

**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:**

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January 11, 2011  
Project No. 401678002

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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.

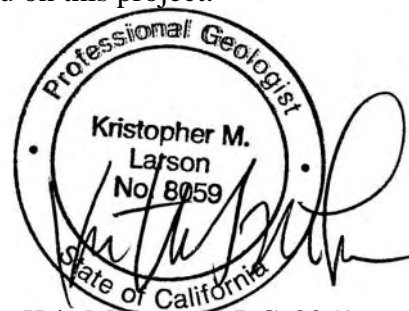
Sincerely,  
**NINYO & MOORE**



Monami 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 aeri ally 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

(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 lithologic 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.



- 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 the 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)fluorethene, 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)fluorethene, 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>
	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		
Approximate Depth (feet bgs)	12/20/2010														
Date Collected	12/20/2010														
METALS (mg/Kg)															
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	<b>4.4</b>	<b>2.5</b>	<b>1.4</b>	<b>9.9</b>	<b>1.8</b>	<b>4.0</b>	<b>1.7</b>	<b>1.0</b>	<b>3.9</b>	<b>3.2</b>	<b>5.6</b>	<b>3.8</b>	<b>4.6</b>	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	<b>40</b>	<b>29</b>	14	<b>44</b>	<b>20</b>	<b>31</b>	13	8.4	<b>36</b>	<b>19</b>	15	14	<b>19</b>	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 applicable



**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**

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	ENVIRONMENTAL
	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	SCREENING LEVELS (1) in ug/Kg
Approximate Depth (feet bgs)	0.5																				
Date Collected	12/20/2010																				
<b>SEMI VOLATILE ORGANIC COMPOUNDS (µg/Kg)</b>																					
Acenaphthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<120 <sup>(2)</sup>	<5.0	<5.0	<5.0	41	<25 <sup>(3)</sup>	<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	<b>1500</b>	<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	<b>1100</b>	<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	<b>1400</b>	<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	<b>490</b>	<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	<b>110</b>	<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
<b>TOTAL PETROLEUM HYDROCARBONS (mg/Kg)</b>																					
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



REFERENCE: USGS, 1978, SAN FRANCISCO 7.5 MINUTE QUADRANGLE TOPOGRAPHIC MAP, SCALE 1:24,000.

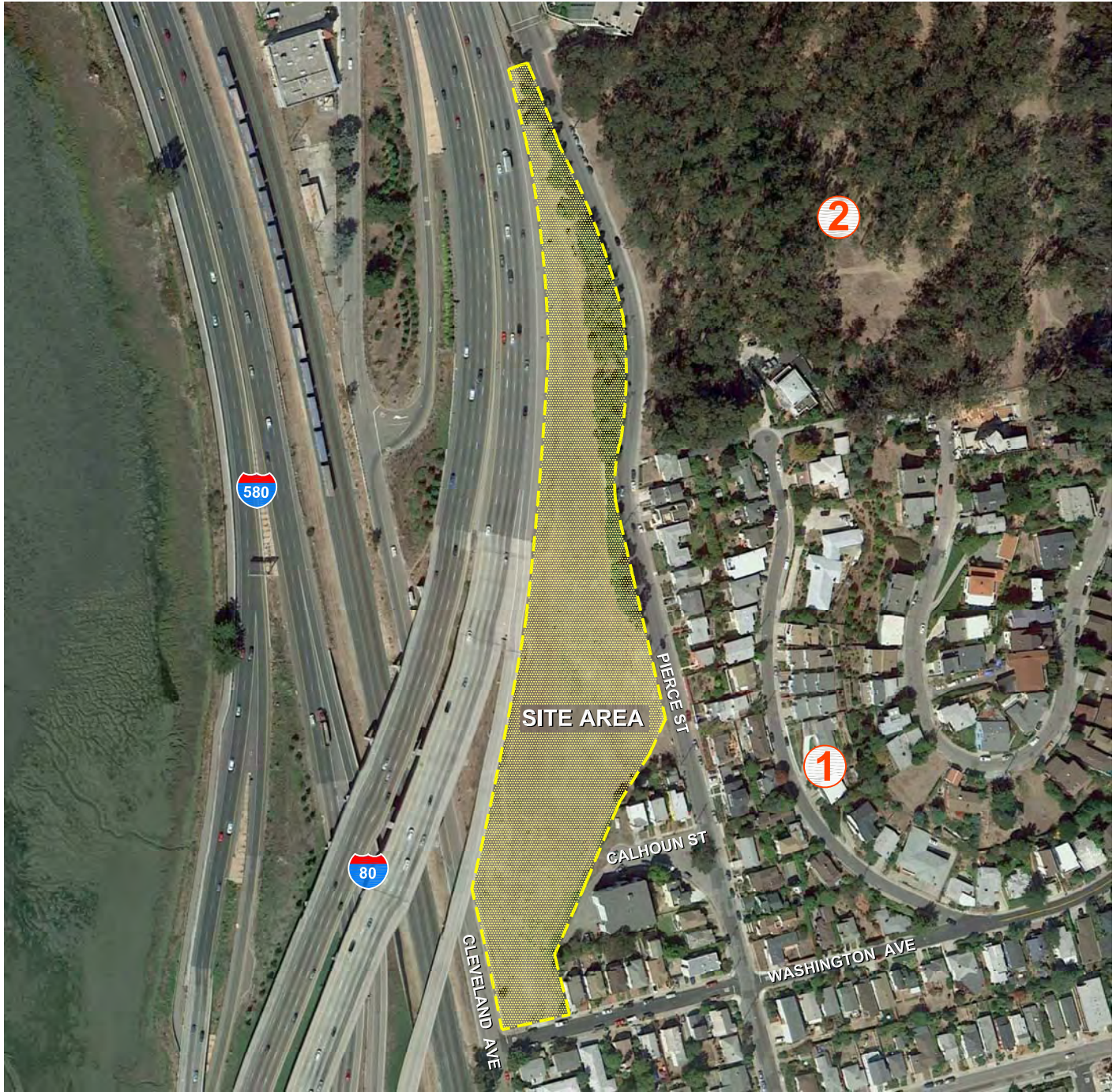


SCALE IN FEET



NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

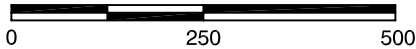
		<b>SITE LOCATION</b> NORTHEAST CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE ALBANY, CALIFORNIA	FIGURE <b>1</b>



REFERENCE:GOOGLE EARTH, 2010.



SCALE IN FEET

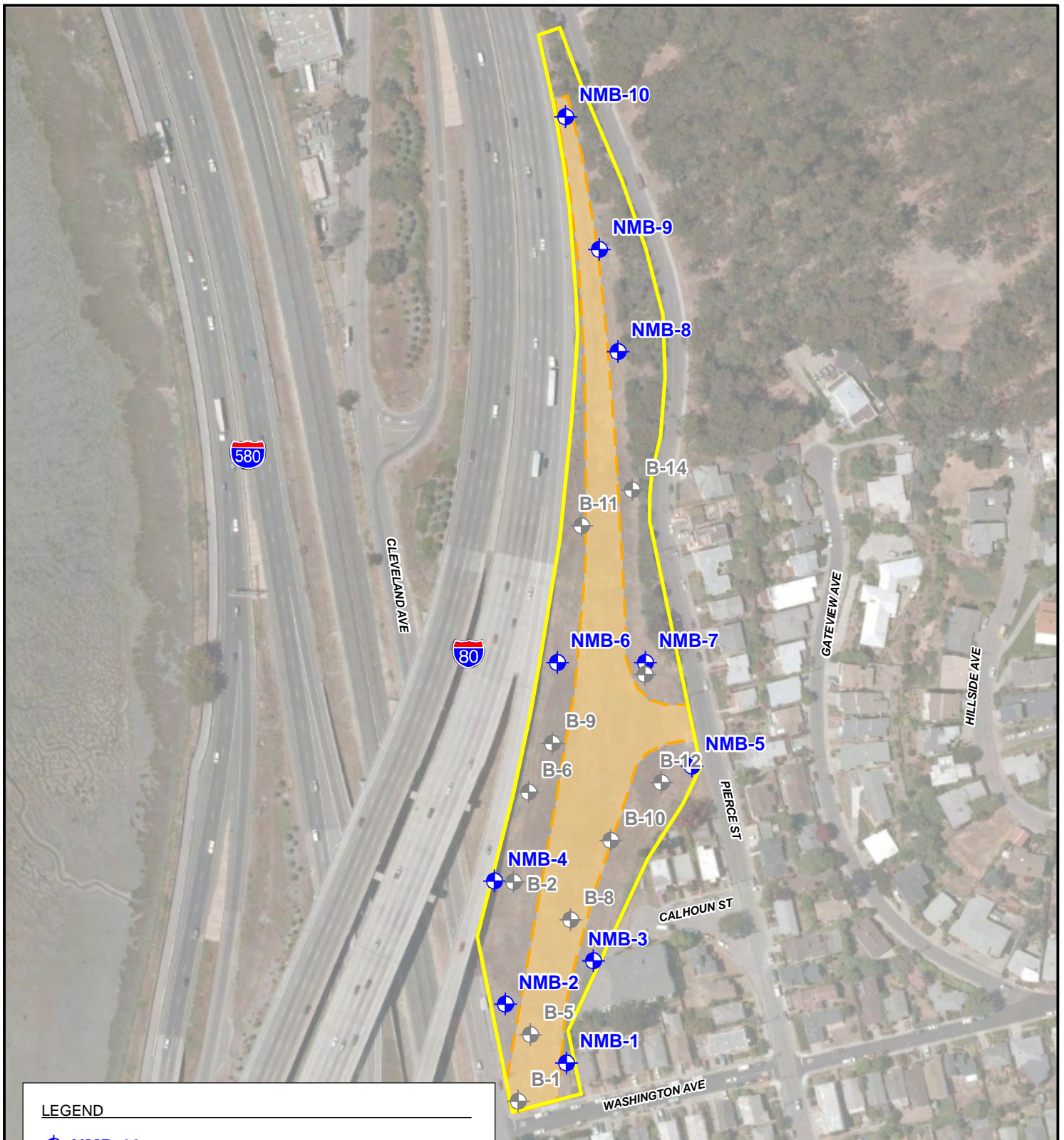


**LEGEND**

- ① RESIDENTIAL
- ② ALBANY HILL PARK

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

<b>Ninyo &amp; Moore</b>		<b>SITE VICINITY</b>	FIGURE
PROJECT NO.	DATE	NORTHEAST CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE ALBANY, CALIFORNIA	<b>2</b>
401678002	1/11		



SOURCE: Aerial Imagery - (c) 2010 Microsoft Corporation and its data suppliers

**LEGEND**

- NMB-10** BORING LOCATION (NINYO & MOORE, 2010)
- B-14** PREVIOUS SAMPLING LOCATION (GEOCON, 2001)
- SITE BOUNDARY
- FORMER OFF-RAMP (GEOCON, 2001)



NOTE: ALL DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE



**BORING LOCATIONS**

FIGURE

PROJECT NO.

DATE

NORTHEAST CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

401678002

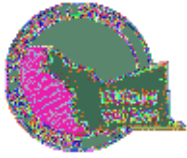
1/11

**3**

**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: 1291921232439  
Site Location: northeast corner of Cleveland Ave and Washington Ave, Albany, CA 94612  
Project Start Date: 12/17/2010  
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: Albany  
Completion Date: 12/17/2010

Applicant: Ninyo and Moore - Kris Larson  
1956 Webster St., Oakland, CA 94612  
Property Owner: Dept of Transportation, #4  
Grand St., Oakland, CA 94612  
Client: City of Albany, Judy Lieberman  
1000 San Pablo Ave, Albany, CA 94706

Phone: 510-633-5640  
Phone: 510-286-5647  
Phone: 510-528-5716

Receipt Number: WR2010-0422 Total Due: \$265.00  
Payer Name : Ninyo and Moore Total Amount Paid: \$265.00  
Paid By: CHECK PAID IN FULL

## Works Requesting Permits:

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

Work Total: \$265.00

### Specifications

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

### 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**



# BORING LOG EXPLANATION SHEET

DEPTH (feet)	Bulk Driven SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.
0	■					Bulk sample.
	■					Modified split-barrel drive sampler.
	⊗					No recovery with modified split-barrel drive sampler.
	■					Sample retained by others.
	■					Standard Penetration Test (SPT).
5	⊗					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.
	∩					Seepage.
10	∩					Groundwater encountered during drilling.
	∩					Groundwater measured after drilling.
					■	SM
						ALLUVIUM: Solid line denotes unit change.
						Dashed line denotes material change.
15						Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Sheared Bedding Surface
20						The total depth line is a solid line that is drawn at the bottom of the boring.



## BORING LOG















### EXPLANATION OF BORING LOG SYMBOLS

PROJECT NO.

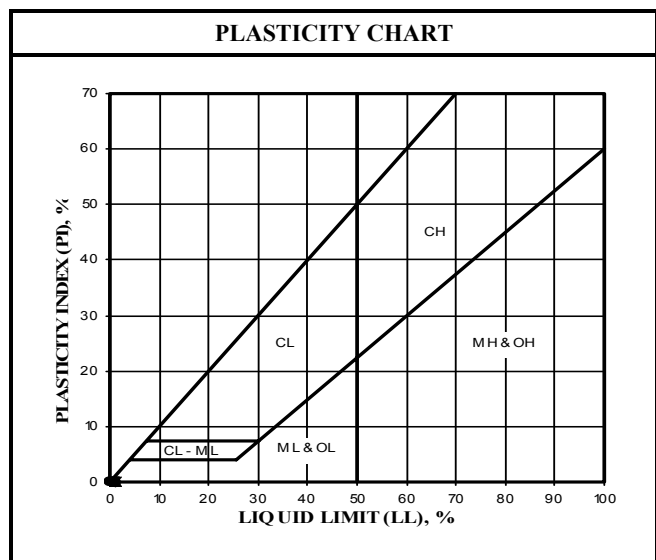
DATE  
Rev. 01/03

FIGURE

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

MAJOR DIVISIONS	SYMBOL	TYPICAL NAMES
<b>COARSE-GRAINED SOILS</b> (More than 1/2 of soil >No. 200 sieve size)	<b>GRAVELS</b> (More than 1/2 of coarse fraction > No. 4 sieve size)	 GW Well graded gravels or gravel-sand mixtures, little or no fines
		 GP Poorly graded gravels or gravel-sand mixtures, little or no fines
		 GM Silty gravels, gravel-sand-silt mixtures
		 GC Clayey gravels, gravel-sand-clay mixtures
	<b>SANDS</b> (More than 1/2 of coarse fraction <No. 4 sieve size)	 SW Well graded sands or gravelly sands, little or no fines
		 SP Poorly graded sands or gravelly sands, little or no fines
		 SM Silty sands, sand-silt mixtures
		 SC Clayey sands, sand-clay mixtures
<b>FINE-GRAINED SOILS</b> (More than 1/2 of soil <No. 200 sieve size)	<b>SILTS &amp; CLAYS</b> Liquid Limit <50	 ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with
		 CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean
		 OL Organic silts and organic silty clays of low plasticity
	<b>SILTS &amp; CLAYS</b> Liquid Limit >50	 MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		 CH Inorganic clays of high plasticity, fat clays
		 OH Organic clays of medium to high plasticity, organic silty clays, organic silts
<b>HIGHLY ORGANIC SOILS</b>		Pt Peat and other highly organic soils

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



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

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-1</u>		
	Bulk	Driven							GROUND ELEVATION <u>29.5' ± MSL</u> SHEET <u>1</u> OF <u>1</u>		
									METHOD OF DRILLING <u>GEO-PROBE</u>		
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>		
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>		
									DESCRIPTION/INTERPRETATION		
0						0		GM	<b>FILL:</b> Dark brown, moist, gravelly silty SAND; concrete debris.		
						0		CL	Yellowish brown, moist, silty CLAY; low plasticity.		
5						0		GM	Grayish brown, dry, gravelly SILT; concrete debris.		
						0			Refusal at 7 feet. Approximate total depth = 7 feet bgs.		
									Groundwater was not encountered.		
									Boring was grouted to surface using Portland cement on 12/20/10.		
10											
15											
20											





**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-1

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-2</u>		
	Bulk Driven								GROUND ELEVATION <u>24.9' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>	METHOD OF DRILLING <u>GEO-PROBE</u>
0								GC	<u>FILL:</u> Dark brown, moist, silty sandy CLAY with gravel.		
						0			Orange brown, sandy gravelly CLAY; concrete debris.		
5								CL	Orange brown, moist, sandy CLAY; presence of debris; low plasticity.		
						0			Approximate total depth = 10 feet bgs.		
									Groundwater was not encountered.		
									Boring was grouted to surface using Portland cement on 12/20/10.		
10											
15											
20											





**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-2

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-3</u>	
	Bulk	Driven							GROUND ELEVATION <u>38.8' ± MSL</u> SHEET <u>1</u> OF <u>1</u>	
									METHOD OF DRILLING <u>GEO-PROBE</u>	
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>	
									DESCRIPTION/INTERPRETATION	
0						0		GC	<u>FILL:</u> Light grayish brown, moist, gravelly CLAY.	
5						0		CL	Orange brown, moist, sandy CLAY.	
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.	
15										
20										





**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-3

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-4</u>		
	Bulk	Driven							GROUND ELEVATION <u>30.5' ± MSL</u> SHEET <u>1</u> OF <u>1</u>		
									METHOD OF DRILLING <u>GEO-PROBE</u>		
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>		
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>		
									DESCRIPTION/INTERPRETATION		
0								GC	<u>FILL:</u> Light grayish brown, moist, gravelly CLAY.		
5								CL	Dark brown, moist, CLAY.  Grayish brown, moist, CLAY; concrete debris.  Orange brown, moist, CLAY.		
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.		
15											
20											





**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-4

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-5</u>	
	Bulk	Driven							GROUND ELEVATION <u>61.9' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>GEO-PROBE</u>	
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>	
									DESCRIPTION/INTERPRETATION	
0						0		SC	<u>FILL:</u> Yellowish brown, moist, silty sandy CLAY; medium plasticity.	
5						0		CL	<u>ALLUVIUM:</u> Grayish green, dry, silty CLAY.	
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.	
15										
20										



**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-5

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-6</u>		
	Bulk	Driven							GROUND ELEVATION <u>49.9' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>	METHOD OF DRILLING <u>GEO-PROBE</u>
									DRIVE WEIGHT <u>N/A</u>	DROP <u>N/A</u>	SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>
0								GM	DESCRIPTION/INTERPRETATION		
						0			<u>FILL:</u> Dark grayish brown, moist, silty SAND with gravel.		
5								CL	Dark greenish brown, moist, silty CLAY with gravel.		
						0			Concrete debris.		
10									Approximate total depth = 10 feet bgs.		
									Groundwater was not encountered.		
									Boring was grouted to surface using Portland cement on 12/20/10.		
15											
20											



**BORING LOG**



NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-6



DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-7</u>	
	Bulk	Driven							GROUND ELEVATION <u>58.7' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>GEO-PROBE</u>	
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>	
									DESCRIPTION/INTERPRETATION	
0						0		GC	<u>FILL:</u> Dark grayish brown, moist, silty gravelly CLAY.	
5						0		CL	Yellowish brown, dry, silty CLAY.	
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.	
15										
20										







**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-7

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-8</u>		
	Bulk Driven								GROUND ELEVATION <u>59.0' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>	METHOD OF DRILLING <u>GEO-PROBE</u>
0								GC	<p><u>FILL:</u> Orange brown, moist, silty gravelly CLAY.</p>		
5						0					
								SP	<p>Light yellowish brown, dry, silty SAND with gravel.</p> <p>No recovery.</p> <p>Light yellowish brown, dry, silty SAND with gravel.</p>		
10									<p>Approximate total depth = 10 feet bgs.</p> <p>Groundwater was not encountered.</p> <p>Boring was grouted to surface using Portland cement on 12/20/10.</p>		
15											
20											





**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-8

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-9</u>	
	Bulk	Driven							GROUND ELEVATION <u>58.4' ± MSL</u>	SHEET <u>1</u> OF <u>1</u>
									METHOD OF DRILLING <u>GEO-PROBE</u>	
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>	
									DESCRIPTION/INTERPRETATION	
0								GC	<u>FILL:</u> Dark brown, moist, silty gravelly CLAY.	
5								CL	Light yellowish brown, dry, silty CLAY.	
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.	
15										
20										



**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-9

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>12/20/10</u> BORING NO. <u>NMB-10</u>	
	Bulk	Driven							GROUND ELEVATION <u>57.7' ± MSL</u> SHEET <u>1</u> OF <u>1</u>	
									METHOD OF DRILLING <u>GEO-PROBE</u>	
									DRIVE WEIGHT <u>N/A</u> DROP <u>N/A</u>	
									SAMPLED BY <u>MOC</u> LOGGED BY <u>MOC</u> REVIEWED BY <u>KML</u>	
									DESCRIPTION/INTERPRETATION	
0						0		SP/SM	<u>FILL:</u> Dark brown, moist, silty SAND with gravel.	
5						0		SM	Yellowish brown, moist, silty SAND with pieces of concrete.	
10									Approximate total depth = 10 feet bgs.  Groundwater was not encountered.  Boring was grouted to surface using Portland cement on 12/20/10.	
15										
20										



**BORING LOG**

NE CORNER OF CLEVELAND AVENUE & WASHINGTON AVENUE  
ALBANY, CALIFORNIA

PROJECT NO.  
401678002

DATE  
1/11

FIGURE  
B-10

**APPENDIX C**  
**WASTE DISPOSAL MANIFEST**



# FILTER RECYCLING SERVICES, INC.

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

**"PRESERVING OUR NATURAL RESOURCES"**

DATE	INVOICE NUMBER <b>133746N</b>
------	----------------------------------

CUSTOMER NUMBER
-----------------

CUSTOMER NAME <b>CITY OF ALBANY</b>	PHONE NO. <b>510-798-1162</b>	BILL TO <b>NINYO &amp; MOORE</b>	PHONE NO. <b>510-633-5640 x3203</b>
SITE ADDRESS <b>NORTHEAST CORNER OF CLEVELAND/WASHINGTON AVE</b>		BILLING ADDRESS <b>1956 WEBSTER ST, STE 400</b>	
CITY / STATE / ZIP <b>ALBANY, CA 94706</b>		CITY / STATE / ZIP <b>OAKLAND, CA</b>	

SALES REP. <b>DR</b>	SITE CONTACT <b>MONAMI</b>	C.O.D. <b>XXX</b>	ON ACCOUNT	PURCHASE ORDER NO.	BILLING CONTACT	REQUESTED BY <b>MONAMI</b>
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QUANTITY	MATERIAL DESCRIPTION	MANIFEST NO.	UNIT PRICE	TOTAL PRICE
	<b>ONSITE 9AM</b>			
<b>1</b>	<b>P/U 1 X 55 NON HAZ SOIL</b>	<b>NH133746-N</b>		
	<b>DRIVER: PLEASE CALL UPON ARRIVAL BECAUSE THE GATES HAVE TO BE UNLOCKED AT THE SITE.....</b>			
	<b>MAY NEED DRUM DOLLY</b>			
	<b>15% ENERGY SURCHARGE COST MAY APPLY</b>			

FACILITY NAME: <b>Filter Recycling Services, Inc.</b>	DRIVER START TIME:
ADDRESS: <b>180 West Monte Avenue</b>	TIME LEFT YARD: <b>8:20 AM</b>
<b>285</b> <b>Bloomington, CA 92316</b>	JOB START TIME: <b>8:55 AM</b>
EPA ID NUMBER: <b>CAD982444481</b>	JOB END TIME: <b>8:58 AM</b>
DRIVER'S SIGNATURE: <i>[Signature]</i>	DRIVER END TIME:

It is the Generator's responsibility to correctly identify chemical composition.  
If material is rejected by disposal site, generator agrees to pay all testing, disposal & transportation charges.  
Invoice is subject to a 1.5% monthly interest rate, on past due amount.

RECEIVED BY: <i>[Signature]</i>	PRINT NAME: <i>[Name]</i>	Subtotal
		<b>TOTAL</b> ▸

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Waste Tracking Number

909-721-2038

NH133716-N NH133716-N

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

CITY OF ALBANY  
NORTHEAST CORNER OF CLEVELAND/WASHINGTON AVE  
ALBANY, CA 94706

Generator's Phone: 510-633-5640

6. Transporter 1 Company Name

U.S. EPA ID Number

ENVIRONMENTAL LOGISTICS, INC

CAR000172478

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

FILTER RECYCLING SERVICES, INC.  
180 WEST MONTE AVENUE  
RIALTO, CA 92316 USA

CAD982444481

Facility's Phone: 800-698-4377

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

No.

Type

1. NON HAZARDOUS WASTE SOLID (SOIL CUTTING)

1

DM

120

P

13. Special Handling Instructions and Additional Information

9B1) SOIL CUTTING # 10123015 (1X55DA) WEAR APPROPRIATE PPE  
MANIFEST MANAGED BY  
1456 WILSON ST. RPT. 4TH FLOOR  
OAKLAND CA 94612

INV# 133716-N 10/17/10

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name

Signature

Month Day Year

X ✓ 1 7 10

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

SETH ROSEN

*[Signature]*

1 7 10

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space  Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Signature

Month Day Year

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

**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

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.

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

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**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.



# Advanced Technology Laboratories

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

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

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227B	QC Batch:	69187	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 12:29 PM		
Arsenic	4.4	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Barium	100	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Chromium	94	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Cobalt	13	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Copper	27	2.0	mg/Kg	1	12/27/2010 12:29 PM		
Lead	73	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Molybdenum	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Nickel	120	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Selenium	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Silver	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Thallium	ND	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Vanadium	40	1.0	mg/Kg	1	12/27/2010 12:29 PM		
Zinc	59	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:	CBR
DRO	6.3	1.0	mg/Kg	1	12/27/2010 01:56 PM		
ORO	25	1.0	mg/Kg	1	12/27/2010 01:56 PM		
Surr: p-Terphenyl	79.1	30-128	%REC	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 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 02:27 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 02:27 AM		
Anthracene	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		

**Qualifiers:** B 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



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

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

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	6.4	5.0	µg/Kg
Benzo(b)fluoranthene	11	5.0	µg/Kg
Benzo(g,h,i)perylene	6.7	5.0	µg/Kg
Benzo(k)fluoranthene	ND	5.0	µg/Kg
Chrysene	11	5.0	µg/Kg
Dibenz(a,h)anthracene	ND	5.0	µg/Kg
Fluoranthene	14	5.0	µg/Kg
Fluorene	ND	5.0	µg/Kg
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/Kg
Naphthalene	5.9	5.0	µg/Kg
Phenanthrene	14	5.0	µg/Kg
Pyrene	13	5.0	µg/Kg
Surr: 1,2-Dichlorobenzene-d4	91.6	33-121	%REC
Surr: 2-Fluorobiphenyl	106	41-128	%REC
Surr: 4-Terphenyl-d14	121	54-154	%REC
Surr: Nitrobenzene-d5	89.0	39-113	%REC

**Qualifiers:** B 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



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# Advanced Technology Laboratories

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

<b>CLIENT:</b>	Ninyo & Moore	<b>Client Sample ID:</b>	NMB-1-5.0
<b>Lab Order:</b>	115438	<b>Collection Date:</b>	12/20/2010 10:40:00 AM
<b>Project:</b>	ALBANY PHASE II ESA, 401678002	<b>Matrix:</b>	SOIL
<b>Lab ID:</b>	115438-005A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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### 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	1.0	mg/Kg	1	12/27/2010 11:45 AM
ORO	ND	1.0	mg/Kg	1	12/27/2010 11:45 AM
Surr: p-Terphenyl	68.6	30-128	%REC	1	12/27/2010 11:45 AM

### SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

#### EPA 3550B

#### EPA 8270C

RunID: MS6_101227A	QC Batch: 69218	PrepDate: 12/27/2010	Analyst: DMP		
Acenaphthene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Acenaphthylene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Anthracene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Benzo(a)pyrene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Benzo(b)fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Benzo(g,h,i)perylene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Benzo(k)fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Chrysene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Dibenz(a,h)anthracene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Fluorene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Naphthalene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Phenanthrene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Pyrene	ND	5.0	µg/Kg	1	12/27/2010 11:05 PM
Surr: 1,2-Dichlorobenzene-d4	87.3	33-121	%REC	1	12/27/2010 11:05 PM
Surr: 2-Fluorobiphenyl	103	41-128	%REC	1	12/27/2010 11:05 PM
Surr: 4-Terphenyl-d14	114	54-154	%REC	1	12/27/2010 11:05 PM
Surr: Nitrobenzene-d5	86.8	39-113	%REC	1	12/27/2010 11:05 PM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# Advanced Technology Laboratories

# ANALYTICAL RESULTS

Print Date: 28-Dec-10

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

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227B	QC Batch:	69187	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 12:31 PM		
Arsenic	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		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 12:31 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 12:31 PM		
Chromium	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		
Copper	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		
Molybdenum	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		
Selenium	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		
Thallium	ND	1.0	mg/Kg	1	12/27/2010 12:31 PM		
Vanadium	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 8015B(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	74.8	30-128	%REC	1	12/27/2010 02:06 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 12:24 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Anthracene	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		

**Qualifiers:** B 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



Advanced Technology  
Laboratories

3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-2-0.5

**Lab Order:** 115438

**Collection Date:** 12/20/2010 10:50:00 AM

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

**Matrix:** SOIL

**Lab ID:** 115438-006A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	µg/Kg	1	12/28/2010 02:53 AM		
Benzo(b)fluoranthene	5.9	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Benzo(g,h,i)perylene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Benzo(k)fluoranthene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Chrysene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Dibenz(a,h)anthracene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Fluoranthene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
Fluorene	ND	5.0	µg/Kg	1	12/28/2010 02:53 AM		
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	106	41-128	%REC	1	12/28/2010 02:53 AM		
Surr: 4-Terphenyl-d14	117	54-154	%REC	1	12/28/2010 02:53 AM		
Surr: Nitrobenzene-d5	90.5	39-113	%REC	1	12/28/2010 02:53 AM		

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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**ANALYTICAL RESULTS**  
 Print Date: 28-Dec-10

<b>CLIENT:</b> Ninyo & Moore	<b>Client Sample ID:</b> NMB-2-5.0
<b>Lab Order:</b> 115438	<b>Collection Date:</b> 12/20/2010 11:10:00 AM
<b>Project:</b> ALBANY PHASE II ESA, 401678002	<b>Matrix:</b> SOIL
<b>Lab ID:</b> 115438-010A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

	EPA 3050B			EPA 6010B		
RunID: ICP10_101227B	QC Batch: 69187			PrepDate: 12/26/2010		Analyst: <b>SRB</b>
Antimony	ND	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	33	1.0		mg/Kg	1	12/27/2010 12:33 PM
Beryllium	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Cadmium	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Chromium	13	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	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Nickel	22	1.0		mg/Kg	1	12/27/2010 12:33 PM
Selenium	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Silver	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Thallium	ND	1.0		mg/Kg	1	12/27/2010 12:33 PM
Vanadium	14	1.0		mg/Kg	1	12/27/2010 12:33 PM
Zinc	13	1.0		mg/Kg	1	12/27/2010 12:33 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: <b>CBR</b>
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		%REC	1	12/27/2010 11:54 AM

**MERCURY BY COLD VAPOR TECHNIQUE**

	EPA 7471A					
RunID: AA5_101227A	QC Batch: 69185			PrepDate: 12/26/2010		Analyst: <b>VV</b>
Mercury	ND	0.10		mg/Kg	1	12/27/2010 12:26 PM

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

	EPA 3550B			EPA 8270C		
RunID: MS6_101227A	QC Batch: 69218			PrepDate: 12/27/2010		Analyst: <b>DMP</b>
Acenaphthene	ND	5.0		µg/Kg	1	12/27/2010 10:38 PM
Acenaphthylene	ND	5.0		µg/Kg	1	12/27/2010 10:38 PM
Anthracene	ND	5.0		µg/Kg	1	12/27/2010 10:38 PM
Benzo(a)anthracene	ND	5.0		µg/Kg	1	12/27/2010 10:38 PM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-2-5.0

**Lab Order:** 115438

**Collection Date:** 12/20/2010 11:10:00 AM

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

**Matrix:** SOIL

**Lab ID:** 115438-010A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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:** B 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



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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:** 115438-011A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227B	QC Batch:	69187	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 12:39 PM		
Arsenic	9.9	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Barium	130	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Chromium	140	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Cobalt	18	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Copper	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		
Molybdenum	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		
Selenium	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		
Thallium	ND	1.0	mg/Kg	1	12/27/2010 12:39 PM		
Vanadium	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-FID

### EPA 3550B

### EPA 8015B(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		
Surr: p-Terphenyl	70.7	30-128	%REC	1	12/27/2010 12:41 PM		

## MERCURY BY COLD VAPOR TECHNIQUE

### EPA 7471A

RunID:	AA5_101227A	QC Batch:	69185	PrepDate:	12/26/2010	Analyst:	VV
Mercury	0.15	0.10	mg/Kg	1	12/27/2010 11:39 AM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Anthracene	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		

**Qualifiers:** B 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



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-3-0.5

**Lab Order:** 115438

**Collection Date:** 12/20/2010 11:25:00 AM

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

**Matrix:** SOIL

**Lab ID:** 115438-011A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	µg/Kg	1	12/27/2010 11:32 PM		
Benzo(b)fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Benzo(g,h,i)perylene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Benzo(k)fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Chrysene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Dibenz(a,h)anthracene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Fluoranthene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Fluorene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Naphthalene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Phenanthrene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Pyrene	ND	5.0	µg/Kg	1	12/27/2010 11:32 PM		
Surr: 1,2-Dichlorobenzene-d4	91.2	33-121	%REC	1	12/27/2010 11:32 PM		
Surr: 2-Fluorobiphenyl	104	41-128	%REC	1	12/27/2010 11:32 PM		
Surr: 4-Terphenyl-d14	114	54-154	%REC	1	12/27/2010 11:32 PM		
Surr: Nitrobenzene-d5	88.3	39-113	%REC	1	12/27/2010 11:32 PM		

**Qualifiers:** B 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



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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:** 115438-015A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

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 AND ORO BY GC-FID

### EPA 3550B

### EPA 8015B(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	81.8	30-128	%REC	1	12/27/2010 12:05 PM		

## 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 12:46 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

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		

**Qualifiers:** B 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



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-3-5.0

**Lab Order:** 115438

**Collection Date:** 12/20/2010 11:25:00 AM

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

**Matrix:** SOIL

**Lab ID:** 115438-015A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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	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	85.7	39-113	%REC	1	12/28/2010 12:40 AM		

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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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:** 115438-016A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227C	QC Batch:	69188	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 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	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-Terphenyl	79.3	30-128	%REC	1	12/27/2010 01:37 PM		

## 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 12:48 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	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)anthracene	ND	5.0	µg/Kg	1	12/28/2010 03:21 AM		

**Qualifiers:** B 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



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**Advanced Technology Laboratories**

**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-4-0.5

**Lab Order:** 115438

**Collection Date:** 12/20/2010 11:50:00 AM

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

**Matrix:** SOIL

**Lab ID:** 115438-016A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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:** B Analyte detected in the associated Method Blank E Value above quantitation range  
 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
 S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
 DO Surrogate Diluted Out



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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:** 115438-020A

**Client Sample ID:** NMB-4-5.0  
**Collection Date:** 12/20/2010 11:50:00 AM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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### SILICA GEL CLEANUP DRO AND ORO BY GC-FID

#### EPA 3550B

#### EPA 8015B(M)

RunID:	QC Batch:	69169	PrepDate:	12/23/2010	Analyst:	CBR
DRO	63	2.0	mg/Kg	2	12/27/2010 02:46 PM	
ORO	180	2.0	mg/Kg	2	12/27/2010 02:46 PM	
Surr: p-Terphenyl	65.1	30-128	%REC	2	12/27/2010 02:46 PM	

### SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

#### EPA 3550B

#### EPA 8270C

RunID:	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Acenaphthylene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Anthracene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Benzo(a)anthracene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Benzo(a)pyrene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Benzo(b)fluoranthene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Benzo(g,h,i)perylene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Benzo(k)fluoranthene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Chrysene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Dibenz(a,h)anthracene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Fluoranthene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Fluorene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Indeno(1,2,3-cd)pyrene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Naphthalene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Phenanthrene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Pyrene	ND	120	µg/Kg	25	12/28/2010 07:49 AM	
Surr: 1,2-Dichlorobenzene-d4	0	33-121	SDO %REC	25	12/28/2010 07:49 AM	
Surr: 2-Fluorobiphenyl	0	41-128	SDO %REC	25	12/28/2010 07:49 AM	
Surr: 4-Terphenyl-d14	0	54-154	SDO %REC	25	12/28/2010 07:49 AM	
Surr: Nitrobenzene-d5	0	39-113	SDO %REC	25	12/28/2010 07:49 AM	

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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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:** 115438-021A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227C	QC Batch:	69188	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 12:55 PM		
Arsenic	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		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 12:55 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 12:55 PM		
Chromium	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		
Molybdenum	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		
Selenium	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		
Thallium	ND	1.0	mg/Kg	1	12/27/2010 12:55 PM		
Vanadium	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 GC-FID

### EPA 3550B

### EPA 8015B(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		

## 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 12:50 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 01:07 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 01:07 AM		
Anthracene	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		

**Qualifiers:** B 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



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

**CLIENT:** Ninyo & Moore

**Client Sample ID:** NMB-5-0.5

**Lab Order:** 115438

**Collection Date:** 12/20/2010 12:30:00 PM

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

**Matrix:** SOIL

**Lab ID:** 115438-021A

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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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:** 115438-025A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID:	ICP10_101227C	QC Batch:	69188	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 12:57 PM		
Arsenic	1.0	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Barium	97	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Chromium	5.3	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Cobalt	ND	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Copper	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		
Molybdenum	ND	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Nickel	6.9	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Selenium	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		
Thallium	ND	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Vanadium	8.4	1.0	mg/Kg	1	12/27/2010 12:57 PM		
Zinc	7.3	1.0	mg/Kg	1	12/27/2010 12:57 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:	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		
Surr: p-Terphenyl	63.7	30-128	%REC	1	12/27/2010 12:14 PM		

**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 12:52 PM		

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

**EPA 3550B**

**EPA 8270C**

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 01:33 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 01:33 AM		
Anthracene	ND	5.0	µg/Kg	1	12/28/2010 01:33 AM		
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/28/2010 01:33 AM		

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

<b>CLIENT:</b> Ninyo & Moore	<b>Client Sample ID:</b> NMB-5-5.0
<b>Lab Order:</b> 115438	<b>Collection Date:</b> 12/20/2010 12:30:00 PM
<b>Project:</b> ALBANY PHASE II ESA, 401678002	<b>Matrix:</b> SOIL
<b>Lab ID:</b> 115438-025A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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	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	90.7	39-113	%REC	1		12/28/2010 01:33 AM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



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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:** 115438-026A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID:	ICP10_101227C	QC Batch:	69188	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 01:02 PM		
Arsenic	3.9	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Barium	97	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Chromium	85	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Cobalt	12	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Copper	18	2.0	mg/Kg	1	12/27/2010 01:02 PM		
Lead	10	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Molybdenum	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	36	1.0	mg/Kg	1	12/27/2010 01:02 PM		
Zinc	30	1.0	mg/Kg	1	12/27/2010 01:02 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:	CBR
DRO	16	1.0	mg/Kg	1	12/27/2010 01:47 PM		
ORO	37	1.0	mg/Kg	1	12/27/2010 01:47 PM		
Surr: p-Terphenyl	101	30-128	%REC	1	12/27/2010 01:47 PM		

**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 12:54 PM		

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

**EPA 3550B**

**EPA 8270C**

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 03:48 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 03:48 AM		
Anthracene	ND	5.0	µg/Kg	1	12/28/2010 03:48 AM		
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/28/2010 03:48 AM		

**Qualifiers:** B 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



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**ANALYTICAL RESULTS**

Print Date: 28-Dec-10

<b>CLIENT:</b> Ninyo & Moore	<b>Client Sample ID:</b> NMB-6-0.5
<b>Lab Order:</b> 115438	<b>Collection Date:</b> 12/20/2010 1:00:00 PM
<b>Project:</b> ALBANY PHASE II ESA, 401678002	<b>Matrix:</b> SOIL
<b>Lab ID:</b> 115438-026A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

**EPA 3550B**

**EPA 8270C**

RunID: MS6_101227A	QC Batch: 69218			PrepDate: 12/27/2010	Analyst: <b>DMP</b>
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

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



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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:** 115438-030A

**Client Sample ID:** NMB-6-5.0  
**Collection Date:** 12/20/2010 1:00:00 PM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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### 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		8.5	1.0	mg/Kg	1		12/27/2010 02:16 PM
ORO		31	1.0	mg/Kg	1		12/27/2010 02:16 PM
Surr: p-Terphenyl		88.6	30-128	%REC	1		12/27/2010 02:16 PM

### SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

#### EPA 3550B

#### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene		41	25	µg/Kg	5		12/28/2010 06:29 AM
Acenaphthylene		ND	25	µg/Kg	5		12/28/2010 06:29 AM
Anthracene		370	25	µg/Kg	5		12/28/2010 06:29 AM
Benzo(a)anthracene		1500	120	µg/Kg	25		12/28/2010 11:40 AM
Benzo(a)pyrene		1100	120	µg/Kg	25		12/28/2010 11:40 AM
Benzo(b)fluoranthene		1400	120	µg/Kg	25		12/28/2010 11:40 AM
Benzo(g,h,i)perylene		350	25	µg/Kg	5		12/28/2010 06:29 AM
Benzo(k)fluoranthene		490	25	µg/Kg	5		12/28/2010 06:29 AM
Chrysene		1200	120	µg/Kg	25		12/28/2010 11:40 AM
Dibenz(a,h)anthracene		110	25	µg/Kg	5		12/28/2010 06:29 AM
Fluoranthene		2600	120	µg/Kg	25		12/28/2010 11:40 AM
Fluorene		49	25	µg/Kg	5		12/28/2010 06:29 AM
Indeno(1,2,3-cd)pyrene		360	25	µg/Kg	5		12/28/2010 06:29 AM
Naphthalene		ND	25	µg/Kg	5		12/28/2010 06:29 AM
Phenanthrene		830	120	µg/Kg	25		12/28/2010 11:40 AM
Pyrene		2100	120	µg/Kg	25		12/28/2010 11:40 AM
Surr: 1,2-Dichlorobenzene-d4		0	33-121	SDO %REC	25		12/28/2010 11:40 AM
Surr: 1,2-Dichlorobenzene-d4		76.6	33-121	%REC	5		12/28/2010 06:29 AM
Surr: 2-Fluorobiphenyl		0	41-128	SDO %REC	25		12/28/2010 11:40 AM
Surr: 2-Fluorobiphenyl		92.5	41-128	%REC	5		12/28/2010 06:29 AM
Surr: 4-Terphenyl-d14		0	54-154	SDO %REC	25		12/28/2010 11:40 AM
Surr: 4-Terphenyl-d14		109	54-154	%REC	5		12/28/2010 06:29 AM
Surr: Nitrobenzene-d5		72.9	39-113	%REC	5		12/28/2010 06:29 AM
Surr: Nitrobenzene-d5		0	39-113	SDO %REC	25		12/28/2010 11:40 AM

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
DO Surrogate Diluted Out



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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:** 115438-031A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### EPA 3050B

### EPA 6010B

RunID:	ICP10_101227C	QC Batch:	69188	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 01:04 PM		
Arsenic	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	ND	1.0	mg/Kg	1	12/27/2010 01:04 PM		
Cadmium	ND	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	5.0	1.0	mg/Kg	1	12/27/2010 01:04 PM		
Copper	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	ND	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	ND	1.0	mg/Kg	1	12/27/2010 01:04 PM		
Silver	ND	1.0	mg/Kg	1	12/27/2010 01:04 PM		
Thallium	ND	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 AND ORO BY GC-FID

### EPA 3550B

### EPA 8015B(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	83.9	30-128	%REC	1	12/27/2010 02:37 PM		

## 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 12:56 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	25	µg/Kg	5	12/28/2010 06:56 AM		
Acenaphthylene	ND	25	µg/Kg	5	12/28/2010 06:56 AM		
Anthracene	ND	25	µg/Kg	5	12/28/2010 06:56 AM		
Benzo(a)anthracene	ND	25	µg/Kg	5	12/28/2010 06:56 AM		

**Qualifiers:** B 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



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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:** 115438-031A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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	80.4	33-121	%REC	5	12/28/2010 06:56 AM
Surr: 2-Fluorobiphenyl	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:** B 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



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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:** 115438-035A

**Client Sample ID:** NMB-7-5.0  
**Collection Date:** 12/20/2010 1:30:00 PM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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## SILICA GEL CLEANUP DRO AND ORO BY GC-FID

### EPA 3550B

### EPA 8015B(M)

RunID:	QC Batch:	69169	PrepDate:	12/23/2010	Analyst:	CBR
DRO	12	1.0	mg/Kg	1	12/27/2010 12:23 PM	
ORO	23	1.0	mg/Kg	1	12/27/2010 12:23 PM	
Surr: p-Terphenyl	96.8	30-128	%REC	1	12/27/2010 12:23 PM	

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

RunID:	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Anthracene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Benzo(a)pyrene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Benzo(b)fluoranthene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Benzo(g,h,i)perylene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Benzo(k)fluoranthene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Chrysene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Dibenz(a,h)anthracene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Fluoranthene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Fluorene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Naphthalene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Phenanthrene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Pyrene	ND	5.0	µg/Kg	1	12/28/2010 02:00 AM	
Surr: 1,2-Dichlorobenzene-d4	87.8	33-121	%REC	1	12/28/2010 02:00 AM	
Surr: 2-Fluorobiphenyl	99.2	41-128	%REC	1	12/28/2010 02:00 AM	
Surr: 4-Terphenyl-d14	115	54-154	%REC	1	12/28/2010 02:00 AM	
Surr: Nitrobenzene-d5	84.4	39-113	%REC	1	12/28/2010 02:00 AM	

**Qualifiers:** B 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



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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:** 115438-036A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

**EPA 3050B**

**EPA 6010B**

RunID:	ICP10_101227C	QC Batch:	69188	PrepDate:	12/26/2010	Analyst:	SRB
Antimony	ND	2.0	mg/Kg	1	12/27/2010 01:05 PM		
Arsenic	5.6	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Barium	80	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Beryllium	ND	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Cadmium	ND	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Chromium	12	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Cobalt	5.0	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Copper	7.2	2.0	mg/Kg	1	12/27/2010 01:05 PM		
Lead	9.1	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Molybdenum	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	15	1.0	mg/Kg	1	12/27/2010 01:05 PM		
Zinc	21	1.0	mg/Kg	1	12/27/2010 01:05 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:	CBR
DRO	ND	1.0	mg/Kg	1	12/27/2010 12:32 PM		
ORO	ND	1.0	mg/Kg	1	12/27/2010 12:32 PM		
Surr: p-Terphenyl	56.2	30-128	%REC	1	12/27/2010 12:32 PM		

**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**

RunID:	MS6_101227A	QC Batch:	69218	PrepDate:	12/27/2010	Analyst:	DMP
Acenaphthene	ND	5.0	µg/Kg	1	12/28/2010 04:15 AM		
Acenaphthylene	ND	5.0	µg/Kg	1	12/28/2010 04:15 AM		
Anthracene	ND	5.0	µg/Kg	1	12/28/2010 04:15 AM		
Benzo(a)anthracene	ND	5.0	µg/Kg	1	12/28/2010 04:15 AM		

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
 S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
 DO Surrogate Diluted Out



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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:** 115438-036A

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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	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	88.3	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	87.3	39-113	%REC	1	12/28/2010 04:15 AM

**Qualifiers:** B 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



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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:** 115438-040A

**Client Sample ID:** NMB-8-5.0  
**Collection Date:** 12/20/2010 2:00:00 PM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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### 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: <b>CBR</b>
DRO	3.3	1.0		mg/Kg	1	12/27/2010 01:09 PM
ORO	6.7	1.0		mg/Kg	1	12/27/2010 01:09 PM
Surr: p-Terphenyl	80.6	30-128		%REC	1	12/27/2010 01:09 PM

### SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

#### EPA 3550B

#### EPA 8270C

RunID: MS6_101227A	QC Batch: 69218				PrepDate: 12/27/2010	Analyst: <b>DMP</b>
Acenaphthene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Acenaphthylene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Anthracene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Benzo(a)anthracene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Benzo(a)pyrene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Benzo(b)fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Benzo(g,h,i)perylene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Benzo(k)fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Chrysene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Dibenz(a,h)anthracene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Fluorene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Naphthalene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Phenanthrene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Pyrene	ND	5.0		µg/Kg	1	12/28/2010 04:41 AM
Surr: 1,2-Dichlorobenzene-d4	94.6	33-121		%REC	1	12/28/2010 04:41 AM
Surr: 2-Fluorobiphenyl	103	41-128		%REC	1	12/28/2010 04:41 AM
Surr: 4-Terphenyl-d14	116	54-154		%REC	1	12/28/2010 04:41 AM
Surr: Nitrobenzene-d5	91.5	39-113		%REC	1	12/28/2010 04:41 AM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



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**ANALYTICAL RESULTS**  
 Print Date: 28-Dec-10

<b>CLIENT:</b> Ninyo & Moore	<b>Client Sample ID:</b> NMB-9-0.5
<b>Lab Order:</b> 115438	<b>Collection Date:</b> 12/20/2010 2:40:00 PM
<b>Project:</b> ALBANY PHASE II ESA, 401678002	<b>Matrix:</b> SOIL
<b>Lab ID:</b> 115438-041A	

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

EPA 3050B		EPA 6010B				
RunID: ICP10_101227C	QC Batch: 69188				PrepDate: 12/26/2010	Analyst: <b>SRB</b>
Antimony	ND	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	80	1.0		mg/Kg	1	12/27/2010 01:07 PM
Beryllium	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Cadmium	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Chromium	11	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	11	2.0		mg/Kg	1	12/27/2010 01:07 PM
Lead	32	1.0		mg/Kg	1	12/27/2010 01:07 PM
Molybdenum	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Nickel	16	1.0		mg/Kg	1	12/27/2010 01:07 PM
Selenium	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Silver	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Thallium	ND	1.0		mg/Kg	1	12/27/2010 01:07 PM
Vanadium	14	1.0		mg/Kg	1	12/27/2010 01:07 PM
Zinc	37	1.0		mg/Kg	1	12/27/2010 01:07 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: <b>CBR</b>
DRO	2.9	1.0		mg/Kg	1	12/27/2010 01:28 PM
ORO	11	1.0		mg/Kg	1	12/27/2010 01:28 PM
Surr: p-Terphenyl	62.9	30-128		%REC	1	12/27/2010 01:28 PM

**MERCURY BY COLD VAPOR TECHNIQUE**

EPA 7471A	
RunID: AA5_101227B	QC Batch: 69186
Mercury	ND 0.10 mg/Kg
	PrepDate: 12/26/2010 Analyst: <b>VV</b>
	12/27/2010 01:00 PM

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

EPA 3550B		EPA 8270C				
RunID: MS6_101227A	QC Batch: 69218				PrepDate: 12/27/2010	Analyst: <b>DMP</b>
Acenaphthene	ND	25		µg/Kg	5	12/28/2010 07:23 AM
Acenaphthylene	ND	25		µg/Kg	5	12/28/2010 07:23 AM
Anthracene	ND	25		µg/Kg	5	12/28/2010 07:23 AM
Benzo(a)anthracene	ND	25		µg/Kg	5	12/28/2010 07:23 AM

**Qualifiers:** B Analyte detected in the associated Method Blank E Value above quantitation range  
 H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit  
 S Spike/Surrogate outside of limits due to matrix interference Results are wet unless otherwise specified  
 DO Surrogate Diluted Out



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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	Result	PQL	Qual	Units	DF	Date Analyzed
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## 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	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	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:** B 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



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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:** 115438-045A

**Client Sample ID:** NMB-9-5.0  
**Collection Date:** 12/20/2010 2:40:00 PM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**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: <b>CBR</b>
DRO	3.1	1.0		mg/Kg	1	12/27/2010 01:00 PM
ORO	5.4	1.0		mg/Kg	1	12/27/2010 01:00 PM
Surr: p-Terphenyl	70.0	30-128		%REC	1	12/27/2010 01:00 PM

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM**

**EPA 3550B**

**EPA 8270C**

RunID: MS6_101227A	QC Batch: 69218				PrepDate: 12/27/2010	Analyst: <b>DMP</b>
Acenaphthene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Acenaphthylene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Anthracene	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
Chrysene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Dibenz(a,h)anthracene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Fluorene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Naphthalene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Phenanthrene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Pyrene	ND	5.0		µg/Kg	1	12/28/2010 05:08 AM
Surr: 1,2-Dichlorobenzene-d4	85.4	33-121		%REC	1	12/28/2010 05:08 AM
Surr: 2-Fluorobiphenyl	93.7	41-128		%REC	1	12/28/2010 05:08 AM
Surr: 4-Terphenyl-d14	108	54-154		%REC	1	12/28/2010 05:08 AM
Surr: Nitrobenzene-d5	80.9	39-113		%REC	1	12/28/2010 05:08 AM

**Qualifiers:** B 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



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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:** 115438-046A

**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
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## ICP METALS

### EPA 3050B

### EPA 6010B

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 AND ORO BY GC-FID

### EPA 3550B

### EPA 8015B(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 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 01:02 PM		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

### EPA 3550B

### EPA 8270C

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		

**Qualifiers:** B 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



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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:** 115438-046A

**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
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**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	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	85.6	33-121	%REC	1	12/28/2010 06:02 AM		
Surr: 2-Fluorobiphenyl	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	83.4	39-113	%REC	1	12/28/2010 06:02 AM		

**Qualifiers:** B 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



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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:** 115438-050A

**Client Sample ID:** NMB-10-5.0  
**Collection Date:** 12/20/2010 3:15:00 PM  
**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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### 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	1.1	1.0		mg/Kg	1	12/27/2010 12:51 PM
ORO	3.4	1.0		mg/Kg	1	12/27/2010 12:51 PM
Surr: p-Terphenyl	64.6	30-128		%REC	1	12/27/2010 12:51 PM

### SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS-SIM

#### EPA 3550B

#### EPA 8270C

RunID: MS6_101227A	QC Batch: 69218				PrepDate: 12/27/2010	Analyst: DMP
Acenaphthene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Acenaphthylene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Anthracene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Benzo(a)anthracene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Benzo(a)pyrene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Benzo(b)fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Benzo(g,h,i)perylene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Benzo(k)fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Chrysene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Dibenz(a,h)anthracene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Fluoranthene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Fluorene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Naphthalene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Phenanthrene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Pyrene	ND	5.0		µg/Kg	1	12/28/2010 05:35 AM
Surr: 1,2-Dichlorobenzene-d4	91.7	33-121		%REC	1	12/28/2010 05:35 AM
Surr: 2-Fluorobiphenyl	101	41-128		%REC	1	12/28/2010 05:35 AM
Surr: 4-Terphenyl-d14	116	54-154		%REC	1	12/28/2010 05:35 AM
Surr: Nitrobenzene-d5	89.5	39-113		%REC	1	12/28/2010 05:35 AM

<b>Qualifiers:</b>	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	ND Not Detected at the Reporting Limit
	S Spike/Surrogate outside of limits due to matrix interference	Results are wet unless otherwise specified
	DO Surrogate Diluted Out	



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**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

**ANALYTICAL QC SUMMARY REPORT**

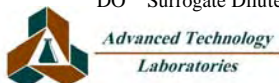
**TestCode: 6010\_S**

Sample ID: <b>MB-69187</b>	SampType: <b>MBLK</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128153</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69187</b>	TestNo: <b>EPA 6010B EPA 3050B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074509</b>						
Analyte	Result	PQL	SPK 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	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: <b>LCS-69187</b>	SampType: <b>LCS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128153</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69187</b>	TestNo: <b>EPA 6010B EPA 3050B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074510</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD 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
- 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



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

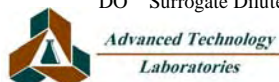
**TestCode: 6010\_S**

Sample ID: <b>LCS-69187</b>	SampType: <b>LCS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128153</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69187</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074510</b>						
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: <b>115438-011A-MS</b>	SampType: <b>MS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128153</b>						
Client ID: <b>NMB-3-0.5</b>	Batch ID: <b>69187</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074581</b>						
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 | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

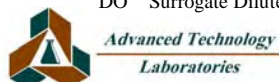
## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010\_S**

Sample ID: <b>115438-011A-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128153</b>						
Client ID: <b>NMB-3-0.5</b>	Batch ID: <b>69187</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074582</b>						
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:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

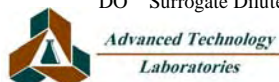
**TestCode: 6010\_S**

Sample ID: <b>MB-69188</b>	SampType: <b>MBLK</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128158</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69188</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074583</b>						
Analyte	Result	PQL	SPK 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: <b>LCS-69188</b>	SampType: <b>LCS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128158</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69188</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074584</b>						
Analyte	Result	PQL	SPK 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:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

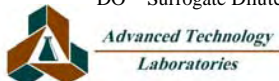
**TestCode: 6010\_S**

Sample ID: <b>LCS-69188</b>	SampType: <b>LCS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128158</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69188</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074584</b>						
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: <b>115446-006A-MS</b>	SampType: <b>MS</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128158</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>69188</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074603</b>						
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:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |





**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

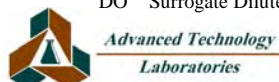
## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010\_S**

Sample ID: <b>115446-006A-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>6010_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128158</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>69188</b>	TestNo: <b>EPA 6010B</b>	<b>EPA 3050B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074604</b>						
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:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471\_S**

Sample ID: <b>MB-69185</b>	SampType: <b>MBLK</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128152</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69185</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074483</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: <b>LCS-69185</b>	SampType: <b>LCS</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128152</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69185</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074484</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.766 0.10 0.8300 0 92.3 80 120

Sample ID: <b>115438-011A-MS</b>	SampType: <b>MS</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128152</b>						
Client ID: <b>NMB-3-0.5</b>	Batch ID: <b>69185</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074485</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

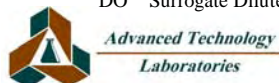
Mercury 0.953 0.10 0.8300 0.1495 96.8 70 130

Sample ID: <b>115438-011A-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128152</b>						
Client ID: <b>NMB-3-0.5</b>	Batch ID: <b>69185</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074486</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.951 0.10 0.8300 0.1495 96.5 70 130 0.9530 0.238 20

**Qualifiers:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471\_S**

Sample ID: <b>MB-69186</b>	SampType: <b>MBLK</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128154</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69186</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074521</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.10

Sample ID: <b>LCS-69186</b>	SampType: <b>LCS</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128154</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69186</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074522</b>						
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: <b>115446-006A-MS</b>	SampType: <b>MS</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128154</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>69186</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074523</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

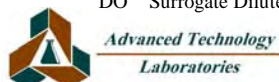
Mercury 0.870 0.10 0.8300 0.04609 99.3 70 130

Sample ID: <b>115446-006A-MSD</b>	SampType: <b>MSD</b>	TestCode: <b>7471_S</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/26/2010</b>	RunNo: <b>128154</b>						
Client ID: <b>ZZZZZZ</b>	Batch ID: <b>69186</b>	TestNo: <b>EPA 7471A</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074524</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.874 0.10 0.8300 0.04609 99.7 70 130 0.8701 0.421 20

**Qualifiers:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8015\_S\_DM LLSGT**

Sample ID: <b>MB-69169</b>	SampType: <b>MBLK</b>	TestCode: <b>8015_S_DM L</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/23/2010</b>	RunNo: <b>128172</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69169</b>	TestNo: <b>EPA 8015B(M EPA 3550B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074797</b>						
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: <b>LCS-69169</b>	SampType: <b>LCS</b>	TestCode: <b>8015_S_DM L</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/23/2010</b>	RunNo: <b>128172</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69169</b>	TestNo: <b>EPA 8015B(M EPA 3550B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074798</b>						
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: <b>115438-010AMS</b>	SampType: <b>MS</b>	TestCode: <b>8015_S_DM L</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/23/2010</b>	RunNo: <b>128172</b>						
Client ID: <b>NMB-2-5.0</b>	Batch ID: <b>69169</b>	TestNo: <b>EPA 8015B(M EPA 3550B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074799</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

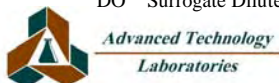
DRO	19.608	1.0	33.00	1.324	55.4	25	129				
Surr: p-Terphenyl	2.306		2.670		86.4	30	128				

Sample ID: <b>115438-010AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8015_S_DM L</b>	Units: <b>mg/Kg</b>	Prep Date: <b>12/23/2010</b>	RunNo: <b>128172</b>						
Client ID: <b>NMB-2-5.0</b>	Batch ID: <b>69169</b>	TestNo: <b>EPA 8015B(M EPA 3550B</b>		Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2074800</b>						
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 | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

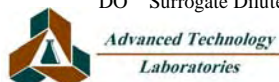
**TestCode: 8270\_S\_SIM**

Sample ID: <b>MB-69218</b>	SampType: <b>MBLK</b>	TestCode: <b>8270_S_SIM</b>	Units: <b>µg/Kg</b>	Prep Date: <b>12/27/2010</b>	RunNo: <b>128213</b>						
Client ID: <b>PBS</b>	Batch ID: <b>69218</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2075505</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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: <b>LCS-69218</b>	SampType: <b>LCS</b>	TestCode: <b>8270_S_SIM</b>	Units: <b>µg/Kg</b>	Prep Date: <b>12/27/2010</b>	RunNo: <b>128213</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69218</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2075506</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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:**

- |   |  |  |
|---|--|--|
| B Analyte detected in the associated Method Blank | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



**CLIENT:** Ninyo & Moore  
**Work Order:** 115438  
**Project:** ALBANY PHASE II ESA, 401678002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270\_S\_SIM**

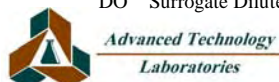
Sample ID: <b>LCS-69218</b>	SampType: <b>LCS</b>	TestCode: <b>8270_S_SIM</b>	Units: <b>µg/Kg</b>	Prep Date: <b>12/27/2010</b>	RunNo: <b>128213</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>69218</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2075506</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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: <b>115438-010AMS</b>	SampType: <b>MS</b>	TestCode: <b>8270_S_SIM</b>	Units: <b>µg/Kg</b>	Prep Date: <b>12/27/2010</b>	RunNo: <b>128213</b>						
Client ID: <b>NMB-2-5.0</b>	Batch ID: <b>69218</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2075507</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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				

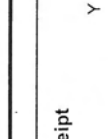
Sample ID: <b>115438-010AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>8270_S_SIM</b>	Units: <b>µg/Kg</b>	Prep Date: <b>12/27/2010</b>	RunNo: <b>128213</b>						
Client ID: <b>NMB-2-5.0</b>	Batch ID: <b>69218</b>	TestNo: <b>EPA 8270C</b>	<b>EPA 3550B</b>	Analysis Date: <b>12/27/2010</b>	SeqNo: <b>2075508</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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 | E Value above quantitation range       | H Holding times for preparation or analysis exceeded           |
| ND Not Detected at the Reporting Limit            | R RPD outside accepted recovery limits | S Spike/Surrogate outside of limits due to matrix interference |
| DO Surrogate Diluted Out                          | Calculations are based on raw values   |  |



# CHAIN OF CUSTODY RECORD



**ADVANCED TECHNOLOGY LABORATORIES**  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

**FOR LABORATORY USE ONLY**

Method of Transport:  Client,  ATL,  FedEx,  GSO,  Other: \_\_\_\_\_

Sample Condition Upon Receipt: 1. CHILLED  Y  N, 2. HEADSPACE (VOA)  Y  N, 3. CONTAINER INTACT  Y  N, 4. SEALED  Y  N, 5. # OF SPLS MATCH COC  Y  N, 6. PRESERVED  Y  N

Quote #: \_\_\_\_\_ Date: 12/20/10  
 Logged By: \_\_\_\_\_ Date: 12/20/10  
 NOTE: Please include your Quote No. to ensure proper pricing of your project.

Client: NINYO AND MOORE  
 Attention: MONAMI CHAKRAVARTI (mchakravarti@ninyoandmoore.com)  
 Project Name: ALBANY PHASE II ESA  
 Project #: 401678002  
 City: OAKLAND State: CA Zip: 94612  
 Address: 1956 WEBSTER AVENUE, SUITE 400  
 State: CA Zip Code: 94612  
 Tel: \_\_\_\_\_ Fax: 510-633-5646  
 Sampler: MOC

Relinquished by: (Signature and Printed Name)  
 MONAMI CHAKRAVARTI 12/20/10 12:43  
 Received by: (Signature and Printed Name)  
 Jeff Siegrist 12/21/10 12:43  
 Relinquished by: (Signature and Printed Name)  
 Monami Chakravarti 12/20/2010  
 Received by: (Signature and Printed Name)  
 Monami Chakravarti 12/22/10 9:11

Relinquished by: (Signature and Printed Name)  
 \_\_\_\_\_  
 Received by: (Signature and Printed Name)  
 \_\_\_\_\_

I hereby authorize ATL to perform the work indicated below:  
 Project Mgr./Submitter: MONAMI CHAKRAVARTI 12/20/2010  
 Print Name: Monami Chakravarti 12/20/2010  
 Signature: \_\_\_\_\_

Send Report To: Attn: MONAMI CHAKRAVARTI  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Bill To: Attn: NINYO AND MOORE  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Special Instructions/Comments: Please send results by Monday 12/27/10

Circle or Add Analysis(es) Requested:  
 8082 (Pesticides), 8260 (Volatiles), 8270C (BNA), 8010B (Total Metals), 8015B (GRO) / 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000), PAH-8270-SIM, SILICA GEL CLEAN UP FOR TPH Analysis

Storage Fees (applies when storage is requested):  
 ■ Sample: \$2.00 / sample / mo (after 45 days)  
 ■ Records: \$1 /ATL workorder / mo (after 1 year)

LAB USE ONLY:  
 Batch #: \_\_\_\_\_  
 Lab No. \_\_\_\_\_


Sample ID / Location	Sample Description	Date	Time
NMB-1-0.5		12/20/2010	9:10
NMB-1-1.0			9:15
NMB-1-1.5			9:20
NMB-1-2.5			9:25
NMB-1-5.0			10:40
NMB-2-0.5			10:50
NMB-2-1.0			11:10
NMB-2-1.5			11:10
NMB-2-2.5			11:10
NMB-2-5.0			11:10

TAT:  A = Overnight ≤ 24 hrs,  B = Emergency Next Workday,  C = Critical 2 Workdays,  D = Urgent 3 Workdays,  E = Routine 7 Workdays

Container Types: T=Tube, V=VOA, L=Liter, P=Pin, J=Jar, B=Tedlar, G=Glass, P=Plastic, M=Metal

Preservatives: H=HCl, N=HNO<sub>3</sub>, S=H<sub>2</sub>SO<sub>4</sub>, C=4°C, Z=Zn(Ac)<sub>2</sub>, O=NaOH, T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

# CHAIN OF CUSTODY RECORD



**ADVANCED LABORATORIES**  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

**FOR LABORATORY USE ONLY**

P.O. #: \_\_\_\_\_ Quote #: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

**NOTE: Please include your Quote No. to ensure proper pricing of your project.**

Client: NINYO AND MOORE  
 Attention: MONAMI CHAKRAVARTI (mchakravarti@ninyoandmoore.com)  
 Project #: 401678002

Address: 1956 WEBSTER AVENUE, SUITE 400  
 City: OAKLAND State: CA Zip Code: 94612  
 Tel: \_\_\_\_\_ Fax: 510-633-5646  
 (Signature)

Sampler: MOC

Method of Transport:  Client  ATL  FedEx  GSO  Other: \_\_\_\_\_  
 OnTrac

Sample Condition Upon Receipt:  
 1. CHILLED Y  N  4. SEALED Y  N   
 2. HEADSPACE (VOA) Y  N  5. # OF SPLS MATCH COC Y  N   
 3. CONTAINER INTACT Y  N  6. PRESERVED Y  N

Relinquished by: (Signature and Printed Name) *MONAMI CHAKRAVARTI* Date: *12/20/10* Time: *12:43*  
 Relinquished by: (Signature and Printed Name) *Monami Chakravarti* Date: *12/20/10* Time: *12:43*  
 Relinquished by: (Signature and Printed Name) *Monami Chakravarti* Date: *12/20/10* Time: *12:43*  
 Relinquished by: (Signature and Printed Name) *Monami Chakravarti* Date: *12/20/10* Time: *12:43*

Received by: (Signature and Printed Name) *Jeff Siegfried* Date: *12/21/10* Time: *12:43*  
 Received by: (Signature and Printed Name) *Jeff Siegfried* Date: *12/21/10* Time: *12:43*  
 Received by: (Signature and Printed Name) *Jeff Siegfried* Date: *12/21/10* Time: *12:43*

Special Instructions/Comments: Please send results by Monday 12/27/10

I hereby authorize ATL to perform the work indicated below.

Project Mgr./Submitter: MONAMI CHAKRAVARTI Date: 12/20/2010  
 Print Name: *Monami Chakravarti* Signature: *Monami Chakravarti* Date: *12/20/10*

Send Report To: Attn: MONAMI CHAKRAVARTI  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Bill To: Attn: NINYO AND MOORE  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

**LAB USE ONLY:**

LAB Batch #	Lab No.	Sample ID / Location	Sample Description	Date	Time
11	NMB-3-0.5			11:25	
12	NMB-3-1.0			11:25	
13	NMB-3-1.5			11:25	
14	NMB-3-2.5			11:25	
15	NMB-3-5.0			11:25	
16	NMB-4-0.5			11:50	
17	NMB-4-1.0			11:50	
18	NMB-4-1.5			11:50	
19	NMB-4-2.5			11:50	
20	NMB-4-5.0			11:50	

**Sample/Records - Archival & Disposal**  
 Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**  
 Sample \$2.00 / sample /mo (after 45 days)  
 Records \$1 /ATL workorder /mo (after 1 year)

**SPECIFY APPROPRIATE MATRIX**

Matrix	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8010B (Total Metals)	8015B (GFO / 8021 (BTEX))	8015B (DRO/MRO)	PAH-270-SIM	SILICA GEL CLEAN UP FOR TPH ANALYSIS
SEDIMENT								
SOIL								
DRINKING WATER								
WASTEWATER								
STORMWATER								
AQUEOUS								

**QA/QC**

RTNE	CT	Legal	SWRCB Logcode	OTHER	REMARKS


**RESERVATION**

Container(s)	TAT #	Type
	1	T

**Container Types:** T=Tube V=VOA L=Liter P=Pin J=Jar B=Tedlar G=Glass P=Plastic M=Metal  
 Preservatives: H=HCl N=HNO3 S=H2SO4 C=4°C  
 Z=Zn(AC)2 O=NaOH T=Na2S2O3



# CHAIN OF CUSTODY RECORD



**ADVANCED TECHNOLOGY LABORATORIES**  
3275 Walnut Ave., Signal Hill, CA 90755  
Tel: (562) 989-4045 • Fax: (562) 989-4040

**FOR LABORATORY USE ONLY**

P.O. #: \_\_\_\_\_ Quote #: \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_

**NOTE: Please include your Quote No. to ensure proper pricing of your project.**

Client: NINYO AND MOORE  
 Attention: MONAMI CHAKRAVARTI (mchakravarti@ninyoandmoore.com)  
 Project Name: ALBANY PHASE II ESA

Address: 1956 WEBSTER AVENUE, SUITE 400  
 City: OAKLAND State: CA Zip Code: 94612  
 Tel: \_\_\_\_\_ Fax: 510-633-5646  
 (Signature)

Sampler: MOC

Relinquished by: (Signature and Printed Name) Monami Chakravarti Date: 12/20/10 Time: 12:43  
 Relinquished by: (Signature and Printed Name) Monami Chakravarti Date: 12/20/10 Time: 12:43  
 Relinquished by: (Signature and Printed Name) Monami Chakravarti Date: 12/20/10 Time: 12:43  
 Relinquished by: (Signature and Printed Name) Monami Chakravarti Date: 12/20/10 Time: 12:43

I hereby authorize ATL to perform the work indicated below:  
 Project Mgr./Submitter: \_\_\_\_\_  
 MONAMI CHAKRAVARTI Date: 12/20/2010  
 Print Name: \_\_\_\_\_  
Monami Chakravarti Signature Date: 12/20/10

Send Report To:  
 Attn: MONAMI CHAKRAVARTI  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Bill To:  
 Attn: NINYO AND MOORE  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Circle or Add Analysis(es) Requested:  
 8081 (Pesticides)  
 8082 (PCB)  
 8260B (Volatiles)  
 8270C (BNA)  
 8010B (Total Metal)  
 8015B (GRO) 8021 (BTEX)  
 TITLE 22 (DROMIRO)  
 PAH-8270-SIM  
 SILICA GEL CLEAN UP FOR TPH Analysis

Special Instructions/Comments:  
 Please send results by Monday 12/27/10

Method of Transport  
 Client  ATL  
 FedEx  OnTrac  
 GSO  Other: \_\_\_\_\_

Sample Condition Upon Receipt  
 1. CHILLED Y  N  4. SEALED Y  N   
 2. HEADSPACE (VOA) Y  N  5. # OF SPLS MATCH COC Y  N   
 3. CONTAINER INTACT Y  N  6. PRESERVED Y  N

**LAB USE ONLY:**

LAB Batch #	Lab No.	Sample ID / Location	Date	Time	Sample Description
105738-21	NMB-5-0.5		12/20/2010	12:30	
- 22	NMB-5-1.0			12:30	
- 23	NMB-5-1.5			12:30	
- 24	NMB-5-2.5			12:30	
- 25	NMB-5-5.0			12:30	
- 26	NMB-6-0.5			1:00	
- 27	NMB-6-1.0			1:00	
- 28	NMB-6-1.5			1:00	
- 29	NMB-6-2.5			1:00	
- 30	NMB-6-5.0			1:00	

**TAT:**  A = Overnight ≤ 24 hrs  B = Emergency Next Workday  C = Critical 2 Workdays  D = Urgent 3 Workdays  E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C Z=Zn(AC)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

# CHAIN OF CUSTODY RECORD

**ADVANCED TECHNOLOGY LABORATORIES**  
 3275 Walnut Ave., Signal Hill, CA 90755  
 Tel: (562) 989-4045 • Fax: (562) 989-4040

P.O. # \_\_\_\_\_ Quote # \_\_\_\_\_  
 Logged By: \_\_\_\_\_ Date: \_\_\_\_\_  
**NOTE: Please include your Quote No. to ensure proper pricing of your project.**

**FOR LABORATORY USE ONLY**

Method of Transport  
 Client  ATL  
 FedEx  OnTrac  
 GSO  Other: \_\_\_\_\_

Sample Condition Upon Receipt  
 1. CHILLED Y  N  4. SEALED Y  N   
 2. HEADSPACE (VOA) Y  N  5. # OF SPLS MATCH COC Y  N   
 3. CONTAINER INTACT Y  N  6. PRESERVED Y  N

---

Client: NINYO AND MOORE  
 Attention: MONAMI CHAKRAVARTI (mchakravarti@ninyoandmoore.com)  
 Project Name: ALBANY PHASE II ESA

Address: 1956 WEBSTER AVENUE, SUITE 400  
 City: OAKLAND State: CA Zip Code: 94612  
 Sampler: MOC

Tel: \_\_\_\_\_ Fax: 510-633-5646  
 (Signature)

---

Relinquished by: (Signature and Printed Name)  
*Monami Chakravarti* Date: 12/24/10 Time: 12:43  
 Relinquished by: (Signature and Printed Name)  
*Monami Chakravarti* Date: 12/24/10 Time: 12:43

Received by: (Signature and Printed Name)  
*Jeff Siegfried* Date: 12/24/10 Time: 12:43  
 Received by: (Signature and Printed Name)  
*Monami Chakravarti* Date: 12/24/10 Time: 9:11

Relinquished by: (Signature and Printed Name)  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: (Signature and Printed Name)  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

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I hereby authorize ATL to perform the work indicated below.  
 Project Mgr / Submitter: MONAMI CHAKRAVARTI Date: 12/20/2010  
 Print Name: *Monami Chakravarti* Signature: *Monami Chakravarti* Date: 12/20/10

Send Report To:  
 Attn: MONAMI CHAKRAVARTI  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

Bill To:  
 Attn: NINYO AND MOORE  
 Co: \_\_\_\_\_  
 Address: 1956 WEBSTER AVE, SUITE 400  
 City: OAKLAND State: CA Zip: 94612

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Special Instructions/Comments:  
 Please send results by Monday 12/27/10

Circle or Add Analysis(es) Requested

8081A (Pesticides)	
8082 (PCB)	
8270C (Vials)	
6010B (Total Metal)	
8015B (GRO / 8021 (BTEX))	
TITLE 22 (PRO/MRO)	
PAR-8270-SIM	
SILICA GEL CLEAN UP FOR TPH Analysis	
8015B (GRO / 8010 / 7000)	
SEDIMENT	
SOLID	
DRINKING WATER	
WASTEWATER	
STORMWATER	
AQUEOUS	

QA/QC  
 RTNE  CT  Legal   
 SWRCB Logcode  OTHER

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LAB USE ONLY:  
 Batch # \_\_\_\_\_ Lab No. \_\_\_\_\_

Sample ID / Location

NMB-7-0.5	1:30
NMB-7-1.0	1:30
NMB-7-1.5	1:30
NMB-7-2.5	1:30
NMB-7-5.0	1:30
NMB-8-0.5	2:00
NMB-8-1.0	2:00
NMB-8-1.5	2:00
NMB-8-2.5	2:00
NMB-8-5.0	2:00

Date

12/20/2010

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TAT:  A = Overnight ≤ 24 hrs  B = Emergency Next Workday  C = Critical 2 Workdays  D = Urgent 3 Workdays  E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pin J=Jar B=Bedlar G=Glass P=Plastic M=Metal

Preservatives:  
 H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C  
 Z=Zn(AC)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

# CHAIN OF CUSTODY RECORD

		P.O. #: _____ Quote #: _____ Logged By: _____ Date: _____		<b>FOR LABORATORY USE ONLY</b> Method of Transport <input type="checkbox"/> Client <input type="checkbox"/> ATL <input type="checkbox"/> FedEx <input type="checkbox"/> OnTrac <input type="checkbox"/> GSO <input type="checkbox"/> Other: _____		Sample Condition Upon Receipt 1. CHILLED Y <input type="checkbox"/> N <input type="checkbox"/> 4. SEALED Y <input type="checkbox"/> N <input type="checkbox"/> 2. HEADSPACE (VOA) Y <input type="checkbox"/> N <input type="checkbox"/> 5. # OF SPLS MATCH COC Y <input type="checkbox"/> N <input type="checkbox"/> 3. CONTAINER INTACT Y <input type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED Y <input type="checkbox"/> N <input type="checkbox"/>	
		NOTE: Please include your Quote No. to ensure proper pricing of your project.		Address: 1956 WEBSTER AVENUE, SUITE 400 City: OAKLAND State: CA Zip Code: 94612 Tel: _____ Fax: 510-633-5646 (Signature)			
		Client: NINYO AND MOORE Attention: MONAMI CHAKRAVARTI (mchakravarti@ninyoandmoore.com) Project #: 401678002		Relinquished by: (Signature and Printed Name) <u>MONAMI CHAKRAVARTI</u> <i>Monami Chakravarti</i> Date: <u>12/20/10</u> Relinquished by: (Signature and Printed Name) <u>Jeff Siegfried</u> <i>Jeff Siegfried</i> Date: <u>12/24/10</u> Relinquished by: (Signature and Printed Name) <u>[Signature]</u> Date: <u>12/20/10</u> Time: <u>9:11</u>		Relinquished by: (Signature and Printed Name) _____ Date: _____	
I hereby authorize ATL to perform the work indicated below: Project Mgr./Submitter: MONAMI CHAKRAVARTI Date: 12/20/2010 Print Name: <u>Monami Chakravarti</u> Signature: <u>[Signature]</u>		Bill To: NINYO AND MOORE Attn: MONAMI CHAKRAVARTI Co: _____ Addr: 1956 WEBSTER AVE, SUITE 400 City: OAKLAND State: CA Zip: 94612		Special Instructions/Comments: Please send results by Monday 12/27/10			
Sample/Records - Archival & Disposal Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report. Storage Fees (applies when storage is requested): ■ Sample: \$2.00 / sample / mo (after 45 days) ■ Records: \$1 / ATL workorder / mo (after 1 year)		Send Report To: Attn: MONAMI CHAKRAVARTI Co: _____ Addr: 1956 WEBSTER AVE, SUITE 400 City: OAKLAND State: CA Zip: 94612		Q A / Q C RTNE _____ CT _____ Legal _____ SWRCB Logcode _____ OTHER _____			
LAB USE ONLY: Batch # _____ Lab No. _____ Sample ID / Location _____ Date _____ Time _____		Circle or Add Analysis(es) Requested: 8081A (Pesticides) _____ 8082 (PCB) _____ 8260B (GNAs) _____ 8270C (Volatiles) _____ 8010B (Total Metals) _____ 8015B (GFO) / 8021 (BTEX) _____ TITLE 22 / CAM 17 (6010 / 7000) _____ PAH-270-SIM _____ SILICA GEL CLEAN UP FOR TPH Analysis _____		SPECIFY APPROPRIATE MATRIX: SEDIMENT _____ SOLID _____ SOIL _____ DRINKING WATER _____ WASTEWATER _____ STORMWATER _____ AQUEOUS _____			
TAT: _____ Emergenc y Next Workday _____ Overnight ≤ 24 hrs _____ B = _____ A = _____		Critical 2 Workdays _____ D = _____ Urgent 3 Workdays _____ E = _____ Routine 7 Workdays _____		Preservatives: H=HCl N=HNO3 S=H2SO4 C=4°C Z=Zn(AC)2 O=NaOH T=Na2S2O3			
TAT starts 8AM the following day if samples received after 5 PM		Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal		REMARKS: HOLD HOLD HOLD HOLD HOLD HOLD			

## Rachelle Arada

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

confirmation wo# 115438.

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**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 <[carmen@atlglobal.com](mailto:carmen@atlglobal.com)>  
**To:** Monami Chakravarti  
**Cc:** Rachelle Arada <[rachelle@atlglobal.com](mailto:rachelle@atlglobal.com)>  
**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  
[www.atlglobal.com](http://www.atlglobal.com) <<http://www.atlglobal.com>>  
Tel: (562) 989-4045 ext. 245  
Fax: (562) 989-4040

Advanced Technology Laboratories is a full-service environmental lab providing organic and inorganic analyses of soil, water, wastewater, storm water and hazardous waste samples. ATL is accredited by the State of California, NELAP and State of Nevada and holds various SBE, DBE and MBE certificates and a USDA soil permit. ATL takes pride in providing our customers with quick turnaround time, excellent customer service and defensible data while offering very competitive rates. Advanced Technology Labs - Your Partner for Quality Environmental Testing

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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.

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

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

**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).