FOR CONTRACT NO.: **04-3A3304**

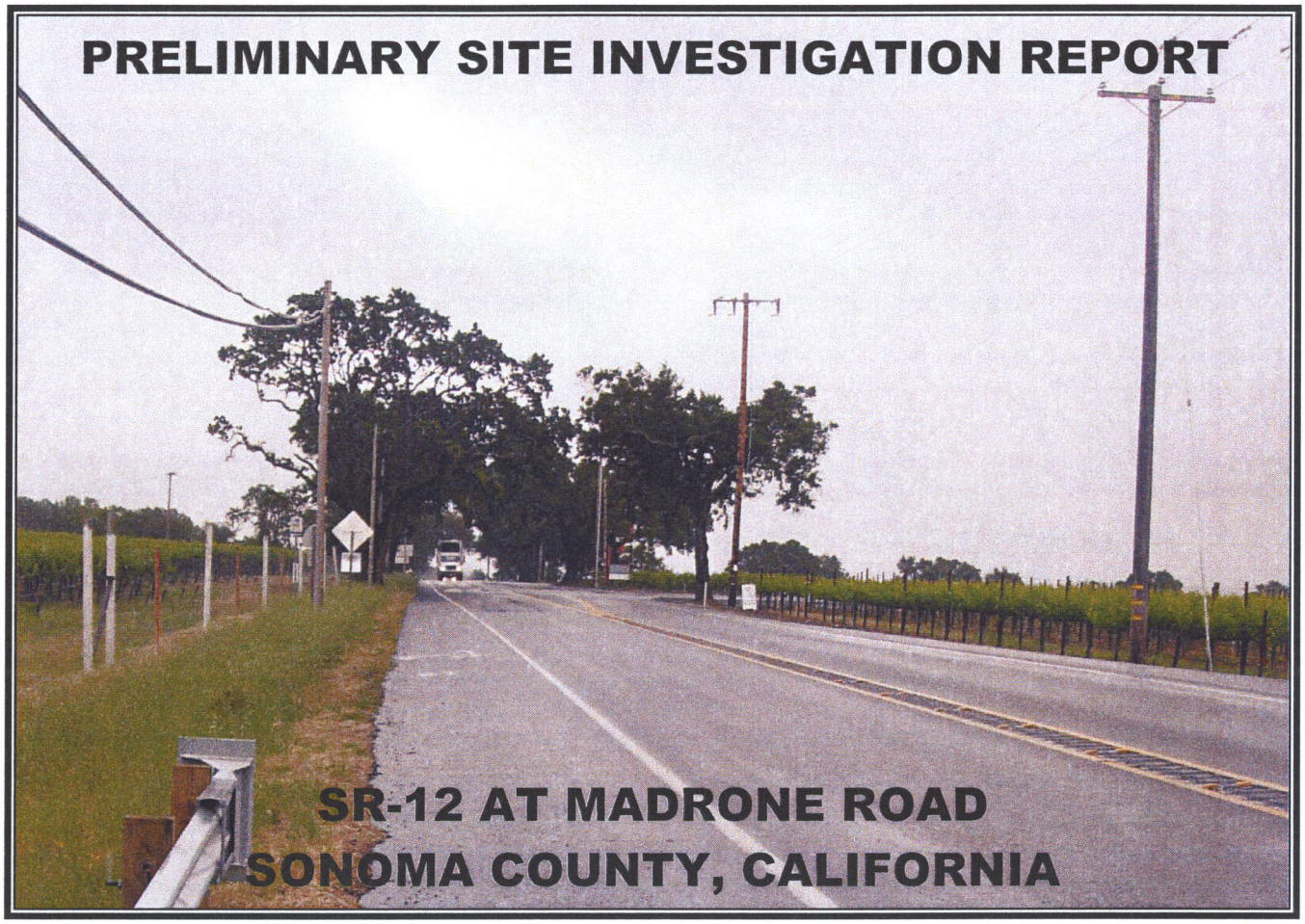
INFORMATION HANDOUT

MATERIALS INFORMATION

PRELIMINARY SITE INVESTIGATION REPORT, SR-12 AT MADRONE ROAD,
SONOMA COUNTY, CALIFORNIA

04-Son-12-32.7/33.0

PRELIMINARY SITE INVESTIGATION REPORT



SR-12 AT MADRONE ROAD
SONOMA COUNTY, CALIFORNIA

PREPARED FOR:
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE, MS8C
OAKLAND, CA 94612

Caltrans

PREPARED BY:
GEOCON CONSULTANTS, INC.
6671 BRISA STREET
LIVERMORE, CA 94550

GEOCON

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TABLE OF CONTENTS

PRELIMINARY SITE INVESTIGATION REPORT Page

REPORT LIMITATIONS i

PROJECT TEAM ii

1.0 INTRODUCTION 1
- 1.1 Project Description and Proposed Improvements 1
- 1.2 General Objectives 1

2.0 BACKGROUND 1
- 2.1 Hazardous Waste Determination Criteria 1
- 2.2 DTSC Variance 2
- 2.3 Environmental Screening Levels 3

3.0 SCOPE OF SERVICES 4
- 3.1 Pre-field Activities 4
- 3.2 Field Activities 4

4.0 INVESTIGATIVE METHODS 4
- 4.1 Sampling Procedures 4
- 4.2 Laboratory Analyses 5
- 4.3 Laboratory QA/QC 6

5.0 INVESTIGATIVE RESULTS 6
- 5.1 Subsurface Conditions 6
- 5.2 Laboratory Analytical Results 6
- 5.3 Laboratory Quality Assurance/Quality Control 7
- 5.4 Statistical Evaluation for Lead Detected in Soil Samples 7
  - 5.4.1 Calculating the UCLs for the Arithmetic Mean 7
  - 5.4.2 Correlation of Total and WET Lead 8

6.0 CONCLUSIONS 10
- 6.1 Lead in Soil 10
  - 6.1.1 Westbound Shoulder 10
  - 6.1.2 Eastbound Shoulder 11
- 6.2 Other CAM 17 Metals 11
- 6.3 Petroleum Hydrocarbons 12
- 6.4 Volatile Organic Compounds 13
- 6.5 Organochlorine Pesticides 13
- 6.6 Worker Protection 13

TABLE OF CONTENTS (cont.)

FIGURES
1. Vicinity Map
2. Site Plan

TABLES
1. Boring Coordinates
2. Summary of Lead and pH Results
3. Summary of CAM 17 Metals Results
4. Summary of Organics Results
5a. Summary of Lead Statistical Analysis – Westbound Shoulder
5b. Summary of Lead Statistical Analysis – Eastbound Shoulder

APPENDICES
A. DTSC Variance
B. Laboratory Reports and Chain-of-custody Documentation
C. Lead Regression and Metals Statistical Analysis

REPORT LIMITATIONS

This report has been prepared exclusively for the State of California Department of Transportation (Caltrans) District 4. The information contained herein is only valid as of the date of the report and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

GEOCON CONSULTANTS, INC.

Richard Day, CEG, CHG
Senior Geologist

CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING

Reviewed By:	Recommended By:	Approved By:
Ana Uribe, PE Task Order Manager	Chris Wilson, PE District Branch Chief	Allen Baradar, PE, REA District Office Chief

PROJECT TEAM

Contact	Affiliation	Responsibility
Romy Fuentes, PE 510.622.8803 510.622.0198 fax romy_f_fuentes@dot.ca.gov	Caltrans – District 4 Consultant Services 111 Grand Avenue, MS7A Oakland, California 94612	Contract Manager
Ana M. Uribe, PE 510.286.4914 510.286.5639 fax ana_m_uribe@dot.ca.gov	Caltrans – District 4 Environmental Engineering 111 Grand Avenue, MS8C Oakland, California 94612	Task Order Manager
Richard Day, CEG, CHG Luann Beadle 925.371.5900 925.371.5915 fax livermore@geoconinc.com	Geocon Consultants, Inc. 6671 Brisa Street Livermore, CA 94550 *(Caltrans Consultant)*	Project Management Sample Collection Field QA/QC Investigation Report
Doug Krause, CIH 530.758.6397 530.758.6506 fax dskrause@pacbell.net	Krause & Associates 216 F. Street Suite 162 Davis, CA 95616 (*Geocon Subconsultant*)	Health and Safety
Diane Galvan 562.989.4045 562.989.4040 fax diane@atlglobal.com	Advanced Technology Laboratories 1510 E. 33rd Street Signal Hill, CA 90807 (*Geocon Subcontractor*)	Soil Sample Analysis
Dan Kocher 510.895.3675 510.895.3680 milpitaslab@emsl.com	EMSL Analytical Inc. 2235 Polvorosa Avenue, Suite 230 San Leandro, CA 94577 *(Geocon Subcontractor)*	Asbestos Analysis

PRELIMINARY SITE INVESTIGATION REPORT

1.0 INTRODUCTION

This Preliminary Site Investigation Report for the area along State Route 12 (SR-12) in Sonoma County, California was prepared by Geocon Consultants, Inc. under California Department of Transportation (Caltrans) Contract No. 04A3578 and Task Order No. 24 (TO-24), EA 04-3A3301.

1.1 Project Description and Proposed Improvements

The project location consists of Caltrans right-of-way (ROW) at the T-intersection of SR-12 and Madrone Road in the community of Eldridge in Sonoma County, California. Caltrans proposes to install traffic signals at the intersection and flash beacons on Madrone Road before the intersection. The project includes installation of a pedestrian crosswalk and a right-turn lane from eastbound SR-12 to Madrone Road. The SR-12 shoulders will also be widened to conform to design standards within the project limits. The project location is depicted on the attached Vicinity Map, Figure 1.

1.2 General Objectives

The purpose of the site investigation was to evaluate concentrations of metals, including aerially-deposited lead (ADL), total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and chlorinated pesticides in the surface and near surface soils within the project boundaries. If encountered, grab groundwater was to be collected and analyzed for TPH and VOCs analyses. Groundwater was not encountered during the investigation; therefore, no groundwater samples were collected.

The information obtained from this investigation will be used by Caltrans to evaluate soil disposal costs and identify health and safety concerns.

2.0 BACKGROUND

2.1 Hazardous Waste Determination Criteria

Regulatory criteria to classify a waste as California hazardous for handling and disposal purposes are contained in the CCR, Title 22, Division 4.5, Chapter 11, Article 3, §66261.24. Criteria to classify a waste as Resource, Conservation, and Recovery Act (RCRA) hazardous are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), Section 261.

For waste containing metals, the waste is classified as California hazardous when: 1) the total metal content exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the soluble metal content exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste has the potential of exceeding the STLC when the waste's total

metal content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal analysis is required. A material is classified as RCRA hazardous, or Federal hazardous, when the soluble metal content exceeds the Federal regulatory level based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability and corrosivity; however, for the purposes of this investigation, toxicity (i.e., lead concentrations) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California hazardous or RCRA hazardous requires management as a hazardous waste.

2.2 DTSC Variance

The DTSC issued a statewide Variance effective July 1, 2009, regarding the management of ADL-impacted soils within Caltrans right-of-way. Under the Variance, soil that is classified as a non-RCRA hazardous waste, based primarily on ADL content, may be suitable for reuse within Caltrans right-of-way. ADL soil that is classified as a RCRA hazardous waste is not eligible for reuse under the Variance and must be disposed of as a RCRA hazardous waste (Caltrans Type Z-3).

ADL soil reused under the Variance must always be at least five feet above the highest groundwater elevation and, depending on lead concentrations, must be covered with at least one foot of non-hazardous soil or a pavement structure. The ADL soil may not be placed in areas where it might contact groundwater or surface water (such as streams and rivers), and must be buried in locations that are protected from erosion that may result from storm water run-on and run-off.

Review of the statewide Variance indicates the following conditions regarding the reuse and management of ADL-impacted soil as fill material for construction and maintenance operations. If ADL soil meets the Variance criteria but is not intended to be reused within Caltrans right-of-way, then the excavated soil must be disposed of as a California hazardous waste (Caltrans Type Z-2). A copy of the Variance is presented as Appendix A.

Caltrans Type Y-1: ADL soil exhibiting a total lead concentration less than or equal to 1,411 milligrams per kilogram (mg/kg), a DI-WET (WET using deionized water as extractant) lead concentration less than or equal to 1.5 milligrams per liter (mg/l), and a pH value greater than or equal to 5.5 may be reused within the same Caltrans corridor and must be covered with at least one foot of non-hazardous soil.

Caltrans Type Y-2: ADL soil exhibiting a total lead concentration less than or equal to 1,411 mg/kg, a DI-WET lead concentration less than or equal to 1.5 mg/l, and a pH value greater than 5 and less than 5.5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

ADL soil exhibiting a total lead concentration less than or equal to 1,411 mg/kg, a DI-WET lead concentration greater than 1.5 mg/l and less than or equal to 150 mg/l, and a pH value greater than 5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

ADL soil exhibiting a total lead concentration greater than 1,411 mg/kg and less than or equal to 3,397 mg/kg, a DI-WET lead concentration less than or equal to 150 mg/l, and a pH value greater than 5 may be reused within the same Caltrans corridor and must be covered and protected from infiltration by a pavement structure.

Caltrans Type Z-2: ADL soil exhibiting a total lead concentration greater than 3,397 mg/kg, a DI-WET lead concentration greater than 150 mg/l, or a pH value less than or equal to 5 is not eligible for reuse under the Variance and must be disposed of as a California hazardous waste.

Caltrans Type Z-3: ADL soil exhibiting a TCLP lead concentration greater than or equal to 5 mg/l is not eligible for reuse under the Variance and must be disposed of as a RCRA hazardous waste.

2.3 Environmental Screening Levels

The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) has prepared a technical report entitled *Screening For Environmental Concerns At Sites With Contaminated Soil and Groundwater, Interim Final* (May 2008), which presents Environmental Screening Levels (ESLs) for soil, groundwater, soil gas, and surface water, to assist in evaluating sites impacted by releases of hazardous chemicals. The ESLs are conservative values for more than 100 commonly detected contaminants, which may be used to compare with environmental data collected at a site. ESLs are strictly risk assessment tools and "not regulatory clean up standards." The presence of a chemical at concentrations in excess of an ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring; this simply indicates that a potential for adverse risk may exist and that additional evaluation is or "may be" warranted (SFRWQCB, 2008).

The most conservative ESL table was used for this characterization: Table A – Shallow Soil (≤3 meters below ground surface; bgs) – Groundwater is a Current or Potential Source of Drinking Water. The respective ESLs are listed at the end of Table 3 for comparative purposes.

3.0 SCOPE OF SERVICES

The scope of services requested by Caltrans under TO-24, EA 04-3A3301 included the following:

3.1 Pre-field Activities

- Prepared a site-specific *Health and Safety Plan* to provide guidelines on the use of personal protective equipment and the health and safety procedures implemented during the field activities.
- Provided a minimum of 48-hours notice to the local public utilities via Underground Service Alert (USA) prior to job site mobilization.
- Retained the services of Advanced Technology Laboratories (ATL), a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of soil samples.
- Retained the services of Baseline Environmental Consulting to perform the USA markings and provide sampling support.

3.2 Field Activities

The field investigation was performed on June 1, 2011, by Geocon and Baseline staff. The following field activities were performed during the sampling efforts:

- Advanced 15 soil borings at the project location using hand-auger and direct push rig techniques. The borings were advanced to a maximum depth of 8.0 feet.
- Collected 15 soil samples for selected analysis of CAM 17 metals.
- Collected 28 soil samples for total lead analysis.
- Collected 8 soil samples for organochlorine pesticide analysis.
- Collected 3 soil samples for total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd), and as motor oil (TPHmo) analyses.
- Collected 3 soil samples for VOCs analysis.
- Collected 5 soil samples for pH analysis.
- Transported samples to California-certified environmental laboratories for analysis under standard chain-of-custody (COC) documentation.

4.0 INVESTIGATIVE METHODS

4.1 Sampling Procedures

Soil samples were collected from 15 boring locations identified by the Caltrans TO Manager. Geocon recorded the boring locations using Differential Global Positioning System (DGPS) equipment. Boring coordinates are presented on Table 1 and boring locations are shown on the Site Plan, Figure 2.

The soil samples for analysis of CAM 17 metals were collected in new stainless steel tubes sealed with Teflon tape and plastic end-caps. Soil samples for total lead analysis were collected into new resealable plastic bags. Sample containers were labeled and transported to Caltrans-approved, certified environmental laboratories using standard COC documentation. Soil borings were backfilled to surface with soil cuttings.

Geocon provided QA/QC procedures during the field activities. These procedures included washing the sampling equipment with a Liqui-Nox® solution followed by a double rinse with deionized water. Decontamination water was disposed of to the ground surface within Caltrans right-of-way in a manner not to create runoff, away from drain inlets or potential water bodies.

4.2 Laboratory Analyses

Laboratory analyses were performed by ATL under an expedited 48-hour turnaround-time (TAT). The laboratory reports and COC documentation are included in Appendix B.

The soil samples were analyzed as follows:

- 28 samples for total lead using Environmental Protection Agency (EPA) Test Method 6010 ICAP.
- 15 samples for CAM 17 metals according to Title 22 CCR, EPA Test Methods 6010 ICAP and 7471A.
- 14 samples with total lead concentrations exceeding 50 mg/kg (i.e. ten times the STLC of 5.0 mg/l) were further analyzed for WET lead.
- 6 samples with WET lead concentrations exceeding the STLC of 5.0 mg/l were further analyzed for DI-WET lead.
- 3 samples with total lead concentrations exceeding 100 mg/kg and WET lead concentrations exceeding the STLC of 5.0 mg/l were further analyzed for TCLP and DI-WET lead.
- 1 sample with total chromium concentrations exceeding 50mg/kg was further analyzed for WET chromium.
- 3 samples for total petroleum hydrocarbons as TPHg and TPHd/mo using EPA Test Method 8015.
- 3 samples for VOCs analysis using EPA Method 8260.
- 11 samples were analyzed using EPA Method 9045 for pH.
- 8 samples for organochlorine pesticide analysis using EPA Test Method 8081.

4.3 Laboratory QA/QC

QA/QC procedures were performed for each method of analysis with specificity for each analyte listed in the test method's QA/QC. The laboratory QA/QC procedures included the following:

- One method blank for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every ten samples, batch of samples or type of matrix; whichever was more frequent, with spike made at ten times the detection limit or at the analyte level.

Prior to submitting the samples to the laboratory, the COC documentation was reviewed for accuracy and completeness.

5.0 INVESTIGATIVE RESULTS

5.1 Subsurface Conditions

Observations during field activities indicated that surface soil at the project location generally consists of loose coarse-grained materials, consisting of sand and gravel in the upper 2.5 to 3.0 feet bgs and dense, coarse-grained materials consisting of mostly sand and gravel below 3 feet bgs. Groundwater was not encountered during the advancement of the soil borings.

5.2 Laboratory Analytical Results

The analytical results are summarized in Tables 2 to 4 and are summarized below:

- The following metals were not detected above their respective laboratory reporting limits: antimony, beryllium, cadmium, molybdenum, selenium, silver, and thallium.
- Total lead was reported at concentrations ranging from less than (<) the laboratory reporting limit of 5.0 to 940 mg/kg.
- WET lead was reported at concentrations ranging from <0.25 to 73 mg/l.
- DI-WET lead was reported in one sample at a concentration of 0.28 mg/l.
- TCLP lead was reported at concentrations ranging from <0.25 to 6.6 mg/l.
- Total chromium was reported at concentrations ranging from less than <5.0 to 67 mg/kg.
- WET chromium was not detected above the laboratory reporting limit of 1.0 mg/l.
- Remaining CAM 17 metals were reported in the samples at total concentrations below ten times their respective STLCs.
- Total petroleum hydrocarbons as gasoline were not detected in the samples at or above the reporting limit of 1.0 mg/kg.

- Total petroleum hydrocarbons as diesel and motor oil were detected at concentrations ranging from < 1.0 mg/kg to 15 mg/kg.
- VOCs were not detected at or above the laboratory detection limits for these compounds.
- Organochlorine pesticides were reported at concentrations ranging from <1.0 to 11 µg/kg.

5.3 Laboratory Quality Assurance/Quality Control

We reviewed the QA/QC results provided with the laboratory analytical reports. The data indicate non-detect results for the method blanks. All samples and internal laboratory QA/QC samples showed acceptable recoveries and relative percent differences (RPDs). Based on this limited data review, no additional qualifications of the soil data are necessary, and the data are of sufficient quality for the purposes of this report.

5.4 Statistical Evaluation for Lead Detected in Soil Samples

Statistical methods were applied to the total lead data to evaluate: 1) the upper confidence limits (UCLs) of the arithmetic means of the total lead concentrations for each sampling depth; and 2) if an acceptable correlation between total and WET lead concentrations exists that would allow the prediction of WET lead concentrations based on calculated UCLs. The lead data for the site were treated as two separate sample populations for statistical evaluation. Sample group WB consisted of samples from borings B1 to B8 collected along the westbound shoulder of SR-12. Sample group EB consisted of samples from borings B9 to B15 collected along the eastbound shoulder of SR-12.

5.4.1 Calculating the UCLs for the Arithmetic Mean

The upper one-sided 90% and 95% UCLs of the arithmetic mean are defined as the values that, when calculated repeatedly for randomly drawn subsets of site data, equal or exceed the true mean 90% and 95% of the time, respectively. Statistical confidence limits are the classical tool for addressing uncertainties of a distribution mean. The UCLs of the arithmetic mean concentration are used as the mean concentrations because it is not possible to know the true mean due to the essentially infinite number of soil samples that could be collected from a site. The UCLs therefore account for uncertainties due to limited sampling data. As data become less limited at a site, uncertainties decrease, and the UCLs move closer to the true mean.

Non-parametric bootstrap techniques were used to calculate the UCLs. For those samples in which total lead was not detected, a value equal to one-half of the detection limit was used in the UCL calculation. The bootstrap test results are included in Appendix C. The following table presents the calculated UCLs and statistics for the data sets.

Westbound Shoulder (Borings B1 to B8)

SAMPLE INTERVAL (feet)	90% TOTAL LEAD UCL (mg/kg)	95% TOTAL LEAD UCL (mg/kg)	TOTAL LEAD MEAN (mg/kg)	MINIMUM VALUE (mg/kg)	MAXIMUM VALUE (mg/kg)
0 to 0.5	47.2	50.3	36.5	6.8	77
1.0 to 1.5	64.9	68.6	50.6	5.1	100

Eastbound Shoulder (Borings B9 to B15)

SAMPLE INTERVAL (feet)	90% TOTAL LEAD UCL (mg/kg)	95% TOTAL LEAD UCL (mg/kg)	TOTAL LEAD MEAN (mg/kg)	MINIMUM VALUE (mg/kg)	MAXIMUM VALUE (mg/kg)
0 to 0.5	33.9	36.9	20.6	2.5	83
1.0 to 1.5	424.1	469.2	269.1	10	940

5.4.2 Correlation of Total and WET Lead

Total and corresponding WET lead concentrations are bivariate data with a linear structure. This linear structure should allow for the prediction of WET lead concentrations based on the maximum total lead concentrations presented in the tables above.

To estimate the degree of interrelation between total and corresponding WET lead values (x and y, respectively), the *correlation coefficient [r]* is used. The correlation coefficient is a ratio that ranges from +1 to –1. A *correlation coefficient* of +1 indicates a perfect direct relationship between two variables; a *correlation coefficient* of –1 indicates that one variable changes inversely with relation to the other. Between the two extremes is a spectrum of less-than-perfect relationships, including zero, which indicates the lack of any sort of linear relationship at all. The *correlation coefficient* was calculated for the 14 (x, y) data points (i.e., soil samples analyzed for both total lead [x] and WET lead [y]). The resulting *coefficient of determination* (r^2) equaled 0.85, which yields a corresponding *correlation coefficient* (r) of 0.922.

For the *correlation coefficient* that indicates a linear relationship between total and WET lead concentrations, it is possible to compute the line of dependence or a best-fit line between the two variables. A least squares method was used to find the equation of a best-fit line (regression line) by forcing the y-intercept equal to zero since that is a known point. The equation of the regression line was determined to be $y = 0.0639(x)$, where x represents total lead concentrations and y represents predicted WET lead concentrations.

This equation was used to estimate the expected WET lead concentrations for the total lead UCLs for the data set (see Section 5.4.1). Regression analysis results and a scatter plot depicting the (x, y) data points along with the regression line are included in Appendix C. The predicted WET lead concentrations are summarized in Tables 5a and 5b.

6.0 CONCLUSIONS

Waste classifications are evaluated based on the 90% UCL of the lead content for the relevant excavation depths; this has historically been considered sufficient to satisfy a good faith effort by the EPA as discussed in SW-846. Risk assessment characterization is based on the 95% UCL of the lead content in the waste for the relevant depths; this is in accordance with the Risk Assessment Guidance for Superfund (RAGS) Volume 1 Documentation for Exposure Assessment. Per Caltrans, the 90% UCLs are to be used to evaluate onsite reuse and the 95% UCLs are to be used to evaluate offsite disposal.

6.1 Lead in Soil

6.1.1 Westbound Shoulder

The following table summarizes the predicted waste classification for excavated soil based on the calculated weighted averages of the total lead UCLs and predicted WET lead concentrations for data collected at the Site. Weighted averages are calculated by using the total lead concentration for each 0.5-foot depth interval as the value for the underlying 0.5-foot depth interval (unless a sample was collected from the underlying depth interval). The total and WET lead calculations are summarized below and in Table 5a.

Excavation Depth	90% UCL Total Lead (mg/kg)	90% UCL Predicted WET Lead (mg/l)	95% UCL Total Lead (mg/kg)	Waste Classification
0 to 1.0 ft	47	3.0	50	Non-Hazardous
Underlying soil (1.0 to 1.5 ft)	*65*	*4.1*	*69*	*Non-Hazardous*
0 to 1.5 ft	53	3.4	56	Non-Hazardous

90% UCL applicable for waste classification and onsite reuse; 95% UCL applicable for risk assessment and offsite disposal

Based on the data presented in the above table, soil excavated from the westbound shoulder would be not classified as California hazardous waste since the predicted WET lead concentrations are less than the lead STLC of 5.0 mg/l.

6.1.2 Eastbound Shoulder

The following table summarizes the predicted waste classification for excavated soil based on the calculated weighted averages of the total lead UCLs and predicted WET lead concentrations for data collected at the Site. Weighted averages are calculated by using the total lead concentration for each 0.5-foot depth interval as the value for the underlying 0.5-foot depth interval (unless a sample was collected from the underlying depth interval). The total and WET lead calculations are summarized below and in Table 5b.

Excavation Depth	90% UCL Total Lead (mg/kg)	90% UCL Predicted WET Lead (mg/l)	95% UCL Total Lead (mg/kg)	Waste Classification
0 to 1.0 ft	34	2.2	37	Non-Hazardous
Underlying soil (1.0 to 1.5 ft)	*424*	***27.1***	*469*	***Hazardous***
0 to 1.5 ft	164	**10.5**	181	**Hazardous**

90% UCL applicable for waste classification and onsite reuse; 95% UCL applicable for risk assessment and offsite disposal

Based on the data presented in the above table, soil excavated from the eastbound shoulder between the surface and 1.0 foot would be not classified as California hazardous waste since the predicted WET lead concentrations are less than the lead STLC of 5.0 mg/l.

Soil excavated from deeper than 1.0 foot would be classified as California hazardous waste since the predicted WET lead concentration is greater than the lead STLC of 5.0 mg/l. Based on the TCLP results, excavated soil would not be considered a RCRA hazardous waste.

Based on the DI-WET results, soil excavated from the eastbound shoulder may be reused onsite (as Type Y-1) in accordance with the DTSC Variance by placing it beneath one foot of clean soil or pavement.

6.2 Other CAM 17 Metals

The CAM 17 metals concentrations in site soil, other than lead, were compared to ESLs (Table A, SFRWQCB, May 2008). Arsenic and vanadium were reported with concentrations greater than their respective ESL values in the soil samples collected at the site. Arsenic was reported in the samples at concentrations ranging from <1 to 3.9 mg/kg, exceeding the residential land use ESL of 0.39 mg/kg and the commercial/industrial land use ESL of 1.6 mg/kg for shallow soil (≤3 meters; SFRWQCB, Table A). Vanadium was reported in the soil samples at concentrations from 19 to 35 mg/kg, exceeding the residential land use ESL of 16 mg/kg for shallow soil.

Upper one-sided 95% Upper Confidence Limits (UCLs) were calculated for the full set of arsenic and vanadium concentrations. Non-parametric bootstrap techniques were used to calculate the UCLs. For those samples in which arsenic was not detected, a value equal to one-half of the detection limit was used in the UCL calculation. The UCLs were compared with the residential and commercial/industrial land use ESLs and with published background levels typically present in California soils as presented in *Background Concentrations of Trace and Major Elements in California Soils* (Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, March 1996). The bootstrap results are included in Appendix C. The calculated standard bootstrap UCLs, ESLs and published background concentrations are summarized in the table below:

Metal	95% UCL	RESIDENTIAL ESL	COMMERCIAL/ INDUSTRIAL ESL	PUBLISHED BACKGROUND MEAN[1]	PUBLISHED BACKGROUND RANGE [1]
Arsenic	3.8	0.39	1.6	3.5	0.6 to 11.0
Vanadium	30.1	16	200	112	39 to 288

Concentrations reported in mg/kg

[1] Kearney Foundation of Soil Science, March 1996

The 95% UCL value for arsenic in the soil samples collected at the Site is greater than the residential and commercial/industrial land use ESLs and within the published background range. The SFRWQCB *November 2007 Update to Environmental Screening Levels (ESLs) Technical Document* states that ambient background concentrations of arsenic typically exceed risk-based screening levels. In such instances, it may be more appropriate to compare site data to regionally specific established background levels.

The 95% UCL value for vanadium in the soil samples collected at the site is greater than the residential land use ESL. However, the 95% UCL for vanadium is less than the commercial/industrial land use ESL and the published background range.

Based on the reported arsenic and vanadium results, offsite disposal or reuse of excavated soil may be restricted.

6.3 Petroleum Hydrocarbons

Petroleum hydrocarbon concentrations in soil were compared to ESLs (Table A and K-3, SFRWQCB, May 2008). TPHg was not detected and reported TPHd and TPHmo concentrations are less than their respective ESL values for residential or commercial/industrial land use.

6.4 Volatile Organic Compounds

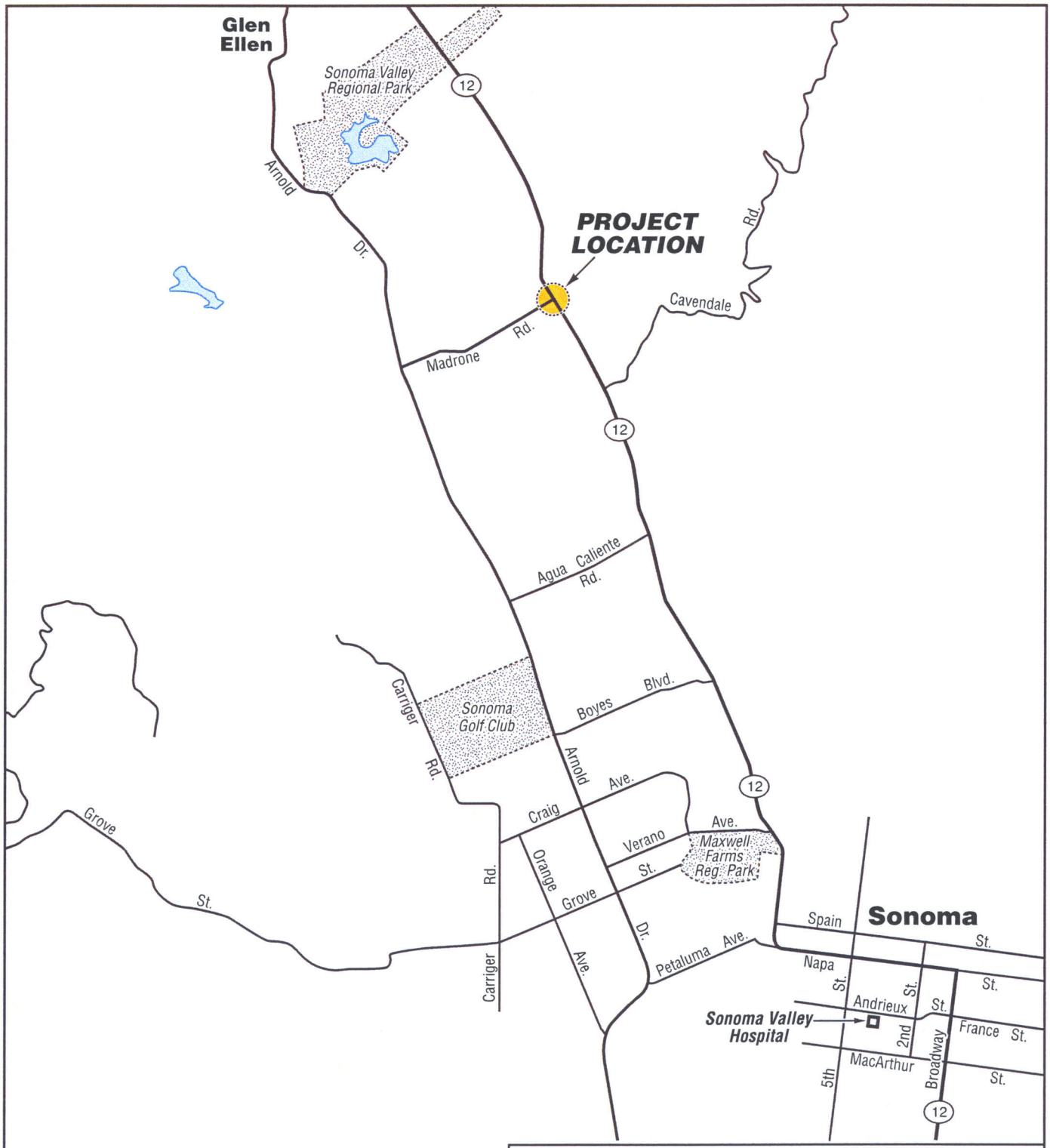
Volatile organic compounds were not detected above laboratory reporting limits.

6.5 Organochlorine Pesticides

Organochlorine pesticides were not detected at or above their respective ESL values for residential or commercial/industrial land use.

6.6 Worker Protection

The contractor(s) should prepare a project-specific health and safety plan to prevent or minimize worker exposure to metals in soil. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of metals in soil.



GEOCON
CONSULTANTS, INC.
6671 BRISA STREET – LIVERMORE, CA 94550
PHONE 925.371.5900 – FAX 925.371.5915

SR-12 at Madrone Road

Sonoma County, California	**VICINITY MAP**
GEOCON Proj. No. E8560-06-24	
Task Order No. 24	June 2011 — Figure 1

LEGEND:

Boring Location

N

0 70 140

SCALE: feet

GEOCON CONSULTANTS, INC.
6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

SR-12 at Madrone Road

Sonoma County, California

SITE PLAN

GEOCON Proj. No. E8560-06-24 | June 2011 | Figure 2

SITE0611

TABLE 1
Boring Coordinates
SR-12 Madrone Road
Sonoma County, California

Boring	Latitude	Longitude	Northing	Easting
B1	38.344701886	-122.498330747	1,887,750.229	6,418,754.537
B2	38.344631581	-122.498270060	1,887,724.530	6,418,771.802
B3	38.344539216	-122.498252055	1,887,690.865	6,418,776.782
B4	38.344478215	-122.498168038	1,887,668.518	6,418,800.756
B5	38.344044210	-122.497860840	1,887,509.980	6,418,887.997
B6	38.343547694	-122.497457317	1,887,328.527	6,419,002.740
B7	38.343264769	-122.497232562	1,887,225.139	6,419,066.639
B8	38.343046829	-122.497092891	1,887,145.552	6,419,106.264
B9	38.345638063	-122.499042540	1,888,092.283	6,418,552.263
B10	38.344768762	-122.498576022	1,887,774.970	6,418,684.325
B11	38.344283609	-122.498236527	1,887,597.754	6,418,780.725
B12	38.343784015	-122.497851747	1,887,413.373	6,418,893.889
B13	38.343577286	-122.497686501	1,887,339.663	6,418,937.067
B14	38.343276185	-122.497457897	1,887,229.650	6,419,002.033
B15	38.343888229	-122.498079575	1,887,453.519	6,418,824.951

Northing and Easting coordinates in NAD83, Zone 2, feet.

TABLE 2
Summary of Lead and pH Results
SR-12 Madrone Road
Sonoma County, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	DI-WET Lead (mg/l)	TCLP Lead (mg/l)	pH
Westbound Shoulder						
B1-0	0	10	---	---	---	---
B1-1	1	37	---	---	---	---
B2-0	0	16	---	---	---	---
B2-1	1	65	<0.25	---	---	6.5
B3-0	0	55	5.1	<0.25	---	6.0
B3-1	1	15	---	---	---	---
B4-0	0	58	0.94	---	---	---
B4-1	1	60	<0.25	---	---	---
B5-0	0	42	---	---	---	---
B5-1	1	100	5.1	<0.25	---	6.6
B5-2	2	33	---	---	---	---
B5-5	5	21	---	---	---	---
B5-7	7	<5.0	---	---	---	---
B5-9	9	230	<0.25	---	---	---
B6-0	0	27	---	---	---	6.0
B6-1	1	87	<0.25	---	---	---
B7-0	0	77	<0.25	---	---	---
B7-1	1	36	---	---	---	---
B8-0	0	6.8	---	---	---	---
B8-1	1	5.1	---	---	---	---
B8-2	2	<5.0	---	---	---	---
B8-5	5	<20	---	---	---	---
B8-6.75	6.75	5.8	---	---	---	6.0
Eastbound Shoulder						
B9-0	0	<5.0	---	---	---	---
B9-1	1	35	---	---	---	---
B9-2	2	38	---	---	---	---
B9-5	5	62	3.1	---	---	---
B9-7	7	8.0	---	---	---	7.0
B10-0	0	7.3	---	---	---	---
B10-1	1	60	2.9	---	---	---
B11-0	0	5.4	---	---	---	---
B11-1	1	440	12	<0.25	<0.25	8.0
B12-0	0	32	---	---	---	---
B12-1	1	<20	---	---	---	---
B12-2	2	11	---	---	---	---
B12-5	5	7.5	---	---	---	---
B12-7	7	5.3	---	---	---	---

TABLE 2
Summary of Lead and pH Results
SR-12 Madrone Road
Sonoma County, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	DI-WET Lead (mg/l)	TCLP Lead (mg/l)	pH
B13-0	0	83	5.4	<0.25	---	7.1
B13-1	1	380	24	<0.25	0.35	6.8
B14-0	0	6.2	---	---	---	---
B14-1	1	940	73	0.28	6.6	7.0
B15-0	0	7.9	---	---	---	6.4
B15-1	1	19	---	---	---	---
Equipment Blank		<0.25	---	---	---	---

--- = not analyzed
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
< = Not detected above the laboratory reporting limit
WET = Waste Extraction Test using citric acid as the extraction fluid
DI-WET = Waste Extraction Test using deionized water as the extraction fluid
TCLP = Toxicity Characteristic Leaching Procedure

TABLE 3
Summary of CAM17 Metals Results
SR-12 Madrone Road
Sonoma County, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B1-1	1	<4.0	<2.0	94	<2.0	<2.0	13	9.4	9.3	37	<0.10	<2.0	8.3	<2.0	<2.0	<2.0	34	46
B3-0	0	<4.0	<2.0	67	<2.0	<2.0	14	11	11	55	0.38	<2.0	16	<2.0	<2.0	<2.0	33	53
B5-1	1	<10	<5.0	57	<5.0	<5.0	12	9.0	16	100	<0.10	<5.0	9.3	<5.0	<5.0	<5.0	35	49
B5-7	7	<10	<5.0	56	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<0.10	<5.0	<5.0	<5.0	<5.0	<5.0	19	10
B6-0	0	<2.0	<1.0	55	<5.0	<1.0	13	7.4	15	27	0.13	<1.0	11	<1.0	<1.0	<1.0	25	35
B7-1	1	<2.0	3.5	58	<5.0	<1.0	17	9.5	25	36	<0.1	<1.0	30	<1.0	<1.0	<1.0	23	62
B8-5	5	<40	<20	<20	<40	<20	<20	<20	<40	<20	<0.10	<20	<20	<20	<20	<20	<20	26
B9-5	5	<80	<40	88	<40	<40	<40	<40	<80	62	0.10	<40	<40	<40	<40	<40	<40	71
B10-0	0	<2.0	<1.0	57	<40	<1.0	18	9.7	15	7.3	0.62	<1.0	21	<1.0	<1.0	<1.0	31	31
B11-1	1	<2.0	2.1	61	<1.0	<1.0	67 *<1.0*	10	20	440	0.43	<1.0	61	<1.0	<1.0	<1.0	26	72
B12-1	1	<40	<20	110	<40	<20	<20	<20	<40	<20	<0.10	<20	<20	<20	<20	<20	32	33
B12-7	7	<2.0	2.2	24	<1.0	<1.0	9.3	3.7	2.8	5.3	<0.10	<1.0	2.3	<1.0	<1.0	<1.0	33	11
B13-0	0	<2.0	1.4	57	<1.0	<1.0	10	6.9	15	83	0.27	<1.0	15	<1.0	<1.0	<1.0	22	68
B14-1	1	<2.0	<1.0	44	<1.0	<1.0	18	5.4	12	940	0.51	<1.0	22	<1.0	<1.0	<1.0	20	70
B15-1	1	<2.0	3.9	59	<1.0	<1.0	15	7.9	34	19	0.22	<1.0	26	<1.0	<1.0	<1.0	20	53
ESLs																		
Residential Land Use		6.3	0.39	750	4.0	1.7	750	40	230	200	1.3	40	150	10	20	1.3	16	600
Comm/Ind Land Use		40	1.6	1500	8.0	7.4	750	80	230	750	10	40	150	10	40	16	200	600
Construction Exposure		310	15	2,600	98	39	1.2E+06	94	310,000	750	58	3,900	260	3,900	3,900	62	770	230,000
Hazardous Waste Criteria																		
TTLC		500	500	10,000	75	100	2,500*	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
STLC		15	5.0	100	0.75	1.0	5.0**	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250
TCLP		---	5.0	100	---	1.0	6.0	---	---	5.0	0.2	---	---	1.0	5.0	---	---	---

Notes:
Total metal results are shown in milligrams per kilogram (mg/kg)
TTLC = total threshold limit concentration
STLC = soluble threshold limit concentration
TCLP = toxicity characteristic leaching procedure

--- = not analyzed or no standard
Soluble metal results shown in italics in milligrams per liter (mg/l)
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, Revised May 2008
ESLs for chromium are for Chromium III, as there is no standard for total chromium

TABLE 4
Summary of Organics Results
SR-12 Madrone Road
Sonoma County, California

ID	Sample Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	VOCs (µg/kg)	Pesticides (µg/kg)
B4-0	0	---	---	---	---	ND
B5-0	0	---	---	---	---	ND
B5-9	9	<1.0	<1.0	<1.0	ND	---
B6-0	0	---	---	---	---	ND
B7-0	0	---	---	---	---	ND
B8-6.75	6.75	<1.0	<1.0	<1.0	ND	---
B9-7	7	<1.0	2.8	15	ND	---
B11-0	0	---	---	---	---	ND
B12-0	0	---	---	---	---	ND
B14-0	0	---	---	---	---	ND
B15-0	0	---	---	---	---	4,4'-DDE=12 4,4'-DDT=7.8
Trip Blank		<0.05	---	---	---	---
ESLs						
Residential		83	83	370	---	1,700
Commercial/Industrial		83	83	2,500	---	4,000
Construction Exposure		4,200	4,200	12,000	---	87,000

Notes:

TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil
< = Not detected above the stated laboratory reporting limit
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, May 2008.

VOCs = Volatile organic compounds
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

TABLE 5a
Summary of Lead Statistical Analysis
SR-12 Madrone Road
Sonoma County, California

Westbound Shoulder (Borings B1 to B8)

TOTAL LEAD UCLs

	Total Lead (mg/kg)	
	90% UCL	95% UCL
0 to 0.5 ft	47.2	50.3
1 to 1.5 ft	64.9	68.6

EXCAVATION SCENARIOS

Excavation Depth	Weighted Averages 90% UCL		Weighted Averages 95% UCL	
	Total Lead (mg/kg)	WET Lead* (mg/l)	Total Lead (mg/kg)	WET Lead* (mg/l)
0 to 1 ft	47	3.0	50	3.2
Underlying Soil (1 to 1.5 ft.)	*65*	*4.1*	*69*	*4.4*
0 to 1.5 ft	53	3.4	56	3.6

Notes:

mg/kg = milligrams per kilogram

mg/l = milligrams per liter

Weighted average values are based upon calculated UCLs for each depth interval.

* = WET lead concentrations are predicted using slope of regression line, where y = predicted WET lead and x = total lead.

Regression Line Slope: $y =$ 0.0639 x

TABLE 5b
Summary of Lead Statistical Analysis
SR-12 Madrone Road
Sonoma County, California

Eastbound Shoulder (Borings B9 to B15)

TOTAL LEAD UCLs

	Total Lead (mg/kg)	
	90% UCL	95% UCL
0 to 0.5 ft	33.9	36.9
1 to 1.5 ft	424.1	469.2

EXCAVATION SCENARIOS

Excavation Depth	Weighted Averages 90% UCL		Weighted Averages 95% UCL	
	Total Lead (mg/kg)	WET Lead* (mg/l)	Total Lead (mg/kg)	WET Lead* (mg/l)
0 to 1 ft	34	2.2	37	2.4
Underlying Soil (1 to 1.5 ft.)	*424*	*27.1*	*469*	*30.0*
0 to 1.5 ft	164	10.5	181	11.6

Notes:

mg/kg = milligrams per kilogram

mg/l = milligrams per liter

Weighted average values are based upon calculated UCLs for each depth interval.

* = WET lead concentrations are predicted using slope of regression line, where y = predicted WET lead and x = total lead.

Regression Line Slope: $y =$ 0.0639 x

APPENDIX A

California Environmental Protection Agency
Department of Toxic Substances Control

VARIANCE

Applicant Names:

State of California
Department of Transportation
(Caltrans)
1120 N Street
Sacramento, California 95814

Variance No. V09HQSCD006

Effective Date: July 1, 2009

Expiration Date: July 1, 2014

Modification History:

Pursuant to California Health and Safety Code, Section 25143, the Department of Toxic Substances Control hereby issues the attached Variance consisting of 9 pages to the Department of Transportation.

Beverly Rikala
Team Leader, Operating Facilities Team
Department of Toxic Substances Control

Date: 6/30/09

1. INTRODUCTION.

a) Pursuant to Health and Safety Code, section 25143, the California Department of Toxic Substances Control (DTSC) grants this variance to the applicant below for waste considered to be hazardous solely because of its lead concentrations and as further specified herein.

b) DTSC hereby grants this variance only from the requirements specified herein and only in accordance with all terms and conditions specified herein.

2. IDENTIFYING INFORMATION.

APPLICANT/OWNER/OPERATOR

State of California
Department of Transportation, (Caltrans)
All Districts

3. TYPE OF VARIANCE.

Generation, Manifest, Transportation, Storage and Disposal.

4. ISSUANCE AND EXPIRATION DATES.

DATE ISSUED: July 1, 2009 EXPIRATION DATE: July 1, 2014

5. APPLICABLE STATUTES AND REGULATIONS. The hazardous waste that is the subject of this variance is fully regulated under Health and Safety Code, section 25100, et seq. and California Code of Regulations, title 22, division 4.5 except as specifically identified in Section 8 of this variance.

6. DEFINITION. For purposes of this variance, "lead-contaminated soil(s)" shall mean soil that meets the criteria for hazardous waste but contains less than 3397 mg/kg total lead and is hazardous primarily because of aerially-deposited lead contamination associated with exhaust emissions from the operation of motor vehicles.

7. FINDINGS/DETERMINATIONS. DTSC has determined that the variance applicant meets the requirements set forth in Health and Safety Code, section 25143 for a variance from specific regulatory requirements as outlined in Section 8 of this variance. The specific determinations and findings made by DTSC are as follows:

a) Caltrans intends to excavate, stockpile, transport, bury and cover large volumes of soil associated with highway construction projects. In the more urbanized highway corridors around the State this soil is contaminated with lead, primarily due to historic emissions from automobile exhausts. In situ sampling and laboratory testing has shown that some of the soil contains concentrations of lead in excess of State regulatory thresholds, and thus any generated waste from disturbance of the soil

would be regulated as hazardous waste. Such soil contains a Total Threshold Limit Concentration (TTLC) of 1000 milligrams per kilogram (mg/kg) or more lead and/or it meets or exceeds the Soluble Threshold Limit Concentration (STLC) for lead of 5 milligrams per liter (mg/l). A Human Health Risk Assessment prepared for this variance concludes that soil contaminated with elevated concentrations of lead can be managed in a way that presents no significant risk to human health.

b) The lead-contaminated soil will be placed only in Caltrans' right-of-way. Depending on concentration levels, the wastes will be covered with a minimum thickness of one (1) foot of non-hazardous soil or asphalt/concrete cover and will always be at least five (5) feet above the highest groundwater elevation. Caltrans will assure that proper health and safety procedures will be followed for workers, including any persons engaged in maintenance work in areas where the waste has been buried and covered.

c) DTSC finds and requires that the lead-contaminated soil excavated, stockpiled, transported, buried and covered pursuant to this variance is a non-RCRA hazardous waste, and that the waste management activity is insignificant as a potential hazard to human health and safety and the environment, when managed in accordance with the conditions, limitations and other requirements specified in this variance.

8. PROVISIONS WAIVED.

Provided Caltrans meets the terms and conditions of this variance, DTSC waives the hazardous waste management requirements of Health and Safety Code, Chapter 6.5 and California Code of Regulations, title 22 for the lead-contaminated soil that Caltrans reuses in projects that would require Caltrans to obtain a permit for a disposal facility and any other generator requirements that concern the transportation, manifesting, storage and land disposal of hazardous waste.

9. SPECIFIC CONDITIONS, LIMITATIONS AND OTHER REQUIREMENTS.

In order for the provisions discussed in section 8 to be waived, lead-contaminated soil must not exceed the contaminant concentrations discussed below and Caltrans management practices must meet all the following conditions:

a) Caltrans implementation of this variance shall comply with all applicable state laws and regulations for water quality control, water quality control plans, waste discharge requirements (including storm water permits), and others issued by the State Water Resources Control Board (SWRCB) and/or a California Regional Water Quality Control Board (RWQCB). Caltrans shall provide written notification to the appropriate RWQCB at least 30 days prior to advertisement for bids of projects that involve invocation of this variance, or as otherwise negotiated with the SWRCB or appropriate RWQCB.

b) The waivers in this variance shall only be applied to lead-contaminated soil that is not a RCRA hazardous waste and is hazardous primarily because of aerially-

deposited lead contamination associated with exhaust emissions from the operation of motor vehicles. The variance is not applicable to any other hazardous waste.

c) Soil containing 1.5 mg/l extractable lead or less (based on a modified waste extraction test using deionized water as the extractant) and 1411 mg/kg or less total lead may be used as fill provided that the lead-contaminated soil is placed a minimum of five (5) feet above the maximum historic water table elevation and covered with at least one (1) foot of nonhazardous soil that will be maintained by Caltrans to prevent future erosion.

d) Soil containing 150 mg/L extractable lead or less (based on a modified waste extraction test using deionized water as the extractant) and 3397 mg/kg or less total lead may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum historic water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans.

e) Lead-contaminated soil with a pH less than 5.5 but greater than 5.0 shall only be used as fill material under the paved portion of the roadway. Lead-contaminated soil with a pH at or less than 5.0 shall be managed as a hazardous waste.

f) For each project that has the potential to generate waste by disturbing lead-contaminated soil (as defined in 6), Caltrans shall conduct sampling and analysis to adequately characterize the soils containing aerially deposited lead in the areas of planned excavation along the project route. Such sampling and analysis shall include the Toxicity Characteristic Leaching Procedure (TCLP) as prescribed by the United States Environmental Protection Agency to determine whether concentrations of contaminants in soil exceed federal criteria for classification as a hazardous waste.

g) Lead-contaminated soil managed pursuant to this variance shall not be moved outside the designated corridor boundaries (see paragraph t) below. All lead-contaminated soil not buried and covered within the same Caltrans corridor where it originated is not eligible for management under this variance and shall be managed as a hazardous waste.

h) Lead-contaminated soil managed pursuant to this variance shall not be placed in areas where it would become in contact with groundwater or surface water (such as streams and rivers).

i) Lead-contaminated soil managed pursuant to this variance shall be buried and covered only in locations that are protected from erosion that may result from storm water run-on and run-off.

j) The lead-contaminated soil shall be buried and covered in a manner that will prevent accidental or deliberate breach of the asphalt, concrete, and/or cover soil.

k) The presence of lead-contaminated soil shall be incorporated into the projects' as-built drawings. The as-built drawings shall be annotated with the location, representative analytical data, and volume of lead-contaminated soil. The as-built drawings shall also state the depth of the cover. These as-built drawings shall be retained by Caltrans.

l) Caltrans shall ensure that no other hazardous wastes, other than the lead-contaminated hazardous waste soil, are placed in the burial areas.

m) Lead-contaminated soil shall not be buried within ten (10) feet of culverts or locations subject to frequent worker exposure.

n) Excavated lead-contaminated soil not placed into the designated area (fill area, roadbed area) by the end of the working day shall be stockpiled and covered with sheets of polyethylene or at least one foot of non-hazardous soil. The lead-contaminated soil, while stockpiled or under transport, shall be protected from contacting surface water and from being dislodged or transported by wind or storm water. The stockpile covers shall be inspected at least once a week and within 24 hours after rainstorms. If the lead-contaminated soil is stockpiled for more than 4 days from the time of excavation, Caltrans shall restrict public access to the stockpile by using barriers that meet the safety requirements of the construction zone. The lead-contaminated soil shall be stockpiled for no more than 90 days from the time the soil is first excavated. If the contaminated soil is stockpiled beyond the 90 day limit Caltrans shall:

1. notify DTSC in writing of the 90 day exceedance and expected date of removal;
2. perform weekly inspections of the stockpiled material to ensure that there is adequate protection from run-on, runoff, public access, and wind dispersion; and
3. notify DTSC on weekly basis of the stockpile status until the stockpile is removed.

The lead-contaminated soil shall be stockpiled for no more than 180 days from the time the soil is first excavated.

o) Caltrans shall ensure that all stockpiling of lead-contaminated soil remains within the project area of the specified corridor. Stockpiling of lead-contaminated soil within the specified corridor, but outside the project area, is prohibited.

p) Caltrans shall conduct confirmatory sampling of any stockpile area in areas not known or expected to contain lead-contaminated soil after removal of the lead-contaminated soil to ensure that contamination has not been left behind or has not migrated from the stockpiled material to the surrounding soils.

q) Caltrans shall stockpile lead-contaminated soil only on high ground (i.e. no sump areas or low points) so that stockpiled soil will not come in contact with surface

water run-on or run-off.

r) Caltrans shall not stockpile lead-contaminated soil in environmentally and ecologically sensitive areas.

s) Caltrans shall ensure that storm/rain run-off that has come into contact with stockpiled lead-contaminated soil will not flow to storm drains, inlets, or waters of the State.

t) Caltrans may dispose of the lead-contaminated soil only within the operating right-of-way of an existing highway, as defined in Streets and Highways Code, section 23. Caltrans may move lead-contaminated soil from one Caltrans project to another Caltrans project only if the lead-contaminated soil remains within the same designated corridor.

Caltrans shall record any movement of lead-contaminated soil by using a bill of lading. The bill of lading must contain: 1) the US DOT description including shipping name, hazard class and ID number; 2) handling codes; 3) quantity of material; 4) volume of material; 5) date of shipment; 6) origin and destination of shipment; and 7) any specific handling instructions. The bill of lading shall be referenced in and kept on file with the project's as-built drawings. The lead-contaminated soil must be kept covered during transportation.

u) For each specific corridor where this variance is to be implemented, all of the following information shall be submitted in writing to DTSC at least five (5) days before construction of any project begins:

1. plan drawing designating the boundaries of the corridor where lead-contaminated soils will be excavated, stockpiled, buried and covered;

2. a list of the Caltrans projects that the corridor encompasses;

3. a list of Caltrans contractors that will be conducting any phase of work on any project affected by this variance;

4. duration of corridor construction;

5. location where sampling and analytical data used to make lead concentration level determinations are kept (e.g. a particular Caltrans project file);

6. name and phone number (including area code) of project resident engineer and project manager;

7. location where Caltrans and contractor health and safety plan and records are kept;

8. location of project special provisions (including page or section number) for soil excavation, transportation, stockpile, burial and placement of cover material;

9. location of project drawings (including drawing page number) for soil excavation, burial and placement of cover in plan and cross section (for example, "The project plans are located at the resident engineer's office located at 5th and Main Streets, City of Fresno, See pages xxxxx of contract xxxx");

10. updated information if a Caltrans project within the corridor is added, changed or deleted; and

11. type of environmental document prepared for each project, date of adoption, document title, Clearing House number and where the document is available for review. A copy of the Caltrans Categorical Exemption, Categorical Exclusion Form, or if filed, the Notice of Exemption for any project shall be submitted to the DTSC Headquarters Project Manager.

v) Changes in location of lead-contaminated soil placement, quantities or protection measures (field changes) shall be noted in the resident engineer's project log within five (5) days of the field change.

w) Caltrans shall ensure that field changes are in compliance with the requirements of this variance.

x) Operational procedures described in the California Environmental Quality Act (CEQA) Special Initial Study shall be followed by Caltrans for activities conducted under this variance.

y) Caltrans shall implement appropriate health and safety procedures to protect its employees and the public, and to prevent or minimize exposure to potentially hazardous wastes. A project-specific health and safety plan must be prepared and implemented. The monitoring and exposure standards shall be based on construction standards for exposure to lead in California Code of Regulations, title 8, section 1532.1.

z) Caltrans shall provide a district Coordinator for this variance. This Coordinator will be the primary point of contact for information flowing to, or received from, DTSC regarding any matter or submission under this variance. Caltrans shall promptly notify DTSC of the name of Coordinator and any change in the Coordinator.

aa) Caltrans shall conduct regular inspections, consistent with Caltrans' Maintenance Division's current Pavement Inspection and Slope Inspection programs, of the locations where lead-contaminated soil has been buried and/or covered pursuant to this variance. If site inspection reveals deterioration of cover so that conditions in the variance are not met, Caltrans shall repair or replace the cover.

bb) Caltrans shall develop and implement a record keeping mechanisms to record and retain permanent records of all locations where lead-contaminated soil has been buried per this variance. The records shall be made available to DTSC.

cc) If areas subject to the terms of this variance are sold, relinquished or abandoned (including roadways), all future property owners shall be notified in writing in advance by Caltrans of the requirements of this variance, and Caltrans shall provide the owner with a copy of the variance. A copy of such a notice shall be sent to DTSC and contain the corridor location and project. Caltrans shall also disclose to DTSC and the new owner the location of areas where lead-contaminated soil has been buried. Future property owners shall be subject to the same requirements as Caltrans.

dd) For the purposes of informing the public about instances where the variance is implemented, Caltrans shall:

1. maintain current fact sheets at all Caltrans resident engineer offices and the Caltrans District office. Caltrans shall make the fact sheets available to anyone expressing an interest in variance-related work.

2. maintain a binder(s) containing copies of all reports submitted to DTSC at the District office. Caltrans shall ensure that the binders are readily accessible to the public.

3. carry out the following actions when it identifies additional projects:

(A) notify the public via a display advertisement in a newspaper of general circulation in that area.

(B) update and distribute the fact sheet to the mailing list and repository locations.

ee) Lead-contaminated soil may be buried only in areas where access is limited or where lead-contaminated soil is covered and contained by a pavement structure.

ff) Dust containing lead-contaminated soil must be controlled. Water or dust palliative may be applied to control dust. If visible dust migration occurs, all excavation, stockpiling and truck loading and burying must be stopped. The granting of this variance confers no relief on Caltrans from compliance with the laws, regulations and requirements enforced by any local air district or the California Air Resources Board.

gg) Sampling and analysis is required to show the lead-contaminated soil meets the variance criteria. All sampling and analysis must be conducted in accordance with the appropriate methods specified in U.S. EPA SW-846.

hh) DTSC retains the right to require Caltrans or any future owner to remove, and properly dispose of, lead-contaminated soil in the event DTSC determines it is necessary for protection of public health, safety or the environment.

ii) DTSC finds that some projects involving lead-contaminated soil are joint projects between Caltrans and other government entities. In these joint projects, Caltrans may not be the lead agency implementing the project although Caltrans is still involved if the project occurs on its right-of-way.

Caltrans may invoke this variance for joint projects where Caltrans and local government entity are involved provided that 1) the project is within the Caltrans Right-of-Way; 2) Caltrans reviews/ oversees all phases of the project including design, contracting, environmental assessment, construction, operation, and maintenance; and 3) Caltrans oversees the project to verify all variance conditions are complied with. Caltrans will be fully responsible for the variance notification and implementation in these joint projects.

jj) All correspondence shall be directed to the following office:

Hazardous Waste Permitting
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826

Attn: Caltrans Lead Variance Notification Unit

10. DISCLAIMER.

a) The issuance of this variance does not relieve Caltrans of the responsibility for compliance with Health and Safety Code, chapter 6.5, or the regulations adopted thereunder, and any other laws and regulations other than those specifically identified in Section 8 of this variance. Caltrans is subject to all terms and conditions herein. The granting of this variance confers no relief from compliance with any federal, State or local requirements other than those specifically provided herein.

b) The issuance of this variance does not release Caltrans from any liability associated with the handling of hazardous waste, except as specifically provided herein and subject to all terms and conditions of this variance.

11. VARIANCE MODIFICATION OR REVOCATION. This variance is subject to review at the discretion of DTSC and may be modified or revoked by DTSC upon change of ownership and at any other time pursuant to Health and Safety Code, section 25143.

12. CEQA DETERMINATION. DTSC adopted a Negative Declaration on June 30, 2009.

Approved:

6/30/09
Date

Beverly Rikala
Operating Facilities Team
Department of Toxic Substances Control

APPENDIX B

June 10, 2011

Lauren Vigliotti
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
TEL: (925) 768-9874
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 118199

RE: SR 12 at Madrone Rd, 11301-02

Attention: Lauren Vigliotti

Enclosed are the results for sample(s) received on June 03, 2011 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.

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

CLIENT: Geocon Consultants, Inc.
Project: SR 12 at Madrone Rd, 11301-02
Lab Order: 118199

CASE NARRATIVE

Analytical Comments for Method 6010

Dilution was necessary for samples 118199-002A, 118199-010A, 118199-013A, 118199-015A, 118199-018A, 118199-022A, 118199-027A, 118199-029A and 118199-034A, due to sample matrix.

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are/is outside recovery criteria for sample 118177-001CMS; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

RPD for Duplicate (DUP) is outside criteria for samples 118199-005ADUP, 118199-008ADUP, 118199-037ADUP, 118199-043ADUP and 118206-001ADUP ; however, the Laboratory Control Sample (LCS) validated the analytical batch.

Analytical Comments for Method 8015 (DRO/ORO)

Surrogate recovery biased high for sample 118199-041A, possibly due to matrix interferences.

RPD for Duplicate (DUP) is outside criteria for sample 118138-002ADUP; however, the Laboratory Control Sample (LCS) validated the analytical batch.

Advanced Technology Laboratories

Date: 6/10/2011

ANALYTICAL RESULTS

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02	**Date Received**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	IL

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-001A	B1-0	10	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-003A	B2-0	16	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-004A	B2-1	65	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-006A	B3-1	15	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-007A	B4-0	58	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-008A	B4-1	60	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-009A	B5-0	42	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-011A	B5-2	33	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-012A	B5-5	21	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-014A	B5-9	230	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-016A	B6-1	87	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-017A	B7-0	77	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-019A	B8-0	6.8	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-020A	B8-1	5.1	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-021A	B8-2	ND	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-023A	B8-6.75	5.8	mg/Kg	73431	5.0	1	6/1/2011	6/9/2011
118199-024A	B9-0	ND	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-025A	B9-1	35	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011

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		

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

Advanced Technology Laboratories

Date: 6/10/2011

ANALYTICAL RESULTS

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02	**Date Received**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	IL

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-026A	B9-2	38	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-028A	B9-7	8.0	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-030A	B10-1	60	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-031A	B11-0	5.4	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-033A	B12-0	32	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-035A	B12-2	11	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-036A	B12-5	7.5	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-040A	B13-1	380	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-041A	B14-0	6.2	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011
118199-043A	B15-0	7.9	mg/Kg	73433	5.0	1	6/1/2011	6/9/2011

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		

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404

Advanced Technology Laboratories

Date: 6/10/2011

ANALYTICAL RESULTS

LEAD BY ICP
EPA 6010B

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02	**Date Received**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Water
Analyte:	Lead	**Analyst:**	IL

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-046A	Equip Blank	ND	mg/L	73390	0.25	1	6/1/2011	6/8/2011

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		

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

Advanced Technology Laboratories

Date: 6/10/2011

ANALYTICAL RESULTS

pH
EPA 9045C

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02	**Date Received**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	pH	**Analyst:**	PT

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-004A	B2-1	6.5	pH Units	R133723	0.10	1	6/1/2011	6/8/2011
118199-015A	B6-0	6.0	pH Units	R133723	0.10	1	6/1/2011	6/8/2011
118199-023A	B8-6.75	6.0	pH Units	R133723	0.10	1	6/1/2011	6/8/2011
118199-028A	B9-7	7.0	pH Units	R133723	0.10	1	6/1/2011	6/8/2011
118199-043A	B15-0	6.4	pH Units	R133723	0.10	1	6/1/2011	6/8/2011

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		

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B1-1
Lab Order:	118199	**Collection Date:**	6/1/2011 1:33:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608E	QC Batch: 73402			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	4.0		mg/Kg	2	6/8/2011 02:44 PM
Arsenic	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Barium	94	2.0		mg/Kg	2	6/8/2011 02:44 PM
Beryllium	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Cadmium	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Chromium	13	2.0		mg/Kg	2	6/8/2011 02:44 PM
Cobalt	9.4	2.0		mg/Kg	2	6/8/2011 02:44 PM
Copper	9.3	4.0		mg/Kg	2	6/8/2011 02:44 PM
Lead	37	2.0		mg/Kg	2	6/8/2011 02:44 PM
Molybdenum	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Nickel	8.3	2.0		mg/Kg	2	6/8/2011 02:44 PM
Selenium	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Silver	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Thallium	ND	2.0		mg/Kg	2	6/8/2011 02:44 PM
Vanadium	34	2.0		mg/Kg	2	6/8/2011 02:44 PM
Zinc	46	2.0		mg/Kg	2	6/8/2011 02:44 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608A	QC Batch: 73395			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 12:38 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

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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B3-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:26:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-005A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608E	QC Batch: 73402			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	4.0		mg/Kg	2	6/8/2011 02:47 PM
Arsenic	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Barium	67	2.0		mg/Kg	2	6/8/2011 02:47 PM
Beryllium	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Cadmium	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Chromium	14	2.0		mg/Kg	2	6/8/2011 02:47 PM
Cobalt	11	2.0		mg/Kg	2	6/8/2011 02:47 PM
Copper	11	4.0		mg/Kg	2	6/8/2011 02:47 PM
Lead	55	2.0		mg/Kg	2	6/8/2011 02:47 PM
Molybdenum	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Nickel	16	2.0		mg/Kg	2	6/8/2011 02:47 PM
Selenium	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Silver	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Thallium	ND	2.0		mg/Kg	2	6/8/2011 02:47 PM
Vanadium	33	2.0		mg/Kg	2	6/8/2011 02:47 PM
Zinc	53	2.0		mg/Kg	2	6/8/2011 02:47 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608A	QC Batch: 73395			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.38	0.10		mg/Kg	1	6/8/2011 12:40 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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B4-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:21:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-007A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 07:26 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 07:26 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 07:26 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 07:26 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 07:26 PM
Surr: Decachlorobiphenyl	93.7	31-107		%REC	1	6/8/2011 07:26 PM
Surr: Tetrachloro-m-xylene	86.9	35-108		%REC	1	6/8/2011 07:26 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

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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-0
Lab Order:	118199	**Collection Date:**	6/1/2011 8:54:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-009A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 07:52 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 07:52 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 07:52 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 07:52 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 07:52 PM
Surr: Decachlorobiphenyl	84.0	31-107		%REC	1	6/8/2011 07:52 PM
Surr: Tetrachloro-m-xylene	83.2	35-108		%REC	1	6/8/2011 07:52 PM

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		

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-1
Lab Order:	118199	**Collection Date:**	6/1/2011 9:01:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-010A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	10		mg/Kg	5	6/8/2011 05:08 PM
Arsenic	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Barium	57	5.0		mg/Kg	5	6/8/2011 05:08 PM
Beryllium	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Cadmium	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Chromium	12	5.0		mg/Kg	5	6/8/2011 05:08 PM
Cobalt	9.0	5.0		mg/Kg	5	6/8/2011 05:08 PM
Copper	16	10		mg/Kg	5	6/8/2011 05:08 PM
Lead	100	5.0		mg/Kg	5	6/8/2011 05:08 PM
Molybdenum	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Nickel	9.3	5.0		mg/Kg	5	6/8/2011 05:08 PM
Selenium	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Silver	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Thallium	ND	5.0		mg/Kg	5	6/8/2011 05:08 PM
Vanadium	35	5.0		mg/Kg	5	6/8/2011 05:08 PM
Zinc	49	5.0		mg/Kg	5	6/8/2011 05:08 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608A	QC Batch: 73395			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 12:42 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

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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-7
Lab Order:	118199	**Collection Date:**	6/1/2011 11:40:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-013A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	10		mg/Kg	5	6/8/2011 05:12 PM
Arsenic	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Barium	56	5.0		mg/Kg	5	6/8/2011 05:12 PM
Beryllium	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Cadmium	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Chromium	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Cobalt	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Copper	ND	10		mg/Kg	5	6/8/2011 05:12 PM
Lead	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Molybdenum	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Nickel	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Selenium	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Silver	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Thallium	ND	5.0		mg/Kg	5	6/8/2011 05:12 PM
Vanadium	19	5.0		mg/Kg	5	6/8/2011 05:12 PM
Zinc	10	5.0		mg/Kg	5	6/8/2011 05:12 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608A	QC Batch: 73395			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 12:44 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

Advanced Technology Laboratories
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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-9
Lab Order:	118199	**Collection Date:**	6/1/2011 11:45:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-014A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B(M)**		
RunID: GC16_110607A	QC Batch: 73367			PrepDate: 6/6/2011		Analyst: **CBR**
DRO	ND	1.0		mg/Kg	1	6/7/2011 09:49 AM
ORO	ND	1.0		mg/Kg	1	6/7/2011 09:49 AM
Surr: p-Terphenyl	74.2	30-128		%REC	1	6/7/2011 09:49 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_110606A	QC Batch: E11VS212			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	6/6/2011 09:12 PM
Surr: Bromofluorobenzene (FID)	112	62-153		%REC	1	6/6/2011 09:12 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	6/6/2011 11:22 AM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
2-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
4-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 11:22 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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Lab Order: 118199
Project: SR 12 at Madrone Rd, 11301-02
Lab ID: 118199-014A

Client Sample ID: B5-9
Collection Date: 6/1/2011 11:45:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
		EPA 8260B				
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
4-Isopropyltoluene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Benzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Bromobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Bromodichloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Bromoform	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Bromomethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Carbon tetrachloride	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Chlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Chloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Chloroform	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Chloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Dibromochloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Dibromomethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Ethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Isopropylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
m,p-Xylene	ND	10		µg/Kg	1	6/6/2011 11:22 AM
Methylene chloride	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
n-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
n-Propylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Naphthalene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
o-Xylene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
sec-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Styrene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
tert-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Tetrachloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Toluene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Trichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Vinyl chloride	ND	5.0		µg/Kg	1	6/6/2011 11:22 AM
Surr: 1,2-Dichloroethane-d4	79.8	70-130		%REC	1	6/6/2011 11:22 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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B5-9
Lab Order:	118199	**Collection Date:**	6/1/2011 11:45:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-014A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
Surr: 4-Bromofluorobenzene	90.9	70-130		%REC	1	6/6/2011 11:22 AM
Surr: Dibromofluoromethane	85.9	70-130		%REC	1	6/6/2011 11:22 AM
Surr: Toluene-d8	85.3	70-130		%REC	1	6/6/2011 11:22 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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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B6-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:15:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-015A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 03:19 PM
Arsenic	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Barium	55	1.0		mg/Kg	1	6/8/2011 03:19 PM
Beryllium	ND	5.0		mg/Kg	5	6/8/2011 05:15 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Chromium	13	1.0		mg/Kg	1	6/8/2011 03:19 PM
Cobalt	7.4	1.0		mg/Kg	1	6/8/2011 03:19 PM
Copper	15	2.0		mg/Kg	1	6/8/2011 03:19 PM
Lead	27	1.0		mg/Kg	1	6/8/2011 03:19 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Nickel	11	1.0		mg/Kg	1	6/8/2011 03:19 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 03:19 PM
Vanadium	25	1.0		mg/Kg	1	6/8/2011 03:19 PM
Zinc	35	1.0		mg/Kg	1	6/8/2011 03:19 PM
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 08:06 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 08:06 PM

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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B6-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:15:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-015A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 08:06 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 08:06 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 08:06 PM
Surr: Decachlorobiphenyl	78.9	31-107		%REC	1	6/8/2011 08:06 PM
Surr: Tetrachloro-m-xylene	74.4	35-108		%REC	1	6/8/2011 08:06 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608A	QC Batch: 73395			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.13	0.10		mg/Kg	1	6/8/2011 12:50 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

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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B7-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:11:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-017A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 08:19 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 08:19 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 08:19 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 08:19 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 08:19 PM
Surr: Decachlorobiphenyl	59.9	31-107		%REC	1	6/8/2011 08:19 PM
Surr: Tetrachloro-m-xylene	61.8	35-108		%REC	1	6/8/2011 08:19 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

Advanced Technology Laboratories
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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B7-1
Lab Order:	118199	**Collection Date:**	6/1/2011 1:10:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-018A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 03:22 PM
Arsenic	3.5	1.0		mg/Kg	1	6/8/2011 03:22 PM
Barium	58	1.0		mg/Kg	1	6/8/2011 03:22 PM
Beryllium	ND	5.0		mg/Kg	5	6/8/2011 05:18 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 03:22 PM
Chromium	17	1.0		mg/Kg	1	6/8/2011 03:22 PM
Cobalt	9.5	1.0		mg/Kg	1	6/8/2011 03:22 PM
Copper	25	2.0		mg/Kg	1	6/8/2011 03:22 PM
Lead	36	1.0		mg/Kg	1	6/8/2011 03:22 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 03:22 PM
Nickel	30	1.0		mg/Kg	1	6/8/2011 03:22 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 03:22 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 03:22 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 03:22 PM
Vanadium	23	1.0		mg/Kg	1	6/8/2011 03:22 PM
Zinc	62	1.0		mg/Kg	1	6/8/2011 03:22 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 01:02 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

Advanced Technology Laboratories
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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-5
Lab Order:	118199	**Collection Date:**	6/1/2011 11:17:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-022A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	40		mg/Kg	20	6/8/2011 05:41 PM
Arsenic	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Barium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Beryllium	ND	40		mg/Kg	40	6/9/2011 10:20 AM
Cadmium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Chromium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Cobalt	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Copper	ND	40		mg/Kg	20	6/8/2011 05:41 PM
Lead	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Molybdenum	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Nickel	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Selenium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Silver	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Thallium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Vanadium	ND	20		mg/Kg	20	6/8/2011 05:41 PM
Zinc	26	20		mg/Kg	20	6/8/2011 05:41 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 01:06 PM

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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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-6.75
Lab Order:	118199	**Collection Date:**	6/1/2011 11:14:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-023A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B(M)**		
RunID: GC16_110607A	QC Batch: 73367			PrepDate:	6/6/2011	Analyst: **CBR**
DRO	ND	1.0		mg/Kg	1	6/7/2011 09:58 AM
ORO	ND	1.0		mg/Kg	1	6/7/2011 09:58 AM
Surr: p-Terphenyl	59.5	30-128		%REC	1	6/7/2011 09:58 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_110606A	QC Batch: E11VS212			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	6/6/2011 09:28 PM
Surr: Bromofluorobenzene (FID)	121	62-153		%REC	1	6/6/2011 09:28 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	6/6/2011 11:59 AM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
2-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
4-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 11:59 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		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-6.75
Lab Order:	118199	**Collection Date:**	6/1/2011 11:14:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-023A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
4-Isopropyltoluene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Benzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Bromobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Bromodichloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Bromoform	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Bromomethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Carbon tetrachloride	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Chlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Chloroethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Chloroform	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Chloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Dibromochloromethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Dibromomethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Ethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Isopropylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
m,p-Xylene	ND	10		µg/Kg	1	6/6/2011 11:59 AM
Methylene chloride	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
n-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
n-Propylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Naphthalene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
o-Xylene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
sec-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Styrene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
tert-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Tetrachloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Toluene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Trichloroethene	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Vinyl chloride	ND	5.0		µg/Kg	1	6/6/2011 11:59 AM
Surr: 1,2-Dichloroethane-d4	88.2	70-130		%REC	1	6/6/2011 11:59 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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-6.75
Lab Order:	118199	**Collection Date:**	6/1/2011 11:14:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-023A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	6/6/2011 11:59 AM
Surr: Dibromofluoromethane	88.6	70-130		%REC	1	6/6/2011 11:59 AM
Surr: Toluene-d8	87.5	70-130		%REC	1	6/6/2011 11:59 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		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B9-5
Lab Order:	118199	**Collection Date:**	6/1/2011 12:27:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-027A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	80		mg/Kg	40	6/9/2011 10:23 AM
Arsenic	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Barium	88	40		mg/Kg	40	6/9/2011 10:23 AM
Beryllium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Cadmium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Chromium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Cobalt	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Copper	ND	80		mg/Kg	40	6/9/2011 10:23 AM
Lead	62	40		mg/Kg	40	6/9/2011 10:23 AM
Molybdenum	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Nickel	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Selenium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Silver	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Thallium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Vanadium	ND	40		mg/Kg	40	6/9/2011 10:23 AM
Zinc	71	40		mg/Kg	40	6/9/2011 10:23 AM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.10	0.10		mg/Kg	1	6/8/2011 01:08 PM

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		

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B9-7
Lab Order:	118199	**Collection Date:**	6/1/2011 12:22:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-028A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B(M)**		
RunID: GC16_110607A	QC Batch: 73367			PrepDate:	6/6/2011	Analyst: **CBR**
DRO	2.8	1.0		mg/Kg	1	6/7/2011 10:08 AM
ORO	15	1.0		mg/Kg	1	6/7/2011 10:08 AM
Surr: p-Terphenyl	49.9	30-128		%REC	1	6/7/2011 10:08 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B(M)		
RunID: GC2_110606A	QC Batch: E11VS212			PrepDate:		Analyst: **TP**
GRO	ND	1.0		mg/Kg	1	6/6/2011 09:44 PM
Surr: Bromofluorobenzene (FID)	117	62-153		%REC	1	6/6/2011 09:44 PM
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	6/6/2011 12:18 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM

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		

Advanced Technology Laboratories
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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B9-7
Lab Order:	118199	**Collection Date:**	6/1/2011 12:22:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-028A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
4-Isopropyltoluene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Benzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Bromobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Bromoform	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Bromomethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Chlorobenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Chloroethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Chloroform	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Chloromethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Dibromochloromethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Dibromomethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Ethylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
m,p-Xylene	ND	10		µg/Kg	1	6/6/2011 12:18 PM
Methylene chloride	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Naphthalene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
o-Xylene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Styrene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Toluene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Trichloroethene	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Vinyl chloride	ND	5.0		µg/Kg	1	6/6/2011 12:18 PM
Surr: 1,2-Dichloroethane-d4	82.1	70-130		%REC	1	6/6/2011 12:18 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

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B9-7
Lab Order:	118199	**Collection Date:**	6/1/2011 12:22:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-028A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_110606A	QC Batch: T11VS092			PrepDate:		Analyst: **SLL**
Surr: 4-Bromofluorobenzene	85.0	70-130		%REC	1	6/6/2011 12:18 PM
Surr: Dibromofluoromethane	89.3	70-130		%REC	1	6/6/2011 12:18 PM
Surr: Toluene-d8	90.5	70-130		%REC	1	6/6/2011 12:18 PM

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		

Advanced Technology Laboratories
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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B10-0
Lab Order:	118199	**Collection Date:**	6/1/2011 12:43:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-029A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 03:32 PM
Arsenic	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Barium	57	1.0		mg/Kg	1	6/8/2011 03:32 PM
Beryllium	ND	40		mg/Kg	40	6/9/2011 10:26 AM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Chromium	18	1.0		mg/Kg	1	6/8/2011 03:32 PM
Cobalt	9.7	1.0		mg/Kg	1	6/8/2011 03:32 PM
Copper	15	2.0		mg/Kg	1	6/8/2011 03:32 PM
Lead	7.3	1.0		mg/Kg	1	6/8/2011 03:32 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Nickel	21	1.0		mg/Kg	1	6/8/2011 03:32 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 03:32 PM
Vanadium	31	1.0		mg/Kg	1	6/8/2011 03:32 PM
Zinc	31	1.0		mg/Kg	1	6/8/2011 03:32 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.62	0.10		mg/Kg	1	6/8/2011 01:14 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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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B11-0
Lab Order:	118199	**Collection Date:**	6/1/2011 12:49:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-031A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 08:32 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 08:32 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 08:32 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 08:32 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 08:32 PM
Surr: Decachlorobiphenyl	81.1	31-107		%REC	1	6/8/2011 08:32 PM
Surr: Tetrachloro-m-xylene	84.4	35-108		%REC	1	6/8/2011 08:32 PM

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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B11-1
Lab Order:	118199	**Collection Date:**	6/1/2011 12:48:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-032A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 03:35 PM
Arsenic	2.1	1.0		mg/Kg	1	6/8/2011 03:35 PM
Barium	61	1.0		mg/Kg	1	6/8/2011 03:35 PM
Beryllium	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Chromium	67	1.0		mg/Kg	1	6/8/2011 03:35 PM
Cobalt	10	1.0		mg/Kg	1	6/8/2011 03:35 PM
Copper	20	2.0		mg/Kg	1	6/8/2011 03:35 PM
Lead	440	1.0		mg/Kg	1	6/8/2011 03:35 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Nickel	61	1.0		mg/Kg	1	6/8/2011 03:35 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 03:35 PM
Vanadium	26	1.0		mg/Kg	1	6/8/2011 03:35 PM
Zinc	72	1.0		mg/Kg	1	6/8/2011 03:35 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.43	0.10		mg/Kg	1	6/8/2011 01:16 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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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B12-0
Lab Order:	118199	**Collection Date:**	6/1/2011 10:09:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-033A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 08:46 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 08:46 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 08:46 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 08:46 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 08:46 PM
Surr: Decachlorobiphenyl	40.8	31-107		%REC	1	6/8/2011 08:46 PM
Surr: Tetrachloro-m-xylene	41.8	35-108		%REC	1	6/8/2011 08:46 PM

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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B12-1
Lab Order:	118199	**Collection Date:**	6/1/2011 10:31:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-034A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	40		mg/Kg	20	6/8/2011 05:51 PM
Arsenic	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Barium	110	20		mg/Kg	20	6/8/2011 05:51 PM
Beryllium	ND	40		mg/Kg	40	6/9/2011 10:30 AM
Cadmium	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Chromium	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Cobalt	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Copper	ND	40		mg/Kg	20	6/8/2011 05:51 PM
Lead	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Molybdenum	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Nickel	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Selenium	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Silver	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Thallium	ND	20		mg/Kg	20	6/8/2011 05:51 PM
Vanadium	32	20		mg/Kg	20	6/8/2011 05:51 PM
Zinc	33	20		mg/Kg	20	6/8/2011 05:51 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 01:18 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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B12-7
Lab Order:	118199	**Collection Date:**	6/1/2011 10:42:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-037A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608G	QC Batch: 73403			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 03:42 PM
Arsenic	2.2	1.0		mg/Kg	1	6/8/2011 03:42 PM
Barium	24	1.0		mg/Kg	1	6/8/2011 03:42 PM
Beryllium	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Chromium	9.3	1.0		mg/Kg	1	6/8/2011 03:42 PM
Cobalt	3.7	1.0		mg/Kg	1	6/8/2011 03:42 PM
Copper	2.8	2.0		mg/Kg	1	6/8/2011 03:42 PM
Lead	5.3	1.0		mg/Kg	1	6/8/2011 03:42 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Nickel	2.3	1.0		mg/Kg	1	6/8/2011 03:42 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 03:42 PM
Vanadium	33	1.0		mg/Kg	1	6/8/2011 03:42 PM
Zinc	11	1.0		mg/Kg	1	6/8/2011 03:42 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	ND	0.10		mg/Kg	1	6/8/2011 01:20 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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B13-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:00:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-039A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608I	QC Batch: 73404			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 06:00 PM
Arsenic	1.4	1.0		mg/Kg	1	6/8/2011 06:00 PM
Barium	57	1.0		mg/Kg	1	6/8/2011 06:00 PM
Beryllium	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Chromium	10	1.0		mg/Kg	1	6/8/2011 06:00 PM
Cobalt	6.9	1.0		mg/Kg	1	6/8/2011 06:00 PM
Copper	15	2.0		mg/Kg	1	6/8/2011 06:00 PM
Lead	83	1.0		mg/Kg	1	6/8/2011 06:00 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Nickel	15	1.0		mg/Kg	1	6/8/2011 06:00 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 06:00 PM
Vanadium	22	1.0		mg/Kg	1	6/8/2011 06:00 PM
Zinc	68	1.0		mg/Kg	1	6/8/2011 06:00 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.27	0.10		mg/Kg	1	6/8/2011 01:22 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: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B14-0
Lab Order:	118199	**Collection Date:**	6/1/2011 1:04:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-041A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424			PrepDate:	6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
4,4´-DDE	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
4,4´-DDT	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 07:12 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 07:12 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 07:12 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 07:12 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 07:12 PM
Surr: Decachlorobiphenyl	107	31-107	S	%REC	1	6/8/2011 07:12 PM
Surr: Tetrachloro-m-xylene	97.9	35-108		%REC	1	6/8/2011 07:12 PM

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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Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B14-1
Lab Order:	118199	**Collection Date:**	6/1/2011 1:03:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-042A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608I	QC Batch: 73404			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 06:03 PM
Arsenic	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Barium	44	1.0		mg/Kg	1	6/8/2011 06:03 PM
Beryllium	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Chromium	18	1.0		mg/Kg	1	6/8/2011 06:03 PM
Cobalt	5.4	1.0		mg/Kg	1	6/8/2011 06:03 PM
Copper	12	2.0		mg/Kg	1	6/8/2011 06:03 PM
Lead	940	1.0		mg/Kg	1	6/8/2011 06:03 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Nickel	22	1.0		mg/Kg	1	6/8/2011 06:03 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 06:03 PM
Vanadium	20	1.0		mg/Kg	1	6/8/2011 06:03 PM
Zinc	70	1.0		mg/Kg	1	6/8/2011 06:03 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.51	0.10		mg/Kg	1	6/8/2011 01:24 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

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

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B15-0
Lab Order:	118199	**Collection Date:**	6/1/2011 12:53:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-043A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES BY GC/ECD						
	EPA 3550B			**EPA 8081A**		
RunID: GC9_110608C	QC Batch: 73424				PrepDate: 6/8/2011	Analyst: **HL**
4,4´-DDD	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
4,4´-DDE	12	2.0		µg/Kg	1	6/8/2011 08:59 PM
4,4´-DDT	7.8	2.0		µg/Kg	1	6/8/2011 08:59 PM
Aldrin	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
alpha-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
alpha-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
beta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Chlordane	ND	8.5		µg/Kg	1	6/8/2011 08:59 PM
delta-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Dieldrin	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
Endosulfan I	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Endosulfan II	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
Endosulfan sulfate	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
Endrin	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
Endrin aldehyde	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
Endrin ketone	ND	2.0		µg/Kg	1	6/8/2011 08:59 PM
gamma-BHC	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
gamma-Chlordane	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Heptachlor	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Heptachlor epoxide	ND	1.0		µg/Kg	1	6/8/2011 08:59 PM
Methoxychlor	ND	5.0		µg/Kg	1	6/8/2011 08:59 PM
Toxaphene	ND	50		µg/Kg	1	6/8/2011 08:59 PM
Surr: Decachlorobiphenyl	65.9	31-107		%REC	1	6/8/2011 08:59 PM
Surr: Tetrachloro-m-xylene	72.0	35-108		%REC	1	6/8/2011 08:59 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

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *10-Jun-11*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B15-1
Lab Order:	118199	**Collection Date:**	6/1/2011 12:51:00 PM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	SOIL
Lab ID:	118199-044A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP8_110608I	QC Batch: 73404			PrepDate:	6/7/2011	Analyst: **IL**
Antimony	ND	2.0		mg/Kg	1	6/8/2011 06:07 PM
Arsenic	3.9	1.0		mg/Kg	1	6/8/2011 06:07 PM
Barium	59	1.0		mg/Kg	1	6/8/2011 06:07 PM
Beryllium	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Cadmium	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Chromium	15	1.0		mg/Kg	1	6/8/2011 06:07 PM
Cobalt	7.9	1.0		mg/Kg	1	6/8/2011 06:07 PM
Copper	34	2.0		mg/Kg	1	6/8/2011 06:07 PM
Lead	19	1.0		mg/Kg	1	6/8/2011 06:07 PM
Molybdenum	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Nickel	26	1.0		mg/Kg	1	6/8/2011 06:07 PM
Selenium	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Silver	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Thallium	ND	1.0		mg/Kg	1	6/8/2011 06:07 PM
Vanadium	20	1.0		mg/Kg	1	6/8/2011 06:07 PM
Zinc	53	1.0		mg/Kg	1	6/8/2011 06:07 PM
MERCURY BY COLD VAPOR TECHNIQUE						
				EPA 7471A		
RunID: AA5_110608B	QC Batch: 73396			PrepDate:	6/7/2011	Analyst: **VV**
Mercury	0.22	0.10		mg/Kg	1	6/8/2011 01:26 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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CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Trip Blank
Lab Order:	118199	**Collection Date:**	6/1/2011 7:00:00 AM
Project:	SR 12 at Madrone Rd, 11301-02	**Matrix:**	WATER
Lab ID:	118199-045A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
		EPA 8015B(M)				
RunID: GC19_110607A	QC Batch: M11VW112			PrepDate:		Analyst: **DDL**
GRO	ND	0.050		mg/L	1	6/7/2011 12:49 PM
Surr: Bromofluorobenzene (FID)	91.7	70-130		%REC	1	6/7/2011 12:49 PM

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		

Advanced Technology Laboratories
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Advanced Technology Laboratories

Date: *10-Jun-11*

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **MB-73402**	SampType: **MBLK**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **PBS**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183413**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.462	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	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.652	1.0									

Sample ID: **LCS-73402**	SampType: **LCS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **LCSS**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183414**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.781	2.0	50.00	0.4624	94.6	80	120				
Arsenic	46.372	1.0	50.00	0	92.7	80	120				
Barium	49.945	1.0	50.00	0	99.9	80	120				
Beryllium	49.816	1.0	50.00	0	99.6	80	120				
Cadmium	47.356	1.0	50.00	0	94.7	80	120				
Chromium	44.965	1.0	50.00	0	89.9	80	120				
Cobalt	48.619	1.0	50.00	0	97.2	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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **LCS-73402**	SampType: **LCS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **LCSS**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183414**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	50.738	2.0	50.00	0	101	80	120				
Lead	48.488	1.0	50.00	0	97.0	80	120				
Molybdenum	50.709	1.0	50.00	0	101	80	120				
Nickel	47.568	1.0	50.00	0	95.1	80	120				
Selenium	43.930	1.0	50.00	0	87.9	80	120				
Silver	46.146	1.0	50.00	0	92.3	80	120				
Thallium	46.396	1.0	50.00	0	92.8	80	120				
Vanadium	49.117	1.0	50.00	0	98.2	80	120				
Zinc	48.757	1.0	50.00	0.6522	96.2	80	120				

Sample ID: **118199-005A-DUP**	SampType: **DUP**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **B3-0**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183426**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.373	4.0						0.4924	0	20	
Arsenic	ND	2.0						0	0	20	
Barium	70.428	2.0						66.58	5.62	20	
Beryllium	ND	2.0						0	0	20	
Cadmium	0.544	2.0						0.5336	0	20	
Chromium	17.538	2.0						14.41	19.6	20	
Cobalt	9.245	2.0						11.13	18.5	20	
Copper	13.526	4.0						10.71	23.3	20	R
Lead	72.986	2.0						55.25	27.7	20	R
Molybdenum	ND	2.0						0	0	20	
Nickel	16.525	2.0						16.25	1.67	20	
Selenium	ND	2.0						0	0	20	
Silver	ND	2.0						0	0	20	
Thallium	ND	2.0						0	0	20	
Vanadium	35.541	2.0						33.08	7.17	20	
Zinc	55.244	2.0						52.92	4.29	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4045

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **118199-005A-MS**	SampType: **MS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **B3-0**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183427**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	84.313	4.0	125.0	0.4924	67.1	32	105				
Arsenic	91.592	2.0	125.0	0	73.3	49	106				
Barium	167.853	2.0	125.0	66.58	81.0	31	133				
Beryllium	98.483	2.0	125.0	0	78.8	56	106				
Cadmium	96.177	2.0	125.0	0.5336	76.5	51	103				
Chromium	129.154	2.0	125.0	14.41	91.8	45	114				
Cobalt	110.457	2.0	125.0	11.13	79.5	52	106				
Copper	118.528	4.0	125.0	10.71	86.3	54	125				
Lead	164.262	2.0	125.0	55.25	87.2	34	126				
Molybdenum	98.336	2.0	125.0	0	78.7	54	106				
Nickel	118.295	2.0	125.0	16.25	81.6	45	111				
Selenium	87.124	2.0	125.0	0	69.7	47	104				
Silver	93.505	2.0	125.0	0	74.8	56	112				
Thallium	86.204	2.0	125.0	0	69.0	46	101				
Vanadium	136.267	2.0	125.0	33.08	82.5	54	114				
Zinc	154.113	2.0	125.0	52.92	81.0	28	125				

Sample ID: **118199-005A-MSD**	SampType: **MSD**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **B3-0**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	90.162	4.0	125.0	0.4924	71.7	32	105	84.31	6.71	20	
Arsenic	98.989	2.0	125.0	0	79.2	49	106	91.59	7.76	20	
Barium	169.313	2.0	125.0	66.58	82.2	31	133	167.9	0.866	20	
Beryllium	106.805	2.0	125.0	0	85.4	56	106	98.48	8.11	20	
Cadmium	103.079	2.0	125.0	0.5336	82.0	51	103	96.18	6.93	20	
Chromium	112.852	2.0	125.0	14.41	78.8	45	114	129.2	13.5	20	
Cobalt	116.503	2.0	125.0	11.13	84.3	52	106	110.5	5.33	20	
Copper	125.841	4.0	125.0	10.71	92.1	54	125	118.5	5.98	20	
Lead	177.733	2.0	125.0	55.25	98.0	34	126	164.3	7.88	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **118199-005A-MSD**	SampType: **MSD**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133734**
Client ID: **B3-0**	Batch ID: **73402**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	104.825	2.0	125.0	0	83.9	54	106	98.34	6.39	20	
Nickel	123.131	2.0	125.0	16.25	85.5	45	111	118.3	4.01	20	
Selenium	92.657	2.0	125.0	0	74.1	47	104	87.12	6.15	20	
Silver	100.256	2.0	125.0	0	80.2	56	112	93.50	6.97	20	
Thallium	93.713	2.0	125.0	0	75.0	46	101	86.20	8.35	20	
Vanadium	146.761	2.0	125.0	33.08	90.9	54	114	136.3	7.42	20	
Zinc	162.804	2.0	125.0	52.92	87.9	28	125	154.1	5.48	20	

Qualifiers:

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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **MB-73403** SampType: **MBLK** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **6/7/2011** RunNo: **133754**
Client ID: **PBS** Batch ID: **73403** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **6/8/2011** SeqNo: **2183548**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.460	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	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.228	1.0									

Sample ID: **LCS-73403** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **6/7/2011** RunNo: **133754**
Client ID: **LCSS** Batch ID: **73403** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **6/8/2011** SeqNo: **2183549**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.397	2.0	50.00	0.4599	95.9	80	120				
Arsenic	46.651	1.0	50.00	0	93.3	80	120				
Barium	50.863	1.0	50.00	0	102	80	120				
Beryllium	50.041	1.0	50.00	0	100	80	120				
Cadmium	48.024	1.0	50.00	0	96.0	80	120				
Chromium	45.611	1.0	50.00	0	91.2	80	120				
Cobalt	49.449	1.0	50.00	0	98.9	80	120				
Copper	51.328	2.0	50.00	0	103	80	120				
Lead	48.384	1.0	50.00	0	96.8	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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: LCS-73403	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133754
Client ID: LCSS	Batch ID: 73403	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183549

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	50.992	1.0	50.00	0	102	80	120				
Nickel	48.331	1.0	50.00	0	96.7	80	120				
Selenium	43.931	1.0	50.00	0	87.9	80	120				
Silver	47.228	1.0	50.00	0	94.5	80	120				
Thallium	47.020	1.0	50.00	0	94.0	80	120				
Vanadium	50.135	1.0	50.00	0	100	80	120				
Zinc	49.308	1.0	50.00	0.2280	98.2	80	120				

Sample ID: 118199-037A-DUP	SampType: DUP	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133754
Client ID: B12-7	Batch ID: 73403	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183555

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.277	2.0						0	0	20	
Arsenic	0.964	1.0						2.237	0	20	
Barium	24.704	1.0						23.66	4.33	20	
Beryllium	0.105	1.0						0	0	20	
Cadmium	0.285	1.0						0.3460	0	20	
Chromium	9.113	1.0						9.255	1.55	20	
Cobalt	2.874	1.0						3.679	24.6	20	R
Copper	3.036	2.0						2.783	8.70	20	
Lead	4.876	1.0						5.300	8.34	20	
Molybdenum	ND	1.0						0	0	20	
Nickel	2.158	1.0						2.314	6.98	20	
Selenium	ND	1.0						0	0	20	
Silver	ND	1.0						0	0	20	
Thallium	ND	1.0						0	0	20	
Vanadium	22.060	1.0						32.99	39.7	20	R
Zinc	11.092	1.0						10.88	1.91	20	

Qualifiers:

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

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404(

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **118199-037A-MS**	SampType: **MS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133754**
Client ID: **B12-7**	Batch ID: **73403**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183556**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	88.595	2.0	125.0	0	70.9	32	105				
Arsenic	95.159	1.0	125.0	2.237	74.3	49	106				
Barium	130.631	1.0	125.0	23.66	85.6	31	133				
Beryllium	105.370	1.0	125.0	0	84.3	56	106				
Cadmium	100.863	1.0	125.0	0.3460	80.4	51	103				
Chromium	105.539	1.0	125.0	9.255	77.0	45	114				
Cobalt	108.231	1.0	125.0	3.679	83.6	52	106				
Copper	114.241	2.0	125.0	2.783	89.2	54	125				
Lead	104.404	1.0	125.0	5.300	79.3	34	126				
Molybdenum	98.178	1.0	125.0	0	78.5	54	106				
Nickel	104.650	1.0	125.0	2.314	81.9	45	111				
Selenium	88.553	1.0	125.0	0	70.8	47	104				
Silver	100.160	1.0	125.0	0	80.1	56	112				
Thallium	92.388	1.0	125.0	0	73.9	46	101				
Vanadium	134.167	1.0	125.0	32.99	80.9	54	114				
Zinc	115.829	1.0	125.0	10.88	84.0	28	125				

Sample ID: **118199-037A-MSD**	SampType: **MSD**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133754**
Client ID: **B12-7**	Batch ID: **73403**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183557**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	95.453	2.0	125.0	0	76.4	32	105	88.60	7.45	20	
Arsenic	104.462	1.0	125.0	2.237	81.8	49	106	95.16	9.32	20	
Barium	139.031	1.0	125.0	23.66	92.3	31	133	130.6	6.23	20	
Beryllium	110.572	1.0	125.0	0	88.5	56	106	105.4	4.82	20	
Cadmium	104.926	1.0	125.0	0.3460	83.7	51	103	100.9	3.95	20	
Chromium	112.664	1.0	125.0	9.255	82.7	45	114	105.5	6.53	20	
Cobalt	111.186	1.0	125.0	3.679	86.0	52	106	108.2	2.69	20	
Copper	119.070	2.0	125.0	2.783	93.0	54	125	114.2	4.14	20	
Lead	109.917	1.0	125.0	5.300	83.7	34	126	104.4	5.14	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **118199-037A-MSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **6/7/2011** RunNo: **133754**
Client ID: **B12-7** Batch ID: **73403** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **6/8/2011** SeqNo: **2183557**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	104.170	1.0	125.0	0	83.3	54	106	98.18	5.92	20	
Nickel	106.967	1.0	125.0	2.314	83.7	45	111	104.6	2.19	20	
Selenium	92.629	1.0	125.0	0	74.1	47	104	88.55	4.50	20	
Silver	104.259	1.0	125.0	0	83.4	56	112	100.2	4.01	20	
Thallium	98.126	1.0	125.0	0	78.5	46	101	92.39	6.02	20	
Vanadium	152.698	1.0	125.0	32.99	95.8	54	114	134.2	12.9	20	
Zinc	117.343	1.0	125.0	10.88	85.2	28	125	115.8	1.30	20	

Qualifiers:

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- ND Not Detected at the Reporting Limit
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **MB-73404**	SampType: **MBLK**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133763**
Client ID: **PBS**	Batch ID: **73404**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183707**

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	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	0.310	1.0									

Sample ID: **LCS-73404**	SampType: **LCS**	TestCode: **6010_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133763**
Client ID: **LCSS**	Batch ID: **73404**	TestNo: **EPA 6010B**	**EPA 3050B**	Analysis Date: **6/8/2011**	SeqNo: **2183708**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	51.406	2.0	50.00	0	103	80	120				
Arsenic	49.517	1.0	50.00	0	99.0	80	120				
Barium	53.973	1.0	50.00	0	108	80	120				
Beryllium	53.371	1.0	50.00	0	107	80	120				
Cadmium	50.911	1.0	50.00	0	102	80	120				
Chromium	47.967	1.0	50.00	0	95.9	80	120				
Cobalt	52.344	1.0	50.00	0	105	80	120				
Copper	54.292	2.0	50.00	0	109	80	120				
Lead	51.236	1.0	50.00	0	102	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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: LCS-73404	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133763
Client ID: LCSS	Batch ID: 73404	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183708

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	54.351	1.0	50.00	0	109	80	120				
Nickel	50.794	1.0	50.00	0	102	80	120				
Selenium	46.793	1.0	50.00	0	93.6	80	120				
Silver	49.456	1.0	50.00	0	98.9	80	120				
Thallium	49.761	1.0	50.00	0	99.5	80	120				
Vanadium	52.762	1.0	50.00	0	106	80	120				
Zinc	50.756	1.0	50.00	0.3102	101	80	120				

Sample ID: 118206-001A-DUP	SampType: DUP	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133763
Client ID: ZZZZZZ	Batch ID: 73404	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183714

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.491	2.0						0.4577	0	20	
Arsenic	2.680	1.0						1.927	32.7	20	R
Barium	106.932	1.0						125.1	15.7	20	
Beryllium	ND	1.0						0	0	20	
Cadmium	0.417	1.0						0.4329	0	20	
Chromium	12.659	1.0						13.19	4.08	20	
Cobalt	7.387	1.0						7.499	1.50	20	
Copper	12.763	2.0						15.91	22.0	20	R
Lead	10.978	1.0						9.713	12.2	20	
Molybdenum	ND	1.0						0	0	20	
Nickel	12.122	1.0						13.95	14.0	20	
Selenium	ND	1.0						0	0	20	
Silver	ND	1.0						0	0	20	
Thallium	ND	1.0						0	0	20	
Vanadium	25.150	1.0						25.20	0.194	20	
Zinc	41.697	1.0						41.00	1.68	20	

Qualifiers:

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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: 118206-001A-MS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133763
Client ID: ZZZZZZ	Batch ID: 73404	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183715

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	90.939	2.0	125.0	0.4577	72.4	32	105				
Arsenic	106.301	1.0	125.0	1.927	83.5	49	106				
Barium	240.315	1.0	125.0	125.1	92.2	31	133				
Beryllium	108.360	1.0	125.0	0	86.7	56	106				
Cadmium	104.149	1.0	125.0	0.4329	83.0	51	103				
Chromium	113.254	1.0	125.0	13.19	80.1	45	114				
Cobalt	116.264	1.0	125.0	7.499	87.0	52	106				
Copper	133.499	2.0	125.0	15.91	94.1	54	125				
Lead	110.809	1.0	125.0	9.713	80.9	34	126				
Molybdenum	106.948	1.0	125.0	0	85.6	54	106				
Nickel	117.171	1.0	125.0	13.95	82.6	45	111				
Selenium	98.514	1.0	125.0	0	78.8	47	104				
Silver	108.731	1.0	125.0	0	87.0	56	112				
Thallium	95.995	1.0	125.0	0	76.8	46	101				
Vanadium	138.066	1.0	125.0	25.20	90.3	54	114				
Zinc	144.275	1.0	125.0	41.00	82.6	28	125				

Sample ID: 118206-001A-MSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133763
Client ID: ZZZZZZ	Batch ID: 73404	TestNo: EPA 6010B	EPA 3050B	Analysis Date: 6/8/2011	SeqNo: 2183716

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	92.494	2.0	125.0	0.4577	73.6	32	105	90.94	1.70	20	
Arsenic	105.526	1.0	125.0	1.927	82.9	49	106	106.3	0.731	20	
Barium	226.235	1.0	125.0	125.1	80.9	31	133	240.3	6.04	20	
Beryllium	109.680	1.0	125.0	0	87.7	56	106	108.4	1.21	20	
Cadmium	102.966	1.0	125.0	0.4329	82.0	51	103	104.1	1.14	20	
Chromium	112.095	1.0	125.0	13.19	79.1	45	114	113.3	1.03	20	
Cobalt	113.132	1.0	125.0	7.499	84.5	52	106	116.3	2.73	20	
Copper	131.741	2.0	125.0	15.91	92.7	54	125	133.5	1.33	20	
Lead	110.386	1.0	125.0	9.713	80.5	34	126	110.8	0.383	20	

Qualifiers:

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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **118206-001A-MSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **6/7/2011** RunNo: **133763**
Client ID: **ZZZZZZ** Batch ID: **73404** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **6/8/2011** SeqNo: **2183716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	106.118	1.0	125.0	0	84.9	54	106	106.9	0.779	20	
Nickel	114.244	1.0	125.0	13.95	80.2	45	111	117.2	2.53	20	
Selenium	97.167	1.0	125.0	0	77.7	47	104	98.51	1.38	20	
Silver	108.500	1.0	125.0	0	86.8	56	112	108.7	0.213	20	
Thallium	95.318	1.0	125.0	0	76.3	46	101	95.99	0.707	20	
Vanadium	136.373	1.0	125.0	25.20	88.9	54	114	138.1	1.23	20	
Zinc	143.549	1.0	125.0	41.00	82.0	28	125	144.3	0.505	20	

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
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ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: MB-73431A	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133777
Client ID: PBS	Batch ID: 73431	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184029

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.169	5.0									

Sample ID: LCS-73431	SampType: LCS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133777
Client ID: LCSS	Batch ID: 73431	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184030

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	260.140	5.0	250.0	0.1686	104	80	120				

Sample ID: 118199-008A-DUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133777
Client ID: B4-1	Batch ID: 73431	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184041

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	9.128	5.0						60.48	148	20	R

Sample ID: MB-73431B	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133777
Client ID: PBS	Batch ID: 73431	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184043

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Sample ID: 118199-023A-DUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133777
Client ID: B8-6.75	Batch ID: 73431	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184054

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.672	5.0						5.767	1.66	20	

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **118199-023A-MS**	SampType: **MS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **6/8/2011**	RunNo: **133777**
Client ID: **B8-6.75**	Batch ID: **73431**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **6/9/2011**	SeqNo: **2184055**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	214.228	5.0	250.0	5.767	83.4	34	126				

Sample ID: **118199-023A-MSD**	SampType: **MSD**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **6/8/2011**	RunNo: **133777**
Client ID: **B8-6.75**	Batch ID: **73431**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **6/9/2011**	SeqNo: **2184056**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	208.959	5.0	250.0	5.767	81.3	34	126	214.2	2.49	20	

Sample ID: **118199-008A-MS**	SampType: **MS**	TestCode: **6010_SPB**	Units: **mg/Kg**	Prep Date: **6/8/2011**	RunNo: **133777**
Client ID: **B4-1**	Batch ID: **73431**	TestNo: **EPA 6010B**	**EPA 3050M**	Analysis Date: **6/9/2011**	SeqNo: **2184057**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	262.779	5.0	250.0	60.48	80.9	34	126				

Qualifiers:

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- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
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Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: MB-73433A	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: PBS	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184065

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.193	5.0									

Sample ID: LCS-73433	SampType: LCS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: LCSS	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184066

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	256.755	5.0	250.0	0.1935	103	80	120				

Sample ID: 118199-040A-DUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: B13-1	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184077

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	347.507	5.0						380.8	9.15	20	

Sample ID: 118199-040A-MS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: B13-1	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184078

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	598.582	5.0	250.0	380.8	87.1	34	126				

Sample ID: MB-73433B	SampType: MBLK	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: PBS	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184079

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	5.0									

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: 118199-043A-DUP	SampType: DUP	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: B15-0	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184082

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	13.561	5.0						7.925	52.5	20	R

Sample ID: 118199-043A-MS	SampType: MS	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: B15-0	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184083

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	205.830	5.0	250.0	7.925	79.2	34	126				

Sample ID: 118199-043A-MSD	SampType: MSD	TestCode: 6010_SPB	Units: mg/Kg	Prep Date: 6/8/2011	RunNo: 133779
Client ID: B15-0	Batch ID: 73433	TestNo: EPA 6010B	EPA 3050M	Analysis Date: 6/9/2011	SeqNo: 2184084

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	192.239	5.0	250.0	7.925	73.7	34	126	205.8	6.83	20	

Qualifiers:

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ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_WPB

Sample ID: MB-73390	SampType: MBLK	TestCode: 6010_WPB	Units: mg/L	Prep Date: 6/7/2011	RunNo: 133722
Client ID: PBW	Batch ID: 73390	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 6/8/2011	SeqNo: 2183015

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: LCS-73390	SampType: LCS	TestCode: 6010_WPB	Units: mg/L	Prep Date: 6/7/2011	RunNo: 133722
Client ID: LCSW	Batch ID: 73390	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 6/8/2011	SeqNo: 2183016

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.026	0.25	1.000	0	103	85	115				

Sample ID: 118177-001C-MS	SampType: MS	TestCode: 6010_WPB	Units: mg/L	Prep Date: 6/7/2011	RunNo: 133722
Client ID: ZZZZZZ	Batch ID: 73390	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 6/8/2011	SeqNo: 2183018

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.987	0.25	2.500	0.001610	79.4	80	118				S

Sample ID: 118177-001C-MSD	SampType: MSD	TestCode: 6010_WPB	Units: mg/L	Prep Date: 6/7/2011	RunNo: 133722
Client ID: ZZZZZZ	Batch ID: 73390	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 6/8/2011	SeqNo: 2183019

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.171	0.25	2.500	0.001610	86.8	80	118	1.987	8.87	20	

Sample ID: 118199-046A-DUP	SampType: DUP	TestCode: 6010_WPB	Units: mg/L	Prep Date: 6/7/2011	RunNo: 133722
Client ID: Equip Blank	Batch ID: 73390	TestNo: EPA 6010B	EPA 3010A	Analysis Date: 6/8/2011	SeqNo: 2183022

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25						0.0009699	0	20	

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: MB-73395	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133750
Client ID: PBS	Batch ID: 73395	TestNo: EPA 7471A		Analysis Date: 6/8/2011	SeqNo: 2183496

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID: LCS-73395	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133750
Client ID: LCSS	Batch ID: 73395	TestNo: EPA 7471A		Analysis Date: 6/8/2011	SeqNo: 2183497

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.781	0.10	0.8300	0	94.0	80	120				

Sample ID: 118179-006A-MS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133750
Client ID: ZZZZZZ	Batch ID: 73395	TestNo: EPA 7471A		Analysis Date: 6/8/2011	SeqNo: 2183498

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.851	0.10	0.8300	0.06760	94.3	70	130				

Sample ID: 118179-006A-MSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133750
Client ID: ZZZZZZ	Batch ID: 73395	TestNo: EPA 7471A		Analysis Date: 6/8/2011	SeqNo: 2183499

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.837	0.10	0.8300	0.06760	92.7	70	130	0.8506	1.65	20	

Sample ID: 118179-006A-DUP	SampType: DUP	TestCode: 7471_S	Units: mg/Kg	Prep Date: 6/7/2011	RunNo: 133750
Client ID: ZZZZZZ	Batch ID: 73395	TestNo: EPA 7471A		Analysis Date: 6/8/2011	SeqNo: 2183501

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.068	0.10						0.06760	0	20	

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: **MB-73396**	SampType: **MBLK**	TestCode: **7471_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133751**
Client ID: **PBS**	Batch ID: **73396**	TestNo: **EPA 7471A**		Analysis Date: **6/8/2011**	SeqNo: **2183511**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID: **LCS-73396**	SampType: **LCS**	TestCode: **7471_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133751**
Client ID: **LCSS**	Batch ID: **73396**	TestNo: **EPA 7471A**		Analysis Date: **6/8/2011**	SeqNo: **2183512**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.811	0.10	0.8300	0	97.7	80	120				

Sample ID: **118199-018A-MS**	SampType: **MS**	TestCode: **7471_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133751**
Client ID: **B7-1**	Batch ID: **73396**	TestNo: **EPA 7471A**		Analysis Date: **6/8/2011**	SeqNo: **2183513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.889	0.10	0.8300	0.06434	99.3	70	130				

Sample ID: **118199-018A-MSD**	SampType: **MSD**	TestCode: **7471_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133751**
Client ID: **B7-1**	Batch ID: **73396**	TestNo: **EPA 7471A**		Analysis Date: **6/8/2011**	SeqNo: **2183514**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.893	0.10	0.8300	0.06434	99.8	70	130	0.8887	0.429	20	

Sample ID: **118199-018A-DUP**	SampType: **DUP**	TestCode: **7471_S**	Units: **mg/Kg**	Prep Date: **6/7/2011**	RunNo: **133751**
Client ID: **B7-1**	Batch ID: **73396**	TestNo: **EPA 7471A**		Analysis Date: **6/8/2011**	SeqNo: **2183516**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.064	0.10						0.06434	0	20	

Qualifiers:

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Work Order: 118199
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: MB-73367	SampType: MBLK	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 6/6/2011	RunNo: 133661
Client ID: PBS	Batch ID: 73367	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 6/7/2011	SeqNo: 2182135

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	1.998		2.670		74.8	30	128				

Sample ID: LCS-73367	SampType: LCS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 6/6/2011	RunNo: 133661
Client ID: LCSS	Batch ID: 73367	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 6/7/2011	SeqNo: 2182136

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	19.513	1.0	33.00	0	59.1	35	118				
Surr: p-Terphenyl	2.708		2.670		101	30	128				

Sample ID: 118199-014AMS	SampType: MS	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 6/6/2011	RunNo: 133661
Client ID: B5-9	Batch ID: 73367	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 6/7/2011	SeqNo: 2182137

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	20.431	1.0	33.00	0	61.9	25	129				
Surr: p-Terphenyl	1.844		2.670		69.1	30	128				

Sample ID: 118199-014AMSD	SampType: MSD	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 6/6/2011	RunNo: 133661
Client ID: B5-9	Batch ID: 73367	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 6/7/2011	SeqNo: 2182138

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	17.548	1.0	33.00	0	53.2	25	129	20.43	15.2	20	
Surr: p-Terphenyl	2.346		2.670		87.9	30	128		0	0	

Sample ID: 118138-002ADUP	SampType: DUP	TestCode: 8015_S_DM L	Units: mg/Kg	Prep Date: 6/6/2011	RunNo: 133661
Client ID: ZZZZZZ	Batch ID: 73367	TestNo: EPA 8015B(M	EPA 3550B	Analysis Date: 6/7/2011	SeqNo: 2182144

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **118138-002ADUP**	SampType: **DUP**	TestCode: **8015_S_DM L** Units: **mg/Kg**	Prep Date: **6/6/2011**	RunNo: **133661**
Client ID: **ZZZZZZ**	Batch ID: **73367**	TestNo: **EPA 8015B(M EPA 3550B**	Analysis Date: **6/7/2011**	SeqNo: **2182144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	323.808	12						268.2	18.8	20	
ORO	889.328	12						720.9	20.9	20	R
Surr: p-Terphenyl	0.808		2.670		30.3	30	128		0	0	

Qualifiers:

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: **E110606LC1**	SampType: **LCS**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **LCSS**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181905**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.474	1.0	5.000	0	109	70	130				
Surr: Bromofluorobenzene (FID)	122.054		100.0		122	62	153				

Sample ID: **E110606MB1MS**	SampType: **MS**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **ZZZZZZ**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181906**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.097	1.0	5.000	0	102	49	131				
Surr: Bromofluorobenzene (FID)	119.016		100.0		119	62	153				

Sample ID: **E110606MB1MSD**	SampType: **MSD**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **ZZZZZZ**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181907**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.461	1.0	5.000	0	109	49	131	5.097	6.90	20	
Surr: Bromofluorobenzene (FID)	128.845		100.0		129	62	153		0	0	

Sample ID: **E110606MB1**	SampType: **MBLK**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **PBS**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181908**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	90.240		100.0		90.2	62	153				

Sample ID: **118199-028AMS**	SampType: **MS**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **B9-7**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181912**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.457	1.0	5.000	0	109	49	131				

Qualifiers:

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Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_GAS

Sample ID: **118199-028AMS**	SampType: **MS**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **B9-7**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181912**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	120.983		100.0		121	62	153				

Sample ID: **118199-028AMSD**	SampType: **MSD**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **B9-7**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2181913**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.192	1.0	5.000	0	104	49	131	5.457	4.98	20	
Surr: Bromofluorobenzene (FID)	127.785		100.0		128	62	153		0	0	

Sample ID: **118199-028ADUP**	SampType: **DUP**	TestCode: **8015_S_GAS**	Units: **mg/Kg**	Prep Date:			RunNo: **133645**		
Client ID: **B9-7**	Batch ID: **E11VS212**	TestNo: **EPA 8015B(M**		Analysis Date: **6/6/2011**			SeqNo: **2182930**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0						0	0	20	
Surr: Bromofluorobenzene (FID)	117.207		100.0		117	62	153		0	0	

Qualifiers:

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GP LL

Sample ID: M110607LCS2	SampType: LCS	TestCode: 8015_W_GP	Units: mg/L	Prep Date:				RunNo: 133718		
Client ID: LCSW	Batch ID: M11VW112	TestNo: EPA 8015B(M		Analysis Date: 6/7/2011				SeqNo: 2182899		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.026	0.050	1.000	0	103	70	130				
Surr: Bromofluorobenzene (FID)	92.048		100.0		92.0	70	130				

Sample ID: M110607MB1MS	SampType: MS	TestCode: 8015_W_GP	Units: mg/L	Prep Date:				RunNo: 133718		
Client ID: ZZZZZZ	Batch ID: M11VW112	TestNo: EPA 8015B(M		Analysis Date: 6/7/2011				SeqNo: 2182900		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.920	0.050	1.000	0	92.0	70	130				
Surr: Bromofluorobenzene (FID)	91.203		100.0		91.2	70	130				

Sample ID: M110607MB1MSD	SampType: MSD	TestCode: 8015_W_GP	Units: mg/L	Prep Date:				RunNo: 133718		
Client ID: ZZZZZZ	Batch ID: M11VW112	TestNo: EPA 8015B(M		Analysis Date: 6/7/2011				SeqNo: 2182901		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	1.009	0.050	1.000	0	101	70	130	0.9200	9.23	20	
Surr: Bromofluorobenzene (FID)	93.974		100.0		94.0	70	130		0	0	

Sample ID: M110607MB1	SampType: MBLK	TestCode: 8015_W_GP	Units: mg/L	Prep Date:				RunNo: 133718		
Client ID: PBW	Batch ID: M11VW112	TestNo: EPA 8015B(M		Analysis Date: 6/7/2011				SeqNo: 2182902		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.050									
Surr: Bromofluorobenzene (FID)	90.704		100.0		90.7	70	130				

Sample ID: 118199-045ADUP	SampType: DUP	TestCode: 8015_W_GP	Units: mg/L	Prep Date:				RunNo: 133718		
Client ID: Trip Blank	Batch ID: M11VW112	TestNo: EPA 8015B(M		Analysis Date: 6/7/2011				SeqNo: 2182904		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	0.050						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

Advanced Technology Laboratories

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_W_GP LL

Sample ID: **118199-045ADUP**	SampType: **DUP**	TestCode: **8015_W_GP**	Units: **mg/L**	Prep Date:	RunNo: **133718**
Client ID: **Trip Blank**	Batch ID: **M11VW112**	TestNo: **EPA 8015B(M**		Analysis Date: **6/7/2011**	SeqNo: **2182904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	90.857		100.0		90.9	70	130		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: **MB-73424**	SampType: **MBLK**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **PBS**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183645**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDD	ND	2.0									
4,4´-DDE	ND	2.0									
4,4´-DDT	ND	2.0									
Aldrin	ND	1.0									
alpha-BHC	ND	1.0									
alpha-Chlordane	ND	1.0									
beta-BHC	ND	1.0									
Chlordane	ND	8.5									
delta-BHC	ND	1.0									
Dieldrin	ND	2.0									
Endosulfan I	ND	1.0									
Endosulfan II	ND	2.0									
Endosulfan sulfate	ND	2.0									
Endrin	ND	2.0									
Endrin aldehyde	ND	2.0									
Endrin ketone	ND	2.0									
gamma-BHC	ND	1.0									
gamma-Chlordane	ND	1.0									
Heptachlor	ND	1.0									
Heptachlor epoxide	ND	1.0									
Methoxychlor	ND	5.0									
Toxaphene	ND	50									
Surr: Tetrachloro-m-xylene	15.308		16.67		91.8	35	108				
Surr: Decachlorobiphenyl	15.728		16.67		94.3	31	107				

Sample ID: **LCS-73424**	SampType: **LCS**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **LCSS**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aldrin	15.855	1.0	16.67	0	95.1	59	105				

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: **LCS-73424**	SampType: **LCS**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **LCSS**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dieldrin	15.968	2.0	16.67	0	95.8	56	112				
Endrin	19.086	2.0	16.67	0	114	53	116				
gamma-BHC	16.368	1.0	16.67	0	98.2	59	110				
Heptachlor	16.402	1.0	16.67	0	98.4	53	118				
Surr: Tetrachloro-m-xylene	15.384		16.67		92.3	35	108				
Surr: Decachlorobiphenyl	16.039		16.67		96.2	31	107				

Sample ID: **118199-041AMS**	SampType: **MS**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **B14-0**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	10.885	1.0	16.67	0	65.3	38	130				
Aldrin	9.752	0.50	16.67	0	58.5	35	122				
Dieldrin	10.238	1.0	16.67	0	61.4	31	138				
Endrin	12.330	1.0	16.67	0	74.0	39	132				
gamma-BHC	10.159	0.50	16.67	0	60.9	36	126				
Heptachlor	10.423	0.50	16.67	0	62.5	34	131				
Surr: Tetrachloro-m-xylene	8.841		16.67		53.0	35	108				
Surr: Decachlorobiphenyl	10.106		16.67		60.6	31	107				

Sample ID: **118199-041AMSD**	SampType: **MSD**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **B14-0**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183648**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	11.277	1.0	16.67	0	67.6	38	130	10.88	3.54	20	
Aldrin	10.154	0.50	16.67	0	60.9	35	122	9.752	4.03	20	
Dieldrin	10.636	1.0	16.67	0	63.8	31	138	10.24	3.81	20	
Endrin	12.888	1.0	16.67	0	77.3	39	132	12.33	4.43	20	
gamma-BHC	10.609	0.50	16.67	0	63.6	36	126	10.16	4.33	20	
Heptachlor	11.031	0.50	16.67	0	66.2	34	131	10.42	5.66	20	

Qualifiers:

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- DO Surrogate Diluted Out
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- R RPD outside accepted recovery limits

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: **118199-041AMSD**	SampType: **MSD**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **B14-0**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183648**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tetrachloro-m-xylene	9.294		16.67		55.8	35	108		0	0	
Surr: Decachlorobiphenyl	10.438		16.67		62.6	31	107		0	0	

Sample ID: **118199-007ADUP**	SampType: **DUP**	TestCode: **8081_S**	Units: **µg/Kg**	Prep Date: **6/8/2011**	RunNo: **133760**
Client ID: **B4-0**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**	Analysis Date: **6/8/2011**	SeqNo: **2183651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4'-DDD	ND	2.0						0	0	20	
4,4'-DDE	ND	2.0						0	0	20	
4,4'-DDT	ND	2.0						0	0	20	
Aldrin	ND	1.0						0	0	20	
alpha-BHC	ND	1.0						0	0	20	
alpha-Chlordane	ND	1.0						0	0	20	
beta-BHC	ND	1.0						0	0	20	
Chlordane	ND	8.5						0	0	20	
delta-BHC	ND	1.0						0	0	20	
Dieldrin	ND	2.0						0	0	20	
Endosulfan I	ND	1.0						0	0	20	
Endosulfan II	ND	2.0						0	0	20	
Endosulfan sulfate	ND	2.0						0	0	20	
Endrin	ND	2.0						0	0	20	
Endrin aldehyde	ND	2.0						0	0	20	
Endrin ketone	ND	2.0						0	0	20	
gamma-BHC	ND	1.0						0	0	20	
gamma-Chlordane	ND	1.0						0	0	20	
Heptachlor	ND	1.0						0	0	20	
Heptachlor epoxide	ND	1.0						0	0	20	
Methoxychlor	ND	5.0						0	0	20	
Toxaphene	ND	50						0	0	20	
Surr: Tetrachloro-m-xylene	14.031		16.67		84.2	35	108		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8081_S

Sample ID: **118199-007ADUP**	SampType: **DUP**	TestCode: **8081_S**	Units: **µg/Kg**		Prep Date: **6/8/2011**			RunNo: **133760**			
Client ID: **B4-0**	Batch ID: **73424**	TestNo: **EPA 8081A**	**EPA 3550B**		Analysis Date: **6/8/2011**			SeqNo: **2183651**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Decachlorobiphenyl	14.592		16.67		87.5	31	107		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **T110606LCS1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **LCSS** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2181940**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	45.230	5.0	50.00	0	90.5	70	130				
Benzene	96.950	5.0	100.0	0	97.0	70	130				
Chlorobenzene	52.180	5.0	50.00	0	104	82	130				
MTBE	46.650	5.0	50.00	0	93.3	70	130				
Toluene	100.290	5.0	100.0	0	100	70	130				
Trichloroethene	52.340	5.0	50.00	0	105	77	130				
Surr: 1,2-Dichloroethane-d4	38.700		50.00		77.4	70	130				
Surr: 4-Bromofluorobenzene	45.660		50.00		91.3	70	130				
Surr: Dibromofluoromethane	43.220		50.00		86.4	70	130				
Surr: Toluene-d8	44.660		50.00		89.3	70	130				

Sample ID: **T110606MB1MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **ZZZZZZ** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2181941**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	46.940	5.0	50.00	0	93.9	70	130				
Benzene	98.050	5.0	100.0	0	98.0	70	130				
Chlorobenzene	54.700	5.0	50.00	0	109	70	130				
Toluene	100.580	5.0	100.0	0	101	70	130				
Trichloroethene	52.910	5.0	50.00	0	106	70	130				
Surr: 1,2-Dichloroethane-d4	40.520		50.00		81.0	70	130				
Surr: 4-Bromofluorobenzene	44.570		50.00		89.1	70	130				
Surr: Dibromofluoromethane	41.880		50.00		83.8	70	130				
Surr: Toluene-d8	44.970		50.00		89.9	70	130				

Sample ID: **T110606MB1MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **ZZZZZZ** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2181942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	41.530	5.0	50.00	0	83.1	70	130	46.94	12.2	20	

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

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Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **T110606MB1MSD**	SampType: **MSD**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date:	RunNo: **133646**
Client ID: **ZZZZZZ**	Batch ID: **T11VS092**	TestNo: **EPA 8260B**		Analysis Date: **6/6/2011**	SeqNo: **2181942**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	93.760	5.0	100.0	0	93.8	70	130	98.05	4.47	20	
Chlorobenzene	51.760	5.0	50.00	0	104	70	130	54.70	5.52	20	
Toluene	94.990	5.0	100.0	0	95.0	70	130	100.6	5.72	20	
Trichloroethene	50.430	5.0	50.00	0	101	70	130	52.91	4.80	20	
Surr: 1,2-Dichloroethane-d4	38.880		50.00		77.8	70	130		0	0	
Surr: 4-Bromofluorobenzene	44.240		50.00		88.5	70	130		0	0	
Surr: Dibromofluoromethane	40.910		50.00		81.8	70	130		0	0	
Surr: Toluene-d8	44.900		50.00		89.8	70	130		0	0	

Sample ID: **T110606MB1**	SampType: **MBLK**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date:	RunNo: **133646**
Client ID: **PBS**	Batch ID: **T11VS092**	TestNo: **EPA 8260B**		Analysis Date: **6/6/2011**	SeqNo: **2181943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **T110606MB1** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **PBS** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2181943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									
Methylene chloride	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									

Qualifiers:

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- DO Surrogate Diluted Out
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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **T110606MB1**	SampType: **MBLK**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date:	RunNo: **133646**
Client ID: **PBS**	Batch ID: **T11VS092**	TestNo: **EPA 8260B**		Analysis Date: **6/6/2011**	SeqNo: **2181943**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	40.300		50.00		80.6	70	130				
Surr: 4-Bromofluorobenzene	46.360		50.00		92.7	70	130				
Surr: Dibromofluoromethane	41.690		50.00		83.4	70	130				
Surr: Toluene-d8	48.000		50.00		96.0	70	130				

Sample ID: **118199-014ADUP**	SampType: **DUP**	TestCode: **8260_S**	Units: **µg/Kg**	Prep Date:	RunNo: **133646**
Client ID: **B5-9**	Batch ID: **T11VS092**	TestNo: **EPA 8260B**		Analysis Date: **6/6/2011**	SeqNo: **2183681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0						0	0	20	
1,1,1-Trichloroethane	ND	5.0						0	0	20	
1,1,2,2-Tetrachloroethane	ND	5.0						0	0	20	
1,1,2-Trichloroethane	ND	5.0						0	0	20	
1,1-Dichloroethane	ND	5.0						0	0	20	
1,1-Dichloroethene	ND	5.0						0	0	20	
1,1-Dichloropropene	ND	5.0						0	0	20	
1,2,3-Trichlorobenzene	ND	5.0						0	0	20	
1,2,3-Trichloropropane	ND	5.0						0	0	20	
1,2,4-Trichlorobenzene	ND	5.0						0	0	20	
1,2,4-Trimethylbenzene	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **118199-014ADUP** SampType: **DUP** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **B5-9** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2183681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	10						0	0	20	
1,2-Dibromoethane	ND	5.0						0	0	20	
1,2-Dichlorobenzene	ND	5.0						0	0	20	
1,2-Dichloroethane	ND	5.0						0	0	20	
1,2-Dichloropropane	ND	5.0						0	0	20	
1,3,5-Trimethylbenzene	ND	5.0						0	0	20	
1,3-Dichlorobenzene	ND	5.0						0	0	20	
1,3-Dichloropropane	ND	5.0						0	0	20	
1,4-Dichlorobenzene	ND	5.0						0	0	20	
2,2-Dichloropropane	ND	5.0						0	0	20	
2-Chlorotoluene	ND	5.0						0	0	20	
4-Chlorotoluene	ND	5.0						0	0	20	
4-Isopropyltoluene	ND	5.0						0	0	20	
Benzene	ND	5.0						0	0	20	
Bromobenzene	ND	5.0						0	0	20	
Bromodichloromethane	ND	5.0						0	0	20	
Bromoform	ND	5.0						0	0	20	
Bromomethane	ND	5.0						0	0	20	
Carbon tetrachloride	ND	5.0						0	0	20	
Chlorobenzene	ND	5.0						0	0	20	
Chloroethane	ND	5.0						0	0	20	
Chloroform	ND	5.0						0	0	20	
Chloromethane	ND	5.0						0	0	20	
cis-1,2-Dichloroethene	ND	5.0						0	0	20	
cis-1,3-Dichloropropene	ND	5.0						0	0	20	
Dibromochloromethane	ND	5.0						0	0	20	
Dibromomethane	ND	5.0						0	0	20	
Dichlorodifluoromethane	ND	5.0						0	0	20	
Ethylbenzene	ND	5.0						0	0	20	
Hexachlorobutadiene	ND	5.0						0	0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-404

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_S

Sample ID: **118199-014ADUP** SampType: **DUP** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **133646**
Client ID: **B5-9** Batch ID: **T11VS092** TestNo: **EPA 8260B** Analysis Date: **6/6/2011** SeqNo: **2183681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	5.0						0	0	20	
m,p-Xylene	ND	10						0	0	20	
Methylene chloride	ND	5.0						0	0	20	
n-Butylbenzene	ND	5.0						0	0	20	
n-Propylbenzene	ND	5.0						0	0	20	
Naphthalene	ND	5.0						0	0	20	
o-Xylene	ND	5.0						0	0	20	
sec-Butylbenzene	ND	5.0						0	0	20	
Styrene	ND	5.0						0	0	20	
tert-Butylbenzene	ND	5.0						0	0	20	
Tetrachloroethene	ND	5.0						0	0	20	
Toluene	ND	5.0						0	0	20	
trans-1,2-Dichloroethene	ND	5.0						0	0	20	
Trichloroethene	ND	5.0						0	0	20	
Trichlorofluoromethane	ND	5.0						0	0	20	
Vinyl chloride	ND	5.0						0	0	20	
Surr: 1,2-Dichloroethane-d4	42.520		50.00		85.0	70	130		0	20	
Surr: 4-Bromofluorobenzene	43.950		50.00		87.9	70	130		0	20	
Surr: Dibromofluoromethane	44.380		50.00		88.8	70	130		0	20	
Surr: Toluene-d8	42.500		50.00		85.0	70	130		0	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

Advanced Technology Laboratories

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID: **118199-023ADUP** SampType: **DUP** TestCode: **9045_S** Units: **pH Units** Prep Date: RunNo: **133723**
Client ID: **B8-6.75** Batch ID: **R133723** TestNo: **EPA 9045C** Analysis Date: **6/8/2011** SeqNo: **2183032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	5.970	0.10						5.970	0	20	

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

BASELINE Environmental Consulting

5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

CHAIN OF CUSTODY RECORD

Turn-Around-Time: Standard TAT
Laboratory: ATL
BASELINE Contact Person: Redgy Ramirez

Project Number: 11301-02
Project Name: SR 12 at Madrone Rd
Samplers: (Signature): Reginald Ramirez

S = stainless steel
P = plastic

Sample ID No. Station	Date	Time	Media	Containers: Total No.	Type: Tube	Encore	L-AG	40-ml VOA	L-Poly	250 ml Poly	500 ml Poly	Plastic Bag	Preservative: Ice	HCL	HNO_3	HSO_4	NaOH	Lead (EPA 6010B)	CAM17 Metals (EPA 6010/7000)	TPH-gasoline (EPA 8015B)	TPH-diesel, motor oil (EPA 8015B)	VOCs (EPA 8260B)	Organochlorine Pesticides (EPA 8081)	pH (EPA 9045)	Remarks
B1-0	6/1/11	13:36	Soil	1	S								x					X							
B1-1	6/1/11	13:33	Soil	1	S								x						X						
B2-0	6/1/11	13:31	Soil	1	S								x					X							
B2-1	6/1/11	13:29	Soil	1	S								x					X						X	
B3-0	6/1/11	13:26	Soil	1	S								x						X						
B3-1	6/1/11	13:24	Soil	1	S								x					X							
B4-0	6/1/11	13:21	Soil	1	S								x					X					X		
B4-1	6/1/11	13:19	Soil	1	S								x					X							
B5-0	6/1/11	8:54	Soil	1	S								x					X					X		
B5-1	6/1/11	9:01	Soil	1	S								x						X						
B5-2	6/1/11	9:16	Soil	1	PS	rg							x					X							
B5-5	6/1/11	11:37	Soil	1	P								x					X							
B5-7	6/1/11	11:40	Soil	1	P								x						X						
B5-9	6/1/11	11:45	Soil	1	P								x					X		X	X	X			
B6-0	6/1/11	13:15	Soil	1	S								x						X				X	X	
B6-1	6/1/11	13:13	Soil	1	S								x					X							
B7-0	6/1/11	13:11	Soil	1	S								x					X					X		
B7-1	6/1/11	13:10	Soil	1	S								x						X						
B8-0	6/1/11	11:00	Soil	1	P								x					X							
B8-1	6/1/11	11:04	Soil	1	P								x					X							
B8-2	6/1/11	11:07	Soil	1	P								x					X							
B8-5	6/1/11	11:17	Soil	1	P								x						X						

Relinquished by: (Signature): Reginald Ramirez	6-1-11 16:14	Received by: (Signature): [illegible]	Date/Time: 6/2/11 9:45
Relinquished by: (Signature)		Received by: (Signature)	Date/Time
Relinquished by: (Signature)		Received by: (Signature)	Date/Time
Received at laboratory with intact: YES NO		Comments:	

Arrival at Laboratory:
Remarks:
Email contact:
redgy@baseline-env.com

Cuft
4.4/6

BASELINE Environmental Consulting

5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

CHAIN OF CUSTODY RECORD

Turn-Around-Time Standard TAT
Laboratory ATL
BASELINE Contact Person Redgy Ramirez

Project Number 11301-02
Project Name: SR 12 at Madrone Rd
Samplers: (Signature) Reginald Ramirez

Sample ID No. Station	Date	Time	Media	Containers: Total No.	Type: Tube	Encore	L-AG	40-ml VOA	L-Poly	250 ml Poly	500 ml Poly	Plastic Bag	Preservative: Ice	HCL	HNO_3	HSO_4	NaOH	Lead (EPA 6010B)	CAM17 Metals (EPA 6010/7000)	TPH-gasoline (EPA 8015B)	TPH-diesel, motor oil (EPA 8015B)	VOCs (EPA 8260B)	Organochlorine Pesticides (EPA 8081)	pH (EPA 9045)	Remarks
~~B8-7~~ B8-6.75	6/1/11	11:14	Soil	1	P								x					X		X	X	X		X	Refusal @ 7.25' bgs
B9-0	6/1/11	12:09	Soil	1	P								x					X							
B9-1	6/1/11	12:11	Soil	1	P								x					X							
B9-2	6/1/11	12:15	Soil	1	P								x					X							
B9-5	6/1/11	12:27	Soil	1	P								x						X						
B9-7	6/1/11	12:22	Soil	1	P								x					X		X	X	X		X	
B10-0	6/1/11	12:43	Soil	1	S								x						X						
B10-1	6/1/11	12:38	Soil	1	S								x					X							
B11-0	6/1/11	12:49	Soil	1	S								x					X					X		
B11-1	6/1/11	12:48	Soil	1	S								x						X						
B12-0	6/1/11	~~10:09~~ 10:09	Soil	1	S								x					X					X		
B12-1	6/1/11	10:31	Soil	1	P								x						X						
B12-2	6/1/11	10:33	Soil	1	P								x					X							
B12-5	6/1/11	10:35	Soil	1	P								x					X							
B12-7	6/1/11	10:42	Soil	1	P								x						X						
B12-9	6/1/11	~~10:09~~	Soil	1	S								x					X		X	X	X			Refusal @ 8' bgs
B13-0	6/1/11	13:00	Soil	1	S								x						X						
B13-1	6/1/11	12:58	Soil	1	S								x					X							
B14-0	6/1/11	13:04	Soil	1	S								x					X					X		
B14-1	6/1/11	13:03	Soil	1	S								x						X						
B15-0	6/1/11	12:53	Soil	1	S								x					X					X	X	
B15-1	6/1/11	12:51	Soil	1	S								x						X						

Relinquished by: (Signature) Reginald Ramirez 6-1-11 16:14	Received by: (Signature)	Date/Time 6/1/11 945	Arrival at Laboratory:
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Remarks: Email contact: redgy@baseline-env.com
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	
Received at laboratory with intact: YES NO	Comments:		

BASELINE Environmental Consulting

5900 Hollis Street, Suite D
Emeryville, CA 94608
Tel: (510) 420-8686 Fax: (510) 420-1707

CHAIN OF CUSTODY RECORD

Turn-Around-Time Standard TAT
Laboratory ATL
BASELINE Contact Person Redgy Ramirez

Project Number 11301-02
Project Name: SR 12 at Madrone Rd
Samplers: (Signature) Reginald Ramirez

Sample ID No. Station	Date	Time	Media	Containers: Type: Total No.	Tube	Encore	L-AG	40-ml VOA	L-Poly	250 ml Poly	500 ml Poly	Plastic Bag	Preservative: Ice	HCL	HNO_3	HSO_4	NaOH	Lead (EPA 6010B)	CAM17 Metals (EPA 6010/7000)	TPH-gasoline (EPA 8015B)	TPH-diesel, motor oil (EPA 8015B)	VOCs (EPA 8260B)	Organochlorine Pesticides (EPA 8081)	pH (EPA 9045)	Remarks
Trip Blank	6/1/11	7:00	H2O	6				x					x	x						X					
Equip Blank	6/1/11	11:57	H2O	1							x		x		x			X							

Relinquished by: (Signature) Reginald Ramirez 6-1-11 16:14	Received by: (Signature)	Date/Time 6/2/11 1145
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time

Arrival at Laboratory:
Remarks:
Email contact:
redgy@baseline-env.com

Received at laboratory with intact: YES NO

Comments:

Carmen Aguila

From: Redgy Ramirez [redgy@baseline-env.com]
Sent: Friday, June 03, 2011 3:32 PM
To: Carmen Aguila
Cc: bruce@baseline-env.com; vigliotti@geoconinc.com
Subject: SR12 Samples - lab report and billing

Carmen,

Please forward the lab report and invoice directly to Geocon. Thanks.

Reginald Ramirez, P.E.
Project Engineer

BASELINE Environmental Consulting
5900 Hollis Street, Suite D
Emeryville, CA 94608

t: (510) 420-8686
f: (510) 420-1707
c: (510) 816-4969

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June 17, 2011

Lauren Vigliotti
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
TEL: (925) 768-9874
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 118199

RE: SR 12 at Madrone Rd, 11301-02

Attention: Lauren Vigliotti

Enclosed are the results for sample(s) received on June 03, 2011 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.

This is an addendum report. Please incorporate with documentation previously submitted.

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 is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

CLIENT: Geocon Consultants, Inc.
Project: SR 12 at Madrone Rd, 11301-02
Lab Order: 118199

CASE NARRATIVE

Analytical Comments for Method 6010

Dilution was necessary for samples 118199-005A, 118199-010A, 118199-027A, 118199-032A, 118199-039A and 118199-042A, due to sample matrix.

Matrix Spike (MS) and /or Matrix Spike Duplicate (MSD) are/is outside recovery criteria for samples 118199-042AMS and 118199-042AMSD; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for Method 7420

Dilution was necessary for sample 118199-040A, due to sample matrix.

Advanced Technology Laboratories

Date: 6/17/2011

ANALYTICAL RESULTS

LEAD BY ATOMIC ABSORPTION (STLC)
WET/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02	**Date Received**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-004A	B2-1	ND	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-007A	B4-0	0.94	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-008A	B4-1	ND	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-014A	B5-9	ND	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-016A	B6-1	ND	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-017A	B7-0	ND	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-030A	B10-1	2.9	mg/L	73572	0.25	1	6/1/2011	6/16/2011
118199-040A	B13-1	24	mg/L	73572	1.0	4	6/1/2011	6/16/2011

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		

CLIENT: Geocon Consultants, Inc. **Lab Order:** 118199
Project: SR 12 at Madrone Rd, 11301-02

Lab ID: 118199-005 **Collection Date:** 6/1/2011 1:26:00 PM
Client Sample ID: B3-0 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC				**WET/ EPA 6010B**		
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Lead	5.1	1.0		mg/L	20	6/17/2011 11:44 AM

Lab ID: 118199-010 **Collection Date:** 6/1/2011 9:01:00 AM
Client Sample ID: B5-1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC				**WET/ EPA 6010B**		
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Lead	5.1	1.0		mg/L	20	6/17/2011 11:46 AM

Lab ID: 118199-027 **Collection Date:** 6/1/2011 12:27:00 PM
Client Sample ID: B9-5 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC				**WET/ EPA 6010B**		
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Lead	3.1	1.0		mg/L	20	6/17/2011 11:49 AM

Lab ID: 118199-032 **Collection Date:** 6/1/2011 12:48:00 PM
Client Sample ID: B11-1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC				**WET/ EPA 6010B**		
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Chromium	ND	1.0		mg/L	20	6/17/2011 11:51 AM
Lead	12	1.0		mg/L	20	6/17/2011 11:51 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

CLIENT: Geocon Consultants, Inc. **Lab Order:** 118199
Project: SR 12 at Madrone Rd, 11301-02

Lab ID: 118199-039 **Collection Date:** 6/1/2011 1:00:00 PM
Client Sample ID: B13-0 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
		WET/ EPA 6010B				
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Lead	5.4	1.0		mg/L	20	6/17/2011 11:53 AM

Lab ID: 118199-042 **Collection Date:** 6/1/2011 1:03:00 PM
Client Sample ID: B14-1 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
		WET/ EPA 6010B				
RunID: ICP10_110617A	QC Batch: R134119			PrepDate:		Analyst: **IL**
Lead	73	1.0		mg/L	20	6/17/2011 11:55 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

Date: *17-Jun-11*

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **MB-73644A**	SampType: **MBLK**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **PBS**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.050									
Lead	ND	0.050									

Sample ID: **MB-73644A STLC**	SampType: **MBLK**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **PBS**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190959**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0									
Lead	ND	1.0									

Sample ID: **LCS-73644**	SampType: **LCS**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **LCSS**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190960**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	1.005	0.050	1.000	0	100	85	115				
Lead	0.994	0.050	1.000	0	99.4	85	115				

Sample ID: **118199-042A-DUP**	SampType: **DUP**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **B14-1**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190967**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.164	1.0						0.1658	0	20	
Lead	74.452	1.0						73.17	1.74	20	

Sample ID: **118199-042A-MS**	SampType: **MS**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **B14-1**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **118199-042A-MS**	SampType: **MS**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **B14-1**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190968**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.414	1.0	2.500	0.1658	89.9	78	115				
Lead	72.204	1.0	2.500	73.17	-38.5	80	118				S

Sample ID: **118199-042A-MSD**	SampType: **MSD**	TestCode: **6010_ST**	Units: **mg/L**	Prep Date:	RunNo: **134119**
Client ID: **B14-1**	Batch ID: **R134119**	TestNo: **WET/ EPA 60**		Analysis Date: **6/17/2011**	SeqNo: **2190969**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.448	1.0	2.500	0.1658	91.3	78	115	2.414	1.40	20	
Lead	72.356	1.0	2.500	73.17	-32.4	80	118	72.20	0.211	20	S

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_ST

Sample ID: **MB-73572A**	SampType: **MBLK**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **6/14/2011**	RunNo: **134076**
Client ID: **PBS**	Batch ID: **73572**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **6/16/2011**	SeqNo: **2190064**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: **LCS-73572**	SampType: **LCS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **6/14/2011**	RunNo: **134076**
Client ID: **LCSS**	Batch ID: **73572**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **6/16/2011**	SeqNo: **2190065**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.246	0.25	5.000	0	105	80	120				

Sample ID: **118199-004A-DUP**	SampType: **DUP**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **6/14/2011**	RunNo: **134076**
Client ID: **B2-1**	Batch ID: **73572**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **6/16/2011**	SeqNo: **2190074**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25						0	0	20	

Sample ID: **118199-004A-MS**	SampType: **MS**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **6/14/2011**	RunNo: **134076**
Client ID: **B2-1**	Batch ID: **73572**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **6/16/2011**	SeqNo: **2190075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.122	0.25	5.000	0	102	80	120				

Sample ID: **118199-004A-MSD**	SampType: **MSD**	TestCode: **7420_ST**	Units: **mg/L**	Prep Date: **6/14/2011**	RunNo: **134076**
Client ID: **B2-1**	Batch ID: **73572**	TestNo: **WET/ EPA 74 WET**		Analysis Date: **6/16/2011**	SeqNo: **2190076**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.161	0.25	5.000	0	103	80	120	5.122	0.757	20	

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

Diane Galvan

From: Luann Beadle [beadle@geoconinc.com]
Sent: Tuesday, June 14, 2011 3:38 PM
To: Diane Galvan
Subject: Results/EDD - SR 12 at Madrone Rd (118199)

Hi Diane,

In addition to Rick's lead request below, please run WET Chromium samples with Total Chromium equal to or greater than 50 mg/kg.

Also 48-hr TAT.

Thank you,

Luann

From: Livermore Office (Rick Day) [mailto:day@geoconinc.com]
Sent: Monday, June 13, 2011 3:21 PM
To: 'Diane Galvan'
Cc: Luann Beadle
Subject: RE: Results/EDD - SR 12 at Madrone Rd (118199)

Hi Diane -

Please run WET Lead on samples with Total Lead equal to or greater than 50 mg/kg.

48-hr TAT please.

Thanks,
Rick.

June 23, 2011

Lauren Vigliotti
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
TEL: (925) 768-9874
FAX: (925) 371-5915

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 118199

RE: SR 12 at Madrone Rd, 11301-02, E8560-06-24

Attention: Lauren Vigliotti

Enclosed are the results for sample(s) received on June 03, 2011 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.

This is an addendum report. Please incorporate with documentation previously submitted.

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 is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

Advanced Technology Laboratories

Date: 6/23/2011

ANALYTICAL RESULTS

LEAD BY ATOMIC ABSORPTION
WET DI/ EPA 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02, E8560-06-24	**Date Received:**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-005A	B3-0	ND	mg/L	73761	0.25	1	6/1/2011	6/23/2011
118199-010A	B5-1	ND	mg/L	73761	0.25	1	6/1/2011	6/23/2011
118199-032A	B11-1	ND	mg/L	73761	0.25	1	6/1/2011	6/23/2011
118199-039A	B13-0	ND	mg/L	73761	0.25	1	6/1/2011	6/23/2011
118199-040A	B13-1	ND	mg/L	73761	0.25	1	6/1/2011	6/23/2011
118199-042A	B14-1	0.28	mg/L	73761	0.25	1	6/1/2011	6/23/2011

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

Date: 6/23/2011

ANALYTICAL RESULTS

LEAD BY ATOMIC ABSORPTION (TCLP)
EPA 1311/ 7420

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02, E8560-06-24	**Date Received:**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	Lead	**Analyst:**	VV

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-032A	B11-1	ND	mg/L	73807	0.25	1	6/1/2011	6/23/2011
118199-040A	B13-1	0.35	mg/L	73807	0.25	1	6/1/2011	6/23/2011
118199-042A	B14-1	6.6	mg/L	73807	0.25	1	6/1/2011	6/23/2011

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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Advanced Technology Laboratories

Date: 6/23/2011

ANALYTICAL RESULTS

pH
EPA 9045C

CLIENT:	Geocon Consultants, Inc.	**Lab Order:**	118199
Project:	SR 12 at Madrone Rd, 11301-02, E8560-06-24	**Date Received:**	6/3/2011 5:27:06 PM
Project No:		**Matrix:**	Soil
Analyte:	pH	**Analyst:**	PT

Laboratory ID	Client Sample ID	Results	Units	QC Batch	PQL	DF	Date Collected	Date Analyzed
118199-005A	B3-0	6.0	pH Units	R134282	0.10	1	6/1/2011	6/21/2011
118199-010A	B5-1	6.6	pH Units	R134282	0.10	1	6/1/2011	6/21/2011
118199-032A	B11-1	8.0	pH Units	R134282	0.10	1	6/1/2011	6/21/2011
118199-039A	B13-0	7.1	pH Units	R134282	0.10	1	6/1/2011	6/21/2011
118199-040A	B13-1	6.8	pH Units	R134282	0.10	1	6/1/2011	6/21/2011
118199-042A	B14-1	7.0	pH Units	R134282	0.10	1	6/1/2011	6/21/2011

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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Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02, E8560-06-24

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_DI_GEOCON

Sample ID: MB73761A	SampType: MBLK	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: PBS	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195742

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: LCS-73761	SampType: LCS	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: LCSS	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195743

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.283	0.25	5.000	0	106	80	120				

Sample ID: 118427-025A-DUP	SampType: DUP	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: ZZZZZZ	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195754

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25						0	0	20	

Sample ID: 118427-025A-MS	SampType: MS	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: ZZZZZZ	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195755

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.156	0.25	5.000	0	103	70	130				

Sample ID: MB-73761B	SampType: MBLK	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: PBS	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195756

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

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

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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02, E8560-06-24

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_DI_GEOCON

Sample ID: 118427-089A-DUP	SampType: DUP	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: ZZZZZZ	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195767

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.042	0.25						2.034	0.429	20	

Sample ID: 118427-089A-MS	SampType: MS	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: ZZZZZZ	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195768

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	6.522	0.25	5.000	2.034	89.8	70	130				

Sample ID: 118427-089A-MSD	SampType: MSD	TestCode: 7420_DI_GEO	Units: mg/L	Prep Date: 6/21/2011	RunNo: 134334
Client ID: ZZZZZZ	Batch ID: 73761	TestNo: WET DI/ EPA WET		Analysis Date: 6/23/2011	SeqNo: 2195769

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	6.372	0.25	5.000	2.034	86.8	70	130	6.522	2.33	20	

Qualifiers:

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

Advanced Technology Laboratories
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CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02, E8560-06-24

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_TC

Sample ID: MB-73807A	SampType: MBLK	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: PBS	Batch ID: 73807	TestNo: EPA 1311/ 74	EPA3010A	Analysis Date: 6/23/2011	SeqNo: 2195670

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: MB-73789A TCLP	SampType: MBLK	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: PBS	Batch ID: 73807	TestNo: EPA 1311/ 74	EPA3010A	Analysis Date: 6/23/2011	SeqNo: 2195671

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: LCS-73807	SampType: LCS	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: LCSS	Batch ID: 73807	TestNo: EPA 1311/ 74	EPA3010A	Analysis Date: 6/23/2011	SeqNo: 2195672

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.041	0.25	1.000	0	104	80	120				

Sample ID: 118427-035A-DUP	SampType: DUP	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: ZZZZZZ	Batch ID: 73807	TestNo: EPA 1311/ 74	EPA3010A	Analysis Date: 6/23/2011	SeqNo: 2195683

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.620	0.25						0.5777	7.10	20	

Sample ID: 118427-035A-MS	SampType: MS	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: ZZZZZZ	Batch ID: 73807	TestNo: EPA 1311/ 74	EPA3010A	Analysis Date: 6/23/2011	SeqNo: 2195684

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.313	0.25	2.500	0.5777	109	70	130				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

  Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02, E8560-06-24

ANALYTICAL QC SUMMARY REPORT

TestCode: 7420_TC

Sample ID: MB-73807B	SampType: MBLK	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: PBS	Batch ID: 73807	TestNo: EPA 1311/ 74 EPA3010A		Analysis Date: 6/23/2011	SeqNo: 2195685

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: MB-73789B TCLP	SampType: MBLK	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: PBS	Batch ID: 73807	TestNo: EPA 1311/ 74 EPA3010A		Analysis Date: 6/23/2011	SeqNo: 2195686

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.25									

Sample ID: 118427-096A-DUP	SampType: DUP	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: ZZZZZZ	Batch ID: 73807	TestNo: EPA 1311/ 74 EPA3010A		Analysis Date: 6/23/2011	SeqNo: 2195697

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	4.863	0.25						4.699	3.44	20	

Sample ID: 118427-096A-MS	SampType: MS	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: ZZZZZZ	Batch ID: 73807	TestNo: EPA 1311/ 74 EPA3010A		Analysis Date: 6/23/2011	SeqNo: 2195698

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.485	0.25	2.500	4.699	111	70	130				

Sample ID: 118427-096A-MSD	SampType: MSD	TestCode: 7420_TC	Units: mg/L	Prep Date: 6/22/2011	RunNo: 134330
Client ID: ZZZZZZ	Batch ID: 73807	TestNo: EPA 1311/ 74 EPA3010A		Analysis Date: 6/23/2011	SeqNo: 2195699

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.598	0.25	2.500	4.699	116	70	130	7.485	1.50	20	

Qualifiers:

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

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

CLIENT: Geocon Consultants, Inc.
Work Order: 118199
Project: SR 12 at Madrone Rd, 11301-02, E8560-06-24

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID: **118427-030ADUP** SampType: **DUP** TestCode: **9045_S** Units: **pH Units** Prep Date: RunNo: **134282**
Client ID: **ZZZZZZ** Batch ID: **R134282** TestNo: **EPA 9045C** Analysis Date: **6/21/2011** SeqNo: **2195035**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.850	0.10						7.760	1.15	20	

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

Diane Galvan

From: Luann Beadle [beadle@geoconinc.com]
Sent: Monday, June 20, 2011 2:56 PM
To: Diane Galvan
Subject: E8560-06-24 SR 12 Madrone Rd

Hi Diane,

Please run DI-WET and pH for samples with WET lead results greater than or equal to 5 from your Work Order Number 118199. These should be for:

118199-005
118199-010
118199-032
118199-039
118199-040A
118199-042

Also, please run TCLPs for samples:

118199-032
118199-040A
118199-042

72-Hour TAT is fine.

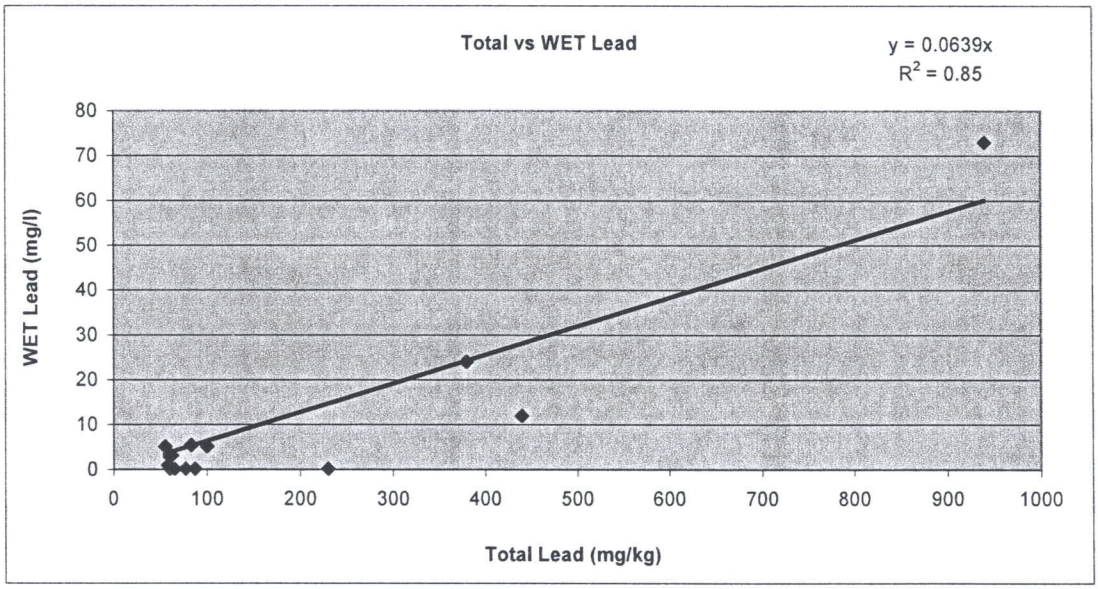
Thank you,

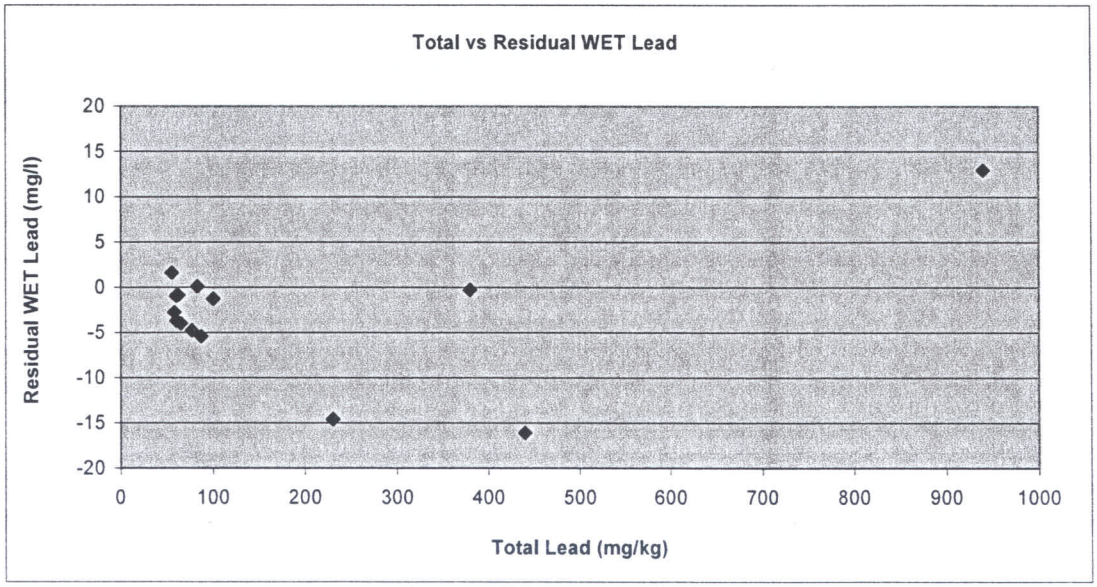
Luann

Luann Beadle | *Senior Staff Scientist*
Geocon Consultants, Inc.
6671 Brisa Street, Livermore, California 94550
Tel 925.371.5900 Fax 925.371.5915
www.geoconinc.com

APPENDIX C

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	Residual WET Lead (mg/l)	Squared Residual WET Lead (mg/l)
B13-0	0-0.5	83	5.4	0.10	0.01
B13-1	1.0-1.5	380	24	-0.28	0.08
B9-5	5.0-5.5	62	3.1	-0.86	0.74
B10-1	1.0-1.5	60	2.9	-0.93	0.87
B5-1	1.0-1.5	100	5.1	-1.29	1.66
B3-0	0-0.5	55	5.1	1.59	2.52
B4-0	0-0.5	58	0.94	-2.77	7.65
B4-1	1.0-1.5	60	0.125	-3.71	13.75
B2-1	1.0-1.5	65	0.125	-4.03	16.22
B7-0	0-0.5	77	0.125	-4.79	22.98
B6-1	1.0-1.5	87	0.125	-5.43	29.52
B14-1	1.0-1.5	940	73	12.95	167.69
B5-9	9.0-9.5	230	0.125	-14.57	212.23
B11-1	1.0-1.5	440	12	-16.11	259.49





Total Lead

WB-0 to 0.5	
Number of Valid Observations	8
Number of Distinct Observations	8
Minimum	6.8
Maximum	77
Mean	36.48
Median	34.5
SD	25.55
Variance	652.8
Coefficient of Variation	0.7
Skewness	0.33
Mean of log data	3.305
SD of log data	0.89
90% Standard Bootstrap UCL	47.17
95% Standard Bootstrap UCL	50.34

EB-0 to 0.5	
Number of Valid Observations	7
Number of Distinct Observations	7
Minimum	2.5
Maximum	83
Mean	20.61
Median	7.3
SD	29.23
Variance	854.7
Coefficient of Variation	1.418
Skewness	2.124
Mean of log data	2.338
SD of log data	1.191
90% Standard Bootstrap UCL	33.88
95% Standard Bootstrap UCL	36.9

WB-1.0 to 1.5	
Number of Valid Observations	8
Number of Distinct Observations	8
Minimum	5.1
Maximum	100
Mean	50.64
Median	48.5
SD	33.37
Variance	1114
Coefficient of Variation	0.659
Skewness	0.137
Mean of log data	3.609
SD of log data	1.001
90% Standard Bootstrap UCL	64.91
95% Standard Bootstrap UCL	68.64

EB-1.0 to 1.5	
Number of Valid Observations	7
Number of Distinct Observations	7
Minimum	10
Maximum	940
Mean	269.1
Median	60
SD	346.4
Variance	119970
Coefficient of Variation	1.287
Skewness	1.422
Mean of log data	4.539
SD of log data	1.751
90% Standard Bootstrap UCL	424.1
95% Standard Bootstrap UCL	469.2

As

Number of Valid Observations	11
Number of Distinct Observations	8
Minimum	0.5
Maximum	10
Mean	2.445
Median	1.4
SD	2.776
Variance	7.705
Coefficient of Variation	1.135
Skewness	2.321
Mean of log data	0.439
SD of log data	0.977
95% Standard Bootstrap UCL	3.769
90% Standard Bootstrap UCL	3.465

V

Number of Valid Observations	11
Number of Distinct Observations	10
Minimum	20
Maximum	35
Mean	27.36
Median	26
SD	5.767
Variance	33.25
Coefficient of Variation	0.211
Skewness	0.00809
Mean of log data	3.288
SD of log data	0.215
95% Standard Bootstrap UCL	30.13
90% Standard Bootstrap UCL	29.51