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Preliminary Site Investigation Report, Sol-80 Gore Paving, Solano County, California, April 2016

PRELIMINARY SITE INVESTIGATION REPORT

SOL-80 GORE PAVING
SOLANO COUNTY, CALIFORNIA

PREPARED FOR:
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DISTRICT 4
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CALTRANS EA 04-4G9601
PROJECT # 04-1300-0147-1

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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 Consultants, Inc. 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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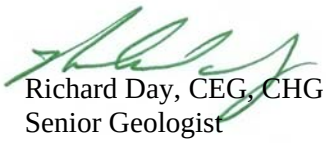

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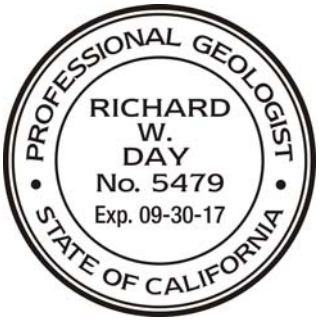

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PRELIMINARY SITE INVESTIGATION REPORT

1.0 INTRODUCTION

This Preliminary Site Investigation Report for the gore point paving project along Interstate 80 (I-80) in Solano County, California was prepared by Geocon Consultants, Inc. (Geocon) under California Department of Transportation (Caltrans) Contract No. 04A4336 and Task Order No. 44 (TO-44), EA 04-4G9601.

1.1 Project Description and Proposed Improvements

The project proposes to pave gore points and collector strips at various locations along I-80 in the cities of Vallejo, Fairfield, and Vacaville, California. Work will take place within Caltrans right-of-way. The project area is depicted on the attached Key Map, Figure 1.

The site investigation was performed in the following five gore areas:

Vallejo

Location 1 – Eastbound (EB) State Route 37 (SR-37) Connector to Westbound (WB) I-80 and EB SR-37 Connector to EB I-80 – Borings LOC1-B1 to LOC1-B8 (Figure 2a)

Location 2 - EB I-80 Connector to Northbound (NB) State Route 29 (SR-29) – Borings LOC2-B1 to LOC2-B8 (Figure 2b)

Location 3 – EB I-80 Offramp to Redwood Parkway – Borings LOC3-B1 to LOC3-B8 (Figure 2a)

Fairfield

Location 4 – EB I-80 Offramp to West Texas Street – Borings LOC4-B1 to LOC4-B8 (Figure 2d)

Vacaville

Location 5 – EB I-80 Offramp to Alamo Drive - Borings LOC5-B1 to LOC5-B8 (Figure 2e)

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 total petroleum hydrocarbons as diesel (TPHd), and as motor oil (TPHmo) in soil within the project limits.

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 10 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 10 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 California Human Health Screening Levels

The California Environmental Protection Agency (Cal/EPA) has prepared technical reports entitled *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties* (Cal/EPA, January 2005) and *Revised California Human Health Screening Levels for Beryllium* (Cal/EPA, March 2009) and *Lead* (Cal/EPA, September 2009), which present CHHSLs for soil, shallow soil gas, and indoor air to assist in evaluating sites impacted by releases of hazardous chemicals.

The CHHSLs are concentrations of 54 hazardous chemicals including Title 22 metals that Cal/EPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of Cal/EPA. The thresholds of concern used to develop the CHHSLs are an excess lifetime cancer risk of one in a million and a hazard quotient or 1.0 for non-cancer effects. Under most circumstances, the presence of

a chemical at concentrations below its respective CHHSL can be assumed to not pose a significant risk. The presence of a chemical at concentrations above a CHHSL does not indicate that adverse impacts to human health are occurring or will occur but suggests that further evaluation is warranted (Cal/EPA, January 2005).

The CHHSLs for residential and industrial/commercial land use were used for comparison on Table 3.

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 2016* (updated February 2016), 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. "If used correctly, ESLs are considered to be protective for typical bay area sites. Under most circumstances, …the presence of a chemical in 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, February 2016).

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 ESL Tables Tier 1, ESL Soil Screening Levels Summary Table, and S-1, Summary of Soil ESLs, Direct Exposure to Human Health, were used for this characterization.

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-44, EA 04-4G9601 included the following:

3.1 Pre-field Activities

- Prepared a Preliminary Site Investigation Workplan and Health and Safety Plan, dated January 2016.
- Retained the services of D & M Traffic Services to provide traffic control services during field operations.
- Retained the services of Advanced Technology Laboratories (ATL), in Signal Hill, California, a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of soil and groundwater samples.

3.2 Field Activities

Our field investigation was performed on December 28 and 29, 2015, by Geocon staff. Forty soil borings were advanced to a depth of 0.5 foot at the project locations using hand-auger drilling techniques.

The following samples were collected:

- 10 for CAM 17 metals analysis
- 30 for total lead analysis
- 30 for TPHd and TPHmo analyses

All samples were transported to ATL for analysis under standard chain-of-custody (COC) documentation.

4.0 INVESTIGATIVE METHODS

4.1 Sampling Procedures

Soil samples were collected from the 40 boring locations using hand-auger drilling techniques. Boring coordinates are presented on Table 1. A Key Map, Figure 1, shows the project location, and boring locations are shown on Figures 2a through 2e.

Soil samples were transferred from the hand-auger bucket to stainless steel tubes or resealable plastic bags. Sample containers were labeled, placed in a chest cooled with ice as necessary, and transported to a Caltrans-approved, certified environmental laboratory using standard COC documentation. Soil borings were backfilled to surface with soil cuttings.

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

4.2 Laboratory Analyses

Laboratory analyses were performed by ATL under standard turnaround-times. The laboratory reports and COC documentation are included in Appendix A.

The samples were analyzed as follows:

- 30 samples for total lead using EPA Test Method 6010 ICAP.
- 10 samples for CAM 17 metals using EPA Test Methods 6010 ICAP and 7471.

- 1 sample with a total chromium concentration equal to or exceeding 50 milligrams per kilogram (mg/kg) (i.e. equal to or exceeding 10 times the STLC of 5.0 milligrams per liter [mg/l]) was further analyzed for WET chromium.
- 12 samples with total lead concentrations equal to or exceeding 50 mg/kg (i.e. equal to or exceeding 10 times the STLC of 5.0 mg/l) were further analyzed for WET lead.
- 5 samples with WET lead concentrations equal to or exceeding 5 mg/l (i.e. equal to or exceeding the STLC of 5.0 mg/l) and total lead equal to or exceeding 100 mg/kg were further analyzed for DI-WET and TCLP lead.
- 2 samples with total lead equal to or exceeding 1,000 mg/kg (i.e. equal to or exceeding the TTLC of 1,000 mg/kg) were further analyzed for TCLP lead.
- 30 samples for TPHd using EPA Test Method 8015B.
- 30 samples for TPHmo using EPA Test Method 8015B.

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 10 samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every 10 samples, batch of samples or type of matrix, whichever was more frequent.
- One spiked sample for every 10 samples, batch of samples or type of matrix; whichever was more frequent, with spike made at 10 times the detection limit or at the analyte level.

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

5.0 INVESTIGATIVE RESULTS

5.1 Subsurface Conditions

Borings were completed using hand-auger drilling techniques. Soil in the project area consisted predominately of mixed sands and silts to a depth of 0.5 foot.

5.2 Laboratory Analytical Results

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

- The following metals were not detected above their respective laboratory reporting limits: antimony, beryllium, selenium, silver, and thallium.
- Chromium and lead were reported at concentrations equal to or exceeding 10 times their respective STLCs.
- Total chromium was reported at concentrations ranging from 2.6 mg/kg to 50 mg/kg.
- WET chromium was not detected at or above the laboratory reporting limit of 1.0 mg/l.
- Total lead was reported at concentrations ranging from 5.8 mg/kg to 1,600 mg/kg.
- WET lead was reported at concentrations ranging from 2.1 mg/l to 32 mg/l.
- TCLP lead was reported at concentrations ranging from not detected (laboratory reporting limit of 0.050 mg/l) to 6.1 mg/l.
- Remaining CAM 17 metals were reported in the samples at total concentrations below 10 times their respective STLCs.
- TPHd was reported at concentrations ranging from 7.5 mg/kg to 520 mg/kg.
- TPHmo was reported at concentrations ranging from 22 mg/kg to 1,900 mg/kg.

5.3 Laboratory Quality Assurance/Quality Control

We reviewed the QA/QC results provided with the laboratory analytical reports (Appendix A). Based on this limited data review, no additional qualifications of the soil or groundwater 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 exist 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. The bootstrap test results are included in Appendix B. The following tables present the calculated UCLs and statistics for the individual gore points.

Location 1 – EB SR-37 Connector to WB I-80 and EB SR-37 Connector to EB I-80
Borings LOC1-B1 to LOC1-B8

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	83.6	89.7	61	19	190

Location 2 - EB I-80 Connector to NB SR-29
Borings LOC2-B1 to LOC2-B8

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	643	720	395	14	1,600

Location 3 - EB I-80 Offramp to Redwood Parkway
Borings LOC3-B1 to LOC3-B8

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	174	195	96.5	9.0	540

Location 4- EB I-80 Offramp to West Texas Street
Borings LOC4-B1 to LOC4-B8

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	70.3	76.6	48.4	5.8	160

Location 5 - EB I-80 Offramp to Alamo Drive
Borings LOC5-B1 to LOC5-B8

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	24.7	26.6	18.5	6.9	44

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 95% UCL 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 12 (*x, y*) data points (i.e., soil samples analyzed for both total lead [*x*] and WET lead [*y*]) from the site. The resulting *coefficient of determination* (r^2) equaled 0.8085, which yields a corresponding *correlation coefficient* (*r*) of 0.901.

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 $y = 0.06(x)$, where *x* represents total lead concentrations and *y* represents predicted WET lead concentrations.

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

6.0 CONCLUSIONS

6.1 Lead in Soil

6.1.1 Location 1 – EB SR-37 Connector to WB I-80 and EB SR-37 Connector to EB I-80 (Borings LOC1-B1 to LOC1-B8)

The following table summarizes the predicted waste classification for excavated soil based on the total lead UCLs and predicted WET lead concentrations for data collected from this portion of the site. The total and WET lead calculations are summarized below and in Table 5a.

Excavation Depth	90% UCL Total Lead (mg/kg)	90% UCL Predicted WET Lead (mg/l)	95% UCL Total Lead (mg/kg)	Waste Classification
0 to 0.5 ft	84	**5.1**	90	**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 0.5 foot would be classified as a California hazardous waste. Based on the TCLP lead results, excavated soil would not be classified as a RCRA hazardous waste.

6.1.2 Location 2 - EB I-80 Connector to NB SR-29 (Borings LOC2-B1 to LOC2-B8)

The following table summarizes the predicted waste classification for excavated soil based on the total lead UCLs and predicted WET lead concentrations for data collected from this portion of the site. The total and WET lead calculations are summarized below and in Table 5b.

Excavation Depth	90% UCL Total Lead (mg/kg)	90% UCL Predicted WET Lead (mg/l)	95% UCL Total Lead (mg/kg)	Waste Classification
0 to 0.5 ft	643	**39.0**	720	**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 0.5 foot would be classified as a California hazardous waste. TCLP lead was reported in samples LOC2-B2 and LOC2-B3 at concentrations of 6.1 mg/l and 5.2 mg/l, respectively. Therefore, soil to a depth of 0.5 foot may also be considered a RCRA waste.

6.1.3 Location 3 – EB I-80 Offramp to Redwood Parkway (Borings LOC3-B1 to LOC3-B8)

The following table summarizes the predicted waste classification for excavated soil based on the total lead UCLs and predicted WET lead concentrations for data collected from this portion of the site. The total and WET lead calculations are summarized below and in Table 5c.

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 0.5 ft	174	**10.6**	195	**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 0.5 foot would be classified as a California hazardous waste. Based on the TCLP lead results, excavated soil would not be classified as a RCRA hazardous waste.

6.1.4 Location 4 – EB I-80 Offramp to West Texas Street (Borings LOC4-B1 to LOC4-B8)

The following table summarizes the predicted waste classification for excavated soil based on the total lead UCLs and predicted WET lead concentrations for data collected from this portion of the site. The total and WET lead calculations are summarized below and in Table 5d.

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 0.5 ft	70	4.3	77	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 0.5 foot would be classified as non-hazardous based on lead content.

6.1.5 Location 5 – EB I-80 Offramp to Alamo Drive (Borings LOC5-B1 to LOC5-B8)

Total lead was reported in the samples at concentrations below 50 mg/kg (i.e., below the TTLC of 1,000 mg/kg and below ten times the STLC of 5 mg/l). Therefore, soil excavated to a depth of up to 0.5 foot would be classified as non-hazardous based on lead content.

6.2 Remaining CAM 17 Metals in Soil

With the exception of chromium, remaining CAM 17 metals were reported in the samples at total concentrations below 10 times their respective STLCs.

WET chromium was not detected at or above the reporting limit of 1.0 mg/l in the sample analyzed. Therefore, soil would not be classified as hazardous based on chromium content.

The CAM 17 metal concentrations in site soil were compared to CHHSLs and ESLs. Arsenic and lead were reported at concentrations greater than one or more ESL values. Because concentrations of arsenic and lead exceeded one or more ESL, non-parametric bootstrap techniques were used to calculate the UCLs. The bootstrap test result is included in Appendix B. CHHSLs, ESLs, UCLs, and published background concentrations for arsenic and lead are summarized in the table below.

Metal	Maximum	95% UCL	Tier 1 ESL	Shallow Soil Residential CHHSL/ESL	Shallow Soil Commercial/ Industrial CHHSL/ESL	Worker Direct Exposure ESL	Published Background Mean[1]	Published Background Range[1]
Arsenic	13	6.86	0.067	0.07/0.067	0.24/0.31	0.99	3.5	0.6 to 11.0
Lead	1,600	200	80	150/80	3,500/160	160	23.9	12.4 to 97.1

Concentrations reported in mg/kg
[1] Kearney Foundation of Soil Science, March 1996
NC – Not calculated due to insufficient sample population. Cadmium was detected in only one of ten samples analyzed.

Based on the maximum and/or the 95% UCL concentrations for arsenic and lead, 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 Organic Compounds in Soil

TPHd was reported at concentrations ranging from 7.5 mg/kg to 520 mg/kg, exceeding the Tier 1 and the residential exposure ESL of 230 mg/kg, but below the commercial/industrial land use ESL of 1,100 mg/kg, and the construction worker exposure ESL of 3,800 mg/kg. TPHd has a 95% UCL concentration of 178 mg/kg.

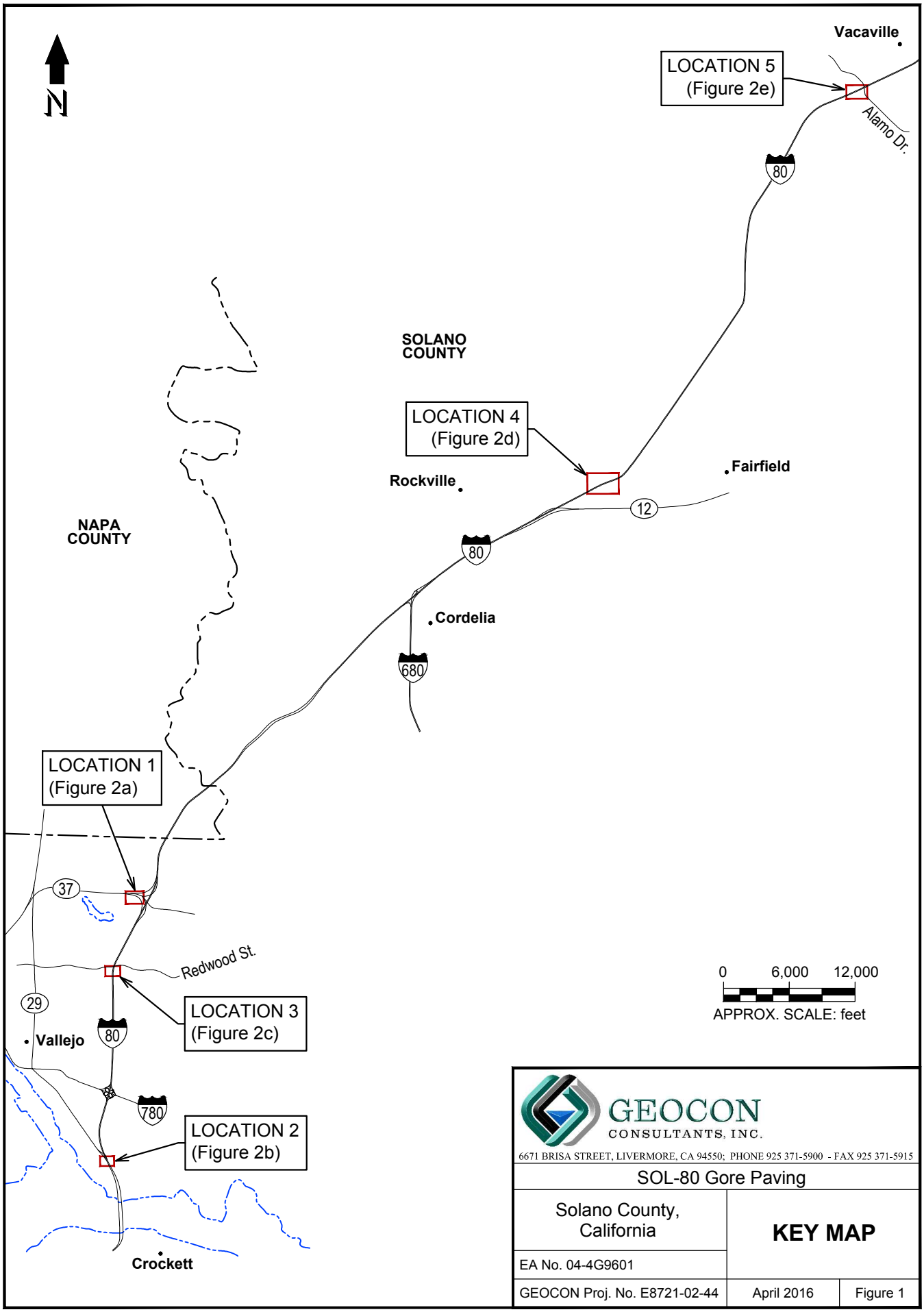
TPHmo was reported at concentrations ranging from 22 mg/kg to 1,900 mg/kg, below the ESLs.

Based on the reported TPHd concentrations, reuse or disposal of excavated soil may be restricted based on TPHd content, depending on proposed use.

A summary of petroleum hydrocarbon concentrations in site soil is presented in Table 4.

6.4 Worker Protection

The contractor(s) should prepare a project-specific health and safety plan to prevent or minimize worker exposure to metals and hydrocarbons 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.



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SOL-80 Gore Paving

Solano County, California

KEY MAP

EA No. 04-4G9601

GEOCON Proj. No. E8721-02-44 | April 2016 | Figure 1

SITE0316.DWG

GEOCON CONSULTANTS, INC.

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

SOL-80 Gore Paving

Solano County, California	**SITE PLAN**	
EA No. 04-4G9601		
GEOCON Proj. No. E8721-02-44	April 2016	Figure 2a

SITE0316.DWG

GEOCON CONSULTANTS, INC.

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

SOL-80 Gore Paving

Solano County, California

SITE PLAN

EA No. 04-4G9601

GEOCON Proj. No. E8721-02-44 | April 2016 | Figure 2b

SITE0316.DWG

GEOCON CONSULTANTS, INC.

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

SOL-80 Gore Paving

Solano County, California	**SITE PLAN**	
EA No. 04-4G9601		
GEOCON Proj. No. E8721-02-44	April 2016	Figure 2c

SITE0316.DWG

GEOCON CONSULTANTS, INC.

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SOL-80 Gore Paving

Solano County, California

SITE PLAN

EA No. 04-4G9601

GEOCON Proj. No. E8721-02-44 | April 2016 | Figure 2d

SITE0316.DWG

GEOCON CONSULTANTS, INC.

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

SOL-80 Gore Paving

Solano County, California

SITE PLAN

EA No. 04-4G9601

GEOCON Proj. No. E8721-02-44 | April 2016 | Figure 2e

SITE0316.DWG

TABLE 1
Boring Coordinates
SOL-80 Gore Paving
Solano County, California

Boring	Northing	Easting
LOC1-B1	1,813,323.6681	6,497,066.5108
LOC1-B2	1,813,308.7172	6,497,123.0373
LOC1-B3	1,813,308.1765	6,497,176.2205
LOC1-B4	1,813,310.1529	6,497,227.7734
LOC1-B5	1,813,219.1853	6,497,586.0576
LOC1-B6	1,813,202.1390	6,497,619.1107
LOC1-B7	1,813,190.5712	6,497,657.5556
LOC1-B8	1,813,164.2476	6,497,690.0181
LOC2-B1	1,788,948.2490	6,495,386.4990
LOC2-B2	1,788,971.1150	6,495,374.7690
LOC2-B3	1,788,995.8030	6,495,361.4570
LOC2-B4	1,789,021.2860	6,495,349.0270
LOC2-B5	1,789,041.8820	6,495,329.4930
LOC2-B6	1,789,067.2510	6,495,317.2840
LOC2-B7	1,789,092.8970	6,495,305.5230
LOC2-B8	1,789,113.9920	6,495,286.9220
LOC3-B1	1,806,108.7280	6,495,468.0850
LOC3-B2	1,806,161.3790	6,495,477.3580
LOC3-B3	1,806,215.3700	6,495,484.9600
LOC3-B4	1,806,271.5070	6,495,499.1390
LOC3-B5	1,806,327.7910	6,495,504.7080
LOC3-B6	1,806,385.7670	6,495,504.1500
LOC3-B7	1,806,439.4060	6,495,528.2110
LOC3-B8	1,806,487.4640	6,495,536.6760
LOC4-B1	1,851,256.1050	6,539,016.5920
LOC4-B2	1,851,328.3950	6,539,145.7000
LOC4-B3	1,851,403.1610	6,539,282.5040
LOC4-B4	1,851,475.9200	6,539,420.2770
LOC4-B5	1,851,547.2540	6,539,559.2630
LOC4-B6	1,851,611.7770	6,539,701.3880
LOC4-B7	1,851,673.1430	6,539,844.8240
LOC4-B8	1,851,717.5110	6,539,985.5090
LOC5-B1	1,887,491.5400	6,561,715.9220
LOC5-B2	1,887,533.5020	6,561,807.6490
LOC5-B3	1,887,588.0630	6,561,911.2310
LOC5-B4	1,887,634.3850	6,562,018.7880
LOC5-B5	1,887,690.0090	6,562,121.8560
LOC5-B6	1,887,741.9120	6,562,226.7200
LOC5-B7	1,887,790.6260	6,562,333.1230
LOC5-B8	1,887,849.6390	6,562,434.5570

NAD 83, Zone 2, feet

TABLE 2
Summary of Lead Results
SOL-80 Gore Paving
Solano County, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)
LOC1-B1	0 to 0.5	41	---	---
LOC1-B2	0 to 0.5	190	8.7	0.19
LOC1-B3	0 to 0.5	49	---	---
LOC1-B4	0 to 0.5	52	2.1	---
LOC1-B5	0 to 0.5	44	---	---
LOC1-B6	0 to 0.5	50	3.4	---
LOC1-B7	0 to 0.5	44	---	---
LOC1-B8	0 to 0.5	19	---	---
LOC2-B1	0 to 0.5	65	3.2	---
LOC2-B2	0 to 0.5	1,600	---	6.1
LOC2-B3	0 to 0.5	1,000	---	5.2
LOC2-B4	0 to 0.5	160	5.3	<0.050
LOC2-B5	0 to 0.5	67	3.5	---
LOC2-B6	0 to 0.5	230	13	0.13
LOC2-B7	0 to 0.5	14	---	---
LOC2-B8	0 to 0.5	24	---	---
LOC3-B1	0 to 0.5	9.0	---	---
LOC3-B2	0 to 0.5	49	---	---
LOC3-B3	0 to 0.5	540	32	0.54
LOC3-B4	0 to 0.5	45	---	---
LOC3-B5	0 to 0.5	20	---	---
LOC3-B6	0 to 0.5	81	4.0	---
LOC3-B7	0 to 0.5	12	---	---
LOC3-B8	0 to 0.5	16	---	---
LOC4-B1	0 to 0.5	5.8	---	---
LOC4-B2	0 to 0.5	160	21	0.085
LOC4-B3	0 to 0.5	72	5.4	---
LOC4-B4	0 to 0.5	15	---	---
LOC4-B5	0 to 0.5	31	---	---
LOC4-B6	0 to 0.5	6.5	---	---
LOC4-B7	0 to 0.5	70	6.9	---
LOC4-B8	0 to 0.5	27	---	---

TABLE 2
Summary of Lead Results
SOL-80 Gore Paving
Solano County, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	TCLP Lead (mg/l)
LOC5-B1	0 to 0.5	11	---	---
LOC5-B2	0 to 0.5	40	---	---
LOC5-B3	0 to 0.5	8.4	---	---
LOC5-B4	0 to 0.5	14	---	---
LOC5-B5	0 to 0.5	14	---	---
LOC5-B6	0 to 0.5	6.9	---	---
LOC5-B7	0 to 0.5	44	---	---
LOC5-B8	0 to 0.5	10	---	---
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
TCLP = Toxicity Characteristic Leaching Procedure
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration

TABLE 3
Summary of CAM 17 Metals Results
SOL-80 Gore Paving
Solano County, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
LOC1-B2	0 to 0.5	<2.0	3.4	86	<1.0	<1.0	22	13	49	190	0.83	<1.0	27	<1.0	<1.0	<1.0	84	160
LOC1-B6	0 to 0.5	<2.0	1.8	34	<1.0	<1.0	11	16	36	50	1.4	<1.0	20	<1.0	<1.0	<1.0	97	97
LOC2-B3	0 to 0.5	<2.0	8.5	140	<2.0	1.4	43	7.3	110	1,000	0.69	3.5	54	<1.0	<1.0	<1.0	27	420
LOC2-B5	0 to 0.5	<2.0	5.1	83	<1.0	<1.0	21	8.9	40	67	<0.10	<1.0	29	<1.0	<1.0	<1.0	36	130
LOC3-B1	0 to 0.5	<4.0	3.3	37	<5.0	<2.0	2.6	11	14	9.0	<0.10	<2.0	5.2	<2.0	<2.0	<2.0	47	51
LOC3-B7	0 to 0.5	<2.0	13	110	<1.0	<1.0	29	13	53	12	<0.10	<1.0	33	<1.0	<1.0	<1.0	50	86
LOC4-B4	0 to 0.5	<2.0	3.7	87	<1.0	<1.0	19	4.1	11	15	<0.10	<1.0	36	<1.0	<1.0	<1.0	14	33
LOC4-B8	0 to 0.5	<2.0	6.2	91	<1.0	<1.0	35	9.4	28	27	0.49	<1.0	45	<1.0	<1.0	<1.0	54	68
LOC5-B3	0 to 0.5	<2.0	4.2	130	<1.0	<1.0	31	6.3	26	8.4	<0.10	<1.0	46	<1.0	<1.0	<1.0	35	100
LOC5-B6	0 to 0.5	<2.0	3.2	70	<1.0	<1.0	50 *<1.0*	7.6	15	6.9	<0.10	<1.0	71	<1.0	<1.0	<1.0	26	36
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	---	---	---
February 2016 ESLs (Rev 2)																		
Tier 1		31	0.067	15,000	150	39	120,000	23	3,100	80	13	390	820	390	390	0.78	140,000	23,000
Residential Direct Exposure		31	0.067	15,000	150	39	120,000	23	3,100	80	13	390	820	390	390	0.78	140,000	23,000
Commercial/Industrial Direct Exposure		470	0.31	220,000	2,200	580	1,800,000	350	47,000	160	190	5,800	11,000	5,800	5,800	12	600,000	350,000
Construction Worker Direct Exposure		140	0.99	67,000	180	110	530,000	49	14,000	160	57	1,800	1,700	1,800	1,800	3.5	220,000	110,000

TABLE 3
Summary of CAM 17 Metals Results
SOL-80 Gore Paving
Solano County, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Background Concentrations [2]																		
	Minimum	0.15	0.6	133	0.25	0.05	23	2.7	9.1	12.4	0.10	0.1	9.0	0.015	0.10	0.17	39	88
	Mean	0.60	3.5	509	1.28	0.36	122	14.9	28.7	23.9	0.26	1.3	57	0.058	0.80	0.56	112	149
	Maximum	1.95	11	1,400	2.70	1.70	1,579	46.9	96.4	97.1	0.90	9.6	509	0.430	8.30	1.10	288	236

Notes:

Results are shown in milligrams per kilogram (mg/kg).

[1] Value listed is for Chromium III, as there is no construction exposure standard for total chromium.

[2] = Background Concentrations of Trace and Major Elements in California Soils (Kearney Foundation of Soil Science, Division of Agricultural and Natural Resources, University of California, March 1996)

Values listed in italics are results of WET analysis

< = Analyte was not detected above the laboratory reporting limit.

ESLs = Environmental Screening Levels, Direct Exposure for Human Health, Tables Tier 1 and S-1, SFRWQCB, February 2016

TTLC = total threshold limit concentration

STLC = soluble threshold limit concentration

TCLP = toxicity characteristic leaching procedure

TABLE 4
Summary of Petroleum Hydrocarbons Results
SOL-80 Gore Paving
Solano County, California

Sample ID	Sample Depth (ft)	TPHd (mg/kg)	TPHmo (mg/kg)
LOC1-B1	0 to 0.5	200	680
LOC1-B3	0 to 0.5	48	270
LOC1-B4	0 to 0.5	160	550
LOC1-B5	0 to 0.5	130	510
LOC1-B7	0 to 0.5	85	270
LOC1-B8	0 to 0.5	15	45
LOC2-B1	0 to 0.5	320	910
LOC2-B2	0 to 0.5	290	870
LOC2-B4	0 to 0.5	340	1,600
LOC2-B6	0 to 0.5	110	380
LOC2-B7	0 to 0.5	46	120
LOC2-B8	0 to 0.5	10	27
LOC3-B2	0 to 0.5	40	110
LOC3-B3	0 to 0.5	170	550
LOC3-B4	0 to 0.5	23	71
LOC3-B5	0 to 0.5	7.5	22
LOC3-B6	0 to 0.5	81	230
LOC3-B8	0 to 0.5	59	160
LOC4-B1	0 to 0.5	520	1,700
LOC4-B2	0 to 0.5	180	570
LOC4-B3	0 to 0.5	80	590
LOC4-B5	0 to 0.5	290	1,000
LOC4-B6	0 to 0.5	25	89
LOC4-B7	0 to 0.5	110	390
LOC5-B1	0 to 0.5	170	560
LOC5-B2	0 to 0.5	330	1,300
LOC5-B4	0 to 0.5	140	1,900
LOC5-B5	0 to 0.5	21	52
LOC5-B7	0 to 0.5	120	450
LOC5-B8	0 to 0.5	86	1,100
ESLs			
Tier 1		230	5,100
Residential Direct Exposure		230	11,000
Commercial/Industrial Direct Exposure		1,100	140,000
Construction Worker Direct Exposure		3,800	32,000

Notes:
mg/kg = milligrams per kilogram
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil
ESLs = Environmental Screening Levels, Direct Exposure for Human Health, Tables

TABLE 5a
Summary of Lead Statistical Analysis
SOL-80 Gore Paving
Solano County, California

Location 1 (Borings LOC1-B1 to LOC1-B8)

TOTAL LEAD

	90% UCL	95% UCL
0 ft	83.6	89.7

EXCAVATION SCENARIOS

	Weighted Averages		
Excavation Depth	90% UCL Total Lead (mg/kg)	WET Lead* (mg/l)	95% UCL Total Lead (mg/kg)
0 to 0.5 ft	84	5.1	90

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: $y =$ 0.06 x

TABLE 5b
Summary of Lead Statistical Analysis
SOL-80 Gore Paving
Solano County, California

Location 2 (Borings LOC2-B1 to LOC2-B8)

TOTAL LEAD

	90% UCL	95% UCL
0 ft	643	720

EXCAVATION SCENARIOS

	Weighted Averages		
Excavation Depth	90% UCL Total Lead (mg/kg)	WET Lead* (mg/l)	95% UCL Total Lead (mg/kg)
0 to 0.5 ft	643	39.0	720

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: $y =$ 0.06 x

TABLE 5c
Summary of Lead Statistical Analysis
SOL-80 Gore Paving
Solano County, California

Location 3 (Borings LOC3-B1 to LOC3-B8)

TOTAL LEAD

	90% UCL	95% UCL
0 ft	174	195

EXCAVATION SCENARIOS

	Weighted Averages		
Excavation Depth	90% UCL Total Lead (mg/kg)	WET Lead* (mg/l)	95% UCL Total Lead (mg/kg)
0 to 0.5 ft	174	10.6	195

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: $y =$ 0.06 x

TABLE 5d
Summary of Lead Statistical Analysis
SOL-80 Gore Paving
Solano County, California

Location 4 (Borings LOC4-B1 to LOC4-B8)

TOTAL LEAD

	90% UCL	95% UCL
0 ft	70.3	76.6

EXCAVATION SCENARIOS

	Weighted Averages		
Excavation Depth	90% UCL Total Lead (mg/kg)	WET Lead* (mg/l)	95% UCL Total Lead (mg/kg)
0 to 0.5 ft	70	4.3	77

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: $y =$ 0.06 x

APPENDIX A

March 02, 2016

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1600708

Client Reference : I-80 Gores, E8721-02-44

Enclosed are the results for sample(s) received on February 23, 2016 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LOC2-B1	1600708-01	Soil	2/22/16 8:37	2/23/16 9:30
LOC2-B2	1600708-02	Soil	2/22/16 8:38	2/23/16 9:30
LOC2-B3	1600708-03	Soil	2/22/16 8:41	2/23/16 9:30
LOC2-B4	1600708-04	Soil	2/22/16 8:42	2/23/16 9:30
LOC2-B5	1600708-05	Soil	2/22/16 8:44	2/23/16 9:30
LOC2-B6	1600708-06	Soil	2/22/16 8:45	2/23/16 9:30
LOC2-B7	1600708-07	Soil	2/22/16 8:49	2/23/16 9:30
LOC2-B8	1600708-08	Soil	2/22/16 8:50	2/23/16 9:30
LOC3-B1	1600708-09	Soil	2/22/16 9:29	2/23/16 9:30
LOC3-B2	1600708-10	Soil	2/22/16 9:30	2/23/16 9:30
LOC3-B3	1600708-11	Soil	2/22/16 9:32	2/23/16 9:30
LOC3-B4	1600708-12	Soil	2/22/16 9:34	2/23/16 9:30
LOC3-B5	1600708-13	Soil	2/22/16 9:41	2/23/16 9:30
LOC3-B6	1600708-14	Soil	2/22/16 9:42	2/23/16 9:30
LOC3-B7	1600708-15	Soil	2/22/16 9:43	2/23/16 9:30
LOC3-B8	1600708-16	Soil	2/22/16 9:44	2/23/16 9:30
LOC1-B1	1600708-17	Soil	2/22/16 9:59	2/23/16 9:30
LOC1-B2	1600708-18	Soil	2/22/16 10:00	2/23/16 9:30
LOC1-B3	1600708-19	Soil	2/22/16 10:02	2/23/16 9:30
LOC1-B4	1600708-20	Soil	2/22/16 10:04	2/23/16 9:30
LOC1-B5	1600708-21	Soil	2/22/16 10:06	2/23/16 9:30
LOC1-B6	1600708-22	Soil	2/22/16 10:03	2/23/16 9:30
LOC1-B7	1600708-23	Soil	2/22/16 10:10	2/23/16 9:30
LOC1-B8	1600708-24	Soil	2/22/16 10:12	2/23/16 9:30
LOC4-B1	1600708-25	Soil	2/22/16 10:35	2/23/16 9:30
LOC4-B2	1600708-26	Soil	2/22/16 10:36	2/23/16 9:30
LOC4-B3	1600708-27	Soil	2/22/16 10:39	2/23/16 9:30
LOC4-B4	1600708-28	Soil	2/22/16 10:41	2/23/16 9:30
LOC4-B5	1600708-29	Soil	2/22/16 10:43	2/23/16 9:30
LOC4-B6	1600708-30	Soil	2/22/16 10:46	2/23/16 9:30
LOC4-B7	1600708-31	Soil	2/22/16 10:48	2/23/16 9:30
LOC4-B8	1600708-32	Soil	2/22/16 10:50	2/23/16 9:30
LOC5-B1	1600708-33	Soil	2/22/16 11:07	2/23/16 9:30
LOC5-B2	1600708-34	Soil	2/22/16 11:13	2/23/16 9:30
LOC5-B3	1600708-35	Soil	2/22/16 11:15	2/23/16 9:30
LOC5-B4	1600708-36	Soil	2/22/16 11:17	2/23/16 9:30
LOC5-B5	1600708-37	Soil	2/22/16 11:19	2/23/16 9:30

Certificate of Analysis

Geocon Consultants, Inc.		Project Number :	I-80 Gores, E8721-02-44
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	03/02/2016

LOC5-B6	1600708-38	Soil	2/22/16 11:21	2/23/16 9:30
LOC5-B7	1600708-39	Soil	2/22/16 11:23	2/23/16 9:30
LOC5-B8	1600708-40	Soil	2/22/16 11:25	2/23/16 9:30

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B1

Lab ID: 1600708-01

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**65**	1.0	1	B6B0818	02/25/2016	02/26/16 10:19	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**320**	20	10	B6B0807	02/24/2016	02/25/16 09:37	
ORO	**910**	20	10	B6B0807	02/24/2016	02/25/16 09:37	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 09:37*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B2

Lab ID: 1600708-02

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**1600**	1.0	1	B6B0818	02/25/2016	02/26/16 10:20	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**290**	20	10	B6B0807	02/24/2016	02/25/16 09:47	
ORO	**870**	20	10	B6B0807	02/24/2016	02/25/16 09:47	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 09:47*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B3

Lab ID: 1600708-03

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Arsenic	**8.5**	1.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Barium	**140**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Beryllium	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:46	D5
Cadmium	**1.4**	1.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Chromium	**43**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Cobalt	**7.3**	1.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Copper	**110**	2.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Lead	**1000**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Molybdenum	**3.5**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Nickel	**54**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Selenium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Silver	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Thallium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:10	
Vanadium	**27**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	
Zinc	**420**	1.0	1	B6B0874	02/29/2016	03/01/16 11:09	

Mercury by AA (Cold Vapor) EPA 7471A — **Analyst: SB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.69**	0.10	1	B6B0880	02/29/2016	02/29/16 13:22	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B4

Lab ID: 1600708-04

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**160**	1.0	1	B6B0818	02/25/2016	02/26/16 10:20	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**340**	20	10	B6B0807	02/24/2016	02/25/16 09:57	
ORO	**1600**	20	10	B6B0807	02/24/2016	02/25/16 09:57	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 09:57*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B5
Lab ID: 1600708-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Arsenic	**5.1**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Barium	**83**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Beryllium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:19	
Cadmium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Chromium	**21**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Cobalt	**8.9**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Copper	**40**	2.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Lead	**67**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Molybdenum	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Nickel	**29**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Selenium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Silver	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Thallium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Vanadium	**36**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	
Zinc	**130**	1.0	1	B6B0874	02/29/2016	03/01/16 11:20	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0880	02/29/2016	02/29/16 13:24	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B6

Lab ID: 1600708-06

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**230**	1.0	1	B6B0818	02/25/2016	02/26/16 10:21	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**110**	10	10	B6B0807	02/24/2016	02/25/16 09:27	
ORO	**380**	10	10	B6B0807	02/24/2016	02/25/16 09:27	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 09:27*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B7

Lab ID: 1600708-07

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**14**	1.0	1	B6B0818	02/25/2016	02/26/16 10:22	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**46**	1.0	1	B6B0807	02/24/2016	02/25/16 08:29	
ORO	**120**	1.0	1	B6B0807	02/24/2016	02/25/16 08:29	
Surrogate: p-Terphenyl	*64.8 %*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 08:29*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC2-B8
Lab ID: 1600708-08

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**24**	1.0	1	B6B0818	02/25/2016	02/26/16 10:22	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**10**	1.0	1	B6B0807	02/24/2016	02/25/16 08:00	
ORO	**27**	1.0	1	B6B0807	02/24/2016	02/25/16 08:00	
Surrogate: p-Terphenyl	*69.9 %*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 08:00*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B1

Lab ID: 1600708-09

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	4.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Arsenic	**3.3**	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Barium	**37**	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Beryllium	ND	5.0	5	B6B0874	02/29/2016	03/01/16 15:53	D5
Cadmium	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Chromium	**2.6**	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Cobalt	**11**	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Copper	**14**	4.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Lead	**9.0**	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Molybdenum	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Nickel	**5.2**	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Selenium	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Silver	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Thallium	ND	2.0	2	B6B0874	02/29/2016	03/01/16 15:51	D5
Vanadium	**47**	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5
Zinc	**51**	2.0	2	B6B0874	02/29/2016	03/01/16 15:50	D5

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0880	02/29/2016	02/29/16 13:26	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B2

Lab ID: 1600708-10

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**49**	1.0	1	B6B0818	02/25/2016	02/26/16 10:23	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**40**	2.0	2	B6B0807	02/24/2016	02/25/16 08:48	
ORO	**110**	2.0	2	B6B0807	02/24/2016	02/25/16 08:48	
Surrogate: p-Terphenyl	*49.9 %*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 08:48*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B3

Lab ID: 1600708-11

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**540**	1.0	1	B6B0818	02/25/2016	02/26/16 10:26	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**170**	5.0	5	B6B0807	02/24/2016	02/25/16 08:58	
ORO	**550**	5.0	5	B6B0807	02/24/2016	02/25/16 08:58	
Surrogate: p-Terphenyl	*38.9 %*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 08:58*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B4

Lab ID: 1600708-12

Lead by ICP-AES EPA 6010B **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**45**	1.0	1	B6B0818	02/25/2016	02/26/16 10:27	

Diesel Range Organics by EPA 8015B **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**23**	1.0	1	B6B0807	02/24/2016	02/25/16 08:19	
ORO	**71**	1.0	1	B6B0807	02/24/2016	02/25/16 08:19	
Surrogate: p-Terphenyl	*52.7 %*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 08:19*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B5

Lab ID: 1600708-13

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**20**	1.0	1	B6B0818	02/25/2016	02/26/16 10:27	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**7.5**	1.0	1	B6B0808	02/24/2016	02/25/16 12:01	
ORO	**22**	1.0	1	B6B0808	02/24/2016	02/25/16 12:01	
Surrogate: p-Terphenyl	*82.0 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:01*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B6

Lab ID: 1600708-14

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**81**	1.0	1	B6B0818	02/25/2016	02/26/16 10:30	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**81**	5.0	5	B6B0808	02/24/2016	02/25/16 12:31	
ORO	**230**	5.0	5	B6B0808	02/24/2016	02/25/16 12:31	
Surrogate: p-Terphenyl	*51.2 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:31*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B7

Lab ID: 1600708-15

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Arsenic	**13**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Barium	**110**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Beryllium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:26	
Cadmium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Chromium	**29**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Cobalt	**13**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Copper	**53**	2.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Lead	**12**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Molybdenum	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Nickel	**33**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Selenium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Silver	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Thallium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Vanadium	**50**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	
Zinc	**86**	1.0	1	B6B0874	02/29/2016	03/01/16 11:27	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0880	02/29/2016	02/29/16 13:28	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC3-B8

Lab ID: 1600708-16

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**16**	1.0	1	B6B0818	02/25/2016	02/26/16 10:30	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**59**	5.0	5	B6B0808	02/24/2016	02/25/16 12:21	
ORO	**160**	5.0	5	B6B0808	02/24/2016	02/25/16 12:21	
Surrogate: p-Terphenyl	*55.1 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:21*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B1

Lab ID: 1600708-17

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**41**	1.0	1	B6B0818	02/25/2016	02/26/16 10:31	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**200**	10	5	B6B0808	02/24/2016	02/25/16 13:13	
ORO	**680**	10	5	B6B0808	02/24/2016	02/25/16 13:13	
Surrogate: p-Terphenyl	*52.0 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 13:13*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B2
Lab ID: 1600708-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Arsenic	**3.4**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Barium	**86**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Beryllium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:30	
Cadmium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Chromium	**22**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Cobalt	**13**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Copper	**49**	2.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Lead	**190**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Molybdenum	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Nickel	**27**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Selenium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Silver	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Thallium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Vanadium	**84**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	
Zinc	**160**	1.0	1	B6B0874	02/29/2016	03/01/16 11:31	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.83**	0.10	1	B6B0880	02/29/2016	02/29/16 13:30	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B3

Lab ID: 1600708-19

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**49**	1.0	1	B6B0818	02/25/2016	02/26/16 10:32	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**48**	5.0	5	B6B0808	02/24/2016	02/25/16 12:52	
ORO	**270**	5.0	5	B6B0808	02/24/2016	02/25/16 12:52	
Surrogate: p-Terphenyl	*56.2 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:52*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B4

Lab ID: 1600708-20

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**52**	1.0	1	B6B0818	02/25/2016	02/26/16 10:33	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**160**	10	5	B6B0808	02/24/2016	02/25/16 13:03	
ORO	**550**	10	5	B6B0808	02/24/2016	02/25/16 13:03	
Surrogate: p-Terphenyl	*58.1 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 13:03*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B5

Lab ID: 1600708-21

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**44**	1.0	1	B6B0818	02/25/2016	02/26/16 10:35	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**130**	10	5	B6B0808	02/24/2016	02/25/16 13:23	
ORO	**510**	10	5	B6B0808	02/24/2016	02/25/16 13:23	
Surrogate: p-Terphenyl	*67.0 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 13:23*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B6

Lab ID: 1600708-22

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Arsenic	**1.8**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Barium	**34**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Beryllium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:34	
Cadmium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Chromium	**11**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Cobalt	**16**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Copper	**36**	2.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Lead	**50**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Molybdenum	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Nickel	**20**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Selenium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Silver	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Thallium	ND	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Vanadium	**97**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	
Zinc	**97**	1.0	1	B6B0874	02/29/2016	03/01/16 11:35	

Mercury by AA (Cold Vapor) EPA 7471A — **Analyst: SB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**1.4**	0.10	1	B6B0880	02/29/2016	02/29/16 13:32	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B7

Lab ID: 1600708-23

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**44**	1.0	1	B6B0818	02/25/2016	02/26/16 10:36	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**85**	5.0	5	B6B0808	02/24/2016	02/25/16 12:42	
ORO	**270**	5.0	5	B6B0808	02/24/2016	02/25/16 12:42	
Surrogate: p-Terphenyl	*66.7 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:42*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC1-B8

Lab ID: 1600708-24

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**19**	1.0	1	B6B0818	02/25/2016	02/26/16 10:37	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**15**	1.0	1	B6B0808	02/24/2016	02/25/16 12:11	
ORO	**45**	1.0	1	B6B0808	02/24/2016	02/25/16 12:11	
Surrogate: p-Terphenyl	*68.4 %*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 12:11*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B1

Lab ID: 1600708-25

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**5.8**	1.0	1	B6B0818	02/25/2016	02/26/16 10:38	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**520**	20	10	B6B0808	02/24/2016	02/25/16 13:34	
ORO	**1700**	20	10	B6B0808	02/24/2016	02/25/16 13:34	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0808	02/24/2016	*02/25/16 13:34*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B2

Lab ID: 1600708-26

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**160**	1.0	1	B6B0818	02/25/2016	02/26/16 10:38	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**180**	10	10	B6B0833	02/25/2016	02/25/16 19:30	
ORO	**570**	10	10	B6B0833	02/25/2016	02/25/16 19:30	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:30*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B3

Lab ID: 1600708-27

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**72**	1.0	1	B6B0819	02/25/2016	02/26/16 10:47	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**80**	10	10	B6B0833	02/25/2016	02/25/16 19:40	
ORO	**590**	10	10	B6B0833	02/25/2016	02/25/16 19:40	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:40*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B4

Lab ID: 1600708-28

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Arsenic	**3.7**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Barium	**87**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Beryllium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Cadmium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Chromium	**19**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Cobalt	**4.1**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Copper	**11**	2.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Lead	**15**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Molybdenum	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Nickel	**36**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Selenium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Silver	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Thallium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Vanadium	**14**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	
Zinc	**33**	1.0	1	B6B0875	02/29/2016	03/01/16 12:19	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0881	02/29/2016	02/29/16 13:56	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B5

Lab ID: 1600708-29

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**31**	1.0	1	B6B0819	02/25/2016	02/26/16 10:47	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**290**	20	10	B6B0833	02/25/2016	02/25/16 19:50	
ORO	**1000**	20	10	B6B0833	02/25/2016	02/25/16 19:50	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:50*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B6

Lab ID: 1600708-30

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**6.5**	1.0	1	B6B0819	02/25/2016	02/26/16 10:48	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**25**	2.0	2	B6B0833	02/25/2016	02/25/16 19:00	
ORO	**89**	2.0	2	B6B0833	02/25/2016	02/25/16 19:00	
Surrogate: p-Terphenyl	*72.3 %*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:00*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B7

Lab ID: 1600708-31

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**70**	1.0	1	B6B0819	02/25/2016	02/26/16 10:49	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**110**	10	10	B6B0833	02/25/2016	02/25/16 19:10	
ORO	**390**	10	10	B6B0833	02/25/2016	02/25/16 19:10	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:10*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC4-B8

Lab ID: 1600708-32

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Arsenic	**6.2**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Barium	**91**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Beryllium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Cadmium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Chromium	**35**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Cobalt	**9.4**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Copper	**28**	2.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Lead	**27**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Molybdenum	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Nickel	**45**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Selenium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Silver	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Thallium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Vanadium	**54**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	
Zinc	**68**	1.0	1	B6B0875	02/29/2016	03/01/16 12:22	

Mercury by AA (Cold Vapor) EPA 7471A

Analyst: SB

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	**0.49**	0.10	1	B6B0881	02/29/2016	02/29/16 13:58	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B1

Lab ID: 1600708-33

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**11**	1.0	1	B6B0819	02/25/2016	02/26/16 10:50	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**170**	10	10	B6B0833	02/25/2016	02/25/16 19:20	
ORO	**560**	10	10	B6B0833	02/25/2016	02/25/16 19:20	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:20*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B2

Lab ID: 1600708-34

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**40**	1.0	1	B6B0819	02/25/2016	02/26/16 10:51	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**330**	20	10	B6B0833	02/25/2016	02/25/16 20:09	
ORO	**1300**	20	10	B6B0833	02/25/2016	02/25/16 20:09	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 20:09*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B3

Lab ID: 1600708-35

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Arsenic	**4.2**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Barium	**130**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Beryllium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:25	
Cadmium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Chromium	**31**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Cobalt	**6.3**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Copper	**26**	2.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Lead	**8.4**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Molybdenum	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Nickel	**46**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Selenium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Silver	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Thallium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Vanadium	**35**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	
Zinc	**100**	1.0	1	B6B0875	02/29/2016	03/01/16 12:26	

Mercury by AA (Cold Vapor) EPA 7471A — **Analyst: SB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0881	02/29/2016	02/29/16 14:00	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B4

Lab ID: 1600708-36

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**14**	1.0	1	B6B0819	02/25/2016	02/26/16 10:52	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**140**	20	10	B6B0833	02/25/2016	02/25/16 20:19	
ORO	**1900**	20	10	B6B0833	02/25/2016	02/25/16 20:19	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 20:19*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B5

Lab ID: 1600708-37

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**14**	1.0	1	B6B0819	02/25/2016	02/26/16 10:52	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**21**	2.0	2	B6B0833	02/25/2016	02/25/16 18:20	
ORO	**52**	2.0	2	B6B0833	02/25/2016	02/25/16 18:20	
Surrogate: p-Terphenyl	*63.7 %*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 18:20*	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B6

Lab ID: 1600708-38

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Arsenic	**3.2**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Barium	**70**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Beryllium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:28	
Cadmium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Chromium	**50**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Cobalt	**7.6**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Copper	**15**	2.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Lead	**6.9**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Molybdenum	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Nickel	**71**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Selenium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Silver	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Thallium	ND	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Vanadium	**26**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	
Zinc	**36**	1.0	1	B6B0875	02/29/2016	03/01/16 12:29	

Mercury by AA (Cold Vapor) EPA 7471A — **Analyst: SB**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	1	B6B0881	02/29/2016	02/29/16 14:02	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B7

Lab ID: 1600708-39

Lead by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**44**	1.0	1	B6B0819	02/25/2016	02/26/16 10:53	

Diesel Range Organics by EPA 8015B — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**120**	10	10	B6B0833	02/25/2016	02/25/16 19:59	
ORO	**450**	10	10	B6B0833	02/25/2016	02/25/16 19:59	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0833	02/25/2016	*02/25/16 19:59*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Client Sample ID LOC5-B8

Lab ID: 1600708-40

Lead by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**10**	1.0	1	B6B0819	02/25/2016	02/26/16 10:56	

Diesel Range Organics by EPA 8015B

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**86**	20	10	B6B0807	02/24/2016	02/25/16 13:44	
ORO	**1100**	20	10	B6B0807	02/24/2016	02/25/16 13:44	
Surrogate: p-Terphenyl	*0%*	*26 - 123*		B6B0807	02/24/2016	*02/25/16 13:44*	S4

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0874 - EPA 3050B_S									
Blank (B6B0874-BLK1)					Prepared: 2/29/2016 Analyzed: 3/1/2016				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	ND	1.0			NR				
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B6B0874-BS1)					Prepared: 2/29/2016 Analyzed: 3/1/2016				
Antimony	47.7275	2.0	50.0000		95.5	80 - 120			
Arsenic	45.8348	1.0	50.0000		91.7	80 - 120			
Barium	50.7561	1.0	50.0000		102	80 - 120			
Beryllium	49.8556	1.0	50.0000		99.7	80 - 120			
Cadmium	47.5437	1.0	50.0000		95.1	80 - 120			
Chromium	47.0169	1.0	50.0000		94.0	80 - 120			
Cobalt	48.8801	1.0	50.0000		97.8	80 - 120			
Copper	49.6940	2.0	50.0000		99.4	80 - 120			
Lead	47.9911	1.0	50.0000		96.0	80 - 120			
Molybdenum	48.8930	1.0	50.0000		97.8	80 - 120			
Nickel	48.4388	1.0	50.0000		96.9	80 - 120			
Selenium	43.7145	1.0	50.0000		87.4	80 - 120			
Silver	45.1794	1.0	50.0000		90.4	80 - 120			
Thallium	45.3514	1.0	50.0000		90.7	80 - 120			
Vanadium	51.3372	1.0	50.0000		103	80 - 120			
Zinc	46.5689	1.0	50.0000		93.1	80 - 120			
Duplicate (B6B0874-DUP1)			**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 3/1/2016				
Antimony	0.260893	2.0		0.784204	NR		100	20	R
Arsenic	23.9233	1.0		24.4373	NR		2.13	20	
Barium	150.658	1.0		135.582	NR		10.5	20	
Beryllium	0.582830	1.0		0.556396	NR		4.64	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0874 - EPA 3050B_S (continued)									
Duplicate (B6B0874-DUP1) - Continued		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Cadmium	1.42806	1.0		1.42182	NR		0.438	20	
Chromium	57.6078	1.0		60.8872	NR		5.54	20	
Cobalt	15.0012	1.0		14.2780	NR		4.94	20	
Copper	544.206	2.0		251.445	NR		73.6	20	R
Lead	134.360	1.0		142.429	NR		5.83	20	
Molybdenum	3.59963	1.0		3.85326	NR		6.81	20	
Nickel	57.4228	1.0		55.8011	NR		2.86	20	
Selenium	0.673624	1.0		0.525863	NR		24.6	20	R
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	30.4841	1.0		29.7514	NR		2.43	20	
Zinc	515.770	1.0		518.738	NR		0.574	20	
Matrix Spike (B6B0874-MS1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	87.0267	2.0	125.000	0.784204	69.0	28 - 106			
Arsenic	132.552	1.0	125.000	24.4373	86.5	57 - 109			
Barium	237.760	1.0	125.000	135.582	81.7	18 - 159			
Beryllium	112.124	1.0	125.000	0.556396	89.3	61 - 107			
Cadmium	100.667	1.0	125.000	1.42182	79.4	53 - 104			
Chromium	163.264	1.0	125.000	60.8872	81.9	53 - 121			
Cobalt	118.187	1.0	125.000	14.2780	83.1	55 - 109			
Copper	389.231	2.0	125.000	251.445	110	58 - 124			
Lead	228.909	1.0	125.000	142.429	69.2	35 - 129			
Molybdenum	106.164	1.0	125.000	3.85326	81.8	57 - 108			
Nickel	160.673	1.0	125.000	55.8011	83.9	44 - 122			
Selenium	102.093	1.0	125.000	0.525863	81.3	54 - 104			
Silver	115.972	1.0	125.000	ND	92.8	60 - 112			
Thallium	86.2030	1.0	125.000	ND	69.0	50 - 103			
Vanadium	146.396	1.0	125.000	29.7514	93.3	54 - 123			
Zinc	597.795	1.0	125.000	518.738	63.2	29 - 132			
Matrix Spike Dup (B6B0874-MSD1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	82.8766	2.0	125.000	0.784204	65.7	28 - 106	4.89	20	
Arsenic	124.383	1.0	125.000	24.4373	80.0	57 - 109	6.36	20	
Barium	232.658	1.0	125.000	135.582	77.7	18 - 159	2.17	20	
Beryllium	109.226	1.0	125.000	0.556396	86.9	61 - 107	2.62	20	
Cadmium	97.8719	1.0	125.000	1.42182	77.2	53 - 104	2.82	20	
Chromium	158.879	1.0	125.000	60.8872	78.4	53 - 121	2.72	20	
Cobalt	115.389	1.0	125.000	14.2780	80.9	55 - 109	2.40	20	
Copper	378.074	2.0	125.000	251.445	101	58 - 124	2.91	20	
Lead	224.326	1.0	125.000	142.429	65.5	35 - 129	2.02	20	
Molybdenum	103.488	1.0	125.000	3.85326	79.7	57 - 108	2.55	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0874 - EPA 3050B_S (continued)									
Matrix Spike Dup (B6B0874-MSD1) - Continued		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Nickel	156.982	1.0	125.000	55.8011	80.9	44 - 122	2.32	20	
Selenium	98.9352	1.0	125.000	0.525863	78.7	54 - 104	3.14	20	
Silver	113.021	1.0	125.000	ND	90.4	60 - 112	2.58	20	
Thallium	83.8608	1.0	125.000	ND	67.1	50 - 103	2.75	20	
Vanadium	141.248	1.0	125.000	29.7514	89.2	54 - 123	3.58	20	
Zinc	553.919	1.0	125.000	518.738	28.1	29 - 132	7.62	20	M1

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0875 - EPA 3050B_S									
Blank (B6B0875-BLK1)				Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	ND	1.0			NR				
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B6B0875-BS1)				Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	46.6719	2.0	50.0000		93.3	80 - 120			
Arsenic	44.3770	1.0	50.0000		88.8	80 - 120			
Barium	49.4704	1.0	50.0000		98.9	80 - 120			
Beryllium	47.8350	1.0	50.0000		95.7	80 - 120			
Cadmium	46.7499	1.0	50.0000		93.5	80 - 120			
Chromium	45.8210	1.0	50.0000		91.6	80 - 120			
Cobalt	47.7038	1.0	50.0000		95.4	80 - 120			
Copper	47.9210	2.0	50.0000		95.8	80 - 120			
Lead	47.4532	1.0	50.0000		94.9	80 - 120			
Molybdenum	47.7388	1.0	50.0000		95.5	80 - 120			
Nickel	47.2676	1.0	50.0000		94.5	80 - 120			
Selenium	42.8669	1.0	50.0000		85.7	80 - 120			
Silver	43.2131	1.0	50.0000		86.4	80 - 120			
Thallium	44.8487	1.0	50.0000		89.7	80 - 120			
Vanadium	49.6431	1.0	50.0000		99.3	80 - 120			
Zinc	47.0766	1.0	50.0000		94.2	80 - 120			
Duplicate (B6B0875-DUP1)			**Source: 1600579-01**	Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	ND	2.0		ND	NR			20	
Arsenic	16.0120	1.0		13.4540	NR		17.4	20	
Barium	146.272	1.0		148.981	NR		1.84	20	
Beryllium	0.936310	1.0		0.899739	NR		3.98	20	
Cadmium	0.987302	1.0		0.514145	NR		63.0	20	R
Chromium	58.0794	1.0		50.6011	NR		13.8	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0875 - EPA 3050B_S (continued)									
Duplicate (B6B0875-DUP1) - Continued		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Cobalt	14.7354	1.0		14.1414	NR		4.11	20	
Copper	165.794	2.0		141.642	NR		15.7	20	
Lead	76.4078	1.0		52.9852	NR		36.2	20	R
Molybdenum	4.44651	1.0		4.23215	NR		4.94	20	
Nickel	52.5482	1.0		47.8202	NR		9.42	20	
Selenium	ND	1.0		ND	NR			20	
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	36.3319	1.0		36.1484	NR		0.506	20	
Zinc	423.720	1.0		204.908	NR		69.6	20	R
Matrix Spike (B6B0875-MS1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	74.0812	2.0	125.000	ND	59.3	28 - 106			
Arsenic	110.900	1.0	125.000	13.4540	78.0	57 - 109			
Barium	248.376	1.0	125.000	148.981	79.5	18 - 159			
Beryllium	102.820	1.0	125.000	0.899739	81.5	61 - 107			
Cadmium	93.5164	1.0	125.000	0.514145	74.4	53 - 104			
Chromium	161.248	1.0	125.000	50.6011	88.5	53 - 121			
Cobalt	110.278	1.0	125.000	14.1414	76.9	55 - 109			
Copper	287.567	2.0	125.000	141.642	117	58 - 124			
Lead	161.032	1.0	125.000	52.9852	86.4	35 - 129			
Molybdenum	99.3990	1.0	125.000	4.23215	76.1	57 - 108			
Nickel	152.537	1.0	125.000	47.8202	83.8	44 - 122			
Selenium	93.3642	1.0	125.000	ND	74.7	54 - 104			
Silver	109.128	1.0	125.000	ND	87.3	60 - 112			
Thallium	82.5926	1.0	125.000	ND	66.1	50 - 103			
Vanadium	142.386	1.0	125.000	36.1484	85.0	54 - 123			
Zinc	304.184	1.0	125.000	204.908	79.4	29 - 132			
Matrix Spike Dup (B6B0875-MSD1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Antimony	78.0585	2.0	125.000	ND	62.4	28 - 106	5.23	20	
Arsenic	112.868	1.0	125.000	13.4540	79.5	57 - 109	1.76	20	
Barium	257.345	1.0	125.000	148.981	86.7	18 - 159	3.55	20	
Beryllium	104.872	1.0	125.000	0.899739	83.2	61 - 107	1.98	20	
Cadmium	95.9714	1.0	125.000	0.514145	76.4	53 - 104	2.59	20	
Chromium	152.870	1.0	125.000	50.6011	81.8	53 - 121	5.33	20	
Cobalt	111.919	1.0	125.000	14.1414	78.2	55 - 109	1.48	20	
Copper	271.608	2.0	125.000	141.642	104	58 - 124	5.71	20	
Lead	163.068	1.0	125.000	52.9852	88.1	35 - 129	1.26	20	
Molybdenum	100.821	1.0	125.000	4.23215	77.3	57 - 108	1.42	20	
Nickel	144.080	1.0	125.000	47.8202	77.0	44 - 122	5.70	20	
Selenium	95.0615	1.0	125.000	ND	76.0	54 - 104	1.80	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0875 - EPA 3050B_S (continued)									
Matrix Spike Dup (B6B0875-MSD1) - Continued		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 3/1/2016					
Silver	110.919	1.0	125.000	ND	88.7	60 - 112	1.63	20	
Thallium	85.9502	1.0	125.000	ND	68.8	50 - 103	3.98	20	
Vanadium	144.234	1.0	125.000	36.1484	86.5	54 - 123	1.29	20	
Zinc	348.814	1.0	125.000	204.908	115	29 - 132	13.7	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Lead by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0818 - EPA 3050 Modified_S									
Blank (B6B0818-BLK1)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	ND	1.0			NR				
Blank (B6B0818-BLK2)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	ND	1.0			NR				
LCS (B6B0818-BS1)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	50.8052	1.0	50.0000		102	80 - 120			
Duplicate (B6B0818-DUP1)		**Source: 1600708-26**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	186.202	1.0		164.892	NR		12.1	20	
Duplicate (B6B0818-DUP2)		**Source: 1600708-13**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	21.1726	1.0		19.6673	NR		7.37	20	
Matrix Spike (B6B0818-MS1)		**Source: 1600708-26**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	368.983	1.0	250.000	164.892	81.6	35 - 129			
Matrix Spike (B6B0818-MS2)		**Source: 1600708-13**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	201.270	1.0	250.000	19.6673	72.6	35 - 129			
Matrix Spike Dup (B6B0818-MSD1)		**Source: 1600708-26**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	411.087	1.0	250.000	164.892	98.5	35 - 129	10.8	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Lead by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0819 - EPA 3050 Modified_S									
Blank (B6B0819-BLK1)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	ND	1.0			NR				
Blank (B6B0819-BLK2)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	ND	1.0			NR				
LCS (B6B0819-BS1)				Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	49.8440	1.0	50.0000		99.7	80 - 120			
Duplicate (B6B0819-DUP1)		**Source: 1600710-10**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	4.08514	1.0		3.39152	NR		18.6	20	
Duplicate (B6B0819-DUP2)		**Source: 1600708-40**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	11.8793	1.0		10.3399	NR		13.9	20	
Matrix Spike (B6B0819-MS1)		**Source: 1600710-10**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	222.512	1.0	250.000	3.39152	87.6	35 - 129			
Matrix Spike (B6B0819-MS2)		**Source: 1600708-40**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	187.057	1.0	250.000	10.3399	70.7	35 - 129			
Matrix Spike Dup (B6B0819-MSD1)		**Source: 1600710-10**		Prepared: 2/25/2016 Analyzed: 2/26/2016					
Lead	227.038	1.0	250.000	3.39152	89.5	35 - 129	2.01	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0880 - EPA 7471_S									
Blank (B6B0880-BLK1)				Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	ND	0.10			NR				
LCS (B6B0880-BS1)				Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.844223	0.10	0.833333		101	80 - 120			
Duplicate (B6B0880-DUP1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.242490	0.10		0.322552	NR		28.3	20	R
Matrix Spike (B6B0880-MS1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	1.17109	0.10	0.833333	0.322552	102	70 - 130			
Matrix Spike Dup (B6B0880-MSD1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	1.26614	0.10	0.833333	0.322552	113	70 - 130	7.80	20	
Post Spike (B6B0880-PS1)		**Source: 1600589-02**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.009544		5.00000E-3	ND	113	85 - 115			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0881 - EPA 7471_S									
Blank (B6B0881-BLK1)				Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	ND	0.10			NR				
LCS (B6B0881-BS1)				Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.828783	0.10	0.833333		99.5	80 - 120			
Duplicate (B6B0881-DUP1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.092540	0.10		0.101836	NR		9.57	20	
Matrix Spike (B6B0881-MS1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.920385	0.10	0.833333	0.101836	98.2	70 - 130			
Matrix Spike Dup (B6B0881-MSD1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.902436	0.10	0.833333	0.101836	96.1	70 - 130	1.97	20	
Post Spike (B6B0881-PS1)		**Source: 1600579-01**		Prepared: 2/29/2016 Analyzed: 2/29/2016					
Mercury	0.006285		5.00000E-3	ND	101	85 - 115			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0807 - GCSEMI_DRO_LL_S									
Blank (B6B0807-BLK1)					Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	ND	1.0			NR				
ORO	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.618*		*2.66667*		*98.2*	*26 - 123*			
LCS (B6B0807-BS1)					Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	34.0547	1.0	33.3333		102	47 - 127			
Surrogate: p-Terphenyl	*2.212*		*2.66667*		*82.9*	*26 - 123*			
Duplicate (B6B0807-DUP1)		**Source: 1600708-10**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	39.5027	2.0		39.9280	NR		1.07	20	
Surrogate: p-Terphenyl	*1.689*		*2.66667*		*63.3*	*26 - 123*			
Matrix Spike (B6B0807-MS1)		**Source: 1600684-01**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	78.9133	5.0	33.3333	11.1723	203	16 - 123			M2
Surrogate: p-Terphenyl	*1.610*		*2.66667*		*60.4*	*26 - 123*			
Matrix Spike Dup (B6B0807-MSD1)		**Source: 1600684-01**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	72.6267	5.0	33.3333	11.1723	184	16 - 123	8.30	20	M2
Surrogate: p-Terphenyl	*1.743*		*2.66667*		*65.4*	*26 - 123*			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0808 - GCSEMI_DRO_LL_S									
Blank (B6B0808-BLK1)					Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	ND	1.0			NR				
ORO	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.427*		*2.66667*		*91.0*	*26 - 123*			
LCS (B6B0808-BS1)					Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	32.2910	1.0	33.3333		96.9	47 - 127			
Surrogate: p-Terphenyl	*2.330*		*2.66667*		*87.4*	*26 - 123*			
Duplicate (B6B0808-DUP1)		**Source: 1600708-13**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	7.98767	1.0		7.49700	NR		6.34	20	
Surrogate: p-Terphenyl	*2.003*		*2.66667*		*75.1*	*26 - 123*			
Matrix Spike (B6B0808-MS1)		**Source: 1600708-13**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	39.6513	1.0	33.3333	7.49700	96.5	16 - 123			
Surrogate: p-Terphenyl	*2.112*		*2.66667*		*79.2*	*26 - 123*			
Matrix Spike Dup (B6B0808-MSD1)		**Source: 1600708-13**			Prepared: 2/24/2016 Analyzed: 2/25/2016				
DRO	35.5360	1.0	33.3333	7.49700	84.1	16 - 123	10.9	20	
Surrogate: p-Terphenyl	*1.848*		*2.66667*		*69.3*	*26 - 123*			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6B0833 - GCSEMI_DRO_LL_S									
Blank (B6B0833-BLK1)					Prepared: 2/25/2016 Analyzed: 2/25/2016				
DRO	ND	1.0			NR				
ORO	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.889*		*2.66667*		*108*	*26 - 123*			
LCS (B6B0833-BS1)					Prepared: 2/25/2016 Analyzed: 2/25/2016				
DRO	32.7433	1.0	33.3333		98.2	47 - 127			
Surrogate: p-Terphenyl	*2.503*		*2.66667*		*93.9*	*26 - 123*			
Duplicate (B6B0833-DUP1)		**Source: 1600708-30**			Prepared: 2/25/2016 Analyzed: 2/25/2016				
DRO	25.8467	2.0		24.5760	NR		5.04	20	
Surrogate: p-Terphenyl	*2.364*		*2.66667*		*88.6*	*26 - 123*			
Matrix Spike (B6B0833-MS1)		**Source: 1600708-37**			Prepared: 2/25/2016 Analyzed: 2/25/2016				
DRO	70.2580	2.0	33.3333	21.1007	147	16 - 123			M2
Surrogate: p-Terphenyl	*2.425*		*2.66667*		*90.9*	*26 - 123*			
Matrix Spike Dup (B6B0833-MSD1)		**Source: 1600708-37**			Prepared: 2/25/2016 Analyzed: 2/25/2016				
DRO	70.6913	2.0	33.3333	21.1007	149	16 - 123	0.615	20	M2
Surrogate: p-Terphenyl	*2.137*		*2.66667*		*80.1*	*26 - 123*			

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/02/2016

Notes and Definitions

S4	Surrogate was diluted out.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
D5	Sample diluted due to failing internal standard in the original run.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

CHAIN OF CUSTODY RECORD

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

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FedEx ☐ Other: OnTrac

Sample Condition Upon Receipt
1. CHILLED 5.4°C Y ☑ N ☐ 4. SEALED Y ☐ N ☑
2. HEADSPACE (VOA) N/A Y ☐ N ☐ 5. # OF SPLS MATCH COC Y ☑ N ☐
3. CONTAINER INTACT Y ☑ N ☐ 6. PRESERVED Y ☐ N ☑

Client: Geocon
Attention: Luann Beadle
Address: 6671 Brisa Street
City: Livermore State: CA Zip Code: 94550
Tel: 916-852-9118
Fax: 916-852-9132

Project Name: I-80 Gores Project #: E8721-02-44 Sampler: Cord Dennig (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Cord Dennig	2/22/16	1500	OnTrac	2/22/16	1500
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date: 2/23/16	Time: 0930
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: R. Silva 2/22/16
Print Name Date
Signature

Send Report To:
Attn: _____
Co: _____
Addr: _____
City: State: Zip:

Bill To:
Attn: _____
Co: _____
Addr: _____
City: State: Zip:

Special Instructions/Comments:
Contract 04A4336

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

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

Circle or Add Analysis(es) Requested: Total Lead; CAM 17 Metals; TPHd/TPHmo

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

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode _____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date (2016)	Time	TAT	Container(s) #	Container(s) Type	REMARKS
	1600708-1	LOC2-B1	2/22	837	E	1	Brass Sleeve	
	-2	-B2		838				
	-3	-B3		941				
	-4	-B4		842				
	-5	-B5		844				
	-6	-B6		845				
	-7	-B7		949				
	-8	-B8		850				
	-9	LOC3-B1		929				
	-10	-B2		930				
	-11	-B3		932				
	-12	-B4		934				
	-13	-B5		941				
	-14	-B6		942				
	-15	-B7		943				
	-16	-B8		944				
	-17	LOC1-B1		959				
	-18	-B2		1000				
	-19	-B3		1002				
	-20	-B4		1004				

■ TAT starts 8AM the following day if samples received after 3 PM

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

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

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

CHAIN OF CUSTODY RECORD

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

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FedEx ☐ Other: ONTRAC

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

Client: Geocon
Attention: Luann Beadle
Address: 6671 Brisa Street
City: Livermore State: CA Zip Code: 94550
Tel: 916-852-9118
Fax: 916-852-9132
Project Name: I-80 Gores
Project #: E8721-02-44
Sampler: Cord Dennig

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Cord Dennig	2/22/16	1500	OnTrac	2/22/16 (Signature)	1500
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 to perform the work indicated below:
Project Mgr /Submitter: R. Silva 2/22/16
Print Name Date
Signature

Send Report To:
Attn: _____
Co: _____
Addr: _____
City: State: Zip:

Bill To:
Attn: _____
Co: _____
Addr: _____
City: State: Zip:

Special Instructions/Comments:
Contract 04A4336

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

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

Circle or Add Analysis(es) Requested: Total Lead; CAM 17 Metals; TPHd/TPHmo

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

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode _____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date (2016)	Time	Total Lead	CAM 17 Metals	TPHd/TPHmo	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	REMARKS
	1605087-21	LOC1-B5	2/22	1006	X		X	X				E	1	Encore Sleeve	
	-22	-B6		1008		X									
	-23	-B7		1010	X		X								
	-24	-B8		1012	X		X								
	-25	LOC4-B1		1035	X		X								
	-26	-B2		1036	X		X								
	-27	-B3		1039	X		X								
	-28	-B4		1041		X									
	-29	-B5		1043	X		X								
	-30	-B6		1046	X		X								
	-31	-B7		1048	X		X								
	-32	-B8		1050		X									
	-33	LOC5-B1		1107	X		X								
	-34	-B2		1113	X		X								
	-35	-B3		1115		X									
	-36	-B4		1117	X		X								
	-37	-B5		1119	X		X								
	-38	-B6		1121		X									
	-39	-B7		1123	X		X								
	-40	-B8		1125	X		X								

■ TAT starts 8AM the following day if samples received after 3 PM

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

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

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

ADVANCED TECHNOLOGY LABORATORIES

March 15, 2016

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1600708
Client Reference : I-80 Gores, E8721-02-44

Enclosed are the results for sample(s) received on February 23, 2016 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/15/2016

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LOC2-B1	1600708-01	Soil	2/22/16 8:37	2/23/16 9:30
LOC2-B2	1600708-02	Soil	2/22/16 8:38	2/23/16 9:30
LOC2-B3	1600708-03	Soil	2/22/16 8:41	2/23/16 9:30
LOC2-B4	1600708-04	Soil	2/22/16 8:42	2/23/16 9:30
LOC2-B5	1600708-05	Soil	2/22/16 8:44	2/23/16 9:30
LOC2-B6	1600708-06	Soil	2/22/16 8:45	2/23/16 9:30
LOC3-B3	1600708-11	Soil	2/22/16 9:32	2/23/16 9:30
LOC3-B6	1600708-14	Soil	2/22/16 9:42	2/23/16 9:30
LOC1-B2	1600708-18	Soil	2/22/16 10:00	2/23/16 9:30
LOC1-B4	1600708-20	Soil	2/22/16 10:04	2/23/16 9:30
LOC1-B6	1600708-22	Soil	2/22/16 10:03	2/23/16 9:30
LOC4-B2	1600708-26	Soil	2/22/16 10:36	2/23/16 9:30
LOC4-B3	1600708-27	Soil	2/22/16 10:39	2/23/16 9:30
LOC4-B7	1600708-31	Soil	2/22/16 10:48	2/23/16 9:30
LOC5-B6	1600708-38	Soil	2/22/16 11:21	2/23/16 9:30

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/15/2016

TCLP Metals by ICP-AES EPA 6010B

Analyte: Lead **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1600708-02	LOC2-B2	**6.1**	mg/L	0.050	1	B6C0301	03/11/2016	03/11/16 11:07	
1600708-03	LOC2-B3	**5.2**	mg/L	0.050	1	B6C0301	03/11/2016	03/11/16 11:16	

STLC Metals by ICP-AES by EPA 6010B

Analyte: Chromium **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1600708-38	LOC5-B6	**ND**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 11:13	

STLC Metals by ICP-AES by EPA 6010B

Analyte: Lead **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1600708-01	LOC2-B1	**3.2**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:34	
1600708-04	LOC2-B4	**5.3**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:36	
1600708-05	LOC2-B5	**3.5**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:38	
1600708-06	LOC2-B6	**13**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:41	
1600708-11	LOC3-B3	**32**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:43	
1600708-14	LOC3-B6	**4.0**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:45	
1600708-18	LOC1-B2	**8.7**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:48	
1600708-20	LOC1-B4	**2.1**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:54	
1600708-22	LOC1-B6	**3.4**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:56	
1600708-26	LOC4-B2	**21**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 10:59	
1600708-27	LOC4-B3	**5.4**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 11:08	
1600708-31	LOC4-B7	**6.9**	mg/L	1.0	20	B6C0334	03/14/2016	03/14/16 11:10	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/15/2016

QUALITY CONTROL SECTION

TCLP Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6C0301 - EPA 3010A_S									
Blank (B6C0301-BLK1)					Prepared: 3/11/2016 Analyzed: 3/11/2016				
Lead	ND	0.050			NR				
LCS (B6C0301-BS1)					Prepared: 3/11/2016 Analyzed: 3/11/2016				
Lead	0.957287	0.050	1.00000		95.7	80 - 120			
Duplicate (B6C0301-DUP1)		**Source: 1600708-02**			Prepared: 3/11/2016 Analyzed: 3/11/2016				
Lead	5.88466	0.050		6.08545	NR		3.35	20	
Matrix Spike (B6C0301-MS1)		**Source: 1600708-02**			Prepared: 3/11/2016 Analyzed: 3/11/2016				
Lead	8.19724	0.050	2.50000	6.08545	84.5	77 - 121			
Matrix Spike Dup (B6C0301-MSD1)		**Source: 1600708-02**			Prepared: 3/11/2016 Analyzed: 3/11/2016				
Lead	8.32698	0.050	2.50000	6.08545	89.7	77 - 121	1.57	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/15/2016

STLC Metals by ICP-AES by EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6C0334 - STLC_S Extraction									
Blank (B6C0334-BLK1)					Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	ND	1.0			NR				
Lead	ND	1.0			NR				
Blank (B6C0334-BLK2)					Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	ND	1.0			NR				
Lead	ND	1.0			NR				
LCS (B6C0334-BS1)					Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	1.88897		2.00000		94.4	80 - 120			
Lead	1.83694		2.00000		91.8	80 - 120			
Duplicate (B6C0334-DUP1)		**Source: 1600708-26**			Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	0.363444	1.0		0.360509	NR		0.811	20	
Lead	20.8154	1.0		20.9746	NR		0.762	20	
Duplicate (B6C0334-DUP2)		**Source: 1600708-38**			Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	0.146403	1.0		0.146033	NR		0.253	20	
Lead	0.094346	1.0		0.149342	NR		45.1	20	R
Matrix Spike (B6C0334-MS1)		**Source: 1600708-26**			Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	2.65540		2.50000	0.360509	91.8	74 - 121			
Lead	21.8835		2.50000	20.9746	36.4	44 - 130			M1
Matrix Spike (B6C0334-MS2)		**Source: 1600708-38**			Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	2.38159		2.50000	0.146033	89.4	74 - 121			
Lead	2.27306		2.50000	0.149342	84.9	44 - 130			
Matrix Spike Dup (B6C0334-MSD1)		**Source: 1600708-26**			Prepared: 3/14/2016 Analyzed: 3/14/2016				
Chromium	2.72612		2.50000	0.360509	94.6	74 - 121	2.63	20	
Lead	22.1667		2.50000	20.9746	47.7	44 - 130	1.29	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/15/2016

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

Diane Galvan

From: Luann Beadle [beadle@geoconinc.com]
Sent: Tuesday, March 08, 2016 11:23 AM
To: Diane Galvan
Subject: Lab Order 1600708 (TO-44)

Hi Diane,

Could you please run WETs on these samples:

1600708-38	LOC5-B6	Chromium	50
1600708-22	LOC1-B6	Lead	50
1600708-20	LOC1-B4	Lead	52
1600708-01	LOC2-B1	Lead	65
1600708-05	LOC2-B5	Lead	67
1600708-31	LOC4-B7	Lead	70
1600708-27	LOC4-B3	Lead	72
1600708-14	LOC3-B6	Lead	81
1600708-04	LOC2-B4	Lead	160
1600708-26	LOC4-B2	Lead	160
1600708-18	LOC1-B2	Lead	190
1600708-06	LOC2-B6	Lead	230
1600708-11	LOC3-B3	Lead	540

And TCLP lead on these:

1600708-03	LOC2-B3
1600708-02	LOC2-B2

On a regular TAT?

Thank you,
Luann

Luann Beadle | *Project Scientist*
GEOCON CONSULTANTS, INC.
6671 Brisa Street, Livermore, California 94550
P|925.371.5900 ext. 403 M|925.395.1669
beadle@geoconinc.com / www.geoconinc.com / Facebook / Linkedin

ADVANCED TECHNOLOGY LABORATORIES

March 22, 2016

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1600708
Client Reference : I-80 Gores, E8721-02-44

Enclosed are the results for sample(s) received on February 23, 2016 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/22/2016

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
LOC2-B4	1600708-04	Soil	2/22/16 8:42	2/23/16 9:30
LOC2-B6	1600708-06	Soil	2/22/16 8:45	2/23/16 9:30
LOC3-B3	1600708-11	Soil	2/22/16 9:32	2/23/16 9:30
LOC1-B2	1600708-18	Soil	2/22/16 10:00	2/23/16 9:30
LOC4-B2	1600708-26	Soil	2/22/16 10:36	2/23/16 9:30

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/22/2016

TCLP Metals by ICP-AES EPA 6010B

Analyte: Lead **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1600708-04	LOC2-B4	**ND**	mg/L	0.050	1	B6C0504	03/18/2016	03/18/16 13:33	
1600708-06	LOC2-B6	**0.13**	mg/L	0.050	1	B6C0504	03/18/2016	03/18/16 13:40	
1600708-11	LOC3-B3	**0.54**	mg/L	0.050	1	B6C0504	03/18/2016	03/18/16 13:42	
1600708-18	LOC1-B2	**0.19**	mg/L	0.050	1	B6C0504	03/18/2016	03/18/16 13:45	
1600708-26	LOC4-B2	**0.085**	mg/L	0.050	1	B6C0504	03/18/2016	03/18/16 13:47	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/22/2016

QUALITY CONTROL SECTION

TCLP Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B6C0504 - EPA 3010A_S									
Blank (B6C0504-BLK1)					Prepared: 3/18/2016 Analyzed: 3/18/2016				
Lead	ND	0.050			NR				
LCS (B6C0504-BS1)					Prepared: 3/18/2016 Analyzed: 3/18/2016				
Lead	0.920185	0.050	1.00000		92.0	80 - 120			
Duplicate (B6C0504-DUP1)		**Source: 1600708-04**			Prepared: 3/18/2016 Analyzed: 3/18/2016				
Lead	0.073605	0.050		0.049881	NR		38.4	20	R
Matrix Spike (B6C0504-MS1)		**Source: 1600708-04**			Prepared: 3/18/2016 Analyzed: 3/18/2016				
Lead	2.23833	0.050	2.50000	0.049881	87.5	77 - 121			
Matrix Spike Dup (B6C0504-MSD1)		**Source: 1600708-04**			Prepared: 3/18/2016 Analyzed: 3/18/2016				
Lead	2.20925	0.050	2.50000	0.049881	86.4	77 - 121	1.31	20	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : I-80 Gores, E8721-02-44
6671 Brisa Street	Report To : Luann Beadle
Livermore , CA 94550	Reported : 03/22/2016

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

Diane Galvan

From: Luann Beadle [beadle@geoconinc.com]
Sent: Tuesday, March 15, 2016 3:09 PM
To: Diane Galvan
Subject: RE: Additional Results/EDD/Invoice - I-80 Gores (1600708)

Hi Diane,
Please run TCLP lead on samples:

LOC2-B4
LOC1-B2
LOC2-B6
LOC4-B2
LOC3-B3

On a regular TAT.
Thanks,
Luann

Luann Beadle | *Project Scientist*
GEOCON CONSULTANTS, INC.
6671 Brisa Street, Livermore, California 94550
P|925.371.5900 ext. 403 M|925.395.1669
beadle@geoconinc.com / www.geoconinc.com / Facebook / Linkedin

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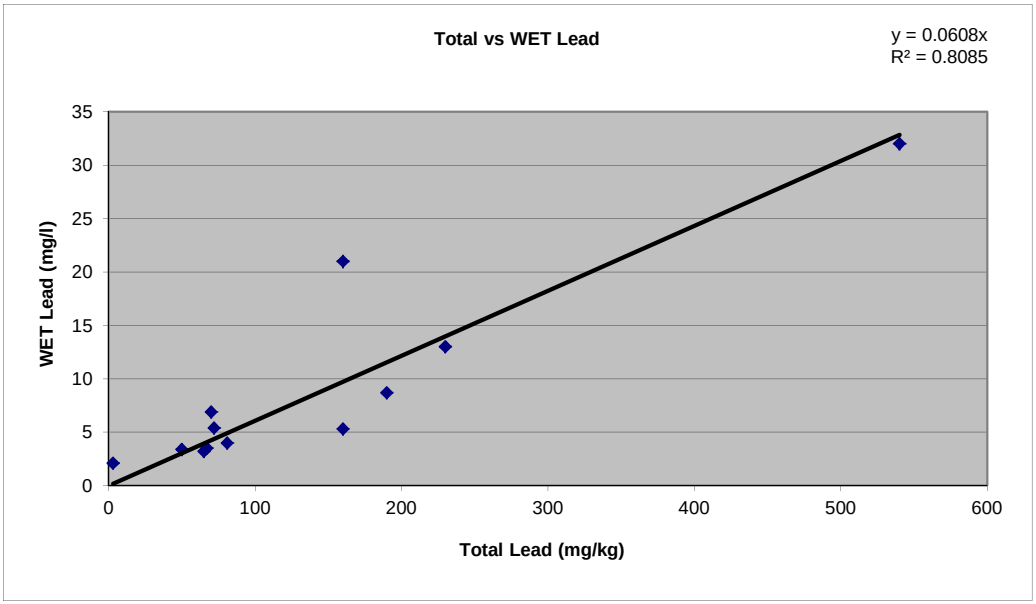
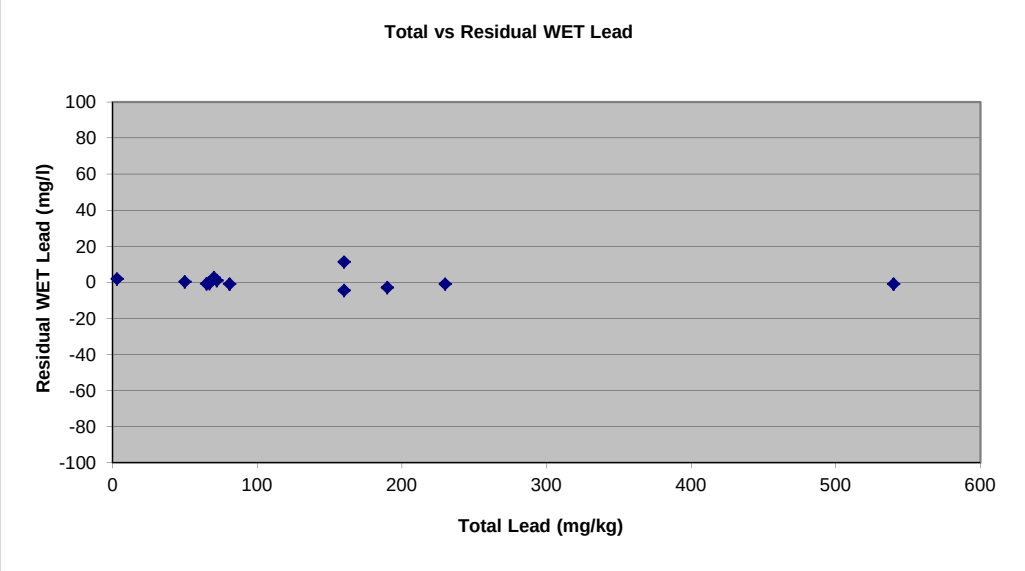
Geotechnical Engineering Environmental Services Engineering Geology Construction Inspection
Land Development Transportation Infrastructure Institutional Brownfields/Redevelopment Natural Resources

APPENDIX B

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	WET Lead (mg/l)	Residual WET Lead (mg/l)	Squared Residual WET Lead (mg/l)
LOC1-B4	0 to 0.5	3	2.1	1.92	3.68
LOC2-B1	0 to 0.5	65	3.2	-0.75	0.57
LOC1-B6	0 to 0.5	50	3.4	0.36	0.13
LOC2-B5	0 to 0.5	67	3.5	-0.57	0.33
LOC3-B6	0 to 0.5	81	4.0	-0.92	0.85
LOC2-B4	0 to 0.5	160	5.3	-4.43	19.60
LOC4-B3	0 to 0.5	72	5.4	1.02	1.05
LOC4-B7	0 to 0.5	70	6.9	2.64	6.99
LOC1-B2	0 to 0.5	190	8.7	-2.85	8.13
LOC2-B6	0 to 0.5	230	13	-0.98	0.97
LOC4-B2	0 to 0.5	160	21	11.27	127.08
LOC3-B3	0 to 0.5	540	32	-0.83	0.69





Pb - Loc 1

Total Number of Observations	8
Number of Distinct Observations	7
Number of Missing Observations	0
Mean	61
Median	46.5
Std. Error of Mean	18.77
Skewness	2.602
SD of logged Data	0.632
Minimum	19
Maximum	190
SD	53.09
Coefficient of Variation	0.869
Mean of logged Data	3.904
90% Standard Bootstrap UCL	**83.6**
95% Standard Bootstrap UCL	**89.7**

Pb - Loc 2

Total Number of Observations	8
Number of Distinct Observations	8
Number of Missing Observations	0
Mean	395
Median	113.5
Std. Error of Mean	207
Skewness	1.685
SD of logged Data	1.672
Minimum	14
Maximum	1600
SD	585.5
Coefficient of Variation	1.482
Mean of logged Data	4.874
90% Standard Bootstrap UCL	**643**
95% Standard Bootstrap UCL	**720**

Pb - Loc 3

Total Number of Observations	8
Number of Distinct Observations	8
Number of Missing Observations	0
Mean	96.5
Median	32.5
Std. Error of Mean	63.94
Skewness	2.728
SD of logged Data	1.324
Minimum	9.0
Maximum	540
SD	180.9
Coefficient of Variation	1.874
Mean of logged Data	3.604
90% Standard Bootstrap UCL	**174**
95% Standard Bootstrap UCL	**195**

Pb - Loc 4

Total Number of Observations	8
Number of Distinct Observations	8
Number of Missing Observations	0
Mean	48.4
Median	29
Std. Error of Mean	18.38
Skewness	1.639
SD of logged Data	1.182
Minimum	5.8
Maximum	160
SD	52
Coefficient of Variation	1.074
Mean of logged Data	3.333
90% Standard Bootstrap UCL	**70.3**
95% Standard Bootstrap UCL	**76.6**

Pb - Loc 5

Total Number of Observations	8
Number of Distinct Observations	7
Number of Missing Observations	0
Mean	18.5
Median	12.5
Std. Error of Mean	5.207
Skewness	1.344
SD of logged Data	0.689
Minimum	6.9
Maximum	44
SD	14.73
Coefficient of Variation	0.794
Mean of logged Data	2.689
90% Standard Bootstrap UCL	**24.7**
95% Standard Bootstrap UCL	**26.6**

Pb - All Locations

Total Number of Observations	40
Number of Distinct Observations	34
Number of Missing Observations	0
Mean	123.9
Median	42.5
Std. Error of Mean	46.88
Skewness	4.072
SD of logged Data	1.324
Minimum	5.8
Maximum	1600
SD	296.5
Coefficient of Variation	2.393
Mean of logged Data	3.681
95% Standard Bootstrap UCL	**200**

As

Total Number of Observations	10
Number of Distinct Observations	10
Number of Missing Observations	0
Mean	5.24
Median	3.95
Std. Error of Mean	1.046
Skewness	1.673
SD of logged Data	0.56
Minimum	1.8
Maximum	13
SD	3.306
Coefficient of Variation	0.631
Mean of logged Data	1.507
95% Standard Bootstrap UCL	**6.86**

TPHd

Total Number of Observations	30
Number of Distinct Observations	27
Number of Missing Observations	0
Mean	140
Median	110
Std. Error of Mean	22.63
Skewness	1.302
Minimum	7.5
Maximum	520
SD	124
Coefficient of Variation	0.884
Mean of logged Data	4.48
95% Standard Bootstrap UCL	**178**