 | S | X | X | X | X | | | | 1 |
| 42 | S144-05 | 5/9/07 | 1746 | S | X | X | X | X | | | | 1 |
| 43 | S134-05 | 5/9/07 | 1743 | S | X | X | X | X | | | | 1 |
| 44 | S143-05 | 5/9/07 | 1751 | S | X | X | X | X | | | | 1 |
| 45 | S142-05 | 5/9/07 | 1755 | S | X | X | X | X | | | | 1 |
| 46 | S141-05 | 5/9/07 | 1759 | S | X | X | X | X | | | | 1 |
| 25 47 | S107-05 | 5/9/07 | 1154 | S | X | X | X | X | X | X | X | 1 |
| 48 | S134-15 | 5/10/07 | 0644 | S | X | X | X | X | | | | 1 |
| 49 | S135-10 | 5/10/07 | 0659 | S | X | X | X | X | | | | 1 |
| 50 | S136-10 | 5/10/07 | 0713 | S | X | X | X | X | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:06 A | [signature] | [signature] |
| 5/14/07 | 3:18 P | [signature] | [signature] |

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Re-accession
07-07-0421
~~07-06-0002~~

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 6 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | S137-10 | 5/10/07 | 0732 | S | X | X | X | X | | | 1 |
| 52 | S143-10 | 5/10/07 | 0742 | S | X | X | X | X | | | 1 |
| 53 | S143-15 | 5/10/07 | 0751 | S | X | X | X | X | | | 1 |
| 54 | SD006-20 | 5/10/07 | 0803 | S | X | X | X | X | | | 1 |
| 55 | S143-25 | 5/10/07 | 0806 | S | X | X | X | X | | | 1 |
| 56 | SD007-05 | 5/10/07 | 0830 | S | X | X | X | X | | | 1 |
| 57 | S121-10 | 5/10/07 | 0939 | S | X | X | X | X | | | 1 |
| 58 | S113-05 | 5/10/07 | 0952 | S | X | X | X | X | | | 1 |
| 59 | S114-10 | 5/10/07 | 1001 | S | X | X | X | X | | | 1 |
| 60 | S115-10 | 5/10/07 | 1011 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:05 | David E Neidigh | [illegible] |
| 5/14/07 | 3:28P | [illegible] | Karen McCann |

All services are performed subject to the Terms & Conditions on the reverse side.

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Re-accession 07-07-0421
~~07-06-0002~~

[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

| | |
|---|---|
| Customer Number: | Page 7 of 8 |
| Customer: Klein Felder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 73

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As 7/11/07 | 6010 Pb 7/11/07 | | TCLP As, Cd, Pb 7/12/07 | | | | | | | | # of Sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 ~~61~~ | S122-05 | 5/10/07 | 1016 | S | X | X | X | X | X | X | | X | | | | | | | | 1 |
| 62 | S120-05 | 5/10/07 | 1033 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 63 | S118-05 | 5/10/07 | 1037 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 64 | S128-05 | 5/10/07 | 1041 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 65 | S148-10 | 5/10/07 | 1110 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 66 | S138-15 | 5/10/07 | 1229 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 67 | S133-20 | 5/10/07 | 1243 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 68 | S132-25 | 5/10/07 | 1307 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 69 | S131-10 | 5/10/07 | 1319 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 70 | S129-20 | 5/10/07 | 1517 | S | X | X | X | X | | | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Re-accession 07-07-0421

~~07-06-0002~~

[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 8 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David G Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David G Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**
Temperature 7.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As 7/1/07 | 6010 Pb 6/1/07 | | TCLP As, Cd, Pb AA 7/12/07 | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | S129-25 | 5/10/07 | 1521 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 72 | S 139-15 | 5/10/07 | 1523 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 4 ~~73~~ | S 119-15 | 5/10/07 | 1649 | S | X | X | X | X | X | X | | X | | | | | | | | 1 |
| 74 | S 143E-20 | 5/10/07 | 1737 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 5 ~~75~~ | S 140-30 | 5/10/07 | 1755 | S | X | X | X | X | X | X | | X | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| ~~10-07 5/14/07~~ | 10:03A | [signature] | [signature] |
| 5/14/07 | 3:15P | [signature] | [signature] |

All services are performed subject to the Terms & Conditions on the reverse side.

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Monday, July 30, 2007

David Neidigh
Kleinfelder
1335 West Auto Loop
Tempe, Arizona 85284

TEL: 480-763-1200
FAX 480-763-1212

RE: Tucson Ore Mill/80365

Order No.: 07070388

Dear David Neidigh:

Aerotech Environmental Laboratories received 13 sample(s) on 5/14/2007 for the analyses presented in the following report.

This report includes the following information:
- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Michelle Johnston
Customer Service Manager (CSM)

## Aerotech Environmental Laboratories

**Date:** *30-Jul-07*

**CLIENT:** Kleinfelder
**Project:** Tucson Ore Mill/80365
**Lab Order:** 07070388

# CASE NARRATIVE

Analyses included in this report were performed by Aerotech Environmental Laboratories (AEL), 4645 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ.

AEL is licensed through the State of Arizona (License No. AZ0610), and holds NELAC accreditation (OR100001) through the State of Oregon for the analytical techniques noted on the scope of accreditation.

AEL is also accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation.

Samples were analyzed using methods outlined in references such as:
-Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.
-40 CFR, Part 136, July 2006. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.
-Methods for the Chemical Analysis of Water and Wastes, EPA/600/4-79-020, Revised March 1983.
-Methods for the Determination of Organic Compounds in Drinking Water: Supplement III, August 1995, EPA/600/R-95/131.
-Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA, 3rd Edition 1986, and Updates.
-Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA, Second Edition, 1999.
-NIOSH Manual of Analytical Methods, Fourth Edition, 1994. NIOSH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Analytical Comments:
All method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

On 7/12/2007, a request was received from the client to add TCLP Arsenic, Cadmium, and Lead to samples S127-00, S138-00, S122-00, S127-30, S123-25, S130-10, S102-05, S103-05, S127-45, S113-05, S114-10, S138-15, and S131-10, originally submitted under Aerotech Environmental ID 070607050523-04, -07, -09, -13, -15, -19, -22, -23, -31, -58, -59, -66, and -69.

Data Qualifiers:
Listed below are the data qualifiers used in your analytical report to explain any analytical or quality control issues. You will find them noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

* Value exceeds Maximum Contaminant Level.

# CASE NARRATIVE

M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-00 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:30:00 PM |
| **Lab ID:** | 07070388-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 84 | 0.50 | * | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S138-00 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:47:00 PM |
| **Lab ID:** | 07070388-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | 0.92 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 47 | 0.50 | * | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S122-00 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/8/2007 3:54:00 PM |
| **Lab ID:** | 07070388-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 4.9 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-30 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 6:59:00 AM |
| **Lab ID:** | 07070388-04A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 12 | 0.50 | * | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S123-25 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 8:05:00 AM |
| **Lab ID:** | 07070388-05A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S130-10 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 10:46:00 AM |
| **Lab ID:** | 07070388-06A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 0.63 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S102-05 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:37:00 AM |
| **Lab ID:** | 07070388-07A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S103-05 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:49:00 AM |
| **Lab ID:** | 07070388-08A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S127-45 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 3:02:00 PM |
| **Lab ID:** | 07070388-09A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 1.7 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S113-05 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 9:52:00 AM |
| **Lab ID:** | 07070388-10A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S114-10 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:01:00 AM |
| **Lab ID:** | 07070388-11A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S138-15 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 12:29:00 PM |
| **Lab ID:** | 07070388-12A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | < 0.25 | 0.25 | | mg/L | 1 | 7/17/2007 |
| Lead | 0.53 | 0.50 | | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *30-Jul-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S131-10 |
| **Lab Order:** | 07070388 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 1:19:00 PM |
| **Lab ID:** | 07070388-13A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS, TCLP LEACHED** | | **SW1311/6010B** | | | | Analyst: **HK** |
| Arsenic | < 0.50 | 0.50 | | mg/L | 1 | 7/17/2007 |
| Cadmium | 1.6 | 0.25 | * | mg/L | 1 | 7/17/2007 |
| Lead | 70 | 0.50 | * | mg/L | 1 | 7/17/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *30-Jul-07*

**CLIENT:** Kleinfelder
**Work Order:** 07070388
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 1311_M**

Sample ID: **MB-29886** SampType: **MBLK** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053540**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <0.50 | 0.50 | | | | | | | | | |
| Cadmium | <0.25 | 0.25 | | | | | | | | | |
| Lead | <0.50 | 0.50 | | | | | | | | | |

Sample ID: **LCS-29886** SampType: **LCS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053538**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.620 | 0.50 | 2.5 | 0 | 105 | 85 | 115 | | | | |
| Cadmium | 2.605 | 0.25 | 2.5 | 0 | 104 | 85 | 115 | | | | * |
| Lead | 2.590 | 0.50 | 2.5 | 0 | 104 | 85 | 115 | | | | |

Sample ID: **LCSD-29886** SampType: **LCSD** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053539**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.505 | 0.50 | 2.5 | 0 | 100 | 85 | 115 | 2.620 | 4.49 | 20 | |
| Cadmium | 2.555 | 0.25 | 2.5 | 0 | 102 | 85 | 115 | 2.605 | 1.94 | 20 | * |
| Lead | 2.490 | 0.50 | 2.5 | 0 | 99.6 | 85 | 115 | 2.590 | 3.94 | 20 | |

Sample ID: **07070388-01A MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: **S127-00** Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053529**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.655 | 0.50 | 2.5 | 0 | 106 | 54.8 | 139 | | | | |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

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**Date:** *30-Jul-07*

**CLIENT:** Kleinfelder
**Work Order:** 07070388
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 1311_M**

Sample ID: **07070388-01A MS** SampType: **MS** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: **S127-00** Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053529**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 2.705 | 0.25 | 2.5 | 0 | 108 | 85.9 | 115 | | | | * |
| Lead | 89.00 | 0.50 | 2.5 | 84.50 | 180 | 78.7 | 119 | | | | M3 |

Sample ID: **07070388-01A MSD** SampType: **MSD** TestCode: **1311_M** Units: **mg/L** Prep Date: **7/13/2007** RunNo: **89075**
Client ID: **S127-00** Batch ID: **29886** TestNo: **SW1311/6010** Analysis Date: **7/17/2007** SeqNo: **1053530**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.625 | 0.50 | 2.5 | 0 | 105 | 54.8 | 139 | 2.655 | 1.14 | 20 | |
| Cadmium | 2.720 | 0.25 | 2.5 | 0 | 109 | 85.9 | 115 | 2.705 | 0.553 | 20 | * |
| Lead | 88.50 | 0.50 | 2.5 | 84.50 | 160 | 78.7 | 119 | 89.00 | 0.563 | 20 | M3 |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

Re-accession 07-07-0388

Aerotech Environmental Laboratories Sample Receipt Checklist

Project Checked By: _____

| | |
|---|---|
| Laboratory Number: 07-05-0523 | Checklist completed by: Karen McCormick |
| Client Name: Kleinfelder | Signature/Date 5/14/07 |
| Matrix: Soil Carrier Name: Client | Date/Time Rec'd: 5/14/07 318 By: KM |

Temperature of Samples? 2.1 °C *Circle one:* Blue Ice Wet Ice Not Present

| Client or PM made aware temp. out of range? | Yes | No |
|---|---|---|

| | Yes | No* | Not Present |
|---|---|---|---|
| Shipping container/cooler in good condition? | X | | |
| Custody seals intact on shipping container/cooler? | | | X |
| Custody seals intact on sample containers? | | | X |
| Chain of Custody present and relinquished/received properly? | X | | |
| Chain of Custody agrees with sample labels? | X | | |
| Samples in proper containers/bottles? | X | | |
| Sample containers intact? | X | | |
| All samples received within holding time? | X | | |
| Is there sufficient sample volume to perform the tests? | X | | |
| 40mL vials for volatiles & SOCs received with zero headspace? | | | X |

Soil Containers:
Brass Sleeve____
Glass Jar X
Methanol____
Plastic Bag____
Encore Samplers____
Sterile Plastic____

**See Comments about Chlorine and pH

| | |
|---|---|
| Total number of bottles received: 75 | IH sample media: |
| If applicable, how many sample bottles were shipped from AEL-Tucson? | N/A X |

*Number of containers received by preservative and by sample number. (If more than 15 samples are rec'd, please continue on separate sheet(s)).*

| Preservative | Simple*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-General | 75 | | | | | | | | | | | | | | | |
| B-HNO3 | | | | | | | | | | | | | | | | |
| C-H2SO4 | | | | | | | | | | | | | | | | |
| D-HCl | | | | | | | | | | | | | | | | |
| E-Na2S2O3 | | | | | | | | | | | | | | | | |
| F-NaOH | | | | | | | | | | | | | | | | |
| G-Sulfide | | | | | | | | | | | | | | | | |
| H-Na Sulfite | | | | | | | | | | | | | | | | |
| I-MCAA | | | | | | | | | | | | | | | | |
| J-Methanol | | | | | | | | | | | | | | | | |
| K-HAA | | | | | | | | | | | | | | | | |
| L-Other | | | | | | | | | | | | | | | | |

Water-pH acceptable upon receipt? Yes No N/A X

| Preservative & pH | | pH of samples upon receipt | If pH requires adjustment, list sample number, and reagent I.D. number |
|---|---|---|---|
| Metals | <2 | | |
| Nutrients | <2 | | |
| Total Phenols | <2 | | |
| 1664 | <2 | | |
| Cyanide | >12 | | |
| Sulfide | >9 | | |

*Any No response must be detailed in the comments section below, Contact the PM immediately to determine how to proceed. Refer to SOP 11-001. Continue on back if additional space is needed.*

***The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.*

****The Simple box is only to be used when there is one bottle per reservative in equal sample sets.*

Comments:

Corrective Action:

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[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 1 of 8 |
| Customer: Kleinfelder West Inc. | Sampler: David G. Neidigh |
| Address: 1335 W. Auto DR | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E. Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dNeidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Total Lead EPA 6010B Dissolved | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B | TCLP As Cd Pb M4 7/12/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SD001-00 | 5/8/07 | 1500 | S | X | X | X | X | | 1 |
| 2 | SD002-00 | 5/8/07 | 1510 | S | X | X | X | X | | 1 |
| 3 | SD003-00 | 5/8/07 | 1520 | S | X | X | X | X | | 1 |
| 1 4 | S127-00 | 5/8/07 | 1530 | S | X | X | X | X | X | 1 |
| 5 | S125-00 | 5/8/07 | 1540 | S | X | X | X | X | | 1 |
| 6 | S124-00 | 5/8/07 | 1544 | S | X | X | X | X | | 1 |
| 2 7 | S138-00 | 5/8/07 | 1547 | S | X | X | X | X | X | 1 |
| 8 | S142-00 | 5/8/07 | 1549 | S | X | X | X | X | | 1 |
| 3 9 | S122-00 | 5/8/07 | 1554 | S | X | X | X | X | X | 1 |
| 10 | S112-00 | 5/8/07 | 1559 | S | X | X | X | X | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:02A | David E. Neidigh | [illegible] |
| 5/14/07 | 3:18 | [illegible] | [illegible] |

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07-07-0388

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | | | |
|---|---|---|---|
| Customer Number: | | Page 2 of 8 | |
| Customer: Kleinfelder West Inc. | | Sampler: David E Neidigh | |
| Address: 1335 W. Auto DR | | Project Name: Tucson Ore Mill | |
| City, State, Zip: Tempe AZ 85284 | | Project Number: 80365 | |
| Contact: David E Neidigh | | P.O. Number: | |
| Phone: 480-763-1200 | Fax: 480-763-1212 | Fax Results: Y N | |
| E-Mail Address: dneidigh@kleinfelder.com | | E-Mail Results: (Y) N | |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes_____ No X
Custody Seals Intact: Yes_____ No X
Total # of Containers: 75

**Turn Around Request**
_____ 24 Hours _____ 48 Hours
_____ 72 Hours
_____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| | Lab # | Sample Identification | Date | Time | Type | Lead EPA 6010B | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B | TCLP As, Cd, Pb 7/12/07 | # of Sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11 | S101-00 | 5/8/07 | 1602 | S | X | X | X | X | | 1 |
| | 12 | S104-00 | 5/8/07 | 1606 | S | X | X | X | X | | 1 |
| 4 | 13 | S127-30 | 5/9/07 | 0659 | S | X | X | X | X | X | 1 |
| | 14 | S126-20 | 5/9/07 | 0728 | S | X | X | X | X | | 1 |
| 5 | 15 | S123-25 | 5/9/07 | 0805 | S | X | X | X | X | X | 1 |
| | 16 | S125-10 | 5/9/07 | 0820 | S | X | X | X | X | | 1 |
| | 17 | S125-30 | 5/9/07 | 0840 | S | X | X | X | X | | 1 |
| | 18 | SD005-05 | 5/9/07 | 0901 | S | X | X | X | X | | 1 |
| 6 | 19 | S130-10 | 5/9/07 | 1046 | S | X | X | X | X | X | 1 |
| | 20 | S124-~~0 DW~~ 5/9/07 -15 | 5/9/07 | 1006 | S | X | X | X | X | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:01A | David E Neidigh | [illegible] |
| 5/14/07 | 3:18P | [illegible] | [illegible] |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 3 of 8 |
| Customer: Kleinfelder West, Inc | Sampler: David E Neidigh |
| Address: 1335 W. Auto Dr | Project Name: Tucson ore mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | TCLP As, Cd, Pb | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | S101-05 | 5/9/07 | 1129 | S | X | X | X | X | | 1 |
| 7 22 | S102-05 | 5/9/07 | 1137 | S | X | X | X | X | X | 1 |
| 8 23 | S103-05 | 5/9/07 | 1149 | S | X | X | X | X | X | 1 |
| 24 | S106-05 | 5/9/07 | 1204 | S | X | X | X | X | | 1 |
| 25 | SD004-05 | 5/9/07 | 1214 | S | X | X | X | X | | 1 |
| 26 | S105-05 | 5/9/07 | 1237 | S | X | X | X | X | | 1 |
| 27 | S104-05 | 5/9/07 | 1306 | S | X | X | X | X | | 1 |
| 28 | S112-05 | 5/9/07 | 1329 | S | X | X | X | X | | 1 |
| 29 | S111-05 | 5/9/07 | 1334 | S | X | X | X | X | | 1 |
| 30 | S110-05 | 5/9/07 | 1444 | S | X | X | X | X | | 1 |

Instructions / Special Requirements: TCLP As, Cd, Pb 7/12/07

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | Karen McCallum |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

| | |
|---|---|
| Customer Number: | Page 4 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

**Analyses Requested**

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | TCLP As Cd Pb | MS 7/12/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 31 | S127-45 | 5/9/07 | 1502 | S | X | X | X | X | X | | 1 |
| 32 | S116-05 | 5/9/07 | 1609 | S | X | X | X | X | X | MS 7/12/07 | 1 |
| 33 | S117-05 | 5/9/07 | 1614 | S | X | X | X | X | | | 1 |
| 34 | S108-05 | 5/9/07 | 1618 | S | X | X | X | X | | | 1 |
| 35 | S109-05 | 5/9/07 | 1623 | S | X | X | X | X | | | 1 |
| 36 | S148-05 | 5/9/07 | 1701 | S | X | X | X | X | | | 1 |
| 37 | S146-05 | 5/9/07 | 1712 | S | X | X | X | X | | | 1 |
| 38 | S147-05 | 5/9/07 | 1716 | S | X | X | X | X | | | 1 |
| 39 | S149-05 | 5/9/07 | 1721 | S | X | X | X | X | | | 1 |
| 40 | S150-05 | 5/9/07 | 1723 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:07A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | Karen McCormick |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | |
| Customer: | Kleinfelder West Inc |
| Address: | 1335 W Auto Dr |
| City, State, Zip: | Tempe AZ 85284 |
| Contact: | David E Neidigh |
| Phone: | 480-763-1200 |
| Fax: | 480-763-1212 |
| E-Mail Address: | dneidigh@kleinfelder.com |
| Page | 5 of 8 |
| Sampler: | David E Neidigh |
| Project Name: | Tucson ore mill |
| Project Number: | 80365 |
| P.O. Number: | |
| Fax Results: | Y N |
| E-Mail Results: | (Y) N |

**Sample Type Codes**

DW - Drinking Water
WW - Waste Water
HW - Hazardous Waste
A - Air
S - Soil
Other_____

**Sample Receipt**

Temperature 7.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**

____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | TCLP As, Cd, Pb 24 7/12/07 | | | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | S145-05 | 5/9/07 | 1727 | S | X | X | X | X | | | | | | | | | | | 1 |
| 42 | S144-05 | 5/9/07 | 1746 | S | X | X | X | X | | | | | | | | | | | 1 |
| 43 | S134-05 | 5/9/07 | 1743 | S | X | X | X | X | | | | | | | | | | | 1 |
| 44 | S143-05 | 5/9/07 | 1751 | S | X | X | X | X | | | | | | | | | | | 1 |
| 45 | S142-05 | 5/9/07 | 1755 | S | X | X | X | X | | | | | | | | | | | 1 |
| 46 | S141-05 | 5/9/07 | 1759 | S | X | X | X | X | | | | | | | | | | | 1 |
| 47 | S107-05 | 5/9/07 | 1154 | S | X | X | X | X | ~~X~~ | pp 7/12/07 | | | | | | | | | 1 |
| 48 | S134-15 | 5/10/07 | 0644 | S | X | X | X | X | | | | | | | | | | | 1 |
| 49 | S135-10 | 5/10/07 | 0659 | S | X | X | X | X | | | | | | | | | | | 1 |
| 50 | S136-10 | 5/10/07 | 0713 | S | X | X | X | X | | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:06A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

| | |
|---|---|
| Customer Number: | |
| Customer: | Kleinfelder West Inc |
| Address: | 1335 W Auto Dr |
| City, State, Zip: | Tempe AZ 85284 |
| Contact: | David E Neidigh |
| Phone: | 480-763-1200 |
| Fax: | 480-763-1212 |
| E-Mail Address: | dneidigh@kleinfelder.com |

Page 6 of 8

| | |
|---|---|
| Sampler: | David E Neidigh |
| Project Name: | Tucson Ore Mill |
| Project Number: | 80365 |
| P.O. Number: | |
| Fax Results: | Y N |
| E-Mail Results: | (Y) N |

**Sample Type Codes**

DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**

Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**

____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | TCLP As, Cd, Pb 24 7/12/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|
| 51 | S137-10 | 5/10/07 | 0732 | S | X | X | X | X | | 1 |
| 52 | S143-10 | 5/10/07 | 0742 | S | X | X | X | X | | 1 |
| 53 | S143-15 | 5/10/07 | 0751 | S | X | X | X | X | | 1 |
| 54 | SD006-20 | 5/10/07 | 0803 | S | X | X | X | X | | 1 |
| 55 | S143-25 | 5/10/07 | 0806 | S | X | X | X | X | | 1 |
| 56 | SD007-05 | 5/10/07 | 0830 | S | X | X | X | X | | 1 |
| 57 | S121-10 | 5/10/07 | 0939 | S | X | X | X | X | | 1 |
| 10 58 | S113-05 | 5/10/07 | 0952 | S | X | X | X | X | X | 1 |
| 11 59 | S114-10 | 5/10/07 | 1001 | S | X | X | X | X | X | 1 |
| 60 | S115-10 | 5/10/07 | 1011 | S | X | X | X | X | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 15:05 | David E Neidigh | [illegible] |
| 5/14/07 | 3:28P | [illegible] | Karen McCarver |

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# Aerotech Environmental Laboratories

Re-accession 07-07-0388

a division of Aerotech Laboratories, Inc.

[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

| | |
|---|---|
| Customer Number: | |
| Customer: | Klein Felder West Inc |
| Address: | 1335 W Auto Dr |
| City, State, Zip: | Tempe AZ 85284 |
| Contact: | David E Neidigh |
| Phone: | 480-763-1200 |
| Fax: | 480-763-1212 |
| E-Mail Address: | dneidigh@kleinfelder.com |
| Page | 7 of 8 |
| Sampler: | David E Neidigh |
| Project Name: | Tucson Ore Mill |
| Project Number: | 80365 |
| P.O. Number: | |
| Fax Results: | Y N |
| E-Mail Results: | (Y) N |

**Sample Type Codes**
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 21 °C
Custody Seals: Yes_____ No X
Custody Seals Intact: Yes_____ No X
Total # of Containers: 73

**Turn Around Request**
_____ 24 Hours _____ 48 Hours
_____ 72 Hours
_____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| | Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Antimony 6010B | Cadmium 6010B | TCLP As, Cd, Pb | 7/12/07 | | | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 61 | S122-05 | 5/10/07 | 1016 | S | X | X | X | X | X | 7/12/07 | | | | | | | | | | 1 |
| | 62 | S120-05 | 5/10/07 | 1033 | S | X | X | X | X | | | | | | | | | | | | 1 |
| | 63 | S118-05 | 5/10/07 | 1037 | S | X | X | X | X | | | | | | | | | | | | 1 |
| | 64 | S128-05 | 5/10/07 | 1041 | S | X | X | X | X | | | | | | | | | | | | 1 |
| | 65 | S148-10 | 5/10/07 | 1110 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 12 | 66 | S138-15 | 5/10/07 | 1229 | S | X | X | X | X | X | | | | | | | | | | | 1 |
| | 67 | S133-20 | 5/10/07 | 1243 | S | X | X | X | X | | | | | | | | | | | | 1 |
| | 68 | S132-25 | 5/10/07 | 1307 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 13 | 69 | S131-10 | 5/10/07 | 1319 | S | X | X | X | X | X | | | | | | | | | | | 1 |
| | 70 | S129-20 | 5/10/07 | 1517 | S | X | X | X | X | | | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:02A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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# Aerotech Environmental Laboratories

Re-accession

a division of Aerotech Laboratories, Inc.

07-07-0388

[X] Main Lab - 4645 E. Cotton Center Blvd., Building 3, Suite 189, Phoenix, AZ 85040 602.437.3340 - FAX 623.445.6192
[ ] North Phoenix - 1501 W. Knudsen, Phoenix, AZ 85027 623.780.4800 - FAX 623.445.6216
[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | |
| Customer: | Kleinfelder west inc |
| Address: | 1335 W Auto Dr |
| City, State, Zip: | Tempe AZ 85284 |
| Contact: | David E Neidigh |
| Phone: | 480-763-1200 |
| Fax: | 480-763-1212 |
| E-Mail Address: | dneidigh@kleinfelder.com |
| Page | 8 of 8 |
| Sampler: | David E Neidigh |
| Project Name: | Tucson Ore Mill |
| Project Number: | 80365 |
| P.O. Number: | |
| Fax Results: | Y N |
| E-Mail Results: | (Y) N |

**Sample Type Codes**
DW - Drinking Water
A - Air
WW - Waste Water
S - Soil
HW - Hazardous Waste
Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | TCLP As, Cd, Pb | | | | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | S129-25 | 5/10/07 | 1524 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 72 | S 139-15 | 5/10/07 | 1523 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 73 | S 119-15 | 5/10/07 | 1649 | S | X | X | X | X | X | MJ 7/12/07 | | | | | | | | | | 1 |
| 74 | S 143E-20 | 5/10/07 | 1737 | S | X | X | X | X | | | | | | | | | | | | 1 |
| 75 | S140-30 | 5/10/07 | 1755 | S | X | X | X | X | X | MJ 7/12/07 | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| ~~10:03~~ 5/14/07 | 10:03A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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RECEIVED
JUN 14 2007

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

Friday, June 08, 2007

David Neidigh
Kleinfelder
1335 West Auto Loop
Tempe, Arizona 85284

TEL: 480-763-1200
FAX 480-763-1212

RE: Tucson Ore Mill/80365

Order No.: 07060002

Dear David Neidigh:

Aerotech Environmental Laboratories received 8 sample(s) on 5/14/2007 for the analyses presented in the following report.

This report includes the following information:
- Case Narrative.
- Analytical Report: includes test results, report limit (Limit), any applicable data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report.

This communication is intended only for the individual or entity to whom it is directed. It may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. Dissemination, distribution, or copying of this communication by anyone other than the intended recipient, or a duly designated employee or agent of such recipient, is prohibited. If you have received this communication in error, please notify us immediately and destroy this message and all attachments thereto. If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Michelle Johnston
Customer Service Manager (CSM)

## Aerotech Environmental Laboratories

**Date:** *12-Jun-07*

**CLIENT:** Kleinfelder
**Project:** Tucson Ore Mill/80365
**Lab Order:** 07060002

# CASE NARRATIVE

Analyses included in this report were performed by Aerotech Environmental Laboratories (AEL), 4645 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ.

AEL is licensed through the State of Arizona (License No. AZ0610), and holds NELAC accreditation (OR100001) through the State of Oregon for the analytical techniques noted on the scope of accreditation.

AEL is also accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation.

Samples were analyzed using methods outlined in references such as:
-Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.
-40 CFR, Part 136, July 2006. Appendix A to Part 136 - Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.
-Methods for the Chemical Analysis of Water and Wastes, EPA/600/4-79-020, Revised March 1983.
-Methods for the Determination of Organic Compounds in Drinking Water: Supplement III, August 1995, EPA/600/R-95/131.
-Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA, 3rd Edition 1986, and Updates.
-Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA, Second Edition, 1999.
-NIOSH Manual of Analytical Methods, Fourth Edition, 1994. NIOSH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Analytical Comments:
All method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

On 5/31/2007, a request was received from the client to add Arsenic and Lead by 6010 to samples S111-05, S116-05, S117-05, S109-05, S107-05, S122-05, S119-15, and S140-30, originally submitted under Aerotech Environmental IDs 07050523-29A, -32A, -33A, -35A, -47A, -61A, -73A, and -75A.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S111-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 1:34:00 PM |
| **Lab ID:** | 07060002-01A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 6.9 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 400 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S116-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:09:00 PM |
| **Lab ID:** | 07060002-02A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 15 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 500 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S117-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:14:00 PM |
| **Lab ID:** | 07060002-03A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 9.4 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 1400 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *12-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S109-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 4:23:00 PM |
| **Lab ID:** | 07060002-04A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 19 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 2300 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S107-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/9/2007 11:54:00 AM |
| **Lab ID:** | 07060002-05A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 640 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S122-05 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 10:16:00 AM |
| **Lab ID:** | 07060002-06A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 10 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 1600 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S119-15 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 4:49:00 PM |
| **Lab ID:** | 07060002-07A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | 21 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 1800 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

## Analytical Report

**Date:** *08-Jun-07*

| | | | |
|---|---|---|---|
| **CLIENT:** | Kleinfelder | **Client Sample ID:** | S140-30 |
| **Lab Order:** | 07060002 | **Tag Number:** | |
| **Project:** | Tucson Ore Mill/80365 | **Collection Date:** | 5/10/2007 5:55:00 PM |
| **Lab ID:** | 07060002-08A | **Matrix:** | SOIL |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | **SW6010B** | | | | Analyst: **HK** |
| Arsenic | < 5.0 | 5.0 | | mg/Kg | 1 | 6/6/2007 |
| Lead | 350 | 5.0 | | mg/Kg | 1 | 6/6/2007 |

**Footnotes:** All analysis performed at AEL Phoenix laboratory unless indicated by footnotes.

(1) The holding time for pH analysis is immediate. For the most accurate result, the pH should be taken in the field within 15 minutes of sampling.

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *08-Jun-07*

**CLIENT:** Kleinfelder
**Work Order:** 07060002
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **MB-29525** SampType: **MBLK** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **6/4/2007** RunNo: **87840**
Client ID: Batch ID: **29525** TestNo: **SW6010B** Analysis Date: **6/6/2007** SeqNo: **1039044**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <5.0 | 5.0 | | | | | | | | | |
| Lead | <5.0 | 5.0 | | | | | | | | | |

Sample ID: **LCS-29525** SampType: **LCS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **6/4/2007** RunNo: **87840**
Client ID: Batch ID: **29525** TestNo: **SW6010B** Analysis Date: **6/6/2007** SeqNo: **1039042**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 24.55 | 5.0 | 25 | 0 | 98.2 | 80 | 120 | | | | |
| Lead | 24.90 | 5.0 | 25 | 0 | 99.6 | 80 | 120 | | | | |

Sample ID: **LCSD-29525** SampType: **LCSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **6/4/2007** RunNo: **87840**
Client ID: Batch ID: **29525** TestNo: **SW6010B** Analysis Date: **6/6/2007** SeqNo: **1039043**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 24.80 | 5.0 | 25 | 0 | 99.2 | 80 | 120 | 24.55 | 1.01 | 20 | |
| Lead | 25.35 | 5.0 | 25 | 0 | 101 | 80 | 120 | 24.90 | 1.79 | 20 | |

Sample ID: **07060028-01A MS** SampType: **MS** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **6/4/2007** RunNo: **87840**
Client ID: Batch ID: **29525** TestNo: **SW6010B** Analysis Date: **6/6/2007** SeqNo: **1039038**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 29.75 | 5.0 | 25 | 11.00 | 75.0 | 75 | 125 | | | | |
| Lead | 25.85 | 5.0 | 25 | 0 | 103 | 75 | 125 | | | | |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

# Aerotech Environmental Laboratories

a division of Aerotech Laboratories, Inc.

**Date:** *08-Jun-07*

**CLIENT:** Kleinfelder
**Work Order:** 07060002
**Project:** Tucson Ore Mill/80365

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010B_S**

Sample ID: **07060028-01A MSD** SampType: **MSD** TestCode: **6010B_S** Units: **mg/Kg** Prep Date: **6/4/2007** RunNo: **87840**
Client ID: Batch ID: **29525** TestNo: **SW6010B** Analysis Date: **6/6/2007** SeqNo: **1039040**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 31.25 | 5.0 | 25 | 11.00 | 81.0 | 75 | 125 | 29.75 | 4.92 | 20 | |
| Lead | 26.45 | 5.0 | 25 | 0 | 106 | 75 | 125 | 25.85 | 2.29 | 20 | |

**Qualifiers:** * Value exceeds Maximum Contaminant Level ND Not Detected at the Reporting Limit

Re-accession 07-06-0002

Aerotech Environmental Laboratories Sample Receipt Checklist

Project Checked By: _____

| | |
|---|---|
| Laboratory Number: 07-05-0523 | Checklist completed by: Karen McComick |
| Client Name: Kleinfelder | Signature/Date: 5/14/07 |
| Matrix: Soil / Carrier Name: Client | Date/Time Rec'd: 5/14/07 318 By: KM |

Temperature of Samples? 2.1 °C  Circle one: Blue Ice  Wet Ice  Not Present

| | Yes | No* | Not Present |
|---|---|---|---|
| Client or PM made aware temp. out of range? Yes / No | | | |
| Shipping container/cooler in good condition? | X | | |
| Custody seals intact on shipping container/cooler? | | | X |
| Custody seals intact on sample containers? | | | X |
| Chain of Custody present and relinquished/received properly? | X | | |
| Chain of Custody agrees with sample labels? | X | | |
| Samples in proper containers/bottles? | X | | |
| Sample containers intact? | X | | |
| All samples received within holding time? | X | | |
| Is there sufficient sample volume to perform the tests? | X | | |
| 40mL vials for volatiles & SOCs received with zero headspace? | | | X |

Soil Containers:
Brass Sleeve ____
Glass Jar X
Methanol ____
Plastic Bag ____
Encore Samplers ____
Sterile Plastic ____

**See Comments about Chlorine and pH

Total number of bottles received: 75  IH sample media:

If applicable, how many sample bottles were shipped from AEL-Tucson? N/A X

*Number of containers received by preservative and by sample number: (If more than 15 samples are rec'd, please continue on separate sheet(s))*

| Preservative | Simple*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-General | 75 | | | | | | | | | | | | | | | |
| B-HNO3 | | | | | | | | | | | | | | | | |
| C-H2SO4 | | | | | | | | | | | | | | | | |
| D-HCl | | | | | | | | | | | | | | | | |
| E-Na2S2O3 | | | | | | | | | | | | | | | | |
| F-NaOH | | | | | | | | | | | | | | | | |
| G-Sulfide | | | | | | | | | | | | | | | | |
| H-Na Sulfite | | | | | | | | | | | | | | | | |
| I-MCAA | | | | | | | | | | | | | | | | |
| J-Methanol | | | | | | | | | | | | | | | | |
| K-HAA | | | | | | | | | | | | | | | | |
| L-Other | | | | | | | | | | | | | | | | |

Water-pH acceptable upon receipt? Yes  No  N/A X

| Preservative & pH | | pH of samples upon receipt | If pH requires adjustment, list sample number, and reagent I.D. number |
|---|---|---|---|
| Metals | <2 | | |
| Nutrients | <2 | | |
| Total Phenols | <2 | | |
| 1664 | <2 | | |
| Cyanide | >12 | | |
| Sulfide | >9 | | |

*Any No response must be detailed in the comments section below, Contact the PM immediately to determine how to proceed. Refer to SOP 11-001. Continue on back if additional space is needed.*

***The holding time for pH and Total Residual Chlorine analysis is immediate. For the most accurate result, the pH and Total Residual Chlorine should be taken in the field within 15 minutes of sampling.*

****The Simple box is only to be used when there is one bottle per reservative in equal sample sets.*

Comments:

Corrective Action:

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07-06-0002

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

Customer Number:
Customer: Kleinfelder West Inc.
Address: 1335 W. Auto DR
City, State, Zip: Tempe AZ 85284
Contact: David E. Neidigh
Phone: 480-763-1200 Fax: 480-763-1212
E-Mail Address: dNeidigh@kleinfelder.com

Page 1 of 8
Sampler: David E. Neidigh
Project Name: Tucson Ore Mill
Project Number: 80365
P.O. Number:
Fax Results: Y N
E-Mail Results: (Y) N

Sample Type Codes
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

**Analyses Requested**

## Sample Information

| Lab # | Sample Identification | Date | Time | Type | Lead EPA 6010B 5/14/07 | Arsenic EPA 6010B | Tungsten EPA 6010B | Cadmium EPA 6010B 5/14/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | SD001-00 | 5/8/07 | 1500 | S | X | X | X | X | 1 |
| 2 | SD002-00 | 5/8/07 | 1510 | S | X | X | X | X | 1 |
| 3 | SD003-00 | 5/8/07 | 1520 | S | X | X | X | X | 1 |
| 4 | S127-00 | 5/8/07 | 1530 | S | X | X | X | X | 1 |
| 5 | S125-00 | 5/8/07 | 1540 | S | X | X | X | X | 1 |
| 6 | S124-00 | 5/8/07 | 1544 | S | X | X | X | X | 1 |
| 7 | S138-00 | 5/8/07 | 1547 | S | X | X | X | X | 1 |
| 8 | S142-00 | 5/8/07 | 1549 | S | X | X | X | X | 1 |
| 9 | S122-00 | 5/8/07 | 1554 | S | X | X | X | X | 1 |
| 10 | S112-00 | 5/8/07 | 1559 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:024 | David E. Neidigh | [illegible] |
| 5/14/07 | 3:18 | [illegible] | Ken McCance |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

Customer Number:
Customer: Kleinfelder West Inc.
Address: 1335 W. Auto Dr.
City, State, Zip: Tempe AZ 85284
Contact: David E Neidigh
Phone: 480-763-1200 Fax: 480-763-1212
E-Mail Address: dneidigh@kleinfelder.com

Page 2 of 8
Sampler: David E Neidigh
Project Name: Tucson Ore Mill
Project Number: 80365
P.O. Number:
Fax Results: Y N
E-Mail Results: (Y) N

Sample Type Codes: DW - Drinking Water; WW - Waste Water; A - Air; S - Soil; HW - Hazardous Waste; Other

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested: Lead EPA 6010B; Arsenic EPA 6010B; Tungsten EPA 6010B; Cadmium EPA 6010B (6/1/07)

| Lab # | Sample Identification | Date | Time | Type | Lead | Arsenic | Tungsten | Cadmium | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|
| 11 | S101-00 | 5/8/07 | 1602 | S | X | X | X | X | 1 |
| 12 | S104-00 | 5/8/07 | 1606 | S | X | X | X | X | 1 |
| 13 | S127-30 | 5/9/07 | 0659 | S | X | X | X | X | 1 |
| 14 | S126-20 | 5/9/07 | 0728 | S | X | X | X | X | 1 |
| 15 | S123-25 | 5/9/07 | 0805 | S | X | X | X | X | 1 |
| 16 | S125-10 | 5/9/07 | 0820 | S | X | X | X | X | 1 |
| 17 | S125-30 | 5/9/07 | 0840 | S | X | X | X | X | 1 |
| 18 | SD005-05 | 5/9/07 | 0901 | S | X | X | X | X | 1 |
| 19 | S130-10 | 5/9/07 | 1046 | S | X | X | X | X | 1 |
| 20 | S124 ~~-00~~ -15 5/9/07 | 5/9/07 | 1006 | S | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:01A | David E Neidigh | [illegible] |
| 5/14/07 | 3:18P | D Neidigh | Kevin McCann |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 3 of 8 |
| Customer: Kleinfelder West, Inc | Sampler: David E Neidigh |
| Address: 1335 W. Auto Dr | Project Name: Tucson one Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water; A - Air; WW - Waste Water; S - Soil; HW - Hazardous Waste; Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ____ No X
Custody Seals Intact: Yes ____ No X
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | S101-05 | 5/9/07 | 1129 | S | X | X | X | X | | | 1 |
| 22 | S102-05 | 5/9/07 | 1137 | S | X | X | X | X | | | 1 |
| 23 | S103-05 | 5/9/07 | 1149 | S | X | X | X | X | | | 1 |
| 24 | S106-05 | 5/9/07 | 1204 | S | X | X | X | X | | | 1 |
| 25 | SD004-05 | 5/9/07 | 1214 | S | X | X | X | X | | | 1 |
| 26 | S105-05 | 5/9/07 | 1237 | S | X | X | X | X | | | 1 |
| 27 | S104-05 | 5/9/07 | 1306 | S | X | X | X | X | | | 1 |
| 28 | S112-05 | 5/9/07 | 1329 | S | X | X | X | X | | | 1 |
| 29 | S111-05 | 5/9/07 | 1334 | S | X | X | X | X | X | X | 1 |
| 30 | S110-05 | 5/9/07 | 1444 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | David E Neidigh | R Nolte |
| 5/14/07 | 3:18P | R Nolte | Karen McClelland |

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[ ] Tucson - 4455 S. Park Ave, Suite 110, Tucson, AZ 85714 520.807.3801 - FAX 520.807.3803
www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | Page 4 of 8 |
| Customer: Kleinfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ____ No X
Custody Seals Intact: Yes ____ No ____
Total # of Containers: 75

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

| | Lab # | Sample Identification | Date | Time | Type | ~~Lead (6010)~~ | ~~Arsenic (6010)~~ | ~~Tungsten (6010)~~ | ~~Cadmium (6010)~~ | As (6010) | Pb (6010) 6/1/07 | | | | | | | | | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31 | S127-45 | 5/9/07 | 1502 | S | X | X | X | X | | | | | | | | | | | 1 |
| 2 | 32 | S116-05 | 5/9/07 | 1609 | S | X | X | X | X | X | X | | | | | | | | | 1 |
| 3 | 33 | S117-05 | 5/9/07 | 1614 | S | X | X | X | X | X | X | | | | | | | | | 1 |
| | 34 | S108-05 | 5/9/07 | 1618 | S | X | X | X | X | | | | | | | | | | | 1 |
| 4 | 35 | S109-05 | 5/9/07 | 1623 | S | X | X | X | X | X | X | | | | | | | | | 1 |
| | 36 | S148-05 | 5/9/07 | 1701 | S | X | X | X | X | | | | | | | | | | | 1 |
| | 37 | S146-05 | 5/9/07 | 1712 | S | X | X | X | X | | | | | | | | | | | 1 |
| | 38 | S147-05 | 5/9/07 | 1716 | S | X | X | X | X | | | | | | | | | | | 1 |
| | 39 | S149-05 | 5/9/07 | 1721 | S | X | X | X | X | | | | | | | | | | | 1 |
| | 40 | S150-05 | 5/9/07 | 1723 | S | X | X | X | X | | | | | | | | | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:07A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | Karen McCormick |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~07-05-0523~~

| | |
|---|---|
| Customer Number: | |
| Customer: | Kleinfelder West Inc |
| Address: | 1335 W Auto Dr |
| City, State, Zip: | Tempe AZ 85284 |
| Contact: | David E Neidigh |
| Phone: | 480-763-1200 |
| Fax: | 480-763-1212 |
| E-Mail Address: | dneidigh@kleinfelder.com |

| | |
|---|---|
| Page | 5 of 8 |
| Sampler: | David E Neidigh |
| Project Name: | Tucson ore mill |
| Project Number: | 80365 |
| P.O. Number: | |
| Fax Results: | Y N |
| E-Mail Results: | (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

**Analyses Requested**

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As add | 6010 Pb add | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | S145-05 | 5/9/07 | 1727 | S | X | X | X | X | | | 1 |
| 42 | S144-05 | 5/9/07 | 1746 | S | X | X | X | X | | | 1 |
| 43 | S134-05 | 5/9/07 | 1743 | S | X | X | X | X | | | 1 |
| 44 | S143-05 | 5/9/07 | 1751 | S | X | X | X | X | | | 1 |
| 45 | S142-05 | 5/9/07 | 1755 | S | X | X | X | X | | | 1 |
| 46 | S141-05 | 5/9/07 | 1759 | S | X | X | X | X | | | 1 |
| 47 | S107-05 | 5/9/07 | 1154 | S | X | X | X | X | X | X | 1 |
| 48 | S134-15 | 5/10/07 | 0644 | S | X | X | X | X | | | 1 |
| 49 | S135-10 | 5/10/07 | 0659 | S | X | X | X | X | | | 1 |
| 50 | S136-10 | 5/10/07 | 0713 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:06A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** 07-05-0523

Customer Number:
Customer: Kleinfelder West Inc
Address: 1335 W Auto Dr
City, State, Zip: Tempe AZ 85284
Contact: David E Neidigh
Phone: 480-763-1200 Fax: 480-763-1212
E-Mail Address: dneidigh@kleinfelder.com

Page 6 of 8
Sampler: David E Neidigh
Project Name: Tucson Ore Mill
Project Number: 80365
P.O. Number:
Fax Results: Y N
E-Mail Results: (Y) N

Sample Type Codes
DW - Drinking Water A - Air
WW - Waste Water S - Soil
HW - Hazardous Waste
Other

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | Lab to AS 6/11/07 | Lab to Pb | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 51 | S137-10 | 5/10/07 | 0732 | S | X | X | X | X | | | 1 |
| 52 | S143-10 | 5/10/07 | 0742 | S | X | X | X | X | | | 1 |
| 53 | S143-15 | 5/10/07 | 0751 | S | X | X | X | X | | | 1 |
| 54 | SD006-20 | 5/10/07 | 0803 | S | X | X | X | X | | | 1 |
| 55 | S143-25 | 5/10/07 | 0806 | S | X | X | X | X | | | 1 |
| 56 | SD007-05 | 5/10/07 | 0830 | S | X | X | X | X | | | 1 |
| 57 | S121-10 | 5/10/07 | 0939 | S | X | X | X | X | | | 1 |
| 58 | S113-05 | 5/10/07 | 0952 | S | X | X | X | X | | | 1 |
| 59 | S114-10 | 5/10/07 | 1001 | S | X | X | X | X | | | 1 |
| 60 | S115-10 | 5/10/07 | 1011 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:05 | David E Neidigh | R Nelson |
| 5/14/07 | 3:28P | R Nelson | Laura McCarver |

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www.aeroenvirolabs.com or call toll-free 866.772.5227

**Lab Number:** ~~0705-0523~~

| | |
|---|---|
| Customer Number: | Page 7 of 8 |
| Customer: Klein Felder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr | Project Name: Tucson Ore Mill |
| City, State, Zip: Tempe AZ 85284 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@kleinfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other_____

**Sample Receipt**
Temperature 21.1 °C
Custody Seals: Yes____ No X
Custody Seals Intact: Yes____ No X
Total # of Containers: 73

**Turn Around Request**
____ 24 Hours ____ 48 Hours
____ 72 Hours
____ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

**Analyses Requested**

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Antimony 6010B | Cadmium 6010B | 6010 As TM 01/10/07 | 6010 Pb 01/10/07 | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 61 | S122-05 | 5/10/07 | 1016 | S | X | X | X | X | X | X | 1 |
| 62 | S120-05 | 5/10/07 | 1033 | S | X | X | X | X | | | 1 |
| 63 | S118-05 | 5/10/07 | 1037 | S | X | X | X | X | | | 1 |
| 64 | S128-05 | 5/10/07 | 1041 | S | X | X | X | X | | | 1 |
| 65 | S148-10 | 5/10/07 | 1110 | S | X | X | X | X | | | 1 |
| 66 | S138-15 | 5/10/07 | 1229 | S | X | X | X | X | | | 1 |
| 67 | S133-20 | 5/10/07 | 1243 | S | X | X | X | X | | | 1 |
| 68 | S132-25 | 5/10/07 | 1307 | S | X | X | X | X | | | 1 |
| 69 | S131-10 | 5/10/07 | 1319 | S | X | X | X | X | | | 1 |
| 70 | S129-20 | 5/10/07 | 1517 | S | X | X | X | X | | | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| 5/14/07 | 10:00A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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**Lab Number:** ~~07-05-053~~

| | |
|---|---|
| Customer Number: | Page 8 of 8 |
| Customer: Klemfelder West Inc | Sampler: David E Neidigh |
| Address: 1335 W Auto Dr. | Project Name: Tucson Ore. Mill |
| City, State, Zip: Tempe AZ 85281 | Project Number: 80365 |
| Contact: David E Neidigh | P.O. Number: |
| Phone: 480-763-1200 Fax: 480-763-1212 | Fax Results: Y N |
| E-Mail Address: dneidigh@klemfelder.com | E-Mail Results: (Y) N |

**Sample Type Codes**
DW - Drinking Water, A - Air, WW - Waste Water, S - Soil, HW - Hazardous Waste, Other

**Sample Receipt**
Temperature 2.1 °C
Custody Seals: Yes ___ No X
Custody Seals Intact: Yes ___ No X
Total # of Containers: 75

**Turn Around Request**
___ 24 Hours ___ 48 Hours
___ 72 Hours
___ 5 Working Days
X Standard 10 Working Days
Subject to scheduling & availability (surcharges apply).

## Sample Information

Analyses Requested

| Lab # | Sample Identification | Date | Time | Type | Lead 6010B | Arsenic 6010B | Tungsten 6010B | Cadmium 6010B | 6010 As | 6010 Pb | # of sample Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | S129-25 | 5/10/07 | 1521 | S | X | X | X | X | | | 1 |
| 72 | S 139-15 | 5/10/07 | 1523 | S | X | X | X | X | | | 1 |
| 73 | S 119-15 | 5/10/07 | 1649 | S | X | X | X | X | X | X | 1 |
| 74 | S 143E-20 | 5/10/07 | 1737 | S | X | X | X | X | | | 1 |
| 75 | S140-30 | 5/10/07 | 1755 | S | X | X | X | X | X | X | 1 |

Instructions / Special Requirements:

| Date | Time | Samples Relinquished By: | Received By: |
|---|---|---|---|
| ~~10-07~~ 5/14/07 | 10:03A | [signature] | [signature] |
| 5/14/07 | 3:18P | [signature] | [signature] |

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