

PHASE II ENVIRONMENTAL SITE ASSESSMENT

TWO PROPERTIES IMPACTED BY SMALL ARMS
SHOOTING RANGE
(PARCEL NOS. 113-49-006 AND 113-49-027)

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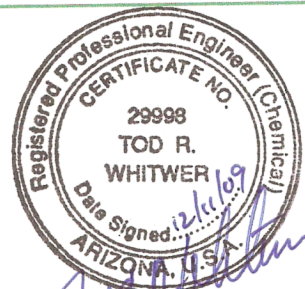
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EXECUTIVE SUMMARY

Allwyn Environmental conducted a Phase II Environmental Site Assessment (ESA) at two parcels (Parcel Nos. 113-49-006 and 113-49-027) located immediately west of a small arms firing range. The small arms firing range is operated on a property located at 1651 W. Target Range Road in Nogales, Arizona (Parcel No. 113-29-010B). Small arms target practice activities are suspected of impacting the two parcels, potentially resulting in elevated concentrations of lead, arsenic, antimony, and polynuclear aromatic hydrocarbons (PAHs). The work was contracted by Santa Cruz County using funds from a Fiscal Year (FY) 2005 Brownfields Community-Wide Assessment grant from the Environmental Protection Agency (EPA) for Hazardous Substances. The on-site assessment activities were conducted from October 19, 2009 through November 12, 2009. The assessment was conducted in accordance with an EPA-approved Quality Assurance Project Plan (QAPP), dated July 2, 2009, and a site-specific Sampling and Analysis Plan (SAP) dated October 6, 2009 and approved by EPA on November 5, 2009.

Soil samples from 51 of the 135 sampling cells contained lead in a concentration above the State of Arizona residential Soil Remediation Level (SRL) of 400 milligrams per kilogram (mg/kg) and, of these 51 sampling cells, 33 contained lead in a concentration above the non-residential SRL of 800 mg/kg. Subsurface soil samples from 28 of the 135 sampling cells contained lead in a concentration above the residential SRL and, of these 28 sampling cells, 14 contained lead in a concentration above the non-residential SRL.

Soil samples from one of the 135 sampling cells contained antimony in a concentration above the residential SRL. Soil samples from two of the 135 sampling cells contained one PAH, benzo(a)pyrene, in a concentration above the residential SRL for the 10^{-6} excess lifetime cancer risk level. Surface and subsurface soil samples did not contain arsenic in a concentration above the residential SRL.

The horizontal extent of lead impacts in the assessment area has been generally defined to the west of the shooting range, but has not been defined to the north and south of the shooting range. The vertical extent of lead impacts has not been defined. Time and budget constraints prevented additional site assessment necessary to define the horizontal and vertical extents. Therefore, additional site assessment, consisting of further surface and subsurface sample collection and analysis, will be required to fully delineate the lead impacts on the surrounding properties due to activities conducted on the small arms shooting range.

Antimony and PAHS, while present in soil samples above the residential SRLs, in two and one sampling cells, respectively, are present only in cells in which lead is also present in soil samples in a concentration above the residential SRLs. In addition, arsenic is not present in any soil samples above the residential SRL. Therefore, lead should be considered the target contaminant of concern for further assessment and/or remediation at the site.

The extent of lead impacts in the wash immediately behind the small arms shooting range has been delineated. Lead is present at a concentration above the non-residential SRL in the wash soil

extending to a distance between 250 feet and 300 feet northeast (downstream) of the small arms shooting range and above residential SRLs between 450 and 500 feet northeast (downstream) of the small arms shooting range. Antimony, arsenic, and PAHs are not present in concentrations above the residential SRLs in samples collected from the wash. Therefore, lead should be considered to be the target contaminant of concern for further assessment and/or remediation in the wash

TCLP analysis to evaluate the hazardous waste classification of on-site soil was performed on two samples from two sampling cells (40 and 71) containing lead above the non-residential SRL (2,200 mg/kg and 3,400 mg/kg, respectively) and one sampling cell (48) containing lead above the residential SRL. The samples collected for the hazardous waste classification demonstrated that the unscreened material and material passing through the #8 sieve would be classified as a hazardous waste based on lead toxicity (D008 waste code). In addition, one sample collected from material passing through the 50 sieve (WD-5) also demonstrated the hazardous waste characteristic for lead following TCLP analysis. The following conclusions can be made based on these assessment activities:

- Site soil containing lead in a concentration greater than the residential SRL of 400 mg/kg will likely considered a hazardous waste for disposal purposes.
- The extract from material passing through a #8 sieve still contains a sufficient lead concentration such that the screened soil would still be considered a hazardous waste for disposal purposes. For one of the three hazardous waste classification samples, the extract from material passing through a #50 sieve still contains a sufficient lead concentration such that the screened solid would still be considered a hazardous waste for disposal purposes. Therefore, screening of excavated soil to reduce off-site disposal volume of material classified as a hazardous waste during remediation activities will likely not be successful.

Based on the results of the Phase II ESA, Allwyn Environmental recommends the following additional activities be conducted at the site:

1. Additional assessment should be conducted to define the vertical extent of lead impacts and horizontal extent of lead impacts to the north and south of the small arms shooting range
2. Site soil cleanup standards (i.e., residential SRL and non-residential SRL) should be established based on considerations such as future site use, deed restriction, and cost and feasibility of remediation to meet the selected cleanup standard.
3. A remedial plan should be developed and should include assessment of feasible remediation options to cleanup soil to the standards considered in Recommendation No. 2 above. The evaluation should take into account the Phase II ESA result that soil containing lead in a concentration above the residential SRL of 400 mg/kg will likely require disposal as a hazardous waste under waste code D008. Alternative remedial options such as physical separation, excavation and off-site disposal, stabilization, phytoremediation, and soil washing should be considered in the evaluation.
4. Remedial action at the site should be conducted using lead as the constituent of concern.
5. Remediation should likely be conducted under the Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP).



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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	SITE DESCRIPTION AND OPERATIONAL HISTORY	1
1.2	PREVIOUS INVESTIGATIONS AND REGULATORY INVOLVEMENT	1
1.3	SOIL ASSESSMENT OBJECTIVES	1
2.0	SOIL SAMPLE COLLECTION	3
2.1	PROJECT DOCUMENTATION	3
2.2	SAMPLE COLLECTION METHODS.....	3
2.2.1	<i>Surface and Subsurface Samples</i>	3
2.2.2	<i>Wash Samples</i>	4
2.2.3	<i>Hazardous Waste Classification Samples</i>	4
2.2.4	<i>Duplicate Sample</i>	5
2.2.5	<i>Background Samples</i>	5
2.2.6	<i>Equipment Blank Samples</i>	6
2.3	DECONTAMINATION PROCEDURES.....	6
2.4	SAMPLE POINT SURVEYING	6
2.5	LABELING AND CHAIN-OF-CUSTODY FORMS	6
2.6	DISPOSAL OF RESIDUAL MATERIALS.....	7
3.0	SOIL SAMPLE ANALYTICAL RESULTS.....	8
3.1	SURFACE AND SUBSURFACE SAMPLES ANALYTICAL RESULTS	8
3.2	WASH SAMPLES ANALYTICAL RESULTS.....	9
3.3	HAZARDOUS WASTE CLASSIFICATION SAMPLES ANALYTICAL RESULTS	9
3.4	DUPLICATE SAMPLE ANALYTICAL RESULTS.....	10
3.5	BACKGROUND SAMPLES ANALYTICAL RESULTS.....	10
3.6	EQUIPMENT BLANKS ANALYTICAL RESULTS	10
3.7	DATA VERIFICATION	10
4.0	DISCUSSION OF RESULTS AND CONCLUSIONS	11
4.1	SURFACE AND SUBSURFACE SAMPLES	11
4.2	WASH SAMPLES	11
4.3	HAZARDOUS WASTE CLASSIFICATION	11
4.4	BACKGROUND SAMPLES.....	12
4.5	EQUIPMENT BLANKS	12
5.0	RECOMMENDATIONS.....	14
6.0	TERMS AND CONDITIONS.....	15

FIGURES

- 1 Vicinity Map
- 2 Sampling Cells
- 3 Discreet Sample Locations
- 4 Hazardous Waste Classification and Duplicate Sample Locations
- 5 Background Sample Locations
- 6 Surface Samples containing Lead in Concentrations Exceeding Residential Soil Remediation Levels
- 7 Subsurface Samples containing Lead in Concentrations Exceeding Residential Soil Remediation Levels

TABLES

- 1 Analytical Results – Surface and Subsurface Samples – Lead
- 2 Analytical Results – Wash Samples
- 3 Analytical Results – Hazardous Waste Classification Samples
- 4 Analytical Results – Duplicate Sample
- 5 Analytical Results – Background Samples
- 6 Analytical Results – Equipment Blank Samples

APPENDICES

- A Analytical Laboratory Reports
- B Data Verification Summary

ACRONYMS

Acronym	Definition
µm	Micron
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESC	Environmental Science Corporation
FY	Fiscal Year
GPS	Global Positioning System
HASP	Health and Safety Plan
mg/kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
Oz	Ounce
PAHs	Polynuclear Aromatic Hydrocarbons
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SPLP	Synthetic Precipitation Leaching Procedure
SRLs	Soil Remediation Levels
TCLP	Toxicity Characteristic Leaching Procedure
VRP	Voluntary Remediation Program

1.0 INTRODUCTION

This report summarizes the Phase II Environmental Site Assessment (ESA) conducted by Allwyn Environmental at two parcels (Parcel Nos. 113-49-006 and 113-49-027) located immediately west of a small arms firing range (See Figure 1 for a vicinity map of the assessment area). The small arms firing range is operated on a property located at 1651 W. Target Range Road in Nogales, Arizona (Parcel No. 113-29-010B). Bullet fragments and other small arms target practice activities impacted the two parcels located west of the small arms firing range, potentially resulting in elevated concentrations of lead, arsenic, antimony, and polynuclear aromatic hydrocarbons (PAHs). The work was contracted by Santa Cruz County using funds from a Fiscal Year (FY) 2005 Brownfields Community-Wide Assessment grant from the Environmental Protection Agency (EPA) for Hazardous Substances.

1.1 SITE DESCRIPTION AND OPERATIONAL HISTORY

The site includes portions of Parcel No. 113-49-006 (owned by La Loma Grande, LLC) and Parcel No. 113-49-027 (owned by Trust #7659 Property, LLC). Figure 1 provides a Vicinity Map of the site. The sampling area occupies approximately 12 acres in an undeveloped desert area. The site is bordered on the north, west, and south by undeveloped land, and on the east by a shooting range and a salvage yard. There are no structures on the site.

Historical records review and interviews with the site owners indicate that the site has never been developed or used for residential, commercial, or industrial purposes. An interview with the owner of the property on which the shooting range is located indicates that the shooting range has been in operation since at least the early 1900s and has been reportedly used by the Border Patrol and/or other Federal agencies since at least the 1970s.

1.2 PREVIOUS INVESTIGATIONS AND REGULATORY INVOLVEMENT

Allwyn Environmental completed a Phase I ESA at the site on March 10, 2009. No sampling was conducted during the course of the Phase I ESA and no other sampling at the site is known to have occurred. The site is not subject to local, tribal, state, or federal government agency involvement or oversight.

1.3 SOIL ASSESSMENT OBJECTIVES

The primary constituent of concern at small arms shooting ranges is lead, which is the primary component of bullets and shot. Other constituents of concern include arsenic and antimony (components of ammunition) and PAHs (present in “wadding” from shotgun shells). Other potential constituents of concern include nickel, copper, zinc, strontium, and magnesium. For the purposes of this Phase II ESA, only lead, arsenic, antimony, and PAHs were analyzed.

Incidental ingestion is the major pathway of exposure to lead in soil and dust. EPA exposure models indicate that the particle size fraction of soil and dust that is the primary source of ingested soil

and dust is the fine fraction and that a reasonable upper-bound for this size fraction is 250 microns (μm). Due to time constraints that prevented the ability to obtain a 250 μm sieve, analysis of soil samples at this site for lead concentration was performed on the total sample that passes through a 300 μm sieve. Other constituents of concern at this site do not require preparation but for ease of sample collection, samples submitted for analysis of antimony, arsenic, and PAHs were also be collected from the fine fraction sample.

A sampling grid consisting of 135 50-foot by 50-foot sampling cells was established across the site to include areas where bullet fragments were observed. In addition, there is a dry wash located adjacent to the shooting range and sample locations were established within the dry wash at 100-foot intervals to a distance of approximately 1,000 feet northeast of the shooting range. Several EPA guidance documents, particularly TRW Recommendations for Performing Human Health Risk Analysis on Small Arms Shooting Ranges; EPA; 2003 were used to guide sampling and analysis protocol and procedures. Based on this guidance, constituents of concern are lead, antimony, arsenic, and PAHs in the fine fraction of soil (soil passing through a 300 μm sieve). Assessment was completed to attempt to define the vertical and horizontal extent of constituents of concern in concentrations exceeding State of Arizona residential Soil Remediation Levels (SRLs).

2.0 SOIL SAMPLE COLLECTION

2.1 PROJECT DOCUMENTATION

Allwyn Environmental prepared a Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP) to guide site assessment activities and to meet the Quality Assurance (QA) requirements of the Cooperative Agreement between EPA and Santa Cruz. The QAPP serves as the master document for site assessment activities conducted by Santa Cruz County, its consultants, and subconsultants using Community-Wide Brownfields Assessment grant funds. This EPA-approved document is dated July 2, 2009. The site-specific SAP, dated October 6, 2009, was prepared by Allwyn Environmental and approved by EPA on November 5, 2009.

A site-specific Health and Safety Plan (HASP) was developed and implemented to assure that site activities were conducted in a safe manner and was prepared in accordance with 29 CFR 1910. The purpose of the plan was to assign responsibilities, to establish personnel protection standards and mandatory safety practices and procedures, and to provide for contingencies that may arise while operations are being conducted at the site. A copy of the HASP was kept on site during site activities. In addition, a safety briefing was conducted by Allwyn Environmental with on-site personnel each day prior to beginning work. The issues that were covered and personnel who were present were documented in a Tailgate Safety Meeting Form.

Field logbooks were used to document where, when, how, and from whom any vital project information was obtained. Documentation recorded in the field logbook was sufficient to reconstruct the field activities situation without relying on the memories of the field team members. Field notes were kept in bound field logbooks that were used to record pertinent field activity information. Two field logbooks were dedicated to this project and were not be used for other projects.

2.2 SAMPLE COLLECTION METHODS

2.2.1 Surface and Subsurface Samples

A grid consisting of 25-foot by 25-foot cells was established across the assessment area using a hand-held global positioning system (GPS) unit, measuring tape, and compass. Four 25-foot by 25-foot cells were combined into a single 50-foot by 50-foot sampling cell (See Figure 2). One discreet sample was collected from each 25-foot by 25-foot sub-cell (See Figure 3). The point from which the discreet sample was collected was chosen by traversing the 25-foot by 25-foot sub-cell and identifying undisturbed areas with visible evidence of bullet fragments, lower elevation areas, or washes.

The surface samples were collected with a stainless steel hand trowel or spoon by scraping the upper 1 inch of the ground surface over an approximately 1 square foot area and placing the material into a stainless steel bowl. The subsurface samples were collected by removing approximately 3 to 4 inches of soil over a 1 square foot area and collecting the sample from the bottom of the excavation.

The four discreet samples, which were of the same approximate volume, were mixed in the stainless steel mixing bowl to form a composite sample representative of the soil in the 50-foot by 50-foot sample cell. Each 50-foot by 50-foot sampling cell was assigned a number based in chronological order in which the sample was collected from the cell (i.e., a sample was collected from Cell No. 1 first, Cell No. 2 second, and so on).

The composite sample was first passed through a #8 sieve to remove rocks, vegetation, and bullet fragments. The number of bullet fragments that did not pass through the #8 sieve were counted and the number was recorded in the fieldbook. The screened material was then passed through a #50 sieve to produce the fine soil fraction from which a sample was collected for laboratory analysis.

The samples were placed in one 4-ounce (oz) clear glass jar and a sample label was affixed to the sample jar. The sample numbers were designated using the sample cell number followed by either a "S" for surface samples or "D" for deep or subsurface samples (e.g., 1S was a shallow sample collected from sample cell 1). All samples were analyzed for lead, arsenic, and antimony. Samples collected from 31 sampling cells were also analyzed for PAHs.

2.2.2 Wash Samples

Sixteen discreet soil samples were collected from the wash that runs immediately to the west of the shooting range. The samples were collected at 100-foot intervals beginning immediately behind the shooting range (See Figure 3). The samples were collected by removing approximately 6 inches of soil and then collecting the sample from the bottom of the excavation. The samples were first passed through a #8 sieve to remove rocks, vegetation, and bullet fragments. The number of bullet fragments that did not pass through the #8 sieve were counted and the number was recorded in the fieldbook. The screened material was then passed through a #50 sieve to produce the fine soil fraction from which a sample was collected for laboratory analysis.

The samples were placed in one 4-oz clear glass jar and a sample label was affixed to the sample jar. The sample numbers were designated using "WASH" followed by the sample number (e.g., WASH-1 was the first sample collected from the wash). Samples were analyzed for lead, arsenic, and antimony.

2.2.3 Hazardous Waste Classification Samples

Soil samples were collected to evaluate the hazardous waste characteristics of on-site soil. Soil samples were collected from three Sampling Cell locations: 40, 48, and 71 (See Figure 4). The purpose of collecting these samples was to evaluate whether excavated soil would be classified as hazardous waste through comparison to lead and arsenic concentrations following analysis using the Toxicity Characteristic Leaching Procedure (TCLP) or PAH concentrations following analysis using the Synthetic Precipitation Leaching Procedure (SCLP). These methods were used to evaluate the mobility of organic and inorganic analytes present in solid wastes to determine if a material meets the definition of EP Toxicity under the Resource Conservation and Recovery Act (RCRA). Materials are considered to be a characteristic hazardous waste if the concentration of any analyte in the method extract exceeds the

regulatory level established by EPA in 40 CFR 261. For the analytes evaluated in this assessment, regulatory levels have been established for lead and arsenic only.

Surface samples were collected from each location in the manner described in Section 4.1. The first sample from a specific location was collected prior to any screening of the material, the second sample was collected from the material that passed through the #8 sieve but not through the #50 sieve, and the third sample was collected from the material that passed through the #50 sieve.

The samples were placed in two 4-oz clear glass jar and a sample label was affixed to the sample jar. The sample numbers were designated using "W" followed by the chronological sample number (e.g., W-1 was the first hazardous waste classification sample collected).

2.2.4 Duplicate Sample

One duplicate sample was collected from Cell No. 41 (See Figure 4). Two surface samples were collected in the manner described in Section 2.2.1. The samples were placed in two 4-oz clear glass jar and a sample label was affixed to the sample jar. The sample numbers were designated as 210A and 210B. Duplicate samples were analyzed for lead, arsenic, and antimony.

2.2.5 Background Samples

Six background samples (four discreet samples and one duplicate sample consisting of two samples) were collected because the possibility exists that there are native or ambient levels of one or more target analytes present above the residential SRL (specifically, arsenic). The sample locations (See Figure 5) were chosen because they were not located in the assessment area and appeared to be free of contamination from the site or sampling location itself, but had similar geology, hydrogeology, or other characteristics to the proposed sampling locations that may have been impacted by site activities.

Background samples were collected in the same manner as surface soil samples described in Section 2.1.1 and analyzed for lead, antimony, arsenic, and PAHs. The samples were placed in one 4-oz clear glass jar and a sample label was affixed to the sample jar. The sample numbers were designated using "B" followed by the chronological sample number (e.g., B-1 was the first background sample collected). Background samples were analyzed for lead, arsenic, and antimony.

The sieve was not decontaminated between sampling cell locations. In order to evaluate whether this caused cross-contamination between sampling cells, a duplicate sample was collected from the fifth background sample location (labeled 5A and 5B). The first sample, 5A, was collected prior to initiating the day's sample collection activities and the second sample, 5B, was collected following the day's sample collection activities.

2.2.6 Equipment Blank Samples

Equipment (rinsate) blanks were collected when reusable, non-disposable sampling equipment (e.g., trowels, spoons, and bowls) were used for the sampling event. One blank sample per matrix per day was collected. If equipment blanks were collected, field blanks and trip blanks were not required under normal circumstances. Equipment rinsate blanks were collected to evaluate field sampling and decontamination by passing water through or over the decontaminated sampling devices used that day.

The rinsate was poured into the appropriate sample container (one 500 milliliter plastic jar preserved with nitric acid for lead, arsenic, and antimony analysis and two 1 liter amber glass jars for PAH analysis). The equipment blanks were labeled as EB followed by MM where MM and DD represent the month and day, respectively, that the equipment blank was collected.

2.3 DECONTAMINATION PROCEDURES

All non-disposable sampling equipment was decontaminated after each use by washing with non-phosphate detergent and deionized water and rinsing with deionized water. Disposable gloves were changed between each sampling event.

2.4 SAMPLE POINT SURVEYING

Boring locations were surveyed using a hand-held GPS unit.

2.5 LABELING AND CHAIN-OF-CUSTODY FORMS

All samples collected were labeled in a clear and precise way for proper identification in the field and for tracking in the analytical laboratory. The samples had pre-assigned, identifiable, and unique numbers as described in Section 2.2. The sample labels contained the following information: sample number, date and time of collection, analytical parameter(s), and method of preservation, if any.

All sample shipments for analyses were accompanied by a chain-of-custody record. Forms were completed and sent with the samples to the analytical laboratory and each shipment (i.e., each day). If multiple coolers were sent to the analytical laboratory on a single day, forms were completed and sent with the samples for each cooler.

The chain-of-custody forms identified the contents of each shipment and maintained the custodial integrity of the samples. Generally, a sample was considered to be in someone's custody if it was either in someone's physical possession, in someone's view, locked up, or kept in a secure area that was restricted to authorized personnel. Until the samples were shipped, the custody of the samples were the responsibility of Allwyn Environmental.

2.6 DISPOSAL OF RESIDUAL MATERIALS

In the process of collecting environmental samples at the site during the site investigation, Allwyn Environmental generated different types of potentially contaminated investigation-derived waste (IDW) that included the following:

- Used personal protective equipment (PPE)
- Disposable sampling equipment
- Decontamination fluids
- Soil from soil samples

The EPA's National Contingency Plan (NCP) requires that management of IDW generated during sampling comply with all applicable or relevant and appropriate requirements (ARARs) to the extent practicable. The assessment activities followed the Office of Emergency and Remedial Response (OERR) Directive 9345.3-02 (May 1991), that provided the guidance for the management of IDW. The means of disposal of residual materials was:

- Used PPE and disposable equipment were double bagged and placed in a municipal refuse dumpster. These wastes are not considered hazardous and were sent to a municipal landfill. Any PPE and disposable equipment that is to be disposed that could still be reused was rendered inoperable before disposal in the refuse dumpster.
- Decontamination fluids that were generated in the sampling event consisted of deionized water, residual contaminants, and water with non-phosphate detergent. The volume and concentration of the decontamination fluid was sufficiently low to allow disposal at the site. The water (and water with detergent) was poured onto the ground.
- Excess soil generated during the sampling was returned to the general area from which it was originally collected.

3.0 SOIL SAMPLE ANALYTICAL RESULTS

Soil and water samples were submitted to Environmental Science Corporation (ESC) of Mt. Juliet, Tennessee. ESC is an analytical laboratory certified by the Arizona Department of Health Services (ADHS) to perform the required analyses to support the remediation activities (ADHS License AZ0612). The following ESC personnel were assigned to this project:

Project Managers: David Veratti and Travis Johnson
QA Officer: Sue Murphy
Laboratory Director: Eric Johnson

Soil and water samples were analyzed using the analytical methods provided in the QAPP and SAP. Sample containers, preservatives, and holding times for these analytical methods were also outlined in the QAPP.

3.1 SURFACE AND SUBSURFACE SAMPLES ANALYTICAL RESULTS

Surface and subsurface samples were collected from 135 sampling cells using the methods described in Section 2.1.1. All samples were analyzed for lead, arsenic, and antimony using EPA Method 6010B and samples from 31 sampling cells were analyzed for PAHs using EPA Method 8310. The analytical results from the samples indicated that lead was present in the assessment area as follows:

- 51 cells contained lead in surface soil samples in a concentration above the residential SRL of 400 milligrams per kilogram (mg/kg) (See Figure 6)
- 33 cells contained lead in surface soil samples in a concentration above the non-residential SRL of 800 mg/kg (See Figure 6)
- 28 cells contained lead in subsurface soil samples in a concentration above the residential SRL of 400 mg/kg (See Figure 7)
- 14 cells contained lead in subsurface soil samples in a concentration above the non-residential SRL of 800 mg/kg (See Figure 7)

A summary of the analytical results for lead in surface and subsurface samples is provided in Table 1.

The analytical results indicated that antimony was present in one sampling cell (Sampling Cell No. 77) in a concentration above the residential SRL of 31 mg/kg. The sample results indicated that antimony was not present in the remaining sampling cells in a concentration above the residential SRL of 31 mg/kg.

The analytical results indicated that one PAH, benzo(a)pyrene, was present in two surface samples collected from two sampling cells (Sampling Cells 71 and 77) in a concentration above the residential SRL for the 10^{-6} lifetime cancer risk of 0.069 mg/kg. The sampling results indicated that no

other PAH was present in surface or subsurface samples in a concentration above the residential SRL in the remaining sampling cells.

The analytical results indicated that arsenic was not present in surface or subsurface samples in a concentration above the residential SRL of 10 mg/kg in any sampling cell.

3.2 WASH SAMPLES ANALYTICAL RESULTS

Wash samples were collected from 16 points in the wash that runs directly behind the small arms shooting range using the methods described in Section 2.1.1 and analyzed for lead, arsenic, and antimony using EPA Method 6010B. A summary of the wash sample analytical results is provided in Table 2.

The analytical results indicated that lead was present above the non-residential SRL of 800 mg/kg in samples WASH1 through WASH6 and above the residential SRL of 400 mg/kg in sample WASH9. The sample results indicated that lead was not present in a concentration above the residential SRL of 400 mg/kg in the remaining samples.

The analytical results indicated that arsenic and antimony were not present in the wash samples in concentrations above the residential SRL of 10 mg/kg and 31 mg/kg, respectively.

3.3 HAZARDOUS WASTE CLASSIFICATION SAMPLES ANALYTICAL RESULTS

Hazardous waste classification samples were collected from three locations and prepared for laboratory analysis using the methods described in Section 2.1.3. Lead, arsenic, and antimony were analyzed using EPA Method 601B and EPA Method 1311 (TCLP) and PAHs were analyzed using EPA Method 8310 and EPA Method 1312 (SPLP). The analytical results from the hazardous waste classification samples demonstrated the following:

- Lead was present in the TCLP extract in a concentration exceeding the regulatory level of 5 milligrams per liter (mg/L) in samples WD-1, WD-2, WD-3, WD-4, WD-5, WD-7, and WD-8. Lead was not present in the TCLP extract in a concentration exceeding the regulatory level of 5 mg/L in samples WD-6 and WD-9.
- Arsenic was not present in the TCLP extract in a concentration exceeding the regulatory level of 5 mg/L in any sample collected for hazardous waste classification.
- PAHs were not present in the SCLP extract in concentrations above the method detection levels in samples WD-1, WD-2, and WD-3. SCLP analysis was not performed on samples WD-4 through WD-9 because PAHs were not present in samples WD-1, WD-2, or WD-3.

Table 3 provides a summary of the analytical results for the hazardous waste classification samples.

3.4 DUPLICATE SAMPLE ANALYTICAL RESULTS

One duplicate sample was collected from Sampling Cell No. 41 as described in Section 2.2.4 and analyzed for lead, arsenic, and antimony using EPA Method 6010B and PAHs using EPA Method 8310. Table 4 presents the analytical results of the duplicate sample.

3.5 BACKGROUND SAMPLES ANALYTICAL RESULTS

Background samples were collected from five areas outside the assessment area as described in Section 2.2.5. Samples B-1, B-2, and B-3 were analyzed for lead, arsenic, and antimony using EPA Method 6010B and PAHs using EPA Method 8310. Samples B-4 and B-5 were analyzed for lead, arsenic, and antimony only using EPA Method 6010B. Table 5 presents the analytical results for the background samples.

3.6 EQUIPMENT BLANKS ANALYTICAL RESULTS

Equipment blanks were collected each day in which soil samples were collected as described in Section 2.2.6. Equipment blanks were analyzed for the same parameters for which soil samples that were collected during that sampling day were analyzed. For example, if soil samples were submitted only for analysis of lead, arsenic, and antimony, then only lead, arsenic, and antimony analysis was performed of the equipment blank. The analytical results for the equipment blank samples are provided in Table 6.

3.7 DATA VERIFICATION

Allwyn Environmental conducted data verification of environmental samples collected for this Phase II ESA. The results are presented in Appendix B.

4.0 DISCUSSION OF RESULTS AND CONCLUSIONS

4.1 SURFACE AND SUBSURFACE SAMPLES

As described in Section 4.1.1, surface soil samples from 51 of the 135 sampling cells contained lead in a concentration above the residential SRL, and of these 51 sampling cells, 33 contain lead in a concentration above the non-residential SRL. Subsurface soil samples from 28 of the 135 sampling cells contained lead in a concentration above the residential SRL and, of these 28 sampling cells, 14 contained lead in a concentration above the non-residential SRL.

Soil samples from one of the 135 sampling cells contained antimony in a concentration above the residential SRL. Soil samples from two of the 135 sampling cells contained one PAH, benzo(a)pyrene, in a concentration above the residential SRL for the 10^{-6} excess lifetime cancer risk level.

The horizontal extent of lead impacts in the assessment area has been generally defined to the west of the shooting range, but has not been defined to the north and south of the shooting range. The vertical extent of lead impacts has not been defined. Time and budget constraints prevented additional site assessment necessary to define the horizontal and vertical extents. Therefore, additional assessment, consisting of further surface and subsurface sample collection and analysis, will be required to fully delineate the lead impacts on the surrounding properties due to activities conducted on the small arms shooting range.

Antimony and PAHs, while present in soil samples above the residential SRLs, in two and one sampling cells, respectively, are present only in cells in which lead is also present in soil samples in a concentration above the residential SRLs. In addition, arsenic is not present in any soil samples above the residential SRL. Therefore, lead should be considered the target contaminant of concern for further assessment and/or remediation at the site.

4.2 WASH SAMPLES

The extent of lead impacts in the wash immediately behind the small arms shooting range has been delineated. Lead is present at a concentration above the non-residential SRL in the wash soil extending to a distance between 250 feet and 300 feet northeast (downstream) of the small arms shooting range and above residential SRLs between 450 and 500 feet northeast (downstream) of the small arms shooting range. Antimony, arsenic, and PAHs are not present in samples in concentrations above the residential SRLs collected from the wash. Therefore, lead should be considered to be the target contaminant of concern for further assessment and/or remediation in the wash.

4.3 HAZARDOUS WASTE CLASSIFICATION

TCLP analysis to evaluate the hazardous waste classification of on-site soil was performed on two samples from two sampling cells (40 and 71) containing lead above the non-residential SRL (2,200

mg/kg and 3,400 mg/kg, respectively) and one sampling cell (48) containing lead above the residential SRL. The samples collected for the hazardous waste classification demonstrated that the unscreened material and material passing through the #8 sieve would be classified as a hazardous waste based on lead toxicity (D008 waste code). In addition, one sample collected from material passing through the 50 sieve (WD-5) also demonstrated the hazardous waste characteristic for lead following TCLP analysis. The following conclusions can be made based on these assessment activities:

- Site soil containing lead in a concentration greater than the residential SRL of 400 mg/kg will likely be considered a hazardous waste for disposal purposes.
- The extract from material passing through a #8 sieve still contains a sufficient lead concentration such that the screened soil would still be considered a hazardous waste for disposal purposes. For one of the three hazardous waste classification samples, the extract from material passing through a #50 sieve still contains a sufficient lead concentration such that the screened solid would still be considered a hazardous waste for disposal purposes. Therefore, screening of excavating soil to reduce off-site disposal volume of material classified as a hazardous waste during remediation activities will likely not be successful.

4.4 BACKGROUND SAMPLES

The mean of the six background samples was calculated by Allwyn Environmental. For this calculation, the analytical results in which the analyte concentration is reported as being present below the analytical method detection limits, a value of one-half the detection limit was used. The background concentration of PAHs was not calculated because one sample was analyzed for PAHs as described in Section 2.2.5. The mean background concentrations for lead, arsenic, and antimony are:

- Lead: 34 mg/kg
- Arsenic: 4.1 mg/kg
- Antimony: 0.3 mg/kg

The analytical results for the background duplicate sample (5A and 5B) indicate that constituents are present in nearly-equal or lower concentrations in the sample prepared for analysis at the end of the day's sample collection activities (5B) than in the sample prepared for analysis at the beginning of the day's sample collection activities (5A). Therefore, Allwyn Environmental concludes that decontamination of the sieves between sampling cell collection was not required and did not cause cross-contamination between samples.

4.5 EQUIPMENT BLANKS

Nine equipment blanks were collected during the site assessment, eight that were analyzed for lead, arsenic, antimony, and PAHs and one that was analyzed only for lead, arsenic, and antimony. Seven equipment blank samples contained lead in a concentration above the method detection limit and one equipment blank sample contained arsenic in a concentration above the method detection limit. The presence of lead and arsenic in the equipment blank indicates that these constituents were

present in the water used to decontaminate the sampling equipment between sampling events. It is likely that lead and arsenic were introduced into the decontamination water via wind-borne dust. The presence of low-level lead and arsenic concentrations likely did not influence the integrity of the assessment program.

5.0 RECOMMENDATIONS

Based on the results of the Phase II ESA, Allwyn Environmental recommends the following additional activities be conducted at the site:

1. Additional assessment should be conducted to define the vertical extent of lead impacts and horizontal extent of lead impacts to the north and south of the small arms shooting range
2. Site soil cleanup standards (i.e., residential SRL and non-residential SRL) should be established based on considerations such as future site use, deed restriction, and cost and feasibility of remediation to meet the selected cleanup standard.
3. A remedial plan should be developed and should include assessment of feasible remediation options to cleanup soil to the standards considered in Recommendation No. 2 above. The evaluation should take into account the Phase II ESA result that soil containing lead in a concentration above the residential SRL of 400 mg/kg will likely require disposal as a hazardous waste under waste code D008. Alternative remedial options such as physical separation, excavation and off-site disposal, stabilization, phytoremediation, and soil washing should be considered in the evaluation.
4. Remedial action at the site should be conducted using lead as the constituent of concern.
5. Remediation should likely be conducted under the Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP).

6.0 TERMS AND CONDITIONS

Allwyn Environmental has performed our services for this project in accordance with Allwyn Environmental's proposal dated September 6, 2009 and our Change Order Request dated November 6, 2009. No other guarantees or warranties are expressed or implied. These services were performed to the degree of skill and diligence normally employed by experienced professionals performing the same or similar services in the same geographic area at the time the services were performed.

Santa Cruz County, including its directors, officers, partners, employees, agents, contractors and their respective assigns, agree to limit Allwyn Environmental's liability (whether arising from contract, statutory violation, or tort) to the greater of \$25,000 or the amount of Consultant's fee. This limitation of liability shall apply to all phases of Services performed in connection with this Project, whether subsequent to or prior to the execution of this Agreement. In no event shall Consultant be liable for liquidated, consequential, incidental or special damages. To the fullest extent permitted by law, Santa Cruz County, including its directors, officers, partners, employees, agents, contractors and their respective assigns, agrees to indemnify, defend, and hold harmless Allwyn Environmental, its directors, officers, employees and subcontractors from and against all claims, liability, damages, or expenses ("Claims") arising out of, in connection with or relating to any alleged act, failure to act, or other conduct of Allwyn Environmental, including but not limited to, Claims alleging the negligence or other fault of Allwyn Environmental, but specifically excepting Claims arising out of Allwyn Environmental's sole negligence or willful misconduct. Santa Cruz County shall indemnify Allwyn Environmental even if Santa Cruz County is partially or wholly without fault for such Claims.

The laws of the State of Arizona shall govern interpretation of these terms and conditions. If any term is deemed unenforceable, the remainder of the Agreement shall stay in full force and effect.

Santa Cruz County and Allwyn Environmental shall attempt resolution of any dispute arising under or related to this Agreement by mediation in the State of Arizona. Notwithstanding the foregoing, in the event of non-payment by Santa Cruz County, Allwyn Environmental may, at its sole option, waive mediation. Either party may demand mediation by serving a written notice on the other party stating the essential nature of the dispute. The mediation shall be conducted in accordance with the AAA Construction Industry Mediation Rules then in effect within forty-five (45) days from the service of notice. The parties shall share the fees equally. If mediation fails, either party may institute litigation in the State of Arizona. The prevailing party shall be entitled to reasonable attorneys' fees, cost, including costs incurred in the mediation and costs of enforcement of any judgment. The parties expressly waive any statute of limitations for a longer period of time and agree that any action shall be brought within one year from the date of Allwyn Environmental's final invoice. The parties expressly waive any and all rights to a trial by jury in any action, proceeding, or counterclaim brought by either of the parties against the other with respect to any matter relating to, arising out of or in any way connected with this Project.

Environmental regulatory criteria are continually changing. Therefore, environmental conditions, such as contaminant concentrations in certain media that are considered legal and

acceptable at the time of this report may in the future be subject to different regulatory standards. Professional opinions and judgments expressed in this Phase I ESA are based on our understanding and interpretations of current regulatory standards and practices. This report is not meant to provide or represent legal opinions.

This document and the information contained herein have been prepared solely for the use of Santa Cruz County and their authorized representatives. Any reliance on this report by other parties shall be at such party's sole risk. Any future consultation or provision of services to third parties related to the property requires written authorization from Santa Cruz County or their representatives. Any such services may be provided at Allwyn Environmental's sole discretion and under terms and conditions acceptable to Allwyn Environmental, including potential additional compensation.

Allwyn Environmental shall sign certifications only if (a) Allwyn Environmental approves the form of such certification prior to the commencement of Services; (b) such certification is included in Allwyn Environmental's Services; (c) Allwyn Environmental receives additional compensation, if requested by Allwyn Environmental; and (d) the certification is limited to a statement of professional opinion and does not constitute a warranty or guarantee, express or implied. Any certification shall not relieve any entity of its obligations.

FIGURES

**FIGURE 1
VICINITY MAP**

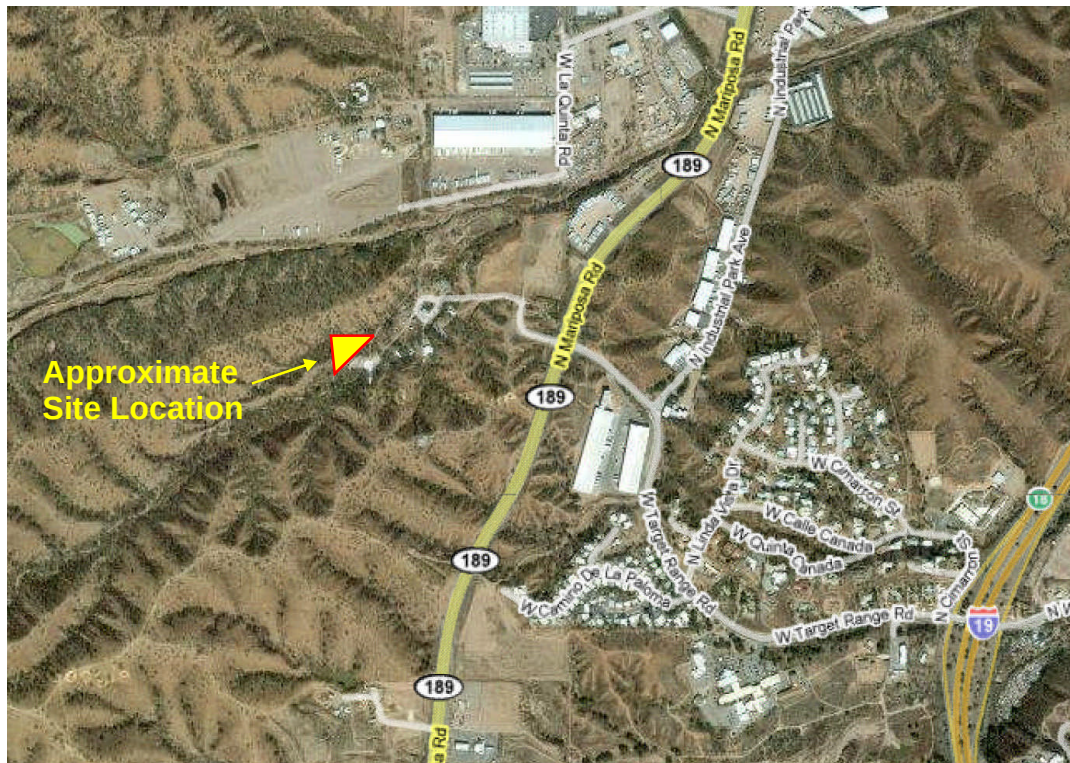
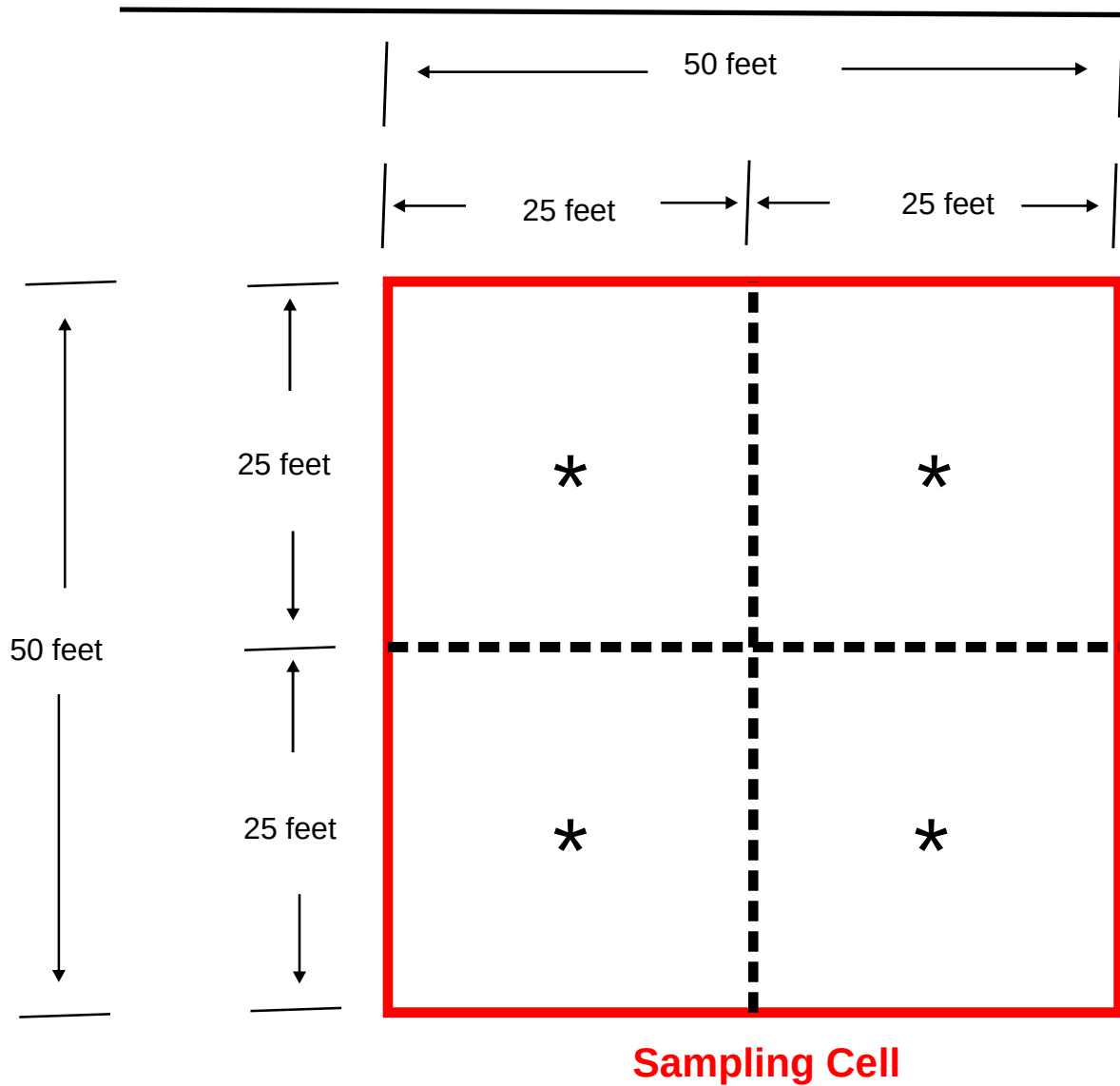


FIGURE 3
DISCREET SAMPLE LOCATIONS

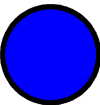
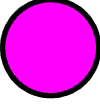
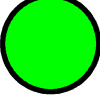


* Discreet sample location collected within Sampling Cell

SAMPLE MAP 4

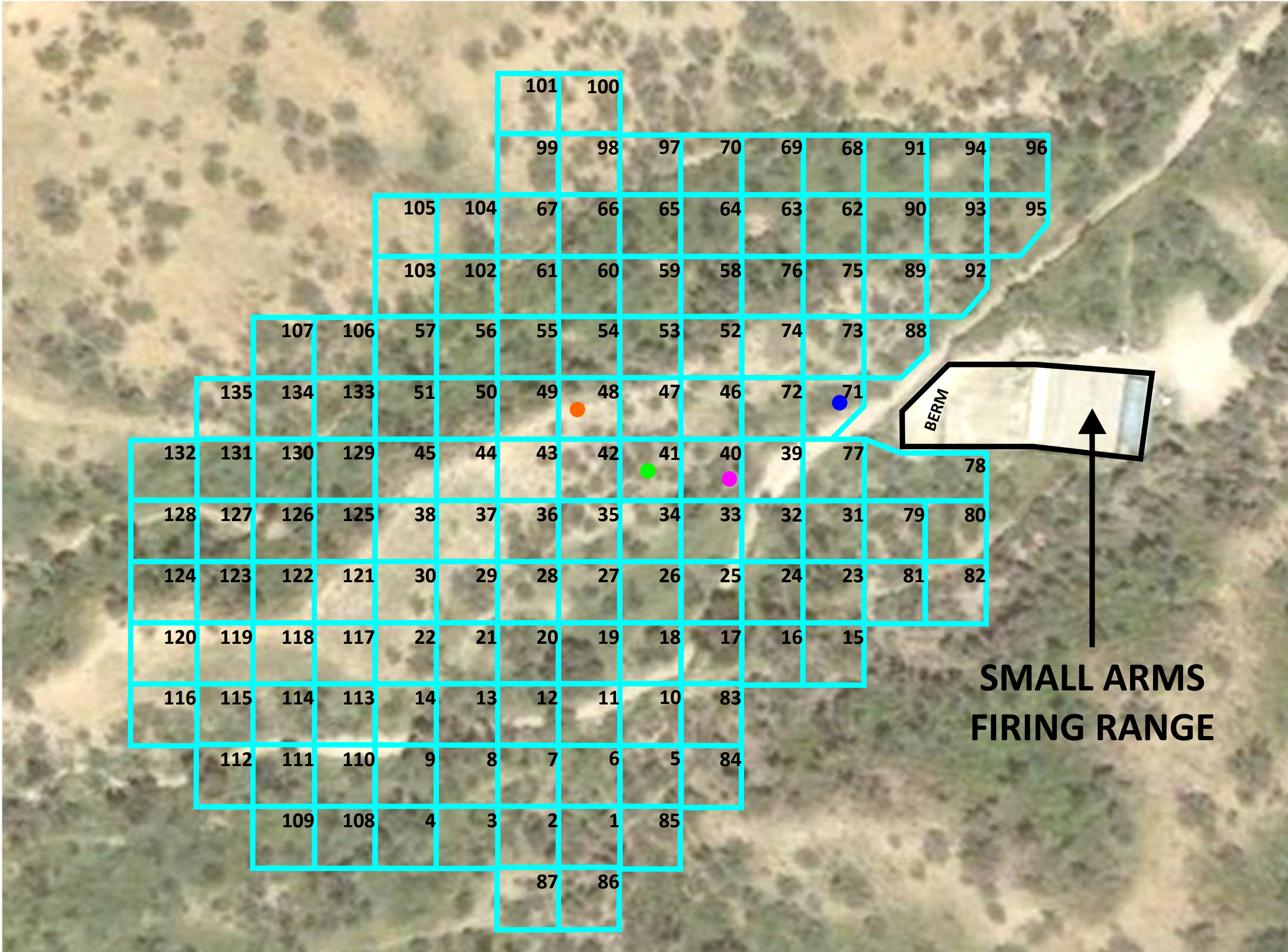
Hazardous Waste
Classification Sample and
Duplicate Sample Locations

LEGEND

-  **SAMPLE LOCATION: 71**
SAMPLES WD-1, WD-2, & WD-3
-  **SAMPLE LOCATION: 48**
SAMPLES WD-4, WD-5, & WD-6
-  **SAMPLE LOCATION: 40**
SAMPLES WD-7, WD-8, & WD-9
-  **SAMPLE LOCATION: 41**
DUPLICATE SAMPLES 210A & 210B

Key:
mg/kg: MILLIGRAMS PER KILOGRAM
SRL: SOIL REMEDIATION LEVELS ESTABLISHED BY THE ARIZONA DEPT. OF ENVIRONMENTAL QUALITY.
METALS ANALYZED USING METHOD 6010B

PHASE II ESA REPORT
TWO PROPERTIES IMPACTED BY
SMALL ARMS SHOOTING RANGE
PARCEL NOS. 113-49-006 AND
113-49-027
DECEMBER 11, 2009



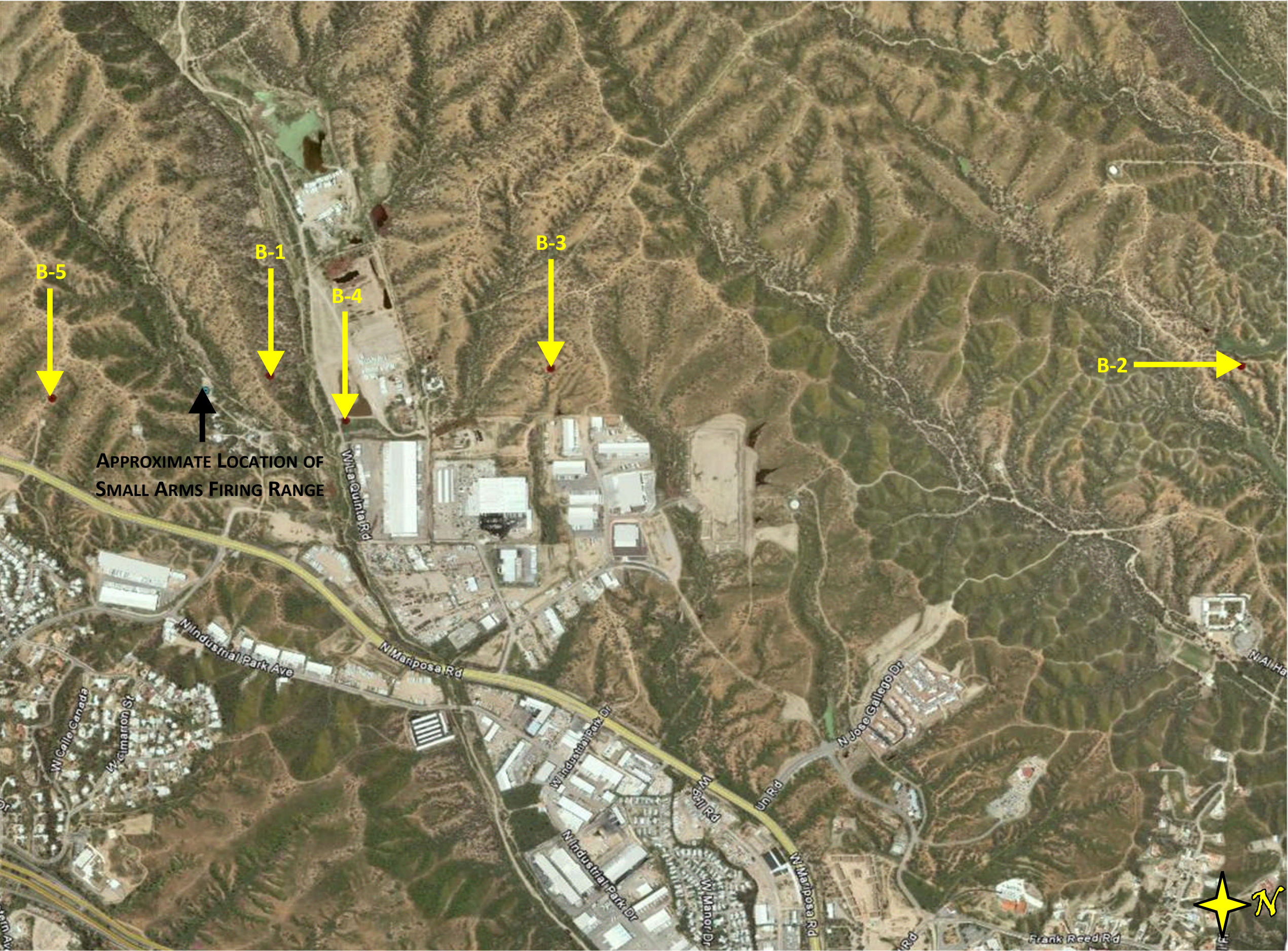


FIGURE 5

Background Sample
Locations

LOCATIONS

BACKGROUND SAMPLES:

SAMPLE B-1	
LATITUDE:	31° 20.931'
LONGITUDE:	110° 58.101'
SAMPLE B-2	
LATITUDE:	31° 22.480'
LONGITUDE:	110° 58.204'
SAMPLE B-3	
LATITUDE:	31° 21.371'
LONGITUDE:	110° 58.204'
SAMPLE B-4:	
LATITUDE:	31° 21.046'
LONGITUDE:	110° 58.105'
SAMPLE B-5	
LATITUDE:	31° 20.600'
LONGITUDE:	110° 58.150'

Key:

mg/kg: MILLIGRAMS PER KILOGRAM

SRL: SOIL REMEDIATION LEVELS ESTABLISHED BY THE ARIZONA DEPT. OF ENVIRONMENTAL QUALITY.

METALS ANALYZED USING METHOD 6010B

Phase II ESA Report
Two Properties Impacted by
Small Arms Shooting Range
Parcel Nos. 113-49-006 and
113-49-027
December 11, 2009

ae

Allwyn Environmental
An Allwyn Priorities, LLC Company

FIGURE 6
Surface Samples
Containing Lead in
Concentrations Exceeding
Residential Soil
Remediation Levels

LEGEND

-  ANALYTICAL RESULTS EXCEED RESIDENTIAL SRLS. (>400 mg/kg)
-  ANALYTICAL RESULTS EXCEED NON-RESIDENTIAL SRLS. (>800 mg/kg)

Key:

mg/kg: MILLIGRAMS PER KILOGRAM

SRL: SOIL REMEDIATION LEVELS ESTABLISHED BY THE ARIZONA DEPT. OF ENVIRONMENTAL QUALITY.

METALS ANALYZED USING METHOD 6010B

Phase II ESA Report
 Two Properties Impacted by
 Small Arms Shooting Range
 Parcel Nos. 113-49-006 and
 113-49-027
 December 11, 2009

ae
 Allwyn Environmental
 An Allwyn Priorities, LLC Company

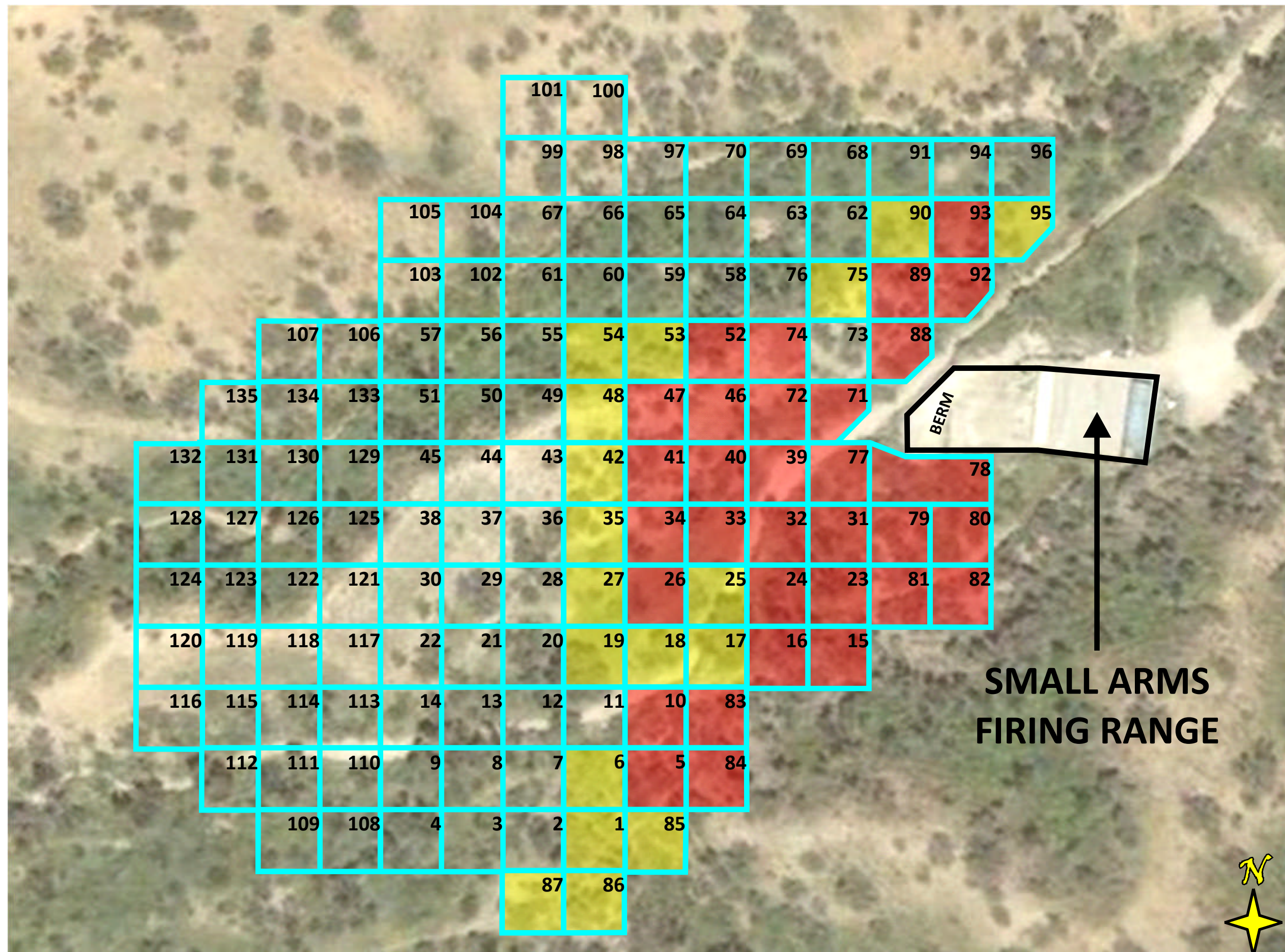
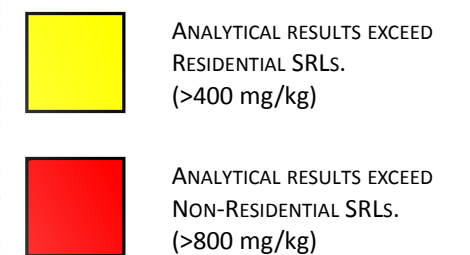


FIGURE 7

Subsurface Samples
Containing Lead in
Concentrations Exceeding
Residential Soil
Remediation Levels

LEGEND



Key:

mg/kg: MILLIGRAMS PER KILOGRAM

SRL: SOIL REMEDIATION LEVELS ESTABLISHED BY THE
ARIZONA DEPT. OF ENVIRONMENTAL QUALITY.

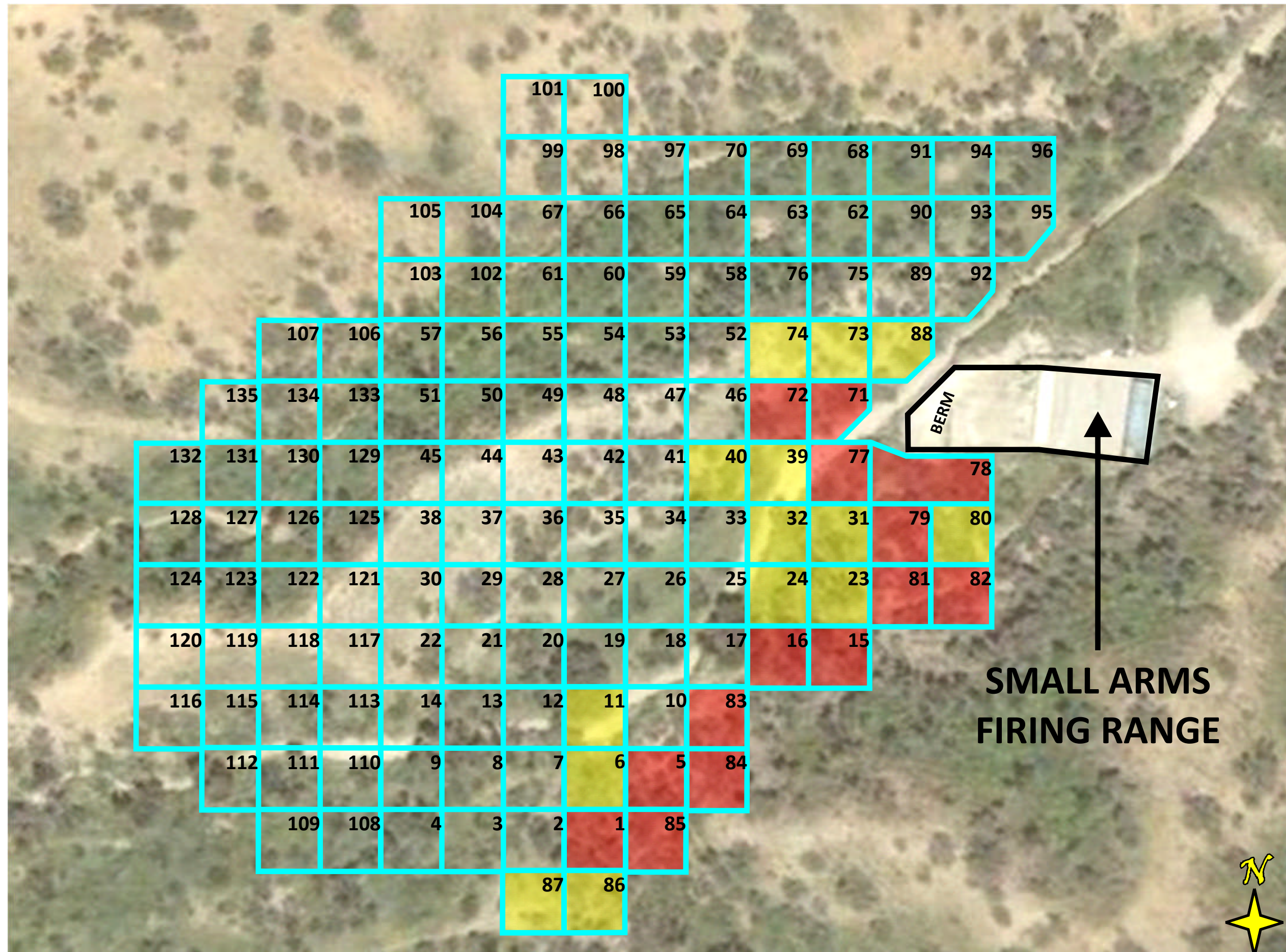
METALS ANALYZED USING METHOD 6010B

Phase II ESA Report
Two Properties Impacted by
Small Arms Shooting Range
Parcel Nos. 113-49-006 and
113-49-027

December 11, 2009

ae

Allwyn Environmental
An Allwyn Priorities, LLC Company



TABLES

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
1D	mg/kg	820	400	800	L432316
1S	mg/kg	700	400	800	L429917
2S	mg/kg	380	400	800	L429917
3S	mg/kg	260	400	800	L429917
4S	mg/kg	160	400	800	L429917
5S	mg/kg	2,600	400	800	L429917
5D	mg/kg	4,300	400	800	L432316
6S	mg/kg	420	400	800	L429917
6D	mg/kg	530	400	800	L432316
7S	mg/kg	280	400	800	L429917
8S	mg/kg	140	400	800	L429917
9S	mg/kg	85	400	800	L429917
10S	mg/kg	1,300	400	800	L429917
10D	mg/kg	310	400	800	L432316
11S	mg/kg	320	400	800	L429917
11D	mg/kg	410	400	800	L432316
12S	mg/kg	280	400	800	L429917
13S	mg/kg	150	400	800	L429917
14S	mg/kg	97	400	800	L429917
15S	mg/kg	25,000	400	800	L430069
15D	mg/kg	12,000	400	800	L431412
16S	mg/kg	2,000	400	800	L430069
16D	mg/kg	5,200	400	800	L431412
17S	mg/kg	420	400	800	L430069
17D	mg/kg	190	400	800	L432316
18S	mg/kg	500	400	800	L430069
18D	mg/kg	260	400	800	L432316
19S	mg/kg	550	400	800	L430069
19D	mg/kg	160	400	800	L432316
20S	mg/kg	290	400	800	L430069
21S	mg/kg	100	400	800	L430069
22S	mg/kg	120	400	800	L430069
23S	mg/kg	1,500	400	800	L430069
23D	mg/kg	680	400	800	L431412
24S	mg/kg	870	400	800	L430069
24D	mg/kg	570	400	800	L431412
25S	mg/kg	550	400	800	L430069
25D	mg/kg	360	400	800	L432316

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
26S	mg/kg	970	400	800	L430069
26D	mg/kg	340	400	800	L432316
27S	mg/kg	550	400	800	L430069
27D	mg/kg	230	400	800	L432316
28S	mg/kg	240	400	800	L430069
29S	mg/kg	150	400	800	L430069
30S	mg/kg	140	400	800	L430069
31S	mg/kg	2,000	400	800	L430069
31D	mg/kg	560	400	800	L431412
32S	mg/kg	1,600	400	800	L430069
32D	mg/kg	430	400	800	L431412
33S	mg/kg	1,300	400	800	L430069
33D	mg/kg	190	400	800	L431412
34S	mg/kg	870	400	800	L430069
34D	mg/kg	260	400	800	L431412
35S	mg/kg	480	400	800	L430069
35D	mg/kg	180	400	800	L431412
36S	mg/kg	260	400	800	L430069
36D	mg/kg	140	400	800	L431412
37S	mg/kg	210	400	800	L430069
37D	mg/kg	65	400	800	L431412
39S	mg/kg	1,100	400	800	400
39D	mg/kg	440	400	800	L431412
40S	mg/kg	2,200	400	800	400
40D	mg/kg	420	400	800	L431412
41S	mg/kg	1,500	400	800	400
41D	mg/kg	150	400	800	L431412
42S	mg/kg	490	400	800	400
42D	mg/kg	190			
43S	mg/kg	310	400	800	400
43D	mg/kg	160	400	800	L431412
44S	mg/kg	200	400	800	400
44D	mg/kg	56	400	800	L431412
45S	mg/kg	160	400	800	400
46S	mg/kg	1,300	400	800	400
46D	mg/kg	340	400	800	L431838
47S	mg/kg	890	400	800	400
47D	mg/kg	390	400	800	L431838

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
48S	mg/kg	560	400	800	400
48D	mg/kg	290	400	800	L431837
49S	mg/kg	410	400	800	400
49D	mg/kg	210	400	800	L431837
50S	mg/kg	420	400	800	400
50D	mg/kg	110	400	800	L431837
51S	mg/kg	370	400	800	400
51D	mg/kg	70	400	800	L431837
52S	mg/kg	880	400	800	400
52D	mg/kg	110	400	800	L431838
53S	mg/kg	490	400	800	400
53D	mg/kg	73	400	800	L431838
54S	mg/kg	420	400	800	400
54D	mg/kg	100	400	800	L431838
55S	mg/kg	560	400	800	400
55D	mg/kg	130	400	800	L431838
56S	mg/kg	190	400	800	400
56D	mg/kg	74	400	800	L431838
57S	mg/kg	160	400	800	400
57D	mg/kg	98	400	800	L431838
58S	mg/kg	310	400	800	400
58D	mg/kg	88	400	800	L431838
59S	mg/kg	350	400	800	400
59D	mg/kg	120	400	800	L431838
60S	mg/kg	220	400	800	400
60D	mg/kg	63	400	800	L431838
61S	mg/kg	110	400	800	400
61D	mg/kg	66	400	800	L431838
62S	mg/kg	290	400	800	400
62D	mg/kg	72	400	800	L431838
63S	mg/kg	250	400	800	400
63D	mg/kg	57	400	800	L431838
64S	mg/kg	140	400	800	400
64D	mg/kg	52	400	800	L431838
65S	mg/kg	130	400	800	L430637
65D	mg/kg	40	400	800	L431838
66S	mg/kg	53	400	800	L430637
66D	mg/kg	56	400	800	L431838

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
67S	mg/kg	96	400	800	L430637
67D	mg/kg	55	400	800	L431838
68S	mg/kg	160	400	800	L430637
69S	mg/kg	71	400	800	L430637
70S	mg/kg	100	400	800	L430637
71S	mg/kg	3,400	400	800	L431076
71D	mg/kg	5,900	400	800	L431076
72S	mg/kg	3,300	400	800	L431076
72D	mg/kg	1,200	400	800	L431076
73D	mg/kg	550	400	800	L431076
74S	mg/kg	1,700	400	800	L431076
74D	mg/kg	450	400	800	L431076
75S	mg/kg	590	400	800	L431076
75D	mg/kg	390	400	800	L431076
76S	mg/kg	380	400	800	L431076
76D	mg/kg	210	400	800	L431076
77S	mg/kg	8,900	400	800	L431412
77D	mg/kg	1,600	400	800	L431412
78S	mg/kg	1,200	400	800	L431412
78D	mg/kg	1,800	400	800	L431412
79S	mg/kg	3,000	400	800	L431412
79D	mg/kg	2,500	400	800	L431412
80S	mg/kg	1,600	400	800	L431412
80D	mg/kg	750	400	800	L431412
81S	mg/kg	3,200	400	800	L431412
81D	mg/kg	2,500	400	800	L431412
82S	mg/kg	12,000	400	800	L431412
82D	mg/kg	18,000	400	800	L431412
83S	mg/kg	3,600	400	800	L431412
83D	mg/kg	3,800	400	800	L432316
84S	mg/kg	7,100	400	800	L431412
84D	mg/kg	16,000	400	800	L432316
85S	mg/kg	600	400	800	L431412
85D	mg/kg	2,100	400	800	L432316
86S	mg/kg	530	400	800	L431412
86D	mg/kg	710	400	800	L432316
87S	mg/kg	620	400	800	L431412
87D	mg/kg	640	400	800	L432316

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
88S	mg/kg	4,100	400	800	L431838
88D	mg/kg	730	400	800	L431838
89S	mg/kg	1,200	400	800	L431838
89D	mg/kg	160	400	800	L431838
90S	mg/kg	530	400	800	L431838
90D	mg/kg	130	400	800	L431838
91S	mg/kg	160	400	800	L431838
92S	mg/kg	1,600	400	800	L431838
92D	mg/kg	250	400	800	L431838
93S	mg/kg	870	400	800	L431838
94S	mg/kg	130	400	800	L431838
95S	mg/kg	590	400	800	L431838
96S	mg/kg	140	400	800	L431838
97S	mg/kg	130	400	800	L431412
97D	mg/kg	60	400	800	L431837
98S	mg/kg	93	400	800	L431837
98D	mg/kg	90	400	800	L431837
99S	mg/kg	100	400	800	L431837
99D	mg/kg	44	400	800	L431837
100S	mg/kg	61	400	800	L431837
100D	mg/kg	38	400	800	L431837
101S	mg/kg	71	400	800	L431837
101D	mg/kg	49	400	800	L431837
102S	mg/kg	220	400	800	L431837
102D	mg/kg	94	400	800	L431837
103S	mg/kg	220	400	800	L431837
103D	mg/kg	150	400	800	L431837
104S	mg/kg	110	400	800	L431837
104D	mg/kg	43	400	800	L431837
105S	mg/kg	81	400	800	L431837
105D	mg/kg	60	400	800	L431837
106S	mg/kg	140	400	800	L431837
106D	mg/kg	150	400	800	L431837
107S	mg/kg	200	400	800	L431837
107D	mg/kg	140	400	800	L431837
108S	mg/kg	96	400	800	L432316
109S	mg/kg	76	400	800	L432316
110S	mg/kg	71	400	800	L432316

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 1
ANALYTICAL RESULTS - LEAD
SURFACE AND SUBSURFACE SAMPLES

Sample Number	Units	Analytical Result	Residential SRLs	Non-Residential SRLs	Analytical Laboratory Report Number
111S	mg/kg	87	400	800	L432316
112S	mg/kg	44	400	800	L432316
113S	mg/kg	79	400	800	L432316
114S	mg/kg	54	400	800	L432316
115S	mg/kg	46	400	800	L432316
116S	mg/kg	33	400	800	L432316
117S	mg/kg	100	400	800	L432316
118S	mg/kg	130	400	800	L432316
119S	mg/kg	36	400	800	L432316
120S	mg/kg	34	400	800	L432316
121S	mg/kg	99	400	800	L432316
122S	mg/kg	97	400	800	L432362
123S	mg/kg	60	400	800	L432362
124S	mg/kg	56	400	800	L432362
125S	mg/kg	110	400	800	L432362
126S	mg/kg	110	400	800	L432362
127S	mg/kg	71	400	800	L432362
128S	mg/kg	51	400	800	L432362
129S	mg/kg	94	400	800	L432362
130S	mg/kg	180	400	800	L432362
131S	mg/kg	250	400	800	L432362
132S	mg/kg	120	400	800	L432362
133S	mg/kg	200	400	800	L432362
134S	mg/kg	140	400	800	L432362
135S	mg/kg	130	400	800	L432362

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

TABLE 2
ANALYTICAL RESULTS
WASH SAMPLES

Sample Number	Units	Lead			Arsenic			Antimony			Analytical Laboratory Report Number
		Analytical Result	Residential SRL	Non-Residential SRL	Analytical Result	Residential SRL	Non-Residential SRL	Analytical Result	Residential SRL	Non-Residential SRL	
WASH-1	mg/kg	11,000	400	800	6.2	10	10	27	31	410	L430637
WASH-2	mg/kg	10,000	400	800	6.8	10	10	30	31	410	L430637
WASH-3	mg/kg	8,700	400	800	5.8	10	10	26	31	410	L430637
WASH-4	mg/kg	4,900	400	800	4.6	10	10	18	31	410	L430637
WASH-5	mg/kg	840	400	800	1.4	10	10	3.5	31	410	L430637
WASH-6	mg/kg	1,400	400	800	1.9	10	10	4.5	31	410	L430637
WASH-7 ⁽¹⁾	mg/kg	270	400	800	BDL	10	10	1.1	31	410	L430637
WASH-7 ⁽¹⁾	mg/kg	220	400	800	2.6	10	10	BDL	31	410	L431076
WASH-8	mg/kg	390	400	800	4.2	10	10	BDL	31	410	L431076
WASH-9	mg/kg	590	400	800	4.5	10	10	BDL	31	410	L431076
WASH-10	mg/kg	150	400	800	3.6	10	10	BDL	31	410	L431076
WASH-11	mg/kg	170	400	800	3.7	10	10	BDL	31	410	L431076
WASH-12	mg/kg	91	400	800	2.7	10	10	BDL	31	410	L431076
WASH-13	mg/kg	240	400	800	4.4	10	10	BDL	31	410	L431076
WASH-14	mg/kg	210	400	800	5.9	10	10	BDL	31	410	L431076
WASH-15	mg/kg	230	400	800	3.1	10	10	BDL	31	410	L431076

Key:

mg/kg milligrams per kilogram

SRL Soil Remediation Levels established by the Arizona Department of Environmental Quality (mg/kg)

Analytical results shown in yellow exceed residential SRLs

Analytical results shown in red exceed non-residential SRLs

Metals analyzed using Method 6010B

BDL – Analytical Result is Below Detection Levels

WASH-7 ⁽¹⁾ – This sample designation was duplicated

TABLE 3
ANALYTICAL RESULTS
HAZARDOUS WASTE CLASSIFICATION SAMPLES

Sample Number	Lead				Arsenic		Antimony		Polynuclear Aromatic Hydrocarbons		Analytical Laboratory Report Number
	Analytical Result (mg/L)	Regulatory Level (mg/L)	Sampling Cell	Surface Sample Concentration (mg/kg)	Analytical Result (mg/L)	Regulatory Level (mg/L)	Analytical Result (mg/L)	Regulatory Level (mg/L)	Analytical Result (mg/L)	Regulatory Level (mg/L)	
WD-1	590	5.0	71	3,400	0.11	5.0	5.8	---	BDL	---	L431076
WD-2	720	5.0	71	3,400	0.19	5.0	2.6	---	BDL	---	L431076
WD-3	470	5.0	71	3,400	0.068	5.0	1.6	---	BDL	---	L431076
WD-4	260	5.0	48	560	0.055	5.0	2.0	---	NA	---	L431837
WD-5	8.4	5.0	48	560	BDL	5.0	0.19	---	NA	---	L431837
WD-6	0.85	5.0	48	560	BDL	5.0	BDL	---	NA	---	L431837
WD-7	210	5.0	40	2,200	BDL	5.0	1.8	---	NA	---	L432316
WD-8	30	5.0	40	2,200	BDL	5.0	0.39	---	NA	---	L432316
WD-9	1.9	5.0	40	2,200	BDL	5.0	0.10	---	NA	---	L432316

Key:

mg/L milligrams per liter

mg/kg milligrams per kilogram

Regulatory Level is the concentration above which a solid waste is considered to be a hazardous waste under 40 CFR 261

Analytical results shown in red exceed Regulatory Level

Metals analyzed using Methods 6010B/1311 and PAHs analyzed using Methods 8310/1312

BDL – Analytical Result is Below Detection Levels

--- No Regulatory Level established for these constituents

NA Sample not analyzed for these constituents

TABLE 4
ANALYTICAL SAMPLES
DUPLICATE SAMPLES

Sample Number	Units	Lead Analytical Result	Arsenic Analytical Result	Arsenic Analytical Result	Benzo(a)pyrene Analytical Result	Benzo(g,h,i)perylene Analytical Result	Pyrene Analytical Result	Analytical Laboratory Report Number
210A	mg/kg	810	2.5	4.9	0.059	0.023	BDL	L432316
210B	mg/kg	820	1.6	3.9	0.071	BDL	0.021	L432316

Key:

mg/kg milligrams per kilogram

PAHs Polynuclear Aromatic Hydrocarbons

Metals analyzed using Method 6010B

PAHs analyzed using Method 8310

BDL Concentration present Below Detection Level for analytical method

TABLE 5
ANALYTICAL SAMPLES
BACKGROUND SAMPLES

Sample Number	Units	Lead Analytical Result (mg/kg)	Arsenic Analytical Result (mg/kg)	Antimony Analytical Result (mg/kg)	PAHs Analytical Result (mg/kg)	Analytical Laboratory Report Number
B-1	mg/kg	100	8.4	BDL	BDL	L431076
B-2	mg/kg	18	1.9	BDL	BDL	L431837
B-3	mg/kg	23	7.9	1.4	BDL	L431837
B-4	mg/kg	40	2.2	BDL	---	L432316
B-5A	mg/kg	22	3.3	BDL	---	L432316
B-5B	mg/kg	2.2	0.62	BDL	---	L432316

Key:

mg/kg milligrams per kilogram

PAHs Polynuclear Aromatic Hydrocarbons

Metals analyzed using Method 6010B

PAHs analyzed using Method 8310

BDL Concentration present Below Detection Level for analytical method

--- Sample not analyzed for this constituent

TABLE 6
ANALYTICAL SAMPLES
EQUIPMENT BLANKS

Sample Number	Units	Lead Analytical Result	Arsenic Analytical Result	Antimony Analytical Result	PAHs Analytical Result	Analytical Laboratory Report Number
EB1029	mg/L	BDL	BDL	BDL	BDL	L429917
EB1031	mg/L	0.0084	BDL	BDL	BDL	L430069
EB1103	mg/L	0.064	BDL	BDL	BDL	L430637
EB1105	mg/L	0.030	BDL	BDL	BDL	L431076
EB1107	mg/L	0.024	BDL	BDL	BDL	L431412
EB1110	mg/L	BDL	BDL	BDL	BDL	L431837
EB1109	mg/L	0.012	BDL	BDL	BDL	L431838
EB1111	mg/L	0.0067	0.023	BDL	BDL	L432316
EB1112	mg/L	0.0051	BDL	BDL	NA	L432362

Key:

mg/L milligrams per Liter

NA Sample not analyzed for this constituent

Metals analyzed using Method 6010B

PAHs analyzed using Method 8310

BDL Concentration present Below Detection Level for analytical method

APPENDIX A

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORTS

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L429917



12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Thursday November 05, 2009

Report Number: L429917

Samples Received: 10/31/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 1S

Collected By : Tod Whitwer
Collection Date : 10/29/09 12:55

ESC Sample # : L429917-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	8.4	1.0	mg/kg	6010B	11/03/09	1
Lead	700	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 2S
Collected By : Tod Whitwer
Collection Date : 10/29/09 13:10

ESC Sample # : L429917-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	8.0	1.0	mg/kg	6010B	11/03/09	1
Lead	380	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 3S
Collected By : Tod Whitwer
Collection Date : 10/29/09 13:35

ESC Sample # : L429917-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	7.5	1.0	mg/kg	6010B	11/03/09	1
Lead	260	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 4S

Collected By : Tod Whitwer
Collection Date : 10/29/09 14:00

ESC Sample # : L429917-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	8.0	1.0	mg/kg	6010B	11/03/09	1
Lead	160	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 5S

Collected By : Tod Whitwer
Collection Date : 10/29/09 14:30

ESC Sample # : L429917-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/03/09	1
Arsenic	11.	1.0	mg/kg	6010B	11/03/09	1
Lead	2600	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 6S

Collected By : Tod Whitwer
Collection Date : 10/29/09 14:45

ESC Sample # : L429917-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	12.	1.0	mg/kg	6010B	11/03/09	1
Lead	420	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 7S

Collected By : Tod Whitwer
Collection Date : 10/29/09 15:10

ESC Sample # : L429917-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	6.6	1.0	mg/kg	6010B	11/03/09	1
Lead	280	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 8S
Collected By : Tod Whitwer
Collection Date : 10/29/09 15:30

ESC Sample # : L429917-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	8.0	1.0	mg/kg	6010B	11/03/09	1
Lead	140	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 9S
Collected By : Tod Whitwer
Collection Date : 10/29/09 15:50

ESC Sample # : L429917-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	7.8	1.0	mg/kg	6010B	11/03/09	1
Lead	85.	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 10S
Collected By : Tod Whitwer
Collection Date : 10/29/09 16:10

ESC Sample # : L429917-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	9.8	1.0	mg/kg	6010B	11/03/09	1
Lead	1300	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/05/09 12:41 Printed: 11/05/09 12:41



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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 11S

Collected By : Tod Whitwer
Collection Date : 10/29/09 16:25

ESC Sample # : L429917-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	7.6	1.0	mg/kg	6010B	11/03/09	1
Lead	320	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/05/09 12:41 Printed: 11/05/09 12:41



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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : 12S
Collected By : Tod Whitwer
Collection Date : 10/29/09 16:45

ESC Sample # : L429917-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	7.2	1.0	mg/kg	6010B	11/03/09	1
Lead	280	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 13S

Collected By : Tod Whitwer
Collection Date : 10/29/09 17:05

ESC Sample # : L429917-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	8.2	1.0	mg/kg	6010B	11/03/09	1
Lead	150	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 05, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : October 31, 2009
Description : Nogales Range Assessment

Sample ID : 14S

Collected By : Tod Whitwer
Collection Date : 10/29/09 17:25

ESC Sample # : L429917-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/03/09	1
Arsenic	9.0	1.0	mg/kg	6010B	11/03/09	1
Lead	97.	0.25	mg/kg	6010B	11/03/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 05, 2009

Date Received : October 31, 2009
Description : Nogales Range Assessment
Sample ID : EB-1029
Collected By : Tod Whitwer
Collection Date : 10/29/09 17:35

ESC Sample # : L429917-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/01/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/01/09	1
Lead	BDL	0.0050	mg/l	200.7	11/01/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Summary of Remarks For Samples Printed
11/05/09 at 12:41:38

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L429917-01 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-02 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-03 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-04 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-05 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-06 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-07 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-08 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-09 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-10 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-11 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-12 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-13 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-14 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41
Sample: L429917-15 Account: ALLWYNGAZ Received: 10/31/09 09:00 Due Date: 11/06/09 00:00 RPT Date: 11/05/09 12:41

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L430069



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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Tuesday November 10, 2009

Report Number: L430069

Samples Received: 11/03/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 15S

Collected By : Tod Whitwer
Collection Date : 10/30/09 12:30

ESC Sample # : L430069-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	47.	1.0	mg/kg	6010B	11/08/09	1
Arsenic	1.7	1.0	mg/kg	6010B	11/08/09	1
Lead	25000	5.0	mg/kg	6010B	11/09/09	20

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 16S
Collected By : Tod Whitwer
Collection Date : 10/30/09 12:45

ESC Sample # : L430069-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.7	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	2000	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 17S

Collected By : Tod Whitwer
Collection Date : 10/30/09 13:00

ESC Sample # : L430069-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	420	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 18S

Collected By : Tod Whitwer
Collection Date : 10/30/09 13:20

ESC Sample # : L430069-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.6	1.0	mg/kg	6010B	11/06/09	1
Lead	500	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 19S
Collected By : Tod Whitwer
Collection Date : 10/30/09 13:30

ESC Sample # : L430069-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.3	1.0	mg/kg	6010B	11/06/09	1
Lead	550	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 20S
Collected By : Tod Whitwer
Collection Date : 10/30/09 13:40

ESC Sample # : L430069-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/06/09	1
Lead	290	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 21S

Collected By : Tod Whitwer
Collection Date : 10/30/09 13:50

ESC Sample # : L430069-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.3	1.0	mg/kg	6010B	11/06/09	1
Lead	100	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 22S
Collected By : Tod Whitwer
Collection Date : 10/30/09 14:05

ESC Sample # : L430069-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	120	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 23S
Collected By : Tod Whitwer
Collection Date : 10/30/09 14:25

ESC Sample # : L430069-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.0	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.6	1.0	mg/kg	6010B	11/06/09	1
Lead	1500	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 24S
Collected By : Tod Whitwer
Collection Date : 10/30/09 14:40

ESC Sample # : L430069-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.6	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.0	1.0	mg/kg	6010B	11/06/09	1
Lead	870	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 25S
Collected By : Tod Whitwer
Collection Date : 10/30/09 14:55

ESC Sample # : L430069-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.5	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.2	1.0	mg/kg	6010B	11/06/09	1
Lead	550	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 26S
Collected By : Tod Whitwer
Collection Date : 10/30/09 15:05

ESC Sample # : L430069-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.0	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/06/09	1
Lead	970	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 27S
Collected By : Tod Whitwer
Collection Date : 10/30/09 15:20

ESC Sample # : L430069-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.5	1.0	mg/kg	6010B	11/06/09	1
Lead	550	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 28S

Collected By : Tod Whitwer
Collection Date : 10/30/09 15:30

ESC Sample # : L430069-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	240	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 29S
Collected By : Tod Whitwer
Collection Date : 10/30/09 15:50

ESC Sample # : L430069-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.6	1.0	mg/kg	6010B	11/06/09	1
Lead	150	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 30S
Collected By : Tod Whitwer
Collection Date : 10/30/09 16:05

ESC Sample # : L430069-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.5	1.0	mg/kg	6010B	11/06/09	1
Lead	140	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/10/09 12:22 Printed: 11/10/09 12:23

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 31S

Collected By : Tod Whitwer
Collection Date : 10/30/09 16:20

ESC Sample # : L430069-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.7	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.3	1.0	mg/kg	6010B	11/06/09	1
Lead	2000	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Chrysene	0.022	0.020	mg/kg	8310	11/04/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/04/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/04/09	1
Pyrene	0.021	0.020	mg/kg	8310	11/04/09	1
Surrogate						
p-Terphenyl-d14	91.5		% Rec.	8310	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : 32S

Collected By : Tod Whitwer
Collection Date : 10/30/09 16:30

ESC Sample # : L430069-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	4.3	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	1600	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/04/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/04/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/04/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Surrogate						
p-Terphenyl-d14	78.4		% Rec.	8310	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 33S
Collected By : Tod Whitwer
Collection Date : 10/30/09 16:50

ESC Sample # : L430069-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.2	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/06/09	1
Lead	1300	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/04/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/04/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/04/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Surrogate						
p-Terphenyl-d14	76.7		% Rec.	8310	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 34S
Collected By : Tod Whitwer
Collection Date : 10/30/09 17:15

ESC Sample # : L430069-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.6	1.0	mg/kg	6010B	11/06/09	1
Arsenic	3.3	1.0	mg/kg	6010B	11/06/09	1
Lead	870	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : 35S
Collected By : Tod Whitwer
Collection Date : 10/30/09 17:25

ESC Sample # : L430069-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	480	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB1030

Collected By : Tod Whitwer
Collection Date : 10/30/09 17:30

ESC Sample # : L430069-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	6010B	11/04/09	1
Arsenic	BDL	0.020	mg/l	6010B	11/04/09	1
Lead	BDL	0.0050	mg/l	6010B	11/04/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/05/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/05/09	1
Chrysene	BDL	0.0010	mg/l	625	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/05/09	1
Fluorene	BDL	0.010	mg/l	625	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Naphthalene	BDL	0.010	mg/l	625	11/05/09	1
Phenanthrene	BDL	0.010	mg/l	625	11/05/09	1
Pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Surrogate Recovery						
Nitrobenzene-d5	62.0		% Rec.	625	11/05/09	1
2-Fluorobiphenyl	79.6		% Rec.	625	11/05/09	1
p-Terphenyl-d14	101.		% Rec.	625	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB36S

Collected By : Tod Whitwer
Collection Date : 10/31/09 09:25

ESC Sample # : L430069-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/05/09	1
Arsenic	6.1	1.0	mg/kg	6010B	11/05/09	1
Lead	260	0.25	mg/kg	6010B	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB37S

Collected By : Tod Whitwer
Collection Date : 10/31/09 09:45

ESC Sample # : L430069-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.6	1.0	mg/kg	6010B	11/06/09	1
Lead	210	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB38S

Collected By : Tod Whitwer
Collection Date : 10/31/09 10:00

ESC Sample # : L430069-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.1	1.0	mg/kg	6010B	11/06/09	1
Lead	130	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB39S

Collected By : Tod Whitwer
Collection Date : 10/31/09 10:20

ESC Sample # : L430069-26

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.5	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.0	1.0	mg/kg	6010B	11/06/09	1
Lead	1100	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(g,h,i)perylene	0.024	0.020	mg/kg	8310	11/04/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Chrysene	0.022	0.020	mg/kg	8310	11/04/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/04/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/04/09	1
Pyrene	0.023	0.020	mg/kg	8310	11/04/09	1
Surrogate						
p-Terphenyl-d14	100.		% Rec.	8310	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB40S

Collected By : Tod Whitwer
Collection Date : 10/31/09 10:30

ESC Sample # : L430069-27

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.8	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/06/09	1
Lead	2200	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/04/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/04/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/04/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/04/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/04/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/04/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/04/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/04/09	1
Surrogate						
p-Terphenyl-d14	87.7		% Rec.	8310	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB41S

Collected By : Tod Whitwer
Collection Date : 10/31/09 10:50

ESC Sample # : L430069-28

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.8	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.1	1.0	mg/kg	6010B	11/06/09	1
Lead	1500	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	84.7		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB42S

Collected By : Tod Whitwer
Collection Date : 10/31/09 11:05

ESC Sample # : L430069-29

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	6.1	1.0	mg/kg	6010B	11/06/09	1
Lead	490	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	93.3		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB43S

Collected By : Tod Whitwer
Collection Date : 10/31/09 11:20

ESC Sample # : L430069-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.6	1.0	mg/kg	6010B	11/06/09	1
Lead	310	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : EB44S
Collected By : Tod Whitwer
Collection Date : 10/31/09 11:40

ESC Sample # : L430069-31

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.4	1.0	mg/kg	6010B	11/06/09	1
Lead	200	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : EB45S
Collected By : Tod Whitwer
Collection Date : 10/31/09 12:20

ESC Sample # : L430069-32

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.9	1.0	mg/kg	6010B	11/06/09	1
Lead	160	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB46S

Collected By : Tod Whitwer
Collection Date : 10/31/09 12:35

ESC Sample # : L430069-33

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.7	1.0	mg/kg	6010B	11/06/09	1
Arsenic	6.0	1.0	mg/kg	6010B	11/06/09	1
Lead	1300	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	86.7		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB47S

Collected By : Tod Whitwer
Collection Date : 10/31/09 12:50

ESC Sample # : L430069-34

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.4	1.0	mg/kg	6010B	11/06/09	1
Arsenic	6.4	1.0	mg/kg	6010B	11/06/09	1
Lead	890	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	90.8		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
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Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB48S

Collected By : Tod Whitwer
Collection Date : 10/31/09 13:05

ESC Sample # : L430069-35

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.7	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.6	1.0	mg/kg	6010B	11/06/09	1
Lead	560	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	87.2		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB49S

Collected By : Tod Whitwer
Collection Date : 10/31/09 13:25

ESC Sample # : L430069-36

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.3	1.0	mg/kg	6010B	11/06/09	1
Lead	410	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : EB50S
Collected By : Tod Whitwer
Collection Date : 10/31/09 13:45

ESC Sample # : L430069-37

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.6	1.0	mg/kg	6010B	11/06/09	1
Lead	430	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB51S

Collected By : Tod Whitwer
Collection Date : 10/31/09 14:10

ESC Sample # : L430069-38

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.9	1.0	mg/kg	6010B	11/06/09	1
Lead	370	0.25	mg/kg	6010B	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB52S

Collected By : Tod Whitwer
Collection Date : 10/31/09 14:30

ESC Sample # : L430069-39

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.1	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.3	1.0	mg/kg	6010B	11/06/09	1
Lead	880	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	80.2		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment
Sample ID : EB53S
Collected By : Tod Whitwer
Collection Date : 10/31/09 14:45

ESC Sample # : L430069-40

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	4.6	1.0	mg/kg	6010B	11/06/09	1
Lead	490	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	87.7		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
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Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB54S

Collected By : Tod Whitwer
Collection Date : 10/31/09 15:05

ESC Sample # : L430069-41

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/06/09	1
Arsenic	5.2	1.0	mg/kg	6010B	11/06/09	1
Lead	420	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/05/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/05/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/05/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/05/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/05/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/05/09	1
Surrogate						
p-Terphenyl-d14	90.3		% Rec.	8310	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 10, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB55S

Collected By : Tod Whitwer
Collection Date : 10/31/09 15:30

ESC Sample # : L430069-42

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/04/09	1
Arsenic	5.6	1.0	mg/kg	6010B	11/04/09	1
Lead	560	0.25	mg/kg	6010B	11/04/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 10, 2009

Date Received : November 03, 2009
Description : Nogales Range Assessment

Sample ID : EB1031

Collected By : Tod Whitwer
Collection Date : 10/31/09 15:35

ESC Sample # : L430069-43

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	6010B	11/04/09	1
Arsenic	BDL	0.020	mg/l	6010B	11/04/09	1
Lead	0.0084	0.0050	mg/l	6010B	11/04/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/05/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	11/05/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/05/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/05/09	1
Chrysene	BDL	0.0010	mg/l	625	11/05/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/05/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/05/09	1
Fluorene	BDL	0.010	mg/l	625	11/05/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Naphthalene	BDL	0.010	mg/l	625	11/05/09	1
Phenanthrene	BDL	0.010	mg/l	625	11/05/09	1
Pyrene	BDL	0.0010	mg/l	625	11/05/09	1
Surrogate Recovery						
Nitrobenzene-d5	53.7		% Rec.	625	11/05/09	1
2-Fluorobiphenyl	68.8		% Rec.	625	11/05/09	1
p-Terphenyl-d14	100.		% Rec.	625	11/05/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L430069-01	WG448873	SAMP	Antimony	R989188	J6
	WG448873	SAMP	Lead	R989188	V
L430069-23	WG448874	SAMP	Antimony	R986988	J6
	WG448874	SAMP	Lead	R986988	V
L430069-42	WG448916	SAMP	Antimony	R985030	J6
	WG448916	SAMP	Lead	R985030	BJ6

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L430069-42 Account: ALLWYNGAZ Received: 11/03/09 09:00 Due Date: 11/10/09 00:00 RPT Date: 11/10/09 12:22

Sample: L430069-43 Account: ALLWYNGAZ Received: 11/03/09 09:00 Due Date: 11/10/09 00:00 RPT Date: 11/10/09 12:22
Changed SV625 to SV625PAH per CoC -JCH 11/4

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L430637



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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Thursday November 12, 2009

Report Number: L430637

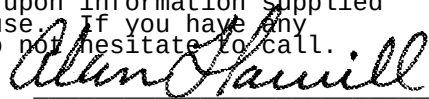
Samples Received: 11/05/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


T. Alan Harvill, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 56S

Collected By : Todd Whitwer
Collection Date : 11/03/09 12:20

ESC Sample # : L430637-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.5	1.0	mg/kg	6010B	11/09/09	1
Lead	190	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 12, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 57S

Collected By : Todd Whitwer
Collection Date : 11/03/09 12:35

ESC Sample # : L430637-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	2.9	1.0	mg/kg	6010B	11/09/09	1
Lead	160	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 58S

Collected By : Todd Whitwer
Collection Date : 11/03/09 12:50

ESC Sample # : L430637-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	2.7	1.0	mg/kg	6010B	11/09/09	1
Lead	310	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	94.6		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 59S

Collected By : Todd Whitwer
Collection Date : 11/03/09 13:05

ESC Sample # : L430637-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.0	1.0	mg/kg	6010B	11/09/09	1
Lead	350	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	98.4		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 12, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 60S
Collected By : Todd Whitwer
Collection Date : 11/03/09 13:20

ESC Sample # : L430637-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/09/09	1
Lead	220	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 61S
Collected By : Todd Whitwer
Collection Date : 11/03/09 13:35

ESC Sample # : L430637-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	2.9	1.0	mg/kg	6010B	11/09/09	1
Lead	110	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 62S

Collected By : Todd Whitwer
Collection Date : 11/03/09 13:50

ESC Sample # : L430637-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	2.9	1.0	mg/kg	6010B	11/09/09	1
Lead	290	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	97.9		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 63S

Collected By : Todd Whitwer
Collection Date : 11/03/09 14:00

ESC Sample # : L430637-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/09/09	1
Lead	250	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	99.5		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/12/09 13:31 Printed: 11/12/09 13:32

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : 64S

Collected By : Todd Whitwer
Collection Date : 11/03/09 14:10

ESC Sample # : L430637-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.2	1.0	mg/kg	6010B	11/09/09	1
Lead	140	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	111.		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 12, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 65S
Collected By : Todd Whitwer
Collection Date : 11/03/09 14:25

ESC Sample # : L430637-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	4.1	1.0	mg/kg	6010B	11/09/09	1
Lead	130	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 66S
Collected By : Todd Whitwer
Collection Date : 11/03/09 14:40

ESC Sample # : L430637-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/09/09	1
Lead	53.	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 67S
Collected By : Todd Whitwer
Collection Date : 11/03/09 15:00

ESC Sample # : L430637-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	4.3	1.0	mg/kg	6010B	11/09/09	1
Lead	96.	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 68S
Collected By : Todd Whitwer
Collection Date : 11/03/09 15:10

ESC Sample # : L430637-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	3.2	1.0	mg/kg	6010B	11/09/09	1
Lead	160	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 69S
Collected By : Todd Whitwer
Collection Date : 11/03/09 15:20

ESC Sample # : L430637-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	4.1	1.0	mg/kg	6010B	11/09/09	1
Lead	71.	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : 70S
Collected By : Todd Whitwer
Collection Date : 11/03/09 15:40

ESC Sample # : L430637-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/09/09	1
Arsenic	4.6	1.0	mg/kg	6010B	11/09/09	1
Lead	100	0.25	mg/kg	6010B	11/09/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 1
Collected By : Todd Whitwer
Collection Date : 11/03/09 16:00

ESC Sample # : L430637-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	27.	1.0	mg/kg	6010B	11/09/09	1
Arsenic	6.2	1.0	mg/kg	6010B	11/09/09	1
Lead	11000	1.2	mg/kg	6010B	11/09/09	5
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	0.068	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	0.59	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	0.20	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	0.12	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	0.037	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	0.15	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	114.		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 2
Collected By : Todd Whitwer
Collection Date : 11/03/09 16:15

ESC Sample # : L430637-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	30.	1.0	mg/kg	6010B	11/09/09	1
Arsenic	6.8	1.0	mg/kg	6010B	11/09/09	1
Lead	10000	1.2	mg/kg	6010B	11/09/09	5
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	0.075	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	0.44	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	0.14	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	0.087	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	0.10	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	105.		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 3
Collected By : Todd Whitwer
Collection Date : 11/03/09 16:25

ESC Sample # : L430637-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	26.	1.0	mg/kg	6010B	11/09/09	1
Arsenic	5.8	1.0	mg/kg	6010B	11/09/09	1
Lead	8700	1.2	mg/kg	6010B	11/09/09	5
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	0.022	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	0.19	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	0.057	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	0.041	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	0.051	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	109.		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 4
Collected By : Todd Whitwer
Collection Date : 11/03/09 16:40

ESC Sample # : L430637-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	18.	1.0	mg/kg	6010B	11/09/09	1
Arsenic	4.6	1.0	mg/kg	6010B	11/09/09	1
Lead	4900	0.25	mg/kg	6010B	11/09/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	95.7		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 5
Collected By : Todd Whitwer
Collection Date : 11/03/09 16:55

ESC Sample # : L430637-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.5	1.0	mg/kg	6010B	11/06/09	1
Arsenic	1.4	1.0	mg/kg	6010B	11/06/09	1
Lead	840	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	79.2		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 6
Collected By : Todd Whitwer
Collection Date : 11/03/09 17:10

ESC Sample # : L430637-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	4.5	1.0	mg/kg	6010B	11/06/09	1
Arsenic	1.9	1.0	mg/kg	6010B	11/06/09	1
Lead	1400	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/07/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/07/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/07/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/07/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/07/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/07/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/07/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/07/09	1
Surrogate						
p-Terphenyl-d14	102.		% Rec.	8310	11/07/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/12/09 13:31 Printed: 11/12/09 13:32

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment
Sample ID : WASH 7
Collected By : Todd Whitwer
Collection Date : 11/03/09 17:25

ESC Sample # : L430637-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/06/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/06/09	1
Lead	270	0.25	mg/kg	6010B	11/06/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/11/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/11/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/11/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/11/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
Surrogate						
p-Terphenyl-d14	92.9		% Rec.	8310	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/12/09 13:31 Printed: 11/12/09 13:32

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 12, 2009

Date Received : November 05, 2009
Description : Nogales Range Assessment

Sample ID : EB1103

Collected By : Todd Whitwer
Collection Date : 11/03/09 17:30

ESC Sample # : L430637-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	6010B	11/10/09	1
Arsenic	BDL	0.020	mg/l	6010B	11/10/09	1
Lead	0.064	0.0050	mg/l	6010B	11/10/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/06/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/06/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/06/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/06/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/06/09	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	11/06/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/06/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/06/09	1
Chrysene	BDL	0.0010	mg/l	625	11/06/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/06/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/06/09	1
Fluorene	BDL	0.010	mg/l	625	11/06/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/06/09	1
Naphthalene	BDL	0.010	mg/l	625	11/06/09	1
Phenanthrene	BDL	0.010	mg/l	625	11/06/09	1
Pyrene	BDL	0.0010	mg/l	625	11/06/09	1
Surrogate Recovery						
Nitrobenzene-d5	52.7		% Rec.	625	11/06/09	1
2-Fluorobiphenyl	69.0		% Rec.	625	11/06/09	1
p-Terphenyl-d14	110.		% Rec.	625	11/06/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L430637-19	WG449343	SAMP	Antimony	R989250	J6J3
	WG449343	SAMP	Lead	R989250	V
L430637-21	WG449357	SAMP	Antimony	R986933	J6
	WG449357	SAMP	Lead	R986933	V

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J3	The associated batch QC was outside the established quality control range for precision.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
11/12/09 at 13:32:34

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L430637-01 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-02 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-03 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-04 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-05 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-06 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-07 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-08 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-09 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-10 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-11 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-12 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-13 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-14 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-15 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-16 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-17 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-18 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-19 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-20 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-21 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-22 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Sample: L430637-23 Account: ALLWYNGAZ Received: 11/05/09 09:00 Due Date: 11/12/09 00:00 RPT Date: 11/12/09 13:31
Changed SV625 to SV625PAH. Placed back into WG449376. AV 11/6

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L431076



12065 Lebanon Rd.
Mt. Juliet, TN 37122
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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Monday November 16, 2009

Report Number: L431076

Samples Received: 11/07/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided
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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-1

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:20

ESC Sample # : L431076-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
SPLP Extraction	-			1312	11/10/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(b)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(g,h,i)perylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(k)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Chrysene	BDL	0.00010	mg/l	8310	11/12/09	1
Dibenz(a,h)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluorene	BDL	0.00010	mg/l	8310	11/12/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
1-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
2-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Naphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Phenanthrene	BDL	0.00010	mg/l	8310	11/12/09	1
Pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Surrogate						
p-Terphenyl-d14	111.		% Rec.	8310	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-2

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:22

ESC Sample # : L431076-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
SPLP Extraction	-			1312	11/10/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(b)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(g,h,i)perylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(k)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Chrysene	BDL	0.00010	mg/l	8310	11/12/09	1
Dibenz(a,h)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluorene	BDL	0.00010	mg/l	8310	11/12/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
1-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
2-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Naphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Phenanthrene	BDL	0.00010	mg/l	8310	11/12/09	1
Pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Surrogate						
p-Terphenyl-d14	103.		% Rec.	8310	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-3

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:25

ESC Sample # : L431076-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
SPLP Extraction	-			1312	11/10/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthene	BDL	0.00010	mg/l	8310	11/12/09	1
Acenaphthylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(a)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(b)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(g,h,i)perylene	BDL	0.00010	mg/l	8310	11/12/09	1
Benzo(k)fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Chrysene	BDL	0.00010	mg/l	8310	11/12/09	1
Dibenz(a,h)anthracene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluoranthene	BDL	0.00010	mg/l	8310	11/12/09	1
Fluorene	BDL	0.00010	mg/l	8310	11/12/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
1-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
2-Methylnaphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Naphthalene	BDL	0.0010	mg/l	8310	11/12/09	1
Phenanthrene	BDL	0.00010	mg/l	8310	11/12/09	1
Pyrene	BDL	0.00010	mg/l	8310	11/12/09	1
Surrogate						
p-Terphenyl-d14	107.		% Rec.	8310	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH7

Collected By : Tod Whitwer
Collection Date : 11/05/09 13:00

ESC Sample # : L431076-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	2.6	1.0	mg/kg	6010B	11/11/09	1
Lead	220	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/12/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/12/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/12/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/12/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/12/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/12/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/12/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/12/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/12/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/12/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/12/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/12/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/12/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/12/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/12/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/12/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/12/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/12/09	1
Surrogate						
p-Terphenyl-d14	94.3		% Rec.	8310	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH8

Collected By : Tod Whitwer
Collection Date : 11/05/09 13:20

ESC Sample # : L431076-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	4.2	1.0	mg/kg	6010B	11/11/09	1
Lead	390	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	87.7		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH9

Collected By : Tod Whitwer
Collection Date : 11/05/09 13:30

ESC Sample # : L431076-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	4.5	1.0	mg/kg	6010B	11/11/09	1
Lead	590	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	90.8		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : WASH10
Collected By : Tod Whitwer
Collection Date : 11/05/09 13:40

ESC Sample # : L431076-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	3.6	1.0	mg/kg	6010B	11/11/09	1
Lead	150	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	87.8		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH11

Collected By : Tod Whitwer
Collection Date : 11/05/09 14:00

ESC Sample # : L431076-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/11/09	1
Lead	170	0.25	mg/kg	6010B	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH12

Collected By : Tod Whitwer
Collection Date : 11/05/09 14:10

ESC Sample # : L431076-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	2.7	1.0	mg/kg	6010B	11/11/09	1
Lead	91.	0.25	mg/kg	6010B	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WASH13

Collected By : Tod Whitwer
Collection Date : 11/05/09 14:20

ESC Sample # : L431076-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/11/09	1
Lead	240	0.25	mg/kg	6010B	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : WASH14
Collected By : Tod Whitwer
Collection Date : 11/05/09 14:25

ESC Sample # : L431076-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	5.9	1.0	mg/kg	6010B	11/11/09	1
Lead	210	0.25	mg/kg	6010B	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : WASH15
Collected By : Tod Whitwer
Collection Date : 11/05/09 14:35

ESC Sample # : L431076-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	3.1	1.0	mg/kg	6010B	11/11/09	1
Lead	230	0.25	mg/kg	6010B	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : B-1

Collected By : Tod Whitwer
Collection Date : 11/05/09 14:45

ESC Sample # : L431076-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	8.4	1.0	mg/kg	6010B	11/11/09	1
Lead	100	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	89.3		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 71S

Collected By : Tod Whitwer
Collection Date : 11/05/09 14:55

ESC Sample # : L431076-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	8.9	1.0	mg/kg	6010B	11/11/09	1
Arsenic	3.6	1.0	mg/kg	6010B	11/11/09	1
Lead	3400	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	0.049	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	83.7		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 71D

Collected By : Tod Whitwer
Collection Date : 11/05/09 15:05

ESC Sample # : L431076-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	9.7	1.0	mg/kg	6010B	11/11/09	1
Arsenic	4.7	1.0	mg/kg	6010B	11/11/09	1
Lead	5900	0.50	mg/kg	6010B	11/11/09	2
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	0.096	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	0.025	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	0.030	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	0.026	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	89.1		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : 72S
Collected By : Tod Whitwer
Collection Date : 11/05/09 15:20

ESC Sample # : L431076-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.8	1.0	mg/kg	6010B	11/11/09	1
Arsenic	5.0	1.0	mg/kg	6010B	11/11/09	1
Lead	3300	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	0.034	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	64.5		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 72D

Collected By : Tod Whitwer
Collection Date : 11/05/09 15:35

ESC Sample # : L431076-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/11/09	1
Arsenic	6.5	1.0	mg/kg	6010B	11/11/09	1
Lead	1200	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	86.1		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 73D

Collected By : Tod Whitwer
Collection Date : 11/05/09 16:00

ESC Sample # : L431076-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/11/09	1
Lead	550	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	84.9		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 74S

Collected By : Tod Whitwer
Collection Date : 11/05/09 16:15

ESC Sample # : L431076-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.0	1.0	mg/kg	6010B	11/11/09	1
Arsenic	4.2	1.0	mg/kg	6010B	11/11/09	1
Lead	1700	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	76.7		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : 74D
Collected By : Tod Whitwer
Collection Date : 11/05/09 16:30

ESC Sample # : L431076-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	8.2	1.0	mg/kg	6010B	11/11/09	1
Lead	450	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/10/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/10/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/10/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/10/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/10/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/10/09	1
Surrogate						
p-Terphenyl-d14	79.4		% Rec.	8310	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 75S

Collected By : Tod Whitwer
Collection Date : 11/05/09 16:40

ESC Sample # : L431076-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	5.3	1.0	mg/kg	6010B	11/11/09	1
Lead	590	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/11/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/11/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/11/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/11/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/11/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/11/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/11/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/11/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/11/09	1
Surrogate						
p-Terphenyl-d14	87.2		% Rec.	8310	11/11/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 75D

Collected By : Tod Whitwer
Collection Date : 11/05/09 16:50

ESC Sample # : L431076-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	9.0	1.0	mg/kg	6010B	11/11/09	1
Lead	390	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	64.7		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 76S

Collected By : Tod Whitwer
Collection Date : 11/05/09 17:00

ESC Sample # : L431076-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	2.9	1.0	mg/kg	6010B	11/11/09	1
Lead	380	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	79.7		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/16/09 13:38 Printed: 11/16/09 13:39

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 76D

Collected By : Tod Whitwer
Collection Date : 11/05/09 17:10

ESC Sample # : L431076-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/11/09	1
Arsenic	2.6	1.0	mg/kg	6010B	11/11/09	1
Lead	210	0.25	mg/kg	6010B	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	83.8		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment
Sample ID : EB1105
Collected By : Tod Whitwer
Collection Date : 11/05/09 17:15

ESC Sample # : L431076-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/11/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/11/09	1
Lead	0.030	0.0050	mg/l	200.7	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/10/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/10/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/10/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/10/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/10/09	1
Benzo(b)fluoranthene	BDL	0.010	mg/l	625	11/10/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/10/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/10/09	1
Chrysene	BDL	0.0010	mg/l	625	11/10/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/10/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/10/09	1
Fluorene	BDL	0.010	mg/l	625	11/10/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/10/09	1
Naphthalene	BDL	0.010	mg/l	625	11/10/09	1
Phenanthrene	BDL	0.010	mg/l	625	11/10/09	1
Pyrene	BDL	0.0010	mg/l	625	11/10/09	1
Surrogate Recovery						
Nitrobenzene-d5	68.3		% Rec.	625	11/10/09	1
2-Fluorobiphenyl	66.4		% Rec.	625	11/10/09	1
p-Terphenyl-d14	85.5		% Rec.	625	11/10/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Est. 1970

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-1

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:20

ESC Sample # : L431076-26

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/11/09 0950	LJN	1
Antimony	5.8	0.050	mg/l		6010B	11/11/09 2231	DMM	1
Arsenic	0.11	0.050	mg/l	5.0	6010B	11/11/09 2231	DMM	1
Lead	590	0.50	mg/l	5.0	6010B	11/12/09 0252	DMM	10

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-2

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:22

ESC Sample # : L431076-27

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/11/09 0950	LJN	1
Antimony	2.6	0.050	mg/l		6010B	11/11/09 2234	DMM	1
Arsenic	0.19	0.050	mg/l	5.0	6010B	11/11/09 2234	DMM	1
Lead	720	0.50	mg/l	5.0	6010B	11/12/09 0255	DMM	10

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : WD-3

Collected By : Tod Whitwer
Collection Date : 11/05/09 12:25

ESC Sample # : L431076-28

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/11/09 0950	LJN	1
Antimony	1.6	0.050	mg/l		6010B	11/11/09 2237	DMM	1
Arsenic	0.068	0.050	mg/l	5.0	6010B	11/11/09 2237	DMM	1
Lead	470	0.50	mg/l	5.0	6010B	11/12/09 0259	DMM	10

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

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REPORT OF ANALYSIS

November 16, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 735

Collected By : Tod Whitwer
Collection Date : 11/05/09 15:50

ESC Sample # : L431076-29

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/11/09 0950	LJN	1
Antimony	0.24	0.050	mg/l		6010B	11/11/09 2240	DMM	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	11/11/09 2240	DMM	1
Lead	4.0	0.050	mg/l	5.0	6010B	11/11/09 2240	DMM	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 16, 2009

Date Received : November 07, 2009
Description : Nogales Range Assessment

Sample ID : 735

Collected By : Tod Whitwer
Collection Date : 11/05/09 15:50

ESC Sample # : L431076-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	62.9		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L431076-22	WG449850	SAMP	Antimony	R992450	J5
	WG449850	SAMP	Lead	R992450	J6
L431076-24	WG449876	SAMP	Antimony	R991650	B3J6

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
B3	(ESC) - The indicated compound was found in the associated method blank, but all reported samples were non-detect.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L431412



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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Tuesday November 17, 2009

Report Number: L431412

Samples Received: 11/10/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 77S

Collected By : Tod Whitwer
Collection Date : 11/07/09 09:20

ESC Sample # : L431412-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	46.	5.0	mg/kg	6010B	11/15/09	5
Arsenic	6.7	5.0	mg/kg	6010B	11/15/09	5
Lead	8900	1.2	mg/kg	6010B	11/15/09	5
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	0.031	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	0.21	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	0.055	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	0.061	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	0.061	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	71.5		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 77D

Collected By : Tod Whitwer
Collection Date : 11/07/09 09:30

ESC Sample # : L431412-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	6.1	5.0	mg/kg	6010B	11/15/09	5
Arsenic	BDL	5.0	mg/kg	6010B	11/15/09	5
Lead	1600	1.2	mg/kg	6010B	11/15/09	5
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	0.048	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	87.7		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 78S

Collected By : Tod Whitwer
Collection Date : 11/07/09 09:50

ESC Sample # : L431412-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.1	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/14/09	1
Lead	1200	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	100.		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 78D

Collected By : Tod Whitwer
Collection Date : 11/07/09 09:55

ESC Sample # : L431412-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	8.1	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.3	1.0	mg/kg	6010B	11/14/09	1
Lead	1800	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	0.020	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	75.8		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 79S
Collected By : Tod Whitwer
Collection Date : 11/07/09 10:10

ESC Sample # : L431412-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.0	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/14/09	1
Lead	3000	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	69.9		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/17/09 09:27 Printed: 11/17/09 09:28

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 79D

Collected By : Tod Whitwer
Collection Date : 11/07/09 10:15

ESC Sample # : L431412-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.2	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.8	1.0	mg/kg	6010B	11/14/09	1
Lead	2500	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	73.9		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 80S
Collected By : Tod Whitwer
Collection Date : 11/07/09 10:30

ESC Sample # : L431412-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.6	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/14/09	1
Lead	1600	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	91.5		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 80D

Collected By : Tod Whitwer
Collection Date : 11/07/09 10:40

ESC Sample # : L431412-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.6	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/14/09	1
Lead	750	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	81.6		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 81S

Collected By : Tod Whitwer
Collection Date : 11/07/09 10:50

ESC Sample # : L431412-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.5	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.5	1.0	mg/kg	6010B	11/14/09	1
Lead	3200	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 81D

Collected By : Tod Whitwer
Collection Date : 11/07/09 10:55

ESC Sample # : L431412-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.0	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.0	1.0	mg/kg	6010B	11/14/09	1
Lead	2500	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 82S

Collected By : Tod Whitwer
Collection Date : 11/07/09 11:15

ESC Sample # : L431412-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	28.	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.2	1.0	mg/kg	6010B	11/14/09	1
Lead	12000	1.2	mg/kg	6010B	11/15/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 82D
Collected By : Tod Whitwer
Collection Date : 11/07/09 11:25

ESC Sample # : L431412-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	37.	1.0	mg/kg	6010B	11/14/09	1
Arsenic	6.0	1.0	mg/kg	6010B	11/14/09	1
Lead	18000	1.2	mg/kg	6010B	11/15/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 39D

Collected By : Tod Whitwer
Collection Date : 11/07/09 11:40

ESC Sample # : L431412-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.6	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/14/09	1
Lead	440	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	93.6		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 32D

Collected By : Tod Whitwer
Collection Date : 11/07/09 12:10

ESC Sample # : L431412-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/14/09	1
Lead	430	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	96.4		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 31D

Collected By : Tod Whitwer
Collection Date : 11/07/09 12:20

ESC Sample # : L431412-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.2	1.0	mg/kg	6010B	11/14/09	1
Lead	560	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	90.1		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 23D
Collected By : Tod Whitwer
Collection Date : 11/07/09 12:35

ESC Sample # : L431412-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.2	1.0	mg/kg	6010B	11/14/09	1
Lead	680	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 24D

Collected By : Tod Whitwer
Collection Date : 11/07/09 12:45

ESC Sample # : L431412-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/14/09	1
Lead	570	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 15D

Collected By : Tod Whitwer
Collection Date : 11/07/09 13:00

ESC Sample # : L431412-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	28.	5.0	mg/kg	6010B	11/15/09	5
Arsenic	BDL	5.0	mg/kg	6010B	11/15/09	5
Lead	12000	1.2	mg/kg	6010B	11/15/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 16D

Collected By : Tod Whitwer
Collection Date : 11/07/09 13:15

ESC Sample # : L431412-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	9.0	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.9	1.0	mg/kg	6010B	11/14/09	1
Lead	5200	1.2	mg/kg	6010B	11/14/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 33D
Collected By : Tod Whitwer
Collection Date : 11/07/09 13:25

ESC Sample # : L431412-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	1.9	1.0	mg/kg	6010B	11/12/09	1
Lead	190	0.25	mg/kg	6010B	11/12/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	97.5		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 34D
Collected By : Tod Whitwer
Collection Date : 11/07/09 13:40

ESC Sample # : L431412-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	1.9	1.0	mg/kg	6010B	11/12/09	1
Lead	260	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 35D

Collected By : Tod Whitwer
Collection Date : 11/07/09 13:50

ESC Sample # : L431412-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	2.3	1.0	mg/kg	6010B	11/12/09	1
Lead	180	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 36D

Collected By : Tod Whitwer
Collection Date : 11/07/09 14:05

ESC Sample # : L431412-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	2.8	1.0	mg/kg	6010B	11/12/09	1
Lead	140	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 37D
Collected By : Tod Whitwer
Collection Date : 11/07/09 14:20

ESC Sample # : L431412-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	2.2	1.0	mg/kg	6010B	11/12/09	1
Lead	65.	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 83S

Collected By : Tod Whitwer
Collection Date : 11/07/09 14:35

ESC Sample # : L431412-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.6	1.0	mg/kg	6010B	11/13/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/13/09	1
Lead	3600	0.25	mg/kg	6010B	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 40D
Collected By : Tod Whitwer
Collection Date : 11/07/09 14:50

ESC Sample # : L431412-26

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	6.2	1.0	mg/kg	6010B	11/12/09	1
Lead	420	0.25	mg/kg	6010B	11/12/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	89.7		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tod Whitwer
Allwyn Environmental
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November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 41D

Collected By : Tod Whitwer
Collection Date : 11/07/09 15:00

ESC Sample # : L431412-27

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	7.2	1.0	mg/kg	6010B	11/12/09	1
Lead	150	0.25	mg/kg	6010B	11/12/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	79.1		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 84S
Collected By : Tod Whitwer
Collection Date : 11/07/09 15:10

ESC Sample # : L431412-28

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	8.3	1.0	mg/kg	6010B	11/12/09	1
Arsenic	11.	1.0	mg/kg	6010B	11/12/09	1
Lead	7100	1.2	mg/kg	6010B	11/13/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 42D
Collected By : Tod Whitwer
Collection Date : 11/07/09 15:25

ESC Sample # : L431412-29

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/13/09	1
Arsenic	8.9	1.0	mg/kg	6010B	11/13/09	1
Lead	190	0.25	mg/kg	6010B	11/13/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/13/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/13/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/13/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/13/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/13/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/13/09	1
Surrogate						
p-Terphenyl-d14	89.1		% Rec.	8310	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 43D
Collected By : Tod Whitwer
Collection Date : 11/07/09 15:55

ESC Sample # : L431412-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	9.6	1.0	mg/kg	6010B	11/12/09	1
Lead	160	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 17, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : 85S

Collected By : Tod Whitwer
Collection Date : 11/07/09 15:35

ESC Sample # : L431412-31

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/12/09	1
Arsenic	7.5	1.0	mg/kg	6010B	11/12/09	1
Lead	600	0.25	mg/kg	6010B	11/12/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 86S
Collected By : Tod Whitwer
Collection Date : 11/07/09 16:05

ESC Sample # : L431412-32

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/13/09	1
Arsenic	7.6	1.0	mg/kg	6010B	11/13/09	1
Lead	530	0.25	mg/kg	6010B	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 44D
Collected By : Tod Whitwer
Collection Date : 11/07/09 16:15

ESC Sample # : L431412-33

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/13/09	1
Arsenic	9.0	1.0	mg/kg	6010B	11/13/09	1
Lead	56.	0.25	mg/kg	6010B	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment
Sample ID : 87S
Collected By : Tod Whitwer
Collection Date : 11/07/09 16:20

ESC Sample # : L431412-34

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.5	1.0	mg/kg	6010B	11/14/09	1
Lead	620	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 17, 2009

Date Received : November 10, 2009
Description : Nogales Range Assessment

Sample ID : EB1107

Collected By : Tod Whitwer
Collection Date : 11/07/09 16:25

ESC Sample # : L431412-35

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/11/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/11/09	1
Lead	0.024	0.0050	mg/l	200.7	11/11/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/13/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/13/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/13/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/13/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/13/09	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	625	11/13/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/13/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/13/09	1
Chrysene	BDL	0.0010	mg/l	625	11/13/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/13/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/13/09	1
Fluorene	BDL	0.0010	mg/l	625	11/13/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/13/09	1
Naphthalene	BDL	0.010	mg/l	625	11/13/09	1
Phenanthrene	BDL	0.010	mg/l	625	11/13/09	1
Pyrene	BDL	0.0010	mg/l	625	11/13/09	1
Surrogate Recovery						
Nitrobenzene-d5	70.5		% Rec.	625	11/13/09	1
2-Fluorobiphenyl	77.2		% Rec.	625	11/13/09	1
p-Terphenyl-d14	96.9		% Rec.	625	11/13/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L431412-01	WG450101	SAMP	Lead	R996150	B
L431412-02	WG450101	SAMP	Arsenic	R996150	O
	WG450101	SAMP	Lead	R996150	B
L431412-03	WG450101	SAMP	Lead	R996150	B
L431412-04	WG450101	SAMP	Lead	R996150	B
L431412-05	WG450101	SAMP	Lead	R996150	B
L431412-06	WG450101	SAMP	Lead	R996150	B
L431412-07	WG450101	SAMP	Lead	R996150	B
L431412-08	WG450101	SAMP	Lead	R996150	B
L431412-09	WG450101	SAMP	Lead	R996150	B
L431412-10	WG450101	SAMP	Lead	R996150	B
L431412-11	WG450101	SAMP	Lead	R996150	B
L431412-12	WG450101	SAMP	Lead	R996150	B
L431412-13	WG450101	SAMP	Lead	R996150	B
L431412-14	WG450101	SAMP	Lead	R996150	B
L431412-15	WG450101	SAMP	Lead	R996150	B
L431412-16	WG450101	SAMP	Lead	R996150	B
L431412-17	WG450101	SAMP	Lead	R996150	B
L431412-18	WG450101	SAMP	Arsenic	R996150	O
	WG450101	SAMP	Lead	R996150	B
L431412-19	WG450101	SAMP	Antimony	R996150	J6
	WG450101	SAMP	Lead	R996150	V
L431412-22	WG450184	SAMP	Antimony	R993249	J6
	WG450184	SAMP	Lead	R993249	J5
L431412-25	WG450200	SAMP	Antimony	R994193	P1J6
	WG450200	SAMP	Lead	R994193	V
L431412-30	WG450231	SAMP	Antimony	R994275	J6
	WG450231	SAMP	Lead	R994275	J6
L431412-34	WG450318	SAMP	Lead	R995309	B

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
0	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L431837



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Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Monday November 23, 2009

Report Number: L431837

Samples Received: 11/12/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : B-2
Collected By : Todd Whitwer
Collection Date : 11/10/09 12:15

ESC Sample # : L431837-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.020	mg/kg	7471	11/16/09	1
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.9	1.0	mg/kg	6010B	11/14/09	1
Lead	18.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	83.2		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : B-3

Collected By : Todd Whitwer
Collection Date : 11/10/09 12:30

ESC Sample # : L431837-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.035	0.020	mg/kg	7471	11/16/09	1
Antimony	1.4	1.0	mg/kg	6010B	11/14/09	1
Arsenic	7.9	1.0	mg/kg	6010B	11/14/09	1
Lead	23.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	64.5		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 97S
Collected By : Todd Whitwer
Collection Date : 11/10/09 13:20

ESC Sample # : L431837-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.030	0.020	mg/kg	7471	11/16/09	1
Antimony	1.1	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.7	1.0	mg/kg	6010B	11/14/09	1
Lead	130	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 97D
Collected By : Todd Whitwer
Collection Date : 11/10/09 13:25

ESC Sample # : L431837-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.028	0.020	mg/kg	7471	11/16/09	1
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.7	1.0	mg/kg	6010B	11/14/09	1
Lead	60.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 48D

Collected By : Todd Whitwer
Collection Date : 11/10/09 13:40

ESC Sample # : L431837-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.026	0.020	mg/kg	7471	11/16/09	1
Antimony	1.3	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.0	1.0	mg/kg	6010B	11/14/09	1
Lead	290	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	84.3		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : WD-4

Collected By : Todd Whitwer
Collection Date : 11/10/09 13:43

ESC Sample # : L431837-06

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/14/09 0837	MVE	1
Antimony	2.0	0.050	mg/l		6010B	11/15/09 1114	DMM	1
Arsenic	0.055	0.050	mg/l	5.0	6010B	11/15/09 1114	DMM	1
Lead	260	0.25	mg/l	5.0	6010B	11/15/09 1343	DMM	5

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : WD-5

Collected By : Todd Whitwer
Collection Date : 11/10/09 13:45

ESC Sample # : L431837-07

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/14/09 0837	MVE	1
Antimony	0.19	0.050	mg/l		6010B	11/15/09 1117	DMM	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	11/15/09 1117	DMM	1
Lead	8.4	0.050	mg/l	5.0	6010B	11/15/09 1117	DMM	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : WD-6

Collected By : Todd Whitwer
Collection Date : 11/10/09 13:50

ESC Sample # : L431837-08

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/14/09 0837	MVE	1
Antimony	BDL	0.050	mg/l		6010B	11/15/09 1120	DMM	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	11/15/09 1120	DMM	1
Lead	0.85	0.050	mg/l	5.0	6010B	11/15/09 1120	DMM	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 98S
Collected By : Todd Whitwer
Collection Date : 11/10/09 14:10

ESC Sample # : L431837-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	0.033	0.020	mg/kg	7471	11/16/09	1
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.5	1.0	mg/kg	6010B	11/14/09	1
Lead	93.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 98D
Collected By : Todd Whitwer
Collection Date : 11/10/09 14:20

ESC Sample # : L431837-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.5	1.0	mg/kg	6010B	11/14/09	1
Lead	90.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 99S

Collected By : Todd Whitwer
Collection Date : 11/10/09 14:25

ESC Sample # : L431837-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.0	1.0	mg/kg	6010B	11/14/09	1
Lead	100	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 99D
Collected By : Todd Whitwer
Collection Date : 11/10/09 14:30

ESC Sample # : L431837-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/14/09	1
Lead	44.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 49D
Collected By : Todd Whitwer
Collection Date : 11/10/09 14:40

ESC Sample # : L431837-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.3	1.0	mg/kg	6010B	11/14/09	1
Lead	210	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 100S
Collected By : Todd Whitwer
Collection Date : 11/10/09 14:55

ESC Sample # : L431837-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.0	1.0	mg/kg	6010B	11/14/09	1
Lead	61.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 100D
Collected By : Todd Whitwer
Collection Date : 11/10/09 15:00

ESC Sample # : L431837-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	6.8	1.0	mg/kg	6010B	11/14/09	1
Lead	38.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 101S
Collected By : Todd Whitwer
Collection Date : 11/10/09 15:25

ESC Sample # : L431837-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/14/09	1
Lead	71.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 101D

Collected By : Todd Whitwer
Collection Date : 11/10/09 15:30

ESC Sample # : L431837-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.4	1.0	mg/kg	6010B	11/14/09	1
Lead	49.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 50D
Collected By : Todd Whitwer
Collection Date : 11/10/09 15:35

ESC Sample # : L431837-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.5	1.0	mg/kg	6010B	11/14/09	1
Lead	110	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 102S
Collected By : Todd Whitwer
Collection Date : 11/10/09 15:50

ESC Sample # : L431837-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/14/09	1
Lead	220	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 102D
Collected By : Todd Whitwer
Collection Date : 11/10/09 15:55

ESC Sample # : L431837-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.0	1.0	mg/kg	6010B	11/14/09	1
Lead	94.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 51D

Collected By : Todd Whitwer
Collection Date : 11/10/09 16:00

ESC Sample # : L431837-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.7	1.0	mg/kg	6010B	11/14/09	1
Lead	70.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 103S
Collected By : Todd Whitwer
Collection Date : 11/10/09 16:20

ESC Sample # : L431837-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	5.4	1.0	mg/kg	6010B	11/14/09	1
Lead	220	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 103D

Collected By : Todd Whitwer
Collection Date : 11/10/09 16:25

ESC Sample # : L431837-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	7.4	1.0	mg/kg	6010B	11/14/09	1
Lead	150	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 104S

Collected By : Todd Whitwer
Collection Date : 11/10/09 16:40

ESC Sample # : L431837-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.6	1.0	mg/kg	6010B	11/14/09	1
Lead	110	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 104D
Collected By : Todd Whitwer
Collection Date : 11/10/09 16:45

ESC Sample # : L431837-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.0	1.0	mg/kg	6010B	11/14/09	1
Lead	43.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 105S
Collected By : Todd Whitwer
Collection Date : 11/10/09 16:55

ESC Sample # : L431837-26

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/14/09	1
Lead	81.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 105D

Collected By : Todd Whitwer
Collection Date : 11/10/09 17:00

ESC Sample # : L431837-27

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.8	1.0	mg/kg	6010B	11/14/09	1
Lead	60.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 106S
Collected By : Todd Whitwer
Collection Date : 11/10/09 17:05

ESC Sample # : L431837-28

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.5	1.0	mg/kg	6010B	11/14/09	1
Lead	140	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 106D
Collected By : Todd Whitwer
Collection Date : 11/10/09 17:10

ESC Sample # : L431837-29

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.2	1.0	mg/kg	6010B	11/14/09	1
Lead	150	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 107S

Collected By : Todd Whitwer
Collection Date : 11/10/09 17:20

ESC Sample # : L431837-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.8	1.0	mg/kg	6010B	11/14/09	1
Lead	200	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 23, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 107D
Collected By : Todd Whitwer
Collection Date : 11/10/09 17:30

ESC Sample # : L431837-31

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	6.4	1.0	mg/kg	6010B	11/14/09	1
Lead	140	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 23, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : EB1110

Collected By : Todd Whitwer
Collection Date : 11/10/09 17:35

ESC Sample # : L431837-32

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/13/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/13/09	1
Lead	BDL	0.0050	mg/l	200.7	11/13/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/17/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Chrysene	BDL	0.0010	mg/l	625	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Fluorene	BDL	0.0010	mg/l	625	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Naphthalene	BDL	0.0010	mg/l	625	11/17/09	1
Phenanthrene	BDL	0.0010	mg/l	625	11/17/09	1
Pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Surrogate Recovery						
Nitrobenzene-d5	95.5		% Rec.	625	11/17/09	1
2-Fluorobiphenyl	73.7		% Rec.	625	11/17/09	1
p-Terphenyl-d14	78.5		% Rec.	625	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/23/09 11:38 Printed: 11/23/09 11:39

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L431837-01	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431837-02	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431837-05	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431837-17	WG450429	SAMP	Antimony	R995290	P1J6
L431837-32	WG450541	SAMP	Acenaphthylene	R998648	J3
	WG450541	SAMP	Chrysene	R998648	J3
	WG450541	SAMP	Fluorene	R998648	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L431838



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Friday November 20, 2009

Report Number: L431838

Samples Received: 11/12/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 46D

Collected By : Tod Whitwer
Collection Date : 11/09/09 12:55

ESC Sample # : L431838-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.3	1.0	mg/kg	6010B	11/14/09	1
Lead	340	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	84.7		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 47D
Collected By : Tod Whitwer
Collection Date : 11/09/09 13:00

ESC Sample # : L431838-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/14/09	1
Lead	390	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	88.9		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 52D

Collected By : Tod Whitwer
Collection Date : 11/09/09 13:15

ESC Sample # : L431838-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/14/09	1
Lead	110	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	92.3		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 53D

Collected By : Tod Whitwer
Collection Date : 11/09/09 13:25

ESC Sample # : L431838-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/14/09	1
Lead	73.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	86.3		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 88S

Collected By : Tod Whitwer
Collection Date : 11/09/09 13:30

ESC Sample # : L431838-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	9.6	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/14/09	1
Lead	4100	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	0.061	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	0.024	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	0.023	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	0.026	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	66.4		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 88D
Collected By : Tod Whitwer
Collection Date : 11/09/09 13:35

ESC Sample # : L431838-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/14/09	1
Lead	730	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	88.0		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 58D
Collected By : Tod Whitwer
Collection Date : 11/09/09 13:45

ESC Sample # : L431838-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.8	1.0	mg/kg	6010B	11/14/09	1
Lead	88.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	80.0		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 59D
Collected By : Tod Whitwer
Collection Date : 11/09/09 13:55

ESC Sample # : L431838-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.0	1.0	mg/kg	6010B	11/14/09	1
Lead	120	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	70.6		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 11/20/09 10:56 Printed: 11/20/09 10:57

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 89S

Collected By : Tod Whitwer
Collection Date : 11/09/09 14:05

ESC Sample # : L431838-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.8	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.3	1.0	mg/kg	6010B	11/14/09	1
Lead	1200	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	72.6		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 89D
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:10

ESC Sample # : L431838-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.3	1.0	mg/kg	6010B	11/14/09	1
Lead	160	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	65.7		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 62D
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:20

ESC Sample # : L431838-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/14/09	1
Lead	72.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	95.9		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 63D
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:30

ESC Sample # : L431838-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.2	1.0	mg/kg	6010B	11/14/09	1
Lead	57.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/17/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/17/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/17/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/17/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/17/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/17/09	1
Surrogate						
p-Terphenyl-d14	69.4		% Rec.	8310	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 90S
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:35

ESC Sample # : L431838-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.4	1.0	mg/kg	6010B	11/14/09	1
Lead	530	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/19/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/19/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/19/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/19/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/19/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/19/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/19/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/19/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/19/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/19/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/19/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/19/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/19/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/19/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/19/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/19/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/19/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/19/09	1
Surrogate						
p-Terphenyl-d14	75.8		% Rec.	8310	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 90D
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:45

ESC Sample # : L431838-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.7	1.0	mg/kg	6010B	11/14/09	1
Lead	130	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	90.4		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 64D
Collected By : Tod Whitwer
Collection Date : 11/09/09 14:55

ESC Sample # : L431838-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.8	1.0	mg/kg	6010B	11/14/09	1
Lead	52.	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	99.9		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 65D
Collected By : Tod Whitwer
Collection Date : 11/09/09 15:05

ESC Sample # : L431838-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.7	1.0	mg/kg	6010B	11/14/09	1
Lead	40.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 91S

Collected By : Tod Whitwer
Collection Date : 11/09/09 15:30

ESC Sample # : L431838-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.5	1.0	mg/kg	6010B	11/14/09	1
Lead	160	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 66D
Collected By : Tod Whitwer
Collection Date : 11/09/09 15:40

ESC Sample # : L431838-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/14/09	1
Lead	56.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 67D
Collected By : Tod Whitwer
Collection Date : 11/09/09 15:45

ESC Sample # : L431838-19

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/14/09	1
Lead	55.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 92S

Collected By : Tod Whitwer
Collection Date : 11/09/09 15:55

ESC Sample # : L431838-20

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.7	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.5	1.0	mg/kg	6010B	11/14/09	1
Lead	1600	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	0.047	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	0.021	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	0.025	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	106.		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 92D
Collected By : Tod Whitwer
Collection Date : 11/09/09 16:00

ESC Sample # : L431838-21

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.2	1.0	mg/kg	6010B	11/14/09	1
Lead	250	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	97.4		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 60D
Collected By : Tod Whitwer
Collection Date : 11/09/09 16:05

ESC Sample # : L431838-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	3.2	1.0	mg/kg	6010B	11/14/09	1
Lead	63.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 61D
Collected By : Tod Whitwer
Collection Date : 11/09/09 16:30

ESC Sample # : L431838-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	2.7	1.0	mg/kg	6010B	11/14/09	1
Lead	66.	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
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November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 54D

Collected By : Tod Whitwer
Collection Date : 11/09/09 16:50

ESC Sample # : L431838-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	4.0	1.0	mg/kg	6010B	11/14/09	1
Lead	100	0.25	mg/kg	6010B	11/14/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	82.5		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 93S

Collected By : Tod Whitwer
Collection Date : 11/09/09 16:20

ESC Sample # : L431838-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.9	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.5	1.0	mg/kg	6010B	11/14/09	1
Lead	870	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 94S
Collected By : Tod Whitwer
Collection Date : 11/09/09 16:40

ESC Sample # : L431838-26

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/14/09	1
Arsenic	1.1	1.0	mg/kg	6010B	11/14/09	1
Lead	130	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 95S

Collected By : Tod Whitwer
Collection Date : 11/09/09 16:55

ESC Sample # : L431838-27

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.4	1.0	mg/kg	6010B	11/14/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/14/09	1
Lead	590	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 96S

Collected By : Tod Whitwer
Collection Date : 11/09/09 17:25

ESC Sample # : L431838-28

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/14/09	1
Lead	140	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 55D

Collected By : Tod Whitwer
Collection Date : 11/09/09 17:05

ESC Sample # : L431838-29

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/14/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/14/09	1
Lead	130	0.25	mg/kg	6010B	11/14/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment
Sample ID : 56D
Collected By : Tod Whitwer
Collection Date : 11/09/09 17:20

ESC Sample # : L431838-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/15/09	1
Arsenic	2.3	1.0	mg/kg	6010B	11/15/09	1
Lead	74.	0.25	mg/kg	6010B	11/15/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : 57D

Collected By : Tod Whitwer
Collection Date : 11/09/09 17:35

ESC Sample # : L431838-31

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/15/09	1
Arsenic	2.4	1.0	mg/kg	6010B	11/15/09	1
Lead	98.	0.25	mg/kg	6010B	11/15/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 12, 2009
Description : Nogales Range Assessment

Sample ID : EB 1109

Collected By : Tod Whitwer
Collection Date : 11/09/09 17:40

ESC Sample # : L431838-32

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/13/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/13/09	1
Lead	0.012	0.0050	mg/l	200.7	11/13/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/17/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/17/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Chrysene	BDL	0.0010	mg/l	625	11/17/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/17/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/17/09	1
Fluorene	BDL	0.0010	mg/l	625	11/17/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Naphthalene	BDL	0.0010	mg/l	625	11/17/09	1
Phenanthrene	BDL	0.0010	mg/l	625	11/17/09	1
Pyrene	BDL	0.0010	mg/l	625	11/17/09	1
Surrogate Recovery						
Nitrobenzene-d5	76.9		% Rec.	625	11/17/09	1
2-Fluorobiphenyl	67.9		% Rec.	625	11/17/09	1
p-Terphenyl-d14	79.1		% Rec.	625	11/17/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L431838-01	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-02	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-03	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-04	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-05	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
	WG450431	SAMP	Antimony	R995268	J6J3
	WG450431	SAMP	Arsenic	R995268	J6P1
	WG450431	SAMP	Lead	R995268	VJ3
L431838-06	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-07	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-08	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-09	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-10	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-11	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-12	WG450528	SAMP	1-Methylnaphthalene	R1000349	J3
L431838-24	WG450432	SAMP	Antimony	R995270	J6
	WG450432	SAMP	Arsenic	R995270	P1J6
	WG450432	SAMP	Lead	R995270	J3J6
L431838-32	WG450541	SAMP	Acenaphthylene	R998648	J3
	WG450541	SAMP	Chrysene	R998648	J3
	WG450541	SAMP	Fluorene	R998648	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L432316



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Friday November 20, 2009

Report Number: L432316

Samples Received: 11/14/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : B-5A
Collected By : Tod Whitwer
Collection Date : 11/11/09 13:00

ESC Sample # : L432316-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	3.3	1.0	mg/kg	6010B	11/18/09	1
Lead	22.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : B-4
Collected By : Tod Whitwer
Collection Date : 11/11/09 13:05

ESC Sample # : L432316-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	2.2	1.0	mg/kg	6010B	11/18/09	1
Lead	40.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 25D
Collected By : Tod Whitwer
Collection Date : 11/11/09 13:08

ESC Sample # : L432316-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.5	1.0	mg/kg	6010B	11/18/09	1
Arsenic	2.1	1.0	mg/kg	6010B	11/18/09	1
Lead	360	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 26D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:10

ESC Sample # : L432316-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	340	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 27D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:15

ESC Sample # : L432316-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.8	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	230	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

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Allwyn Environmental
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Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 17D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:25

ESC Sample # : L432316-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/18/09	1
Arsenic	2.1	1.0	mg/kg	6010B	11/18/09	1
Lead	190	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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November 20, 2009

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 18D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:30

ESC Sample # : L432316-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.6	1.0	mg/kg	6010B	11/18/09	1
Lead	260	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Allwyn Environmental
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Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 19D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:35

ESC Sample # : L432316-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	160	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 83D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:40

ESC Sample # : L432316-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	5.6	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	3800	0.50	mg/kg	6010B	11/19/09	2

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 10D
Collected By : Tod Whitwer
Collection Date : 11/11/09 13:50

ESC Sample # : L432316-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	310	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 11D

Collected By : Tod Whitwer
Collection Date : 11/11/09 13:55

ESC Sample # : L432316-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.7	1.0	mg/kg	6010B	11/18/09	1
Lead	410	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 84D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:15

ESC Sample # : L432316-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	26.	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.2	1.0	mg/kg	6010B	11/18/09	1
Lead	16000	2.5	mg/kg	6010B	11/18/09	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 5D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:10

ESC Sample # : L432316-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	4.2	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	4300	1.2	mg/kg	6010B	11/18/09	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 6D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:25

ESC Sample # : L432316-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.4	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	530	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 85D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:30

ESC Sample # : L432316-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.9	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.2	1.0	mg/kg	6010B	11/18/09	1
Lead	2100	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 1D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:40

ESC Sample # : L432316-16

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.8	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	820	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 86D

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:45

ESC Sample # : L432316-17

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	710	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 87D
Collected By : Tod Whitwer
Collection Date : 11/11/09 00:00

ESC Sample # : L432316-18

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	640	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : WD-7

Collected By : Tod Whitwer
Collection Date : 11/11/09 14:58

ESC Sample # : L432316-19

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/18/09 0730	MVE	1
Antimony	1.8	0.050	mg/l		6010B	11/18/09 2107	ALT	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	11/18/09 2107	ALT	1
Lead	210	0.25	mg/l	5.0	6010B	11/18/09 2301	ALT	5

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : WD-8

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:00

ESC Sample # : L432316-20

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/18/09 0730	MVE	1
Antimony	0.39	0.050	mg/l		6010B	11/18/09 2110	ALT	1
Arsenic	0.10	0.050	mg/l	5.0	6010B	11/18/09 2110	ALT	1
Lead	30.	0.050	mg/l	5.0	6010B	11/18/09 2110	ALT	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : WD-9

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:05

ESC Sample # : L432316-21

Site ID :

Project : 010-025

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP Extraction	-				1311	11/18/09 0730	MVE	1
Antimony	0.10	0.050	mg/l		6010B	11/18/09 2114	ALT	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	11/18/09 2114	ALT	1
Lead	1.9	0.050	mg/l	5.0	6010B	11/18/09 2114	ALT	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : WD-9

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:05

ESC Sample # : L432316-22

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	6.5	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	1600	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 210A

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:15

ESC Sample # : L432316-23

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	4.9	1.0	mg/kg	6010B	11/18/09	1
Arsenic	2.5	1.0	mg/kg	6010B	11/18/09	1
Lead	810	0.25	mg/kg	6010B	11/18/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	0.059	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	0.023	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	98.5		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 210B
Collected By : Tod Whitwer
Collection Date : 11/11/09 15:15

ESC Sample # : L432316-24

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	3.9	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.6	1.0	mg/kg	6010B	11/18/09	1
Lead	820	0.25	mg/kg	6010B	11/18/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthene	BDL	0.020	mg/kg	8310	11/18/09	1
Acenaphthylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(a)pyrene	0.071	0.020	mg/kg	8310	11/18/09	1
Benzo(b)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.020	mg/kg	8310	11/18/09	1
Benzo(k)fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Chrysene	BDL	0.020	mg/kg	8310	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluoranthene	BDL	0.020	mg/kg	8310	11/18/09	1
Fluorene	BDL	0.020	mg/kg	8310	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.020	mg/kg	8310	11/18/09	1
1-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Naphthalene	BDL	0.020	mg/kg	8310	11/18/09	1
Phenanthrene	BDL	0.020	mg/kg	8310	11/18/09	1
Pyrene	0.021	0.020	mg/kg	8310	11/18/09	1
Surrogate						
p-Terphenyl-d14	88.2		% Rec.	8310	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 108S

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:40

ESC Sample # : L432316-25

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	96.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 109S
Collected By : Tod Whitwer
Collection Date : 11/11/09 15:45

ESC Sample # : L432316-26

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.0	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	76.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

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Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 110S
Collected By : Tod Whitwer
Collection Date : 11/11/09 15:50

ESC Sample # : L432316-27

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	71.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 111S

Collected By : Tod Whitwer
Collection Date : 11/11/09 15:55

ESC Sample # : L432316-28

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.0	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.0	1.0	mg/kg	6010B	11/18/09	1
Lead	87.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 112S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:10

ESC Sample # : L432316-29

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	44.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 113S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:20

ESC Sample # : L432316-30

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	79.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 114S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:30

ESC Sample # : L432316-31

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	54.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 115S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:40

ESC Sample # : L432316-32

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	46.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 116S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:50

ESC Sample # : L432316-33

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/18/09	1
Lead	33.	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 117S

Collected By : Tod Whitwer
Collection Date : 11/11/09 16:55

ESC Sample # : L432316-34

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/18/09	1
Arsenic	1.1	1.0	mg/kg	6010B	11/18/09	1
Lead	100	0.25	mg/kg	6010B	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 118S
Collected By : Tod Whitwer
Collection Date : 11/11/09 17:20

ESC Sample # : L432316-35

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/20/09	1
Arsenic	5.3	1.0	mg/kg	6010B	11/20/09	1
Lead	130	0.25	mg/kg	6010B	11/20/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 119S
Collected By : Tod Whitwer
Collection Date : 11/11/09 17:10

ESC Sample # : L432316-36

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/20/09	1
Arsenic	3.7	1.0	mg/kg	6010B	11/20/09	1
Lead	36.	0.25	mg/kg	6010B	11/20/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 120S

Collected By : Tod Whitwer
Collection Date : 11/11/09 17:30

ESC Sample # : L432316-37

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/20/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/20/09	1
Lead	34.	0.25	mg/kg	6010B	11/20/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 121S

Collected By : Tod Whitwer
Collection Date : 11/11/09 17:40

ESC Sample # : L432316-38

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/20/09	1
Arsenic	3.9	1.0	mg/kg	6010B	11/20/09	1
Lead	99.	0.25	mg/kg	6010B	11/20/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 20, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : B-5B

Collected By : Tod Whitwer
Collection Date : 11/11/09 17:35

ESC Sample # : L432316-39

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.10	mg/kg	6010B	11/20/09	.1
Arsenic	0.62	0.10	mg/kg	6010B	11/20/09	.1
Lead	2.2	0.025	mg/kg	6010B	11/20/09	.1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 20, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : EB 1111

Collected By : Tod Whitwer
Collection Date : 11/11/09 17:45

ESC Sample # : L432316-40

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/16/09	1
Arsenic	0.023	0.020	mg/l	200.7	11/16/09	1
Lead	0.0067	0.0050	mg/l	200.7	11/16/09	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	625	11/18/09	1
Acenaphthene	BDL	0.0010	mg/l	625	11/18/09	1
Acenaphthylene	BDL	0.0010	mg/l	625	11/18/09	1
Benzo(a)anthracene	BDL	0.0010	mg/l	625	11/18/09	1
Benzo(a)pyrene	BDL	0.0010	mg/l	625	11/18/09	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	625	11/18/09	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	625	11/18/09	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	625	11/18/09	1
Chrysene	BDL	0.0010	mg/l	625	11/18/09	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	625	11/18/09	1
Fluoranthene	BDL	0.0010	mg/l	625	11/18/09	1
Fluorene	BDL	0.0010	mg/l	625	11/18/09	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	625	11/18/09	1
Naphthalene	BDL	0.0010	mg/l	625	11/18/09	1
Phenanthrene	BDL	0.0010	mg/l	625	11/18/09	1
Pyrene	BDL	0.0010	mg/l	625	11/18/09	1
Surrogate Recovery						
Nitrobenzene-d5	62.4		% Rec.	625	11/18/09	1
2-Fluorobiphenyl	67.4		% Rec.	625	11/18/09	1
p-Terphenyl-d14	82.7		% Rec.	625	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L432316-03	WG451131	SAMP	Antimony	R1001128	J6
L432316-13	WG451132	SAMP	Antimony	R1001129	J6
	WG451132	SAMP	Lead	R1001129	VJ3
L432316-40	WG450541	SAMP	Acenaphthylene	R998648	J3
	WG450541	SAMP	Chrysene	R998648	J3
	WG450541	SAMP	Fluorene	R998648	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

TSR Signing Reports: 288
R5 - Desired TAT

ESC LAB SCIENCES

ANALYTICAL LABORATORY REPORT NO.
L432362



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Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.

Glendale, AZ 85304

Report Summary

Sunday November 22, 2009

Report Number: L432362

Samples Received: 11/14/09

Client Project: 010-025

Description: Nogales Range Assessment

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne R. Richards
Daphne Richards, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided
in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 122D

Collected By : Tod Whitwer
Collection Date : 11/12/09 13:35

ESC Sample # : L432362-01

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.7	1.0	mg/kg	6010B	11/19/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/19/09	1
Lead	97.	0.25	mg/kg	6010B	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 22, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 123D
Collected By : Tod Whitwer
Collection Date : 11/12/09 13:50

ESC Sample # : L432362-02

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.5	1.0	mg/kg	6010B	11/19/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/19/09	1
Lead	60.	0.25	mg/kg	6010B	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 124D
Collected By : Tod Whitwer
Collection Date : 11/12/09 14:05

ESC Sample # : L432362-03

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.1	1.0	mg/kg	6010B	11/19/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/19/09	1
Lead	56.	0.25	mg/kg	6010B	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 125D

Collected By : Tod Whitwer
Collection Date : 11/12/09 14:15

ESC Sample # : L432362-04

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.3	1.0	mg/kg	6010B	11/19/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/19/09	1
Lead	110	0.25	mg/kg	6010B	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 126D

Collected By : Tod Whitwer
Collection Date : 11/12/09 14:25

ESC Sample # : L432362-05

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	1.2	1.0	mg/kg	6010B	11/19/09	1
Arsenic	BDL	1.0	mg/kg	6010B	11/19/09	1
Lead	110	0.25	mg/kg	6010B	11/19/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 22, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 127D

Collected By : Tod Whitwer
Collection Date : 11/12/09 14:35

ESC Sample # : L432362-06

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	5.9	1.0	mg/kg	6010B	11/21/09	1
Lead	71.	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 128D
Collected By : Tod Whitwer
Collection Date : 11/12/09 14:45

ESC Sample # : L432362-07

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	4.9	1.0	mg/kg	6010B	11/21/09	1
Lead	51.	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 129D

Collected By : Tod Whitwer
Collection Date : 11/12/09 14:55

ESC Sample # : L432362-08

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	4.4	1.0	mg/kg	6010B	11/21/09	1
Lead	94.	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 130D

Collected By : Tod Whitwer
Collection Date : 11/12/09 15:05

ESC Sample # : L432362-09

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	5.5	1.0	mg/kg	6010B	11/21/09	1
Lead	180	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 131S

Collected By : Tod Whitwer
Collection Date : 11/12/09 15:20

ESC Sample # : L432362-10

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	7.7	1.0	mg/kg	6010B	11/21/09	1
Lead	250	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 132S

Collected By : Tod Whitwer
Collection Date : 11/12/09 15:25

ESC Sample # : L432362-11

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	6.0	1.0	mg/kg	6010B	11/21/09	1
Lead	120	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 22, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 133S
Collected By : Tod Whitwer
Collection Date : 11/12/09 15:40

ESC Sample # : L432362-12

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	5.0	1.0	mg/kg	6010B	11/21/09	1
Lead	200	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment

Sample ID : 134S

Collected By : Tod Whitwer
Collection Date : 11/12/09 15:45

ESC Sample # : L432362-13

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	7.7	1.0	mg/kg	6010B	11/21/09	1
Lead	140	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

November 22, 2009

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : 135S
Collected By : Tod Whitwer
Collection Date : 11/12/09 15:55

ESC Sample # : L432362-14

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	1.0	mg/kg	6010B	11/21/09	1
Arsenic	7.0	1.0	mg/kg	6010B	11/21/09	1
Lead	130	0.25	mg/kg	6010B	11/21/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Tod Whitwer
Allwyn Environmental
5723 W. Larkspur Dr.
Glendale, AZ 85304

November 22, 2009

Date Received : November 14, 2009
Description : Nogales Range Assessment
Sample ID : EB1112
Collected By : Tod Whitwer
Collection Date : 11/12/09 16:00

ESC Sample # : L432362-15

Site ID :

Project # : 010-025

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	BDL	0.020	mg/l	200.7	11/18/09	1
Arsenic	BDL	0.020	mg/l	200.7	11/18/09	1
Lead	0.0051	0.0050	mg/l	200.7	11/18/09	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L432362-05	WG451214	SAMP	Antimony	R1003108	J6
L432362-06	WG451215	SAMP	Antimony	R1004610	J6

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
11/22/09 at 08:35:10

TSR Signing Reports: 288
R5 - Desired TAT

Sample: L432362-01 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-02 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-03 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-04 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-05 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-06 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-07 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-08 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-09 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-10 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-11 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-12 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-13 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-14 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34
Sample: L432362-15 Account: ALLWYNGAZ Received: 11/14/09 09:00 Due Date: 11/20/09 00:00 RPT Date: 11/22/09 08:34

APPENDIX B

DATA VERIFICATION

APPENDIX B DATA VERIFICATION

B.1 SUMMARY OF DATA VERIFICATION

Allwyn Environmental performed data verification of environmental samples collected for this project. The verification process identified a small percentage (3.0%) of qualified data. This data verification/validation report was prepared in accordance with methods described in:

- *United States Environmental Protection Agency (USEPA) Contract Laboratory Program National Functional Guidelines for Organic Data Review*, OSWER 9240.1-05A-P, EPA 540/R-99/008, Office of Emergency and Remedial Response, USEPA, Washington, DC, October 1999.
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, OSWER 9240.1-45, EPA 540-R-04-004, Office of Superfund Remediation and Technology Innovation, USEPA, Washington, DC, October 2004.
- *Guidance for Evaluating Performance-Based Chemical Data*, EM200-1-10, United States Army Corps of Engineers (USACE), Washington, DC, June 30, 2005.
- The information contained in this report includes a discussion of information requested ADEQ *Checklist 1 – Laboratory Report Goal: Data Verification*, and *Checklist 2 – Laboratory Report Goal: Data Validation*. These checklists are available on Arizona Department of Environmental Quality's (ADEQ's) website at: <http://www.azdeq.gov/function/business/data.html>.

Additionally, a discussion of information requested on the ADEQ Superfund Program Section *Data Review Checklist* and *Data Verification Checklist* is incorporated. Data Quality Indicators (DQIs) from the Quality Assurance Project Plan (QAPP) were used in conjunction with DQIs specified by analytical method, the above guidance and A.A.C. Title 9, Chapter 14, and applicable and/or appropriate.

Due to the number of laboratory reports and number of analytical methods employed, this report documents the collective product, rather than addressing each analytical class and each laboratory report separately to improve report usability and reduce redundancy.

B.2 CHAINS-OF-CUSTODY (COCs)

COCs were present for nine of nine sample sets sent to the analytical laboratory. These sample are:

- L429917 (15 samples)
- L430069 (43 samples)
- L430637 (23 sample)
- L431076 (30 samples)
- L431412 (35 samples)
- L431837 (32 samples)

- L431838 (32 samples)
- L432316 (40 samples)
- L432362 (15 samples)

B.2.1 Documentation

Table B-1 summarizes the verification of COCs. Details are discussed below.

Signatures

All COCs were signed by the sampler (in the field designated by *Collected by (signature)*). All COCs were signed by the laboratory. In cases where intermediaries were used prior to shipping, the intermediary signed both to receive the samples and to relinquish the samples, with the following exceptions:

- L429917, L430069, L432316, and L432362 – Samples relinquished by Allwyn to local ESC personnel. ESC does not sign to relinquish samples to the ESC laboratory.
- Custody seals are noted to be intact for all samples (noted by “COCSI”, “custody seal intact” or a checkmark next to “Y” in the *COC Seals Intact _ Y _ N* field of the *Condition* section of the COC, except for L430637. These COC sheets do not note the presence or condition of a custody seal.

Sample Set Condition

The condition of all samples received is noted as “OK” in the *Condition* field of the COC. On the COC for L431076, the sample non-conformance sheet indicated that the client requested TCLP SV8310. The analytical laboratory contacted Allwyn Environmental and the Synthetic Precipitation Leaching Procedure (SPLP) Extraction Method (EPA Method 1312) was performed instead. In addition, an analytical method was not indicated for Sample No. EB1105. The analytical laboratory contacted Allwyn Environmental and EPA Method 625 was performed.

Pagination

An inspection of pagination of COCs revealed all COCs to be present. However, several omissions in documentation were noted. The *Page _ of _* field on the COCs for L431076 was not completed. The same field on COC for L343875 was not completed.

8.2.2 Correct Analytical Methods

The analytical methods requested on the COCs are in accordance with the Work Plan and are appropriate for the analytes and matrices of interest with the exception of the stated method for the hazardous waste analysis for polynuclear aromatic hydrocarbons, which should be SCLP (EPA Method 1312) for solid samples, not TCLP (EPA Method 1311), as per COCs and the QAPP. Note: not all the COCs requests analyses by method number, using the generic terms volatile organic compounds (VOCs), etc.

B.2.3 Samples Collected

The estimated number of soil samples listed in the Sampling and Analysis Plan (SAP) and the actual number of samples collected are listed in the following table:

Sample Type	SAP Proposed Samples		Actual Samples Collected	
	Lead, Arsenic, Antimony	PAHs	Lead, Arsenic, Antimony	PAHs
Surface Soil Samples	95	40	135	31
Dry Wash Samples	10	10	16	12
Duplicate Samples	12	14	1	1
Subsurface Samples	25	10	81	32
Background Samples	6	6	5	2
Contingency Samples	15	7	N/A	N/A
TOTAL	163	87	238	79

B.2.4 Containers and Preservation

Improper containers or preservation were not noted for any of the samples submitted to the laboratory. Had improper conditions been present, it would have been appropriate to note them on the sample non-conformance form and case narrative. The only field on the COC addressing preservation was a field labeled *Packed on Ice N_Y_*, or *Immediately Packed on Ice N_Y_*. This field was not completed on page 1 of the COC for L431412 and pages 1, 2, 3, and 4 of the COC for L432816.

B.2.5 Trip Blanks

Trip blanks were not collected for this project.

B.2.6 Temperature

Temperatures noted on the COCs ranged from 2.3° C to 4.0° C, all within the allowable range of 2° C to 6° C.

B.2.7 Laboratory/Client Sample Identification

The COCs clearly identify the unique laboratory identification number assigned to client samples with the corresponding client sample identification.

B.2.8 Internal Tracking Documents (Sample Non-Conformance Form)

One sample non-conformance form accompanied the laboratory reports. The report L431076 resulted from the analytical method not indicated for one sample (75D), one sample for which SV8310 was requested, and one sample for which the analytical method not being indicated for EB1105.

B.3 ANALYTICAL LABORATORY REPORTS

The initial analytical laboratory reports were submitted to Allwyn Environmental with Level II+ documentation.

B.3.1 Client/Lab Sample Identification

The analytical laboratory reports clearly identify the Lab Sample ID and the corresponding Client ID for all samples in summary tables in each analytical laboratory report. It was noted that the laboratory sometimes did not use the sample identifier provided by the client on the COCs. In laboratory report L430069, samples on the COC that were given a client ID of 36S through 55S. The analytical laboratory incorrectly reports the sample number as EB36S through EB55S.

B.3.2 Report Completeness

All report pages are labeled with a page number in the format *Page n of N*, where n is the page number and N is the total number of pages in the report. Allwyn Environmental verified that the correct number of pages is present for each report. Some reports also include a similar numbering system for individual sections within the reports. All reports are provided on laboratory letterhead.

B.3.3 Method Identification and Utilization

The method used for each analysis is clearly identified on each laboratory data report sheet for the environmental samples. In addition, the particular instrument and analyst are also identified.

B.3.4 Quality Control

A total of 78 qualifiers were applied to 259 samples collected (out of 2,583 sample results). Therefore, approximately 3.0% of the sample results were qualified. Table B-1 lists all qualified sample results and summarizes the qualifications by qualifier and compound. This section discusses verification of the Quality Control of the analysis and includes a summary of qualifiers applied to analytical results.