

# PHASE II ENVIRONMENTAL SITE ASSESSMENT NORTHEAST CORNER OF CLEVELAND AVENUE AND WASHINGTON AVENUE, (BETWEEN CLEVELAND AVENUE, WASHINGTON AVENUE, PIERCE STREET AND I-80) ALBANY, CALIFORNIA

### **PREPARED FOR:**

Ms. Judith R. Lieberman City of Albany 1000 San Pablo Avenue Albany, California 94706

#### **PREPARED BY:**

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> January 11, 2011 Project No. 401678002

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January 11, 2011 Project No. 401678002

Ms. Judith R. Lieberman Assistant City Manager 1000 San Pablo Avenue City of Albany Albany, California 94706

Subject: Phase II Environmental Site Assessment Report Northeast corner of Cleveland Avenue and Washington Avenue, (Between Cleveland Avenue, Washington Avenue, Pierce Street, and I-80). Albany, California

Dear Ms. Lieberman:

In accordance with the Scope of Services described in our Proposal dated November 22, 2010, Ninyo & Moore has performed a Phase II Environmental Site Assessment for the property located at the northeast corner of Cleveland Ave. and Washington Ave. (between Cleveland Ave, Washington Ave, Pierce St, and I-80).

The attached report presents our findings, conclusions, and recommendations regarding the environmental conditions at the site.

We appreciate the opportunity to be of service to you on this project.

Sincerely, NINYO & MOORE

Monami Chahravarti

Monami Chakravarti Senior Staff Geologist

MOC/KML/csj

Distribution: (1) Addressee (hard copy)



Kris M. Larson, P.G. 8059 Principal Environmental Geologist

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#### 1. INTRODUCTION

On behalf of the City of Albany (City), Ninyo & Moore has performed a Phase II Environmental Site Assessment (ESA) for the property located at northeast corner of Washington Avenue and Cleveland Avenue (between Cleveland Avenue, Washington Avenue, Pierce Street and I-80) located in Albany, California (Figure 1). The Phase II ESA was performed in general accordance with the proposed methodology presented in Ninyo & Moore's proposal P-81595B, dated November 22, 2010.

### 1.1. Site Description and Background

The project site is located at the northeast corner of Washington Avenue and Cleveland Avenue (between Cleveland Ave, Washington Ave, Pierce St and I-80) located in Albany, California (Figure 1). The site location is presented on **Figure 1**.

The site is triangular shaped and consists of approximately 4.45 acres of land, which is currently vacant. The entire site area is mostly grassy. The site is bordered by the Albany Hill Park in the northeast, by residential areas in the south and south east, residential areas in the east and highway I-80 on the west. The site vicinity is presented on **Figure 2**.

### **1.2.** Previous Environmental Investigations

A Phase I ESA, dated November 23, 2010, was prepared for the site by Ninyo and Moore, on behalf of the City. The Phase I ESA identified the following Recognized Environmental Conditions (RECs):

- The site has historically been located adjacent to a major freeway and may potentially be impacted by aerially deposited lead (ADL) resulting from automobile emissions.
- Based on a previous investigation conducted in 2001 by Geocon (Geocon, 2001) for the California Department of Transportation (Caltrans), potential constituents-of-concern (COCs) were found in soil samples taken between surface and 20 feet below ground surface (bgs). Metals (arsenic, nickel, chromium and lead) were detected above background concentrations and/or regulatory screening guidelines in several borings. Phenol was also detected in eight samples; however other Semi Volatile Organic Compounds (SVOCs) could not be correctly evaluated because of high laboratory reporting limits. Total Petroleum Hydrocarbons as diesel (TPHd) and Total Petroleum Hydrocarbons as motor-oil

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(TPHmo) were also detected in almost all soil samples. Most of the metal, TPH, and phenol detections were from samples collected in the western and central portion of the site. Based on the sample locations and the COCs detected, impacts to site soils potentially originated from several sources including ADL, runoff from the adjacent freeway, and/or building materials, such as treated lumber.

The City contracted with Ninyo & Moore to perform a Phase II ESA for the property in November, 2010.

#### 1.3. Purpose

The purpose of this Phase II ESA is to assess the RECs identified in the Phase I ESA. This report documents the field methods used to collect subsurface analytical data, the results of the field activities and analytical testing, and Ninyo & Moore's conclusions.

#### **1.4.** Site Topography

Based on a figure from a previous report for Caltrans (Geocon, January 2001), the site elevation is between 6 feet to 14.6 feet above mean sea level (msl). The topographic gradient of the site is from east to the west towards the San Francisco Bay.

#### 1.5. Site Geology and Hydrogeology

Soil encountered during the field activities of this investigation generally consisted of fill materials and construction debris between 7 and 10 feet below ground surface (bgs) in every boring with the exception of the southeastern section of the site. Additional site litholigic characteristics are described in Section 2.2.1 below. Previous consultants reported clayey sand and clayey gravel underlain by well-cemented fine sand, clayey sand, and silty clay between the surface and 20 feet bgs.

According to the Phase I ESA, the site groundwater likely follows the topographic gradient, which is towards west-southwest.

#### 2. SUBSURFACE ACTIVITIES

Ninyo & Moore conducted pre-field activities and investigative field activities. Descriptions of our recent activities are presented below.

### 2.1. Pre-field Preparations

#### 2.1.1. Permits

Ninyo & Moore obtained a soil boring permit from the Alameda County Public Works Agency for the ten soil borings (**Appendix A**).

### 2.1.2. Private Utility Location Survey

In order to minimize the chance of damaging a subsurface utility, Ninyo & Moore procured the services of Precision Locating, LLC (Precision) of Brentwood, California. On December 17, 2010, Precision performed a utility location site visit to verify that the proposed locations of the soil borings were not in the vicinity of any utilities.

In addition to the private locating service, the City provided as-built plans for on and off site subsurface utilities.

### 2.2. Field Activities

On December 20, Ninyo & Moore conducted field activities that included the advancement of 10 borings (NMB-1 through NMB-10, Figure 3) for the collection of soil samples to confirm soil sample results and fill data gaps from the 2001 investigation.

Samples were collected at locations NMB-1, NMB-5 and NMB-6 to confirm results from the 2001 sampling event where elevated concentrations of TPHd and TPHmo, and metals were reported on site. Soil samples were collected from soil boring locations NMB-2, NMB-3, NMB-4 and NMB-7, located adjacent to a former I-80 off-ramp, to evaluate the potential of ADL and petroleum hydrocarbon compounds impacting soils. The final three borings (NMB-8, NMB-9 and NMB-10) were located in the northern section of the site, adjacent to highway I-80, also in an area where potential ADL and petroleum hydrocarbon impacts to soil



may have occurred. Samples were not collected in the northern section of the site during the 2001 investigation. A description of field activities performed by Ninyo and Moore follows.

#### 2.2.1. Soil Boring Advancement

Soil borings were advanced to 10 feet bgs using a direct push drill rig in every boring with the exception of NMB-1, due to refusal at seven feet bgs. Each boring was continuously cored and the soil samples were collected in acetate liners. The soil samples were observed for lithologic characteristics, and field screened for organic vapors using a photoionization detector (PID) meter. Lithologic characteristics of the soil included fill material between the surface and 10 feet bgs in every boring with the exception of NMB-1, where refusal due to construction debris was encountered at 7 feet bgs, and NMB-5, where alluvial material was encountered at 5 feet bgs. The fill material consisted of silty and sandy clays with gravels, silty sand, and concrete debris. Alluvial material encountered at boring NMB-5 included silty clay. No physical signs of impacts such as staining, odors, or PID readings were observed in any of the borings advanced on site. Boring logs describing lithologic and physical characteristics are presented in **Appendix B**.

### 2.2.2. Soil Sample Collection Methods

Soil samples were collected directly from the acetate liners from 0.5, 1.0, 1.5, 2.5 and 5.0 feet bgs, and capped and sealed with teflon tape. The samples were labeled, placed in individual zip-lock type plastic bags and stored in a cooler on ice under chain-of-custody. The samples were transported under chain-of-custody to the laboratory, Advanced Technology Laboratories (ATL), a state certified analytical laboratory located in Signal Hill, California.

### 2.2.2.1. Soil Sample Analysis

Select soil samples were laboratory analyzed for the following analytes:

• CAM 17 Metals using EPA Method 6010B except for Mercury which was analyzed by EPA Method 7471A.

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- TPHd and TPHmo oil using EPA Method 8015B; along with Silica Gel Clean-up.
- SVOCs using EPA Method 8270C.

#### 2.3. Decontamination Procedures

All equipment that came into contact with potentially contaminated soil or water was decontaminated consistently to assure the quality of samples collected. Decontamination occurred prior to and after each use of a piece of equipment. All drilling and sampling devices used were decontaminated using a steam cleaner or a three bucket wash consisting of a rinse and scrub in tap water, rinse and scrub in an appropriate non-phosphate based detergent solution, and final rinse in distilled water. Disposable equipment intended for one-time use was not decontaminated. Nitrile gloves were changed between each sample location to minimize the likelihood of cross contamination.

#### 2.4. Investigation Derived Waste Disposal

Soil cuttings and decontamination fluids generated from field activities were placed into one properly labeled 55-gallon drum and temporarily stored on-site pending laboratory analysis. The 55-gallon drum was removed from the site by Filter Recycling of Colton, California on January 7, 2011. The waste pickup manifest is included in **Appendix C**.

#### 3. ANALYTICAL RESULTS

Summaries of the Soil Sample Analytical Results are presented in **Tables 1** and **2**. Copies of the laboratory analytical reports are included in **Appendix D**.

The detected analyte concentrations were compared to the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential land use (Table K-1) (California RWQCB, May 2008), and Oakland Survey of Background Metal Concentration Study (Survey). A copy of the Survey is included in **Appendix E**.

### 3.1. Total Metals

Soil samples collected from 0.5 feet bgs from every boring, and samples collected at 5 feet bgs from boreholes NMB-2, NMB-3 and NMB-5, were analyzed for CAM 17 Metals. Other samples collected were placed on hold at the lab pending analysis. Metal concentrations, except for arsenic and vanadium, were below the ESLs. Additionally, ESLs are not listed for total chromium.

Arsenic concentrations were below the background concentrations as defined in the Oakland Survey, and chromium concentrations were also below the Survey background concentration of between 99.6 and 142.2 mg/kg. The sample collected from the 0.5 foot bgs sample from boring NMB-3 (140 mg/kg) was close to the high range of background concentrations, and elevated relative to the next highest concentration of chromium (85 mg/kg), detected at NMB-6 at 0.5 feet bgs. The highest concentration of vanadium was reported at 44 mg/kg at the 0.5-foot sample from NMB-3, which is within the background range 10 to 300 mg/kg found in Northern California according to the Shacklette and Boerngen study conducted in 1984 (Shacklette and Boerngen, 1984).

Although lead was reported below its ESL, the sample collected from NMB-1 at 0.5 feet bgs was reported at 73 mg/kg, which is 10 times greater than the Soluble Threshold limit Concentration (STLC) of 50 mg/kg. STLCs are used to evaluate solubility characteristics for disposal purposes. Chromium and nickel were also reported at concentrations greater than 10 times their STLC. Chromium was reported exceeding the STLC rule in 0.5 ft bgs samples from borings NMB-1, NMB-3, NMB-4, and NMB-6, and nickel was reported exceeding the STLC rule in 0.5 ft bgs sample collected from NMB-3.

## **3.2.** TPH as diesel and motor oil

Samples collected from 0.5 feet bgs and 5 feet bgs were analyzed for TPHd and TPH mo. All the other samples collected from 1.0, 1.5 and 2.5 feet were placed on hold. Both TPHd and TPHmo were below the ESLs, therefore the hold samples were not analyzed.

#### 3.3. Semi Volatile Organic Compounds

Samples collected from 0.5 feet and 5 feet bgs were analyzed for SVOCs. Samples collected from other depths were put on hold. The soil sample collected from boring B-6 at 5-foot depth exceeded the ESLs for several SVOC compounds including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorenthene, benzo(k)fluoranthene, and dibenz(a,h)anthracene. The laboratory reporting limit was elevated in the sample collected from 5 feet bgs at NMB-4 due to dilution, resulting in reporting limits exceeding the ESLs for benzo(a)pyrene, and dibenz(a,h)anthracene. According to ATL, the sample was diluted to avoid contaminating the laboratory instrument because of a dark and viscous extract from the sample. All other samples analyzed were below the ESLs, therefore, the hold samples were not analyzed.

#### 4. LABORATORY QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

The laboratory analyses followed the approved methods. Laboratory QA/QC samples included method blanks, laboratory control samples (LCS), matrix spikes (MS), and matrix spike duplicates (MSD). The percentage recoveries were within the specific acceptance limits for these types of samples, with one exception. In sample NMB-3-0.5, for the EPA Method 6010B analysis, the MS and MSD were reported outside of the recovery criteria; however, the analytical batch was validated by the LCS, therefore the relevant QA/QC results are satisfactory and acceptable.

For EPA Method 8270C analysis, the surrogate was diluted out in samples NMB-4-5.0 and NMB-6-5.0. Dilution was necessary in samples NMB-4-5.0 and NMB-7-0.5 due to sample matrix. Overall, the presented data are reliable and useable for project decision making.

#### 5. FINDINGS AND CONCLUSION

Ninyo and Moore conducted this Phase II ESA to confirm previous sampling data, and fill data gaps from an investigation conducted in 2001. 10 soil borings were installed to up to 10 feet bgs during this sampling event, with the exception of boring NMB-1, where refusal was encountered at 7 feet bgs due to construction debris. Construction debris was also observed in several other borings below 5 feet bgs.



Select soil samples were analyzed for TPHd, TPHmo, CAM 17 Metals, and SVOCs. TPHd and TPHmo compounds were reported below their respective ESLs. CAM 17 Metals were reported below their ESLs with the exception of arsenic, and vanadium, which were both within background metal ranges evaluated from previous studies. Total chromium does not have an ESL for comparison, yet all samples analyzed were below background levels discussed in the Oakland Survey. Total chromium in NMB-3 at 0.5 feet bgs was, however, almost double in concentration compared to the next highest reported in NMB-6 at 0.5 feet bgs. In general, concentrations of lead and chromium were higher in the 0.5 foot samples collected compared to the 5.0 foot bgs samples collected, which is consistent with the 2001 investigation. Additionally, 0.5 foot samples collected from NMB-1, NMB-3, NMB-4, and NMB-6 had metals reported greater than 10 times their respective STLCs.

SVOCs were not reported in any samples above ESLs with the exception of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorenthene, benzo(k)fluoranthene, and dibenz(a,h)anthracene from the 5-foot depth at NMB-6. Reporting limits were also elevated for SVOCs in the 5-foot sample from NMB-4 because of dilution.

Based on the soil sample laboratory results from this sampling event, it is unlikely that surface soils would create an environmental concern. However, based on the several lead, chromium, and nickel concentrations exceeding the 10 times STLC rule, additional testing will be needed if soils are to be disposed of in a Class II landfill. Additionally, because of the SVOC impacts to soils in depths (below 5 feet bgs) where construction debris was observed, additional sampling and/or soil management may be needed for the protection of site workers potentially encountering deeper soils. If physical signs of contamination, including odors or obvious signs of staining, are encountered during construction activities, the contractor should contact the City for further guidance regarding worker safety, soil handling, and disposal options. On the basis of our findings, no additional sampling is recommended.

### 6. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the City of Albany. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than those noted is undertaken at said parties' sole risk.

#### 7. **REFERENCES**

- City of Oakland Survey of Background Metal Concentration Studies-Oakland Urban Land Redevelopment Program.
- Screening for Environmental Concerns at Sites with contaminated Soil and Groundwater, California Regional Water Quality Control Board, November 2007.
- Shacklette, H.T. and J.G. Boerngen, Element Concentrations in Soils and Other Surficial Materials in the Conterminous United States, Geological Survey Paper 1270, United States Department of the Interior, Alexandria, VA, 1984.
- Site Investigation Report Pierce Street –Maxi Park near Route 80, Albany, and Alameda County, California, prepared for California Department of Transportation, Geocon, dated January 2001.

#### TABLE 1

#### SOIL SAMPLE LABORATORY ANALYTICAL RESULTS - METALS NORTHEAST CORNER OF CLEVELAND AVENUE AND WASHINGTON AVENUE ALBANY, CALIFORNIA

SAMPLE ID	NMB-1-0.5	NMB-2-0.5	NMB-2-5.0	NMB-3-0.5	NMB-3-5.0	NMB-4-0.5	NMB-5-0.5	NMB-5-5.0	NMB-6-0.5	NMB-7-0.5	NMB-8-0.5	NMB-9-0.5	NMB-10-0.5	ENVIRONMENTAL SCREENING LEVELS <sup>1</sup>	BACKGROUND METAL CONCENTRATIONS <sup>2</sup>
Approximate Depth (feet bgs)	0.5	0.5	5.0	0.5	5.0	0.5	0.5	5.0	0.5	0.5	0.5	0.5	0.5		
Date Collected															
							N	1ETAL	S (mg/K	<b>g</b> )					
Antimony	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	6.3	
Arsenic	4.4	2.5	1.4	9.9	1.8	4.0	1.7	1.0	3.9	3.2	5.6	3.8	4.6	0.39	9.3-19.1
Barium	100	110	33	130	16	96	90	97	97	89	80	80	75	3000	
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	31	
Cadmium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	
Chromium	94	60	13	140	14	58	8.3	5.3	85	20	12	11	25	NE	99.6-142.2
Cobalt	13	9.8	1.7	18	1.6	10	4.5	<1.0	12	5.0	5.0	5.0	6.7	280	
Copper	27	33	3.3	37	2.9	26	8.4	2.4	18	9.4	7.2	11	15	6300	
Lead	73	36	4.1	11	5.1	35	7.1	4.6	10	13	9.1	32	17	260	
Mercury	< 0.10	< 0.10	< 0.10	0.15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.3	
Molybdenum	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	78	
Nickel	120	49	22	210	13	75	6.4	6.9	110	25	14	16	33	300	
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	78	
Silver	<1.0	<1.0	<1.0	<1.0	<1.0	< 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	78	
Thallium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	
Vanadium	40	29	14	44	20	31	13	8.4	36	19	15	14	19	16	10-300
Zinc	59	47	13	47	9.6	55	12	7.3	30	22	21	37	32	4700	

#### NOTES:

Metals were analyzed by EPA Method 6010B except for Hg which is analyzed by 7471A

mg/Kg = milligrams per kilogram

< x = less than reporting limit

BOLD = Values exceeding the ESL or City of Oakland screening criteria.

NE = Not established for Total Chromium

<sup>1</sup> ESL = Environmental Screening Limit - Table K-1, Direct Exposure Soil Screening Levels Residential Exposure Scenario, SF Bay RWQCB May 2008.

<sup>2</sup> Background concentration from City of Oakland Survey of Background Metal Concentration Studies, and Element Concentrations in Soils and Other Surficial Materials in the Conterminous United States

--- Not applicaple

#### TABLE 2

#### SOIL SAMPLE LABORATORY ANALYTICAL RESULTS SEMI VOLATILE ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS NORTHEAST CORNER OF CLEVELAND AVENUE AND WASHINGTON AVENUE ALBANY, CALIFORNIA

																					ENVIRONMENTAL
SAMPLE ID	NMB-1-0.5	NMB-1-5.0	NMB-2-0.5	NMB-2-5.0	NMB-3-0.5	NMB-3-5.0	NMB-4-0.5	NMB-4-5.0	NMB-5-0.5	NMB-5-5.0	NMB-6-0.5	NMB-6-5.0	NMB-7-0.5	NMB-7-5.0	NMB-8-0.5	NMB-8-5.0	NMB-9-0.5	NMB-9-5.0	NMB-10-0.5	NMB-10-5.0	SCREENING LEVELS (1) in
Approximate Depth (feet bgs)	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0	ug/Kg
Date Collected										12/2	0/2010										
					S	EMI	VOLA	ATILE (	ORGA	NIC	COMPO	DUNDS	6 (µg/K	g)							
Acenaphthene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120 (2)	< 5.0	< 5.0	<5.0	41	$<\!\!25^{(3)}$	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	500,000
Acenaphthylene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	< 5.0	<25	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	340,000
Anthracene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	370	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	3,100,000
Benzo(a)anthracene	6.6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	1500	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	380
Benzo(a)pyrene	6.4	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	1100	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	38
Benzo(b)fluoranthene	11	< 5.0	5.9	< 5.0	< 5.0	< 5.0	7.0	<120	< 5.0	< 5.0	< 5.0	1400	<25	< 5.0	< 5.0	< 5.0	31	< 5.0	< 5.0	< 5.0	380
Benzo(g,h,i)perylene	6.7	< 5.0	< 5.0	6.3	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	< 5.0	350	<25	< 5.0	< 5.0	< 5.0	29	< 5.0	< 5.0	< 5.0	340,000
Benzo(k)fluoranthene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	< 5.0	490	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	380
Chrysene	11	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	< 5.0	1200	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	62,000
Dibenz(a,h)anthracene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	110	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	62
Fluoranthene	14	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.6	<120	< 5.0	< 5.0	< 5.0	2600	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	460,000
Fluorene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	49	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	390,000
Indeno(1,2,3-cd)pyrene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	360	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	620
Naphthalene	5.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<120	< 5.0	< 5.0	<5.0	<25	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	1,300
Phenanthrene	14	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	7.2	<120	< 5.0	< 5.0	5.5	830	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	340,000
Pyrene	13	< 5.0	5.5	18	< 5.0	< 5.0	6.2	<120	< 5.0	< 5.0	<5.0	2100	<25	< 5.0	< 5.0	< 5.0	<25	< 5.0	< 5.0	< 5.0	690,000
TOTAL PETROLEUM HYDROCARBONS (mg/Kg)																					
Diesel	6.3	<1.0	8.6	1.3	1.8	4.9	5.0	63	3.4	2.7	16	8.5	14	12	<1.0	3.3	2.9	3.1	11	1.1	110
Motor Oil	25	<1.0	26	1.9	<1.0	11	16	180	5.1	<1.0	37	31	51	23	<1.0	6.7	11	5.4	37	3.4	370

#### NOTES:

SVOCs were analyzed by EPA Method 8270C TPH as diesel and motor oil were analyzed by EPA Method 8015B ug/Kg = micrograms per kilogram mg/Kg = milligrams per kilogram <x = less than reporting limit BOLD = Values exceeding the ESL. (1) ESL = Environmental Screening Limit - Table K-1, Direct Exposure Soil Screening Levels Residential Exposure Scenario, SF Bay RWQCB May 2008. (2) Dilution Factor.= 25 (3) Dilution Factor = 5







# APPENDIX A

# ALAMEDA COUNTY PUBLIC WORKS AGENCY- WATER RESOURCES WELL PERMIT

#### Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

#### Application Approved on: 12/09/2010 By jamesy

#### Permit Numbers: W2010-0998 Permits Valid from 12/17/2010 to 12/17/2010

Application Id: Site Location: Project Start Date: Assigned Inspector:	1291921232439 northeast corner of Cleveland Ave and Washing 12/17/2010 Contact Steve Miller at (510) 670-5517 or steve	City of Project Site:Albany gton Ave, Albany , CA 94612 Completion Date:12/17/2010 m@acpwa.org	
Applicant:	Ninyo and Moore - Kris Larson	<b>Phone:</b> 510-633-5640	
Property Owner:	1956 Webster St., Oakland, CA 94612 Dept of Transportation, #4 Grand St. Oakland, CA 94612	<b>Phone:</b> 510-286-5647	
Client:	City of Albany, Judy Lieberman 1000 San Pablo Ave, Albany, CA 94706	<b>Phone:</b> 510-528-5716	
	Passint Number: WP2010.0422	Total Due:	\$265.00

	I Ulai Due.	φ205.00
Receipt Number: WR2010-0422	Total Amount Paid:	<u>\$265.00</u>
Payer Name : Ninyo and Moore	Paid By: CHECK	PAID IN FULL

#### **Works Requesting Permits:**

Borehole(s) for Investigation-Environmental/Monitorinig Study - 10 Boreholes Driller: Penecore - Lic #: 906899 - Method: other

Work Total: \$265.00

#### Specifications

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2010-	12/09/2010	03/17/2011	10	2.00 in.	10.00 ft
0998					

#### **Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits

### Alameda County Public Works Agency - Water Resources Well Permit

required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

# **APPENDIX B**

# **BORING LOGS**

0 Bulk sample.							
Modified split-barrel drive sampler.							
Sample retained by others.							
Standard Penetration Test (SPT).							
No recovery with a SPT.							
XX/XX       Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.							
No recovery with Shelby tube sampler.							
Continuous Push Sample.	ontinuous Push Sample.						
Q     Seepage.							
10     ₩     Groundwater encountered during drilling.       𝔤     Groundwater measured after drilling.							
SM ALLUVIUM: Solid line denotes unit change.							
Dashed line denotes material change.							
Attitudes: Strike/Dip b: Bedding c: Contact							
15 j: Joint f: Fracture							
F: Fault cs: Clay Seam							
s: Shear bss: Basal Slide Surface	s: Shear bss: Basal Slide Surface						
sf: Shear Fracture sz: Shear Zone	sf: Shear Fracture sz: Shear Zone						
sbs: Sheared Bedding Surface							
The total depth line is a solid line that is drawn at the bottom of the boring.							
BORING LOG							
NIJY & NUTE     EXPLANATION OF BORING LOG SYMBOLS       PROJECT NO.     DATE	RE						

DATE Rev. 01/03

	U.S.C.S. METHOD OF SOIL CLASSIFICATION										
MA	JOR DIVISIONS	SYM	BOL	TYPICAL NAMES							
			GW	Well graded gravels or gravel-sand mixtures, little or no fines							
ILS	GRAVELS (More than 1/2 of coarse		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines							
(D SO) of soil size)	fraction > No. 4 sieve size)		GM	Silty gravels, gravel-sand-silt mixtures							
tAINE In 1/2 Sieve			GC	Clayey gravels, gravel-sand-clay mixtures							
SE-GR ore tha o. 200			SW	Well graded sands or gravelly sands, little or no fines							
COARS (Mc >N	SANDS (More than 1/2 of coarse		SP	Poorly graded sands or gravelly sands, little or no fines							
	fraction <no. 4="" sieve="" size)<="" th=""><th></th><td>SM</td><td>Silty sands, sand-silt mixtures</td></no.>		SM	Silty sands, sand-silt mixtures							
			SC	Clayey sands, sand-clay mixtures							
			ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with							
SOILS of soil size)	SILTS & CLAYS Liquid Limit <50		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean							
NED n 1/2 c sieve			OL	Organic silts and organic silty clays of low plasticity							
FINE-GRAI (More thar <no. 200<="" th=""><th></th><th></th><th>MH</th><th>Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts</th></no.>			MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts							
	SILTS & CLAYS Liquid Limit >50		СН	Inorganic clays of high plasticity, fat clays							
			ОН	Organic clays of medium to high plasticity, organic silty clays, organic silts							
HIG	HLY ORGANIC SOILS	5	Pt	Peat and other highly organic soils							

GRA	AIN SIZE CHART	1		
	RANGE OF O	GRAIN SIZE		
CLASSIFICATION	U.S. Standard Sieve Size	Grain Size in Millimeters		
BOULDERS	Above 12"	Above 305		
COBBLES	12" to 3"	305 to 76.2		
GRAVEL Coarse Fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76		
SAND Coarse Medium Fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075		
SILT & CLAY	Below No. 200	Below 0.075		

*Ninyo* & Moore



U.S.C.S. METHOD OF SOIL CLASSIFICATION

	ES											
	AMPL	<u>–</u>	()	CF)	(Mq		NO	DATE DRILLED	12/20/10		BORING NO.	NMB-1
(feet)	S	F00	RE (%	TY (F	DI DI	Ы	CATIC .S.	GROUND ELEVATIO	$\frac{29.5' \pm MSL}{2}$		SHEET	OF
PTH	, c	/S/\	STUF	ENSI	ADIN	YMB	SIFIC J.S.C	METHOD OF DRILL	ING <u>GEO-PRO</u>	BE		
DE I	Bulk Drive	BLO	MO	۲D	DRE	0	CLAS	DRIVE WEIGHT	1	N/A	DROP	N/A
				ā	Id			SAMPLED BY	IOC LOGG	ED BY	MOC REVIEWE	D BY <u>KML</u>
0					0		GM	<u>FILL</u> : Dark brown, moist, g	ravelly silty S	AND; con	acrete debris.	
							CL	Yellowish brown, mo	oist, silty CLA	Y; low pla	asticity.	
					0							
					0							
5 -							$-\overline{GM}$	Gravish brown, dry, g	pravelly SILT:	concrete	$\overline{debris}$	
							0.11		<u> </u>	,		
					0							
								Refusal at 7 feet. Approximate total de	pth = 7 feet bg	gs.		
								Groundwater was not	t encountered.			
								Boring was grouted to	o surface using	o Portland	cement on 12/20/1	0
										5 - 0101010		
10 -												
15 -												
20_											BORING LOG	
		M	ĥ		]&	A	Λο	ore	NE CORNE	R OF CLEV	ELAND AVENUE & W ALBANY. CALIFORNI	ASHINGTON AVENUE
				J		-			PROJECT N 40167800	NO.	DATE 1/11	FIGURE B-1
L									-0107000		1/11	D 1

	ES													
	AMPLI		()	CF)	(MG		Z	DATE DRILLED	12/20/10	BORI	NG NO	]	NMB-2	
(feet)	S S		RE (%	TY (P	IG (P	Ы	SATIC S.	GROUND ELEVATI	ON $24.9' \pm MSL$		_ SHEET	1	_ OF	1
PTH	. c	WS/I	STUF	ISNSI-	ADIN	YMB	SIFIC J.S.C.	METHOD OF DRILL	ING GEO-PROBE					
В	Bulk Drive	BLC	MOI	SY DI	D RE	0	CLAS	DRIVE WEIGHT	N/A		DROP		N/A	
				ä	□		0	SAMPLED BYN		Y MOC		D BY	KML	
0							GC	FILL:						
								Dark brown, moist, s	silty sandy CLAY v	ith gravel.				
					0			Orango hrown, aand	u amoriallu CLAVI a	anarata dah	<b></b>			
								Orange brown, sand	y graveny CLAT; c					
5 -					+		CL	Orange brown, mois	t, sandy CLAY; pre	sence of del	pris; low plas	ticity.		
					0									
.														
10														
10-								Approximate total de	epth = 10 feet bgs.					
								Groundwater was no	t encountered.					
								Boring was grouted	to surface using Por	tland cemer	nt on 12/20/1	0.		
15 -														
_20								]						
					1&	A	An	ore	NE CORNER OF		AVENUE & W	ASHIN	GTON AVI	ENUE
		<b>' \</b>		7		-			PROJECT NO.	ALBAN	DATE	A	FIGURE	
									4016/8002		1/11		в-2	

Image: state         Image: state<		
O         O	TON (PCF) (PCF)	ROUND FLEVATION 38.8' + MSL SHEET 1 OF 1
End       Bool	H (fee S/FO NE	ETHOD OF DRILLING GEO-PROBE
0       0	DEPT	RIVE WEIGHT N/A DROP N/A
0       GC       ILL: Light grayish brown, moist, gravelly CLAY.         3       0       0       GC       Discretion of the second secon		AMPLED BY MOC LOGGED BY MOC REVIEWED BY KML
1       1	0 ■ GC FIL	DESCRIPTION/INTERPRETATION
0       0	Ligi	ght grayish brown, moist, gravelly CLAY.
0       0		
5       Ct.       Orange brown, moist, sandy CLAY.         10       0       0         11       0       0         12       0       0         13       0       0		
5       CL       Orange brown, moist, sandy CLAY.         10       0       CL       Orange brown, moist, sandy CLAY.         10       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15       0         16       0         17       0         18       0         19       0         10       0         10       0         10       0         10       0         10       0         11       0         12       0         13       0         14       0         15       0         16       0         17       0         18       0         19       0         10       0         10       0         115       0         12       0         13       0         14       0         15       0         16       0         17       0 <tr< th=""><th></th><th></th></tr<>		
5       CI.       Orange brown, moist, sandy CLAY.         10       0       CI.       Orange brown, moist, sandy CLAY.         10       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         15       Boring was grouted to surface using Portland cement on 12/20/10.         15       Image: State of the		
10       0       Ct.       Orange brown, moist, sandy CLAY.         10       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15       Boring was grouted to surface using Portland cement on 12/20/10.         15       Boring was grouted to surface using Portland cement on 12/20/10.         15       Boring was grouted to surface using Portland cement on 12/20/10.         15       Boring was grouted to surface using Portland cement on 12/20/10.         15       Boring was grouted to surface using Portland cement on 12/20/10.         16       Boring was grouted to surface using Portland cement on 12/20/10.         16       Boring was grouted to surface using Portland cement on 12/20/10.         16       Boring was grouted to surface using Portland cement on 12/20/10.         17       Boring was grouted to surface using Portland cement on 12/20/10.         18       Boring was grouted to surface using Portland cement on 12/20/10.         19       Boring was grouted to surface using Portland cement on 12/20/10.         10       Boring was grouted to surface using Portland cement on 12/20/10.         10       Boring was grouted to surface using Portland cement on 12/20/10.		
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20 20 BORING LOG NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE AL BANY, CAL HODDNIA		
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	<i>Ninun</i> & Mnn	NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE
PROJECT NO. DATE FIGURE		ALBANY, CALIFURNIA       PROJECT NO.     DATE     FIGURE       401678002     1/11     B.3

0	0												
			CF)	(Mc		Z	DATE DRILLED	12/20/10	BORIN	g NO	N	IMB-4	
feet)		кЕ (%	L∠ (P	G (PF	Ы	S.	GROUND ELEVATIO	N <u>30.5' ± MSL</u>		SHEET _	1	OF	1
PTH (		STUR		ADIN	YMB	SIFIC J.S.C.	METHOD OF DRILLIN	NG GEO-PROBE					
Bulk	Drive	MOI	RY DI	D RE	N	ך כראצ	DRIVE WEIGHT	N/A		_ DROP _		N/A	
			ā			U	SAMPLED BY	DC LOGGED BY	MOC		DBY	KML	
				0		GC CL	FILL: Light grayish brown, r Dark brown, moist, CI Grayish brown, moist,	DESCRIPTION/II noist, gravelly CLAY	ris.	<u>A IION</u>			
10							Orange brown, moist, Approximate total dep	CLAY. $th = 10 \text{ feet bgs.}$					
							Groundwater was not	encountered.					
							Boring was grouted to	surface using Portlan	d cement	on 12/20/10	).		
15													
20									BUDI				
	٨			1&	A	Λn	ore	NE CORNER OF CLE	VELAND A	VENUE & W	ASHIN	GTON AVE	ENUE
	- 1		J	_	- 1			PROJECT NO.			1	FIGURE	
I								401070002	1/			<sup>14</sup> ע	

	12/20/10 BORING NO. NMB-5
ୁ (କୁ ୁର୍ଦ୍ଦି ା କୁ ଅନ୍ମାର୍କ୍ କୁ ମୁନ୍ଦ୍ର ା କୁ ଅନ୍ମାର୍କ୍ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମାର୍କ୍ କୁ ଅନ୍ମାର୍କ୍ କୁ ଅନ୍ମାର୍କ୍ କୁ ଅନ୍ମାର୍କ୍ କୁ ଅନ୍ମାର୍କ୍ତ କୁ ଅନ୍ମାର୍କ୍ତ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମାର୍କ ସମହାର୍କ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମ ସମହାର୍କ କୁ ଅନ୍ମାର୍କ କୁ ଅନ୍ମ	TION 61.9' ± MSL SHEET 1 OF 1
	LLING GEO-PROBE
	N/AN/AN/A
SAMPLED BY _	MOC LOGGED BY MOC REVIEWED BY KML
0 SC FILL:	
	moist, sitty sandy CLA I; medium plasticity.
CL <u>ALLUVIUM</u> : Grayish green, dry	r, silty CLAY.
10 Approximate total	depth = 10 feet bgs.
Groundwater was	not encountered
Boring was groute	d to surface using Portland cement on 12/20/10
	d to surface using Fortiand cement on 12/20/10.
Alinun - AAnnen	BORING LOG NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE
	ALBANY, CALIFORNIA PROJECT NO. DATE FIGURE
	401678002 1/11 B-5

<u> </u>			
	12/20/10	BORING NO.	NMB-6
	ION <u>49.9' ± MSL</u>	SHEET	OF
	LING GEO-PROBE		
	N/A	DROP	N/A
	MOC LOGGED BY	MOC REVIEWE	D BY KML
0 GM <u>FILL</u> :			
Dark grayish brown	, moist, silty SAND with	gravel.	
5 CL Dark greenish brow	n, moist, silty CLAY wit	h gravel.	
Concrete debris.			
	10 for the		
Approximate total d	epth = 10 leet bgs.		
Groundwater was no	ot encountered.		
Boring was grouted	to surface using Portland	l cement on 12/20/1	0.
20			
		BORING LOG	
<i>Ninyu &amp; M</i> oole		ALBANY, CALIFORNI	
	401678002	1/11	B-6

	12/20/10 BORING NO. NMB-7
	ION         58.7' ± MSL         SHEET         1         OF         1
	LING GEO-PROBE
	N/A DROP <u>N/A</u>
SAMPLED BY	
0 GC FILL:	DESCRIPTION/INTERPRETATION
Dark grayish brown	a, moist, silty gravelly CLAY.
CL Yellowish brown, d	ry, silty CLAY.
10 Approximate total of	lepth = 10 feet bgs.
Groundwater was n	ot encountered
Boring was grouted	to surface using Portland compart on 12/20/10
	to surface using Fortiand cement on 12/20/10.
	7
A <i>linua</i> « AAnnea	BORING LOG NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE
	ALBANY, CALIFORNIA PROJECT NO. DATE FIGURE
	401678002 1/11 B-7

	S										
	MPLI		~	CF)	(Mc		Z	DATE DRILLED	12/20/10	BORING NO.	NMB-8
feet)	Ś	100	E (%	– ∠	G (PF	ЪГ	ATIO S.	GROUND ELEVATION	<b>59.0' ± MSL</b>	SHEET _	1 OF 1
DTH (		WS/F	STUR	LISN	ADIN	YMB(	SIFIC I.S.C.	METHOD OF DRILLIN	G GEO-PROBE		
	Bulk	BLO	MOIS	C DE	O RE,	ŝ	U U	DRIVE WEIGHT	N/A	DROP	N/A
				DR	IId		0	SAMPLED BY MO	C LOGGED BY DESCRIPTION/IN	MOC REVIEWE	D BY KML
0		-			0		GC	<u>FILL</u> : Orange brown, moist, s	ilty gravelly CLAY.		
5 -					+			Light yellowish brown,	dry, silty SAND with	n gravel.	
		-			0			No recovery. Light yellowish brown,	dry, silty SAND with	n gravel.	
10 -								Approximate total dept	h = 10 feet bgs.		
		-						Groundwater was not e	ncountered.		
								Boring was grouted to	surface using Portland	d cement on 12/20/10	).
		-									
	++	-									
15 -											
	$\square$	1									
		_									
		-									
		1									
20										BORINGIOG	
	<i>Ninuo</i> & Moore								NE CORNER OF CLEV	/ELAND AVENUE & W	ASHINGTON AVENUE
				J		-			PROJECT NO.	DATE 1/11	FIGURE
<u>الـــــــــ</u>									1010/00/2	1/11	<b>D</b> 0

0       0	S S						
9       0	WPLE		CF)	(W		z	DATE DRILLED         12/20/10         BORING NO.         NMB-9
O       So	feet)	E (%)	ר (Pe	G (PF	5	ATIO S.	GROUND ELEVATION         58.4' ± MSL         SHEET         1         OF         1
B B	NS/F	STUR	LISNE	ADING	YMB(	SIFIC J.S.C.	METHOD OF DRILLING GEO-PROBE
0       C       SAMPLED BYMOCLOGGED BYMOCREVIEWED BYKML         0       C       PILL: Dark brown, moist, silty gravelly CLAY.         5       0       C         10       0       C         11       0       C         12       0       C         13       0       C         14       0       C         15       0       C	DEI Bulk Drive	MOIS	ςΥ DE	DRE	S	CLAS	DRIVE WEIGHT         N/A         DROP         N/A
0       0       GC       FLL: Duk brown, moist, silly gravelly CLAY.         5       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         10       0       0       C1.       Light yellowish brown, dry, silly CLAY.         110       0       0       C1.       Light yellowish brown, dry, silly CLAY.         110       0       0       C1.       Light yellowish brown, dry, silly CLAY.         110       0       0       C1.       Light yellowish brown, dry, silly CLAY.         110       0       0       C1.       C1.       C1.         120			ä			0	SAMPLED BY MOC LOGGED BY MOC REVIEWED BY KML
Dark brown, moist, sing graveny CLAT.         0         0         10         0         10         10         11         12         13	0					GC	FILL: Dark business maint silter second by CLAN
0       0         5       0         0       0         0       0         10       0 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Dark brown, moist, sing graveny CLA I.</th>							Dark brown, moist, sing graveny CLA I.
0       0         5       0         0       0         0       0         11       0         12       0         13       0         14       0         15       0         16       0         17       0         18       0         19       0         10       0         10       0 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
CL Light yellowish brown, dry, silty CLAY.				0			
5       CL       Light yellowish brown, dry, silty CLAY.         0       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.       Boring was grouted to surface using Portland cement on 12/20/10.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         15       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         16       Image: Classical depth = 10 feet bgs.       Image: Classical depth = 10 feet bgs.         17       Image: Classical depth = 10 feet bgs.							
5       0       CL       Light yellowish brown, dry, silty CLAY.         10       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15       0							
CL Light yellowish brown, dry, silty CLAY.	5			L			
10       0       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15       I         I       I						CL	Light yellowish brown, dry, silty CLAY.
10       Approximate total depth = 10 feet bgs.         10       Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15       Image: Comparison of the surface using Portland cement on 12/20/10.							
10       Approximate total depth = 10 feet bgs.         Groundwater was not encountered.       Boring was grouted to surface using Portland cement on 12/20/10.         15       Image: Comparison of the surface using Portland cement on 12/20/10.				0			
10       Approximate total depth = 10 feet bgs.         Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15         15							
10       Approximate total depth = 10 feet bgs.         Groundwater was not encountered.       Boring was grouted to surface using Portland cement on 12/20/10.         15       Image: Comparison of the surface using Portland cement on 12/20/10.							
10       Approximate total depth = 10 feet bgs.         Groundwater was not encountered.         Boring was grouted to surface using Portland cement on 12/20/10.         15         15							
Image:	10						Approximate total depth = 10 feet bgs.
Boring was grouted to surface using Portland cement on 12/20/10.							Groundwater was not encountered.
							Boring was grouted to surface using Portland cement on 12/20/10.
	20						BORING LOG
NINUO & MOORE NE CORNER OF CLEVELAND A VENUE & WASHINGTON A VENUE ALBANY. CALIFORNIA		ĥí	$\overline{U}$	]&	Λ	Λο	NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE ALBANY, CALIFORNIA
PROJECT NO.         DATE         FIGURE           401678002         1/11         B-9							PROJECT NO.         DATE         FIGURE           401678002         1/11         B-9

Image: Apple of the second	12/20/10 BORING NO. NMB-10
	TON         57.7' ± MSL         SHEET         1         OF         1
	LING GEO-PROBE
	<u>N/A</u> DROP <u>N/A</u>
SAMPLED BY	MOC LOGGED BY MOC REVIEWED BY KML DESCRIPTION/INTERPRETATION
0 SP/SM <u>FILL</u> : Dark brown, moist,	silty SAND with gravel.
0	
5	noist silty SAND with pieces of concrete
	ioisi, siity SAIND with pieces of concrete.
0	
10     IIIIII     Approximate total c	lepth = 10 feet bgs.
Groundwater was n	ot encountered.
Boring was grouted	to surface using Portland cement on 12/20/10.
	BORING LOG
<i>Ninyo</i> & Moore	NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE ALBANY, CALIFORNIA
	PROJECT NO.         DATE         FIGURE           401678002         1/11         B-10
# APPENDIX C

# WASTE DISPOSAL MANIFEST



in the a case

#### P.O. Box 449 Colton, CA 92324-0449 1-800-698-4377

19.

have the man

# "PRESERVING OUR NATURAL RESOURCES"

SER	VICESS	INC	DATE	W Strange	INVOICE NUMBER	133746N
i i			CUSTOME	RNUMBER		2001401
4			-			*
CUSTOMER NAME		PHONE NO.	BILL TO		PH	ONE NO.
CITY OF A	TRANY	510-798-1162	NIT	JYO & MOORF		510-633-5640 x5203
SITE ADDRESS	history a his of the		BILLING AD	DRESS		1
NORTHEAST C	ORNER OF CLEVELAND/WASI	HINGTON AVE	1950	6 WEBSTER ST	STE 400	
CITY / STATE / ZIP			CITY / STAT	re / ZIP		
ALBANY,	CA 94706		QAI	KLAND CA		
SALES REP.	SITE CONTACT	C.O.D. ON ACC		RCHASE ORDER NO.	BILLING CONTACT	REQUESTED BY
DR	MONAMI	XXX				MONAMI
QUANTITY	MATERIA	L DESCRIPTION		MANIFEST NO	. UNIT PRICE	TOTAL PRICE
						-
	ONSITE 9AM					
<u> </u>		*			-	
	DALLAN CONTRACTOR	A C COT		NH133746-N		
-	P/U-I-X 33 NON H	AZ SOIL		111133740-14		
a de la			1			*
	DRIVER: PLEASE	CALL UPON ARR	IVAL BEC.	AUSE		
	THE GATES HAVE	TO BE UNLOCK	ED AT THI	E		1
	SIIE				-	
-	MAY NEED DRUN	H DOLLY				-
					-	
			1			
	15% ENERGY SUI	RCHARGE COST	<mark>F MAY AI</mark>	PLY		1
						1
-					-	
FACILITY NAME:	Filter Recycling Services,	Inc. DRIVER START TIM	ME:		A IN CASE	
ADDRESS:	180 West Monte Avenue	TIME LEFT YARD:	8:20	AM		
285	Bloomington, CA 92316	JOB START TIME:	8:55	An		
EPA ID NUMBER:	CAD98244481	JOB END TIME:	8:28	An		
DRIVER'S SIGNATUR	RE:	DRIVER END TIME				1
It is the Generator	's responsibility to correctly ide	entify chemical compos	sition.	ropportation along	Subtotal	
In material is reject	to a 1.5% monthly interact rate	agrees to pay all testing	y, disposal & 1	transportation charge	5.	
	to a 1.5 % monthly interest fall				TOTAL	
RECEIVED BY:	min Ihada		2 (11 M	cit front part	TUTAL	

NON-HAZARDOUS	1. Generator ID Number	2. Page 1 of	3. Emergency Response I	Phone	4. Waste T	racking Nu	mber	
WASTE MANIFEST			909-721-2038		NH133716-N NHI 1715 1			
5. Generator's Name and Mai	ling Address		Generator's Site Address (	(if different tha	in mailing addr	ress)		
NORTHEAST CO ALBANY, CA 947	RNER OF CLEVELAND/WAS	HINGTON AVE						
Generator's Phone: 51	0-633-6640					Number		
ENVIRONMENTA	L LOGISTICS, INC				CAF	2000172	478	
7. Transporter 2 Company Na	ime				U.S. EPA ID	Number		
8. Designated Facility Name a	ING SERVICES, INC.				U.S. EPA ID	Number		
180 WEST MONT	TE AVENUE				CAL	3982444	483	
800-690	8-4377				1			
Facility's Phone:			10. Contair	ners	11 Total	12 Unit		
9. Waste Shipping Nan	ne and Description		No.	Туре	Quantity	Wt./Vol.		
1. NON HAZAR	DOUS WASTE SOLID (SOIL	CUTTING)		DM	1 1 1	P		
					160			
0								
2.								
3.								
4.								
14. GENERATOR'S/OFFERO marked and labeled/placarded	R'S CERTIFICATION: I hereby declare the	at the contents of this consignment a n for transport according to applicable	re fully and accurately desc e international and national	ribed above by	y the proper sh regulations.	hipping name	e, and are classified, packaged,	
Generator's/Offeror's Printed/	Typed Name	Sig	nature				Month Day Year	
X			(			4	1 7 10	
15. International Shipments	Import to U.S.	Export from	J.S. Port of entr	y/exit:				
Transporter Signature (for exp	orts only):		Date leavin	ig U.S.:				
Transporter 1 Printed/Typed N	lame	Sig	Inature		7		Month Day Year	
Æ.	THI ROSEN		- +		for many	ar etc. er-	1710	
Transporter 2 Printed/Typed N	lame	Sig	nature				Month Day Year	
17. Discrepancy								
	Quantity	L Туре	Residue		Partial Re	ejection	Full Rejection	
		2 - 7 P	Manifest Reference Nu	umber:				
17b. Alternate Facility (or Gen	erator)				U.S. EPA ID	Number		
					1			
Facility's Phone:	allity (or Canaratar)						Month Dou Voor	
TTC. Signature of Alternate Fa	city (or denerator)							
				and the second s				
18. Designated Facility Owner	or Operator: Certification of receipt of mat	erials covered by the manifest excen	t as noted in Item 17a					
Printed/Typed Name		Sig	nature		N. C. C.		Month Day Year	
		1						

~

Sec.

# **APPENDIX D**

# LABORATORY ANALYTICAL RESULTS

December 28, 2010

Monami Chakravarti Ninyo & Moore 1956 Webster Street, Suite 400 Oakland, CA 94612

TEL: (510) 633-5640 FAX: (510) 633-5646 Sonelac "

ELAP No.: 1838 NELAP No.: 02107CA CSDLAC No.: 10196

Workorder No.: 115438

RE: ALBANY PHASE II ESA, 401678002

Attention: Monami Chakravarti

Enclosed are the results for sample(s) received on December 22, 2010 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez

Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT:Ninyo & MooreProject:ALBANY PHASE II ESA, 401678002Lab Order:115438

# CASE NARRATIVE

Silica Gel Cleanup was performed on sample prior to the analysis, per client request.

Analytical Comments for EPA 6010B

Samples 115438-011A-MS and 115438-011A-MSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 8270C

Samples 115438-020A and 115438-030A, surrogate diluted out.

Samples 115438-020A and 115438-031A, dilution was necessary due to sample matrix.



Page 1 of 45

# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-001A

Client Sample ID: NMB-1-0.5 Collection Date: 12/20/2010 9:10:00 AM

Matrix: SOIL

ICP METALS         EPA 3050B         EPA 6010B           RunID:         ICP10_101227B         QC Batch:         69187         PrepDate:         12/26/2010         Analyst: SRE           Antimony         ND         2.0         mg/Kg         1         12/27/2010         12/29           Arsenic         4.4         1.0         mg/Kg         1         12/27/2010         12/29           Barium         100         1.0         mg/Kg         1         12/27/2010         12/29           Cadmium         ND         1.0         mg/Kg         1         12/27/2010         12/29           Cadmium         ND         1.0         mg/Kg         1         12/27/2010         12/29           Cobat         13         1.0         mg/Kg         1         12/27/2010         12/29           Cobat         73         1.0         mg/Kg         1         12/27/2010         12/29           Lead         73         1.0         mg/Kg         1         12/27/2010         12/29           Selenium         ND         1.0         mg/Kg         1         12/27/2010         12/29           Silver         ND         1.0         mg/Kg         1         12/27/20	Analys	es	Re	sult	PQL	Qual	Units		DF	Date Analyzed
EPA 3050B         EPA 6010B           RunD:         ICP10_101227B         QC Batch:         69187         PrepDate:         12/27/010 12:29 P           Ansenic         4/4         1.0         mg/Kg         1         12/27/2010 12:29 P           Barium         100         1.0         mg/Kg         1         12/27/2010 12:29 P           Barium         100         1.0         mg/Kg         1         12/27/2010 12:29 P           Cadmium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Cadmium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Cadmium         94         1.0         mg/Kg         1         12/27/2010 12:29 P           Cobat         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P     <		TALS								
RunID:         ICP10_101227B         QC Batch:         69187         PrepDate         12/26/2010         Ansults:         SRe           Antimony         ND         2.0         mg/Kg         1         12/27/2010         12/29         P           Arsenic         4.4         1.0         mg/Kg         1         12/27/2010         12/29         P           Barium         ND         1.0         mg/Kg         1         12/27/2010         12/29         P           Cadmium         ND         1.0         mg/Kg         1         12/27/2010         12/29         P           Chromium         ND         1.0         mg/Kg         1         12/27/2010         12/29         P           Cobalt         13         1.0         mg/Kg         1         12/27/2010         12/29         P           Cobalt         13         1.0         mg/Kg         1         12/27/2010         12/29         P           Molybdenum         ND         1.0         mg/Kg         1         12/27/2010         12/29         P           Nickel         120         1.0         mg/Kg         1         12/27/2010         12/29         P           Silver <t< td=""><td></td><td></td><td>EPA 3050B</td><td></td><td></td><td>E</td><td>PA 601</td><td>0B</td><td></td><td></td></t<>			EPA 3050B			E	PA 601	0B		
Antimony         ND         2.0         mg/Kg         1         1227/2010 12:29 P           Arsenic         4.4         1.0         mg/Kg         1         1227/2010 12:29 P           Barium         100         1.0         mg/Kg         1         1227/2010 12:29 P           Baryllum         ND         1.0         mg/Kg         1         1227/2010 12:29 P           Cadmium         ND         1.0         mg/Kg         1         1227/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         1227/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         1227/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         1227/2010 12:29 P           Lead         73         1.0         mg/Kg         1         1227/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         1227/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         1227/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         1227/2010 12:29 P           Silver         ND         1.0         mg/Kg	RunID:	ICP10_101227B	QC Batch:	69187				PrepDate:		12/26/2010 Analyst: SRB
Arsenic       4.4       1.0       mg/Kg       1       12/27/2010 12:29 P         Barium       100       1.0       mg/Kg       1       12/27/2010 12:29 P         Beryllium       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Cadmium       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Chromium       94       1.0       mg/Kg       1       12/27/2010 12:29 P         Cobalt       13       1.0       mg/Kg       1       12/27/2010 12:29 P         Cobalt       13       1.0       mg/Kg       1       12/27/2010 12:29 P         Lead       73       1.0       mg/Kg       1       12/27/2010 12:29 P         Nickel       120       1.0       mg/Kg       1       12/27/2010 12:29 P         Silver       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Silver       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Thallium       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Silver       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Since       59       1.0       <	Antimo	ony		ND	2.0		mg/Kg		1	12/27/2010 12:29 PM
Barium         100         1.0         mg/Kg         1         12/27/2010 12:29 P           Beryllium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Cadmium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Chromium         94         1.0         mg/Kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Nckel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         Stb         FPA 3550B         EP	Arsen	c		4.4	1.0		mg/Kg		1	12/27/2010 12:29 PM
Beryllium         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Cadmium         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Chromium         94         1.0         mg/kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/kg         1         12/27/2010 12:29 P           Copper         27         2.0         mg/kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/kg         1         12/27/2010 12:29 P           Nokel         120         1.0         mg/kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/kg         1         12/27/2010 12:29 P           Silver         Stol         59         1.0         mg/kg         1         12/27/2010 12:29 P           Sinc         GC16_101227A         QC	Bariur	n		100	1.0		mg/Kg		1	12/27/2010 12:29 PM
Cadmium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Chomium         94         1.0         mg/Kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Jandium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Zilce         S9         1.0         mg/Kg         1         12/27/2010 12:29 P           Zilca         S50B         EPA 8015B(M)         1         12/27/2010 12:29 P           Silca GEL CLEANUP DRO AND ORO BY GC-FID         Immodel Analyst: CBF         Immodel Analyst: CBF           DRO         6.3         1.0         mg/Kg         1	Berylli	um		ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Chromium         94         1.0         mg/kg         1         12/27/2010 12:29 P           Cobalt         13         1.0         mg/kg         1         12/27/2010 12:29 P           Copper         27         2.0         mg/kg         1         12/27/2010 12:29 P           Molybdenum         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/kg         1         12/27/2010 12:29 P           Vanadium         40         1.0         mg/kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/kg         1         12/27/2010 12:29 P           SILICA GEL CLEANUP DRO AND ORO BY GC-FID         EPA 3050B         EPA 3050B         1         12/27/2010 01:56 P           DRO         0.25         1.0<	Cadm	ium		ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Cobalt         13         1.0         mg/Kg         1         12/27/2010 12:29 P           Copper         27         2.0         mg/Kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Molybdenum         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/Kg         1         12/27/2010 12:29 P           SLICA GEL CLEANUP DRO AND ORO BY GC-FID         EPA 3550B         EPA 305B(M)         1         12/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         mg/Kg         1         12/27/2010 01:56 P           DRO         6.3         1.0         mg/Kg         1         12/27/2010 01:56 P           Surr: p-Terp	Chrom	nium		94	1.0		mg/Kg		1	12/27/2010 12:29 PM
Copper         27         2.0         mg/Kg         1         12/27/2010 12:29 P           Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Molybdenum         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Vanadium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           SILICA GEL CLEANUP DRO AND ORO BY GC-FID         EPA 3550B         EPA 8015B(M)         1         12/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         PrepDate:         12/27/2010 01:56 P           DRO         6.3         1.0         mg/Kg         1         12/27/2010 01:56 P           Sur: p-Terphenyl         79.1         30-128         %REC         1         12/27/2010 01:56 P           Mercury         ND         0.10         mg/Kg         1         12/27/2010 01:56 P           SEMIVOL	Cobal	t		13	1.0		mg/Kg		1	12/27/2010 12:29 PM
Lead         73         1.0         mg/Kg         1         12/27/2010 12:29 P           Molybdenum         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Vanadium         40         1.0         mg/Kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/Kg         1         12/27/2010 12:29 P           SILICA GEL CLEANUP DRO AND ORO BY GC-FID         EPA 3550B         EPA 8015B(M)         1         12/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         PrepDate:         12/23/2010 Analyst: CBF           DRO         25         1.0         mg/Kg         1         12/27/2010 01:56 P           Sur: p-Terphenyl         79.1         30-128         %REC         1         12/27/2010 01:56 P           Sur:	Coppe	r		27	2.0		mg/Kg		1	12/27/2010 12:29 PM
Molybdenum         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Vanadium         40         1.0         mg/Kg         1         12/27/2010 12:29 P           Zinc         59         1.0         mg/Kg         1         12/27/2010 12:29 P           SLICA GEL CLEANUP DRO AND ORO BY GC-FID         EPA 8015B(M)         1         12/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         PrepDate:         12/23/2010 Analyst: CBF           DRO         6.3         1.0         mg/Kg         1         12/27/2010 01:56 P           Surr: p-Terphenyl         79.1         30-128         %REC         1         12/27/2010 01:56 P           MERCURY BY COLD VAPOR TECHNIQUE         EPA 7471A         QC Batch:         69185         PrepDate:         12/27/2010 12:21 P	Lead			73	1.0		mg/Kg		1	12/27/2010 12:29 PM
Nickel         120         1.0         mg/Kg         1         12/27/2010 12:29 P           Selenium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         12/27/2010 12:29 P           Vanadium         40         1.0         mg/Kg         1         12/27/2010 12:29 P           SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B         mg/Kg         1         12/27/2010 12:29 P           SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B         EPA 8015B(M)         1         12/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         PrepDate:         12/27/2010 01:56 P           DRO         25         1.0         mg/Kg         1         12/27/2010 01:56 P           MERCURY BY COLD VAPOR TECHNIQUE         EPA 7471A         1         12/27/2010 01:56 P           Mercury         ND         0.10         mg/Kg         1         12/27/2010 01:56 P           SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B         EPA 8270C         1         12/27/2010 12:21 P           Semivolatile Organic 69218	Molyb	denum		ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Selenium         ND         1.0         mg/Kg         1         1/2/27/2010 12:29 P           Silver         ND         1.0         mg/Kg         1         1/2/27/2010 12:29 P           Thallium         ND         1.0         mg/Kg         1         1/2/27/2010 12:29 P           Vanadium         40         1.0         mg/Kg         1         1/2/27/2010 12:29 P           Zinc         59         1.0         mg/Kg         1         1/2/27/2010 12:29 P           SLICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B         EPA 8015B(M)         1         1/2/27/2010 12:29 P           RunID:         GC16_101227A         QC Batch:         69169         PrepDate:         1/2/27/2010 01:56 P           DRO         6.3         1.0         mg/Kg         1         1/2/27/2010 01:56 P           ORO         25         1.0         mg/Kg         1         1/2/27/2010 01:56 P           Surr: p-Terphenyl         79.1         30-128         %REC         1         1/2/27/2010 01:56 P           MERCURY BY COLD VAPOR TECHNIQUE         EPA 7471A         RunID: AA5_101227A         QC Batch:         69185         PrepDate:         1/2/27/2010 12:21 P           SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B         EPA 8270C	Nickel			120	1.0		mg/Kg		1	12/27/2010 12:29 PM
Silver       ND       1.0       mg/kg       1       12/27/2010 12:29 P         Thallium       ND       1.0       mg/kg       1       12/27/2010 12:29 P         Vanadium       40       1.0       mg/kg       1       12/27/2010 12:29 P         Zinc       59       1.0       mg/kg       1       12/27/2010 12:29 P         SillCA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B       EPA 8015B(M)       E         RunID:       GC16_101227A       QC Batch:       69169       PrepDate:       12/27/2010 Analyst: CBF         DRO       6.3       1.0       mg/kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A       EPA 7471A       VV         Mercury       ND       0.10       mg/kg       1       12/27/2010 Analyst: VV         Mercury       ND       0.10       mg/kg       1       12/27/2010 2:27 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       1       12/28/2010 02:27 A         Acenaphthene       ND	Seleni	um		ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Thallium       ND       1.0       mg/Kg       1       12/27/2010 12:29 P         Vanadium       40       1.0       mg/Kg       1       12/27/2010 12:29 P         Zinc       59       1.0       mg/Kg       1       12/27/2010 12:29 P         SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B       EPA 8015B(M)       E         RunID:       GC16_101227A       QC Batch:       69169       PrepDate:       12/27/2010 Analyst: CBF         DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A       EPA 7471A       EPA 7471A       VV       Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       EPA 8270C       I       12/27/2010 Analyst: VV         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A	Silver			ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Vanadium       40       1.0       mg/Kg       1       12/27/2010 12:29 P         Zinc       59       1.0       mg/Kg       1       12/27/2010 12:29 P         SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B       EPA 8015B(M)       E         RunlD:       GC16_101227A       QC Batch:       69169       PrepDate:       12/23/2010       Analyst:       CBr         DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A       RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       1       12/27/2010       Analyst:       VV         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A       Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A       Anthracene<	Thalliu	ım		ND	1.0		mg/Kg		1	12/27/2010 12:29 PM
Zinc       59       1.0       mg/Kg       1       12/27/2010 12:29 P         SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B       EPA 8015B(M)       EPA 8015B(M)         RunID:       GC16_101227A       QC Batch:       69169       PrepDate:       12/23/2010       Analyst:       CBF         DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       1       12/27/2010 Analyst: DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Anthracene       ND       5.0       µg/Kg       1       12/28/2010	Vanac	lium		40	1.0		mg/Kg		1	12/27/2010 12:29 PM
SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B       EPA 8015B(M)         RunID:       GC16_101227A       QC Batch:       69169       PrepDate:       12/23/2010       Analyst:       CBF         DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       1       12/28/2010 02:27 A         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/	Zinc			59	1.0		mg/Kg		1	12/27/2010 12:29 PM
EPA 3550B       EPA 8015B(M)         RunID:       GC16_101227A       QC Batch:       69169       PrepDat:       12/23/2010       Analyst: CBR         DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A       EPA 7471A       PrepDat:       12/26/2010       Analyst: VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPUNDS BY C/MS-SIM EPA 3550B       EPA 8270C       1       12/27/2010 22:7 A         RunID:       MS6_101227A       QC Batch:       69218       PrepDat:       12/27/2010       Analyst: DM         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27	SILICA	GEL CLEANUP DRO	O AND ORO BY GO	-FID						
RunlD:       GC16_101227A       QC Batch:       69169       PrepDate:       12/23/2010       Analyst:       CBF         DRO       6.3       1.0       mg/Kg       1       12/27/2010       01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010       01:56 P         Surr:       p-Terphenyl       79.1       30-128       %REC       1       12/27/2010       01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       TEPA 7471A       %REC       1       12/27/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010       Analyst:       VV         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM       EPA 3550B       EPA 8270C       1       12/27/2010       Analyst:       DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010       02:27 A         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010       02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010       02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010       02:27 A         A			EPA 3550B			EP	A 8015	B(M)		
DRO       6.3       1.0       mg/Kg       1       12/27/2010 01:56 P         ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM       EPA 3550B       EPA 8270C       E         RunID:       MS6_101227A       QC Batch:       69218       PrepDate:       12/27/2010       Analyst:       DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A       Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Actenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Anthracene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A	RunID:	GC16_101227A	QC Batch:	69169				PrepDate:		12/23/2010 Analyst: CBR
ORO       25       1.0       mg/Kg       1       12/27/2010 01:56 P         Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst: VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM       EPA 8270C       EPA 8270C         RunID:       MS6_101227A       QC Batch:       69218       PrepDate:       12/27/2010 Analyst: DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Anthracene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A	DRO			6.3	1.0		ma/Ka		1	12/27/2010 01:56 PM
Surr: p-Terphenyl       79.1       30-128       %REC       1       12/27/2010 01:56 P         MERCURY BY COLD VAPOR TECHNIQUE       EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst: VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010 12:21 P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       EPA 8270C         RunID:       MS6_101227A       QC Batch:       69218       PrepDate:       12/27/2010       Analyst: DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A         Anthracene       ND       5.0       µg/Kg       1       12/28/2010 02:27 A	ORO			25	1.0		mg/Kg		1	12/27/2010 01:56 PM
MERCURY BY COLD VAPOR TECHNIQUE         EPA 7471A           RunID:         AA5_101227A         QC Batch:         69185         PrepDate:         12/26/2010         Analyst:         VV           Mercury         ND         0.10         mg/Kg         1         12/27/2010         12:21 P           SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B         EPA 8270C         EPA 8270C           RunID:         MS6_101227A         QC Batch:         69218         PrepDate:         12/27/2010         Analyst:         DMI           Acenaphthene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Acenaphthylene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Anthracene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A	Sur	r: p-Terphenyl		79.1	30-128		%REC		1	12/27/2010 01:56 PM
EPA 7471A         RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010       12:21       P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       EPA 8270C       PrepDate:       12/27/2010       Analyst:       DMI         RunID:       MS6_101227A       QC Batch:       69218       PrepDate:       12/27/2010       Analyst:       DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Actionaphthylene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Anthracene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Anthracene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Anthracene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:	MERCI	JRY BY COLD VAPO	R TECHNIQUE							
RunID:       AA5_101227A       QC Batch:       69185       PrepDate:       12/26/2010       Analyst:       VV         Mercury       ND       0.10       mg/Kg       1       12/27/2010       12:21       P         SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B       EPA 8270C       EPA 8270C       12/27/2010       Analyst:       DMI         RunID:       MS6_101227A       QC Batch:       69218       PrepDate:       12/27/2010       Analyst:       DMI         Acenaphthene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Acenaphthylene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Anthracene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Beast (c) anthracene       ND       5.0       µg/Kg       1       12/28/2010       02:27       Analyst:       DMI         Beast (c) anthracene       S0       µg/Kg       1       12/28/2010       02:27       Analyst:						E	PA 747	'1A		
Mercury         ND         0.10         mg/Kg         1         12/27/2010 12:21 P           SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B         EPA 8270C         EPA 8270C           RunID:         MS6_101227A         QC Batch:         69218         PrepDate:         12/27/2010         Analyst:         DMI           Acenaphthene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A           Anthracene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A           Runthracene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A	RunID:	AA5_101227A	QC Batch:	69185				PrepDate:		12/26/2010 Analyst: VV
SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B         EPA 8270C           RunID:         MS6_101227A         QC Batch:         69218         PrepDate:         12/27/2010         Analyst:         DMI           Acenaphthene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Acenaphthylene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Anthracene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A	Mercu	ry		ND	0.10		mg/Kg		1	12/27/2010 12:21 PM
EPA 3550B         EPA 8270C           RunID:         MS6_101227A         QC Batch:         69218         PrepDate:         12/27/2010         Analyst:         DMI           Acenaphthene         ND         5.0         µg/Kg         1         12/28/2010         02:27         A           Acenaphthylene         ND         5.0         µg/Kg         1         12/28/2010         02:27         A           Anthracene         ND         5.0         µg/Kg         1         12/28/2010         02:27         A	SEMIV	OLATILE ORGANIC	COMPOUNDS BY	GC/MS-SI	л					
RunID:         MS6_101227A         QC Batch:         69218         PrepDate:         12/27/2010         Analyst:         DMI           Acenaphthene         ND         5.0         µg/Kg         1         12/28/2010         02:27 A           Acenaphthylene         ND         5.0         µg/Kg         1         12/28/2010         02:27 A           Anthracene         ND         5.0         µg/Kg         1         12/28/2010         02:27 A           Beasto(s) anthracene         ND         5.0         µg/Kg         1         12/28/2010         02:27 A			EPA 3550B			E	PA 827	0C		
Acenaphthene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A           Acenaphthylene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A           Anthracene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A           Beagag(a)apthracene         ND         5.0         μg/Kg         1         12/28/2010 02:27 A	RunID:	MS6_101227A	QC Batch:	69218				PrepDate:		12/27/2010 Analyst: DMP
Acenaphthylene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Anthracene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A           Bostor(c)apthracene         ND         5.0         µg/Kg         1         12/28/2010 02:27 A	Acena	phthene		ND	5.0		µg/Kg		1	12/28/2010 02:27 AM
Anthree ND 5.0 µg/Kg 1 12/28/2010 02:27 A	Acena	, phthylene		ND	5.0		µg/Kg		1	12/28/2010 02:27 AM
Banza (a) anthroanna 6.6 5.0 ug/// a 1 1/2/9/2010.02:27.4	Anthra	icene		ND	5.0		µg/Kg		1	12/28/2010 02:27 AM
	Benzo	(a)anthracene		6.6	5.0		µg/Kg		1	12/28/2010 02:27 AM

Η Holding times for preparation or analysis exceeded

S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out

Advanced Technology

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-001A

# Client Sample ID: NMB-1-0.5 Collection Date: 12/20/2010 9:10:00 AM

Matrix: SOIL

Analyses		sult	PQL	Qual Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY EPA 3550B	GC/MS-SIN	Л	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		6.4	5.0	µg/Kg	1	12/28/2010 02:27 AM
Benzo(b)fluoranthene		11	5.0	µg/Kg	1	12/28/2010 02:27 AM
Benzo(g,h,i)perylene		6.7	5.0	µg/Kg	1	12/28/2010 02:27 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 02:27 AM
Chrysene		11	5.0	µg/Kg	1	12/28/2010 02:27 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 02:27 AM
Fluoranthene		14	5.0	µg/Kg	1	12/28/2010 02:27 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 02:27 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 02:27 AM
Naphthalene		5.9	5.0	µg/Kg	1	12/28/2010 02:27 AM
Phenanthrene		14	5.0	µg/Kg	1	12/28/2010 02:27 AM
Pyrene		13	5.0	µg/Kg	1	12/28/2010 02:27 AM
Surr: 1,2-Dichlorobenzene-d4	:	91.6	33-121	%REC	1	12/28/2010 02:27 AM
Surr: 2-Fluorobiphenyl		106	41-128	%REC	1	12/28/2010 02:27 AM
Surr: 4-Terphenyl-d14		121	54-154	%REC	1	12/28/2010 02:27 AM
Surr: Nitrobenzene-d5		89.0	39-113	%REC	1	12/28/2010 02:27 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

Auvanceu reennology Laboratories					Print Date: 28-Dec-10						
CLIENT:	Ninyo & Moor	e		(	Client Samp	ole ID: NM	[B-1-	5.0			
Lab Order:	115438			<b>Collection Date:</b> 12/20/2010 10:40:00 AM							
Project:	ALBANY PHA	ASE II ESA, 401	678002		Μ	l <b>atrix:</b> SOI	L				
Lab ID:	115438-005A										
Analyses		Resu	lt P	QL	Qual Unit	s	DF	Date	Analyzed		
SILICA GEL C	LEANUP DRO ANI	D ORO BY GC-F FPA 3550B	ĪD		FPA 801	5B(M)					
	4040074		00400			DeseDeter		40/00/0040			
RUND: GC16_	101227A	QC Batch:	69169			PrepDate:		12/23/2010	Analyst: CBR		
DRO		N	D	1.0	mg/K	g	1	12/2	27/2010 11:45 AM		
ORO		N	D	1.0	mg/K	g	1	12/2	27/2010 11:45 AM		
Surr: p-Terpl	henyl	68	.6 30-	128	%RE	С	1	12/2	27/2010 11:45 AM		
SEMIVOLATIL	E ORGANIC COM	POUNDS BY GO EPA 3550B	C/MS-SIM		EPA 82	270C					
RunID: MS6_1	01227A	QC Batch:	69218			PrepDate:		12/27/2010	Analyst: DMP		
Acenaphthene		Ν	D	5.0	µg/Kç	9	1	12/2	27/2010 11:05 PM		
Acenaphthylen	e	Ν	D	5.0	μg/Kg	3	1	12/2	27/2010 11:05 PM		
Anthracene		Ν	D	5.0	µg/Kg	3	1	12/2	27/2010 11:05 PM		
Benzo(a)anthra	acene	Ν	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Benzo(a)pyrene	e	N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Benzo(b)fluora	nthene	Ν	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Benzo(g,h,i)pe	rylene	Ν	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Benzo(k)fluorai	nthene	N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Chrysene		N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Dibenz(a,h)ant	hracene	N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Fluoranthene		N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Fluorene		N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Indeno(1,2,3-co	d)pyrene	N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Naphthalene		N	D	5.0	μg/Kg	9	1	12/2	27/2010 11:05 PM		
Phenanthrene		N	D	5.0	μg/Kg	9	1	12/2	27/2010 11:05 PM		
Pyrene		N	D	5.0	µg/Kg	9	1	12/2	27/2010 11:05 PM		
Surr: 1,2-Dic	hlorobenzene-d4	87	.3 33-	121	%RE	С	1	12/2	27/2010 11:05 PM		
Surr: 2-Fluor	obiphenyl	10	3 41-	128	%RE	С	1	12/2	27/2010 11:05 PM		
Surr: 4-Terpl	henyl-d14	11	4 54-	154	%RE	С	1	12/2	27/2010 11:05 PM		
Surr: Nitrobe	enzene-d5	86	.8 39-	113	%RE	С	1	12/2	27/2010 11:05 PM		

**ANALYTICAL RESULTS** 

Qualifiers:

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

Е Value above quantitation range

- ND Not Detected at the Reporting Limit Results are wet unless otherwise specified
- DO Surrogate Diluted Out

Laboratories

В

Н



# **ANALYTICAL RESULTS**

**Date Analyzed** 

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-006A

Result

#### Client Sample ID: NMB-2-0.5 Collection Date: 12/20/2010 10:50:00 AM Matrix: SOIL

DF

Analyses

ICP ME	TALS							
		EPA 3050B			EPA 601	0B		
RunID:	ICP10_101227B	QC Batch:	69187			PrepDate:	12/26/2010	Analyst: SRB
Antimo	ny		ND	2.0	mg/Kg	1	12/	27/2010 12:31 PM
Arseni	0		2.5	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Barium			110	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Berylliu	ım		ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Cadmi	um		ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Chrom	ium		60	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Cobalt			9.8	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Coppe	r		33	2.0	mg/Kg	1	12/	27/2010 12:31 PM
Lead			36	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Molybo	lenum		ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Nickel			49	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Seleni	ım		ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Silver			ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Thalliu	m		ND	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Vanad	um		29	1.0	mg/Kg	1	12/	27/2010 12:31 PM
Zinc			47	1.0	mg/Kg	1	12/	27/2010 12:31 PM
SILICA	GEL CLEANUP DRO	AND ORO BY GC	-FID					
		EPA 3550B			EPA 8015	B(M)		
RunID:	GC16_101227A	QC Batch:	69169			PrepDate:	12/23/2010	Analyst: CBR
DRO			8.6	1.0	mg/Kg	1	12/	27/2010 02:06 PM
ORO			26	1.0	mg/Kg	1	12/	27/2010 02:06 PM
Surr	: p-Terphenyl	7	4.8	30-128	%REC	1	12/	27/2010 02:06 PM
MERCL	RY BY COLD VAPOR	TECHNIQUE						
					EPA 747	1A		
RunID:	AA5_101227A	QC Batch:	69185			PrepDate:	12/26/2010	Analyst: VV
Mercu	у		ND	0.10	mg/Kg	1	12/	27/2010 12:24 PM
SEMIVO	DLATILE ORGANIC C	OMPOUNDS BY O	SC/MS-SI	М				
		EPA 3550B			EPA 827	OC		
RunID:	MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010	Analyst: DMP
Acena	ohthene		ND	5.0	µg/Kg	1	12/	28/2010 02:53 AM
Acena	ohthylene		ND	5.0	µg/Kg	1	12/	28/2010 02:53 AM
Anthra	cene		ND	5.0	µg/Kg	1	12/	28/2010 02:53 AM
Benzo	a)anthracene		ND	5.0	µg/Kg	1	12/	28/2010 02:53 AM
Qualifier	s: B Analyte detected	d in the associated Met	hod Blank		E Va	alue above quant	itation range	

**PQL** Qual Units

Η S Spike/Surrogate outside of limits due to matrix interference

Surrogate Diluted Out DO

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-006A

#### Client Sample ID: NMB-2-0.5 Collection Date: 12/20/2010 10:50:00 AM Matrix: SOIL

Result **POL Oual Units** DF **Date Analyzed** Analyses SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B EPA 8270C RunID: MS6\_101227A QC Batch: 69218 PrepDate: 12/27/2010 Analyst: DMP Benzo(a)pyrene ND 5.0 12/28/2010 02:53 AM µg/Kg 1 5.0 12/28/2010 02:53 AM Benzo(b)fluoranthene 5.9 µg/Kg 1 Benzo(g,h,i)perylene ND 5.0 1 12/28/2010 02:53 AM µg/Kg Benzo(k)fluoranthene ND 5.0 µg/Kg 1 12/28/2010 02:53 AM Chrysene ND 5.0 12/28/2010 02:53 AM µg/Kg 1 Dibenz(a,h)anthracene ND 5.0 1 12/28/2010 02:53 AM µg/Kg Fluoranthene ND 5.0 µg/Kg 1 12/28/2010 02:53 AM Fluorene ND 5.0 12/28/2010 02:53 AM µg/Kg 1 Indeno(1,2,3-cd)pyrene ND 5.0 µg/Kg 1 12/28/2010 02:53 AM Naphthalene ND 5.0 µg/Kg 1 12/28/2010 02:53 AM Phenanthrene ND 5.0 µg/Kg 1 12/28/2010 02:53 AM Pyrene 5.5 5.0 µg/Kg 1 12/28/2010 02:53 AM Surr: 1,2-Dichlorobenzene-d4 90.5 33-121 %REC 1 12/28/2010 02:53 AM Surr: 2-Fluorobiphenyl 41-128 %REC 106 1 12/28/2010 02:53 AM Surr: 4-Terphenyl-d14 54-154 %REC 12/28/2010 02:53 AM 117 1 Surr: Nitrobenzene-d5 90.5 39-113 %REC 12/28/2010 02:53 AM 1

**Qualifiers:** 

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



В

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-010A

Client Sample ID: NMB-2-5.0 Collection Date: 12/20/2010 11:10:00 AM

Matrix: SOIL

Analyses	Resu	lt PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B		E	PA 6010B		
RunID: ICP10_101227B	QC Batch:	69187		Prepl	Date:	12/26/2010 Analyst: SRB
Antimony	Ν	D 2.0	)	mg/Kg	1	12/27/2010 12:33 PM
Arsenic	1	.4 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Barium	3	3 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Beryllium	Ν	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Cadmium	N	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Chromium	1	3 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Cobalt	1	.7 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Copper	3	.3 2.0	)	mg/Kg	1	12/27/2010 12:33 PM
Lead	4	.1 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Molybdenum	N	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Nickel	2	.2 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Selenium	N	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Silver	N	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Thallium	N	D 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Vanadium	1	4 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
Zinc	1	3 1.0	)	mg/Kg	1	12/27/2010 12:33 PM
SILICA GEL CLEANUP DRO	AND ORO BY GC-F	ID				
	EPA 3550B		EP.	A 8015B(M)		
RunID: GC16_101227A	QC Batch:	69169		Prepl	Date:	12/23/2010 Analyst: CBR
DRO	1	.3 1.0	)	mg/Kg	1	12/27/2010 11:54 AM
ORO	1	.9 1.0	)	mg/Kg	1	12/27/2010 11:54 AM
Surr: p-Terphenyl	60	.5 30-128	5	%REC	1	12/27/2010 11:54 AM
MERCURY BY COLD VAPOR	TECHNIQUE					
			E	PA 7471A		
RunID: AA5_101227A	QC Batch:	69185		Prepl	Date:	12/26/2010 Analyst: VV
Mercury	Ν	D 0.10	)	mg/Kg	1	12/27/2010 12:26 PM
SEMIVOLATILE ORGANIC CO	OMPOUNDS BY GO	C/MS-SIM				
	EPA 3550B		E	PA 8270C		
RunID: MS6_101227A	QC Batch:	69218		Prepl	Date:	12/27/2010 Analyst: DMP
Acenaphthene	N	D 5.0	)	µg/Kg	1	12/27/2010 10:38 PM
Acenaphthylene	Ν	D 5.0	)	µg/Kg	1	12/27/2010 10:38 PM
Anthracene	N	D 5.0	)	µg/Kg	1	12/27/2010 10:38 PM
Benzo(a)anthracene	N	D 5.0	)	µg/Kg	1	12/27/2010 10:38 PM
<b>Qualifiers:</b> B Analyte detected	d in the associated Metho	od Blank		E Value ab	ove quantita	tion range

Η Holding times for preparation or analysis exceeded

S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out

Advanced Technology

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-010A

# Client Sample ID: NMB-2-5.0 Collection Date: 12/20/2010 11:10:00 AM

Matrix: SOIL

Analyses		sult	PQL Qua	al Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	gc/ms-sin	И	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Benzo(g,h,i)perylene		6.3	5.0	µg/Kg	1	12/27/2010 10:38 PM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Chrysene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Fluoranthene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Fluorene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Naphthalene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Phenanthrene		ND	5.0	µg/Kg	1	12/27/2010 10:38 PM
Pyrene		18	5.0	µg/Kg	1	12/27/2010 10:38 PM
Surr: 1,2-Dichlorobenzene-d4	:	81.1	33-121	%REC	1	12/27/2010 10:38 PM
Surr: 2-Fluorobiphenyl	:	98.7	41-128	%REC	1	12/27/2010 10:38 PM
Surr: 4-Terphenyl-d14		105	54-154	%REC	1	12/27/2010 10:38 PM
Surr: Nitrobenzene-d5		86.0	39-113	%REC	1	12/27/2010 10:38 PM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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Result

# **ANALYTICAL RESULTS**

**Date Analyzed** 

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-011A

Client Sample ID: NMB-3-0.5 Collection Date: 12/20/2010 11:25:00 AM Matrix: SOIL

DF

Analyses

ICP ME	TALS						
		EPA 3050B		EPA 601	0B		
RunID:	ICP10_101227B	QC Batch:	69187		PrepDate:	12/26/2010	Analyst: SRB
Antim	ony	ND	2.0	mg/Kg	1	12/	27/2010 12:39 PM
Arsen	ic	9.9	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Bariur	n	130	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Berylli	um	ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Cadm	ium	ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Chron	nium	140	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Cobal	t	18	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Coppe	er	37	2.0	mg/Kg	1	12/	27/2010 12:39 PM
Lead		11	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Molyb	denum	ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Nickel		210	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Selen	um	ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Silver		ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Thalliu	ım	ND	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Vanad	lium	44	1.0	mg/Kg	1	12/	27/2010 12:39 PM
Zinc		47	1.0	mg/Kg	1	12/	27/2010 12:39 PM
SILICA	GEL CLEANUP DRO	AND ORO BY GC-FIE	)				
		EPA 3550B		EPA 8015	B(M)		
RunID:	GC16_101227A	QC Batch:	69169		PrepDate:	12/23/2010	Analyst: CBR
DRO		1.8	1.0	mg/Kg	1	12/	27/2010 12:41 PM
ORO		ND	1.0	mg/Kg	1	12/	27/2010 12:41 PM
Sur	r: p-Terphenyl	70.7	30-128	%REC	1	12/	27/2010 12:41 PM
MERC	JRY BY COLD VAPOR	R TECHNIQUE					
				EPA 747	1A		
RunID:	AA5_101227A	QC Batch:	69185		PrepDate:	12/26/2010	Analyst: VV
Mercu	ry	0.15	0.10	mg/Kg	1	12/	27/2010 11:39 AM
SEMIV	OLATILE ORGANIC C	OMPOUNDS BY GC/	NS-SIM				
		EPA 3550B		EPA 827	0C		
RunID:	MS6_101227A	QC Batch:	69218		PrepDate:	12/27/2010	Analyst: DMP
Acena	phthene	ND	5.0	µg/Kg	1	12/	27/2010 11:32 PM
Acena	phthylene	ND	5.0	µg/Kg	1	12/	27/2010 11:32 PM
Anthra	acene	ND	5.0	µg/Kg	1	12/	27/2010 11:32 PM
Benzo	(a)anthracene	ND	5.0	µg/Kg	1	12/	27/2010 11:32 PM
Qualifie	B Analyte detecte	d in the associated Method	Blank	E Va	due above quanti	tation range	

PQL Qual Units

Holding times for preparation or analysis exceeded Η

Spike/Surrogate outside of limits due to matrix interference S

DO Surrogate Diluted Out

Advanced Technology

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-011A

# Client Sample ID: NMB-3-0.5 Collection Date: 12/20/2010 11:25:00 AM

Matrix: SOIL

Analyses		ılt	PQL	Qual Units	D	F Date Analyzed	l
SEMIVOLATILE ORGANIC CO	MPOUNDS BY G EPA 3550B	C/MS-SIN	И	EPA 82	70C		
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst:	DMP
Benzo(a)pyrene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Benzo(b)fluoranthene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Benzo(g,h,i)perylene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Benzo(k)fluoranthene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Chrysene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Dibenz(a,h)anthracene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Fluoranthene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Fluorene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Indeno(1,2,3-cd)pyrene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Naphthalene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Phenanthrene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Pyrene	١	١D	5.0	µg/Kg	1	12/27/2010 11:	32 PM
Surr: 1,2-Dichlorobenzene-d4	91	.2	33-121	%REC	<b>)</b> 1	12/27/2010 11:	32 PM
Surr: 2-Fluorobiphenyl	1	04	41-128	%REC	<b>)</b> 1	12/27/2010 11:	32 PM
Surr: 4-Terphenyl-d14	1	14	54-154	%REC	<b>)</b> 1	12/27/2010 11:	32 PM
Surr: Nitrobenzene-d5	88	3.3	39-113	%REC	: 1	12/27/2010 11:	32 PM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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# **ANALYTICAL RESULTS**

**Date Analyzed** 

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-015A

#### Client Sample ID: NMB-3-5.0 Collection Date: 12/20/2010 11:25:00 AM Matrix: SOIL

DF

Analyses

ICP METALS							
	EPA 3050B			EPA 601	0B		
RunID: ICP10_101227C	QC Batch:	69188			PrepDate:	12/26/2010	Analyst: SRB
Antimony		ND	2.0	mg/Kg	1	12/	27/2010 12:52 PM
Arsenic		1.8	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Barium		16	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Beryllium		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Cadmium		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Chromium		14	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Cobalt		1.6	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Copper		2.9	2.0	mg/Kg	1	12/	27/2010 12:52 PM
Lead		5.1	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Molybdenum		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Nickel		13	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Selenium		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Silver		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Thallium		ND	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Vanadium		20	1.0	mg/Kg	1	12/	27/2010 12:52 PM
Zinc		9.6	1.0	mg/Kg	1	12/	27/2010 12:52 PM
SILICA GEL CLEANUP DRO A	ND ORO BY GC	-FID					
	EPA 3550B			EPA 8015	B(M)		
RunID: GC16_101227A	QC Batch:	69169			PrepDate:	12/23/2010	Analyst: CBR
DRO		4.9	1.0	mg/Kg	1	12/	27/2010 12:05 PM
ORO		11	1.0	mg/Kg	1	12/	27/2010 12:05 PM
Surr: p-Terphenyl	8	81.8	30-128	%REC	1	12/	27/2010 12:05 PM
MERCURY BY COLD VAPOR	FECHNIQUE						
				EPA 747	'1A		
RunID: AA5_101227B	QC Batch:	69186			PrepDate:	12/26/2010	Analyst: VV
Mercury		ND	0.10	mg/Kg	1	12/	27/2010 12:46 PM
SEMIVOLATILE ORGANIC CO	MPOUNDS BY G	C/MS-SI	М				
	EPA 3550B			EPA 827	0C		
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010	Analyst: DMP
Acenaphthene		ND	5.0	µg/Kg	1	12/	28/2010 12:40 AM
Acenaphthylene		ND	5.0	µg/Kg	1	12/	28/2010 12:40 AM
Anthracene		ND	5.0	µg/Kg	1	12/	28/2010 12:40 AM
Benzo(a)anthracene		ND	5.0	μg/Kg	1	12/	28/2010 12:40 AM
<b>Qualifiers:</b> B Analyte detected	in the associated Met	hod Blank		E Va	alue above quant	itation range	

PQL Qual Units

Result

- Holding times for preparation or analysis exceeded Η
- S Spike/Surrogate outside of limits due to matrix interference
- Surrogate Diluted Out DO

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-015A

# Client Sample ID: NMB-3-5.0 Collection Date: 12/20/2010 11:25:00 AM

Matrix: SOIL

Analyses		sult	PQL Qu	ial Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	Λ	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Phenanthrene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 12:40 AM
Surr: 1,2-Dichlorobenzene-d4	8	84.8	33-121	%REC	1	12/28/2010 12:40 AM
Surr: 2-Fluorobiphenyl		100	41-128	%REC	1	12/28/2010 12:40 AM
Surr: 4-Terphenyl-d14		109	54-154	%REC	1	12/28/2010 12:40 AM
Surr: Nitrobenzene-d5	1	85.7	39-113	%REC	1	12/28/2010 12:40 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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Result

# **ANALYTICAL RESULTS**

**Date Analyzed** 

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-016A

#### Client Sample ID: NMB-4-0.5 Collection Date: 12/20/2010 11:50:00 AM Matrix: SOIL

DF

Analyses

ICP METALS							
	EPA 30508	3		EPA 601	0B		
RunID: ICP10_101	227C QC Bate	ch: 6918	88		PrepDate:	12/26/2010	Analyst: SRB
Antimony		ND	2.0	mg/Kg	1	12/	27/2010 12:53 PM
Arsenic		4.0	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Barium		96	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Beryllium		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Cadmium		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Chromium		58	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Cobalt		10	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Copper		26	2.0	mg/Kg	1	12/	27/2010 12:53 PM
Lead		35	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Molybdenum		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Nickel		75	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Selenium		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Silver		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Thallium		ND	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Vanadium		31	1.0	mg/Kg	1	12/	27/2010 12:53 PM
Zinc		55	1.0	mg/Kg	1	12/	27/2010 12:53 PM
SILICA GEL CLEA	NUP DRO AND ORO BY	GC-FID					
	EPA 3550	3		EPA 8015	B(M)		
RunID: GC16_101	227A QC Bate	ch: 6916	69		PrepDate:	12/23/2010	Analyst: CBR
DRO		5.0	1.0	mg/Kg	1	12/	27/2010 01:37 PM
ORO		16	1.0	mg/Kg	1	12/	27/2010 01:37 PM
Surr: p-Terpheny	/	79.3	30-128	%REC	1	12/	27/2010 01:37 PM
MERCURY BY CO	LD VAPOR TECHNIQUE						
				EPA 747	1A		
RunID: AA5_10122	27B QC Bato	ch: 6918	36		PrepDate:	12/26/2010	Analyst: VV
Mercury		ND	0.10	mg/Kg	1	12/	27/2010 12:48 PM
SEMIVOLATILE O	RGANIC COMPOUNDS E	BY GC/MS-	SIM				
	EPA 3550	3		EPA 827	0C		
RunID: MS6_1012	27A QC Bato	ch: 6921	8		PrepDate:	12/27/2010	Analyst: DMP
Acenaphthene		ND	5.0	µg/Kg	1	12/	28/2010 03:21 AM
Acenaphthylene		ND	5.0	µg/Kg	1	12/	28/2010 03:21 AM
Anthracene		ND	5.0	µg/Kg	1	12/	28/2010 03:21 AM
Benzo(a)anthracen	е	ND	5.0	µg/Kg	1	12/	28/2010 03:21 AM
Qualifiers: <sup>B</sup> A	nalyte detected in the associated	Method Blan	k	E Va	llue above quanti	itation range	

PQL Qual Units

Η Holding times for preparation or analysis exceeded

S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-016A

# Client Sample ID: NMB-4-0.5 Collection Date: 12/20/2010 11:50:00 AM

Matrix: SOIL

Analyses		sult	PQL	Qual Units	DI	F Date Analyzed
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	Λ	EPA 82	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Benzo(b)fluoranthene		7.0	5.0	µg/Kg	1	12/28/2010 03:21 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Fluoranthene		5.6	5.0	µg/Kg	1	12/28/2010 03:21 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 03:21 AM
Phenanthrene		7.2	5.0	µg/Kg	1	12/28/2010 03:21 AM
Pyrene		6.2	5.0	µg/Kg	1	12/28/2010 03:21 AM
Surr: 1,2-Dichlorobenzene-d4	:	81.9	33-121	%REC	; 1	12/28/2010 03:21 AM
Surr: 2-Fluorobiphenyl	:	96.9	41-128	%REC	; 1	12/28/2010 03:21 AM
Surr: 4-Terphenyl-d14		105	54-154	%REC	; 1	12/28/2010 03:21 AM
Surr: Nitrobenzene-d5		81.0	39-113	%REC	; 1	12/28/2010 03:21 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

Auvanceu Teennology Laboratories							Print Date: 28-Dec-10							
CLIEN	IT:	Ninyo & Moore	;			Client	Sample	e ID: NM	B-4-	5.0				
Lab Oı	rder:	115438			Collection Date: 12/20/2010 11:50:00 AM									
Project	t:	ALBANY PHA	SE II ESA, 40	01678002			Ma	trix: SOII	L					
Lab ID	):	115438-020A												
Analys	es		Res	ult	PQL	Qual	Units		DF	Date	Analyzed			
SILICA	GEL CLE	ANUP DRO AND	ORO BY GC	-FID				-						
		I	EPA 3550B			EP	A 8015	B(M)						
RunID:	GC16_10	1227A	QC Batch:	69169				PrepDate:		12/23/2010	Analyst: CBR			
DRO				63	2.0		mg/Kg		2	12/2	27/2010 02:46 PM			
ORO				180	2.0		mg/Kg		2	12/2	27/2010 02:46 PM			
Sur	r: p-Terpher	nyl	6	5.1	30-128		%REC		2	12/2	27/2010 02:46 PM			
SEMIV	OLATILE	ORGANIC COMP	OUNDS BY G	C/MS-SIN	Л									
		I	EPA 3550B			E	PA 827	'0C						
RunID:	MS6_101	227A	QC Batch:	69218				PrepDate:		12/27/2010	Analyst: DMP			
Acena	phthene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Acena	phthylene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Anthra	acene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Benzo	(a)anthrace	ne		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Benzo	o(a)pyrene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Benzo	(b)fluoranth	ene		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Benzo	o(g,h,i)peryle	ene		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Benzo	(k)fluoranth	ene		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Chryse	ene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Dibenz	z(a,h)anthra	cene		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Fluora	Inthene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Fluore	ene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Indend	o(1,2,3-cd)p	yrene		ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Napht	halene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Phena	anthrene			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Pyrene	e			ND	120		µg/Kg		25	12/2	28/2010 07:49 AM			
Sur	r: 1,2-Dichlo	robenzene-d4		0	33-121	SDO	%REC		25	12/2	28/2010 07:49 AM			
Sur	r: 2-Fluorob	iphenyl		0	41-128	SDO	%REC		25	12/2	28/2010 07:49 AM			
Sur	r: 4-Terpher	nyl-d14		0	54-154	SDO	%REC		25	12/2	28/2010 07:49 AM			
Sur	r: Nitrobenz	ene-d5		0	39-113	SDO	%REC		25	12/2	28/2010 07:49 AM			

Qualifiers:

В

Н

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

**ANALYTICAL RESULTS** 



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-021A

Client Sample ID: NMB-5-0.5 Collection Date: 12/20/2010 12:30:00 PM Matrix: SOIL

DF

Analyses

PQL Qual Units

Result

**Date Analyzed** 

ICP ME	TALS							
		EPA 3050B			EPA 601	0B		
RunID:	ICP10_101227C	QC Batch:	69188			PrepDate:	12/26/2010	Analyst: SRB
Antimo	ny		ND	2.0	mg/Kg	1	12/	27/2010 12:55 PM
Arsenio	>		1.7	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Barium			90	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Berylliu	ım		ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Cadmi	um		ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Chrom	um		8.3	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Cobalt			4.5	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Copper			8.4	2.0	mg/Kg	1	12/	27/2010 12:55 PM
Lead			7.1	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Molybd	enum		ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Nickel			6.4	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Seleniu	ım		ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Silver			ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Thalliu	n		ND	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Vanadi	um		13	1.0	mg/Kg	1	12/	27/2010 12:55 PM
Zinc			12	1.0	mg/Kg	1	12/	27/2010 12:55 PM
SILICA	GEL CLEANUP DRO	AND ORO BY GO	-FID					
		EPA 3550B			EPA 8015	B(M)		
RunID:	GC16_101227A	QC Batch:	69169			PrepDate:	12/23/2010	Analyst: CBR
DRO			3.4	1.0	mg/Kg	1	12/	27/2010 01:19 PM
ORO			5.1	1.0	mg/Kg	1	12/	27/2010 01:19 PM
Surr	: p-Terphenyl		78.4	30-128	%REC	1	12/	27/2010 01:19 PM
MERCU	RY BY COLD VAPOR	TECHNIQUE						
					EPA 747	1A		
RunID:	AA5_101227B	QC Batch:	69186			PrepDate:	12/26/2010	Analyst: VV
Mercur	у		ND	0.10	mg/Kg	1	12/	27/2010 12:50 PM
SEMIVO	DLATILE ORGANIC C	OMPOUNDS BY	GC/MS-SI	М				
		EPA 3550B			EPA 827	0C		
RunID:	MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010	Analyst: DMP
Acenap	ohthene		ND	5.0	µg/Kg	1	12/	28/2010 01:07 AM
Acenap	ohthylene		ND	5.0	µg/Kg	1	12/	28/2010 01:07 AM
Anthra	cene		ND	5.0	µg/Kg	1	12/	28/2010 01:07 AM
Benzo(	a)anthracene		ND	5.0	µg/Kg	1	12/	28/2010 01:07 AM
Qualifier	B Analyte detected	d in the associated Me	thod Blank		E Va	lue above quanti	tation range	

Holding times for preparation or analysis exceeded Η

S Spike/Surrogate outside of limits due to matrix interference

Surrogate Diluted Out DO

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-021A

# Client Sample ID: NMB-5-0.5 Collection Date: 12/20/2010 12:30:00 PM

Matrix: SOIL

Analyses	Re	sult	PQL Qu	ual Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC COI	MPOUNDS BY EPA 3550B	GC/MS-SIN	И	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Phenanthrene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:07 AM
Surr: 1,2-Dichlorobenzene-d4		83.7	33-121	%REC	1	12/28/2010 01:07 AM
Surr: 2-Fluorobiphenyl	:	99.1	41-128	%REC	1	12/28/2010 01:07 AM
Surr: 4-Terphenyl-d14		112	54-154	%REC	1	12/28/2010 01:07 AM
Surr: Nitrobenzene-d5		83.5	39-113	%REC	1	12/28/2010 01:07 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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# ANALYTICAL RESULTS

**Date Analyzed** 

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-025A

#### Client Sample ID: NMB-5-5.0 Collection Date: 12/20/2010 12:30:00 PM Matrix: SOIL

DF

Matrix:

PQL Qual Units

# Analyses

ICP MI	ETALS							
		EPA 3050B			EPA 6010	)B		
RunID:	ICP10_101227C	QC Batch:	69188			PrepDate:	12/26/2010	Analyst: SRB
Antim	ony		ND	2.0	mg/Kg	1	12/	27/2010 12:57 PM
Arsen	ic		1.0	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Bariu	m		97	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Beryll	ium		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Cadm	nium		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Chror	nium		5.3	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Coba	lt		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Copp	er		2.4	2.0	mg/Kg	1	12/:	27/2010 12:57 PM
Lead			4.6	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Molyb	odenum		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Nicke	I		6.9	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Selen	ium		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Silver			ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Thalli	um		ND	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Vana	dium		8.4	1.0	mg/Kg	1	12/:	27/2010 12:57 PM
Zinc			7.3	1.0	mg/Kg	1	12/3	27/2010 12:57 PM
SILICA	GEL CLEANUP DRO	AND ORO BY GO	C-FID					
		EPA 3550B			EPA 8015E	B(M)		
RunID:	GC16_101227A	QC Batch:	69169			PrepDate:	12/23/2010	Analyst: CBR
DRO			2.7	1.0	mg/Kg	1	12/:	27/2010 12:14 PM
ORO			ND	1.0	mg/Kg	1	12/:	27/2010 12:14 PM
Su	rr: p-Terphenyl		63.7	30-128	%REC	1	12/:	27/2010 12:14 PM
MERC	URY BY COLD VAPO	R TECHNIQUE						
					EPA 747	1A		
RunID:	AA5_101227B	QC Batch:	69186			PrepDate:	12/26/2010	Analyst: <b>VV</b>
Mercu	ıry		ND	0.10	mg/Kg	1	12/:	27/2010 12:52 PM
SEMIV	OLATILE ORGANIC C	COMPOUNDS BY	GC/MS-SI	М				
		EPA 3550B			EPA 8270	OC		
RunID:	MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010	Analyst: DMP
Acena	aphthene		ND	5.0	µg/Kg	1	12/	28/2010 01:33 AM
Acena	aphthylene		ND	5.0	µg/Kg	1	12/:	28/2010 01:33 AM
Anthr	acene		ND	5.0	µg/Kg	1	12/:	28/2010 01:33 AM
Benzo	o(a)anthracene		ND	5.0	µg/Kg	1	12/:	28/2010 01:33 AM

Result

- Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-025A

# Client Sample ID: NMB-5-5.0 Collection Date: 12/20/2010 12:30:00 PM

Matrix: SOIL

Analyses R		sult	PQL Qu	al Units	DI	<b>Date Analyzed</b>	
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	И	EPA 827	70C		
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DN	IΡ
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Phenanthrene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 01:33	AM
Surr: 1,2-Dichlorobenzene-d4	ç	91.3	33-121	%REC	1	12/28/2010 01:33	AM
Surr: 2-Fluorobiphenyl		104	41-128	%REC	1	12/28/2010 01:33	AM
Surr: 4-Terphenyl-d14		117	54-154	%REC	1	12/28/2010 01:33	AM
Surr: Nitrobenzene-d5	ç	90.7	39-113	%REC	1	12/28/2010 01:33	AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Client Sample ID: NMB-6-0.5 Collection Date: 12/20/2010 1:00:00 PM Lab Order: 115438 Matrix: SOIL **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-026A Result **POL Oual Units** DF **Date Analyzed** Analyses **ICP METALS** EPA 3050B EPA 6010B RunID: ICP10\_101227C QC Batch: 69188 PrepDate: 12/26/2010 Analyst: SRB ND 2.0 12/27/2010 01:02 PM Antimony mg/Kg 1 Arsenic 12/27/2010 01:02 PM 3.9 1.0 mg/Kg 1 Barium 97 1.0 1 12/27/2010 01:02 PM mg/Kg Beryllium ND 1.0 mg/Kg 1 12/27/2010 01:02 PM Cadmium ND 1.0 12/27/2010 01:02 PM mg/Kg 1 mg/Kg Chromium 85 12/27/2010 01:02 PM 1.0 1 Cobalt 12 mg/Kg 12/27/2010 01:02 PM 1.0 1 2.0 12/27/2010 01:02 PM Copper 18 mg/Kg 1 Lead 10 1.0 mg/Kg 1 12/27/2010 01:02 PM Molvbdenum ND 1.0 mg/Kg 1 12/27/2010 01:02 PM Nickel 110 1.0 mg/Kg 1 12/27/2010 01:02 PM Selenium ND 1.0 mg/Kg 1 12/27/2010 01:02 PM Silver ND 1.0 mg/Kg 1 12/27/2010 01:02 PM Thallium ND 1.0 mg/Kg 1 12/27/2010 01:02 PM Vanadium 12/27/2010 01:02 PM 36 1.0 mg/Kg 1 Zinc 30 12/27/2010 01:02 PM 1.0 mg/Kg 1 SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B EPA 8015B(M) RunID: GC16\_101227A QC Batch: 69169 PrepDate: 12/23/2010 Analyst: CBR DRO 16 mg/Kg 12/27/2010 01:47 PM 1.0 1 ORO 37 1.0 mg/Kg 1 12/27/2010 01:47 PM Surr: p-Terphenyl 101 30-128 %REC 12/27/2010 01:47 PM 1

#### MERCURY BY COLD VAPOR TECHNIQUE

RunID:	AA5_101227B	QC Batch:	69186		Pro
Mercu	ry		ND	0.10	mg/Kg
SEMIV	DLATILE ORGANIC COMP	OUNDS BY	GC/MS-SIM		
	E	PA 3550B			EPA 8270C
RunID:	MS6_101227A	QC Batch:	69218		Pro
Acena	phthene		ND	5.0	µg/Kg
Acena	phthylene		ND	5.0	µg/Kg
Anthra	cene		ND	5.0	µg/Kg
Benzo	(a)anthracene		ND	5.0	µg/Kg

#### В **Qualifiers:**

- Analyte detected in the associated Method Blank Holding times for preparation or analysis exceeded
- Н
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

Е Value above quantitation range

PrepDate:

PrepDate:

1

1

1

1

1

EPA 7471A

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

12/26/2010 Analyst: VV

12/27/2010 Analyst: DMP

12/27/2010 12:54 PM

12/28/2010 03:48 AM

12/28/2010 03:48 AM

12/28/2010 03:48 AM

12/28/2010 03:48 AM



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-026A

# Client Sample ID: NMB-6-0.5 Collection Date: 12/20/2010 1:00:00 PM

Matrix: SOIL

Analyses		sult	PQL Q	ual Units	DF	Date Analyzed
SEMIVOLATILE ORGANIC CO	MPOUNDS BY EPA 3550B	gc/ms-sin	Λ	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Phenanthrene		5.5	5.0	µg/Kg	1	12/28/2010 03:48 AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 03:48 AM
Surr: 1,2-Dichlorobenzene-d4	:	89.3	33-121	%REC	1	12/28/2010 03:48 AM
Surr: 2-Fluorobiphenyl		103	41-128	%REC	1	12/28/2010 03:48 AM
Surr: 4-Terphenyl-d14		118	54-154	%REC	1	12/28/2010 03:48 AM
Surr: Nitrobenzene-d5		88.0	39-113	%REC	1	12/28/2010 03:48 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

Auvanceu Teennology Laboratories						Print Date: 28-Dec-10							
CLIEN	NT:	Ninyo & Moore	;			Client	Sample	e ID: NM	B-6-	5.0			
Lab O	rder:	115438				<b>Collection Date:</b> 12/20/2010 1:00:00 PM							
Projec	et:	ALBANY PHA	SE II ESA, 40	1678002			Matrix: SOIL						
Lab II	<b>D</b> :	115438-030A											
Analys	ses		Res	ult	PQL	Qual	Units		DF	Date	Analyzed		
SILICA	A GEL CLE	ANUP DRO AND	ORO BY GC- EPA 3550B	FID		EP	A 8015	B(M)					
RunID:	GC16_10	1227A	QC Batch:	69169				PrepDate:		12/23/2010	Analyst: CBR		
DRO				8.5	1.0		mg/Kg		1	12/2	27/2010 02:16 PM		
ORO				31	1.0		mg/Kg		1	12/2	27/2010 02:16 PM		
Su	rr: p-Terpher	nyl	8	8.6	30-128		%REC		1	12/2	27/2010 02:16 PM		
SEMIV			OUNDS BY G	C/MS-SI	м								
		I	EPA 3550B			E	PA 827	0C					
RunID:	MS6_101	227A	QC Batch:	69218				PrepDate:		12/27/2010	Analyst: DMP		
Acena	aphthene			41	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Acena	aphthylene			ND	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Anthr	acene		3	370	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Benzo	o(a)anthrace	ne	15	500	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Benzo	o(a)pyrene		1 <i>*</i>	100	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Benzo	o(b)fluoranth	ene	14	400	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Benzo	o(g,h,i)peryle	ene	3	350	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Benzo	o(k)fluoranth	ene	2	190	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Chrys	sene		12	200	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Diben	nz(a,h)anthra	cene	í	110	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Fluora	anthene		26	600	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Fluore	ene			49	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Inden	o(1,2,3-cd)p	yrene	3	360	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Naph	thalene			ND	25		µg/Kg		5	12/2	28/2010 06:29 AN		
Phena	anthrene		8	330	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Pyren	ne		21	100	120		µg/Kg		25	12/2	28/2010 11:40 AN		
Su	rr: 1,2-Dichlo	robenzene-d4		0	33-121	SDO	%REC		25	12/2	28/2010 11:40 AN		
Su	rr: 1,2-Dichlo	robenzene-d4	7	6.6	33-121		%REC		5	12/2	28/2010 06:29 AN		
Su	rr: 2-Fluorob	iphenyl		0	41-128	SDO	%REC		25	12/2	28/2010 11:40 AN		
Su	rr: 2-Fluorob	iphenyl	9	2.5	41-128		%REC		5	12/2	28/2010 06:29 AN		
Su	rr: 4-Terpher	nyl-d14		0	54-154	SDO	%REC		25	12/2	28/2010 11:40 AN		
Su	rr: 4-Terpher	nyl-d14	ŕ	109	54-154		%REC		5	12/2	28/2010 06:29 AN		
Surr: Nitrobenzene-d5 72.9 39-11		39-113		%REC		5	12/2	28/2010 06:29 AN					
Su	rr: Nitrobenz	ene-d5		0	39-113	SDO	%REC		25	12/2	28/2010 11:40 AN		

# **ANALYTICAL RESULTS**

Qualifiers:

В

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-031A

#### Client Sample ID: NMB-7-0.5 Collection Date: 12/20/2010 1:30:00 PM Matrix: SOIL

Analyses	Resu	ılt	PQL	Qual	Units		DF	Date	Analyzed
ICP METALS									
	EPA 3050B			E	PA 601	0B			
RunID: ICP10_101227C	QC Batch:	69188				PrepDate:		12/26/2010	Analyst: SRB
Antimony	Ν	١D	2.0		mg/Kg		1	12/	27/2010 01:04 PM
Arsenic	3	3.2	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Barium	;	89	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Beryllium	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Cadmium	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Chromium	:	20	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Cobalt	5	5.0	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Copper	g	9.4	2.0		mg/Kg		1	12/	27/2010 01:04 PM
Lead		13	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Molybdenum	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Nickel	:	25	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Selenium	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Silver	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Thallium	Ν	١D	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Vanadium		19	1.0		mg/Kg		1	12/	27/2010 01:04 PM
Zinc	:	22	1.0		mg/Kg		1	12/	27/2010 01:04 PM
SILICA GEL CLEANUP DRO A	ND ORO BY GC-I	FID							
	EPA 3550B			EP/	A 8015I	B(M)			
RunID: GC16_101227A	QC Batch:	69169				PrepDate:		12/23/2010	Analyst: CBR
DRO		14	1.0		mg/Kg		1	12/	27/2010 02:37 PM
ORO	:	51	1.0		mg/Kg		1	12/	27/2010 02:37 PM
Surr: p-Terphenyl	83	3.9	30-128		%REC		1	12/	27/2010 02:37 PM
MERCURY BY COLD VAPOR 1	ECHNIQUE								
				E	PA 747	1A			
RunID: AA5_101227B	QC Batch:	69186				PrepDate:		12/26/2010	Analyst: VV
Mercury	Ν	١D	0.10		mg/Kg		1	12/	27/2010 12:56 PM
SEMIVOLATILE ORGANIC CO	MPOUNDS BY G	C/MS-SIN	1						
	EPA 3550B			E	PA 827	0C			
RunID: MS6_101227A	QC Batch:	69218				PrepDate:		12/27/2010	Analyst: DMP
Acenaphthene	Ν	ND	25		µg/Kg		5	12/	28/2010 06:56 AM
Acenaphthylene	Ν	١D	25		µg/Kg		5	12/	28/2010 06:56 AM
Anthracene	Ν	١D	25		µg/Kg		5	12/	28/2010 06:56 AM
Benzo(a)anthracene	Ν	ND	25		µg/Kg		5	12/	28/2010 06:56 AM
o um B Analyte detected i	n the associated Meth	od Blank			E Va	lue above qu	antita	tion range	

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-031A

# Client Sample ID: NMB-7-0.5 Collection Date: 12/20/2010 1:30:00 PM

Matrix: SOIL

Analyses R		sult	PQL Qu	al Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	gc/ms-sin	И	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Benzo(b)fluoranthene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Benzo(g,h,i)perylene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Benzo(k)fluoranthene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Chrysene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Dibenz(a,h)anthracene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Fluoranthene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Fluorene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Indeno(1,2,3-cd)pyrene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Naphthalene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Phenanthrene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Pyrene		ND	25	µg/Kg	5	12/28/2010 06:56 AM
Surr: 1,2-Dichlorobenzene-d4	:	30.4	33-121	%REC	5	12/28/2010 06:56 AM
Surr: 2-Fluorobiphenyl	9	94.1	41-128	%REC	5	12/28/2010 06:56 AM
Surr: 4-Terphenyl-d14		101	54-154	%REC	5	12/28/2010 06:56 AM
Surr: Nitrobenzene-d5	-	73.9	39-113	%REC	5	12/28/2010 06:56 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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					Print Date: 28-Dec-10							
CLIEN	<b>Γ:</b> Ninyo	& Moore			Client Samp	le ID: NM	B-7-	5.0				
Lab Order: 115438					Collection Date: 12/20/2010 1:30:00 PM							
Project:	ALBA	NY PHASE II ESA, 4	01678002	Matrix: SOIL								
Lab ID:	11543	8-035A										
Analyse	s	Re	Result		Qual Units	6	DF Date		Analyzed			
SILICA	GEL CLEANUP [	DRO AND ORO BY GO	C-FID		EDA 801	5B(M)						
					LFA 001							
RunID:	GC16_101227A	QC Batch:	69169			PrepDate:		12/23/2010	Analyst: CBR			
DRO			12	1.0	mg/Kg	9	1	12/2	27/2010 12:23 PM			
ORO			23	1.0	mg/Kg	9	1	12/2	27/2010 12:23 PM			
Surr:	p-Terphenyl		96.8	30-128	%REC	2	1	12/2	27/2010 12:23 PM			
SEMIVO	LATILE ORGAN	IC COMPOUNDS BY	GC/MS-SI	М								
		EPA 3550B			EPA 82	70C						
RunID:	MS6_101227A	QC Batch:	69218			PrepDate:		12/27/2010	Analyst: DMP			
Acenap	hthene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Acenap	hthylene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Anthrac	cene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Benzo(a	a)anthracene		ND		µg/Kg		1	12/2	28/2010 02:00 AM			
Benzo(a	a)pyrene		ND		µg/Kg		1	12/2	28/2010 02:00 AM			
Benzo(ł	b)fluoranthene		ND		µg/Kg		1	12/2	28/2010 02:00 AM			
Benzo(	g,h,i)perylene		ND		µg/Kg		1	12/2	28/2010 02:00 AM			
Benzo(I	k)fluoranthene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Chryser	ne		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Dibenz(	(a,h)anthracene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Fluoran	thene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Fluoren	e		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Indeno(	(1,2,3-cd)pyrene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Naphtha	alene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Phenan	nthrene		ND	5.0	µg/Kg		1	12/2	28/2010 02:00 AM			
Pyrene			ND	5.0	µg/Kg		1 12/28/2010 (		28/2010 02:00 AM			
Surr:	1,2-Dichlorobenze	ne-d4	87.8	33-121	%REC	)	1	1 12/28/2010 02				
Surr:	2-Fluorobiphenyl		99.2	41-128	%REC	)	1	12/2	28/2010 02:00 AM			
Surr:	4-Terphenyl-d14		115	54-154	%REC	2	1	12/2	28/2010 02:00 AM			
Surr:	Nitrobenzene-d5		84.4	39-113	%REC	2	1	12/2	28/2010 02:00 AM			

Qualifiers:

В

Н

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

**ANALYTICAL RESULTS** 



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Fax: 562.989.4040

# **ANALYTICAL RESULTS**

**Date Analyzed** 

Print Date: 28-Dec-10

DF

**CLIENT:** Ninyo & Moore Client Sample ID: NMB-8-0.5 Collection Date: 12/20/2010 2:00:00 PM Lab Order: 115438 Matrix: SOIL **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-036A PQL Qual Units Analyses Result

**ICP METALS** EPA 3050B EPA 6010B RunID: ICP10\_101227C QC Batch: 69188 PrepDate: 12/26/2010 Analyst: SRB ND 2.0 12/27/2010 01:05 PM Antimony mg/Kg 1 Arsenic 12/27/2010 01:05 PM 5.6 1.0 mg/Kg 1 Barium 80 1.0 1 12/27/2010 01:05 PM mg/Kg Beryllium ND 1.0 mg/Kg 1 12/27/2010 01:05 PM Cadmium ND 1.0 12/27/2010 01:05 PM mg/Kg 1 Chromium 12 12/27/2010 01:05 PM 1.0 mg/Kg 1 Cobalt 5.0 12/27/2010 01:05 PM 1.0 mg/Kg 1 7.2 2.0 Copper mg/Kg 1 12/27/2010 01:05 PM Lead 9.1 1.0 mg/Kg 1 12/27/2010 01:05 PM Molvbdenum ND 1.0 mg/Kg 1 12/27/2010 01:05 PM Nickel 14 1.0 mg/Kg 1 12/27/2010 01:05 PM Selenium ND 1.0 mg/Kg 1 12/27/2010 01:05 PM Silver ND 1.0 mg/Kg 1 12/27/2010 01:05 PM Thallium ND 1.0 mg/Kg 1 12/27/2010 01:05 PM Vanadium 12/27/2010 01:05 PM 15 1.0 mg/Kg 1 Zinc 21 12/27/2010 01:05 PM 1.0 mg/Kg 1 SILICA GEL CLEANUP DRO AND ORO BY GC-FID EPA 3550B EPA 8015B(M) RunID: GC16\_101227A QC Batch: 69169 PrepDate: 12/23/2010 Analyst: CBR DRO ND 12/27/2010 12:32 PM 1.0 mg/Kg 1 ORO ND 1.0 mg/Kg 1 12/27/2010 12:32 PM Surr: p-Terphenyl 30-128 %REC 12/27/2010 12:32 PM 56.2 1 MERCURY BY COLD VAPOR TECHNIQUE EPA 7471A RunID: AA5\_101227B QC Batch: 69186 PrepDate: 12/26/2010 Analyst: VV Mercury ND 0.10 mg/Kg 1 12/27/2010 12:58 PM SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM EPA 3550B EPA 8270C 12/27/2010 Analyst: DMP RunID: MS6 101227A QC Batch: PrepDate: 69218 ND 5.0 µg/Kg Acenaphthene 12/28/2010 04:15 AM 1 Acenaphthylene µg/Kg 12/28/2010 04:15 AM ND 5.0 1 ND Anthracene 5.0 1 12/28/2010 04:15 AM µg/Kg Benzo(a)anthracene ND 5.0 µg/Kg 1 12/28/2010 04:15 AM

**Qualifiers:** 

в

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-036A

# Client Sample ID: NMB-8-0.5 Collection Date: 12/20/2010 2:00:00 PM

Matrix: SOIL

Analyses	Re	sult	PQL Q	ual Units	DF	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	Λ	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Phenanthrene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 04:15 AM
Surr: 1,2-Dichlorobenzene-d4	8	38.3	33-121	%REC	1	12/28/2010 04:15 AM
Surr: 2-Fluorobiphenyl	(	99.4	41-128	%REC	1	12/28/2010 04:15 AM
Surr: 4-Terphenyl-d14		109	54-154	%REC	1	12/28/2010 04:15 AM
Surr: Nitrobenzene-d5	8	37.3	39-113	%REC	1	12/28/2010 04:15 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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					Frint Date: 28-Dec-10							
CLIEN	T:	Ninyo & Moore				Client	Sample	e ID: NM	B-8-	5.0		
<b>Lab Order:</b> 115438					Collection Date: 12/20/2010 2:00:00 PM							
<b>Project:</b> ALBANY PHASE ILESA, 401678002							Ma	trix: SOII	Ľ			
Lab ID	:	115438-040A	, -									
Analys	es		Result		PQL	Qual	Units		DF Date Anal		Analyzed	
SILICA	GEL CLE	ANUP DRO AND	ORO BY GC	FID								
		E	PA 3550B			EP.	A 8015	B(M)				
RunID:	GC16_10 <sup>2</sup>	1227A	QC Batch:	69169				PrepDate:		12/23/2010	Analyst: CBR	
DRO				3.3	1.0		mg/Kg		1	12/2	27/2010 01:09 PM	
ORO				6.7	1.0		mg/Kg		1	12/2	27/2010 01:09 PM	
Suri	r: p-Terphen	ıyl	8	0.6	30-128		%REC		1	12/2	27/2010 01:09 PM	
SEMIV	OLATILE (	ORGANIC COMP	OUNDS BY G	C/MS-SIN	Λ							
		E	PA 3550B			E	PA 827	'0C				
RunID:	MS6_1012	227A	QC Batch:	69218				PrepDate:		12/27/2010	Analyst: DMP	
Acena	phthene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Acena	phthylene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Anthra	icene		ND		5.0		µg/Kg		1	12/28/2010 04:41		
Benzo	(a)anthrace	ne	ND		5.0		µg/Kg		1	12/28/2010 04:41		
Benzo	(a)pyrene		ND		5.0		µg/Kg		1	12/28/2010 04:41		
Benzo	(b)fluoranthe	ene		ND	5.0		µg/Kg		1	12/28/2010 04:41		
Benzo	(g,h,i)peryle	ne		5.0		µg/Kg		1	12/28/2010 04:41			
Benzo	(k)fluoranthe	ene	ND		5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Chryse	ene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Dibenz	z(a,h)anthra	cene		ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Fluora	nthene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Fluore	ne			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Indenc	o(1,2,3-cd)py	yrene		ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Naphth	nalene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Phena	nthrene			ND	5.0		µg/Kg		1	12/2	28/2010 04:41 AM	
Pyrene	e			ND	5.0		µg/Kg		1	12/28/2010 04:41		
Suri	r: 1,2-Dichlo	robenzene-d4	9	4.6	33-121		%REC		1	12/28/2010 04:41		
Suri	r: 2-Fluorobi	phenyl		103	41-128		%REC		1	12/28/2010 04:41		
Suri	r: 4-Terphen	iyl-d14		116	54-154		%REC		1	12/2	28/2010 04:41 AM	
Surr: Nitrobenzene-d5			91.5		39-113		%REC		1	12/2	28/2010 04:41 AM	

#### Qualifiers:

Analyte detected in the associated Method Blank

- Н Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Laboratories

В

Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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# **ANALYTICAL RESULTS**

28-D 10

# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-041A

Client Sample ID: NMB-9-0.5 Collection Date: 12/20/2010 2:40:00 PM

Matrix: SOIL

Analyses	Resu	lt PQ	L Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B		E	EPA 6010B		
RunID: ICP10_101227C	QC Batch:	69188		PrepD	ate:	12/26/2010 Analyst: SRB
Antimony	Ν	D 2.	0	mg/Kg	1	12/27/2010 01:07 PM
Arsenic	3.	.8 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Barium	8	<b>60 1</b> .	0	mg/Kg	1	12/27/2010 01:07 PM
Beryllium	Ν	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Cadmium	Ν	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Chromium	1	1 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Cobalt	5.	.0 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Copper	1	1 2.	0	mg/Kg	1	12/27/2010 01:07 PM
Lead	3	2 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Molybdenum	Ν	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Nickel	1	6 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Selenium	N	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Silver	Ν	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Thallium	N	D 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Vanadium	1	4 1.	0	mg/Kg	1	12/27/2010 01:07 PM
Zinc	3	<b>57</b> 1.	0	mg/Kg	1	12/27/2010 01:07 PM
SILICA GEL CLEANUP DRO A	ND ORO BY GC-F	ID				
	EPA 3550B		EF	PA 8015B(M)		
RunID: GC16_101227A	QC Batch:	69169		PrepD	ate:	12/23/2010 Analyst: CBR
DRO	2.	.9 1.	0	mg/Kg	1	12/27/2010 01:28 PM
ORO	1	1 1.	0	mg/Kg	1	12/27/2010 01:28 PM
Surr: p-Terphenyl	62.	.9 30-12	8	%REC	1	12/27/2010 01:28 PM
MERCURY BY COLD VAPOR	TECHNIQUE					
			E	EPA 7471A		
RunID: AA5_101227B	QC Batch:	69186		PrepD	ate:	12/26/2010 Analyst: VV
Mercury	Ν	D 0.1	0	mg/Kg	1	12/27/2010 01:00 PM
SEMIVOLATILE ORGANIC CO	MPOUNDS BY GO	:/MS-SIM		0 0		
	EPA 3550B		E	EPA 8270C		
RunID: MS6_101227A	QC Batch:	69218		PrepD	ate:	12/27/2010 Analyst: DMP
Acenaphthene	N	D 2	5	µg/Kg	5	12/28/2010 07:23 AM
Acenaphthylene	N	D 2	5	µg/Kg	5	12/28/2010 07:23 AM
Anthracene	Ν	D 2	5	µg/Kg	5	12/28/2010 07:23 AM
Benzo(a)anthracene	N	D 2	5	µg/Kg	5	12/28/2010 07:23 AM
B Analyte detected	in the associated Metho	d Blank		E Value abc	ve quantita	tion range

Η Holding times for preparation or analysis exceeded

S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out

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ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-041A

# Client Sample ID: NMB-9-0.5 Collection Date: 12/20/2010 2:40:00 PM

Matrix: SOIL

Analyses	Re	sult	PQL Q	ual Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	Λ	EPA 827	′0C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Benzo(b)fluoranthene		31	25	µg/Kg	5	12/28/2010 07:23 AM
Benzo(g,h,i)perylene		29	25	µg/Kg	5	12/28/2010 07:23 AM
Benzo(k)fluoranthene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Chrysene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Dibenz(a,h)anthracene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Fluoranthene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Fluorene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Indeno(1,2,3-cd)pyrene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Naphthalene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Phenanthrene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Pyrene		ND	25	µg/Kg	5	12/28/2010 07:23 AM
Surr: 1,2-Dichlorobenzene-d4	-	73.6	33-121	%REC	5	12/28/2010 07:23 AM
Surr: 2-Fluorobiphenyl	:	86.6	41-128	%REC	5	12/28/2010 07:23 AM
Surr: 4-Terphenyl-d14	9	94.8	54-154	%REC	5	12/28/2010 07:23 AM
Surr: Nitrobenzene-d5	-	78.7	39-113	%REC	5	12/28/2010 07:23 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

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E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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Advanced Technology Laboratories					Print Date: 28-Dec-10						
CLIEN	T: Niny	vo & Moore			Client Sample	e ID: NMB	-9-	5.0			
Lab Or	rder: 1154	438			Collection E	Date: 12/20	: 12/20/2010 2:40:00 PM				
Project	ALE	BANY PHASE II ES	A, 4016780	002	Ma	trix: SOIL					
Lab ID	: 1154	138-045A									
Analyses Result					Qual Units		DF	Date Analyzed			
SILICA	GEL CLEANU	P DRO AND ORO B EPA 355	Y GC-FID 0B		EPA 8015	B(M)					
RunID:	GC16_101227A	QC Ba	atch: 691	69		PrepDate:		12/23/2010 Analyst: CBR			
DRO	_		3 1	1.0	ma/Ka	·	1	12/27/2010 01:00 PM			
ORO			5.4	1.0	mg/Kg		1	12/27/2010 01:00 PM			
Sur	r: p-Terphenvl		70.0	30-128	%RFC		1	12/27/2010 01:00 PM			
SEMIV	OLATILE ORGA		BY GC/MS	-SIM			-				
0 E III I		EPA 355	0B		EPA 827	0C					
RunID:	MS6_101227A	QC Ba	atch: 692	218		PrepDate:		12/27/2010 Analyst: DMP			
Acena	phthene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Acena	phthylene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Anthra	icene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Benzo	(a)anthracene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Benzo	(a)pyrene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Benzo	(b)fluoranthene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Benzo	(g,h,i)perylene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Benzo	(k)fluoranthene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Chryse	ene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Dibenz	z(a,h)anthracene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Fluora	nthene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Fluore	ne		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Indenc	o(1,2,3-cd)pyrene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Naphth	nalene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Phena	nthrene		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Pyrene	e		ND	5.0	µg/Kg		1	12/28/2010 05:08 AM			
Suri	r: 1,2-Dichloroben:	zene-d4	85.4	33-121	%REC		1	12/28/2010 05:08 AM			
Suri	r: 2-Fluorobipheny	1	93.7	41-128	%REC		1	12/28/2010 05:08 AM			
Suri	r: 4-Terphenyl-d14	Ļ	108	54-154	%REC		1	12/28/2010 05:08 AM			
Suri	r: Nitrobenzene-d5	5	80.9	39-113	%REC		1	12/28/2010 05:08 AM			

Qualifiers:

В

Н

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

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Е Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

**ANALYTICAL RESULTS** 


## **Advanced Technology Laboratories**

# **ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore Lab Order: 115438 **Project:** ALBANY PHASE II ESA, 401678002 Lab ID: 115438-046A

Client Sample ID: NMB-10-0.5 Collection Date: 12/20/2010 3:15:00 PM

Matrix: SOIL

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
ICP METALS					
	EPA 3050B		EPA 601	0B	
RunID: ICP10_101227C	QC Batch:	69188		PrepDate:	12/26/2010 Analyst: SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 01:09 PM
Arsenic	4.6	1.0	mg/Kg	1	12/27/2010 01:09 PM
Barium	75	1.0	mg/Kg	1	12/27/2010 01:09 PM
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Chromium	25	1.0	mg/Kg	1	12/27/2010 01:09 PM
Cobalt	6.7	1.0	mg/Kg	1	12/27/2010 01:09 PM
Copper	15	2.0	mg/Kg	1	12/27/2010 01:09 PM
Lead	17	1.0	mg/Kg	1	12/27/2010 01:09 PM
Molybdenum	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Nickel	33	1.0	mg/Kg	1	12/27/2010 01:09 PM
Selenium	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Silver	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Thallium	ND	1.0	mg/Kg	1	12/27/2010 01:09 PM
Vanadium	19	1.0	mg/Kg	1	12/27/2010 01:09 PM
Zinc	32	1.0	mg/Kg	1	12/27/2010 01:09 PM
SILICA GEL CLEANUP DRO A	ND ORO BY GC-FIL	)			
	EPA 3550B		EPA 8015	B(M)	
RunID: GC16_101227A	QC Batch:	69169		PrepDate:	12/23/2010 Analyst: CBR
DRO	11	1.0	mg/Kg	1	12/27/2010 02:26 PM
ORO	37	1.0	mg/Kg	1	12/27/2010 02:26 PM
Surr: p-Terphenyl	60.6	30-128	%REC	1	12/27/2010 02:26 PM
MERCURY BY COLD VAPOR	<b>FECHNIQUE</b>				
			EPA 747	71A	
RunID: AA5_101227B	QC Batch:	69186		PrepDate:	12/26/2010 Analyst: VV
Mercury	ND	0.10	mg/Kg	1	12/27/2010 01:02 PM
SEMIVOLATILE ORGANIC CO	MPOUNDS BY GC/	MS-SIM			
	EPA 3550B		EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218		PrepDate:	12/27/2010 Analyst: DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Anthracene	ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
B Analyte detected	in the associated Method	Blank	E V	alue above quantit	ation range

- Η Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

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ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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## **Advanced Technology Laboratories**

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

 CLIENT:
 Ninyo & Moore

 Lab Order:
 115438

 Project:
 ALBANY PHASE II ESA, 401678002

 Lab ID:
 115438-046A

## Client Sample ID: NMB-10-0.5 Collection Date: 12/20/2010 3:15:00 PM

Matrix: SOIL

Analyses	Res	sult	PQL 0	Qual Units	DI	<b>Date Analyzed</b>
SEMIVOLATILE ORGANIC CO	MPOUNDS BY ( EPA 3550B	GC/MS-SIN	И	EPA 827	70C	
RunID: MS6_101227A	QC Batch:	69218			PrepDate:	12/27/2010 Analyst: DMP
Benzo(a)pyrene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Benzo(b)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Benzo(g,h,i)perylene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Benzo(k)fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Chrysene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Dibenz(a,h)anthracene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Fluoranthene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Fluorene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Indeno(1,2,3-cd)pyrene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Naphthalene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Phenanthrene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Pyrene		ND	5.0	µg/Kg	1	12/28/2010 06:02 AM
Surr: 1,2-Dichlorobenzene-d4	8	35.6	33-121	%REC	1	12/28/2010 06:02 AM
Surr: 2-Fluorobiphenyl	9	94.1	41-128	%REC	1	12/28/2010 06:02 AM
Surr: 4-Terphenyl-d14		106	54-154	%REC	1	12/28/2010 06:02 AM
Surr: Nitrobenzene-d5	8	33.4	39-113	%REC	1	12/28/2010 06:02 AM

**Qualifiers:** 

В

Analyte detected in the associated Method Blank

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified



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Adva		Print Date: 28-Dec-10									
CLIEN	IT:	Ninyo & Moore	e			Client	Sampl	e ID: NM	<b>B-</b> 10	0-5.0	
Lab O	rder:	115438				Colle	ection I	Date: 12/2	0/20	10 3:15:00	PM
Project	t•	ΔΙ ΒΔΝΥ ΡΗΔ		1678002			Ma	triv SOI	ſ.		
		ALDAN I I IIA	SE II ESA, 40	1078002			1110	<b></b> 501			
Lab ID	):	115438-050A									
Analys	es		Res	sult	PQL	Qual	Units		DF	Date	Analyzed
SILICA	GEL CLEA	NUP DRO ANI	O ORO BY GC	-FID		FP	A 8015	B(M)			
						<b>_</b>					
RunID:	GC16_1012	227A	QC Batch:	69169				PrepDate:		12/23/2010	Analyst: CBR
DRO				1.1	1.0		mg/Kg		1	12/2	27/2010 12:51 PM
ORO				3.4	1.0		mg/Kg		1	12/2	27/2010 12:51 PM
Sur	r: p-Terpheny	l	6	64.6	30-128		%REC		1	12/2	27/2010 12:51 PM
SEMIV	OLATILE O	RGANIC COM	POUNDS BY (	SC/MS-SI	М						
			EPA 3550B			E	PA 827	70C			
RunID:	MS6_10122	27A	QC Batch:	69218				PrepDate:		12/27/2010	Analyst: DMP
Acena	phthene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Acena	phthylene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Anthra	acene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Benzo	(a)anthracene	9		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Benzo	o(a)pyrene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Benzo	(b)fluoranther	ne		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Benzo	(g,h,i)perylen	е		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Benzo	(k)fluoranther	ne		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Chryse	ene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Dibenz	z(a,h)anthrace	ene		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Fluora	Inthene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Fluore	ene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Indend	o(1,2,3-cd)pyr	ene		ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Napht	halene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Phena	anthrene			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Pyrene	е			ND	5.0		µg/Kg		1	12/2	28/2010 05:35 AM
Sur	r: 1,2-Dichlord	benzene-d4	ę	91.7	33-121		%REC		1	12/2	28/2010 05:35 AM
Sur	r: 2-Fluorobipl	henyl		101	41-128		%REC		1	12/2	28/2010 05:35 AM
Sur	r: 4-Terpheny	l-d14		116	54-154		%REC		1	12/2	28/2010 05:35 AM
Sur	r: Nitrobenzer	ne-d5	8	39.5	39-113		%REC		1	12/2	28/2010 05:35 AM

Qualifiers:

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out

Advanced Technology

Laboratories

В

Н

E Value above quantitation range

ND Not Detected at the Reporting Limit Results are wet unless otherwise specified

**ANALYTICAL RESULTS** 



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Fax: 562.989.4040

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## Advanced Technology Laboratories

**Date:** 28-Dec-10

CLIENT: Ninyo & Moore Work Order: 115438

Project: ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: MB-69187	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/26/2010	RunNo: <b>128153</b>
Client ID: PBS	Batch ID: 69187	TestNo: EPA 6010	B EPA 3050B	Analysis Date: 12/27/2010	SeqNo: 2074509
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RP	D Ref Val %RPD RPDLimit Qual
Antimony	ND	2.0			
Arsenic	ND	1.0			
Barium	ND	1.0			
Beryllium	ND	1.0			
Cadmium	ND	1.0			
Chromium	ND	1.0			
Cobalt	ND	1.0			
Copper	ND	2.0			
Lead	ND	1.0			
Molybdenum	ND	1.0			
Nickel	0.039	1.0			
Selenium	ND	1.0			
Silver	ND	1.0			
Thallium	ND	1.0			
Vanadium	ND	1.0			
Zinc	ND	1.0			
Sample ID: LCS-69187	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/26/2010	RunNo: <b>128153</b>
Client ID: LCSS	Batch ID: 69187	TestNo: EPA 6010	B EPA 3050B	Analysis Date: 12/27/2010	SeqNo: 2074510
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RP	D Ref Val %RPD RPDLimit Qual
Antimony	44.609	2.0 50.00	0	89.2 80 120	
Arsenic	44.445	1.0 50.00	0	88.9 80 120	
Barium	48.946	1.0 50.00	0	97.9 80 120	
Beryllium	48.040	1.0 50.00	0	96.1 80 120	
Cadmium	46.318	1.0 50.00	0	92.6 80 120	
Chromium	45.093	1.0 50.00	0	90.2 80 120	
Cobalt	47.037	1.0 50.00	0	94.1 80 120	

#### **Qualifiers:**

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- E Value above quantitation range
- R RPD outside accepted recovery limits Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045

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Work Order:

115438

**Project:** ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: LCS-69187	SampType: LCS	TestCoo	de: 6010_S	Units: mg/Kg		Prep Date	e: 12/26/20	010	RunNo: 128	3153	
Client ID: LCSS	Batch ID: 69187	TestN	lo: EPA 6010B	EPA 3050B		Analysis Date	e: <b>12/27/20</b>	010	SeqNo: 207	4510	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	47.040	2.0	50.00	0	94.1	80	120				
Lead	46.344	1.0	50.00	0	92.7	80	120				
Molybdenum	49.476	1.0	50.00	0	99.0	80	120				
Nickel	45.483	1.0	50.00	0.03922	90.9	80	120				
Selenium	43.712	1.0	50.00	0	87.4	80	120				
Silver	47.091	1.0	50.00	0	94.2	80	120				
Thallium	44.243	1.0	50.00	0	88.5	80	120				
Vanadium	48.753	1.0	50.00	0	97.5	80	120				
Zinc	44.891	1.0	50.00	0	89.8	80	120				
Sample ID: 115438-011A-MS	SampType: <b>MS</b>	TestCoo	de: 6010_S	Units: <b>mg/Kg</b>		Prep Date	e: <b>12/26/20</b>	010	RunNo: 128	153	
Client ID: NMB-3-0.5	Batch ID: 69187	TestN	lo: EPA 6010B	EPA 3050B		Analysis Date	e: 12/27/20	010	SeqNo: 207	4581	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	69.236	2.0	125.0	0	55.4	32	105				
Arsenic	97.702	1.0	125.0	9.907	70.2	49	106				
Barium	144.146	1.0	125.0	125.8	14.7	31	133				S
Beryllium	89.614	1.0	125.0	0	71.7	56	106				
Cadmium	75.543	1.0	125.0	0	60.4	51	103				
Chromium	131.318	1.0	125.0	138.4	-5.69	45	114				S
Cobalt	87.662	1.0	125.0	18.23	55.5	52	106				
Copper	117.129	2.0	125.0	37.03	64.1	54	125				
Lead	89.801	1.0	125.0	11.12	62.9	34	126				
Molybdenum	83.971	1.0	125.0	0	67.2	54	106				
Nickel	189.676	1.0	125.0	208.0	-14.7	45	111				S
Selenium	86.183	1.0	125.0	0	68.9	47	104				
Silver	91.013	1.0	125.0	0	72.8	56	112				
Thallium	76.502	1.0	125.0	0	61.2	46	101				
Vanadium	116.969	1.0	125.0	44.22	58.2	54	114				
Zinc	102.974	1.0	125.0	47.02	44.8	28	125				

#### Qualifiers:

- B Analyte detected in the associated Method Blank
  - - RPD outside accepted recovery limits

- DO Surrogate Diluted Out

ND Not Detected at the Reporting Limit

- Value above quantitation range Е
- R Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S



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Work Order:

**Project:** ALBANY PHASE II ESA, 401678002

115438

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: 115438-011A-MSD	SampType: <b>MSD</b>	TestCo	de: 6010_S	Units: mg/Kg		Prep Dat	e: 12/26/2	010	RunNo: 128	3153	
Client ID: NMB-3-0.5	Batch ID: 69187	TestN	lo: EPA 6010E	B EPA 3050B		Analysis Dat	e: <b>12/27/2</b>	010	SeqNo: 207	4582	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	80.579	2.0	125.0	0	64.5	32	105	69.24	15.1	20	
Arsenic	111.860	1.0	125.0	9.907	81.6	49	106	97.70	13.5	20	
Barium	142.583	1.0	125.0	125.8	13.5	31	133	144.1	1.09	20	S
Beryllium	103.586	1.0	125.0	0	82.9	56	106	89.61	14.5	20	
Cadmium	89.171	1.0	125.0	0	71.3	51	103	75.54	16.5	20	
Chromium	157.602	1.0	125.0	138.4	15.3	45	114	131.3	18.2	20	S
Cobalt	103.075	1.0	125.0	18.23	67.9	52	106	87.66	16.2	20	
Copper	137.200	2.0	125.0	37.03	80.1	54	125	117.1	15.8	20	
Lead	106.286	1.0	125.0	11.12	76.1	34	126	89.80	16.8	20	
Molybdenum	97.627	1.0	125.0	0	78.1	54	106	83.97	15.0	20	
Nickel	226.107	1.0	125.0	208.0	14.4	45	111	189.7	17.5	20	S
Selenium	99.127	1.0	125.0	0	79.3	47	104	86.18	14.0	20	
Silver	105.644	1.0	125.0	0	84.5	56	112	91.01	14.9	20	
Thallium	89.423	1.0	125.0	0	71.5	46	101	76.50	15.6	20	
Vanadium	136.562	1.0	125.0	44.22	73.9	54	114	117.0	15.5	20	
Zinc	121.057	1.0	125.0	47.02	59.2	28	125	103.0	16.1	20	

Qualifiers:

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- RPD outside accepted recovery limits R Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S



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### CLIENT: Ninyo & Moore

**Work Order:** 115438

Project: ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: MB-69188	SampType: MBLK	TestCode:	6010_S	Units: mg/Kg		Prep Dat	te: 12/26/2	2010	RunNo: 128	3158	
Client ID: PBS	Batch ID: 69188	TestNo:	EPA 6010E	B EPA 3050B		Analysis Da	te: 12/27/2	2010	SeqNo: 207	74583	
Analyte	Result	PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	0.131	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	0.021	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									
Sample ID: LCS-69188	SampType: LCS	TestCode:	6010_S	Units: mg/Kg		Prep Dat	te: 12/26/2	2010	RunNo: 128	3158	
Client ID: LCSS	Batch ID: 69188	TestNo:	EPA 6010E	B EPA 3050B		Analysis Da	te: 12/27/2	2010	SeqNo: 207	74584	
Analyte	Result	PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	46.338	2.0	50.00	0	92.7	80	120				
Arsenic	46.404	1.0	50.00	0	92.8	80	120				
Barium	49.689	1.0	50.00	0	99.4	80	120				
Beryllium	51.515	1.0	50.00	0	103	80	120				
Cadmium	46.933	1.0	50.00	0	93.9	80	120				
Chromium	47.162	1.0	50.00	0	94.3	80	120				
Cobalt	48.636	1.0	50.00	0	97.3	80	120				
Copper	49.733	2.0	50.00	0	99.5	80	120				
Lead	49.161	1.0	50.00	0.1306	98.1	80	120				

#### Qualifiers:

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- E Value above quantitation range
- R RPD outside accepted recovery limits Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

DO Surrogate Diluted Out



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Work Order:

**Project:** ALBANY PHASE II ESA, 401678002

115438

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: LCS-69188	SampType: LCS	TestCo	de: 6010_S	Units: mg/Kg		Prep Dat	e: 12/26/2	010	RunNo: 128	8158	
Client ID: LCSS	Batch ID: 69188	TestN	lo: EPA 6010B	EPA 3050B		Analysis Dat	e: <b>12/27/2</b>	010	SeqNo: 207	4584	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	50.935	1.0	50.00	0	102	80	120				
Nickel	48.681	1.0	50.00	0	97.4	80	120				
Selenium	46.346	1.0	50.00	0	92.7	80	120				
Silver	49.299	1.0	50.00	0.02122	98.6	80	120				
Thallium	45.852	1.0	50.00	0	91.7	80	120				
Vanadium	50.732	1.0	50.00	0	101	80	120				
Zinc	47.315	1.0	50.00	0	94.6	80	120				
Sample ID: 115446-006A-MS	SampType: <b>MS</b>	TestCo	de: 6010_S	Units: mg/Kg		Prep Dat	e: <b>12/26/2</b>	010	RunNo: 128	8158	
Client ID: ZZZZZZ	Batch ID: 69188	TestN	lo: EPA 6010B	EPA 3050B		Analysis Dat	e: <b>12/27/2</b>	010	SeqNo: 207	4603	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	62.484	2.0	125.0	0	50.0	32	105				
Arsenic	93.748	1.0	125.0	6.502	69.8	49	106				
Barium	190.876	1.0	125.0	107.2	66.9	31	133				
Beryllium	94.283	1.0	125.0	0.2326	75.2	56	106				
Cadmium	78.879	1.0	125.0	0.2648	62.9	51	103				
Chromium	95.464	1.0	125.0	12.69	66.2	45	114				
Cobalt	88.223	1.0	125.0	6.314	65.5	52	106				
Copper	111.665	2.0	125.0	20.10	73.3	54	125				
Lead	90.677	1.0	125.0	7.597	66.5	34	126				
Molybdenum	84.457	1.0	125.0	0	67.6	54	106				
Nickel	94.906	1.0	125.0	11.89	66.4	45	111				
Selenium	86.579	1.0	125.0	0	69.3	47	104				
Silver	89.936	1.0	125.0	0	71.9	56	112				
Thallium	78.444	1.0	125.0	0	62.8	46	101				
Vanadium	122.365	1.0	125.0	33.10	71.4	54	114				
Zinc	134.168	1.0	125.0	56.75	61.9	28	125				

#### Qualifiers:

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- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S



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Work Order:

**Project:** ALBANY PHASE II ESA, 401678002

115438

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: 115446-006A-MSD	SampType: <b>MSD</b>	TestCo	de: 6010_S	Units: <b>mg/Kg</b>		Prep Date	e: <b>12/26/2</b>	010	RunNo: 128	8158	
Client ID: ZZZZZZ	Batch ID: 69188	TestN	lo: EPA 6010E	B EPA 3050B		Analysis Date	e: <b>12/27/2</b>	010	SeqNo: 207	74604	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	59.028	2.0	125.0	0	47.2	32	105	62.48	5.69	20	
Arsenic	88.987	1.0	125.0	6.502	66.0	49	106	93.75	5.21	20	
Barium	181.044	1.0	125.0	107.2	59.0	31	133	190.9	5.29	20	
Beryllium	89.605	1.0	125.0	0.2326	71.5	56	106	94.28	5.09	20	
Cadmium	75.704	1.0	125.0	0.2648	60.4	51	103	78.88	4.11	20	
Chromium	91.322	1.0	125.0	12.69	62.9	45	114	95.46	4.43	20	
Cobalt	85.010	1.0	125.0	6.314	63.0	52	106	88.22	3.71	20	
Copper	107.178	2.0	125.0	20.10	69.7	54	125	111.7	4.10	20	
Lead	86.524	1.0	125.0	7.597	63.1	34	126	90.68	4.69	20	
Molybdenum	80.905	1.0	125.0	0	64.7	54	106	84.46	4.30	20	
Nickel	91.517	1.0	125.0	11.89	63.7	45	111	94.91	3.64	20	
Selenium	82.024	1.0	125.0	0	65.6	47	104	86.58	5.40	20	
Silver	86.062	1.0	125.0	0	68.8	56	112	89.94	4.40	20	
Thallium	75.100	1.0	125.0	0	60.1	46	101	78.44	4.35	20	
Vanadium	117.146	1.0	125.0	33.10	67.2	54	114	122.4	4.36	20	
Zinc	128.986	1.0	125.0	56.75	57.8	28	125	134.2	3.94	20	

Qualifiers:

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### Work Order:

115438

**Project:** ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

TestCode: 7471\_S

Sample ID: MB-69185	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Pr	ep Date: 12/26/2010	RunNo: 128152	
Client ID: PBS	Batch ID: 69185	TestNo: EPA 7471A		Analys	sis Date: 12/27/2010	SeqNo: 2074483	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC Low	Limit HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury	ND	0.10					
Sample ID: LCS-69185	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Pr	ep Date: 12/26/2010	RunNo: 128152	
Client ID: LCSS	Batch ID: 69185	TestNo: EPA 7471A		Analys	sis Date: 12/27/2010	SeqNo: 2074484	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC Low	Limit HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Mercury	0.766	0.10 0.8300	0	92.3	80 120		
Sample ID: 115438-011A-MS	SampType: <b>MS</b>	TestCode: 7471_S	Units: mg/Kg	Pr	ep Date: 12/26/2010	RunNo: 128152	
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5	SampType: <b>MS</b> Batch ID: <b>69185</b>	TestCode: 7471_S TestNo: EPA 7471A	Units: <b>mg/Kg</b>	Pr Analys	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b>	RunNo: <b>128152</b> SeqNo: <b>2074485</b>	
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5 Analyte	SampType: <b>MS</b> Batch ID: <b>69185</b> Result	TestCode: <b>7471_S</b> TestNo: <b>EPA 7471A</b> PQL SPK value	Units: <b>mg/Kg</b> SPK Ref Val	Pr Analys %REC Low	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> _imit HighLimit RPD Ref Val	RunNo: <b>128152</b> SeqNo: <b>2074485</b> %RPD RPDLimit	Qual
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5 Analyte Mercury	SampType: MS Batch ID: 69185 Result 0.953	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value           0.10         0.8300	Units: <b>mg/Kg</b> SPK Ref Val 0.1495	Pri Analys %REC Low 96.8	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> Limit HighLimit RPD Ref Val 70 130	RunNo: <b>128152</b> SeqNo: <b>2074485</b> %RPD RPDLimit	Qual
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5 Analyte Mercury Sample ID: 115438-011A-MSD	SampType: MS Batch ID: 69185 Result 0.953 SampType: MSD	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value           0.10         0.8300           TestCode:         7471_S	Units: mg/Kg SPK Ref Val 0.1495 Units: mg/Kg	Pr Analys %REC Low 96.8 Pr	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> Limit HighLimit RPD Ref Val 70 130 ep Date: <b>12/26/2010</b>	RunNo: <b>128152</b> SeqNo: <b>2074485</b> %RPD RPDLimit RunNo: <b>128152</b>	Qual
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5 Analyte Mercury Sample ID: 115438-011A-MSD Client ID: NMB-3-0.5	SampType: MS Batch ID: 69185 Result 0.953 SampType: MSD Batch ID: 69185	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value           0.10         0.8300           TestCode:         7471_S           TestNo:         EPA 7471A	Units: <b>mg/Kg</b> SPK Ref Val 0.1495 Units: <b>mg/Kg</b>	Pri Analys %REC Low 96.8 Pr Analys	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> Limit HighLimit RPD Ref Val 70 130 ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b>	RunNo: 128152 SeqNo: 2074485 %RPD RPDLimit RunNo: 128152 SeqNo: 2074486	Qual
Sample ID: 115438-011A-MS Client ID: NMB-3-0.5 Analyte Mercury Sample ID: 115438-011A-MSD Client ID: NMB-3-0.5 Analyte	SampType: MS Batch ID: 69185 Result 0.953 SampType: MSD Batch ID: 69185 Result	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value           0.10         0.8300           TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value	Units: <b>mg/Kg</b> SPK Ref Val 0.1495 Units: <b>mg/Kg</b> SPK Ref Val	<ul> <li>Pri Analys</li> <li>%REC</li> <li>Low</li> <li>96.8</li> <li>Pri Analys</li> <li>%REC</li> <li>Low</li> </ul>	ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> Limit HighLimit RPD Ref Val 70 130 ep Date: <b>12/26/2010</b> sis Date: <b>12/27/2010</b> Limit HighLimit RPD Ref Val	RunNo: 128152 SeqNo: 2074485 %RPD RPDLimit RunNo: 128152 SeqNo: 2074486 %RPD RPDLimit	Qual

Qualifiers:

- B Analyte detected in the associated Method Blank
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- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S

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#### Work Order:

115438

**Project:** ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

TestCode: 7471\_S

Sample ID: MB-69186	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: <b>12/26/2010</b>	RunNo: <b>128154</b>
Client ID: PBS	Batch ID: 69186	TestNo: EPA 7471A		Analysis Date: 12/27/2010	SeqNo: 2074521
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref	Val %RPD RPDLimit Qual
Mercury	ND	0.10			
Sample ID: LCS-69186	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/26/2010	RunNo: <b>128154</b>
Client ID: LCSS	Batch ID: 69186	TestNo: EPA 7471A		Analysis Date: 12/27/2010	SeqNo: 2074522
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref	Val %RPD RPDLimit Qual
Mercury	0.841	0.10 0.8300	0	101 80 120	
Sample ID: 115446-006A-MS	SampType: <b>MS</b>	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/26/2010	RunNo: 128154
Sample ID: 115446-006A-MS Client ID: ZZZZZZ	SampType: <b>MS</b> Batch ID: <b>69186</b>	TestCode: 7471_S TestNo: EPA 7471A	Units: <b>mg/Kg</b>	Prep Date: 12/26/2010 Analysis Date: 12/27/2010	RunNo: <b>128154</b> SeqNo: <b>2074523</b>
Sample ID: <b>115446-006A-MS</b> Client ID: <b>ZZZZZZ</b> Analyte	SampType: <b>MS</b> Batch ID: <b>69186</b> Result	TestCode: <b>7471_S</b> TestNo: <b>EPA 7471A</b> PQL SPK value S	Units: mg/Kg SPK Ref Val	Prep Date: <b>12/26/2010</b> Analysis Date: <b>12/27/2010</b> %REC LowLimit HighLimit RPD Ref	RunNo: <b>128154</b> SeqNo: <b>2074523</b> Val %RPD RPDLimit Qual
Sample ID: 115446-006A-MS Client ID: ZZZZZZ Analyte Mercury	SampType: <b>MS</b> Batch ID: <b>69186</b> Result 0.870	TestCode: <b>7471_S</b> TestNo: <b>EPA 7471A</b> PQL SPK value \$ 0.10 0.8300	Units: mg/Kg SPK Ref Val 0.04609	Prep Date: 12/26/2010 Analysis Date: 12/27/2010 %REC LowLimit HighLimit RPD Ref 99.3 70 130	RunNo: <b>128154</b> SeqNo: <b>2074523</b> Val %RPD RPDLimit Qual
Sample ID: 115446-006A-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: 115446-006A-MSD	SampType: MS Batch ID: 69186 Result 0.870 SampType: MSD	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value           0.10         0.8300           TestCode:         7471_S	Units: mg/Kg SPK Ref Val 0.04609 Units: mg/Kg	Prep Date:         12/26/2010           Analysis Date:         12/27/2010           %REC         LowLimit         HighLimit         RPD Ref           99.3         70         130            Prep Date:         12/26/2010	RunNo: <b>128154</b> SeqNo: <b>2074523</b> Val %RPD RPDLimit Qual RunNo: <b>128154</b>
Sample ID: 115446-006A-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: 115446-006A-MSD Client ID: ZZZZZZ	SampType: MS Batch ID: 69186 Result 0.870 SampType: MSD Batch ID: 69186	TestCode:         7471_S           TestNo:         EPA 7471A           PQL         SPK value         S           0.10         0.8300           TestCode:         7471_S           TestNo:         EPA 7471A	Units: mg/Kg SPK Ref Val 0.04609 Units: mg/Kg	Prep Date: 12/26/2010 Analysis Date: 12/27/2010 %REC LowLimit HighLimit RPD Ref 99.3 70 130 Prep Date: 12/26/2010 Analysis Date: 12/27/2010	RunNo: <b>128154</b> SeqNo: <b>2074523</b> Val %RPD RPDLimit Qual RunNo: <b>128154</b> SeqNo: <b>2074524</b>
Sample ID: 115446-006A-MS Client ID: ZZZZZZ Analyte Mercury Sample ID: 115446-006A-MSD Client ID: ZZZZZZ Analyte	SampType: MS Batch ID: 69186 Result 0.870 SampType: MSD Batch ID: 69186 Result	TestCode:       7471_S         TestNo:       EPA 7471A         PQL       SPK value         0.10       0.8300         TestCode:       7471_S         TestNo:       EPA 7471A         PQL       SPK value         State       State         EpstCode:       7471_S         TestNo:       EPA 7471A         PQL       SPK value	Units: mg/Kg SPK Ref Val 0.04609 Units: mg/Kg SPK Ref Val	Prep Date:       12/26/2010         Analysis Date:       12/27/2010         %REC       LowLimit       HighLimit       RPD Ref         99.3       70       130       130         Prep Date:       12/26/2010       Analysis Date:       12/26/2010         Analysis Date:       12/27/2010       Analysis Date:       12/27/2010         %REC       LowLimit       HighLimit       RPD Ref	RunNo: 128154 SeqNo: 2074523 Val %RPD RPDLimit Qual RunNo: 128154 SeqNo: 2074524 Val %RPD RPDLimit Qual

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S

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3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

### 115438

Work Order:

**Project:** ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

### TestCode: 8015\_S\_DM LLSGT

Sample ID: MB-69169	SampType: MBLK	TestCode: 8015_S_DM L Units: mg/Kg	Prep Date: 12/23/2010	RunNo: 128172
Client ID: PBS	Batch ID: 69169	TestNo: EPA 8015B(M EPA 3550B	Analysis Date: 12/27/2010	SeqNo: 2074797
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
DRO	ND	1.0		
ORO	ND	1.0		
Surr: p-Terphenyl	2.629	2.670	98.5 30 130	
Sample ID: LCS-69169	SampType: LCS	TestCode: 8015_S_DM L Units: mg/Kg	Prep Date: 12/23/2010	RunNo: 128172
Client ID: LCSS	Batch ID: 69169	TestNo: EPA 8015B(M EPA 3550B	Analysis Date: 12/27/2010	SeqNo: 2074798
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
DRO	24.912	1.0 33.00 0	75.5 35 118	
Surr: p-Terphenyl	2.942	2.670	110 30 128	
Sample ID: 115438-010AMS	SampType: <b>MS</b>	TestCode: 8015_S_DM L Units: mg/Kg	Prep Date: 12/23/2010	RunNo: 128172
Client ID: NMB-2-5.0	Batch ID: 69169	TestNo: EPA 8015B(M EPA 3550B	Analysis Date: 12/27/2010	SeqNo: 2074799
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
DRO	19.608	1.0 33.00 1.324	55.4 25 129	
Surr: p-Terphenyl	2.306	2.670	86.4 30 128	
Sample ID: 115438-010AMSD	SampType: MSD	TestCode: 8015_S_DM L Units: mg/Kg	Prep Date: 12/23/2010	RunNo: 128172
Client ID: NMB-2-5.0	Batch ID: 69169	TestNo: EPA 8015B(M EPA 3550B	Analysis Date: 12/27/2010	SeqNo: 2074800
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
DRO	20.411	1.0 33.00 1.324	57.8 25 129 19.61	4.01 20
Surr: p-Terphenyl	2.184	2.670	81.8 30 128	0 0

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

- Value above quantitation range Е
- RPD outside accepted recovery limits R Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S



3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045

Fax: 562.989.4040 44 of 46

Work Order:

ALBANY PHASE II ESA, 401678002 **Project:** 

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_SIM

Sample ID: MB-69218	SampType: MBLK	TestCode: 8270_S_SIM	Units: µg/Kg	Prep Date: 12/27/2010 RunNo: 128213	
Client ID: PBS	Batch ID: 69218	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 12/27/2010 SeqNo: 2075505	
Analyte	Result	PQL SPK value SP	K Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qu	ual
Acenaphthene	ND	5.0			
Acenaphthylene	ND	5.0			
Anthracene	ND	5.0			
Benzo(a)anthracene	ND	5.0			
Benzo(a)pyrene	ND	5.0			
Benzo(b)fluoranthene	ND	5.0			
Benzo(g,h,i)perylene	ND	5.0			
Benzo(k)fluoranthene	ND	5.0			
Chrysene	ND	5.0			
Dibenz(a,h)anthracene	ND	5.0			
Fluoranthene	ND	5.0			
Fluorene	ND	5.0			
Indeno(1,2,3-cd)pyrene	ND	5.0			
Naphthalene	ND	5.0			
Phenanthrene	ND	5.0			
Pyrene	ND	5.0			
Surr: 1,2-Dichlorobenzene-d4	28.222	33.33		84.7 33 121	
Surr: 2-Fluorobiphenyl	28.981	33.33		87.0 41 128	
Surr: 4-Terphenyl-d14	38.802	33.33		116 54 154	
Surr: Nitrobenzene-d5	26.044	33.33		78.1 39 113	
Sample ID: LCS-69218	SampType: LCS	TestCode: 8270_S_SIM	Units: µg/Kg	Prep Date: 12/27/2010 RunNo: 128213	
Client ID: LCSS	Batch ID: 69218	TestNo: EPA 8270C	EPA 3550B	Analysis Date: 12/27/2010 SeqNo: 2075506	
Analyte	Result	PQL SPK value SP	K Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qu	ual
Acenaphthene	25.763	5.0 33.33	0	77.3 48 103	
Phenanthrene	27.178	5.0 33.33	0	81.5 56 110	
Pyrene	29.437	5.0 33.33	0	88.3 62 110	
Surr: 1,2-Dichlorobenzene-d4	25.922	33.33		77.8 33 121	
Surr: 2-Fluorobiphenyl	27.631	33.33		82.9 41 128	

#### Qualifiers:

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- Value above quantitation range Е
- RPD outside accepted recovery limits R Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- Spike/Surrogate outside of limits due to matrix interference S

DO Surrogate Diluted Out



- 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045
- Fax: 562.989.4040 45 of 46

### CLIENT: Ninyo & Moore

#### **Work Order:** 115438

Project: ALBANY PHASE II ESA, 401678002

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_SIM

Sample ID: LCS-69218	SampType: LCS	TestCode: 8270_S_SI	M Units: µg/Kg		Prep Date:	12/27/2010	RunNo: 128213	
Client ID: LCSS	Batch ID: 69218	TestNo: EPA 8270C	EPA 3550B		Analysis Date:	12/27/2010	SeqNo: 2075506	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit Hig	ghLimit RPD Ref Val	%RPD RPDLimit	Qual
Surr: 4-Terphenyl-d14	34.642	33.33		104	54	154		
Surr: Nitrobenzene-d5	24.884	33.33		74.7	39	113		
Sample ID: 115438-010AMS	SampType: <b>MS</b>	TestCode: 8270_S_SI	M Units: µg/Kg		Prep Date:	12/27/2010	RunNo: 128213	
Client ID: NMB-2-5.0	Batch ID: 69218	TestNo: EPA 8270C	EPA 3550B		Analysis Date:	12/27/2010	SeqNo: 2075507	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit Hig	ghLimit RPD Ref Val	%RPD RPDLimit	Qual
Acenaphthene	34.071	5.0 33.33	0	102	52	133		
Phenanthrene	34.363	5.0 33.33	0	103	32	181		
Pyrene	39.692	5.0 33.33	17.90	65.4	46	157		
Surr: 1,2-Dichlorobenzene-d4	29.199	33.33		87.6	33	121		
Surr: 2-Fluorobiphenyl	34.557	33.33		104	41	128		
Surr: 4-Terphenyl-d14	38.099	33.33		114	54	154		
Surr: Nitrobenzene-d5	30.628	33.33		91.9	39	113		
Sample ID: 115438-010AMSD	SampType: MSD	TestCode: 8270_S_SI	M Units: µg/Kg		Prep Date:	12/27/2010	RunNo: 128213	
Client ID: NMB-2-5.0	Batch ID: 69218	TestNo: EPA 8270C	EPA 3550B		Analysis Date:	12/27/2010	SeqNo: 2075508	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit Hig	ghLimit RPD Ref Val	%RPD RPDLimit	Qual
Acenaphthene	33.008	5.0 33.33	0	99.0	52	133 34.07	3.17 20	
Phenanthrene	33.731	5.0 33.33	0	101	32	181 34.36	1.86 20	
Pyrene	38.797	5.0 33.33	17.90	62.7	46	157 39.69	2.28 20	
Surr: 1,2-Dichlorobenzene-d4	27.755	33.33		83.3	33	121	0	
Surr: 2-Fluorobiphenyl	34.261	33.33		103	41	128	0	
Surr: 4-Terphenyl-d14	37.106	33.33		111	54	154	0	
Surr: Nitrobenzene-d5	30.353	33.33		91.1	39	113	0	

#### Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

- E Value above quantitation range
- R RPD outside accepted recovery limits Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

- Advanced Technology
- Laboratories
  - 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

46 of 46

Pageof	JR LABORATORY USE ONLY	K     Sample Condition Upon Receipt       Y     N       Y     N       A. SEALED     Y       F. NOAI */SY     N		Tel:	Zip Code: 94612 Fax: 510-633-5646	(Signature)	Defficering Date: 2/21/12 Time:	Date: Date: 72/27/10 Time: 9:11	Date: Time:	Special Instructions/Comments:		Please send results by Monday 12/27/10	1612			SWRCB SILVERCE	Image: Second					HOLD	+ 	-	НОГР				E Routine Preservatives: 7 Workdays H=HCI N=HNO3 S=H <sub>3</sub> SO1 C=4°C	Plastic M=Metal Z=Zn(AC), O=NaOH T=Na,S,O <sub>3</sub>
IN OF CUSTODY RECORD	FG	Method of Transport Client コATL 1. CHILLED こ FedEx コ OnTrac 2. HEADSPA(	40. to ensure GSO 3. CONTAINE Other:	Address: 1956 WEBSTER AVENUE, SUITE 400	city: OAKLAND State: CA	Sampler: MOC	P/10 Time Received by: (signate and fance Name)	Time: Received by: Develope and Prineer Name)	Time: Received by: (Signature and Pringed Name)			Addr: 1956 WEBSTER AVE SUITF 400	94612 City: OAKLAND State: CA Zip: 9	disposed Circle or Add disposed Analysis(es)		$\left  \frac{1}{28} \right  \left  \frac{1}{24} \right  \left  \frac{1}{28} \right  \frac{1}{28} \left  \frac{1}{24} \right  \left  \frac{1}{28} \right  \left  \frac{1}{28} \right  \right $	(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	$Time \left  \begin{cases} z \\ g \\$	9:10 X X X 0:10	9:15 X X X	9:20 X X X	9:25 X X X	10:40 X X	10:50 X X X	11:10 X X X	11:10 X X X	11:10 X X X	11:10 X X X	$\Gamma C = \begin{bmatrix} Critical \\ 2 Workdays \end{bmatrix} \Gamma D = \begin{bmatrix} Urgent \\ 3 Workdays \end{bmatrix} \overline{V} E$	=Liter P=Pint J=Jar B=Tedlar G=Glass P=I
CHA		P.O. #: Quote #: Date:	NOTE: Please include your Quote N proper pricing of your project.		ti@ninyoandmoore.com)	Project #: 401678002	and the hourself it y	Date:	Date:	Report To: • MONIAMI CLIAKEANVAETI		: 1956 WEBSTER AVE. SUITE 400	: OAKLAND State: CA Zip:	sed 45 days after receipt and records will be			ample Description	cation Date	5	0	5	5	0	5	0	5	5	0	overnight ≤ 24 hrs	ner Types: T=Tube V=VOA L
		ANCED TECHNOLOGY	<sup>5</sup> Wahnut Ave., Signal Hill, CA 90755 :(562) 989-4045 ● Fax: (562) 989-4040	Client: NINYO AND MOORE	ention: MONAMI CHAKRAVARTI (mchakravari	Vame: ALBANY PHASE II ESA	hed by: (Signature and Printed Name)	hed by: (Signature and Printed Name)	hed by: (Signature and Printed Name)	ereby authorize ATL to perform the work Send indicated below:		Print Name Date Addr	anni Chalmananti 12 20/ 2010 City	Records - Archival & Disposal intervise requested by client, all samples will be dispo er submitted of final record.	Fees (applies when storage is requested):	ore: \$2.00 / sample /mo (atter 45 days) rds: \$1 /ATL workorder /mo (after 1 year)	s use only: sh#: S	Lab No. Sample ID / Lo	Y-1 NMB-1-0	~ 2 NMB-1-1	3 NMB-1-1.	- 4 NMB-1-2	~ 5 NMB-1-5.	~ 6 NMB-2-0	~ 7 NMB-2-1.	~ 8 NMB-2-1.	- 9 NMB-2-2	- 10 NMB-2-5	starts 8AM the following day TAT: A =	Contain
		ADV.	327 Tel:		Att	Project h	Relinquist	Relinquis	Relinquis	41	Project N	MIC	Mon	Sample/F Unless of	Storage	<ul> <li>Recol</li> </ul>	T Batc	μΣ	11543	_									<ul> <li>TAT</li> <li>if same</li> </ul>	

Page of	E ONLY	dition Upon Receipt	5. # OF SPLS MATCH COC Y	6. PRESERVED Y N	Tel:	94612 Fax: 510-633-5646	(Signature)	2) Date: 2/21/10 Time: 2:43	Date: //17/10 Time: 7.11	Date: Time:	s/Comments:		lease send results by Monday 12/27/10				Der Colore State Colore	Container(s) OTHER	S     S     Tat     #     Type     Tat       S     Q     Tat     #     Type     Tat		Ногр	Ногр	НОГР		-	Ногр	Ногр	НОГР		Preservatives: H=HCI N=HNO <sub>3</sub> S=H <sub>3</sub> SO, C=4°C	Z=Zn(AC)2 O=NaOH T=Na2S2O3
	FOR LABORATORY USE	CHILED Y N N		CONTAINER INTACT Y	100	Zip Code:		Polited Name) Juff Sleaffr	Printed Jame)	Printed Name)	Special Instruction		E 400	Zip: 94612	Sel 25 / Speci	3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								>	<					/s E = Routine 7 Workdays	iss P=Plastic M=Metal
<b>CUSTODY RECORD</b>		Method of Transport	□ FedEx □ OnTrac 2.	re GSO 3.	1956 WEBSTER AVENUE, SUITE	OAKLAND State: C/	Sampler: MOC	Time: Received by: (sgraumene	Time: Received by: (signaule)	Time: Received by: (signature and	Bill To: Attn: NINYO AND MOORE	Co:	Addr: 1956 WEBSTER AVE, SUITI	City: OAKLAND State: CA	Circle or Add Analysis(es) Requested			[2] 2] 2] 2] 2] 2] 2] 2] 2] 2] 2] 2] 2] 2	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	X X X	X X X	X X X	X X X	X X X	X X X X	X X X	X X X	X X X	XX	Critical D = Urgent 3 Workdar	o=Pint J=Jar B=Tedlar G=Gla
CHAIN OF		Quote #: Date:		iclude your Quote No. to ensu if your project.	Address:	.com) City: (	401678002	Date: 12/20/10	Date:	Date:	VARTI		VE, SUITE 400	State: CA Zip: 94612	eipt and records will be disposed				Date Time	11:25	11:25	11:25	11:25	12/20/2010 11:25	11:50	11:50	11:50	11:50	11:50	3 = Emergency C = Next Workday	ube V=VOA L=Liter F
		TECHNOLOGY P.O.#		I Hill, CA 90755 NOTE: Please in x: (562) 989-4040 proper pricing o	AOORE	<pre>KRAVARTI (mchakravarti@ninyoandmoore</pre>	Project #: ASE II ESA	Name) Reproved Alynami Click	Name)	Name)	erform the work Send Report To: w: Attn: MONAMI CHAKRA	1 12/20/2010 Co:	Date Addr: 1956 WEBSTER A	the 12/20/10 City: OAKLAND	sposal ent, all samples will be disposed 45 days after rec +	rage is requested): after 45 days)	no (aitei 1 yeai)	Sample Description	Sample ID / Location	NMB-3-0.5	NMB-3-1.0	NMB-3-1.5	NMB-3-2.5	NMB-3-5.0	NMB-4-0.5	NMB-4-1.0	NMB-4-1.5	NMB-4-2.5	NMB-4-5.0	g day TAT:	Container Types: T=Tu
		ADVANCED	r v o o v r	3275 Walnut Ave., Signal Tel: (562) 989-4045 • Fa	Client: NINYO AND M	Attention: MONAMI CHA	Project Name: ALBANY PH,	Relinquished by: (Signature and Printed 1 Mo V ANT CHM	Relinquished by: (signature and Printed I	Relinquished by: (Signature and Printed I	I hereby authorize ATL to point indicated belov	Project Mgr /Submitter: MONAMI CHAKRAVART	Print Name	Monan Chehran	Sample/Records - Archival & Dis Unless otherwise requested by clic 1 vear after submittal of final renor	Storage Fees (applies when stor Sample :\$2.00 / sample /mo (a		T Batch #:	M Lab No.	11 - YEVRI	- 12	- 13	- 14	- 15	- 16	~ 17	- 18	19	20	<ul> <li>TAT starts 8AM the following if samples received after 5 D</li> </ul>	וו סמוווקופט ופכפולפת מונפו ס ו

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									FOR LABO	RATORY USE OI	٩٢Y	
A	DVANCED TECHI	NOLOGY	P.O.#	Quote #:		Metho	od of Trar	Isport		Sample Conditi	on Upon Receipt	
	LABORATORIE	L S	Logged By:	Date		Client FedE		ATL 1. CH OnTrac 2. HE	HILLED ADSPACE (VOA)		<ol> <li>SEALED</li> <li># OF SPLS MATCH C</li> </ol>	
	3275 Walnut Ave., Signal Hill, CA Tel: (562) 989-4045 • Fax: (562) 5	A 90755 989-4040	NOTE: Please include proper pricing of your	your Quote N project.	o. to ensure	C CSO		3. CC	ONTAINER INTACT	□   1   1	6. PRESERVED	] □ z ] □ ≻
	Client: NINYO AND MOORE				Address: 19	56 WEBSTE	R AVEN	UE, SUITE 40	0		Tel:	
	Attention: MONAMI CHAKRAVAF	RTI (mchakravan	ti@ninyoandmoore.com)		City: O/	AKLAND		State: CA		Zip Code: 94	612 Fax: 510-633	1-5646
Pro	ject Name: ALBANY PHASE II E	SA	Project #: 40167	78002			sampler:	AOC			(Signature)	
Reli	nquished by: (signature and Printed Name)	MTS Non	ani Chehianan	C Date: 12fr	* 01/	ime: SYS	Received	Lby: (algnature and Pri	nted Name) Jeff Size	Kent	Date: 1/10	Time: 1243
Reli	nquished by: (Signature and Printed Name)			Date:		ime:	Received	Day: (Signature and Pri	nted Name)		Date: /2/2/1)	Time:
Reli	nquished by: (Signature and Printed Name)			Date:	F	ime:	Received	by: (Signarure and Pri	nted Name)		Date:	Time:
	I hereby authorize ATL to perform the indicated below:	work Send	I Report To: 1: MONAMI CHAKRAVARTI		Bil	I To: Attn: NINYO AN	D MOORE			pecial Instructions/Cor	mments:	
Pro	ject Mgr /Submitter: MONAMI CHAKRAVARTI 12	2/20/2010 Co				Co:						
	Print Name	Date Addr	r: 1956 WEBSTER AVE, SU	IITE 400	A	Addr: 1956 WI	EBSTER	AVE, SUITE 4	100	Please	send results by Monday 12	/27/10
M	many Chelinson 1. 1. Signature	city	r: OAKLAND State:	CA Zip:	94612	City: OAKLAND		State: CA	Zip: 94612			
Unle Unle	nple/Records - Archival & Disposal ess otherwise requested by client, all sarr iar after submittal of final report.	mples will be dispo-	ised 45 days after receipt an	d records will be	disposed A	ircle or Add malysis(es) Requested			Sile Sile Sile	SPECIFY A	PPROPRIATE MATRIX	
Stol	rage Fees (applies when storage is rec	quested):							1	/////	///	
	Sample :\$2.00 / sample /mo (after 45 da Records: \$1 /ATL workorder /mo (after 1	ays)   year)				130	(ea)	22/20/20/20/20/20/20/20/20/20/20/20/20/2	3		1/1	A SWRCB Logcode
1	LAB USE ONLY: Batch #:	S	ample Description				2 ( 1 ) ( C )		1 1 1 1 1 1 21	2 2 2 X X	S S Container(s)	OTHER
Ξ	Lab No.	Sample ID / Lo	ocation	Date	Time	12 28 28 20 C	18 18 18 19 19 19 19 19 19			0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SU TAT # TVDE	REMARKS
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	- 22	NMB-5-1	0.		12:30	<u> </u>	×	×				НОГР
	~ 23	NMB-5-1	.5		12:30	<u> </u>	×	×				НОГР
	- 24	NMB-5-2	.5		12:30	^	×	×				ПОН
	~ 25	NMB-5-5	0.0	0100/00/01	12:30	^	×	××			F	
	- 26	NMB-6-0	.5	210202121	1:00	^	×	×			-	
	- 27	NMB-6-1	0.		1:00	^	×	×				НОГР
_	- 28	NMB-6-1	.5		1:00	^	×	×				ПОН
	- 29	NMB-6-2	5		1:00	^	×	×				НОГР
-	- 30	NMB-6-5	5.0		1:00		×	×				
	TAT starts 8AM the following day If samples received after 5 PM	AT: $\Gamma A =$	Overnight	Emergency Next Workday	= C L	Critical 2 Workdays		Urgent 3 Workdays	Re E ZV	utine Vorkdays	Preservatives: H=HCI N=HNO <sub>3</sub> S=	⊧H <sub>2</sub> SO₄ C=4°C
		Contai	iner Types: T=Tube	V=VOA L	=Liter P=I	Pint J=Jar	B=Te	dar G=Glass	P=Plastic	M=Metal	Z=Zn(AC)2 O=NaO	H T=Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>

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AD	VANCED 1	TECHNOLOG	Υ P.O.#:	Quot	te #:		Me	thod of <b>1</b>	Transpor	ţ		Sai	nple Condi	tion Upon R	eceipt	
	LABORATC	ORIES	Logged By:		Date:			ent dEx		1. CHI rac 2. HEA	ADSPACE (VO)			4. SEALE 5. # OF S	D PLS MATCH C	
υ T	(275 Walnut Ave., Signal Tel: (562) 989-4045 • Fax	l Hill, CA 90755 x: (562) 989-4040	NOTE: Please inc proper pricing of	clude you your pro	ir Quote No ject.	o. to ensure	5 8 0 0	SO her:		3. CO	NTAINER INTA	CT Y [		6. PRESE	RVED	] □ z ] □ ≻
	Client: NINYO AND M	AOORE			1	Address: 15	956 WEBS	TER AV	ENUE, S	SUITE 400					Tel:	
	Attention: MONAMI CHA	KRAVARTI (mchakr	ravarti@ninyoandmoore.c	com)		City: O	AKLAND		S	itate: CA		Zip (	Code: 9	4612	Fax: 510-633	-5646
Projec	ct Name: ALBANY PH/	ASE II ESA	Project #: 4	40167800	2			Sample	er: MOC					(Sign	ature)	
	uished by: (signature and Printed N	Name) NUNUNTYTT	Monum	1	V 24 /	0	Cut3	Reće	ived by: (8	Braturerand Prin	ted Name) Left	) field	riel	Date:	01/12)	Time: 12143
Relinqu	uished by: (signature and Printed N	Name)		-	Date:		Time:	Rece	s) : (a participation	ignature and Prin	ted Name)	M		Date:	1/22/10	Time: 9.7/
Relinqu	uished by: (Signature and Printed N	Name)		-	Date:		Time:	Rece	eived by: (s	ignatorife and Prin	ted Name)			Date:		Time:
	I hereby authorize ATL to pe indicated below	erform the work w:	Send Report To: Attn: MONAMI CHAKRAV	ARTI		ā	II To: Attn: NINYO	AND MOC	DRE			Special	Instructions/C	omments:		
Projec	st Mgr /Submitter: NONAMI CHAKRAVARTI	1 12/20/2010	Co:				Co:									
	Print Name	Date	Addr: 1956 WEBSTER AVI	/E, SUITE 4	400		Addr: 1956	WEBST	ER AVE	, SUITE 4	00		Plea	e send results	by Monday 12	/27/10
m	hann Chelvan Signature	olarki ma	City: OAKLAND S	State: CA	Zip:	94612	City: OAKLA	QN	State	CA	Zip: 94612					
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32' Tel	75 Walnut Ave., Si 1: (562) 989-4045 •	gnal Hill, CA 90755 • Fax: (562) 989-4040	NOTE: Please inclu proper pricing of yc	de your Quote h our project.	lo. to ensure	C GSO		3. CO	NTAINER INTACT		6. PRESERVED	≺ □ N
	Client: NINYO AN	<b>JD MOORE</b>			Address: 19	56 WEBSTE	R AVEN	UE, SUITE 400			Tel:	
At	tention: MONAMI (	CHAKRAVARTI (mchak	cravarti@ninyoandmoore.cor	n)	City: O/	AKLAND		State: CA		Zip Code: 9.	4612 Fax: 510-633	-5646
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=	hereby authorize ATL indicated	to perform the work below:	Send Report To: Attn: MONAMI CHAKRAVAF	8TI	Bil	II To: Attn: NINYO AN	D MOORE			special Instructions/Co	mments:	
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Page\_\_\_\_of\_\_\_\_

### **Rachelle Arada**

From: Sent: To: Cc: Subject: Carmen Aguila Monday, December 27, 2010 9:14 AM Rachelle Arada Ed Caballero; Eddie Rodriguez; Edgar Morrison FW: ALBANY PHASE II ESA, 401678002

confirmation wo# 115438.

From: Monami Chakravarti [mailto:mchakravarti@ninyoandmoore.com] Sent: Friday, December 24, 2010 1:30 AM To: Carmen Aguila Subject: Re: ALBANY PHASE II ESA, 401678002

Carmen please use CAM 17 metals for the metal analysis, thanks

----- Original Message -----From: Carmen Aguila <<u>carmen@atlglobal.com</u>> To: Monami Chakravarti Cc: Rachelle Arada <<u>rachelle@atlglobal.com</u>> Sent: Thu Dec 23 09:27:19 2010 Subject: ALBANY PHASE II ESA, 401678002

Hi Monami,

We would like to confirm if you have a specific metals selection for the 6010 (total metals) that is marked on the coc for the above project or it's CAM 17 that you require. Please advice. Enclosed is a copy of the coc.

Thank you,

Carmen Aguila Sample Control Manager

Advanced Technology Laboratories <u>www.atlglobal.com</u> <<u>http://www.atlglobal.com</u>> Tel: (562) 989-4045 ext. 245 Fax: (562) 989-4040

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## **APPENDIX E**

# OAKLAND SURVEY OF BACKGROUND METAL CONCENTRATION STUDY

### **City of Oakland Survey of Background Metal Concentration Studies**

Some naturally-occurring concentrations of metals in Oakland soils are higher than the thresholds calculated by risk-based models. In such cases, there is unlikely to be any real reduction in risk realized from remediation to the risk-based threshold since the observed concentrations are likely to represent ambient conditions. In Oakland, this is especially true of arsenic. The following table contains the results from background metal concentration studies conducted in locations that are relevant to Oakland's geology.

Source	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Lawrence Berkeley National Laboratories <sup>1</sup>	5.5	19.1	1.0	2.7	99.6	69.4	16.1	0.4	119.8	5.6	1.8	27.1	106.1
-Colluvian &Fill	5.9	14.0	0.9	1.5	91.4	59.6	14.7	0.3	120.2	5.6	1.7	42.5	91.5
-Great Valley Group	6.3	31.0	1.0	3.2	59.0	99.7	21.5	0.6	69.7	4.8	2.2	8.7	135.9
-Moraga Formation	6.1	9.3	0.8	2.6	142.2	54.1	8.9	0.3	100.4	4.7	2.0	38.9	84.7
-Orinda Formation	5.2	17.8	1.1	3.3	95.2	66.9	14.8	0.3	144.3	7.0	1.9	19.8	98.3
-San Pablo Group	7.1	15.7	0.8	2.9	78.6	40.9	10.3	0.4	125.9	4.9	1.5	10.9	97.7
San Leandro, Ca <sup>2</sup>	<3-<15	1.8-5.9	<0.25-<1.30	<0.25- <1.30	24.8-43.0	11.8- 68.0	3.3-10.4	<0.10	2.93- 43.60	<0.25- <2.50	<0.50- <2.50	<0.50- <5.00	9.3- 61.3
Union City, Ca <sup>3</sup>	5.0	6.92- 9.34	0.5-0.81	0.5-1.30	46.5-112	28.2- 60.1	19.8- 148	0.1-0.36	32.4-60.6	0.5	0.5	5.0	97.1- 474
Western U.S. <sup>4</sup>		1-50		0.1-0.7	1-1,000	2-100	20-100	0.01-0.3	5-500				10- 300

#### **Background Metal Concentrations** (ppm in soil)

Sources:

<sup>1</sup> Lawrence Berkeley National Laboratory Environmental Restoration Program, 1995. 500 samples were taken from 71 locations representing 5 geologic units at LBNL: Colluvian & Fill, Great Valley group, Moraga formation, Orinda formation and San Pablo group. Concentrations listed are Upper 95% Confidence Limits of data from 71 monitoring well borings.

<sup>2</sup> Chemical Testing on Background Soil Samples: Roberts Landing Development Site, San Leandro, CA, 1994.
 <sup>3</sup> Site Wide Remedial Investigation: Pacific States Steel Corp. Union City, CA, 1992.

<sup>4</sup> USEPA (found in Remedial Investigation Report, Hercules Properties, Inc., 1991).