INFORMATION HANDOUT

For Contract No. 04-4A8104
At 04-Ala-880-R32.8/R34.0

Identified by
Project ID 0400020932

WATER QUALITY

Water Quality Information Handout Contract No. 4A8104, Storm Water Mitigation Project, Alameda County Highway 880, 04-Ala-880-PM R32.8/34.0

Water Quality Information Handout Contract No. 4A8104, Storm Water Mitigation Project, Alameda County Highway 880, 04-Ala-880-PM R32.8/34.0

WATER QUALITY INFORMATION HANDOUT
CONTRACT NO. 4A8104

Storm Water Mitigation Project
Alameda County Highway 880
04-Ala-880-PM R32.8/34.0

To Contractor

California Department of Transportation
District 4, 111 Grand Avenue
Oakland, CA 94612

Disclaimer

A "Disclaimer" is required specifying that the information provided in the Storm Water Information Handout is just a guideline and is to be used for information purposes only and should not be considered a sole source document to adhere to the requirements of the new National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), Number CAS000002, adopted on September 2, 2009. The contractor is required to provide water quality monitoring, sampling and implement best management practices (BMPs) based on standard industry operations, field conditions and conditions encountered based on the contractor's means and methods. The information in this handout is not to be construed in any way as a waiver of the provisions in the CGP. Bidders and contractors are cautioned to make independent investigations and examinations as they deem necessary to satisfy the conditions encountered in performance of work, with respect to the following: sampling and monitoring locations, distribution of watershed areas for sizing of BMPs, and selection of BMPs in order to conform to the requirement of the contract documents and the CGP.

Project Vicinity

Project Vicinity

MATERIAL INFORMATION

FOR

SOURCES OF RECLAIMED WASTE WATER

CONTRACT NO. 4A8104

Storm Water Mitigation Project
Alameda County Highway 880
04-Ala-880-PM R32.8/34.0

California Department of Transportation
District 4, 111 Grand Avenue
Oakland, CA 94612

In accordance with attached February 6, 2014 Caltrans Director Memorandum on subject of Water Conservation and Draught Action Plan, Contractor shall utilize recycled water required for construction activities wherever feasible.

Water for use on this project shall be nonpotable water and shall be furnished and applied as provided in Section 17, "Watering," of the Standard Specifications and Special Provisions.

Available sources of nonpotable water for use on the project can be obtained by contacting local Publicly Owned Treatment Works (POTW) facilities for reclaimed waste water. A list of local POTW facilities is included in this "Material Information" hereafter.

Reclaimed waste water from sources, not listed in this "Material Information", that are developed for use on the project shall meet the California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. The Contractor shall obtain either a waste water discharge permit or a waiver from the Regional Water Quality Control Board. Copies of permits or waivers from the Regional Water Quality Control Board, for sources not listed in the "Materials Information," shall be delivered to the Engineer before using reclaimed waste water on the project.

February 6, 2014 Caltrans Director Memorandum on Subject of Water Conservation and Draught Action Plan

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Flex your power!
Be energy efficient!

To: ALL EMPLOYEES

Date: February 6, 2014

File:

From: MALCOLM DOUGHERTY
Director

Subject: **CALTRANS WATER CONSERVATION AND DROUGHT ACTION PLAN**

Caltrans has been a leader in water conservation practices in project design, building operations, construction and maintenance activities since the drought of 1976-1978. Our water conservation efforts have served as a model for many local and state agencies. We should acknowledge we have been doing a good job, but there is always room for us to improve by expediting the implementation of a drought action plan. As California is again in a period of severe drought, finite water resources and increasing water cost make efficient water use critical. Caltrans must reduce water use in operating Caltrans' facilities and performing construction and maintenance on the State Highway System, while protecting the state's $1.4 billion investment in highway planting and helping to ensure there is sufficient water for all Californians. Facing the worst drought in recorded California history, we must act decisively to curtail water use to meet the Governor's 20 percent reduction mandate. In those areas of the state where a critical water shortage exists, further conservation efforts will be required.

Caltrans owns and manages over 30,000 acres of irrigated landscaping which functions to reduce erosion and graffiti, protects stormwater quality, and meets environmental mitigation commitments. Approximately 75 percent of all water used by Caltrans is for the irrigation of highway vegetation. Maintenance forces are charged with operating irrigation facilities with the goal to manage water use efficiently while maintaining vegetation in a healthy condition.

To comply with the Governor's emergency drought declaration and in anticipation of future additional restrictions we must also do our part to conserve water at our state owned facilities and in maintenance and construction activities. I am asking that the following actions be implemented:

1) Maintenance forces will immediately implement actions to reduce irrigation use by 50 percent.
2) Maintenance forces will begin evaluating and repairing existing irrigation systems to efficiently apply water.
3) Irrigation of highway landscaping shall be curtailed in areas identified by the California Department of Public Health as "severe water shortage areas", including portions of Fresno, Madera, Mariposa, Kern, Amador, Mendocino, Nevada Placer, and Santa Cruz counties, and the cities of Healdsburg and Cloverdale in Sonoma County.
4) Existing Maintenance and Construction practices shall utilize recycled water wherever feasible.
5) All highway planting work shall be postponed in areas identified by the California

Department of Public Health as "severe water shortage areas."

6) All non-essential highway planting work shall be postponed statewide.
7) Districts shall identify a qualified "Water Manager" to act as the point of contact for water conservation efforts.
8) District Maintenance and Landscape Architecture staff shall collaborate to identify existing highway planting that can survive with reduced or no supplemental water and shut off automatic irrigation systems at these locations as appropriate. These areas shall be monitored and water systems operated manually to ensure vegetation survives, to protect the state's investment.
9) As funds allow, begin replacing building fixtures and irrigation components with more efficient models and innovative technology.
10) Caltrans employees are asked not to wash their state vehicles, except in the case where it would present a potential health and safety issue to the driver.

These actions constitute Caltrans initial drought response. As conditions in California change over the next few months, we may need to increase our water conservation efforts. Additionally, detailed direction regarding the implementation of these actions will be forthcoming from the Divisions of Maintenance, Construction, and Facilities.

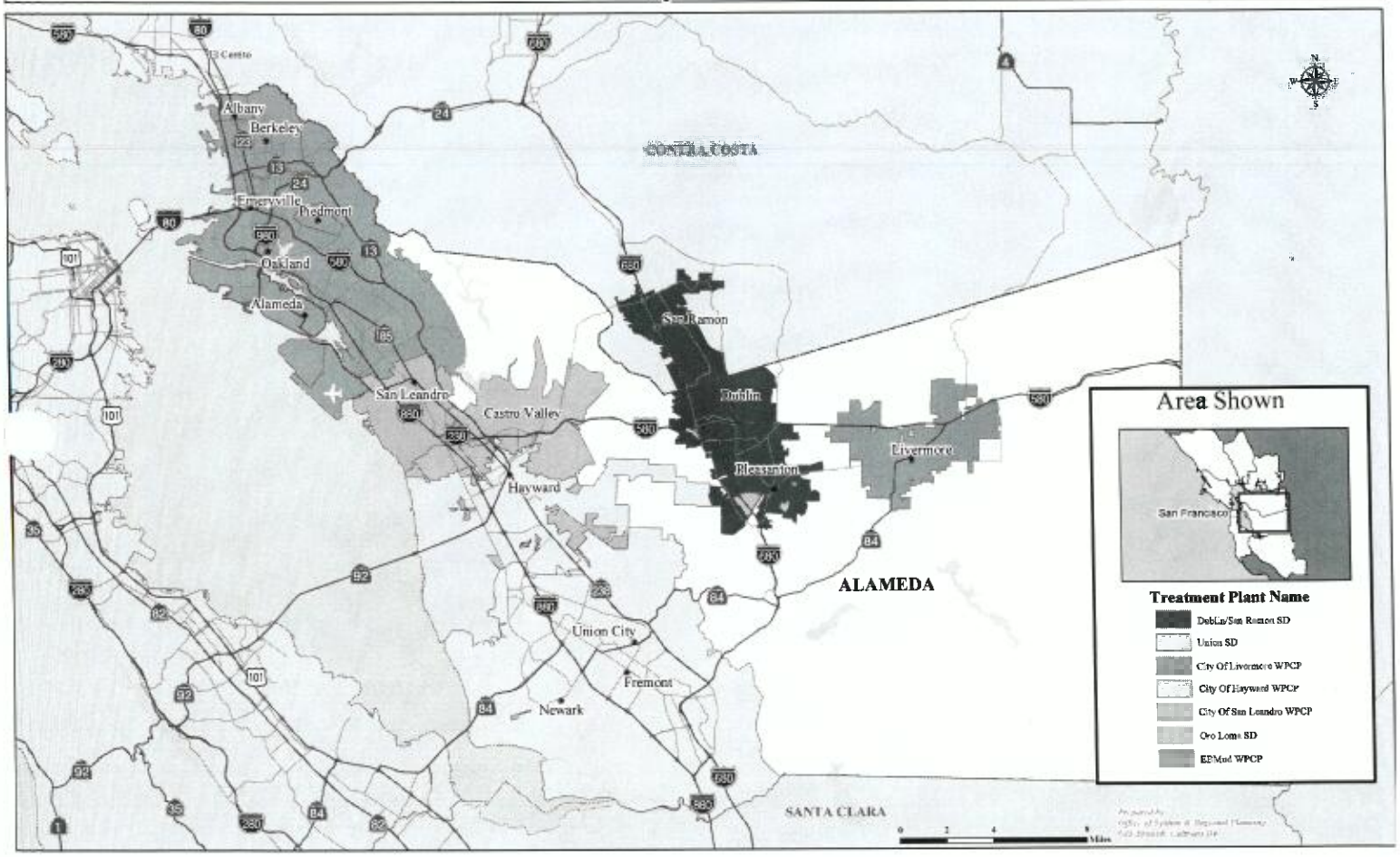
We are facing a difficult situation, but with prudent and practical actions each of us can contribute to conserving water this year to meet the Governor's goal of a 20 percent reduction in water use and assist our fellow Californians to get through the drought with as little impact as possible.

A List of POTW Facilities
in
Alameda County

Alameda POTW

	City Discharger	Treatment Plant Name	WDR Discharger Name	Discharger Contact Name	Contact Phone No.	Contact Email	Mail Address	Ct Contact for Groundwater & De-Watering Discharges	Service Area of the POTW
6	Dublin	Dublin San Ramon Service District	Dublin San Ramon SD	Bob Anderson/ Levi Fuller	925-875-2360, cell 925-570-6757; 925-846-0568 ext. 119	andersonr@dsrsd.com; fuller@dsrsd.com	DSRSD, 7051 Dublin Blvd., Dublin, CA 94568	Call Env. Compliance Officer Eric Kuehner @ 925-875-2335 "case-by-case situation -prefer not during storms" Testing required,$385 for annual permit, per million gal fee, etc.	Dublin, San Ramon, & Pleasanton
7	Pleasanton		City of Pleasanton	Richard Lagomarsino; Daniel Smith	925-931-5538; 925-931-5509	rlagomarsino@ci.pleasanton.ca.us; dsmith@ci.pleasanton.ca.us	Richard Lagomarsino, Lead Utility Operator and Daniel Smith, Utility Superintendent, 3333 Busch Road, Pleasanton, CA 94568	Same as Dublin-San Ramon SD - see line #A- 7	Same as Dublin-San Ramon SD - see line #A- 7
8	Union City	Union SD	Union SD	Roger Ham	510-477-7548	roger_ham@unionsanitary.com	Roger Ham, Collection Service Manager, Union Sanitary District, 5072 Benson Road, Union City, CA 94587	Best contact is Von Henry @ 510-477 7637. UCSD would consider if there are no other options available, ie. if non-contaminated using the storm drain is "ok"	Services: Fremont (including Niles), Union City, & Newark
9	Livermore	City of Livermore WPCP	City of Livermore	Darren Greenwood	925-960-8300	dgreenwood@ci.livermore.ca.us	Darren Greenwood, Water Resources Manager, 101 West Jackmidge Blv., Livermore, CA 94551	Call Ms. Cye Nolteu @ 510-881-7990 They will accept discharge with test results. Permit fee is $470 plus per gallon fee. See email of 6/22/04 has all info	City of Livermore, the Ruby Hills Development of Pleasanton, and the Veteran's Hospital of unincorporated Alameda County.
10	Hayward	City of Hayward WPCP	City of Hayward	Alex Ameri	510-583-4728	agent@ci.hayward.ca.us	Alex Ameri, Deputy Director/Utilities, Dept. of Public Works, 777 B Street, Hayward, CA 94541-5007	Call Ms. Cye Nolteu @ 510-881-7990 They will accept discharge with test results. Permit fee is $470 plus per gallon fee. See email of 6/22/04 has all info	Per Alex Ameri: 90% of the city of Hayward is served by this sewer system - the other 10% (the North end, north of "A" St.) is serviced by Ora Loma Sanitation
11	San Leandro	San Leandro WPCP	City of San Leandro	Dean Wilson	510-577-6030	dwilson@ci.san-leandro.ca.us	Dean Wilson, Water Pollution Control Plant Manager, 3000 David St., San Leandro, CA 94577	Contact: John Camp in Env Services @ 510-577-6029. "Haven't accepted in the past...prefers Baker tanks for sediment, then discharge to storm drain" There is a special Discharge Permit, includes $2.40 per 100 cu.ft. Would consider proposals.	Plant phone # is 510-577-3434 - they only do "the city boundaries of San Leandro - not the unincorporated areas - its sort of a Zig Zag kind of thing.. " They do have their boundaries on GIS - call Mike Hamer at 577-3339
12	San Lorenzo	Ora Loma SD	Ora Loma S.D.	Michael C. Cameron	510-481-6669	mcameron@oraloma.org	Michael Cameron, General Manager, Ora Loma Sanitary District, 2680 Grant Avenue, San Lorenzo, CA 94580	Best contact: Jeff Carson 510-481-6971. Fee, permit, plan, testing, possible treatment required. Potential problems are large sediments and amounts. May only allow discharge between 2 and 4 A.M. Service area is 40% of both Hayward and San Leandro, San Lorenzo, and some unincorporated Alameda County	Call Bill Halstead @ 510-481-6963 - he has base maps and shape files which he will make available on CD or pdf. Service area is all of San Lorenzo, parts of San Leandro, Hayward, and Castro Valley, and parts of unincorporated Alameda County. "Ora Loma is a district and not subject to city boundaries..."
13	Castro Valley		Castro Valley S.D.	Roland Williams	510-537-0757	rolandr@cvsan.org	Roland Williams, General Manager, Castro Valley Sanitary District, 21040 Marshall Street, Castro Valley, CA 94546-6068	Same as Ora Loma SD - see line # A-12	Same as Ora Loma SD - see line # A-12
14	Oakland	EBMUD WPCP	EBMUD	Maria A. Bonnarens; Jennifer Smith	510-287-1341; 510-287-0589	mbonnaren@ebmud.com; jsmith@ebmud.com	David R. Williams, P.O. Box 2055 (MS#702), Oakland, CA 94623-1055	Web site: www.ebmud.com or call 510-287-1651 "for determination of your permitting needs" Best contact Gail Tupper at 510-287-1608. Permit is 13 pages long (costs $550) - "every situation is different/special "	Cities of: Alameda, Albany, Berkeley, El Cerrito, Emeryville, Kensington, Oakland, and the Stege Sanitary section of Richmond.
15	Alameda		City of Alameda	Will Wurtz	510-749-5853	wwurtz@ci.alameda.ca.us	Mat Nuckolls, Director of Public Works, City of Alameda, Alameda Point, Building 1, 950 West Mitchell Square, Room 110, Alameda, CA 94501	Same as EBMUD WPCP - see line # A-14	Part of EBMUD see # A -14
16	Albany		City of Albany	Ann Chaney	510-528-5706	achaney@albanyca.org	Ann Chaney, Director of Community Development and Environmental Resources, City of Albany-City Hall, 1000 San Pablo Ave., Albany, CA 94706	Same as EBMUD WPCP - see line # A-14	Part of EBMUD see # A -14
17	Berkeley		City of Berkeley	Henry Yee	510-981-6303	hyee@ci.berkeley.ca.us	Rose Cordinaux, Public Works Director, City of Berkeley, 2180 Milvia St., Berkeley, CA 94704	Same as EBMUD WPCP - see line # A-14	Part of EBMUD see # A -14
18	Emeryville		City of Emeryville	Maurice Kaufman	510-596-4334	mkaufman@ci.emeryville.ca.us	Hank Van Dyke, City Engineer, City of Emeryville, 1333 Park Ave., Emeryville, CA 94608	Same as EBMUD WPCP - see line # A-14	Part of EBMUD see # A -14
19	Oakland		City of Oakland	Fred Sperisc; Allen Law	510-238-6687 (LR); 238-6936(AL)	fsperisc@oaklandnet.com; alaw@oaklandnet.com	Michael Neary, Engineering Division Manager, City of Oakland, 250 Frank Ogawa Plaza, Suite 4314, Oakland, CA 94612	Same as EBMUD WPCP - see line #A -14	Part of EBMUD see # A -14
20	Piedmont		City of Piedmont	Larry Roseberg	510-420-3050	lroseberg@ci.piedmont.ca.us	Larry Roseberg, Director of Public Works, City of Piedmont, 120 Vista Ave., Piedmont, CA 94611	Same as EBMUD WPCP - see line # A -14	Part of EBMUD see # A -14

Alameda County - POTW Service Areas



PREPARED FOR:
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE, MS8C
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PREPARED BY:
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6671 BRISA STREET
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GEOCON PROJECT NO. E8560-02-60
CALTRANS EA 04-4A8100
CALTRANS PROJECT # 04-0002-0932-0

DECEMBER 2013

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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.

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STATE OF CALIFORNIA

CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING

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Jose Tenorio, Jr. 702.307.2659 702.307.2691 fax jojo@atl-labs.com	Advanced Technology Laboratories 3151 Post Road Las Vegas, NV 89118 *(Geocon Subcontractor)*	Soil Sample Analysis

PRELIMINARY SITE INVESTIGATION REPORT

1.0 INTRODUCTION

This Preliminary Site Investigation Report for the storm water erosion control and slope stabilization project within the 50-foot-wide unplanted median of southbound Interstate 880 (I-880) from 0.3 mile south of 7th Street to 0.4 mile south of West Grand Avenue in Oakland California was prepared by Geocon Consultants, Inc. under California Department of Transportation (Caltrans) Contract No. 04A3578 and Task Order No. 60 (TO-60), EA 04-4A8100.

1.1 Project Description and Proposed Improvements

The project proposes to plant native grass between the existing pavement and drainage ditch. Eighteen inches of existing material will be excavated to accommodate the best practice management treatment needed for this project. Soil conditioning will be done with amendments to improve filtration, reduce surface runoff, and improve plant growth. Work will take place within Caltrans right-of-way. 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 California Assessment Manual 17 (CAM 17) metals, particularly aerially deposited lead (ADL), and organic contaminants in soil. The information obtained from this investigation will be used by Caltrans to evaluate soil handling practices, worker health and safety, and soil reuse and disposal options.

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 representative total metal content equals or exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the representative soluble metal content equals or 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 representative soluble metal content equals or 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., representative 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 *User's Guide: Derivation and Application of Environmental Screening Levels, Interim Final 2013* (updated December 2013), which presents Environmental Screening Levels (ESLs) for over 100 commonly found contaminants in soil, groundwater, soil gas, and surface water, to assist in evaluating sites impacted by releases of hazardous chemicals. "The ESLs are considered to be protective for typical bay area sites. Under most circumstances, …the presence of a chemical is soil, soil gas, or groundwater at concentrations below the corresponding ESL can be assumed to not pose a significant threat to human health, water resources, or the environment." (SFRWQCB, December 2013). ESLs are risk assessment tools and are "not intended to serve as a rule to determine if a waste is hazardous under the state or federal regulations."

Residential and commercial/industrial land use ESLs are commonly used by contractors, soil trucking companies, and private and commercial land owners as default acceptance criteria to evaluate suitability of import soil material. The following ESL tables were used for this characterization:

- Table A. Shallow Soil (≤3m bgs), Groundwater is a Current or Potential Source of Drinking Water
- Table K-3. Direct Exposure Soil Screening Levels, Construction/Trench Worker Exposure Scenario

The respective ESLs are listed at the end of Tables 3 and 4 for comparative purposes.

3.0 SCOPE OF SERVICES

The scope of services performed under TO-60, EA 04-4A8100 included the following:

3.1 Pre-field Activities

- Prepared the *Soil Sampling Workplan* and *Health and Safety Plan*, dated December 2013.
- Retained the services of Lane Safety to provide shoulder closure services.
- Retained the services of Advanced Technology Laboratories, Las Vegas (ATL-LV), a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of soil and groundwater samples.

3.2 Field Activities

The field investigation was performed on December 10, 2013, by Geocon staff. The following field activities were performed during the sampling efforts:

- Advanced 21 soil borings at the project location using hands-auger methods. The borings were advanced to a maximum depth of two feet.
- Collected 47 soil samples for laboratory analysis as outlined in the Caltrans task order.
- Collected 1 equipment rinse blank sample for total lead analysis.

All samples were transported 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 21 boring locations identified by the Caltrans TO Manager using hand-auger sampling methods. Boring coordinates are presented on Table 1 and locations are shown on the Site Plan, Figure 2.

Soil samples collected using a hand-auger were placed in ziploc bags or in stainless steel tubes and sealed with Teflon tape and plastic lids prior to being stored in a chest cooled with ice. Sample containers were labeled and transported to a Caltrans-approved, certified environmental laboratory using standard COC documentation. Soil borings were back-filled 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. The equipment rinse blank was collected by pouring deionized water over the cleaned sampling equipment and collecting it into a sample container for laboratory analysis. Decontamination water was disposed of to the ground surface within Caltrans right-of-way in a manner not to create runoff and away from drain inlets or potential water bodies.

4.2 Laboratory Analyses

Initial laboratory analyses were performed by ATL-LV under standard turnaround-time (TAT) per the Task Order Manager. Soluble metals analysis was performed under expedited TAT. The laboratory reports and COC documentation are included in Appendix B.

The soil samples were analyzed as follows:

- 32 samples for total lead using EPA Test Method 6010B.
- 15 samples for CAM 17 metals using EPA Test Methods 6010B and 7471A.
- 17 samples with total lead concentrations equal to or exceeding 50 mg/kg (i.e. equal to or exceeding ten times the STLC of 5.0 mg/l) were further analyzed for WET lead.
- 8 samples with WET lead concentrations equal to or exceeding 5.0 mg/l were further analyzed for DI-WET lead.
- 4 samples with total lead concentrations equal to or exceeding 100 mg/kg and WET lead concentrations equal to or exceeding 5.0 mg/l were further analyzed for TCLP lead.
- 16 samples for total petroleum hydrocarbons as diesel (TPHd) and as motor oil (TPHmo) using EPA Test Method 8015B.
- 8 samples for total petroleum hydrocarbons as gasoline (TPHg) using EPA Test Method 8015B.
- 8 samples for volatile organic compounds (VOCs) using EPA Test Method 8260B.
- 3 samples for pH using EPA Test Method 9045C.

The QA/QC equipment rinse blank sample was analyzed for total lead using EPA Test Method 6010B.

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 soil in the areas consisted of light brown, dense, moist sane to a depth of one foot, underlain by dark silty sand with some gravel at 1.5 to 2 feet. Boring B4 contained debris consisting of old glass, bricks, and metal. Groundwater was not encountered.

5.2 Laboratory Analytical Results

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

Soil Sample Results:

- The following metals were not detected above their respective laboratory reporting limits: antimony, beryllium, cadmium, molybdenum, silver, and thallium.
- Total lead was reported at concentrations ranging from 6.8 mg/kg to 160 mg/kg.
- WET lead was reported at concentrations ranging from 1.8 mg/l to 11 mg/l.
- DI-WET lead was reported at concentrations ranging from <0.25 mg/l to 0.53 mg/l.
- TCLP lead was not detected at or above the reporting limit of 0.25 mg/l.
- Remaining CAM 17 metals were reported in the samples at total concentrations below ten times their respective STLCs.

- pH was reported at 8.9 to 9.2.
- TPHd was reported at concentrations ranging from 5.4 mg/kg to 95 mg/kg.
- TPHmo was reported at concentrations ranging from 11 mg/kg to 230 mg/kg.
- TPHg was not detected at or above the laboratory reporting limit of 1.0 mg/kg.
- VOCs were not detected at or above laboratory reporting limits.

QA/QC Sample Result:

- Total lead was not detected at or above the laboratory reporting limit of 0.0050 mg/l in the equipment rinse blank sample.

5.3 Laboratory Quality Assurance/Quality Control

We reviewed the QA/QC results provided with the laboratory analytical reports. The data indicate a motor oil detection in a method blank at a concentration less than 1/10th of the amount measured in the sample. The Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) were outside recovery criteria for several samples, possibly due to matrix interference, however the associated laboratory control sample recoveries were acceptable. The relative percent differences (RPD) for MS/MSD were outside of recovery limits for several samples. Remaining 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.

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 the sample 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 tables present the calculated UCLs and statistics.

Borings B1 to B21

Sample Interval (feet)	Total Lead 90% UCL (mg/kg)	Total Lead 95% UCL (mg/kg)	Total Lead Mean (mg/kg)	Total Lead Minimum (mg/kg)	Total Lead Maximum (mg/kg)
0 to 0.5	45.8	47.91	38.04	6.8	110
1 to 1.5	62.02	65.59	51.16	2.5	160
1.5 to 2	103.8	112.4	76.4	18	160

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 17 (x, y) data points (i.e., soil samples analyzed for both total lead [x] and WET lead [y]) from the site. The regression analysis yields an acceptable *coefficient of determination* (r^2) equaled 0.8069, which yields a corresponding *correlation coefficient* (r) of 0.8983.

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 $y = 0.059(x)$, where x represents total lead concentrations and y represents predicted WET lead concentrations.

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

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 from this portion of 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 5.

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 ft	45.8	2.7	47.9	Non-hazardous
Underlying soil (1 to 2 ft)	*75*	*4.5*	*81.2*	*Non-hazardous*
0 to 1.5 ft	53.9	3.2	56.8	Non-hazardous
Underlying Soil (1.5 to 2 ft)	*103.8*	***6.1***	*112.4*	***Hazardous***
0 to 2 ft	63.9	3.8	67.9	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 to a depth of 2 feet would be classified as a non-hazardous since the 90% UCL-predicted WET lead concentration is less than the lead STLC of 5.0 mg/l.

If segregated and managed separately from the overlying soil, soil from 1.5 to 2 feet would be classified as a California hazardous waste since the 90% UCL-predicted WET lead concentration is greater than 5.0 mg/l. Based on the reported DI-WET and pH results, soil excavated from 1.5 to 2 feet may be reused in accordance with the DTSC Variance (as Caltrans Type Y-1) by placing the excavated soil under clean fill or pavement. Based on the TCLP lead results, excavated soil would not be classified as a RCRA hazardous waste.

6.2 Other CAM 17 Metals in Soil

With the exception of lead, CAM 17 metals were reported in the samples at total concentrations below ten times their respective STLCs.

Arsenic and lead were reported at concentrations greater than one or more ESL values. The 95% UCL calculations for arsenic and lead are included in Appendix C and summarized below along with the ESLs and published background concentrations.

Metal	Maximum	95% UCL	Shallow Soil Residential ESL	Shallow Soil Commercial/ Industrial ESL	Worker Direct Exposure ESL	Published Background Mean[1]	Published Background Range [1]
Arsenic	10	5.66	0.39	0.96	10	3.5	0.6 to 11.0
Lead	160	57.12	80	320	320	23.9	12.4 to 97.1

Concentrations reported in mg/kg

[1] Kearney Foundation of Soil Science, March 1996

The 95% UCL arsenic concentration is greater than the residential and commercial land use ESLs; however, it is less than the construction exposure ESL 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 lead concentration is less than the residential and commercial land use ESLs, less than the construction exposure ESL, and within published background range.

Based on the reported results for arsenic, offsite reuse or disposal of excavated soil may be restricted depending on proposed use.

Metals results for soil samples are summarized in Table 3.

6.3 Organics in Soil

TPHd was reported at concentrations less than its residential and commercial land use ESLs of 100 mg/kg and 110 mg/kg, respectively, and less than the construction exposure ESL of 900 mg/kg.

TPHmo was reported at concentrations greater than it residential land use ESL of 100 mg/kg. TPHmo was not reported at concentrations greater than its commercial land use ESL of 500 mg/kg or the construction exposure ESL of 28,000 mg/kg.

TPHg or VOC were not detected at or above laboratory reporting limits.

Based on the reported TPHmo concentrations greater than the residential land use ESL, offsite reuse or disposal of excavated soil may be restricted depending on proposed use.

6.4 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 soil.

N

0 1

Scale in Miles

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

SR-880 Post Mile R32.8/34.0

Oakland, California	**VICINITY MAP**	
GEOCON Proj. No. E8560-02-60		
Task Order No. 60	December 2013	Figure 1

GEOCON CONSULTANTS, INC.

6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

I-880 Erosion Control

Oakland, California

SITE PLAN

GEOCON Proj. No. E8560-02-60

EA No. 04-4A8100

December 2013

Figure 2

SITE1213

TABLE 1
Boring Coordinates
I-880 Erosion Control
Oakland, California

Boring	Northing	Easting	Latitude	Longitude
B1	2,119,456.537	6,042,482.160	37.801953855	-122.297115540
B2	2,119,518.951	6,042,172.869	37.802108917	-122.298190011
B3	2,119,612.573	6,041,846.394	37.802348754	-122.299326035
B4	2,119,773.164	6,041,529.554	37.802772974	-122.300433179
B5	2,119,909.923	6,041,365.421	37.803139815	-122.301010287
B6	2,120,044.606	6,041,144.077	37.803497928	-122.301785250
B7	2,120,229.851	6,040,966.235	37.803997174	-122.302413044
B8	2,120,440.675	6,040,784.308	37.804566433	-122.303056690
B9	NM	NM	NM	NM
B10	2,120,957.049	6,040,497.095	37.805969098	-122.304085097
B11	2,121,195.170	6,040,439.881	37.806619904	-122.304298990
B12	2,121,448.000	6,040,347.828	37.807309254	-122.304634441
B13	2,121,827.275	6,040,343.238	37.808350428	-122.304675641
B14	2,121,998.081	6,040,316.970	37.808818040	-122.304777951
B15	2,122,245.259	6,040,336.205	37.809497761	-122.304727881
B16	2,122,462.343	6,040,384.638	37.810096396	-122.304574748
B17	2,122,718.795	6,040,493.125	37.810806310	-122.304216392
B18	2,122,991.374	6,040,581.753	37.811559452	-122.303927839
B19	2,123,240.544	6,040,731.426	37.812251548	-122.303426440
B20	2,123,446.631	6,040,882.026	37.812825392	-122.302918952
B21	2,123,641.007	6,041,071.454	37.813369130	-122.302276285

Northing and Easting shown in NAD 83, Zone 3, feet

NM = Not Measured

TABLE 2
Summary of Lead and pH Results - Soil
I-880 Erosion Control
Oakland, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	DI-WET Lead (mg/l)	TCLP Lead (mg/l)	pH
B1-0	0 to 0.5	34	---	---	---	---
B1-1	1 to 1.5	30	---	---	---	8.9
B2-0	0 to 0.5	42	---	---	---	---
B2-1	1 to 1.5	45	---	---	---	---
B3-0	0 to 0.5	21	---	---	---	---
B3-1	1 to 1.5	61	3.8	---	---	---
B4-0	0 to 0.5	110	7.2	X	X	---
B4-1	1 to 1.5	160	11	X	X	---
B4-1.5	1.5 to 2	160	9.2	X	X	---
B5-0	0 to 0.5	11	---	---	---	---
B5-1	1 to 1.5	47	---	---	---	---
B6-0	0 to 0.5	13	---	---	---	---
B6-1	1 to 1.5	48	---	---	---	---
B7-0	0 to 0.5	18	---	---	---	---
B7-1	1 to 1.5	100	3.5	---	---	9.2
B8-0	0 to 0.5	80	4.3	---	---	---
B8-1	1 to 1.5	68	3.7	---	---	---
B8-1.5	1.5 to 2	60	3.2	---	---	---
B9-0	0 to 0.5	12	---	---	---	---
B9-1	1 to 1.5	21	---	---	---	---
B10-0	0 to 0.5	19	---	---	---	---
B10-1	1 to 1.5	11	---	---	---	---
B11-0	0 to 0.5	17	---	---	---	---
B11-1	1 to 1.5	8.8	---	---	---	---
B12-0	0 to 0.5	45	---	---	---	---
B12-1	1 to 1.5	37	---	---	---	---
B12-1.5	1.5 to 2	18	---	---	---	---

TABLE 2
Summary of Lead and pH Results - Soil
I-880 Erosion Control
Oakland, 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 to 0.5	59	3.1	---	---	---
B13-1	1 to 1.5	31	---	---	---	---
B14-0	0 to 0.5	59	2.5	---	---	---
B14-1	1 to 1.5	82	5.1	X	---	---
B15-0	0 to 0.5	31	---	---	---	---
B15-1	1 to 1.5	29	---	---	---	---
B16-0	0 to 0.5	83	7.6	X	---	---
B16-1	1 to 1.5	93	5.3	X	---	---
B16-1.5	1.5 to 2	94	5.6	X	---	---
B17-0	0 to 0.5	25	---	---	---	---
B17-1	1 to 1.5	27	---	---	---	9.2
B18-0	0 to 0.5	29	---	---	---	---
B18-1	1 to 1.5	120	6.7	X	X	---
B19-0	0 to 0.5	6.8	---	---	---	---
B19-1	1 to 1.5	<5.0	---	---	---	---
B20-0	0 to 0.5	21	---	---	---	---
B20-1	1 to 1.5	30	---	---	---	---
B20-1.5	1.5 to 2	50	1.8	---	---	---
B21-0	0 to 0.5	63	3.1	---	---	---
B21-1	1 to 1.5	23	---	---	---	---
Equipment Blank		<0.0050 mg/l				
Hazardous Waste Criteria						
	TTLC (mg/kg)	1,000	---	---	---	---
	STLC (mg/l)	---	5.0	---	---	---
	TCLP (mg/l)	---	---	---	5.0	---

Notes:
mg/kg = Milligrams per kilogram
mg/l = Milligrams per liter
WET = Waste Extraction Test using citric acid as the extraction fluid
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration

TABLE 3
Summary of CAM 17 Metals Results
I-880 Erosion Control
Oakland, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B4-0	0 to 0.5	<2.0	5.6	120	<1.0	<1.0	32	5.3	37	110	0.31	<1.0	26	<1.0	<1.0	<1.0	29	150
B4-1	1 to 1.5	<2.0	10	140	<1.0	<1.0	39	6.3	71	160	0.57	<1.0	28	<1.0	<1.0	<1.0	29	170
B4-1.5	1.5 to 2	<2.0	7.8	170	<1.0	<1.0	29	6.3	77	160	0.60	<1.0	29	<1.0	<1.0	<1.0	28	130
B8-0	0 to 0.5	<2.0	6.0	100	<1.0	<1.0	37	6.0	29	80	0.12	<1.0	32	<1.0	<1.0	<1.0	28	81
B8-1	1 to 1.5	<2.0	3.8	79	<1.0	<1.0	39	5.9	17	68	0.10	<1.0	30	<1.0	<1.0	<1.0	28	63
B8-1.5	1.5 to 2	<2.0	3.3	89	<1.0	<1.0	36	5.5	15	60	0.13	<1.0	29	<1.0	<1.0	<1.0	29	63
B12-0	0 to 0.5	<2.0	6.2	120	<1.0	<1.0	31	5.6	23	45	<0.10	<1.0	28	<1.0	<1.0	<1.0	30	70
B12-1	1 to 1.5	<2.0	6.6	120	<1.0	<1.0	35	5.8	24	37	0.12	<1.0	32	<1.0	<1.0	<1.0	30	75
B12-1.5	1.5 to 2	<2.0	3.0	61	<1.0	<1.0	33	5.4	12	18	<0.10	<1.0	38	<1.0	<1.0	<1.0	27	41
B16-0	0 to 0.5	<2.0	3.4	75	<1.0	<1.0	30	5.5	17	83	0.14	<1.0	26	<1.0	<1.0	<1.0	24	79
B16-1	1 to 1.5	<2.0	4.2	82	<1.0	<1.0	32	5.8	32	93	0.11	<1.0	28	<1.0	<1.0	<1.0	26	110
B16-1.5	1.5 to 2	<2.0	5.5	81	<1.0	<1.0	33	7.4	28	94	0.12	<1.0	30	<1.0	<1.0	<1.0	27	83
B20-0	0 to 0.5	<2.0	2.9	72	<1.0	<1.0	33	6.1	30	21	<0.10	1.2	31	<1.0	<1.0	<1.0	28	88
B20-1	1 to 1.5	<2.0	3.5	60	<1.0	<1.0	33	5.3	12	30	<0.10	<1.0	29	<1.0	<1.0	<1.0	25	45
B20-1.5	1.5 to 2	<2.0	3.5	88	<1.0	<1.0	38	6.2	16	50	<0.098	<1.0	32	<1.0	<1.0	<1.0	27	56
ESLs																		
Residential Land Use		20	0.39	750	4.0	12	750	23	230	80	6.7	40	150	10	20	0.78	200	600
Commercial/Industrial Land Use		40	0.96	1,500	8.0	12	750	80	230	320	10	40	150	10	40	10	200	600
Construction Worker Exposure		120	10	61,000	180	110	460,000	49	12,000	320	27	1,500	6,100	1,500	1,500	3.1	1,500	93,000
Hazardous Waste Criteria																		
TTLC (mg/kg)		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 (mg/l)		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 (mg/l)		---	5.0	100	---	1.0	6.0	---	---	5.0	0.2	---	---	1.0	5.0	---	---	---

Notes:

Results are shown in milligrams per kilogram (mg/kg).
Values listed for chromium are for Chromium III, as there is no standard for total chromium.
< = Analyte was not detected above the laboratory reporting limit.
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, Revised December 2013.
TTLC = total threshold limit concentration
STLC = soluble threshold limit concentration
TCLP = toxicity characteristic leaching procedure

TABLE 4
Summary of Organics Results
I-880 Erosion Control
Oakland, California

Sample ID	Sample Depth (ft)	TPHd (mg/kg)	TPHmo (mg/kg)	TPHg (mg/kg)	VOCs (ug/kg)
B3-0	0 to 0.5	35	160	---	---
B3-1	1 to 1.5	14	39	<1.0	ND
B5-0	0 to 0.5	95	230	---	---
B5-1	1 to 1.5	19	49	<1.0	ND
B7-0	0 to 0.5	11	32	---	---
B7-1	1 to 1.5	5.4	11	<1.0	ND
B9-0	0 to 0.5	8.9	22	---	---
B9-1	1 to 1.5	6.6	18	<1.0	ND
B12-0	0 to 0.5	18	55	---	---
B12-1	1 to 1.5	32	96	<1.0	ND
B14-0	0 to 0.5	40	100	---	---
B14-1	1 to 1.5	25	61	<1.0	ND
B16-0	0 to 0.5	14	29	---	---
B16-1	1 to 1.5	33	64	<1.0	ND
B20-0	0 to 0.5	11	36	---	---
B20-1	1 to 1.5	8.5	20	<1.0	ND
	ESLs				
	Residential	100	100	100	---
	Commercial/Industrial	110	500	500	---
	Construction Exposure	900	28,000	2,700	---

Notes:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil
TPHg = Total petroleum hydrocarbons as gasoline
--- = Not analyzed or no standard for this compound
< = Not detected above the stated laboratory reporting limit
ND = None detected
ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, Revised December 2013.

TABLE 5
Summary of Lead Statistical Analysis
I-880 Erosion Control
Oakland, California

Borings B1 to B21

TOTAL LEAD

	90% UCL	95% UCL
0 to 0.5 ft	45.8	47.9
1 to 1.5 ft	62.0	65.6
1.5 to 2 ft	103.8	112.4

EXCAVATION SCENARIOS

	Weighted Averages		
	90% UCL		95% UCL
Excavation Depth	**Total Lead (mg/kg)**	**WET Lead* (mg/l)**	**Total Lead (mg/kg)**
0 to 1 ft	45.8	2.7	47.9
Underlying Soil (1 to 2 ft)	*75.9*	*4.5*	*81.2*
0 to 1.5 ft	53.9	3.2	56.8
Underlying Soil (1.5 to 2 ft)	*103.8*	*6.1*	*112.4*
0 to 2 ft	63.9	3.8	67.9

Notes:

UCL = Upper Confidence Limit (90% UCL is applicable for waste classification; 95% UCL applicable for risk assessment)
mg/kg = milligrams per kilogram
mg/l = milligrams per liter
* = WET lead concentrations are predicted using slope of regression line,
where y = predicted WET lead and x = total lead.

Regression Line Slope: $y = 0.059\ x$

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

December 19, 2013

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

TEL: 925-371-5900 Ext 403
FAX: (925) 371-5915

CA-ELAP No.: 2676
NV Cert. No.: NV-009222007A

Workorder No.: N011599

RE: I-880 Erosion Control, E8560-02-60

Attention: Luann Beadle

Enclosed are the results for sample(s) received on December 11, 2013 by Advanced Technology Laboratories, Inc. . 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 (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Nancy Liberman for

Jose Tenorio Jr.
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 - Las Vegas.

Advanced Technology Laboratories, Inc. **Date:** *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Project: I-880 Erosion Control, E8560-02-60
Lab Order: N011599

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Samples were analyzed within method holding time .

Analytical Comments for EPA 6010B:

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) on QC samples N011599-007A-MS/MSD, N011599-035A-MS, N011599-030A-MS/MSD, N011599-046A-MS are outside recovery criteria for some analytes possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

RPD for sampIe duplicate N011599-007, N011599-035, N011599-046 are outside criteria for some analytes ; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 8015B_DRO/ORO:

Surrogate on samples N011599-005, N011599-005A-MS/MSD are outside recovery criteria possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

RPD for Sample Duplicate,Matrix Spike(MS) and Matrix Spike Duplicate(MSD) is outside criteria ; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Method Blank (MB2-44632) has hit above the reporting limit for Motor Oil but less than 1/10 of the amount measured in sample.

Matrix Spike (MS) is outside recovery criteria possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Advanced Technology Laboratories, Inc. *3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691*

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B1-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 1:30:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-001		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	34	5.0		mg/Kg	1	12/13/2013 11:58 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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-002

Client Sample ID: B1-1
Collection Date: 12/10/2013 1:35:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
PH						
				EPA 9045C		
RunID: WETCHEM_131212B QC Batch: R91569				PrepDate:		Analyst: **LCC**
pH	8.9	0.10		pH Units	1	12/12/2013
Temp. at time of pH Analysis	25	0		pH Units	1	12/12/2013
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A QC Batch: 44579				PrepDate:	12/11/2013	Analyst: **JAA**
Lead	30	5.0		mg/Kg	1	12/13/2013 01:02 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B2-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 1:20:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-003		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	42	5.0		mg/Kg	1	12/13/2013 01:10 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B2-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 1:25:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-004		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	45	5.0		mg/Kg	1	12/13/2013 01:18 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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-005

Client Sample ID: B3-0
Collection Date: 12/10/2013 1:05:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	35	10		mg/Kg	10	12/16/2013 11:58 PM
ORO	160	10		mg/Kg	10	12/16/2013 11:58 PM
Surr: p-Terphenyl	53.8	59-127	S	%REC	10	12/16/2013 11:58 PM
LEAD BY ICP						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	21	5.0		mg/Kg	1	12/13/2013 01:24 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-006

Client Sample ID: B3-1
Collection Date: 12/10/2013 1:10:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 11:25 AM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 11:25 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-006

Client Sample ID: B3-1
Collection Date: 12/10/2013 1:10:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 11:25 AM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 11:25 AM
Surr: 1,2-Dichloroethane-d4	88.2	63-139		%REC	1	12/12/2013 11:25 AM
Surr: 4-Bromofluorobenzene	77.8	75-124		%REC	1	12/12/2013 11:25 AM
Surr: Dibromofluoromethane	89.1	70-133		%REC	1	12/12/2013 11:25 AM
Surr: Toluene-d8	86.8	80-123		%REC	1	12/12/2013 11:25 AM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	14	1.0		mg/Kg	1	12/17/2013 12:50 AM
ORO	39	1.0		mg/Kg	1	12/17/2013 12:50 AM
Surr: p-Terphenyl	68.9	59-127		%REC	1	12/17/2013 12:50 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**

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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-006

Client Sample ID: B3-1
Collection Date: 12/10/2013 1:10:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 10:51 AM
Surr: Chlorobenzene - d5	104	51-136		%REC	1	12/12/2013 10:51 AM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	61	5.0		mg/Kg	1	12/13/2013 01:31 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-007

Client Sample ID: B4-0
Collection Date: 12/10/2013 12:50:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471			**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.31	0.10		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 08:31 PM
Arsenic	5.6	1.0		mg/Kg	1	12/12/2013 08:31 PM
Barium	120	1.0		mg/Kg	1	12/12/2013 08:31 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Chromium	32	1.0		mg/Kg	1	12/12/2013 08:31 PM
Cobalt	5.3	1.0		mg/Kg	1	12/12/2013 08:31 PM
Copper	37	2.0		mg/Kg	1	12/12/2013 08:31 PM
Lead	110	1.0		mg/Kg	1	12/12/2013 08:31 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Nickel	26	1.0		mg/Kg	1	12/12/2013 08:31 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 08:31 PM
Vanadium	29	1.0		mg/Kg	1	12/12/2013 08:31 PM
Zinc	150	1.0		mg/Kg	1	12/12/2013 08:31 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-008

Client Sample ID: B4-1
Collection Date: 12/10/2013 12:55:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.57	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 09:10 PM
Arsenic	10	1.0		mg/Kg	1	12/12/2013 09:10 PM
Barium	140	1.0		mg/Kg	1	12/12/2013 09:10 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Chromium	29	1.0		mg/Kg	1	12/12/2013 09:10 PM
Cobalt	6.3	1.0		mg/Kg	1	12/12/2013 09:10 PM
Copper	71	2.0		mg/Kg	1	12/12/2013 09:10 PM
Lead	160	1.0		mg/Kg	1	12/12/2013 09:10 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Nickel	28	1.0		mg/Kg	1	12/12/2013 09:10 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 09:10 PM
Vanadium	29	1.0		mg/Kg	1	12/12/2013 09:10 PM
Zinc	170	1.0		mg/Kg	1	12/12/2013 09:10 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-009

Client Sample ID: B4-1.5
Collection Date: 12/10/2013 1:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.60	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 09:16 PM
Arsenic	7.8	1.0		mg/Kg	1	12/12/2013 09:16 PM
Barium	170	1.0		mg/Kg	1	12/12/2013 09:16 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Chromium	29	1.0		mg/Kg	1	12/12/2013 09:16 PM
Cobalt	6.3	1.0		mg/Kg	1	12/12/2013 09:16 PM
Copper	77	2.0		mg/Kg	1	12/12/2013 09:16 PM
Lead	160	1.0		mg/Kg	1	12/12/2013 09:16 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Nickel	29	1.0		mg/Kg	1	12/12/2013 09:16 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 09:16 PM
Vanadium	28	1.0		mg/Kg	1	12/12/2013 09:16 PM
Zinc	130	1.0		mg/Kg	1	12/12/2013 09:16 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-010

Client Sample ID: B5-0
Collection Date: 12/10/2013 12:40:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	95	1.0		mg/Kg	1	12/17/2013 01:16 AM
ORO	230	1.0		mg/Kg	1	12/17/2013 01:16 AM
Surr: p-Terphenyl	74.6	59-127		%REC	1	12/17/2013 01:16 AM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	11	5.0		mg/Kg	1	12/13/2013 01:39 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-011

Client Sample ID: B5-1
Collection Date: 12/10/2013 12:45:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 11:47 AM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 11:47 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-011

Client Sample ID: B5-1
Collection Date: 12/10/2013 12:45:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 11:47 AM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 11:47 AM
Surr: 1,2-Dichloroethane-d4	93.2	63-139		%REC	1	12/12/2013 11:47 AM
Surr: 4-Bromofluorobenzene	83.9	75-124		%REC	1	12/12/2013 11:47 AM
Surr: Dibromofluoromethane	95.0	70-133		%REC	1	12/12/2013 11:47 AM
Surr: Toluene-d8	91.3	80-123		%REC	1	12/12/2013 11:47 AM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	19	1.0		mg/Kg	1	12/17/2013 01:41 AM
ORO	49	1.0		mg/Kg	1	12/17/2013 01:41 AM
Surr: p-Terphenyl	71.2	59-127		%REC	1	12/17/2013 01:41 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**

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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-011

Client Sample ID: B5-1
Collection Date: 12/10/2013 12:45:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 04:04 PM
Surr: Chlorobenzene - d5	107	51-136		%REC	1	12/12/2013 04:04 PM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	47	5.0		mg/Kg	1	12/13/2013 01:46 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B6-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:30:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-012		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	13	5.0		mg/Kg	1	12/13/2013 01:53 AM

Qualifiers:

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

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B6-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:35:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-013		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	48	5.0		mg/Kg	1	12/13/2013 02:12 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-014

Client Sample ID: B7-0
Collection Date: 12/10/2013 12:20:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	11	1.0		mg/Kg	1	12/17/2013 02:07 AM
ORO	32	1.0		mg/Kg	1	12/17/2013 02:07 AM
Surr: p-Terphenyl	69.7	59-127		%REC	1	12/17/2013 02:07 AM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	18	5.0		mg/Kg	1	12/13/2013 02:19 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-015

Client Sample ID: B7-1
Collection Date: 12/10/2013 12:25:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
PH						
				EPA 9045C		
RunID: WETCHEM_131212B QC Batch: R91569				PrepDate:		Analyst: **LCC**
pH	9.2	0.10		pH Units	1	12/12/2013
Temp. at time of pH Analysis	25	0		pH Units	1	12/12/2013
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A QC Batch: Q13VS039				PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 12:08 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-015

Client Sample ID: B7-1
Collection Date: 12/10/2013 12:25:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 12:08 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 12:08 PM
Surr: 1,2-Dichloroethane-d4	88.6	63-139		%REC	1	12/12/2013 12:08 PM
Surr: 4-Bromofluorobenzene	85.0	75-124		%REC	1	12/12/2013 12:08 PM
Surr: Dibromofluoromethane	92.2	70-133		%REC	1	12/12/2013 12:08 PM
Surr: Toluene-d8	89.8	80-123		%REC	1	12/12/2013 12:08 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	5.4	1.0		mg/Kg	1	12/17/2013 02:33 AM
ORO	11	1.0		mg/Kg	1	12/17/2013 02:33 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-015

Client Sample ID: B7-1
Collection Date: 12/10/2013 12:25:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
Surr: p-Terphenyl	78.1	59-127		%REC	1	12/17/2013 02:33 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 12:43 PM
Surr: Chlorobenzene - d5	108	51-136		%REC	1	12/12/2013 12:43 PM
LEAD BY ICP						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	100	5.0		mg/Kg	1	12/13/2013 02:40 AM

Qualifiers:

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

Advanced Technology Laboratories, Inc.
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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-016

Client Sample ID: B8-0
Collection Date: 12/10/2013 12:10:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471			**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.12	0.10		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 09:22 PM
Arsenic	6.0	1.0		mg/Kg	1	12/12/2013 09:22 PM
Barium	100	1.0		mg/Kg	1	12/12/2013 09:22 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Chromium	37	1.0		mg/Kg	1	12/12/2013 09:22 PM
Cobalt	6.0	1.0		mg/Kg	1	12/12/2013 09:22 PM
Copper	29	2.0		mg/Kg	1	12/12/2013 09:22 PM
Lead	80	1.0		mg/Kg	1	12/12/2013 09:22 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Nickel	32	1.0		mg/Kg	1	12/12/2013 09:22 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 09:22 PM
Vanadium	28	1.0		mg/Kg	1	12/12/2013 09:22 PM
Zinc	81	1.0		mg/Kg	1	12/12/2013 09:22 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-017

Client Sample ID: B8-1
Collection Date: 12/10/2013 12:15:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471			**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.10	0.10		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 09:54 PM
Arsenic	3.8	1.0		mg/Kg	1	12/12/2013 09:54 PM
Barium	79	1.0		mg/Kg	1	12/12/2013 09:54 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Chromium	39	1.0		mg/Kg	1	12/12/2013 09:54 PM
Cobalt	5.9	1.0		mg/Kg	1	12/12/2013 09:54 PM
Copper	17	2.0		mg/Kg	1	12/12/2013 09:54 PM
Lead	68	1.0		mg/Kg	1	12/12/2013 09:54 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Nickel	30	1.0		mg/Kg	1	12/12/2013 09:54 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 09:54 PM
Vanadium	28	1.0		mg/Kg	1	12/12/2013 09:54 PM
Zinc	63	1.0		mg/Kg	1	12/12/2013 09:54 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-018

Client Sample ID: B8-1.5
Collection Date: 12/10/2013 12:20:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.13	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:01 PM
Arsenic	3.3	1.0		mg/Kg	1	12/12/2013 10:01 PM
Barium	89	1.0		mg/Kg	1	12/12/2013 10:01 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Chromium	36	1.0		mg/Kg	1	12/12/2013 10:01 PM
Cobalt	5.5	1.0		mg/Kg	1	12/12/2013 10:01 PM
Copper	15	2.0		mg/Kg	1	12/12/2013 10:01 PM
Lead	60	1.0		mg/Kg	1	12/12/2013 10:01 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Nickel	29	1.0		mg/Kg	1	12/12/2013 10:01 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:01 PM
Vanadium	29	1.0		mg/Kg	1	12/12/2013 10:01 PM
Zinc	63	1.0		mg/Kg	1	12/12/2013 10:01 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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-019

Client Sample ID: B9-0
Collection Date: 12/10/2013 12:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC1_131218A	QC Batch: 44632			PrepDate:	12/17/2013	Analyst: **MDM**
DRO	8.9	1.0		mg/Kg	1	12/18/2013 05:35 PM
ORO	22	1.0		mg/Kg	1	12/18/2013 05:35 PM
Surr: p-Terphenyl	67.9	59-127		%REC	1	12/18/2013 05:35 PM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	12	5.0		mg/Kg	1	12/13/2013 02:47 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-020

Client Sample ID: B9-1
Collection Date: 12/10/2013 12:05:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 12:30 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 12:30 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-020

Client Sample ID: B9-1
Collection Date: 12/10/2013 12:05:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 8260B						
RunID: MS6_131212A QC Batch: Q13VS039 PrepDate: Analyst: **QBM**						
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 12:30 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 12:30 PM
Surr: 1,2-Dichloroethane-d4	95.1	63-139		%REC	1	12/12/2013 12:30 PM
Surr: 4-Bromofluorobenzene	88.8	75-124		%REC	1	12/12/2013 12:30 PM
Surr: Dibromofluoromethane	93.7	70-133		%REC	1	12/12/2013 12:30 PM
Surr: Toluene-d8	93.0	80-123		%REC	1	12/12/2013 12:30 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B **EPA 8015B**						
RunID: GC1_131216A QC Batch: 44616 PrepDate: 12/16/2013 Analyst: **MDM**						
DRO	6.6	1.0		mg/Kg	1	12/17/2013 03:24 AM
ORO	18	1.0		mg/Kg	1	12/17/2013 03:24 AM
Surr: p-Terphenyl	72.7	59-127		%REC	1	12/17/2013 03:24 AM
GASOLINE RANGE ORGANICS BY GC/FID						
EPA 8015B						
RunID: GC4_131212A QC Batch: E13VS127 PrepDate: Analyst: **PN**						

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, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-020

Client Sample ID: B9-1
Collection Date: 12/10/2013 12:05:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 01:12 PM
Surr: Chlorobenzene - d5	111	51-136		%REC	1	12/12/2013 01:12 PM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate: 12/11/2013		Analyst: **JAA**
Lead	21	5.0		mg/Kg	1	12/13/2013 02:54 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B10-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:52:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-021		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	19	5.0		mg/Kg	1	12/13/2013 03:01 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-022

Client Sample ID: B10-1
Collection Date: 12/10/2013 11:52:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	11	5.0		mg/Kg	1	12/13/2013 03:08 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B11-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:40:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-023		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	17	5.0		mg/Kg	1	12/13/2013 03:14 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B11-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:45:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-024		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	8.8	5.0		mg/Kg	1	12/13/2013 03:46 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-025

Client Sample ID: B12-0
Collection Date: 12/10/2013 11:25:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	18	1.0		mg/Kg	1	12/17/2013 03:50 AM
ORO	58	1.0		mg/Kg	1	12/17/2013 03:50 AM
Surr: p-Terphenyl	76.9	59-127		%REC	1	12/17/2013 03:50 AM
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	ND	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:09 PM
Arsenic	6.2	1.0		mg/Kg	1	12/12/2013 10:09 PM
Barium	120	1.0		mg/Kg	1	12/12/2013 10:09 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Chromium	31	1.0		mg/Kg	1	12/12/2013 10:09 PM
Cobalt	5.6	1.0		mg/Kg	1	12/12/2013 10:09 PM
Copper	23	2.0		mg/Kg	1	12/12/2013 10:09 PM
Lead	45	1.0		mg/Kg	1	12/12/2013 10:09 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Nickel	28	1.0		mg/Kg	1	12/12/2013 10:09 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:09 PM
Vanadium	30	1.0		mg/Kg	1	12/12/2013 10:09 PM
Zinc	70	1.0		mg/Kg	1	12/12/2013 10:09 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, Inc.
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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-026

Client Sample ID: B12-1
Collection Date: 12/10/2013 11:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 02:42 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 02:42 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, Inc.
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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-026

Client Sample ID: B12-1
Collection Date: 12/10/2013 11:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 8260B						
RunID: MS6_131212A QC Batch: Q13VS039 PrepDate: Analyst: **QBM**						
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 02:42 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 02:42 PM
Surr: 1,2-Dichloroethane-d4	85.9	63-139		%REC	1	12/12/2013 02:42 PM
Surr: 4-Bromofluorobenzene	70.0	75-124	S	%REC	1	12/12/2013 02:42 PM
Surr: Dibromofluoromethane	87.3	70-133		%REC	1	12/12/2013 02:42 PM
Surr: Toluene-d8	80.7	80-123		%REC	1	12/12/2013 02:42 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC1_131216A QC Batch: 44616 PrepDate: 12/16/2013 Analyst: **MDM**						
DRO	32	10		mg/Kg	10	12/17/2013 04:16 AM
ORO	96	10		mg/Kg	10	12/17/2013 04:16 AM
Surr: p-Terphenyl	85.5	59-127		%REC	10	12/17/2013 04:16 AM
GASOLINE RANGE ORGANICS BY GC/FID						
EPA 8015B						
RunID: GC4_131212A QC Batch: E13VS127 PrepDate: Analyst: **PN**						

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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-026

Client Sample ID: B12-1
Collection Date: 12/10/2013 11:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 01:40 PM
Surr: Chlorobenzene - d5	108	51-136		%REC	1	12/12/2013 01:40 PM
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471			**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.12	0.10		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:16 PM
Arsenic	6.6	1.0		mg/Kg	1	12/12/2013 10:16 PM
Barium	120	1.0		mg/Kg	1	12/12/2013 10:16 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Chromium	35	1.0		mg/Kg	1	12/12/2013 10:16 PM
Cobalt	5.8	1.0		mg/Kg	1	12/12/2013 10:16 PM
Copper	24	2.0		mg/Kg	1	12/12/2013 10:16 PM
Lead	37	1.0		mg/Kg	1	12/12/2013 10:16 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Nickel	32	1.0		mg/Kg	1	12/12/2013 10:16 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:16 PM
Vanadium	30	1.0		mg/Kg	1	12/12/2013 10:16 PM
Zinc	75	1.0		mg/Kg	1	12/12/2013 10:16 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-027

Client Sample ID: B12-1.5
Collection Date: 12/10/2013 11:35:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	ND	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:23 PM
Arsenic	3.0	1.0		mg/Kg	1	12/12/2013 10:23 PM
Barium	61	1.0		mg/Kg	1	12/12/2013 10:23 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Chromium	33	1.0		mg/Kg	1	12/12/2013 10:23 PM
Cobalt	5.4	1.0		mg/Kg	1	12/12/2013 10:23 PM
Copper	12	2.0		mg/Kg	1	12/12/2013 10:23 PM
Lead	18	1.0		mg/Kg	1	12/12/2013 10:23 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Nickel	28	1.0		mg/Kg	1	12/12/2013 10:23 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:23 PM
Vanadium	27	1.0		mg/Kg	1	12/12/2013 10:23 PM
Zinc	41	1.0		mg/Kg	1	12/12/2013 10:23 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-028

Client Sample ID: B13-0
Collection Date: 12/10/2013 11:10:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	59	5.0		mg/Kg	1	12/13/2013 03:52 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B13-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:10:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-029		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44579			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	31	5.0		mg/Kg	1	12/13/2013 04:00 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-030

Client Sample ID: B14-0
Collection Date: 12/10/2013 11:00:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	40	1.0		mg/Kg	1	12/17/2013 12:41 AM
ORO	100	1.0		mg/Kg	1	12/17/2013 12:41 AM
Surr: p-Terphenyl	76.5	59-127		%REC	1	12/17/2013 12:41 AM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	59	5.0		mg/Kg	1	12/13/2013 04:24 AM

Qualifiers:

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

Results are wet unless otherwise specified

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-031

Client Sample ID: B14-1
Collection Date: 12/10/2013 11:05:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 01:14 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 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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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-031

Client Sample ID: B14-1
Collection Date: 12/10/2013 11:05:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 01:14 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 01:14 PM
Surr: 1,2-Dichloroethane-d4	84.3	63-139		%REC	1	12/12/2013 01:14 PM
Surr: 4-Bromofluorobenzene	76.4	75-124		%REC	1	12/12/2013 01:14 PM
Surr: Dibromofluoromethane	87.9	70-133		%REC	1	12/12/2013 01:14 PM
Surr: Toluene-d8	82.2	80-123		%REC	1	12/12/2013 01:14 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	25	1.0		mg/Kg	1	12/17/2013 01:34 AM
ORO	61	1.0		mg/Kg	1	12/17/2013 01:34 AM
Surr: p-Terphenyl	75.4	59-127		%REC	1	12/17/2013 01:34 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**

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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-031

Client Sample ID: B14-1
Collection Date: 12/10/2013 11:05:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 02:09 PM
Surr: Chlorobenzene - d5	106	51-136		%REC	1	12/12/2013 02:09 PM
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate: 12/11/2013		Analyst: **JAA**
Lead	82	5.0		mg/Kg	1	12/13/2013 05:18 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B15-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:45:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-032		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	31	5.0		mg/Kg	1	12/13/2013 05:25 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B15-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:55:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-033		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	29	5.0		mg/Kg	1	12/13/2013 05:33 AM

Qualifiers:

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

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-034

Client Sample ID: B16-0
Collection Date: 12/10/2013 10:25:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	14	1.0		mg/Kg	1	12/17/2013 02:00 AM
ORO	29	1.0		mg/Kg	1	12/17/2013 02:00 AM
Surr: p-Terphenyl	73.6	59-127		%REC	1	12/17/2013 02:00 AM
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.14	0.099		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:30 PM
Arsenic	3.4	1.0		mg/Kg	1	12/12/2013 10:30 PM
Barium	75	1.0		mg/Kg	1	12/12/2013 10:30 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Chromium	30	1.0		mg/Kg	1	12/12/2013 10:30 PM
Cobalt	5.5	1.0		mg/Kg	1	12/12/2013 10:30 PM
Copper	17	2.0		mg/Kg	1	12/12/2013 10:30 PM
Lead	83	1.0		mg/Kg	1	12/12/2013 10:30 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Nickel	26	1.0		mg/Kg	1	12/12/2013 10:30 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:30 PM
Vanadium	24	1.0		mg/Kg	1	12/12/2013 10:30 PM
Zinc	79	1.0		mg/Kg	1	12/12/2013 10:30 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-035

Client Sample ID: B16-1
Collection Date: 12/10/2013 10:35:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 01:36 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 01:36 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-035

Client Sample ID: B16-1
Collection Date: 12/10/2013 10:35:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 01:36 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 01:36 PM
Surr: 1,2-Dichloroethane-d4	93.0	63-139		%REC	1	12/12/2013 01:36 PM
Surr: 4-Bromofluorobenzene	79.0	75-124		%REC	1	12/12/2013 01:36 PM
Surr: Dibromofluoromethane	95.0	70-133		%REC	1	12/12/2013 01:36 PM
Surr: Toluene-d8	86.8	80-123		%REC	1	12/12/2013 01:36 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
	EPA 3550B			**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	33	1.0		mg/Kg	1	12/17/2013 02:27 AM
ORO	64	1.0		mg/Kg	1	12/17/2013 02:27 AM
Surr: p-Terphenyl	80.4	59-127		%REC	1	12/17/2013 02:27 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**

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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-035

Client Sample ID: B16-1
Collection Date: 12/10/2013 10:35:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
			EPA 8015B			
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 02:38 PM
Surr: Chlorobenzene - d5	110	51-136		%REC	1	12/12/2013 02:38 PM
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471		**EPA 7471A**			
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.11	0.099		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B		**EPA 6010B**			
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:38 PM
Arsenic	4.2	1.0		mg/Kg	1	12/12/2013 10:38 PM
Barium	82	1.0		mg/Kg	1	12/12/2013 10:38 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Chromium	32	1.0		mg/Kg	1	12/12/2013 10:38 PM
Cobalt	5.8	1.0		mg/Kg	1	12/12/2013 10:38 PM
Copper	32	2.0		mg/Kg	1	12/12/2013 10:38 PM
Lead	93	1.0		mg/Kg	1	12/12/2013 10:38 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Nickel	28	1.0		mg/Kg	1	12/12/2013 10:38 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:38 PM
Vanadium	26	1.0		mg/Kg	1	12/12/2013 10:38 PM
Zinc	110	1.0		mg/Kg	1	12/12/2013 10:38 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-036

Client Sample ID: B16-1.5
Collection Date: 12/10/2013 10:45:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	0.12	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 10:59 PM
Arsenic	5.5	1.0		mg/Kg	1	12/12/2013 10:59 PM
Barium	81	1.0		mg/Kg	1	12/12/2013 10:59 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Chromium	33	1.0		mg/Kg	1	12/12/2013 10:59 PM
Cobalt	7.4	1.0		mg/Kg	1	12/12/2013 10:59 PM
Copper	28	2.0		mg/Kg	1	12/12/2013 10:59 PM
Lead	94	1.0		mg/Kg	1	12/12/2013 10:59 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Nickel	30	1.0		mg/Kg	1	12/12/2013 10:59 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 10:59 PM
Vanadium	27	1.0		mg/Kg	1	12/12/2013 10:59 PM
Zinc	83	1.0		mg/Kg	1	12/12/2013 10:59 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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B17-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:15:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-037		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	25	5.0		mg/Kg	1	12/13/2013 05:41 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-038

Client Sample ID: B17-1
Collection Date: 12/10/2013 10:19:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
PH						
				EPA 9045C		
RunID: WETCHEM_131212B	QC Batch: R91569			PrepDate:		Analyst: **LCC**
pH	9.2	0.10		pH Units	1	12/12/2013
Temp. at time of pH Analysis	25	0		pH Units	1	12/12/2013
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	27	5.0		mg/Kg	1	12/13/2013 05:48 AM

Qualifiers:

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

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ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B18-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:00:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-039		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	29	5.0		mg/Kg	1	12/13/2013 05:56 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-040

Client Sample ID: B18-1
Collection Date: 12/10/2013 10:10:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate: 12/11/2013		Analyst: **JAA**
Lead	120	5.0		mg/Kg	1	12/13/2013 06:03 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-041

Client Sample ID: B19-0
Collection Date: 12/10/2013 9:50:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	6.8	5.0		mg/Kg	1	12/13/2013 06:10 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B19-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:55:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-042		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	ND	5.0		mg/Kg	1	12/13/2013 06:42 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, Inc.

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-043

Client Sample ID: B20-0
Collection Date: 12/10/2013 9:37:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate:	12/16/2013	Analyst: **MDM**
DRO	11	1.0		mg/Kg	1	12/17/2013 02:53 AM
ORO	36	1.0		mg/Kg	1	12/17/2013 02:53 AM
Surr: p-Terphenyl	80.4	59-127		%REC	1	12/17/2013 02:53 AM
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	ND	0.10		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 11:18 PM
Arsenic	2.9	1.0		mg/Kg	1	12/12/2013 11:18 PM
Barium	72	1.0		mg/Kg	1	12/12/2013 11:18 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 11:18 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 11:18 PM
Chromium	33	1.0		mg/Kg	1	12/12/2013 11:18 PM
Cobalt	6.1	1.0		mg/Kg	1	12/12/2013 11:18 PM
Copper	30	2.0		mg/Kg	1	12/12/2013 11:18 PM
Lead	21	1.0		mg/Kg	1	12/12/2013 11:18 PM
Molybdenum	1.2	1.0		mg/Kg	1	12/12/2013 11:18 PM
Nickel	31	1.0		mg/Kg	1	12/12/2013 11:18 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 11:18 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 11:18 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 11:18 PM
Vanadium	28	1.0		mg/Kg	1	12/12/2013 11:18 PM
Zinc	88	1.0		mg/Kg	1	12/12/2013 11:18 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		

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-044

Client Sample ID: B20-1
Collection Date: 12/10/2013 9:40:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
1,1,1,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1,1-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1,2-Trichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,1-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2,3-Trichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/Kg	1	12/12/2013 01:58 PM
1,2-Dibromoethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2-Dichloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,3-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,3-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
1,4-Dichlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
2,2-Dichloropropane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
2-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
4-Chlorotoluene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
4-Isopropyltoluene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Benzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Bromobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Bromodichloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Bromoform	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Bromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Carbon tetrachloride	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Chlorobenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Chloroethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Chloroform	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Chloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
cis-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
cis-1,3-Dichloropropene	ND	5.0		µg/Kg	1	12/12/2013 01:58 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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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-044

Client Sample ID: B20-1
Collection Date: 12/10/2013 9:40:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
				EPA 8260B		
RunID: MS6_131212A	QC Batch: Q13VS039			PrepDate:		Analyst: **QBM**
Dibromochloromethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Dibromomethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Dichlorodifluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Ethylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Hexachlorobutadiene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Isopropylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
m,p-Xylene	ND	10		µg/Kg	1	12/12/2013 01:58 PM
Methylene chloride	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
MTBE	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
n-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
n-Propylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Naphthalene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
o-Xylene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
sec-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Styrene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
tert-Butylbenzene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Tetrachloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Toluene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
trans-1,2-Dichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Trichloroethene	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Trichlorofluoromethane	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Vinyl chloride	ND	5.0		µg/Kg	1	12/12/2013 01:58 PM
Surr: 1,2-Dichloroethane-d4	86.2	63-139		%REC	1	12/12/2013 01:58 PM
Surr: 4-Bromofluorobenzene	80.8	75-124		%REC	1	12/12/2013 01:58 PM
Surr: Dibromofluoromethane	86.3	70-133		%REC	1	12/12/2013 01:58 PM
Surr: Toluene-d8	86.6	80-123		%REC	1	12/12/2013 01:58 PM
DIESEL & MOTOR OIL RANGE ORGANICS BY GC/FID						
EPA 3550B				**EPA 8015B**		
RunID: GC3_131216A	QC Batch: 44616			PrepDate: 12/16/2013		Analyst: **MDM**
DRO	8.5	1.0		mg/Kg	1	12/17/2013 03:20 AM
ORO	20	1.0		mg/Kg	1	12/17/2013 03:20 AM
Surr: p-Terphenyl	78.1	59-127		%REC	1	12/17/2013 03:20 AM
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch: E13VS127			PrepDate:		Analyst: **PN**

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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-044

Client Sample ID: B20-1
Collection Date: 12/10/2013 9:40:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS BY GC/FID						
				EPA 8015B		
RunID: GC4_131212A	QC Batch:	E13VS127		PrepDate:		Analyst: **PN**
GRO	ND	1.0		mg/Kg	1	12/12/2013 03:06 PM
Surr: Chlorobenzene - d5	111	51-136		%REC	1	12/12/2013 03:06 PM
MERCURY BY COLD VAPOR TECHNIQUE						
	EPA 7471			**EPA 7471A**		
RunID: AA1_131213A	QC Batch:	44591		PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	ND	0.10		mg/Kg	1	12/13/2013
ICP METALS						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131212E	QC Batch:	44581		PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 11:26 PM
Arsenic	3.5	1.0		mg/Kg	1	12/12/2013 11:26 PM
Barium	60	1.0		mg/Kg	1	12/12/2013 11:26 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Chromium	33	1.0		mg/Kg	1	12/12/2013 11:26 PM
Cobalt	5.3	1.0		mg/Kg	1	12/12/2013 11:26 PM
Copper	12	2.0		mg/Kg	1	12/12/2013 11:26 PM
Lead	30	1.0		mg/Kg	1	12/12/2013 11:26 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Nickel	29	1.0		mg/Kg	1	12/12/2013 11:26 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 11:26 PM
Vanadium	25	1.0		mg/Kg	1	12/12/2013 11:26 PM
Zinc	45	1.0		mg/Kg	1	12/12/2013 11:26 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: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Lab Order: N011599
Project: I-880 Erosion Control, E8560-02-60
Lab ID: N011599-045

Client Sample ID: B20-1.5
Collection Date: 12/10/2013 9:43:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY BY COLD VAPOR TECHNIQUE						
EPA 7471				**EPA 7471A**		
RunID: AA1_131213A	QC Batch: 44591			PrepDate:	12/12/2013	Analyst: **LCC**
Mercury	ND	0.098		mg/Kg	1	12/13/2013
ICP METALS						
EPA 3050B				**EPA 6010B**		
RunID: ICP2_131212E	QC Batch: 44581			PrepDate:	12/11/2013	Analyst: **JAA**
Antimony	ND	2.0		mg/Kg	1	12/12/2013 11:33 PM
Arsenic	3.5	1.0		mg/Kg	1	12/12/2013 11:33 PM
Barium	88	1.0		mg/Kg	1	12/12/2013 11:33 PM
Beryllium	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Cadmium	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Chromium	38	1.0		mg/Kg	1	12/12/2013 11:33 PM
Cobalt	6.2	1.0		mg/Kg	1	12/12/2013 11:33 PM
Copper	16	2.0		mg/Kg	1	12/12/2013 11:33 PM
Lead	50	1.0		mg/Kg	1	12/12/2013 11:33 PM
Molybdenum	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Nickel	32	1.0		mg/Kg	1	12/12/2013 11:33 PM
Selenium	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Silver	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Thallium	ND	1.0		mg/Kg	1	12/12/2013 11:33 PM
Vanadium	27	1.0		mg/Kg	1	12/12/2013 11:33 PM
Zinc	56	1.0		mg/Kg	1	12/12/2013 11:33 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: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B21-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:30:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-046		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	63	5.0		mg/Kg	1	12/13/2013 06:49 AM

Qualifiers:

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

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B21-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:35:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-047		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
LEAD BY ICP						
	EPA 3050B			**EPA 6010B**		
RunID: ICP2_131213A	QC Batch: 44580			PrepDate:	12/11/2013	Analyst: **JAA**
Lead	23	5.0		mg/Kg	1	12/13/2013 07:08 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, Inc.

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *19-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	Equipment Blank
Lab Order:	N011599	**Collection Date:**	12/10/2013
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	WATER
Lab ID:	N011599-048		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS						
EPA 3010A			**EPA 6010B**			
RunID: ICP2_131213F	QC Batch: 44596			PrepDate:	12/13/2013	Analyst: **JAA**
Lead	ND	0.0050		mg/L	1	12/13/2013 02:33 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, Inc.
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Advanced Technology Laboratories, Inc.

Date: *19-Dec-13*

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **LCS-44581** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **LCSS** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	23.602	2.0	25.00	0	94.4	80	120				
Arsenic	23.797	1.0	25.00	0	95.2	80	120				
Barium	24.929	1.0	25.00	0	99.7	80	120				
Beryllium	24.401	1.0	25.00	0	97.6	80	120				
Cadmium	24.516	1.0	25.00	0	98.1	80	120				
Chromium	24.823	1.0	25.00	0	99.3	80	120				
Cobalt	24.760	1.0	25.00	0	99.0	80	120				
Copper	26.992	2.0	25.00	0	108	80	120				
Lead	25.238	1.0	25.00	0	101	80	120				
Molybdenum	26.044	1.0	25.00	0	104	80	120				
Nickel	24.632	1.0	25.00	0	98.5	80	120				
Selenium	22.361	1.0	25.00	0	89.4	80	120				
Silver	22.535	1.0	25.00	0	90.1	80	120				
Thallium	24.670	1.0	25.00	0	98.7	80	120				
Vanadium	25.251	1.0	25.00	0	101	80	120				
Zinc	24.191	1.0	25.00	0	96.8	80	120				

Sample ID: **N011599-007A-DUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0						0	0	20	
Arsenic	6.020	1.0						5.558	7.98	20	
Barium	125.449	1.0						118.7	5.51	20	
Beryllium	0.161	1.0						0.1462	0	20	
Cadmium	ND	1.0						0	0	20	
Chromium	29.302	1.0						31.60	7.54	20	
Cobalt	5.121	1.0						5.258	2.64	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
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CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **N011599-007A-DUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	33.444	2.0						37.28	10.8	20	
Lead	139.411	1.0						109.5	24.1	20	R
Molybdenum	ND	1.0						0.1585	0	20	
Nickel	24.370	1.0						26.19	7.19	20	
Selenium	0.420	1.0						0.6294	0	20	
Silver	ND	1.0						0	0	20	
Thallium	ND	1.0						0	0	20	
Vanadium	28.687	1.0						28.80	0.384	20	
Zinc	90.552	1.0						152.7	51.1	20	R

Sample ID: **N011599-007A-MS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702217**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	15.419	2.0	25.06	0	61.5	75	125				S
Arsenic	27.355	1.0	25.06	5.558	87.0	75	125				
Barium	137.638	1.0	25.06	118.7	75.5	75	125				
Beryllium	23.578	1.0	25.06	0.1462	93.5	75	125				
Cadmium	21.698	1.0	25.06	0	86.6	75	125				
Chromium	53.225	1.0	25.06	31.60	86.3	75	125				
Cobalt	29.130	1.0	25.06	5.258	95.2	75	125				
Copper	67.271	2.0	25.06	37.28	120	75	125				
Lead	143.270	1.0	25.06	109.5	135	75	125				S
Molybdenum	22.630	1.0	25.06	0.1585	89.7	75	125				
Nickel	47.736	1.0	25.06	26.19	86.0	75	125				
Selenium	21.298	1.0	25.06	0.6294	82.5	75	125				
Silver	19.272	1.0	25.06	0	76.9	75	125				
Thallium	21.219	1.0	25.06	0	84.7	75	125				
Vanadium	52.522	1.0	25.06	28.80	94.7	75	125				
Zinc	109.113	1.0	25.06	152.7	-174	75	125				S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **N011599-007A-MSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702218**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	14.491	2.0	25.00	0	58.0	75	125	15.42	6.21	20	S
Arsenic	27.995	1.0	25.00	5.558	89.7	75	125	27.36	2.31	20	
Barium	131.609	1.0	25.00	118.7	51.5	75	125	137.6	4.48	20	S
Beryllium	21.478	1.0	25.00	0.1462	85.3	75	125	23.58	9.32	20	
Cadmium	20.087	1.0	25.00	0	80.3	75	125	21.70	7.71	20	
Chromium	48.502	1.0	25.00	31.60	67.6	75	125	53.23	9.29	20	S
Cobalt	27.242	1.0	25.00	5.258	87.9	75	125	29.13	6.70	20	
Copper	57.197	2.0	25.00	37.28	79.7	75	125	67.27	16.2	20	
Lead	150.544	1.0	25.00	109.5	164	75	125	143.3	4.95	20	S
Molybdenum	21.034	1.0	25.00	0.1585	83.5	75	125	22.63	7.31	20	
Nickel	47.640	1.0	25.00	26.19	85.8	75	125	47.74	0.201	20	
Selenium	19.582	1.0	25.00	0.6294	75.8	75	125	21.30	8.40	20	
Silver	17.502	1.0	25.00	0	70.0	75	125	19.27	9.63	20	S
Thallium	19.390	1.0	25.00	0	77.6	75	125	21.22	9.01	20	
Vanadium	49.639	1.0	25.00	28.80	83.4	75	125	52.52	5.64	20	
Zinc	192.983	1.0	25.00	152.7	161	75	125	109.1	55.5	20	SR

Sample ID: **N011599-035A-DUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0						0	0	20	
Arsenic	3.946	1.0						4.235	7.06	20	
Barium	78.396	1.0						82.21	4.75	20	
Beryllium	ND	1.0						0	0	20	
Cadmium	ND	1.0						0	0	20	
Chromium	32.962	1.0						32.30	2.01	20	
Cobalt	5.784	1.0						5.805	0.358	20	
Copper	21.605	2.0						31.80	38.2	20	R
Lead	78.921	1.0						93.09	16.5	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **N011599-035A-DUP** SampType: **DUP** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Molybdenum	ND	1.0						0	0	20	
Nickel	27.542	1.0						28.03	1.76	20	
Selenium	0.488	1.0						0.4263	0	20	
Silver	ND	1.0						0	0	20	
Thallium	ND	1.0						0	0	20	
Vanadium	25.477	1.0						26.21	2.84	20	
Zinc	73.435	1.0						107.4	37.6	20	R

Sample ID: **N011599-035A-MS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91590**
Client ID: **ZZZZZZ** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	11.843	2.0	24.91	0	47.5	75	125				S
Arsenic	26.889	1.0	24.91	4.235	90.9	75	125				
Barium	108.695	1.0	24.91	82.21	106	75	125				
Beryllium	22.816	1.0	24.91	0	91.6	75	125				
Cadmium	21.513	1.0	24.91	0	86.4	75	125				
Chromium	71.930	1.0	24.91	32.30	159	75	125				S
Cobalt	29.715	1.0	24.91	5.805	96.0	75	125				
Copper	43.694	2.0	24.91	31.80	47.7	75	125				S
Lead	105.291	1.0	24.91	93.09	49.0	75	125				S
Molybdenum	22.100	1.0	24.91	0	88.7	75	125				
Nickel	62.675	1.0	24.91	28.03	139	75	125				S
Selenium	21.048	1.0	24.91	0.4263	82.8	75	125				
Silver	18.914	1.0	24.91	0	75.9	75	125				
Thallium	21.229	1.0	24.91	0	85.2	75	125				
Vanadium	50.621	1.0	24.91	26.21	98.0	75	125				
Zinc	95.149	1.0	24.91	107.4	-49.1	75	125				S

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID: **MB1-44581** SampType: **MBLK** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91606**
Client ID: **PBS** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702715**

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	ND	1.0									

Sample ID: **MB2-44581** SampType: **MBLK** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91606**
Client ID: **PBS** Batch ID: **44581** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702716**

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									

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_S

Sample ID:	**MB2-44581**	SampType:	**MBLK**	TestCode:	**6010_S**	Units:	**mg/Kg**		Prep Date:	**12/11/2013**		RunNo:	**91606**	
Client ID:	**PBS**	Batch ID:	**44581**	TestNo:	**EPA 6010B**		**EPA 3050B**		Analysis Date:	**12/13/2013**		SeqNo:	**1702716**	
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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		ND		1.0										

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **MB1-44579** SampType: **MBLK** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **PBS** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702360**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.143	5.0									

Sample ID: **MB2-44579** SampType: **MBLK** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **PBS** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702361**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.168	5.0									

Sample ID: **LCS-44579** SampType: **LCS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **LCSS** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/12/2013** SeqNo: **1702362**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	24.403	5.0	25.00	0	97.6	80	120				

Sample ID: **N011599-001A-DUP** SampType: **DUP** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702363**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	41.106	5.0						34.30	18.0	20	

Sample ID: **N011599-001A-MS** SampType: **MS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702370**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	60.487	5.0	25.01	34.30	105	75	125				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **N011599-001A-MSD** SampType: **MSD** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702371**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	58.801	5.0	24.98	34.30	98.1	75	125	60.49	2.83	20	

Sample ID: **N011599-014A-DUP** SampType: **DUP** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702384**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	18.637	5.0						18.38	1.41	20	

Sample ID: **N011599-014A-MS** SampType: **MS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44579** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702385**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	40.423	5.0	24.95	18.38	88.4	75	125				

Qualifiers:

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

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Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **MB1-44580** SampType: **MBLK** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **PBS** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702399**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.125	5.0									

Sample ID: **MB2-44580** SampType: **MBLK** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **PBS** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702400**

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

Sample ID: **LCS-44580** SampType: **LCS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **LCSS** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	24.340	5.0	25.00	0	97.4	80	120				

Sample ID: **N011599-030A-DUP** SampType: **DUP** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	55.485	5.0						58.56	5.39	20	

Sample ID: **N011599-030A-MS** SampType: **MS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702408**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	69.483	5.0	25.03	58.56	43.6	75	125				S

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_SPB

Sample ID: **N011599-030A-MSD** SampType: **MSD** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702409**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	76.988	5.0	24.91	58.56	74.0	75	125	69.48	10.2	20	S

Sample ID: **N011599-046A-DUP** SampType: **DUP** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702424**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	47.044	5.0						63.16	29.2	20	R

Sample ID: **N011599-046A-MS** SampType: **MS** TestCode: **6010_SPB** Units: **mg/Kg** Prep Date: **12/11/2013** RunNo: **91592**
Client ID: **ZZZZZZ** Batch ID: **44580** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **12/13/2013** SeqNo: **1702425**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	77.591	5.0	24.89	63.16	58.0	75	125				S

Qualifiers:

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

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Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_W

Sample ID: **MB-44596** SampType: **MBLK** TestCode: **6010_W** Units: **mg/L** Prep Date: **12/13/2013** RunNo: **91651**
Client ID: **PBW** Batch ID: **44596** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **12/13/2013** SeqNo: **1704238**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.0050									

Sample ID: **LCS-44596** SampType: **LCS** TestCode: **6010_W** Units: **mg/L** Prep Date: **12/13/2013** RunNo: **91651**
Client ID: **LCSW** Batch ID: **44596** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **12/13/2013** SeqNo: **1704240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.508	0.0050	0.5000	0	102	85	115				

Sample ID: **N011607-001A-MS** SampType: **MS** TestCode: **6010_W** Units: **mg/L** Prep Date: **12/13/2013** RunNo: **91651**
Client ID: **ZZZZZZ** Batch ID: **44596** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **12/13/2013** SeqNo: **1704247**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.556	0.0050	0.5000	0.08320	94.6	75	125				

Sample ID: **N011607-001A-MSD** SampType: **MSD** TestCode: **6010_W** Units: **mg/L** Prep Date: **12/13/2013** RunNo: **91651**
Client ID: **ZZZZZZ** Batch ID: **44596** TestNo: **EPA 6010B** **EPA 3010A** Analysis Date: **12/13/2013** SeqNo: **1704248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.564	0.0050	0.5000	0.08320	96.1	75	125	0.5562	1.34	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: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: **LCS-44591** SampType: **LCS** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **LCSS** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702466**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.448	0.099	0.4126	0	109	80	120				

Sample ID: **MB-44591** SampType: **MBLK** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **PBS** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702467**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.099									

Sample ID: **N011599-007A-DUP** SampType: **DUP** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **ZZZZZZ** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702469**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.260	0.10						0.3132	18.6	20	

Sample ID: **N011599-007A-MS** SampType: **MS** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **ZZZZZZ** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702470**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.811	0.10	0.4195	0.3132	119	75	125				

Sample ID: **N011599-007A-MSD** SampType: **MSD** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **ZZZZZZ** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.726	0.10	0.4230	0.3132	97.5	75	125	0.8110	11.1	20	

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 7471_S

Sample ID: **N011599-035A-DUP** SampType: **DUP** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **ZZZZZZ** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702482**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.155	0.10						0.1102	33.7	20	R

Sample ID: **N011599-035A-MS** SampType: **MS** TestCode: **7471_S** Units: **mg/Kg** Prep Date: **12/12/2013** RunNo: **91595**
Client ID: **ZZZZZZ** Batch ID: **44591** TestNo: **EPA 7471A** **EPA 7471** Analysis Date: **12/13/2013** SeqNo: **1702483**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.555	0.10	0.4146	0.1102	107	75	125				

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **LCS-44616** SampType: **LCS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91668**
Client ID: **LCSS** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/16/2013** SeqNo: **1705107**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	60.463	1.0	83.30	0	72.6	52	126				
Surr: p-Terphenyl	6.157		6.670		92.3	59	127				

Sample ID: **MB1-44616** SampType: **MBLK** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91668**
Client ID: **PBS** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/16/2013** SeqNo: **1705108**

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	5.558		6.670		83.3	59	127				

Sample ID: **N011599-005A-DUP** SampType: **DUP** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91668**
Client ID: **ZZZZZZ** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/17/2013** SeqNo: **1705110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	46.235	10						34.60	28.8	20	R
ORO	226.407	10						164.6	31.6	20	R
Surr: p-Terphenyl	3.436		6.659		51.6	59	127		0		S

Sample ID: **N011599-005A-MS** SampType: **MS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91668**
Client ID: **ZZZZZZ** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/17/2013** SeqNo: **1705120**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	46.011	10	83.30	34.60	13.7	13	129				
Surr: p-Terphenyl	3.588		6.670		53.8	59	127				S

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **N011599-005A-MSD** SampType: **MSD** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91668**
Client ID: **ZZZZZZ** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/17/2013** SeqNo: **1705121**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	57.588	10	83.30	34.60	27.6	13	129	46.01	22.4	20	R
Surr: p-Terphenyl	3.340		6.670		50.1	59	127		0		S

Sample ID: **MB2-44616** SampType: **MBLK** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91673**
Client ID: **PBS** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/16/2013** SeqNo: **1705295**

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	5.924		6.670		88.8	59	127				

Sample ID: **N011599-030A-DUP** SampType: **DUP** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91673**
Client ID: **ZZZZZZ** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/17/2013** SeqNo: **1705301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	13.032	1.0						39.74	101	20	R
ORO	39.012	1.0						101.0	88.6	20	R
Surr: p-Terphenyl	4.383		6.670		65.7	59	127		0		

Sample ID: **N011599-030A-MS** SampType: **MS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/16/2013** RunNo: **91673**
Client ID: **ZZZZZZ** Batch ID: **44616** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/17/2013** SeqNo: **1705307**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	67.067	1.0	83.30	39.74	32.8	13	129				
Surr: p-Terphenyl	5.255		6.670		78.8	59	127				

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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Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **LCS-44632** SampType: **LCS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **LCSS** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1705627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	59.106	1.0	83.30	0	71.0	52	126				
Surr: p-Terphenyl	5.854		6.670		87.8	59	127				

Sample ID: **MB1-44632** SampType: **MBLK** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **PBS** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1705628**

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	5.826		6.670		87.4	59	127				

Sample ID: **N011655-002A-dup** SampType: **duP** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **ZZZZZZ** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1706198**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	89.845	1.0						94.70	5.26	20	
ORO	201.809	1.0						222.6	9.81	20	
Surr: p-Terphenyl	3.598		6.688		53.8	59	127		0		S

Sample ID: **N011655-002A-MS** SampType: **MS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **ZZZZZZ** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1706206**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	94.092	1.0	83.55	94.70	-0.727	13	129				S
Surr: p-Terphenyl	4.220		6.690		63.1	59	127				

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015_S_DM LL

Sample ID: **N011655-002A-MSD** SampType: **MSD** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **ZZZZZZ** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1706207**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	128.249	1.0	83.38	94.70	40.2	13	129	94.09	30.7	20	R
Surr: p-Terphenyl	3.960		6.677		59.3	59	127		0		

Sample ID: **MB2-44632** SampType: **MBLK** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **PBS** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/18/2013** SeqNo: **1706208**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	ND	1.0									
ORO	1.339	1.0									
Surr: p-Terphenyl	5.258		6.670		78.8	59	127				

Sample ID: **N011655-025A-DUP** SampType: **DUP** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **ZZZZZZ** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/19/2013** SeqNo: **1706211**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	24.653	1.0						23.33	5.53	20	
ORO	57.337	1.0						55.14	3.91	20	B
Surr: p-Terphenyl	4.700		6.677		70.4	59	127		0		

Sample ID: **N011655-025A-MS** SampType: **MS** TestCode: **8015_S_DM L** Units: **mg/Kg** Prep Date: **12/17/2013** RunNo: **91686**
Client ID: **ZZZZZZ** Batch ID: **44632** TestNo: **EPA 8015B EPA 3550B** Analysis Date: **12/19/2013** SeqNo: **1706212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
DRO	53.004	1.0	83.30	23.33	35.6	13	129				
Surr: p-Terphenyl	2.931		6.670		43.9	59	127				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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_S

Sample ID: **E131212LCS** SampType: **LCS** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **LCSS** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.787	1.0	5.000	0	95.7	77	122				
Surr: Chlorobenzene - d5	106.662		100.0		107	51	136				

Sample ID: **E131212MB1** SampType: **MBLK** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **PBS** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.053	1.0									
Surr: Chlorobenzene - d5	94.920		100.0		94.9	51	136				

Sample ID: **N011599-006AMS** SampType: **MS** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **ZZZZZZ** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.099	1.0	5.000	0.04400	101	41	132				
Surr: Chlorobenzene - d5	106.032		100.0		106	51	136				

Sample ID: **N011599-006AMSD** SampType: **MSD** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **ZZZZZZ** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.686	1.0	5.000	0.04400	92.8	41	132	5.099	8.44	20	
Surr: Chlorobenzene - d5	108.129		100.0		108	51	136		0		

Sample ID: **N011599-006ADUP** SampType: **DUP** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **ZZZZZZ** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701721**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	0.031	1.0						0.04400	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

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Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GAS_S

Sample ID: **N011599-006ADUP** SampType: **DUP** TestCode: **8015GAS_S** Units: **mg/Kg** Prep Date: RunNo: **91580**
Client ID: **ZZZZZZ** Batch ID: **E13VS127** TestNo: **EPA 8015B** Analysis Date: **12/12/2013** SeqNo: **1701721**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Chlorobenzene - d5	108.358		100.0		108	51	136		0		

Qualifiers:

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

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **Q131212LCS** SampType: **LCS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **LCSS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	41.580	5.0	40.00	0	104	80	123				
1,1,1-Trichloroethane	37.440	5.0	40.00	0	93.6	71	127				
1,1,2,2-Tetrachloroethane	36.860	5.0	40.00	0	92.2	80	120				
1,1,2-Trichloroethane	36.570	5.0	40.00	0	91.4	80	120				
1,1-Dichloroethane	36.370	5.0	40.00	0	90.9	80	120				
1,1-Dichloroethene	35.790	5.0	40.00	0	89.5	80	121				
1,1-Dichloropropene	37.660	5.0	40.00	0	94.2	74	131				
1,2,3-Trichlorobenzene	34.140	5.0	40.00	0	85.4	64	137				
1,2,3-Trichloropropane	37.090	5.0	40.00	0	92.7	75	120				
1,2,4-Trichlorobenzene	36.640	5.0	40.00	0	91.6	75	128				
1,2,4-Trimethylbenzene	37.370	5.0	40.00	0	93.4	73	128				
1,2-Dibromo-3-chloropropane	41.420	10	40.00	0	104	53	143				
1,2-Dibromoethane	36.900	5.0	40.00	0	92.2	74	124				
1,2-Dichlorobenzene	37.120	5.0	40.00	0	92.8	80	120				
1,2-Dichloroethane	37.670	5.0	40.00	0	94.2	70	139				
1,2-Dichloropropane	34.470	5.0	40.00	0	86.2	80	120				
1,3,5-Trimethylbenzene	37.160	5.0	40.00	0	92.9	76	126				
1,3-Dichlorobenzene	38.360	5.0	40.00	0	95.9	80	120				
1,3-Dichloropropane	37.200	5.0	40.00	0	93.0	80	120				
1,4-Dichlorobenzene	37.340	5.0	40.00	0	93.4	80	120				
2,2-Dichloropropane	37.280	5.0	40.00	0	93.2	72	135				
2-Chlorotoluene	37.150	5.0	40.00	0	92.9	79	120				
4-Chlorotoluene	37.530	5.0	40.00	0	93.8	80	120				
4-Isopropyltoluene	37.120	5.0	40.00	0	92.8	76	126				
Benzene	37.260	5.0	40.00	0	93.2	80	120				
Bromobenzene	38.270	5.0	40.00	0	95.7	80	120				
Bromodichloromethane	39.700	5.0	40.00	0	99.2	79	131				
Bromoform	43.500	5.0	40.00	0	109	80	120				
Bromomethane	39.140	5.0	40.00	0	97.9	43	179				
Carbon tetrachloride	38.070	5.0	40.00	0	95.2	80	125				

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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **Q131212LCS** SampType: **LCS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **LCSS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	37.820	5.0	40.00	0	94.6	80	120				
Chloroethane	35.170	5.0	40.00	0	87.9	32	181				
Chloroform	38.070	5.0	40.00	0	95.2	77	129				
Chloromethane	37.150	5.0	40.00	0	92.9	80	120				
cis-1,2-Dichloroethene	36.220	5.0	40.00	0	90.6	80	120				
cis-1,3-Dichloropropene	38.030	5.0	40.00	0	95.1	80	120				
Dibromochloromethane	40.920	5.0	40.00	0	102	80	122				
Dibromomethane	35.720	5.0	40.00	0	89.3	80	120				
Dichlorodifluoromethane	38.080	5.0	40.00	0	95.2	64	135				
Ethylbenzene	35.990	5.0	40.00	0	90.0	80	120				
Hexachlorobutadiene	35.800	5.0	40.00	0	89.5	69	132				
Isopropylbenzene	37.970	5.0	40.00	0	94.9	79	121				
m,p-Xylene	74.180	10	80.00	0	92.7	80	121				
Methylene chloride	33.750	5.0	40.00	0	84.4	74	123				
MTBE	35.860	5.0	40.00	0	89.7	56	140				
n-Butylbenzene	37.720	5.0	40.00	0	94.3	72	131				
n-Propylbenzene	37.410	5.0	40.00	0	93.5	79	122				
Naphthalene	35.500	5.0	40.00	0	88.8	69	126				
o-Xylene	35.780	5.0	40.00	0	89.4	80	120				
sec-Butylbenzene	37.200	5.0	40.00	0	93.0	74	127				
Styrene	37.090	5.0	40.00	0	92.7	80	120				
tert-Butylbenzene	37.830	5.0	40.00	0	94.6	75	125				
Tetrachloroethene	36.600	5.0	40.00	0	91.5	80	120				
Toluene	36.310	5.0	40.00	0	90.8	80	120				
trans-1,2-Dichloroethene	38.290	5.0	40.00	0	95.7	80	125				
Trichloroethene	38.060	5.0	40.00	0	95.2	80	120				
Trichlorofluoromethane	36.780	5.0	40.00	0	92.0	67	152				
Vinyl chloride	36.580	5.0	40.00	0	91.4	69	135				
Surr: 1,2-Dichloroethane-d4	45.660		50.00		91.3	63	139				
Surr: 4-Bromofluorobenzene	47.580		50.00		95.2	75	124				

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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **Q131212LCS** SampType: **LCS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **LCSS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702625**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	49.610		50.00		99.2	70	133				
Surr: Toluene-d8	47.280		50.00		94.6	80	123				

Sample ID: **N011599-006AMS** SampType: **MS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	40.790	5.0	40.00	0	102	58	149				
1,1,1-Trichloroethane	36.380	5.0	40.00	0	91.0	67	126				
1,1,2,2-Tetrachloroethane	34.920	5.0	40.00	0	87.3	18	193				
1,1,2-Trichloroethane	38.450	5.0	40.00	0	96.1	70	136				
1,1-Dichloroethane	36.700	5.0	40.00	0	91.8	65	134				
1,1-Dichloroethene	36.160	5.0	40.00	0	90.4	61	135				
1,1-Dichloropropene	36.180	5.0	40.00	0	90.4	68	125				
1,2,3-Trichlorobenzene	30.120	5.0	40.00	0	75.3	40	134				
1,2,3-Trichloropropane	34.870	5.0	40.00	0	87.2	38	167				
1,2,4-Trichlorobenzene	31.930	5.0	40.00	0	79.8	40	132				
1,2,4-Trimethylbenzene	34.020	5.0	40.00	0	85.0	58	123				
1,2-Dibromo-3-chloropropane	41.340	10	40.00	0	103	30	181				
1,2-Dibromoethane	39.820	5.0	40.00	0	99.6	67	139				
1,2-Dichlorobenzene	34.330	5.0	40.00	0	85.8	65	122				
1,2-Dichloroethane	37.300	5.0	40.00	0	93.3	63	149				
1,2-Dichloropropane	37.070	5.0	40.00	0	92.7	69	127				
1,3,5-Trimethylbenzene	33.350	5.0	40.00	0	83.4	58	122				
1,3-Dichlorobenzene	34.210	5.0	40.00	0	85.5	64	120				
1,3-Dichloropropane	36.540	5.0	40.00	0	91.4	64	141				
1,4-Dichlorobenzene	34.270	5.0	40.00	0	85.7	62	122				
2,2-Dichloropropane	37.410	5.0	40.00	0	93.5	62	138				
2-Chlorotoluene	33.140	5.0	40.00	0	82.8	59	124				
4-Chlorotoluene	32.940	5.0	40.00	0	82.4	60	123				

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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-006AMS** SampType: **MS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	32.870	5.0	40.00	0	82.2	50	124				
Benzene	35.860	5.0	40.00	0	89.7	72	122				
Bromobenzene	35.470	5.0	40.00	0	88.7	64	129				
Bromodichloromethane	41.680	5.0	40.00	0	104	67	142				
Bromoform	43.700	5.0	40.00	0	109	35	192				
Bromomethane	38.430	5.0	40.00	0	96.1	62	150				
Carbon tetrachloride	38.610	5.0	40.00	0	96.5	56	142				
Chlorobenzene	35.690	5.0	40.00	0	89.2	71	120				
Chloroethane	36.150	5.0	40.00	0	90.4	55	149				
Chloroform	38.630	5.0	40.00	0	96.6	70	135				
Chloromethane	35.420	5.0	40.00	0	88.6	37	151				
cis-1,2-Dichloroethene	37.120	5.0	40.00	0	92.8	69	131				
cis-1,3-Dichloropropene	39.510	5.0	40.00	0	98.8	71	129				
Dibromochloromethane	43.790	5.0	40.00	0	109	53	161				
Dibromomethane	38.610	5.0	40.00	0	96.5	66	145				
Dichlorodifluoromethane	37.610	5.0	40.00	0	94.0	52	135				
Ethylbenzene	34.200	5.0	40.00	0	85.5	65	120				
Hexachlorobutadiene	25.850	5.0	40.00	0	64.6	22	135				
Isopropylbenzene	33.930	5.0	40.00	0	84.8	60	121				
m,p-Xylene	69.250	10	80.00	0	86.6	65	120				
Methylene chloride	35.040	5.0	40.00	0	87.6	55	138				
MTBE	39.780	5.0	40.00	0	99.4	64	149				
n-Butylbenzene	31.450	5.0	40.00	0	78.6	43	126				
n-Propylbenzene	32.370	5.0	40.00	0	80.9	56	122				
Naphthalene	32.320	5.0	40.00	0	80.8	48	139				
o-Xylene	34.310	5.0	40.00	0	85.8	67	118				
sec-Butylbenzene	31.780	5.0	40.00	0	79.4	50	123				
Styrene	35.760	5.0	40.00	0	89.4	57	129				
tert-Butylbenzene	32.430	5.0	40.00	0	81.1	54	121				
Tetrachloroethene	33.830	5.0	40.00	0	84.6	35	149				

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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-006AMS** SampType: **MS** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702626**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	35.700	5.0	40.00	0	89.2	68	120				
trans-1,2-Dichloroethene	35.990	5.0	40.00	0	90.0	62	139				
Trichloroethene	37.380	5.0	40.00	0	93.5	63	134				
Trichlorofluoromethane	35.850	5.0	40.00	0	89.6	34	179				
Vinyl chloride	35.220	5.0	40.00	0	88.0	57	136				
Surr: 1,2-Dichloroethane-d4	48.080		50.00		96.2	63	139				
Surr: 4-Bromofluorobenzene	39.410		50.00		78.8	75	124				
Surr: Dibromofluoromethane	49.060		50.00		98.1	70	133				
Surr: Toluene-d8	43.970		50.00		87.9	80	123				

Sample ID: **N011599-006AMSD** SampType: **MSD** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	39.790	5.0	40.00	0	99.5	58	149	40.79	2.48	20	
1,1,1-Trichloroethane	35.920	5.0	40.00	0	89.8	67	126	36.38	1.27	20	
1,1,2,2-Tetrachloroethane	36.690	5.0	40.00	0	91.7	18	193	34.92	4.94	20	
1,1,2-Trichloroethane	36.520	5.0	40.00	0	91.3	70	136	38.45	5.15	20	
1,1-Dichloroethane	34.010	5.0	40.00	0	85.0	65	134	36.70	7.61	20	
1,1-Dichloroethene	33.840	5.0	40.00	0	84.6	61	135	36.16	6.63	20	
1,1-Dichloropropene	32.120	5.0	40.00	0	80.3	68	125	36.18	11.9	20	
1,2,3-Trichlorobenzene	28.670	5.0	40.00	0	71.7	40	134	30.12	4.93	20	
1,2,3-Trichloropropane	35.460	5.0	40.00	0	88.6	38	167	34.87	1.68	20	
1,2,4-Trichlorobenzene	29.750	5.0	40.00	0	74.4	40	132	31.93	7.07	20	
1,2,4-Trimethylbenzene	33.290	5.0	40.00	0	83.2	58	123	34.02	2.17	20	
1,2-Dibromo-3-chloropropane	38.670	10	40.00	0	96.7	30	181	41.34	6.67	20	
1,2-Dibromoethane	36.900	5.0	40.00	0	92.2	67	139	39.82	7.61	20	
1,2-Dichlorobenzene	33.100	5.0	40.00	0	82.8	65	122	34.33	3.65	20	
1,2-Dichloroethane	35.750	5.0	40.00	0	89.4	63	149	37.30	4.24	20	
1,2-Dichloropropane	35.220	5.0	40.00	0	88.0	69	127	37.07	5.12	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-006AMSD** SampType: **MSD** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	32.150	5.0	40.00	0	80.4	58	122	33.35	3.66	20	
1,3-Dichlorobenzene	31.890	5.0	40.00	0	79.7	64	120	34.21	7.02	20	
1,3-Dichloropropane	36.090	5.0	40.00	0	90.2	64	141	36.54	1.24	20	
1,4-Dichlorobenzene	31.980	5.0	40.00	0	80.0	62	122	34.27	6.91	20	
2,2-Dichloropropane	35.430	5.0	40.00	0	88.6	62	138	37.41	5.44	20	
2-Chlorotoluene	33.210	5.0	40.00	0	83.0	59	124	33.14	0.211	20	
4-Chlorotoluene	32.570	5.0	40.00	0	81.4	60	123	32.94	1.13	20	
4-Isopropyltoluene	30.610	5.0	40.00	0	76.5	50	124	32.87	7.12	20	
Benzene	34.870	5.0	40.00	0	87.2	72	122	35.86	2.80	20	
Bromobenzene	34.770	5.0	40.00	0	86.9	64	129	35.47	1.99	20	
Bromodichloromethane	39.320	5.0	40.00	0	98.3	67	142	41.68	5.83	20	
Bromoform	42.040	5.0	40.00	0	105	35	192	43.70	3.87	20	
Bromomethane	36.220	5.0	40.00	0	90.6	62	150	38.43	5.92	20	
Carbon tetrachloride	35.160	5.0	40.00	0	87.9	56	142	38.61	9.35	20	
Chlorobenzene	34.010	5.0	40.00	0	85.0	71	120	35.69	4.82	20	
Chloroethane	32.700	5.0	40.00	0	81.8	55	149	36.15	10.0	20	
Chloroform	35.680	5.0	40.00	0	89.2	70	135	38.63	7.94	20	
Chloromethane	32.610	5.0	40.00	0	81.5	37	151	35.42	8.26	20	
cis-1,2-Dichloroethene	35.350	5.0	40.00	0	88.4	69	131	37.12	4.88	20	
cis-1,3-Dichloropropene	37.830	5.0	40.00	0	94.6	71	129	39.51	4.34	20	
Dibromochloromethane	41.870	5.0	40.00	0	105	53	161	43.79	4.48	20	
Dibromomethane	36.680	5.0	40.00	0	91.7	66	145	38.61	5.13	20	
Dichlorodifluoromethane	34.850	5.0	40.00	0	87.1	52	135	37.61	7.62	20	
Ethylbenzene	32.560	5.0	40.00	0	81.4	65	120	34.20	4.91	20	
Hexachlorobutadiene	23.090	5.0	40.00	0	57.7	22	135	25.85	11.3	20	
Isopropylbenzene	33.020	5.0	40.00	0	82.6	60	121	33.93	2.72	20	
m,p-Xylene	65.800	10	80.00	0	82.2	65	120	69.25	5.11	20	
Methylene chloride	32.600	5.0	40.00	0	81.5	55	138	35.04	7.21	20	
MTBE	38.760	5.0	40.00	0	96.9	64	149	39.78	2.60	20	
n-Butylbenzene	28.320	5.0	40.00	0	70.8	43	126	31.45	10.5	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-006AMSD** SampType: **MSD** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702627**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Propylbenzene	31.580	5.0	40.00	0	79.0	56	122	32.37	2.47	20	
Naphthalene	30.810	5.0	40.00	0	77.0	48	139	32.32	4.78	20	
o-Xylene	33.370	5.0	40.00	0	83.4	67	118	34.31	2.78	20	
sec-Butylbenzene	29.750	5.0	40.00	0	74.4	50	123	31.78	6.60	20	
Styrene	34.100	5.0	40.00	0	85.2	57	129	35.76	4.75	20	
tert-Butylbenzene	31.780	5.0	40.00	0	79.4	54	121	32.43	2.02	20	
Tetrachloroethene	31.950	5.0	40.00	0	79.9	35	149	33.83	5.72	20	
Toluene	33.680	5.0	40.00	0	84.2	68	120	35.70	5.82	20	
trans-1,2-Dichloroethene	35.810	5.0	40.00	0	89.5	62	139	35.99	0.501	20	
Trichloroethene	35.460	5.0	40.00	0	88.6	63	134	37.38	5.27	20	
Trichlorofluoromethane	34.390	5.0	40.00	0	86.0	34	179	35.85	4.16	20	
Vinyl chloride	33.100	5.0	40.00	0	82.8	57	136	35.22	6.21	20	
Surr: 1,2-Dichloroethane-d4	45.790		50.00		91.6	63	139		0		
Surr: 4-Bromofluorobenzene	37.720		50.00		75.4	75	124		0		
Surr: Dibromofluoromethane	47.370		50.00		94.7	70	133		0		
Surr: Toluene-d8	40.690		50.00		81.4	80	123		0		

Sample ID: **Q131212MB3** SampType: **MBLK** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **PBS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702628**

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									

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **Q131212MB3** SampType: **MBLK** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **PBS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702628**

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

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **Q131212MB3** SampType: **MBLK** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **PBS** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702628**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	10									
Methylene chloride	ND	5.0									
MTBE	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
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	45.980		50.00		92.0	63	139				
Surr: 4-Bromofluorobenzene	47.160		50.00		94.3	75	124				
Surr: Dibromofluoromethane	45.930		50.00		91.9	70	133				
Surr: Toluene-d8	48.820		50.00		97.6	80	123				

Sample ID: **N011599-020ADUP** SampType: **DUP** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702637**

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	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DQ 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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-020ADUP** SampType: **DUP** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702637**

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

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, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260SOIL

Sample ID: **N011599-020ADUP** SampType: **DUP** TestCode: **8260SOIL** Units: **µg/Kg** Prep Date: RunNo: **91604**
Client ID: **ZZZZZZ** Batch ID: **Q13VS039** TestNo: **EPA 8260B** Analysis Date: **12/12/2013** SeqNo: **1702637**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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	
Isopropylbenzene	ND	5.0						0	0	20	
m,p-Xylene	ND	10						0	0	20	
Methylene chloride	ND	5.0						0	0	20	
MTBE	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	52.610		50.00		105	63	139		0		
Surr: 4-Bromofluorobenzene	47.010		50.00		94.0	75	124		0		
Surr: Dibromofluoromethane	50.200		50.00		100	70	133		0		
Surr: Toluene-d8	49.420		50.00		98.8	80	123		0		

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 9045_S

Sample ID: **N011599-038A-DUP** SampType: **DUP** TestCode: **9045_S** Units: **pH Units** Prep Date: RunNo: **91569**
Client ID: **ZZZZZZ** Batch ID: **R91569** TestNo: **EPA 9045C** Analysis Date: **12/12/2013** SeqNo: **1701552**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	9.280	0.10						9.240	0.432	20	
Temp. at time of pH Analysis	25.000	0						25.00	0	0	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories, Inc.
3151-3153 W. Post Rd.
Las Vegas, NV 89118
Tel:(702) 307-2659•Fax:(702) 307-2691

FOR LABORATORY USE ONLY:

P.O.#

Logged By: HSG Date: 12/11/13

Method of Transport: Client ☐ ATL INC ☐ FEDEX ☐ Other: GSO

Sample Condition Upon Receipt:
1. CHILLED 4.9/5.5°C IR2 Y☑ N☐
2. HEADSPACE (VOA) NA Y☐ N☐
3. CONTAINER INTACT Y☑ N☐
4. SEALED Y☑ N☐
5. # OF SPLS MATCH COC Y☐ N☐
6. PRESERVED Y☐ N☑

Client: Geocon Consultants
Attn: Luann Beadle
Address: 6671 Brisa St
City: Livermore State: CA Zip Code: 94550
TEL:(925) 371-5700
FAX:( )

Project Name: I-880 Erosion Control
Project #: E8560-02-60
Sampler: Beadle
I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.
(Printed Name) Luann Beadle/Chris Martin
(Signature) Luann

Relinquished by: (Signature and Printed name)	Date	Time	Received by: (Signature and Printed name)	Date	Time
Luann Beadle	12-10-13	GSO	Holding HGLODOVIZA	12/10/13	0920
				11 HSG 12/11	

I hereby authorize ATL INC to perform the work indicated below:
Project Mgr/Submitter: Luann Beadle 12-10-13 (Print Name, Date)
Signature: Luann B

Send Report To: Attn: lbeadle@geoconinc.com Co: day@geoconinc.com Address: 6671 Brisa ST City: Livermore State: CA Zip: 94550

Bill To: Attn: same Co: Address: City State Zip

Special Instructions/Comments:

Sample/Records-Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.
Storage Fees (applies when storage is requested):
- Sample : $ 2.00 / sample / mo (after 45 days)
- Records : $ 1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested; SPECIFY APPROPRIATE MATRIX

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX),(MTBE)	8015B (GRO)	8015B (DRO),(Motor Oil/ORO)	RCRA8 (6010B/7000)	6010 Pb only	CAM17 metals	pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N011599-1	B1-0	12/10/13	1330					X				X				E	1	P B	C	
	-2	B1-1		1335							X										
	-3	B2-0		1320																	
	-4	B2-1		1325																	
	-5	B3-0		1305			X												S T		
	-6	B3-1		1310	X	X	X		X												
	-7	B4-0		1250						X											
	-8	B4-1		1255						X											
	-9	B4-1.5		1300						X											
	-10	B5-0		1240			X		X												

QA/QC: RTNE ☐ CT ☒ RWQCB ☐ LEVEL IV ____ OTHER ____

•TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: ☐ A= Overnight ≤ 24 hr ☐ B= Emergency Next workday ☐ C= Critical 2 Workdays ☐ D= Urgent 3 Workdays ☒ E= Routine 7 Workdays

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

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

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories, Inc.
3151-3153 W. Post Rd.
Las Vegas, NV 89118
Tel:(702) 307-2659•Fax:(702) 307-2691

FOR LABORATORY USE ONLY:

P.O.#:

Logged By: Date:

Method of Transport: Client ☐ ATL INC ☐ FEDEX ☐ Other:

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

Client: Geocon
Attn: Luann Beadle
Address: 6671 Brisa St
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: ( )

Project Name: I-880 Erosion Control Project #: E836002-60
Sampler: Beadle
I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.
(Printed Name) Luann Beadle
(Signature) Luann Beadle

Relinquished by: (Signature and Printed name) Luann Beadle Date: 12-10-13 Time: 0900
Received by: (Signature and Printed name) Holloway HGLOD0V124 Date: 12/10/13 Time: 0920
Relinquished by: (Signature and Printed name) Date: Time:
Received by: (Signature and Printed name) Date: 11 HSE 1244 Time:
Relinquished by: (Signature and Printed name) Date: Time:
Received by: (Signature and Printed name) Date: Time:

I hereby authorize ATL INC to perform the work indicated below:
Project Mgr/Submitter: Luann Beadle 12-10-13 (Print Name, Date)
Luann Beadle (Signature)

Send Report To: Attn: Same p.1 Co: Address: City State Zip

Bill To: Attn: Same p.1 Co: Address: City State Zip

Special Instructions/Comments:

Sample/Records-Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.
Storage Fees (applies when storage is requested):
- Sample : $ 2.00 / sample / mo (after 45 days)
- Records : $ 1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8260B (VOC), 8260B (BTEX),(MTBE), 8015B (GRO), 8015B (DRO),(Motor Oil/ORO), RCRA8 (6010B/7000), 6010 Pb total and CAM17 metals, pH

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

QA/QC: RTNE ☐ CT ☑ RWQCB ☐ LEVEL IV ___ OTHER ___

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX),(MTBE)	8015B (GRO)	8015B (DRO),(Motor Oil/ORO)	RCRA8 (6010B/7000)	6010 Pb total and CAM17 metals	pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N011599-11	B5-1	12-10-13	1245	X	X	X	X				X				E	1	SJT	C	
	-12	B6-0		1230				X										P B		
	-13	B6-1		1235				X										P B		
	-14	B7-0		1220			X	X										SJT		
	-15	B7-1		1225	X	X	X	X		X										
	-16	B8-0		1210						X										
	-17	B8-1		1215						X										
	-18	B8-1.5		1220						X										
	-19	B9-0		1200			X	X												
	-20	B9-1		1205	X	X	X	X												

•TAT starts 8 a.m. following day if samples received after 3 p.m.

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

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

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter

CHAIN OF CUSTODY RECORD

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Logged By: Date:

Method of Transport: Client ☐ ATL INC ☐ FEDEX ☐ Other:

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

Client: Recon
Attn: LuAnn Beadle
Address: 6671 B Bisa St
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: ( )

Project Name: I-880 Erosion Control
Project #: E8560-02-60
Sampler: Beadle
I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.
(Printed Name) LuAnn Beadle
(Signature) LuAnn Beadle

Relinquished by: (Signature and Printed name)	Date:	Time:	Received by: (Signature and Printed name)	Date:	Time:
			Helena HELODOVIZA	12/11/13	0920

I hereby authorize ATL INC to perform the work indicated below:
Project Mgr/Submitter: LuAnn Beadle 12-10-13 (Print Name, Date)
Signature: LuAnn Beadle

Send Report To: Attn: Same p/l Co: Address: City State Zip

Bill To: Attn: Same p/l Co: Address: City State Zip

Special Instructions/Comments:

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

Storage Fees (applies when storage is requested):
- Sample : $ 2.00 / sample / mo (after 45 days)
- Records : $ 1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8260B (VOC); 8260B (BTEX),(MTBE); 8015B (GRO); 8015B (DRO),(Motor Oil/ORO); RCRA8 (6010B/7000); 6010 total Pb only; CAM 17 metals; pH

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

QA/QC: RTNE ☐ CT ☒ RWQCB ☐ LEVEL IV ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX),(MTBE)	8015B (GRO)	8015B (DRO),(Motor Oil/ORO)	RCRA8 (6010B/7000)	6010 total Pb only	CAM 17 metals	pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N0115991-21	B10-0	12/10/13	1152					X				X				E	1	P:B	C	
	-22	B10-1		1152					X												
	-23	B11-0		1140					X										P:B		
	-24	B11-1		1145					X												
	-25	B12-0		1125			X			X									S:T		
	-26	B12-1		1130	X		X	X		X											
	-27	B12-1.5		1135						X											
	-28	B13-0		1110					X										P:B		
	-29	B13-1		1110					X												
	-30	B14-0	✓	1100				X	X				✓				✓	✓	S:T	✓	

•TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: ☐ A= Overnight ≤ 24 hr ☐ B= Emergency Next workday ☐ C= Critical 2 Workdays ☐ D= Urgent 3 Workdays ☒ E= Routine 7 Workdays

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

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories, Inc.
3151-3153 W. Post Rd.
Las Vegas, NV 89118
Tel:(702) 307-2659•Fax:(702) 307-2691

FOR LABORATORY USE ONLY:

P.O.#:

Logged By: Date:

Method of Transport: Client ☐ ATL INC ☐ FEDEX ☐ Other:

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

Client: GeoCon
Attn: Luann Beadle
Address: 6671 Bonita St
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: ( )

Project Name: I-880 Erosion Control Project #: E8560-02-60 Sampler: Beadle

I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.
(Printed Name) Luann Beadle
(Signature) Luann Beadle

Relinquished by: (Signature and Printed name)	Date	Time	Received by: (Signature and Printed name)	Date	Time
Luann Beadle Luann Beadle	12-10-13		HGLODOVIZA	12/11/13	0930

I hereby authorize ATL INC to perform the work indicated below:
Project Mgr/Submitter: Luann Beadle 12-10-13 (Print Name, Date)
Signature: Luann Beadle

Send Report To: Attn: same p. 1 Co: Address: City State Zip

Bill To: Attn: same p. 1 Co: Address: City State Zip

Special Instructions/Comments:

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

Storage Fees (applies when storage is requested):
- Sample : $ 2.00 / sample / mo (after 45 days)
- Records : $ 1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8260B (VOC), 8260B (BTEX),(MTBE), 8015B (GRO), 8015B (DRO),(Motor Oil/ORO), RCRA8 (6010B/7000), 6010 Pb total only, CAM 17 metals

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX),(MTBE)	8015B (GRO)	8015B (DRO),(Motor Oil/ORO)	RCRA8 (6010B/7000)	6010 Pb total only, CAM 17 metals	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	QA/QC REMARKS
	N011599-31	B14-1	12-10-13	1105	X		X	X	X		X				E	1	S:T	G	
	-32	B15-0		0945					X								P:B		
	-33	B15-1		0955					X										
	-34	B16-0		1025			X			X							S:T		
	-35	B16-1		1035	X		X	X		X									
	-36	B16-1.5		1045						X									
	-37	B17-0		1015					X								P:B		
	-38	B17-1		1019					X	X									
	-39	B18-0		1000					X										
	-40	B18-1		1010					X										

QA/QC: RTNE ☐ CT ☒ RWQCB ☐ LEVEL IV ____ OTHER ____

•TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: ☐ A= Overnight ≤ 24 hr ☐ B= Emergency Next workday ☐ C= Critical 2 Workdays ☐ D= Urgent 3 Workdays ☒ E= Routine 7 Workdays

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

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories, Inc.
3151-3153 W. Post Rd.
Las Vegas, NV 89118
Tel:(702) 307-2659•Fax:(702) 307-2691

FOR LABORATORY USE ONLY:

P.O.#:

Logged By: Date:

Method of Transport: Client ☐ ATL INC ☐ FEDEX ☐ Other:

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

Client: Geocon Consultants
Attn: Luann Beadle
Address: 6671 Brisa St
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: ( )

Project Name: I-880 Explosion Cond
Project #: E356002-60
Sampler: I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. (Printed Name) Luann Beadle (Signature)

Relinquished by: (Signature and Printed name) Luann Beadle Date: 12-10-13 Time: 0850 Received by: (Signature and Printed name) [illegible] HGLO DOW BA Date: 12/11/13 Time: 0920
Relinquished by: (Signature and Printed name) Date: Time: Received by: (Signature and Printed name) Date: Time:
Relinquished by: (Signature and Printed name) Date: Time: Received by: (Signature and Printed name) Date: Time:

I hereby authorize ATL INC to perform the work indicated below:
Project Mgr/Submitter: Luann Beadle 12-10-13
Print Name Date
Signature

Send Report To: Attn: Same p.1 Co: Address: City State Zip

Bill To: Attn: Same p.1 Co: Address: City State Zip

Special Instructions/Comments:

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

Storage Fees (applies when storage is requested):
- Sample : $ 2.00 / sample / mo (after 45 days)
- Records : $ 1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8260B (VOC); 8260B (BTEX),(MTBE); 8015B (GRO); 8015B (DRO),(Motor Oil/ORO); RCRA8 (6010B/7000); ACID to fill Pb/Cu; Add 17 metals; pH

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

QA/QC: RTNE ☐ CT ☑ RWQCB ☐ LEVEL IV ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX),(MTBE)	8015B (GRO)	8015B (DRO),(Motor Oil/ORO)	RCRA8 (6010B/7000)	ACID to fill Pb/Cu	Add 17 metals	pH	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N011599-41	B19-0	12-10-13	0950					X				C				E	1	P B	C	
	-42	B19-1		0955					X												
	-43	B20-0		937			X			X									S T		
	-44	B20-1		940	X		X	X		X											
	-45	B20-1.5		943						X											
	-46	B21-0		0930					X										P B		
	-47	B21-1		0935					X												
	-48	Equipment Blank							X					X							

•TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: ☐ A= Overnight ≤ 24 hr ☐ B= Emergency Next workday ☐ C= Critical 2 Workdays ☐ D= Urgent 3 Workdays ☑ E= Routine 7 Workdays

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

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter

Advanced Technology Laboratories, Inc.

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	12/11/2013	Workorder:	N011599
Rep sample Temp (Deg C):	4.9, 5.3	IR Gun ID:	2
Temp Blank:	☐ Yes ☑ No		
Carrier name:	GSO		
Last 4 digits of Tracking No.:	3657, 9893	Packing Material Used:	Bubble Wrap
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☐	No ☐	NA ☑
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☐	No ☐	NA ☑
15. Did the bottle labels indicate correct preservatives used?	Yes ☐	No ☐	NA ☑
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: HG 12/12/2013

Reviewed By: 2013-12-13

GSO GOLDEN STATE OVERNIGHT

< WebShip > > > >

800-322-5555 www.gso.com

Ship From:
RICK DAY
GEOCON
6671 BRISA ST.
LIVERMORE, CA 94550

Ship To:
MARLON CARTIN CARTIN
ADVANCED TECHNOLOGY
LABORATORIES, INC.
3151 W. POST RD.
LAS VEGAS, NV 89118

COD:
$0.00

Reference:

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 523223657

CPS

LVS

LAS VEGAS

D89103B

18167752

Print Date : 11/14/13 12:20 PM

Send Label To Printer | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

GSO GOLDEN STATE OVERNIGHT

< WebShip > > > > >
800-322-5555 www.gso.com

Ship From:
RICK DAY
GEOCON
6671 BRISA ST.
LIVERMORE, CA 94550

Ship To:
MARLON CARTIN CARTIN
ADVANCED TECHNOLOGY
LABORATORIES, INC.
3151 W. POST RD.
LAS VEGAS, NV 89118

COD:
$0.00

Reference:

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 523169893

CPS

LVS

LAS VEGAS

D89103B

17926634

Print Date : 11/07/13 11:20 AM

Send Label To Printer | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

December 24, 2013

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550

TEL: 925-371-5900 Ext 403
FAX: (925) 371-5915

CA-ELAP No.: 2676
NV Cert. No.: NV-009222007A

Workorder No.: N011599

RE: I-880 Erosion Control, E8560-02-60

Attention: Luann Beadle

Enclosed are the results for sample(s) received on December 11, 2013 by Advanced Technology Laboratories, Inc. . 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 (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Jose Tenorio Jr.
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 - Las Vegas.

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B3-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 1:10:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-006A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.8	0.050		mg/L	5	12/23/2013 11:20 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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B4-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:50:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-007A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	7.2	0.050		mg/L	5	12/23/2013 11:44 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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B4-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:55:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-008A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	11	0.050		mg/L	5	12/23/2013 11:49 AM

Qualifiers:

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

Advanced Technology Laboratories, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B4-1.5
Lab Order:	N011599	**Collection Date:**	12/10/2013 1:00:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-009A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	9.2	0.050		mg/L	5	12/23/2013 12:06 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		

Advanced Technology Laboratories, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B7-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:25:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-015A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.5	0.050		mg/L	5	12/23/2013 12:11 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, Inc.

3151 W. Post Rd Las Vegas, NV 89118 Tel: 702-307-2659 Fax: 702-307-2691

Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:10:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-016A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	4.3	0.050		mg/L	5	12/23/2013 12:15 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, Inc.

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Advanced Technology Laboratories, Inc.

ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:15:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-017A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.7	0.050		mg/L	5	12/23/2013 12:24 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B8-1.5
Lab Order:	N011599	**Collection Date:**	12/10/2013 12:20:00 PM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-018A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.2	0.050		mg/L	5	12/23/2013 12:28 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B13-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:10:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-028A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.1	0.050		mg/L	5	12/23/2013 12:33 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B14-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:00:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-030A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	2.5	0.050		mg/L	5	12/23/2013 12:37 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B14-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 11:05:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-031A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	5.1	0.050		mg/L	5	12/23/2013 12:41 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B16-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:25:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-034A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	7.6	0.050		mg/L	5	12/23/2013 01:12 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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ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B16-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:35:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-035A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	5.3	0.050		mg/L	5	12/23/2013 01:17 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B16-1.5
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:45:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-036A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131224A	QC Batch: R91782			PrepDate:		Analyst: **JAA**
Lead	5.6	0.050		mg/L	5	12/24/2013 11:06 AM

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

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ANALYTICAL RESULTS

Print Date: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B18-1
Lab Order:	N011599	**Collection Date:**	12/10/2013 10:10:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-040A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	6.7	0.050		mg/L	5	12/23/2013 01:23 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B20-1.5
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:43:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-045A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	1.8	0.050		mg/L	5	12/23/2013 01:28 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: *24-Dec-13*

CLIENT:	Geocon Consultants, Inc.	**Client Sample ID:**	B21-0
Lab Order:	N011599	**Collection Date:**	12/10/2013 9:30:00 AM
Project:	I-880 Erosion Control, E8560-02-60	**Matrix:**	SOIL
Lab ID:	N011599-046A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS BY STLC						
			WET/ EPA 6010B			
RunID: ICP2_131223A	QC Batch: R91775			PrepDate:		Analyst: **JAA**
Lead	3.1	0.050		mg/L	5	12/23/2013 01:32 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		

Advanced Technology Laboratories, Inc.

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Advanced Technology Laboratories, Inc.

Date: *24-Dec-13*

CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **MB-R91775A** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **PBS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709542**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.010									

Sample ID: **MB1-44657** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **PBS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709543**

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

Sample ID: **MB2-44657** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **PBS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709544**

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

Sample ID: **LCS-R91775A** SampType: **LCS** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **LCSS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709545**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.514	0.010	0.5000	0	103	85	115				

Sample ID: **N011599-006A-MS** SampType: **MS** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709549**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.950	0.050	2.500	3.762	87.5	75	125				

Qualifiers:

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

Advanced Technology Laboratories, Inc.
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CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **N011599-006A-MSD** SampType: **MSD** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709550**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	6.144	0.050	2.500	3.762	95.3	75	125	5.950	3.21	20	

Sample ID: **N011599-031A-DUP** SampType: **DUP** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709564**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	5.021	0.050						5.137	2.28	20	

Sample ID: **N011599-031A-MS** SampType: **MS** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709569**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	7.272	0.050	2.500	5.137	85.4	75	125				

Sample ID: **MB-R91775B** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **PBS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709576**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.010									

Sample ID: **MB-44663** SampType: **MBLK** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **PBS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709577**

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

Qualifiers:

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

Advanced Technology Laboratories, Inc.
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CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **LCS-R91775B** SampType: **LCS** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **LCSS** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.523	0.010	0.5000	0	105	85	115				

Sample ID: **N011655-002A-DUP** SampType: **DUP** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709582**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.454	0.050						1.350	7.40	20	

Sample ID: **N011655-002A-MS** SampType: **MS** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709584**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.940	0.050	2.500	1.350	104	75	125				

Sample ID: **N011655-002A-MSD** SampType: **MSD** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91775**
Client ID: **ZZZZZZ** Batch ID: **R91775** TestNo: **WET/ EPA 60** Analysis Date: **12/23/2013** SeqNo: **1709585**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.651	0.050	2.500	1.350	92.1	75	125	3.940	7.61	20	

Qualifiers:

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

Advanced Technology Laboratories, Inc.
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CLIENT: Geocon Consultants, Inc.
Work Order: N011599
Project: I-880 Erosion Control, E8560-02-60

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_ST

Sample ID: **N011599-006A-DUP** SampType: **DUP** TestCode: **6010_ST** Units: **mg/L** Prep Date: RunNo: **91782**
Client ID: **ZZZZZZ** Batch ID: **R91782** TestNo: **WET/ EPA 60** Analysis Date: **12/24/2013** SeqNo: **1709822**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	3.632	0.050						3.762	3.49	20	

Qualifiers:

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

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Glen S. Gesmundo

From: Luann Beadle [beadle@geoconinc.com]
Sent: Thursday, December 19, 2013 3:12 PM
To: Advanced Technology Labs, Inc.
Subject: Lab Order N011599 (TO-60)

Hi ATL,

For this lab order, please run the following samples for WET lead analysis with an expedited TAT. 48-hr for extraction 24-hr TAT for analysis.

N011599-006A	B3-1
N011599-007A	B4-0
N011599-008A	B4-1
N011599-009A	B4-1.5
N011599-015A	B7-1
N011599-016A	B8-0
N011599-017A	B8-1
N011599-018A	B8-1.5
N011599-028A	B13-0
N011599-030A	B14-0
N011599-031A	B14-1
N011599-034A	B16-0
N011599-035A	B16-1
N011599-036A	B16-1.5
N011599-040A	B18-1
N011599-045A	B20-1.5
N011599-046A	B21-0

Thank you,
Luann

Luann Beadle | Senior Staff Scientist
Geocon Consultants, Inc.
6671 Brisa Street, Livermore, CA 94550
Office: 925.371.5900, ext. 403 Direct: 925.961.5272 Mobile: 925.395.1669

beadle@geoconinc.com

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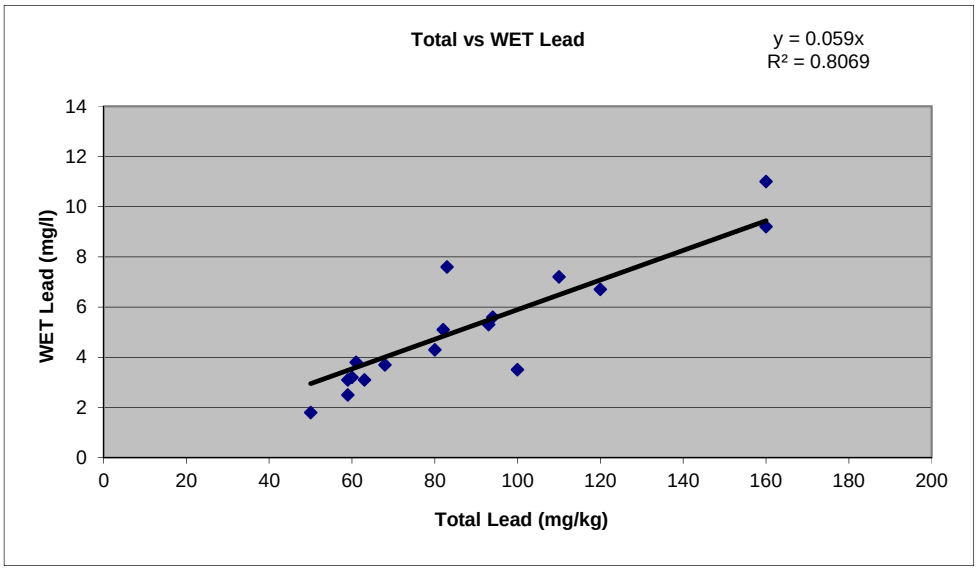
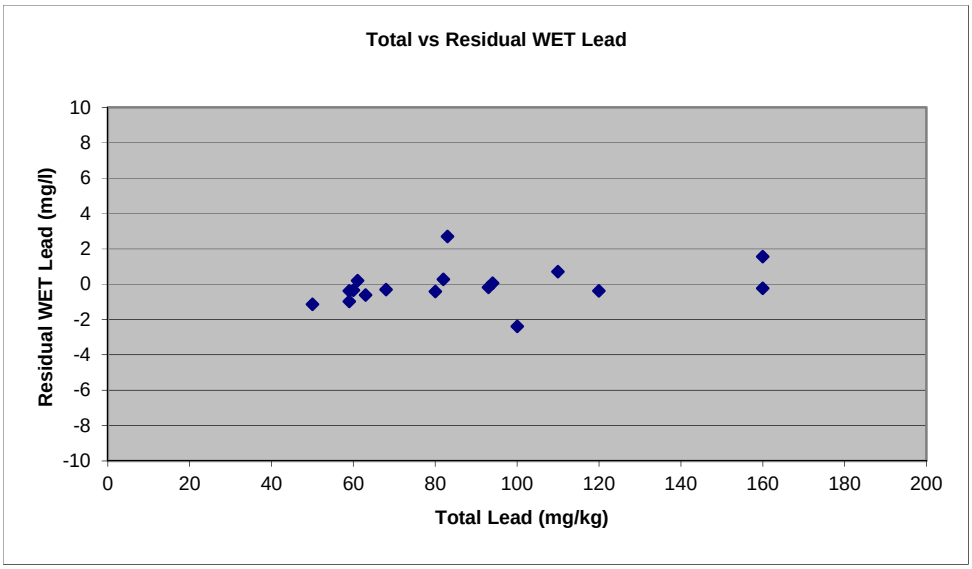
APPENDIX C

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	Residual WET Lead (mg/l)	Squared Residual WET Lead (mg/l)
B16-1.5	1.5 to 2	94	5.6	0.06	0.00
B16-1	1 to 1.5	93	5.3	-0.19	0.03
B3-1	1 to 1.5	61	3.8	0.20	0.04
B4-1.5	1.5 to 2	160	9.2	-0.24	0.06
B14-1	1 to 1.5	82	5.1	0.26	0.07
B8-1	1 to 1.5	68	3.7	-0.31	0.10
B8-1.5	1.5 to 2	60	3.2	-0.34	0.11
B18-1	1 to 1.5	120	6.7	-0.38	0.14
B13-0	0 to 0.5	59	3.1	-0.38	0.14
B8-0	0 to 0.5	80	4.3	-0.42	0.18
B21-0	0 to 0.5	63	3.1	-0.62	0.38
B4-0	0 to 0.5	110	7.2	0.71	0.51
B14-0	0 to 0.5	59	2.5	-0.98	0.96
B20-1.5	1.5 to 2	50	1.8	-1.15	1.32
B4-1	1 to 1.5	160	11.0	1.56	2.44
B7-1	1 to 1.5	100	3.5	-2.40	5.75
B16-0	0 to 0.5	83	7.6	2.70	7.31





Pb 0 to 0.5

Number of Valid Observations	21
Number of Distinct Observations	19
Minimum	6.8
Maximum	110
Mean	38.04
Geometric Mean	29.42
Median	29
SD	27.97
Variance	782.2
Std. Error of Mean	6.103
Coefficient of Variation	0.735
Skewness	1.139
90% Standard Bootstrap UCL	**45.8**
95% Standard Bootstrap UCL	**47.91**

Pb

Number of Valid Observations	47
Number of Distinct Observations	37
Minimum	2.5
Maximum	160
Mean	47.98
Geometric Mean	34.9
Median	34
SD	37.83
Variance	1431
Std. Error of Mean	5.517
Coefficient of Variation	0.788
Skewness	1.354
90% Standard Bootstrap UCL	**54.83**
95% Standard Bootstrap UCL	**57.12**

Pb 1 to 1.5

Number of Valid Observations	21
Number of Distinct Observations	20
Minimum	2.5
Maximum	160
Mean	51.16
Geometric Mean	36.33
Median	37
SD	40.11
Variance	1609
Std. Error of Mean	8.752
Coefficient of Variation	0.784
Skewness	1.267
90% Standard Bootstrap UCL	**62.02**
95% Standard Bootstrap UCL	**65.59**

As

Number of Valid Observations	15
Number of Distinct Observations	14
Minimum	2.9
Maximum	10
Mean	5.02
Geometric Mean	4.678
Median	4.2
SD	2.051
Variance	4.206
Std. Error of Mean	0.53
Coefficient of Variation	0.409
Skewness	1.102
90% Standard Bootstrap UCL	**5.66**
95% Standard Bootstrap UCL	**5.863**

Pb 1.5 to 2

Number of Valid Observations	5
Number of Distinct Observations	5
Minimum	18
Maximum	160
Mean	76.4
Geometric Mean	60.52
Median	60
SD	54.03
Variance	2919
Std. Error of Mean	24.16
Coefficient of Variation	0.707
Skewness	0.972
90% Standard Bootstrap UCL	**103.8**
95% Standard Bootstrap UCL	**112.4**