Rte 5 KP [illegible]
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SITE INVESTIGATION REPORT

STATE ROUTE 5 BETWEEN THE SAN DIEGO RIVER BRIDGE AND 0.2 KM NORTH OF THE MISSION BAY DRIVE OVERCROSSING IN SAN DIEGO, CALIFORNIA

CONTRACT 43A0012

Rte 5 TASK ORDER NO. 11-07580K-PK;

EA 17580K

PM

R32.7 - R38.7

GEOCON

GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS

PREPARED BY

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PREPARED FOR

CALIFORNIA DEPARTMENT
OF TRANSPORTATION
DISTRICT 11
SAN DIEGO, CALIFORNIA

APRIL 1999

GEOCON

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Project No. 08900-06-18
Task Order No. 11-07580K-PK
EA 17580K
April 4, 1999

Ms. Diane Vermeulen
California Department of Transportation
District 11
2829 Juan Street
San Diego, California 92110-2799

Subject: SITE INVESTIGATION REPORT
LEAD INVESTIGATION ON ROUTE 5
FROM THE SAN DIEGO RIVER BRIDGE TO
0.2 KM NORTH OF MISSION BAY DRIVE OVERCROSSING
SAN DIEGO, CALIFORNIA
CONTRACT 43A0012
TASK ORDER NO. 11-07580K-PK, EA 17580K

Dear Mr. Threlkeld:

In accordance with Caltrans Contract No. 43A0012 and Task Order No. 11-07580K-PK, EA 17580K, dated February 10, 1999, Geocon Environmental Consultants, Inc. (Geocon) has performed environmental engineering services at the site consisting of the exposed soil adjacent to the median on northbound and southbound Route 5 from the San Diego River Bridge to 0.2 km north of Mission Bay Drive Overcrossing in San Diego, California. The accompanying report summarizes the services performed, including the advancement of hand-auger borings, limited soil sampling, statistical analyses, and laboratory analyses. Should questions concerning the contents of this report arise, or if Geocon may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON ENVIRONMENTAL CONSULTANTS, INC.

Joel C. Kloth, RG 4628	Mark P. Wanek	Marc A. Barton
Project Geologist	Staff Geologist	Staff Scientist

MPW:MAB:JCK:sc

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I. EXECUTIVE SUMMARY

Pursuant to the California Department of Transportation (Caltrans) contract 43A0012 and Task Order (TO) No 11-07580K-PK, EA 17580K, Geocon Environmental Consultants, Inc. (Geocon) has performed a site investigation on the unpaved portions of the median on northbound and southbound Route 5 from the San Diego River Bridge to 0.2 km north of Mission Bay Drive Overcrossing in San Diego, California. The investigation was performed to evaluate the presence of lead due to the historical combustion of leaded fuels from freeway traffic. Data from the investigation was used to determine the re-use method for soil excavated at the site during the proposed construction, and to inform Caltrans of potential health and safety issues concerning the presence of lead in soil for workers at the site during construction activities. One-hundred seventy-two (172) soil samples collected were analyzed for total lead, eighteen soil samples were analyzed for pH, 49 soil samples were analyzed using WET with citric acid, and 45 soil samples were analyzed using the WET with deionized water.

Statistical analysis using the upper confidence levels (UCL) of 80 % and 95% and the laboratory data indicated soil along the median of the roadway to the total depth of 0.60 meters contained soluble lead concentrations greater than 5.0 mg/l. The average soluble lead WET-DI results were below 0.5 mg/l.

i.i. Conclusions

The laboratory analytical results and statistical analysis indicated that the soil excavated from the median of the roadway at the site has the potential to be classified as a hazardous waste per Title 22 of the California Code of Regulations (CCR). Laboratory results for total lead indicate that the area around borings B8, B9, B16, B19, B20, B24, B28, B30, B39, and B56 may contain hazardous lead concentrations. Soluble lead concentrations indicate that the majority of the site may contain hazardous lead concentrations. Based upon the guidelines of the Caltrans Lead Variance (Variance Suitability) and statistical analysis using the 80% and 95% UCL of the soil samples analyzed, soil at the site is suitable for re-use within the Caltrans right-of-way.

i.ii. Recommendations

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil may be placed under pavement or under 0.30 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.

SITE INVESTIGATION REPORT

1. INTRODUCTION

1.1 Project Description and Objectives

Pursuant to the California Department of Transportation (Caltrans) Contract 43A0012 and Task Order (TO) No. 11-07580K-PK, EA 17580K, Geocon Environmental Consultants, Inc. (Geocon) performed environmental engineering services on the median of northbound and southbound Route 5 from the San Diego River Bridge to 0.2 km north of Mission Bay Drive Overcrossing in San Diego, California (site). The approximate site location is depicted on the Vicinity Map, presented as Figure 1.

The objective of the site investigation was to evaluate soil at the site for the presence of lead due to the historical combustion of leaded fuels from freeway traffic. The information obtained from the limited soil sampling and laboratory testing was used to determine the method of re-use of soil excavated during the proposed construction activities at the site. Caltrans proposes to install a new center divider at the site. The data was also used to inform Caltrans of potential health and safety issues for workers at the site during construction activities.

1.2 Scope of Work

Geocon performed the following tasks:

1.2.1 Pre-field Activities

- Attended a task order meeting on February 11, 1999 to discuss issues such as field methods, boring locations, health and safety measures, and the completion schedule.
- Prepared a Health and Safety Plan dated February 11, 1999, for the proposed activities. The Health and Safety Plan included guidelines for the use of personal protective equipment for Geocon employees during the field activities.
- Contacted Underground Service Alert (USA) to notify utility companies of the field activities. Geocon was provided with USA Ticket Numbers 345619, 345632, 345636, and 345644.

1.2.2 Limited Soil Sampling

A 7.60 cm diameter hand auger was used to collect 172 soil samples from 59 boring locations on February 16 and February 17, 1999. Boring locations were spaced approximately 200 meters apart. The borings were advanced to a maximum depth of approximately 0.60 meters below the ground

surface. However, refusal prevented advancing several borings to the proposed total depth. According to the Task Order, soil samples were to be collected from depths of approximately 0.15, 0.30, and 0.6 meters with the exception of B5, B16, B20, B41, B50, and B52 which were advanced to a depth of 0.30 meters and B9, B13, B53, and B58 which were advanced to a depth of 0.45 meters. The approximate boring locations are depicted on Boring Location Maps, Figures 2 through 7. The borings were backfilled with the soil cuttings generated.

1.2.3 Laboratory Analyses

Geocon submitted the soil samples to a California Department of Health Services (CDOHS)-certified analytical laboratory. The soil samples were analyzed for total lead following Environmental Protection Agency (EPA) Test Method 6010. Soil samples exhibiting total lead concentrations between 75 milligrams per kilogram (mg/kg) and 1000 mg/kg were analyzed for soluble lead using citric acid following EPA Test Methods 3050 and EPA series 7420. Soil samples exhibiting soluble lead concentrations using citric acid over 5 milligrams per liter (mg/l) were subsequently analyzed for soluble lead using deionized water following EPA Test Methods 3050 and 7420. In addition, 18 soil samples were analyzed for soil pH following EPA Test Method 9045A. The laboratory analyses were performed on a standard turn-around-time basis.

1.2.4 Report Preparation

This report was prepared as outlined in Contract No. 43A0012 and in Task Order No. 11-07580K-PK, summarizing the results of the site investigation activities requested by Caltrans.

1.3 Previous Site Investigations

Geocon has not performed a previous investigation at the site. In addition, Caltrans has not notified Geocon of previous investigations performed at the site.

2. INVESTIGATIVE METHODS

2.1. Field Methods

The field methods used by Geocon to complete this TO are outlined in the following Geocon Standard Operating Procedures (SOPs) presented as Appendix A:

SOP No. 11 - Hand-Augering and Soil Sample Collection
SOP No. 31 - Soil Sample Handling Procedures

2.2. Deviations from Work Plan

A work plan was not prepared for this TO; however, Geocon performed the scope of work as described in TO No. 11-07580K-PK, EA 17580K.

3. INVESTIGATIVE RESULTS AND FIELD OBSERVATIONS

3.1. Site Geology, Hydrology, and Other Site Conditions

The soil conditions encountered consisted generally of loose to moderately dense, dry to wet, yellow-brown to dark-brown, loamy sand with some gravel and cobbles.

3.2. Analytical Laboratory Results

A summary of the results of the laboratory analyses for total lead is presented in Table I. Reproductions of the laboratory reports and chain-of-custody documentation are presented as Appendix B.

3.3. Total Lead

Total lead concentrations ranged from below the laboratory detection of 5.0 mg/kg to 2,690 mg/kg. Ten (10) soil samples exhibited total lead concentrations above 1,000 mg/kg.

3.4. Soluble Lead WET

Soluble lead concentrations using citric acid as the extractant via the Waste Extraction Test (soluble lead WET) ranged from 0.44 milligrams per liter (mg/l) to 93 mg/l. Thirty-nine (39) samples exhibited soluble lead WET concentrations greater than or equal to the Soluble Threshold Limit Concentration (STLC) of 5.0 mg/l.

3.5. Soluble Lead WET-DI

Soluble lead concentrations using de-ionized water as the extractant via the WET (soluble lead WET-DI) ranged from below the laboratory detection of 0.15 mg/l to 3.9 mg/l. Four (4) soil samples analyzed for soluble lead WET-DI exhibited soluble lead concentrations greater than 0.5 mg/l.

3.6. pH

Eighteen (18) soil samples were analyzed for pH, and the values ranged from 8.2 to 9.3.

3.7. Statistical Data Evaluation

The analytical laboratory results from the boring locations were evaluated statistically in conformance with a document entitled *Contract 43Y097 Lead Investigation Reporting*, prepared by Caltrans and dated January 20, 1997. This procedure was used in order to determine the best method of re-use for on-site soil. A histogram of the numerical data set was initially developed to determine normality in the data set. The data was determined to be lognormal, and the numerical data set was transformed using the natural logarithm function. The mean concentrations of the total lead in on-site soil were calculated for each sampling depth. The data was evaluated using both an 80 percent and 95 percent upper confidence limit (UCL). The Caltrans letter of January 20, 1997, indicates that there should be a correlation factor ("r") of 0.8 or greater. The statistical analysis for the boring locations at the site indicated an 'r' value of 0.84. The statistical analysis is presented as Appendix C.

3.8. Data Validation

Prior to submitting the soil samples to the laboratory, the chain-of-custody documentation was reviewed for accuracy and completeness. The laboratory reports were reviewed for accuracy and consistency with chain-of-custody documentation. The matrix-spikes and duplicates were reviewed to ensure the laboratory results were within tolerance control limits. Based upon this validation process, the data quality is adequate for the purposes of this report.

4. CONCLUSIONS

The laboratory analytical results and statistical analysis indicated that the soil excavated from the median of the roadway at the site has the potential to be classified as a hazardous waste per Title 22 of the California Code of Regulations (CCR). Laboratory results for total lead indicate that the area around borings B8, B9, B16, B19, B20, B24, B28, B30, B39, and B56 may contain hazardous lead concentrations. Soluble lead concentrations indicate that the majority of the site may contain hazardous lead concentrations. Based upon the guidelines of the Caltrans Lead Variance (Variance Suitability) and statistical analysis using the 80% and 95% UCL of the soil samples analyzed, soil at the site is suitable for re-use within the Caltrans right-of-way. The average WET-DI concentration of samples analyzed from the site is 0.29 mg/l.

5. RECOMMENDATIONS

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil may be placed under pavement or under 0.30 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil and that appropriate health and safety measures should be taken to minimize the exposure to lead.

6. REPORT LIMITATIONS

This report has been prepared exclusively for Caltrans. The information obtained is only relevant as of the date of the latest site visit. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

The Client should recognize that this report is not a comprehensive site characterization and should not be construed as such. The appropriate regulatory agency may require additional investigations. The findings and conclusions as presented in this report are predicated on the results of the limited soil sampling and laboratory analyses 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 only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of the report is implied within the intent of this report or any subsequent reports, correspondence, or consultation, either expressed or implied. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

SAN DIEGO
SITE
MISSION BAY PARK
CROWN POINT
MISSION BAY
MISSION BAY GOLF COURSE
MISSION BAY HS
NORTHERN WILDLIFE PRESERVE
1 NORTHWEST
2 FUCHSIA DR
3 GARDENIA DR
4 ELYSIUM DR
5 HIBISCUS DR
DE ANZA COVE
(SWIMMING AREA)
FIESTA ISLAND
CROWN POINT SHORES
WEST SKI ISLAND
EAST SKI ISLAND
US GOVERNMENT ISLAND
FIESTA SHORES
PACIFIC PASSAGE
HILTON SAN DIEGO
ENCHANTED COVE
ENCHANTED ISLE
VACATION ISLE
SKI BEACH
FIESTA BAY
BOAT LAUNCH
HIDDEN
CLAIREMONT HS
CLAIREMONT VILLAGE
TECOLOTE CANYON NATURAL PARK
TECOLOTE CANYON GOLF COURSE
UNIVERSITY OF SAN DIEGO
VISTA
BALBOA
MISSION
GARNET
LAKEMONT
MORENA
FRONT
SEE PG B6
1 CMTO DEMESA
2 CMTO POCO
3 CMTO EMERAL
4 CMTO MEDIA
5 CMTO AFUERA

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
11	SD	5	R32.5/R38.7		

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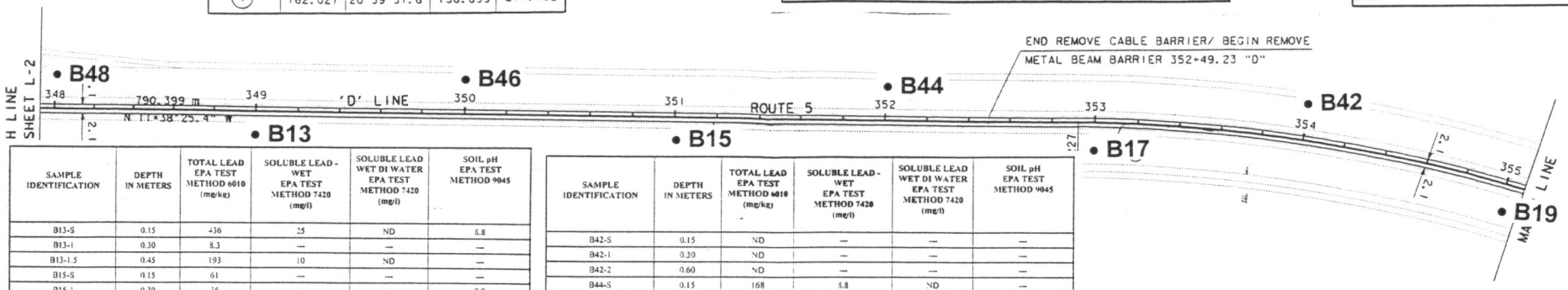
Caltrans Metric

RECOMMENDATIONS FOR RE-USE

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil be placed under pavement or 0.15 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activites that hazardous concentrations of lead may be present in on-site soil

CURVE	R	Δ	T	L
1	762.027	20° 39' 37.6"	138.899	274.782



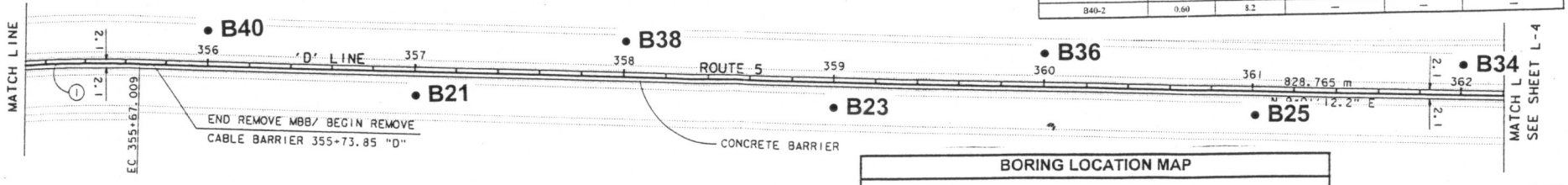
SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B13-S	0.15	436	25	ND	8.8
B13-1	0.30	8.3	—	—	—
B13-1.5	0.45	193	10	ND	—
B15-S	0.15	61	—	—	—
B15-1	0.30	26	—	—	8.8
B15-2	0.60	24	—	—	—
B17-S	0.15	163	2.1	—	—
B17-1	0.30	123	8.4	ND	—
B17-2	0.60	23	—	—	—
B19-S	0.60	1790	—	—	—
B19-1	0.15	154	4.8	—	—
B19-2	0.60	22	—	—	—

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B42-S	0.15	ND	—	—	—
B42-1	0.30	ND	—	—	—
B42-2	0.60	ND	—	—	—
B44-S	0.15	168	8.8	ND	—
B44-1	0.30	83	19	ND	—
B44-2	0.60	16	—	—	—
B46-S	0.15	6.8	—	—	—
B46-1	0.30	14	—	—	—
B46-2	0.60	32	—	—	9.7
B48-S	0.15	153	12	ND	—
B48-1	0.30	16	—	—	—
B48-2	0.60	141	3.7	—	—

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B21-S	0.15	176	0.60	—	—
B21-1	0.30	55	—	—	—
B21-2	0.60	6.1	—	—	—
B23-S	0.15	266	14	ND	—
B23-1	0.30	237	0.62	—	—
B23-2	0.60	6.2	—	—	—
B25-S	0.15	18	—	—	—
B25-1	0.30	18	—	—	—
B25-2	0.60	8.1	—	—	—

T	L
38.899	274.782

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B34-S	0.15	649	27	0.36	—
B34-1	0.30	24	—	—	—
B34-2	0.60	15	—	—	—
B36-S	0.15	881	55	0.18	—
B36-1	0.30	9.7	—	—	—
B36-2	0.60	13	—	—	—
B38-S	0.15	62	—	—	—
B38-1	0.30	ND	—	—	—
B38-2	0.60	9.6	—	—	—
B40-S	0.15	ND	—	—	8.6
B40-1	0.30	ND	—	—	—
B40-2	0.60	8.2	—	—	—



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SAN DIEGO

BORING LOCATION MAP

ROUTE 5 FROM THE SAN DIEGO RIVER BRIDGE TO 0.2 KM NORTH OF THE MISSION BAY OVERCROSSING IN SAN DIEGO, CA

DATE 4-4-99	PROJECT NO. 08900-06-18	FIGURE 4

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

LAYOUT ALTERNATIVE 1

SCALE: 1:1000

L-3

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

REVISED BY | DATE REVISED | DATE | CALCULATED/DESIGNED BY | CHECKED BY | PROJECT ENGINEER

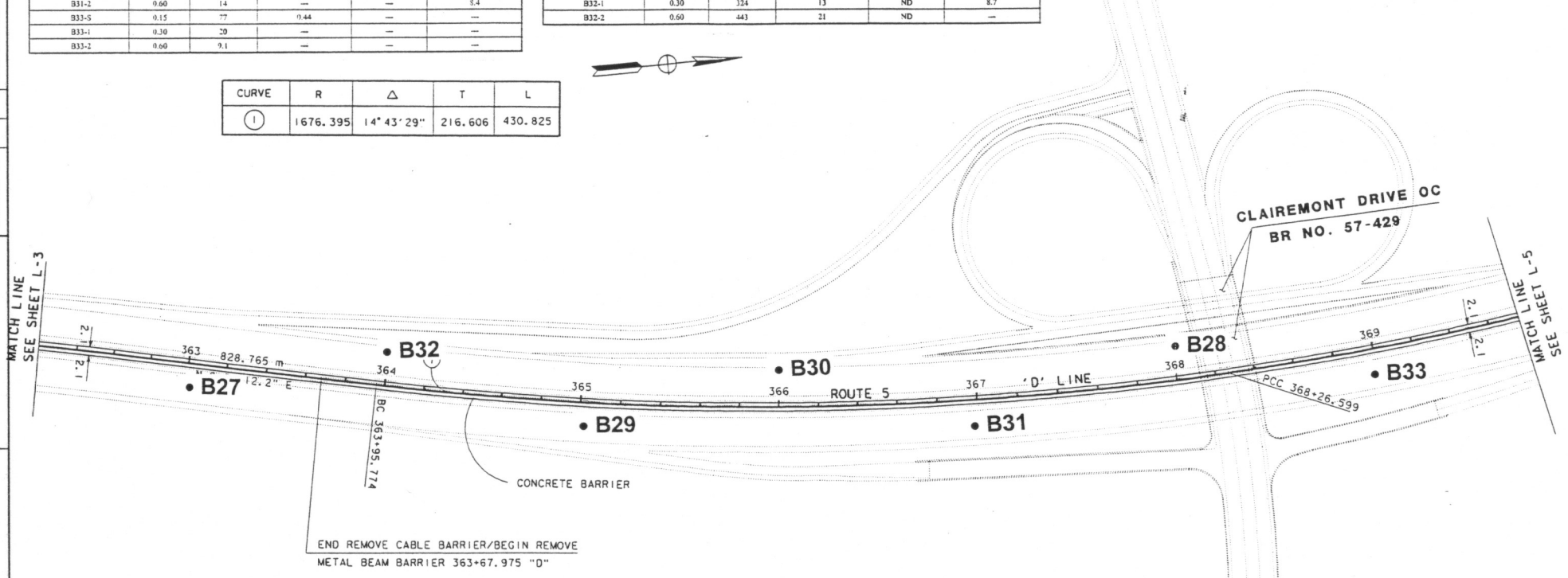
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B27-S	0.15	46	—	—	—
B27-1	0.30	17	—	—	8.8
B27-2	0.60	23	—	—	—
B29-S	0.15	8.4	—	—	—
B29-1	0.30	5.7	—	—	—
B29-2	0.60	15	—	—	—
B31-S	0.15	33	—	—	—
B31-1	0.30	10	—	—	—
B31-2	0.60	14	—	—	8.4
B33-S	0.15	77	0.44	—	—
B33-1	0.30	20	—	—	—
B33-2	0.60	9.1	—	—	—

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B28-S	0.15	1620	—	—	—
B28-1	0.30	13	—	—	—
B28-2	0.60	ND	—	—	—
B30-S	0.15	1290	—	3.3	—
B30-1	0.30	ND	—	—	—
B30-2	0.60	ND	—	—	—
B32-S	0.15	703	58	0.22	—
B32-1	0.30	324	13	ND	8.7
B32-2	0.60	443	21	ND	—

CURVE	R	Δ	T	L
1	1676.395	14° 43' 29"	216.606	430.825



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
11	SD	5	R32.5/R38.7		

Caltrans Metric

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DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

RECOMMENDATIONS FOR RE-USE

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil be placed under pavement or 0.15 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil

SAN DIEGO

GEOCON

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
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PHONE 619 558-6100 - FAX 619 558-8437

BORING LOCATION MAP

ROUTE 5 FROM THE SAN DIEGO RIVER BRIDGE TO 0.2 KM NORTH OF THE MISSION BAY OVERCROSSING IN SAN DIEGO, CA

DATE 4-4-99	PROJECT NO. 08900-06-18	FIGURE 5

SCALE: 1:1000

L-4

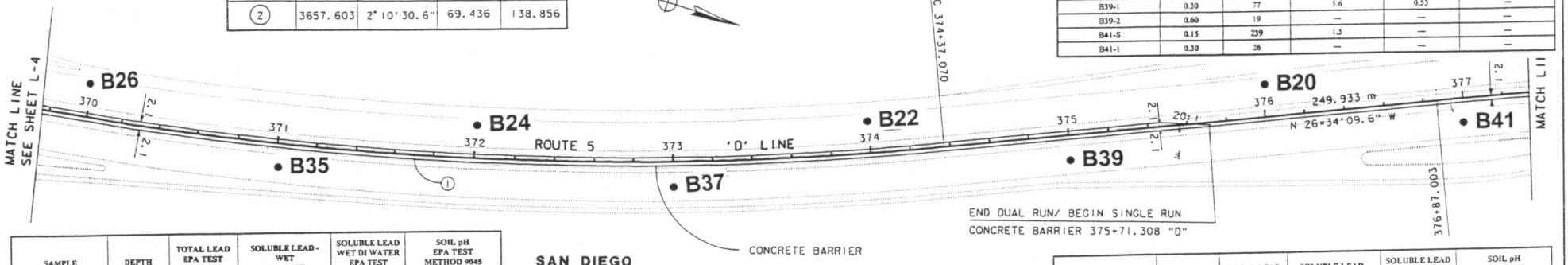
FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

RECOMMENDATIONS FOR RE-USE

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil be placed under pavement or 0.15 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil

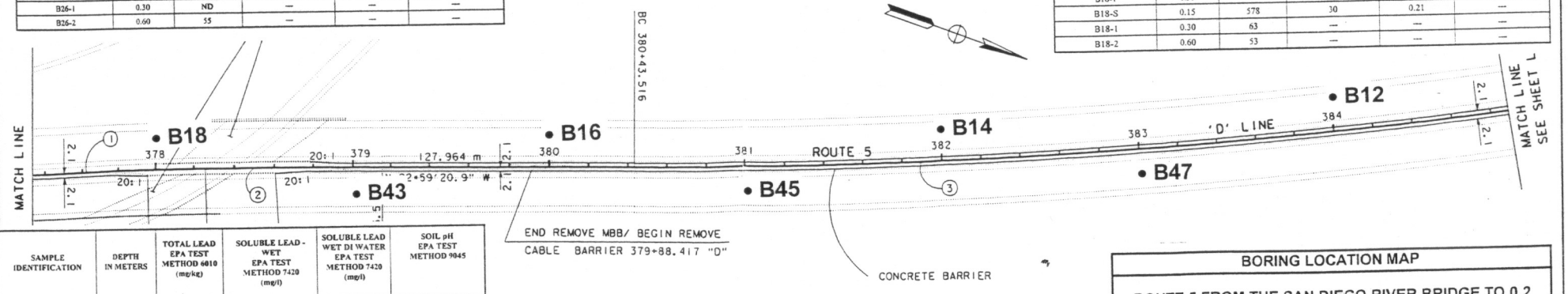
			T	L
			16.606	430.825
2	3657.603	2° 10' 30.6"	69.436	138.856

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B35-S	0.15	13	—	—	—
B35-1	0.30	12	—	—	—
B35-2	0.60	1.5	—	—	—
B37-S	0.15	18	—	—	8.6
B37-1	0.30	34	—	—	—
B37-2	0.60	9.7	—	—	—
B39-S	0.15	1010	—	0.25	—
B39-1	0.30	77	5.6	0.53	—
B39-2	0.60	19	—	—	—
B41-S	0.15	239	1.5	—	—
B41-1	0.30	26	—	—	—



SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B20-S	0.15	1030	—	ND	—
B20-1	0.30	314	17	ND	—
B22-S	0.15	812	93	ND	—
B22-1	0.30	413	20	ND	—
B22-2	0.60	68	—	—	—
B24-S	0.15	1080	—	0.82	—
B24-1	0.30	114	4.2	—	—
B24-2	0.60	33	—	—	9.3
B26-S	0.15	832	67	0.16	—
B26-1	0.30	ND	—	—	—
B26-2	0.60	55	—	—	—

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B12-S	0.15	560	55	ND	—
B12-1	0.30	65	—	—	—
B12-2	0.60	27	—	—	—
B14-S	0.15	390	13	ND	—
B14-1	0.30	36	—	—	—
B14-2	0.60	65	—	—	—
B16-S	0.15	1200	—	ND	—
B16-1	0.30	87	2.0	—	8.8
B18-S	0.15	578	30	0.21	—
B18-1	0.30	63	—	—	—
B18-2	0.60	53	—	—	—



SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B43-S	0.15	197	6.5	—	—
B43-1	0.30	60	3.1	—	—
B43-2	0.60	146	18	0.38	—
B45-S	0.15	17	—	—	—
B45-1	0.30	21	—	—	—
B45-2	0.60	17	—	—	9.3
B47-S	0.15	82	0.44	—	—
B47-1	0.30	13	—	—	—
B47-2	0.60	159	2.7	—	—

GEOCON

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6100 - FAX 619 558-8437

BORING LOCATION MAP

ROUTE 5 FROM THE SAN DIEGO RIVER BRIDGE TO 0.2 KM NORTH OF THE MISSION BAY OVERCROSSING IN SAN DIEGO, CA

DATE 4-4-99	PROJECT NO. 08900-06-18	FIGURE 6

SCALE: 1:1000

L-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

PROJECT ENGINEER

CALCULATED/ DESIGNED BY | CHECKED BY | DATE REVISED BY | DATE REVISED

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B5-S	0.15	247	19	ND	8.4
B5-1	0.30	36	---	---	---
B7-S	0.15	150	7.8	ND	---
B7-1	0.30	15	---	---	---
B7-2	0.60	13	---	---	---
B9-S	0.15	1420	---	ND	---
B9-1	0.30	122	9.7	ND	---
B9-1.5	0.45	287	23	ND	---
B11-S	0.15	91	5.3	0.17	---
B11-1	0.30	10	---	---	---
B11-2	0.60	0.4	---	---	---

RECOMMENDATIONS FOR RE-USE

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil be placed under pavement or 0.15 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
11	SD	5	R32.5/R38.7		

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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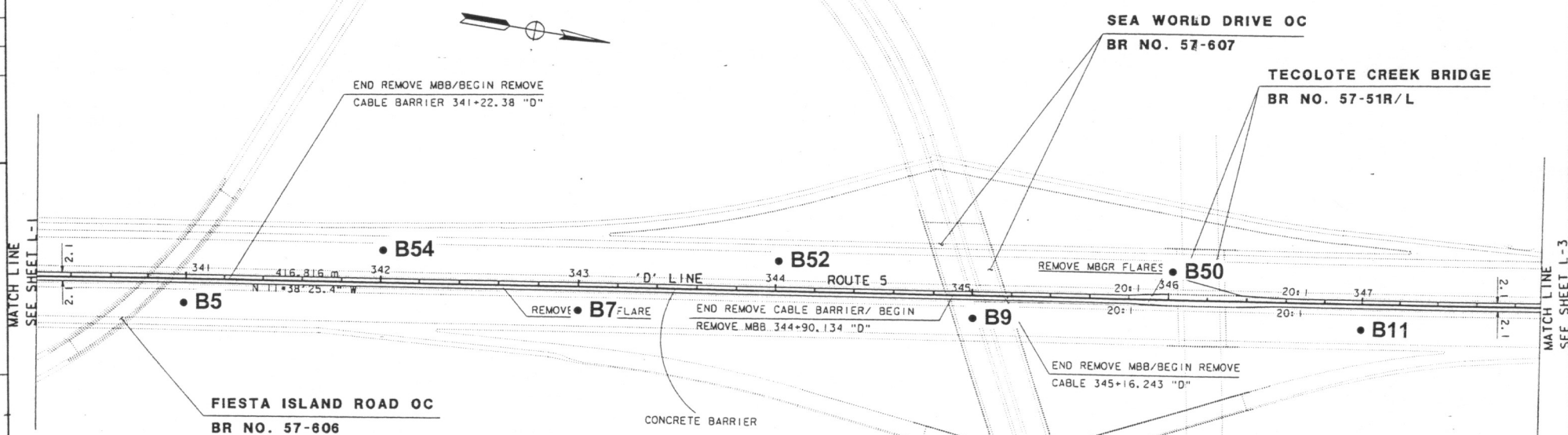
REGISTERED PROFESSIONAL ENGINEER NO. CIVIL STATE OF CALIFORNIA



SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B50-S	0.15	49	---	---	---
B50-1	0.30	28	---	---	---
B52-S	0.15	16	---	---	---
B52-1	0.30	14	---	---	---
B54-S	0.15	199	9.9	ND	---
B54-1	0.30	5.0	---	---	---
B54-2	0.60	ND	---	---	---

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PHONE 619 558-6100 - FAX 619 558-8437

BORING LOCATION MAP

ROUTE 5 FROM THE SAN DIEGO RIVER BRIDGE TO 0.2 KM NORTH OF THE MISSION BAY OVERCROSSING IN SAN DIEGO, CA

DATE 4-4-99	PROJECT NO. 08900-06-18	FIGURE 3

SCALE: 1:1000

L-2

REVISED BY | DATE REVISED | CALCULATED/DESIGNED BY | CHECKED BY | PROJECT ENG. | STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | Caltrans

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
11	SD	5	R32.5/R38.7		

Caltrans Metric

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

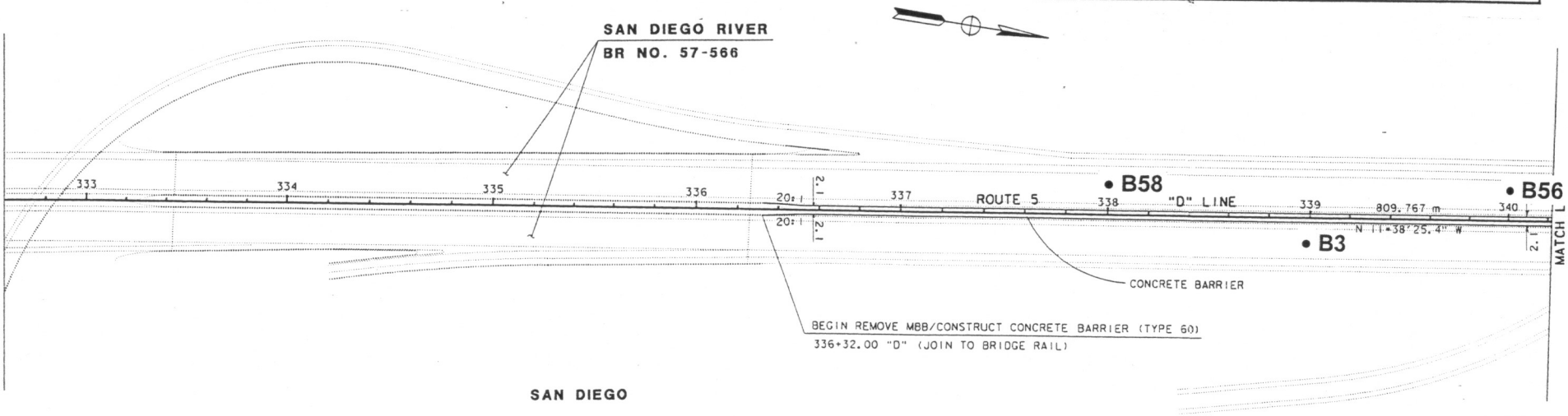
REGISTERED PROFESSIONAL ENGINEER NO. EXP. CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD WET DI WATER EPA TEST METHOD 7420 (mg/l)	SOIL pH EPA TEST METHOD 9045
B1-S	0.15	785	68	ND	—
B1-1	0.30	612	45	ND	—
B1-2	0.60	14	—	—	—
B3-S	0.15	197	23	ND	—
B3-1	0.30	237	20	ND	—
B3-2	0.60	72	—	—	—
B56-S	0.15	1500	—	3.9	8.2
B56-1	0.30	33	—	—	—
B56-2	0.60	176	12	ND	—
B58-S	0.15	741	37	—	—
B58-1	0.30	105	7.4	ND	9.3
B58-1.5	0.45	641	32	ND	—

RECOMMENDATIONS FOR RE-USE

It is recommended that if the soil excavated along the median of the roadway is to be re-used on-site, the upper 0.6 meters of soil be placed under pavement or 0.15 meters of clean-fill material, at least 1.5 meters above the maximum groundwater level in accordance with the Department of Toxic Substances Control (DTSC) variance issued to Caltrans. If the soil excavated is to be exported to another Caltrans right-of-way location, the soil should be re-used in the same manner as described above. Should the soil be disposed of, it should be handled as a hazardous material with respect to lead impacts as indicated by the Caltrans Lead Variance (Variance Suitability). It is recommended that Caltrans notify the contractors performing the construction activities that hazardous concentrations of lead may be present in on-site soil



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6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 619 558-6100 - FAX 619 558-8437

BORING LOCATION MAP

ROUTE 5 FROM THE SAN DIEGO RIVER BRIDGE TO 0.2 KM NORTH OF THE MISSION BAY OVERCROSSING IN SAN DIEGO, CA

DATE 4-4-99	PROJECT NO. 08900-06-18	FIGURE 2

SCALE: 1:1000

L-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

PROJECT ENGINEER

CALCULATED/DESIGNED BY

CHECKED BY

DATE REVISED BY

DATE REVISED

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

TABLE I

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B1-S	0.15	785	68	ND	---
B1-1	0.30	612	45	ND	---
B1-2	0.60	14	---	---	---
B2-S	0.15	ND	---	---	8.6
B2-1	0.30	ND	---	---	---
B2-2	0.60	24	---	---	---
B3-S	0.15	197	23	ND	---
B3-1	0.30	237	20	ND	---
B3-2	0.60	72	---	---	---
B4-S	0.15	85	4.2	---	---
B4-1	0.30	36	---	---	---
B4-2	0.60	ND	---	---	---
B5-S	0.15	247	19	ND	8.4
B5-1	0.30	36	---	---	---
B6-S	0.15	90	5.2	ND	---
B6-1	0.30	10	---	---	---
B6-2	0.60	8.6	---	---	---
B7-S	0.15	150	7.8	ND	---
B7-1	0.30	15	---	---	---
B7-2	0.60	13	---	---	---
B8-S	0.15	2690	---	---	---
B8-1	0.30	13	---	---	---
B8-2	0.60	12	---	---	8.5
B9-S	0.15	1420	---	ND	---
B9-1	0.30	122	9.7	ND	---
B9-1.5	0.45	287	23	ND	---
B10-S	0.15	90	8.6	ND	---
B10-1	0.30	8.0	---	---	---
B10-2	0.60	6.7	---	---	---
B11-S	0.15	91	5.3	0.17	---
B11-1	0.30	10	---	---	---

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B11-2	0.60	6.4	---	---	---
B12-S	0.15	560	55	ND	---
B12-1	0.30	65	---	---	---
B12-2	0.60	27	---	---	---
B13-S	0.15	436	25	ND	8.8
B13-1	0.30	8.3	---	---	---
B13-1.5	0.45	193	10	ND	---
B14-S	0.15	390	13	ND	---
B14-1	0.30	36	---	---	---
B14-2	0.60	65	---	---	---
B15-S	0.15	61	---	---	---
B15-1	0.30	36	---	---	8.8
B15-2	0.60	24	---	---	---
B16-S	0.15	1200	---	ND	---
B16-1	0.30	87	2.0	---	8.8
B17-S	0.15	163	2.1	---	---
B17-1	0.30	123	8.4	ND	---
B17-2	0.60	23	---	---	---
B18-S	0.15	578	30	0.21	---
B18-1	0.30	63	---	---	---
B18-2	0.60	53	---	---	---
B19-S	0.60	1790	---	---	---
B19-1	0.15	154	4.8	---	---
B19-2	0.60	22	---	---	---
B20-S	0.15	1030	---	ND	---
B20-1	0.30	314	17	ND	---
B21-S	0.15	176	0.60	---	---
B21-1	0.30	55	---	---	---
B21-2	0.60	6.1	---	---	---
B22-S	0.15	812	93	ND	---
B22-1	0.30	413	20	ND	---

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B22-2	0.60	68	---	---	---
B23-S	0.15	266	14	ND	---
B23-1	0.30	237	0.62	---	---
B23-2	0.60	6.2	---	---	---
B24-S	0.15	1080	---	0.82	---
B24-1	0.30	114	4.2	---	---
B24-2	0.60	33	---	---	9.3
B25-S	0.15	18	---	---	---
B25-1	0.30	18	---	---	---
B25-2	0.60	8.1	---	---	---
B26-S	0.15	832	67	0.16	---
B26-1	0.30	ND	---	---	---
B26-2	0.60	55	---	---	---
B27-S	0.15	46	---	---	---
B27-1	0.30	17	---	---	8.8
B27-2	0.60	23	---	---	---
B28-S	0.15	1620	---	---	---
B28-1	0.30	13	---	---	---
B28-2	0.60	ND	---	---	---
B29-S	0.15	8.4	---	---	---
B29-1	0.30	5.7	---	---	---
B29-2	0.60	15	---	---	---
B30-S	0.15	1290	---	3.3	---
B30-1	0.30	ND	---	---	---
B30-2	0.60	ND	---	---	---
B31-S	0.15	33	---	---	---
B31-1	0.30	10	---	---	---
B31-2	0.60	14	---	---	8.4
B32-S	0.15	703	58	0.22	---
B32-1	0.30	324	13	ND	8.7
B32-2	0.60	443	21	ND	---

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B33-S	0.15	77	0.44	---	---
B33-1	0.30	20	---	---	---
B33-2	0.60	9.1	---	---	---
B34-S	0.15	649	27	0.36	---
B34-1	0.30	24	---	---	---
B34-2	0.60	15	---	---	---
B35-S	0.15	13	---	---	---
B35-1	0.30	12	---	---	---
B35-2	0.60	1.5	---	---	---
B36-S	0.15	881	55	0.18	---
B36-1	0.30	9.7	---	---	---
B36-2	0.60	13	---	---	---
B37-S	0.15	18	---	---	8.6
B37-1	0.30	34	---	---	---
B37-2	0.60	9.7	---	---	---
B38-S	0.15	62	---	---	---
B38-1	0.30	ND	---	---	---
B38-2	0.60	9.6	---	---	---

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B43-2	0.60	146	5.1	0.38	---
B44-S	0.15	168	8.8	ND	---
B44-1	0.30	83	19	ND	---
B44-2	0.60	16	---	---	---
B45-S	0.15	17	---	---	---
B45-1	0.30	21	---	---	---
B45-2	0.60	17	---	---	9.3
B46-S	0.15	6.8	---	---	---
B46-1	0.30	14	---	---	---
B46-2	0.60	32	---	---	9.7
B47-S	0.15	82	0.44	---	---
B47-1	0.30	13	---	---	---
B47-2	0.60	159	2.7	---	---
B48-S	0.15	153	12	ND	---
B48-1	0.30	16	---	---	---
B48-2	0.60	141	3.7	---	---
B49-S	0.15	55	---	---	---
B49-1	0.30	89	0.47	---	8.8
B49-2	0.60	51	---	---	---
B50-S	0.15	49	---	---	---
B50-1	0.30	28	---	---	---
B51-S	0.15	46	---	---	---
B51-1	0.30	46	---	---	---
B51-2	0.60	90	5.0	0.19	---
B52-S	0.15	16	---	---	---
B52-1	0.30	14	---	---	---
B53-S	0.15	75	0.48	---	---
B53-1	0.30	22	---	---	---
B53-1.5	0.45	10	---	---	---
B54-S	0.15	199	9.9	ND	---
B54-1	0.30	5.0	---	---	---

TABLE I (continued)

SUMMARY OF ANALYTICAL LABORATORY RESULTS

SAMPLE IDENTIFICATION	DEPTH IN METERS	TOTAL LEAD EPA TEST METHOD 6010 (mg/kg)	SOLUBLE LEAD - WET EPA TEST METHOD 7420 (mg/l)	SOLUBLE LEAD VIA WET DI WATER (mg/l)	SOIL pH EPA TEST METHOD 9045
B54-2	0.60	ND	---	---	---
B55-S	0.15	79	1.5	---	---
B55-1	0.30	19	---	---	---
B55-2	0.60	64	---	---	---
B56-S	0.15	1500	---	3.9	8.2
B56-1	0.30	33	---	---	---
B56-2	0.60	176	12	ND	---
B57-S	0.15	293	1.2	---	---
B57-1	0.30	496	1.9	---	---
B57-2	0.60	101	0.70	---	---
B58-S	0.15	741	37	---	---
B58-1	0.30	105	7.4	ND	9.3
B58-1.5	0.45	641	32	ND	---
B59-S	0.15	379	0.98	---	8.2
B59-1	0.30	83	3.4	---	---
B59-2	0.60	7.2	---	---	---

Note:

mg/kg = milligrams per kilogram
mg/l = milligrams per liter
--- = analysis not performed
EPA = United States Environmental Protection Agency

APPENDIX A

APPENDIX A

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 11
HAND-AUGERING AND SOIL SAMPLE COLLECTION

Purpose

The purpose of this SOP is to outline procedures and methods to be used to advance hand-augers and collect soil samples for chemical analyses.

Hand-Augering and Soil Sample Collection Procedures

1. Initiate boring using a hand-held 7.62-centimeter diameter stainless steel auger.

2. Advance boring to initial sample depth of approximately 0 to 0.15 meters below the ground surface.

3. Transfer the soil sample from the hand-auger into a glass jar supplied by the laboratory.

4. Repeat the procedure and collect soil samples at subsequent depths as specified in the Task Order, if possible.

5. Backfill the borings to surface grade with soil cuttings generated.

6. Clean and rinse sampling equipment prior to the collection of each soil sample by washing the equipment with a trisodium phosphate solution followed by subsequent tap water and deionized water rinses.

APPENDIX A (continued)

GEOCON ENVIRONMENTAL CONSULTANTS INCORPORATED
STANDARD OPERATING PROCEDURE (SOP) NO. 31
SOIL SAMPLE HANDLING PROCEDURES

Purpose

The purpose of this SOP is to outline procedures and methods to be used to package and transport soil samples to an analytical laboratory.

Soil Sample Handling Procedures

1. Soil samples will be retrieved directly from the hand auger.

2. After extracting the sample from the auger, the soil sample will be placed in laboratory supplied glass jars with Teflon-lined lids.

3. Sample labels will be placed on the outside of the jar to indicate the boring number and from what depth the sample was obtained, the time the sample was obtained, and the date the sample was obtained.

4. Each prepared sample jar will be placed into a container for transport to Advanced Technology Laboratories.

APPENDIX B

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-001	B2-S	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-017	B12-1	EPA 6010 (Lead)	02/22/99	65	Soil, mg/kg	5.0	5.0	LP/DJ
33286-018	B12-2	EPA 6010 (Lead)	02/22/99	27	Soil, mg/kg	5.0	5.0	LP/DJ
33286-019	B14-S	EPA 6010 (Lead)	02/22/99	390	Soil, mg/kg	5.0	5.0	LP/DJ
33286-020	B14-1	EPA 6010 (Lead)	02/22/99	36	Soil, mg/kg	5.0	5.0	LP/DJ
33286-020Dup	B14-1	EPA 6010 (Lead)	02/22/99	44	Soil, mg/kg	5.0	5.0	LP/DJ
33286-021	B14-2	EPA 6010 (Lead)	02/22/99	65	Soil, mg/kg	5.0	5.0	LP/DJ
33286-022	B16-S	EPA 6010 (Lead)	02/22/99	1200	Soil, mg/kg	5.0	25	LP/DJ
33286-023	B16-1	EPA 6010 (Lead)	02/22/99	87	Soil, mg/kg	5.0	5.0	LP/DJ
33286-024	B18-S	EPA 6010 (Lead)	02/22/99	578	Soil, mg/kg	5.0	5.0	LP/DJ
33286-025	B18-1	EPA 6010 (Lead)	02/22/99	63	Soil, mg/kg	5.0	5.0	LP/DJ
33286-026	B18-2	EPA 6010 (Lead)	02/22/99	53	Soil, mg/kg	5.0	5.0	LP/DJ
33286-027	B20-S	EPA 6010 (Lead)	02/22/99	1030	Soil, mg/kg	5.0	25	LP/DJ
33286-028	B20-1	EPA 6010 (Lead)	02/22/99	314	Soil, mg/kg	5.0	5.0	LP/DJ
33286-029	B22-S	EPA 6010 (Lead)	02/22/99	812	Soil, mg/kg	5.0	5.0	LP/DJ
33286-030	B22-1	EPA 6010 (Lead)	02/22/99	413	Soil, mg/kg	5.0	5.0	LP/DJ
33286-030Dup	B22-1	EPA 6010 (Lead)	02/22/99	304	Soil, mg/kg	5.0	5.0	LP/DJ
33286-031	B22-2	EPA 6010 (Lead)	02/22/99	68	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: Cheryl de los Reyes
Technical Operations Manager

Date: 02/26/99

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-032	B24-S	EPA 6010 (Lead)	02/22/99	1080	Soil, mg/kg	5.0	5.0	LP/DJ
33286-033	B24-1	EPA 6010 (Lead)	02/22/99	114	Soil, mg/kg	5.0	5.0	LP/DJ
33286-034	B24-2	EPA 6010 (Lead)	02/22/99	33	Soil, mg/kg	5.0	5.0	LP/DJ
33286-035	B26-S	EPA 6010 (Lead)	02/22/99	832	Soil, mg/kg	5.0	5.0	LP/DJ
33286-036	B26-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-037	B26-2	EPA 6010 (Lead)	02/22/99	55	Soil, mg/kg	5.0	25	LP/DJ
33286-038	B28-S	EPA 6010 (Lead)	02/22/99	1620	Soil, mg/kg	5.0	5.0	LP/DJ
33286-039	B28-1	EPA 6010 (Lead)	02/22/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33286-040	B28-2	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-040Dup	B28-2	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-041	B30-S	EPA 6010 (Lead)	02/22/99	1290	Soil, mg/kg	5.0	25	LP/DJ
33286-042	B30-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-043	B30-2	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-044	B32-S	EPA 6010 (Lead)	02/22/99	703	Soil, mg/kg	5.0	5.0	LP/DJ
33286-045	B32-1	EPA 6010 (Lead)	02/22/99	324	Soil, mg/kg	5.0	5.0	LP/DJ
33286-046	B32-2	EPA 6010 (Lead)	02/22/99	443	Soil, mg/kg	5.0	5.0	LP/DJ
33286-047	B34-S	EPA 6010 (Lead)	02/22/99	649	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 2/26/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-048	B34-1	EPA 6010 (Lead)	02/22/99	24	Soil, mg/kg	5.0	5.0	LP/DJ
33286-049	B34-2	EPA 6010 (Lead)	02/22/99	15	Soil, mg/kg	5.0	5.0	LP/DJ
33286-050	B36-S	EPA 6010 (Lead)	02/22/99	881	Soil, mg/kg	5.0	5.0	LP/DJ
33286-050Dup	B36-S	EPA 6010 (Lead)	02/22/99	800	Soil, mg/kg	5.0	5.0	LP/DJ
33286-051	B36-1	EPA 6010 (Lead)	02/22/99	9.7	Soil, mg/kg	5.0	5.0	LP/DJ
33286-052	B36-2	EPA 6010 (Lead)	02/22/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33286-053	B38-S	EPA 6010 (Lead)	02/22/99	62	Soil, mg/kg	5.0	5.0	LP/DJ
33286-054	B38-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-055	B38-2	EPA 6010 (Lead)	02/22/99	9.6	Soil, mg/kg	5.0	5.0	LP/DJ
33286-056	B40-S	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-057	B40-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-058	B40-2	EPA 6010 (Lead)	02/22/99	8.2	Soil, mg/kg	5.0	5.0	LP/DJ
33286-059	B42-S	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-060	B42-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-060Dup	B42-1	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-061	B42-2	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-062	B44-S	EPA 6010 (Lead)	02/22/99	168	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 2/26/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99, 03/10/99
Digestion Method: EPA 3050
Date Amended: 03/29/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MD	DLR	Analyst
33286-063*	B44-1	EPA 6010 (Lead)	02/22/99	168	Soil, mg/kg	5.0	5.0	LP/DJ
33286-063Dup*	B44-1	EPA 6010 (Lead)	02/22/99	169	Soil, mg/kg	5.0	5.0	LP/DJ
33286-064	B44-2	EPA 6010 (Lead)	02/22/99	16	Soil, mg/kg	5.0	5.0	LP/DJ
33286-065	B46-S	EPA 6010 (Lead)	02/22/99	6.8	Soil, mg/kg	5.0	5.0	LP/DJ
33286-066	B46-1	EPA 6010 (Lead)	02/22/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33286-067	B46-2	EPA 6010 (Lead)	02/22/99	32	Soil, mg/kg	5.0	5.0	LP/DJ
33286-068	B48-S	EPA 6010 (Lead)	02/22/99	153	Soil, mg/kg	5.0	5.0	LP/DJ
33286-069	B48-1	EPA 6010 (Lead)	02/22/99	16	Soil, mg/kg	5.0	5.0	LP/DJ
33286-070	B48-2	EPA 6010 (Lead)	02/22/99	141	Soil, mg/kg	5.0	5.0	LP/DJ
33286-070Dup	B48-2	EPA 6010 (Lead)	02/22/99	71	Soil, mg/kg	5.0	5.0	LP/DJ
33286-071	B50-S	EPA 6010 (Lead)	02/22/99	49	Soil, mg/kg	5.0	5.0	LP/DJ
33286-072	B50-1	EPA 6010 (Lead)	02/22/99	28	Soil, mg/kg	5.0	5.0	LP/DJ
33286-073	B52-S	EPA 6010 (Lead)	02/22/99	16	Soil, mg/kg	5.0	5.0	LP/DJ
33286-074	B52-1	EPA 6010 (Lead)	02/22/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33286-075	B54-S	EPA 6010 (Lead)	02/22/99	199	Soil, mg/kg	5.0	5.0	LP/DJ
33286-076	B54-1	EPA 6010 (Lead)	02/22/99	5.0	Soil, mg/kg	5.0	5.0	LP/DJ
33286-077	B54-2	EPA 6010 (Lead)	02/22/99	ND	Soil, mg/kg	5.0	5.0	LP/DJ
33286-078	B56-S	EPA 6010 (Lead)	02/22/99	1500	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 3/28/99
Cheryl de los Reyes
Technical Operations Manager

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Digested: 02/22/99
Digestion Method: EPA 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-079	B56-1	EPA 6010 (Lead)	02/22/99	33	Soil, mg/kg	5.0	5.0	LP/DJ
33286-080	B56-2	EPA 6010 (Lead)	02/22/99	176	Soil, mg/kg	5.0	5.0	LP/DJ
33286-080Dup	B56-2	EPA 6010 (Lead)	02/22/99	163	Soil, mg/kg	5.0	5.0	LP/DJ
33286-081	B58-S	EPA 6010 (Lead)	02/22/99	741	Soil, mg/kg	5.0	5.0	LP/DJ
33286-082	B58-1	EPA 6010 (Lead)	02/22/99	105	Soil, mg/kg	5.0	5.0	LP/DJ
33286-083	B58-1.5	EPA 6010 (Lead)	02/22/99	641	Soil, mg/kg	5.0	5.0	LP/DJ
33286-083Dup	B58-1.5	EPA 6010 (Lead)	02/22/99	201	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 2/26/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33286-001	B2-S	EPA 9045 (pH)	02/23/99	8.6	Soil, pH units	---	---	OL
33286-012	B8-2	EPA 9045 (pH)	02/23/99	8.5	Soil, pH units	---	---	OL
33286-023	B16-1	EPA 9045 (pH)	02/23/99	8.8	Soil, pH units	---	---	OL
33286-034	B24-2	EPA 9045 (pH)	02/23/99	9.3	Soil, pH units	---	---	OL
33286-045	B32-1	EPA 9045 (pH)	02/23/99	8.7	Soil, pH units	---	---	OL
33286-056	B40-S	EPA 9045 (pH)	02/23/99	8.6	Soil, pH units	---	---	OL
33286-067	B46-2	EPA 9045 (pH)	02/23/99	9.7	Soil, pH units	---	---	OL
33286-078	B56-S	EPA 9045 (pH)	02/23/99	8.2	Soil, pH units	---	---	OL
33286-082	B58-1	EPA 9045 (pH)	02/23/99	9.3	Soil, pH units	---	---	OL
33286-082Dup	B58-1	EPA 9045 (pH)	02/23/99	9.3	Soil, pH units	---	---	OL

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ **Date:** 2/26/99

Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA 6010 (Lead)
Analyst: LP/SER
Data File: ICAP90223-4
QA File: 9054-4

Date Analyzed: 2/22/99
Date Digested: 2/22/99
Sample ID: See below
Matrix: Soil
QAQC Batch No: ICAP990223S-4

SAMPLE ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC	RPD	RPD Limit	MDL
33286-010*	mg/kg	5.0	4.8	96	ND	2690	2430	10	250	2180	1770	204	368	68-106	21	20	0.25
33286-020	mg/kg	5.0	4.8	96	ND	36	44	20	250	250	254	86	87	68-106	2	20	0.25
33286-030*	mg/kg	5.0	4.7	94	ND	304	413	30	250	512	402	83	39	68-106	24	20	0.25
33286-040	mg/kg	5.0	4.7	94	ND	0.67	ND	200	250	230	239	92	95	68-106	4	20	0.25
33286-050*	mg/kg	5.0	4.8	96	ND	800	881	10	250	963	1030	65	92	68-106	7	20	0.25
33286-060	mg/kg	5.0	4.8	96	ND	4.0	3.9	3	250	222	233	87	92	68-106	5	20	0.25
33286-070*	mg/kg	5.0	4.7	94	ND	141	71	66	250	284	287	57	58	68-106	1	20	0.25
33286-080*	mg/kg	5.0	4.7	94	ND	176	163	8	250	452	367	110	76	68-106	21	20	0.25
33286-083*	mg/kg	5.0	4.8	96	ND	641	201	105	250	552	564	36	31	68-106	2	20	0.25

* RPD and %REC out of the limit is due to the sample matrix and relatively high sample concentration.

Approved by: David J. Kern
Inorganics Supervisor

Date: 2/26/99

Advanced Technology Laboratories

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Extracted: 02/27/99
Extrartion Method: WET (Title 22, CCR, 6626.100 Appendix)

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MD	DLR	Analyst
33286-004	B4-S	EPA 7420 (Lead)	03/01/99	4.2	STLC Extract, mg/L	0.15	0.15	DJ
33286-007	B6-S	EPA 7420 (Lead)	03/01/99	5.2	STLC Extract, mg/L	0.15	0.15	DJ
33286-013	B10-S	EPA 7420 (Lead)	03/01/99	8.6	STLC Extract, mg/L	0.15	0.15	DJ
33286-016	B12-S	EPA 7420 (Lead)	03/01/99	55	STLC Extract, mg/L	0.15	0.75	DJ
33286-019	B14-S	EPA 7420 (Lead)	03/01/99	13	STLC Extract, mg/L	0.15	0.30	DJ
33286-023	B16-1	EPA 7420 (Lead)	03/01/99	2.0	STLC Extract, mg/L	0.15	0.15	DJ
33286-024	B18-S	EPA 7420 (Lead)	03/01/99	30	STLC Extract, mg/L	0.15	0.60	DJ
33286-028	B20-1	EPA 7420 (Lead)	03/01/99	17	STLC Extract, mg/L	0.15	0.45	DJ

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Extracted: 02/27/99
Extrartion Method: WET (Title 22, CCR, 6626.100 Appendix)

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MD	DLR	Analyst
33286-063	B44-1	EPA 7420 (Lead)	03/01/99	19	STLC Extract, mg/L	0.15	0.45	DJ
33286-068	B48-S	EPA 7420 (Lead)	03/01/99	12	STLC Extract, mg/L	0.15	0.30	DJ
33286-070	B48-2	EPA 7420 (Lead)	03/01/99	3.7	STLC Extract, mg/L	0.15	0.15	DJ
33286-075	B54-S	EPA 7420 (Lead)	03/01/99	9.9	STLC Extract, mg/L	0.15	0.15	DJ
33286-080	B56-2	EPA 7420 (Lead)	03/01/99	12	STLC Extract, mg/L	0.15	0.30	DJ
33286-081	B58-S	EPA 7420 (Lead)	03/01/99	37	STLC Extract, mg/L	0.15	0.75	DJ
33286-082	B58-1	EPA 7420 (Lead)	03/01/99	7.4	STLC Extract, mg/L	0.15	0.15	DJ
33286-083	B58-1.5	EPA 7420 (Lead)	03/01/99	32	STLC Extract, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: [signature] Date: 3/4/99
Cheryl de los Reyes
Technical Operations Manager

Spike Recovery and RPD Summary Report

Date Analyzed: 03/10/99

Date Digested: 03/10/99

Sample ID: 33286-063

Matrix: Soil/Solid

QC Batch No: ICAP 990310S-1

c	METH BLANK	SPL CONC	SPK ADDED	MS RES	MSD RES	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
0	ND	1.4	125	93	92	73	72	32-110	1	20	0.25
4	ND	23	125	125	128	82	84	68-105	2	20	0.25
0	ND	53	125	164	166	89	90	22-170	1	20	0.05
3	ND	0.16	125	110	109	88	87	47-134	1	20	0.05
4	ND	ND	125	109	108	87	86	65-106	1	20	0.15
5	ND	3.7	125	110	110	85	85	61-128	0	20	0.15
1	ND	2.2	125	98	96	77	75	68-112	2	20	0.15
0	ND	14	125	156	158	114	115	60-133	1	20	0.15
3	ND	168	125	215	234	38	53	68-106	8	20	0.25
2	ND	0.55	125	104	102	83	81	67-107	2	20	0.25
0	ND	3.0	125	110	110	86	86	29-155	0	20	0.15
1	ND	0.27	125	89	87	71	69	51-114	2	20	0.25
7	ND	ND	125	81	80	65	64	45-111	1	20	0.05
0	ND	ND	125	117	116	94	93	60-111	1	20	0.25
2	ND	12	125	115	115	82	82	71-116	0	20	0.15
2	ND	39	125	133	136	75	78	47-128	2	20	0.50
3	ND	4430	500	4450	5030	4	120	47-128	12	20	5.0

le concentration.

Date: 3/29/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Date Analyzed: 03-01-99
Date Digested: 02-27-99
Sample ID: SEE BELOW
Matrix: STLC EXTRACT
QC Batch NO: PBF990301ST-1

ONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
	1.3	14	5.0	5.7	6.0	84	90	50-150	7	50	0.15
	14	19	5.0	20	20	60	60	50-150	0	50	0.15
	8.8	6	5.0	14	15	94	114	50-150	19	50	0.15
	7.6	76	5.0	24	24	140	140	50-150	0	50	0.15

Date: 3/4/99

Advanced Technology Laboratories

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Extracted: 03/06/99
Extraction Method: WET (title 22, CCR, 66261.100, Appendix II) Modified

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
33286-013	B10-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-016	B12-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-019	B14-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-024	B18-S	EPA 7420 (Lead)	03/08/99	0.21	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-028	B20-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-029	B22-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-030	B22-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-035	B26-S	EPA 7420 (Lead)	03/08/99	0.16	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-044	B32-S	EPA 7420 (Lead)	03/08/99	0.22	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-045	B32-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-045Dup	B32-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-046	B32-2	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-047	B34-S	EPA 7420 (Lead)	03/08/99	0.36	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-050	B36-S	EPA 7420 (Lead)	03/08/99	0.18	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-062	B44-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-063	B44-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-063Dup	B44-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 3/28/99
Cheryl de los Reyes
Technical Operations Manager

April 7, 1999

ELAP No.: 1838

Geocon Environmental
6970 Flanders Drive
San Diego, CA 92121

ATTN: Marc Barton
SUBJECT: AMENDED REPORT

Client's Project: Rte.5, #08900-06-18
Lab No.: 33286-001/083

The report was amended for the following:

STLC DI Water result for Lab# 33286-081(B28-S) was removed.

Please disregard all previous documentation that corresponds to the pages(s) enclosed.

Sincerely,

Cheryl De Los Reyes
Technical Operations Manager
CDR/ra

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/17/99
Date Sampled: 02/17/99
Date Extracted: 03/06/99
Extraction Method: WET (title 22, CCR, 66261.100, Appendix II) Modified
Date Amended: 04/07/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MD	DLR	Analyst
33286-007	B6-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-068	B48-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-075	B54-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-080	B56-2	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-082	B58-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ
33286-083	B58-1.5	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: [signature] for Date: 4/7/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/OL
Data File: AA90308-1
QA File: 9067-1

Date Analyzed: 03/08/99
Date Digested: 03/06/99
Sample ID: SEE BELOW
Matrix: DI Water Extract
QC Batch NO: PBF990308DI-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33252-020	mg/L	5.0	4.9	98	ND	ND	ND	0	5.0	4.8	5.2	96	104	50-150	8	50	0.15
33252-076	mg/L	5.0	4.9	98	ND	0.19	ND	*	5.0	5.3	5.4	102	104	50-150	0	50	0.15
33286-045	mg/L	5.0	4.9	98	ND	ND	ND	0	5.0	4.6	5.0	92	100	50-150	8	50	0.15
33286-063	mg/L	5.0	5.0	100	ND	ND	ND	0	5.0	5.2	5.2	104	104	50-150	0	50	0.15
33599-007	mg/L	5.0	5.0	100	ND	ND	ND	0	5.0	5.2	5.4	104	108	50-150	4	50	0.15

*Sample result is at/near the detection limit.

Approved by: Liping Liu
Inorganics Supervisor

Date: 3/9/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/HP/SER
Data File: AA90310-1-2
QA File: 9068-1

Date Analyzed: 03/10/99
Date Digested: 03/08/99
Sample ID: SEE BELOW
Matrix: DI Water/STLC Extract
QC Batch NO: PBF990310W-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33286-083	mg/L	5.0	5.1	102	ND	ND	ND	0	5.0	3.3	4.6	66	92	50-150	33	50	0.15

Approved by: _____
Liping Liu
Inorganics Supervisor

Date: 3/12/99

Advanced Technology Laboratories

CHAIN OF CUSTODY RECORD

Pg 1 of 9

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: Pb Date: 2-18 Time: 0820

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 08900-06-18 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: 2/17/99 Time: 6:15
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines Date: 2/17/99
Print Name
Renae Hines
Signature

Send Report To:
Attn: _____
Co: SAME
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments:
Soil Samples w/ Total Pb ≥ 75 mg/kg and < 1000 mg/kg test via WET. ~~Calculate~~. Samples w/ STLC ≥ 5.0 mg/L, please test via WET-DI. Also, 10% test soil pH 9045A.

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total					SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	332860-001	B2-S	2/17	9:54									X						X							E	1	J/G		
	002	B2-1		9:55																										
	003	B2-2		9:57																										
	004	B4-S		10:02																										
	005	B4-1		10:04																										
	006	B4-2		10:06																										
	007	B6-S		10:11																										
	008	B6-1		10:12																										
	009	B6-2		10:13																										
	010	B8-S		10:17																										

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

RECORD g 2 f 9

R LABORATORY USE ONLY:

Method of Transport		Sample Condition Upon Receipt					
Walk-in	☐	1. CHILLED	Y☐	N☐	4. SEALED	Y☐	N☐
Courier	☐	2. HEADSPACE (VOA)	Y☐	N☐	5. # OF SPLS MATCH COC	Y☐	N☐
UPS	☐	3. CONTAINER INTACT	Y☐	N☐	6. PRESERVED	Y☐	N☐
FED. EXP.	☐						
ATL	☑						

State CA Zip Code 92121

TEL: (619) 558-6100

FAX: (619) 558-8437

(Printed Name) ne Hines (Signature) Renae Hines

by: (Signature and Printed Name) Date: 2/17/99 Time: 615

by: (Signature and Printed Name) Date: Time:

by: (Signature and Printed Name) Date: Time:

E

tate_____ Zip_____

Special Instructions/Comments:

See page 1

8015M TPHG/BTEX(COMBINATION)	8015M TPH/D (Diesel-GC)	418.1 (TPH-IR)	Metals-Total (CAC-6010/7000) Pb	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
		X		X							E	1	J G		

CIRCLE APPROPRIATE MATRIX

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER ____

D= Urgent 3 Workdays E= Routine 7 Workdays

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

B=Tedlar G=Glass P=Plastic M=Metal

to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Jel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Marc Barton (Signature)

Relinquished by: (Signature and Printed Name) Marc Barton Date: 2/17/99 Time: 10:35 Received by: (Signature and Printed Name) Date: 2/17/99 Time: 6:15
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Marc Barton Date: 2/17/99
Print Name
Signature

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	332860-021	B14-2	2/17	10:37										X	X							E	2	J G		
	022	B16-S		10:40																						
	023	B16-1		10:42																						ref@1'
	024	B18-S		10:45																						
	025	B18-1		10:47																						
	026	B18-2		10:49																						
	027	B20-S		10:51																						
	028	B20-1		10:53																						ref@1'
	029	B22-S		11:00																						
	030	B22-1		11:02																						

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Mark Wanek (Signature) Mark Wanek

Relinquished by: (Signature and Printed Name) Mark Wanek Date: Time: Received by: (Signature and Printed Name) Date: 2/17/99 Time: 5:15
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Mark Wanek Date: 2/17/99
Print Name
Mark Wanek
Signature

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Page One

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals Total (CAC-6010/7000) Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals Total (Pb)				SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	332860-031	B22-2	2/17	11:05										X				X							E	1	J G		
	032	B24-S		11:09																									
	033	B24-1		11:11																									
	034	B24-2		11:12																									
	035	B26-S		11:14																									
	036	B26-1		11:16																									
	037	B26-2		11:17																									
	038	B28-S		11:23																									
	039	B28-1		11:24																									
	040	B28-2		11:25																									

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

5 9

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☒

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: 2/17/99 Time: 6:15
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/17/99
Renae Hines (Signature)

Send Report To:
Attn: _____
Co: SAME
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total Pb	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	332860-041	B30-S		11:26										X								E	1	J G		
	042	B30-1		11:27																						
	043	B30-2		11:28																						
	044	B32-S		11:30																						
	045	B32-1		11:31																						
	046	B32-2		11:33																						
	047	B34-S		11:35																						
	048	B34-1		11:36																						
	049	B34-2		11:38																						
	050	B36-S		11:39																						

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

OD[illegible] RECORD 6 9

FOR LABORATORY USE ONLY:

Method of Transport		Sample Condition Upon Receipt					
Walk-in	☐	1. CHILLED	Y☐ N☐	4. SEALED	Y☐ N☐		
Courier	☐						
UPS	☐	2. HEADSPACE (VOA)	Y☐ N☐	5. # OF SPLS MATCH COC	Y☐ N☐		
FED. EXP.	☐						
ATL	☒	3. CONTAINER INTACT	Y☐ N☐	6. PRESERVED	Y☐ N☐		

Drive

State CA Zip Code 92121

TEL: (619) 558-6100

FAX: (619) 558-8437

...pler: (Printed Name) Marc Barton (Signature) [signature]

...eceived by: (Signature and Printed Name) GC Date: 2/17/99 Time: 3:16

...eceived by: (Signature and Printed Name) Date: Time:

...eceived by: (Signature and Printed Name) Date: Time:

SAME

State ___ Zip ___

Special Instructions/Comments:

See Page 1

...olatiles-GC	...s/PCB-GC)	...(Volatiles-GC/MS)	8260 (Volatiles-GC/MS)	625/8270 (BNA-GC/MS)	8015M TPHG/BTEX(COMBINATION)	8015M TPH/D (Diesel-GC)	418.1 (TPH-IR)	Metals-Total (CAC-6010/7000) Pb					SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
								X					X							E	1	J G		

CIRCLE APPROPRIATE MATRIX

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER ☐

...al ...rkdays D= Urgent 3 Workdays E= Routine 7 Workdays

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=$Na_2S_2O_3$

...ellow to folder, **Pink** to submitter.

CHAIN OF CUSTODY RECORD

7 9

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 08900-06-18 Sampler: (Printed Name) Mark Wanek (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature] Mark Wanek Date: Time: Received by: (Signature and Printed Name) [signature] Date: 2/17/99 Time: 6:16
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Mark Wanek Date: 2/17/99
Print Name
[signature]
Signature

Send Report To:
Attn: _____
Co: SAME
Address: 7 WAYS
City _____ State _____ Zip _____

Special Instructions/Comments: See Page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 418.1 (TPH-IR); Metals: Total (CAC-6010/7000) pb

CIRCLE APPROPRIATE MATRIX: SOLID (SOIL) • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☑ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1 (TPH-IR)	Metals: Total (CAC-6010/7000)	SOLID (SOIL)	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	332860-061	D42-2	2/17	1205										X								X	E	1	J G	
	062	B44-S		12:10																						
	063	B44-1		12:11																						
	064	B44-2		12:13																						
	065	B46-S		12:16																						
	066	B46-1		12:18																						
	067	B46-2		12:20																						
	068	B48-S		12:27																						
	069	B48-1		12:29																						
	070	B48-2		12:35																						

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

8

on Receipt

ALED Y ☐ N ☐

OF SPLS MATCH COC Y ☐ N ☐

RESERVED Y ☐ N ☐

619) 558-6100

619) 558-8437

Hines

/14/99 Time: 6:15

Time:

Time:

RIATE		PRESERVATION	QA/QC
			RTNE ☐
			RWQCB ☐
			WIP ☐
			NAVY ☐
			CT ☒
			OTHER
ontainer(s)			
#	Type		REMARKS
1	JG		
			ref @ 1'

tives:

N=HNO_3 S=H_2SO_4 C=4°C

$)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

9 9

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8400-06-18 Sampler: (Printed Name) Mark Barton (Signature) [signature]

Relinquished by: (Signature and Printed Name) Mark Barton Date: 2/17/99 Time: 12:45 Received by: (Signature and Printed Name) [signature] Date: 2/17/99 Time: 18:18
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Mark Barton Date: 2/17/99
Print Name
Signature: [signature]

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals: Total/CAC-6010/7000; Pb

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals	Pb	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33286-001	B58-S	2/17	1:29										X				X					E	1	J	G	
	002	B58-1		1:33																							
	003	B58-1.5		1:34																							1qt 1½

Q A / Q C: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

March 15, 1999

ELAP No.: 1838

Geocon Environmental
11375 Sunrise Park Drive, Suite 100
Rancho Cordova, CA 95742

ATTN: Marc Barton

Client's Project: Rte. 5- Mission Bay, #08900-06-18
Lab No.: 33911-001/007

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (562) 989 - 4045 if I can be of further assistance to your company.

Sincerely,

Cheryl De Los Reyes
Technical Operations Manager
CDR/jh

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

Client: Geocon Environmental
Attn: Marc Barton

Client's Project: Rte. 5-Mission Bay, #08900-06-18

Date Received: 03/12/99
Date Sampled: 03/16&17/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MD	DLR	Analyst
33911-001	B9-S	EPA 7420 (Lead)	03/15/99	ND	DI Water, mg/L	0.15	0.15	DJ
33911-002	B39-S	EPA 7420 (Lead)	03/15/99	0.25	DI Water, mg/L	0.15	0.15	DJ
33911-003	B16-S	EPA 7420 (Lead)	03/15/99	ND	DI Water, mg/L	0.15	0.15	DJ
33911-004	B20-S	EPA 7420 (Lead)	03/15/99	ND	DI Water, mg/L	0.15	0.15	DJ
33911-005	B24-S	EPA 7420 (Lead)	03/15/99	0.82	DI Water, mg/L	0.15	0.15	DJ
33911-006	B30-S	EPA 7420 (Lead)	03/15/99	3.3	DI Water, mg/L	0.15	0.15	DJ
33911-007	B56-S	EPA 7420 (Lead)	03/15/99	3.9	DI Water, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 3/15/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Spike Recovery and RPD Summary Report

Date Analyzed: 03/15/99

Date Digested: 03/13/99

Sample ID: SEE BELOW

Matrix: DI WATER EXTRACT

QC Batch NO: PBF990315DI-1

SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
3.8	184	5.0	4.7	5.1	91	99	50-150	8	50	0.15

Date: 3/15/99

Advanced Technology Laboratories

CHAIN OF CUSTODY RECORD

Pg ____ of ____

Advanced Technology Laboratories

1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: ____ D.O. # ____

P.O.#: ____

Logged By: RAL Date: 3/12/99 Time: 18:38

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

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

Client: CEDCON-S
Attn: MARC BARTON

Address: ____ City ____ State ____ Zip Code ____ TEL: ( ) FAX: ( )

Project Name: RTE 5 Project #: 08900-06-18 Sampler: (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: 3/12,18/99 Time:

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:

SHIP TO LAB: (SUB CONTRACT) ____
TEST: ____
ATL #: ____
DATE: ____
CLIENT I.D. ____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
____ Date: ___/___/___
Print Name
____
Signature

Send Report To:
Attn: ____
Co: ____
Address ____
City ____ State ____ Zip ____

Special Instructions/Comments:

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other ____
☐ Return To: ____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000); WET DI PB

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

Container(s): TAT; # ; Type

PRESERVATION

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☐ OTHER ____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	Analysis	Matrix	TAT	#	Type	Preservation	REMARKS
	33911-001	33252-012 / B9-S	2/16		X	X	A				
	-002	-057 / ~~B39-S~~	↓		↓	↓	↓				
	-003	33284-022 / D16-S	2/17								
	-004	-027 / B20-S	↓								
	-005	-032 / B24-S									
	-006	-041 / B30-S									
	-007	-078 / B36-S									

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

FAX

Date March 11, 1999

Number of pages including cover sheet 1

TO: Rachelle Arada
ATL

Phone 562-989 4045
Fax Phone 562-989-4040

CC:

FROM: Marc a. Barton
Geocon Environmental
Consultants, Inc.
6970 Flanders Drive
San Diego CA 92121

Phone 619.558.6100
Fax Phone 619.558.8437

REMARKS: ☒ Urgent ☒ For your review ☒ Reply ASAP Please Comment

Subject: Route 5--Mission Bay, 08900-06-18

lab # 33286

I was double-checking the results that we received for this project. I noticed both we and the lab missed some analyses. They are as follows:

WET-citric
B47-2, 33252-070 done

WET CITRIC AND IF OVER 5 MG/L SAMPLE WET DI
B43-S 33252-062

WET DI 33286 ~~33252~~ 33286
B1-S, B5-S, B9-S, B6-S, B56-S, B39-S, B30-S, ~~B24-S~~, B20-S, B16-S, B48-S, B54-S, B56-2, B58-1, B58-1.5
33252 001 007 012 007 078 057 041 032 027 022 068 075 080 082 083

Please run these as soon as possible!

Thanks,

Marc

February 22, 1999

ELAP No.: 1838

Geocon Environmental
6970 Flanders Drive
San Diego, CA 92121

ATTN: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Lab No.: 33252-001/088

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (562) 989 - 4045 if I can be of further assistance to your company.

Sincerely,

Cheryl De Los Reyes
Technical Operations Manager
CDR/jh

Enclosures

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This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

Client: Geocon Evironmental
Attn: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Date Received: 02/16/99
Date Sampled: 02/16/99
Date Digested: 02/18/99, 03/02/99
Digestion Method: 3050
Date Amended: 03/15/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Unit	MDL	DLR	Analyst
33252-001*	B1-S	EPA 6010 (Lead)	03/04/99	785	Soil, mg/kg	5.0	5.0	LP/DJ
33252-002	B1-1	EPA 6010 (Lead)	02/18/99	612	Soil, mg/kg	5.0	5.0	LP/DJ
33252-003	B1-2	EPA 6010 (Lead)	02/18/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33252-004	B3-S	EPA 6010 (Lead)	02/18/99	197	Soil, mg/kg	5.0	5.0	LP/DJ
33252-005	B3-1	EPA 6010 (Lead)	02/18/99	237	Soil, mg/kg	5.0	5.0	LP/DJ
33252-006	B3-6	EPA 6010 (Lead)	02/18/99	72	Soil, mg/kg	5.0	5.0	LP/DJ
33252-007	B5-S	EPA 6010 (Lead)	02/18/99	247	Soil, mg/kg	5.0	5.0	LP/DJ
33252-008	B5-1	EPA 6010 (Lead)	02/18/99	36	Soil, mg/kg	5.0	5.0	LP/DJ
33252-009	B7-S	EPA 6010 (Lead)	02/18/99	150	Soil, mg/kg	5.0	5.0	LP/DJ
33252-010	B7-1	EPA 6010 (Lead)	02/18/99	15	Soil, mg/kg	5.0	5.0	LP/DJ
33252-010Dup	B7-1	EPA 6010 (Lead)	02/18/99	21	Soil, mg/kg	5.0	5.0	LP/DJ
33252-011	B7-2	EPA 6010 (Lead)	02/18/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33252-012	B9-S	EPA 6010 (Lead)	02/18/99	1420	Soil, mg/kg	5.0	5.0	LP/DJ
33252-013	B9-1	EPA 6010 (Lead)	02/18/99	122	Soil, mg/kg	5.0	5.0	LP/DJ
33252-014	B9-1.5	EPA 6010 (Lead)	02/18/99	287	Soil, mg/kg	5.0	5.0	LP/DJ
33252-015	B11-S	EPA 6010 (Lead)	02/18/99	91	Soil, mg/kg	5.0	5.0	LP/DJ
33252-016	B11-1	EPA 6010 (Lead)	02/18/99	10	Soil, mg/kg	5.0	5.0	LP/DJ
33252-017	B11-2	EPA 6010 (Lead)	02/18/99	6.4	Soil, mg/kg	5.0	5.0	LP/DJ
33252-018	B13-S	EPA 6010 (Lead)	02/18/99	436	Soil, mg/kg	5.0	5.0	LP/DJ
33252-019	B13-1	EPA 6010 (Lead)	02/18/99	8.3	Soil, mg/kg	5.0	5.0	LP/DJ
33252-020	B13-1.5	EPA 6010 (Lead)	02/18/99	193	Soil, mg/kg	5.0	5.0	LP/DJ
33252-020Dup	B13-1.5	EPA 6010 (Lead)	02/18/99	188	Soil, mg/kg	5.0	5.0	LP/DJ
33252-021	B15-S	EPA 6010 (Lead)	02/18/99	61	Soil, mg/kg	5.0	5.0	LP/DJ
33252-022	B15-1	EPA 6010 (Lead)	02/18/99	36	Soil, mg/kg	5.0	5.0	LP/DJ
33252-023	B15-2	EPA 6010 (Lead)	02/18/99	24	Soil, mg/kg	5.0	5.0	LP/DJ
33252-024	B17-S	EPA 6010 (Lead)	02/18/99	163	Soil, mg/kg	5.0	5.0	LP/DJ
33252-025	B17-1	EPA 6010 (Lead)	02/18/99	123	Soil, mg/kg	5.0	5.0	LP/DJ
33252-026	B17-2	EPA 6010 (Lead)	02/18/99	23	Soil, mg/kg	5.0	5.0	LP/DJ
33252-027	B19-S	EPA 6010 (Lead)	02/18/99	1790	Soil, mg/kg	5.0	5.0	LP/DJ
33252-028	B19-1	EPA 6010 (Lead)	02/18/99	154	Soil, mg/kg	5.0	5.0	LP/DJ
33252-029	B19-2	EPA 6010 (Lead)	02/18/99	22	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit ND = Not Detected (Below DLR) DF = Dilution Factor

Reviewed/Approved By: Cheryl De Los Reyes
Technical Operations Manager

Date: 3/15/99

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Evironmental
Attn: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Date Received: 02/16/99
Date Sampled: 02/16/99
Date Digested: 02/18/99
Digestion Method: 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
33252-030	B21-S	EPA 6010 (Lead)	02/18/99	176	Soil, mg/kg	5.0	5.0	LP/DJ
33252-030Dup	B21-S	EPA 6010 (Lead)	02/18/99	161	Soil, mg/kg	5.0	5.0	LP/DJ
33252-031	B21-1	EPA 6010 (Lead)	02/18/99	55	Soil, mg/kg	5.0	5.0	LP/DJ
33252-032	B21-2	EPA 6010 (Lead)	02/18/99	6.1	Soil, mg/kg	5.0	5.0	LP/DJ
33252-033	B23-S	EPA 6010 (Lead)	02/18/99	266	Soil, mg/kg	5.0	5.0	LP/DJ
33252-034	B23-1	EPA 6010 (Lead)	02/18/99	237	Soil, mg/kg	5.0	5.0	LP/DJ
33252-035	B23-2	EPA 6010 (Lead)	02/18/99	6.2	Soil, mg/kg	5.0	5.0	LP/DJ
33252-036	B25-S	EPA 6010 (Lead)	02/18/99	18	Soil, mg/kg	5.0	5.0	LP/DJ
33252-037	B25-1	EPA 6010 (Lead)	02/18/99	18	Soil, mg/kg	5.0	5.0	LP/DJ
33252-038	B25-2	EPA 6010 (Lead)	02/18/99	8.1	Soil, mg/kg	5.0	5.0	LP/DJ
33252-039	B27-S	EPA 6010 (Lead)	02/18/99	46	Soil, mg/kg	5.0	5.0	LP/DJ
33252-040	B27-1	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-040Dup	B27-1	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-041	B27-2	EPA 6010 (Lead)	02/18/99	23	Soil, mg/kg	5.0	5.0	LP/DJ
33252-042	B29-S	EPA 6010 (Lead)	02/18/99	8.4	Soil, mg/kg	5.0	5.0	LP/DJ
33252-043	B29-1	EPA 6010 (Lead)	02/18/99	5.7	Soil, mg/kg	5.0	5.0	LP/DJ
33252-044	B29-2	EPA 6010 (Lead)	02/18/99	15	Soil, mg/kg	5.0	5.0	LP/DJ
33252-045	B31-S	EPA 6010 (Lead)	02/18/99	33	Soil, mg/kg	5.0	5.0	LP/DJ
33252-046	B31-1	EPA 6010 (Lead)	02/18/99	10	Soil, mg/kg	5.0	5.0	LP/DJ
33252-047	B31-2	EPA 6010 (Lead)	02/18/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33252-048	B33-S	EPA 6010 (Lead)	02/18/99	77	Soil, mg/kg	5.0	5.0	LP/DJ
33252-049	B33-1	EPA 6010 (Lead)	02/18/99	20	Soil, mg/kg	5.0	5.0	LP/DJ
33252-050	B33-2	EPA 6010 (Lead)	02/18/99	9.1	Soil, mg/kg	5.0	5.0	LP/DJ
33252-050Dup	B33-2	EPA 6010 (Lead)	02/18/99	16	Soil, mg/kg	5.0	5.0	LP/DJ
33252-051	B35-S	EPA 6010 (Lead)	02/18/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33252-052	B35-1	EPA 6010 (Lead)	02/18/99	12	Soil, mg/kg	5.0	5.0	LP/DJ
33252-053	B35-2	EPA 6010 (Lead)	02/18/99	1.5	Soil, mg/kg	5.0	5.0	LP/DJ
33252-054	B37-S	EPA 6010 (Lead)	02/18/99	18	Soil, mg/kg	5.0	5.0	LP/DJ
33252-055	B37-1	EPA 6010 (Lead)	02/18/99	34	Soil, mg/kg	5.0	5.0	LP/DJ
33252-056	B37-2	EPA 6010 (Lead)	02/18/99	9.7	Soil, mg/kg	5.0	5.0	LP/DJ
33252-057	B39-S	EPA 6010 (Lead)	02/18/99	1010	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit ND = Not Detected (Below DLR) DF = Dilution Factor

Reviewed/Approved By: _____ Date: 2/24/99
Cheryl De Los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Evironmental
Attn: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Date Received: 02/16/99
Date Sampled: 02/16/99
Date Digested: 02/18/99
Digestion Method: 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
33252-058	B39-1	EPA 6010 (Lead)	02/18/99	77	Soil, mg/kg	5.0	5.0	LP/DJ
33252-059	B39-2	EPA 6010 (Lead)	02/18/99	19	Soil, mg/kg	5.0	5.0	LP/DJ
33252-060	B41-S	EPA 6010 (Lead)	02/18/99	239	Soil, mg/kg	5.0	5.0	LP/DJ
33252-060Dup	B41-S	EPA 6010 (Lead)	02/18/99	324	Soil, mg/kg	5.0	5.0	LP/DJ
33252-061	B41-1	EPA 6010 (Lead)	02/18/99	26	Soil, mg/kg	5.0	5.0	LP/DJ
33252-062	B43-S	EPA 6010 (Lead)	02/18/99	197	Soil, mg/kg	5.0	5.0	LP/DJ
33252-063	B43-1	EPA 6010 (Lead)	02/18/99	60	Soil, mg/kg	5.0	5.0	LP/DJ
33252-064	B43-2	EPA 6010 (Lead)	02/18/99	146	Soil, mg/kg	5.0	5.0	LP/DJ
33252-065	B45-S	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-066	B45-1	EPA 6010 (Lead)	02/18/99	21	Soil, mg/kg	5.0	5.0	LP/DJ
33252-067	B45-2	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-068	B47-S	EPA 6010 (Lead)	02/18/99	82	Soil, mg/kg	5.0	5.0	LP/DJ
33252-069	B47-1	EPA 6010 (Lead)	02/18/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33252-070	B47-2	EPA 6010 (Lead)	02/18/99	159	Soil, mg/kg	5.0	5.0	LP/DJ
33252-070Dup	B47-2	EPA 6010 (Lead)	02/18/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33252-071	B49-S	EPA 6010 (Lead)	02/18/99	55	Soil, mg/kg	5.0	5.0	LP/DJ
33252-072	B49-1	EPA 6010 (Lead)	02/18/99	89	Soil, mg/kg	5.0	5.0	LP/DJ
33252-073	B49-2	EPA 6010 (Lead)	02/18/99	51	Soil, mg/kg	5.0	5.0	LP/DJ
33252-074	B51-S	EPA 6010 (Lead)	02/18/99	46	Soil, mg/kg	5.0	5.0	LP/DJ
33252-075	B51-1	EPA 6010 (Lead)	02/18/99	46	Soil, mg/kg	5.0	5.0	LP/DJ
33252-076	B51-2	EPA 6010 (Lead)	02/18/99	90	Soil, mg/kg	5.0	5.0	LP/DJ
33252-077	B53-S	EPA 6010 (Lead)	02/18/99	75	Soil, mg/kg	5.0	5.0	LP/DJ
33252-078	B53-1	EPA 6010 (Lead)	02/18/99	22	Soil, mg/kg	5.0	5.0	LP/DJ
33252-079	B53-1.5	EPA 6010 (Lead)	02/18/99	10	Soil, mg/kg	5.0	5.0	LP/DJ
33252-080	B55-S	EPA 6010 (Lead)	02/18/99	79	Soil, mg/kg	5.0	5.0	LP/DJ
33252-080Dup	B55-S	EPA 6010 (Lead)	02/18/99	79	Soil, mg/kg	5.0	5.0	LP/DJ
33252-081	B55-1	EPA 6010 (Lead)	02/18/99	19	Soil, mg/kg	5.0	5.0	LP/DJ
33252-082	B55-2	EPA 6010 (Lead)	02/18/99	64	Soil, mg/kg	5.0	5.0	LP/DJ
33252-083	B57-S	EPA 6010 (Lead)	02/18/99	293	Soil, mg/kg	5.0	5.0	LP/DJ
33252-084	B57-1	EPA 6010 (Lead)	02/18/99	496	Soil, mg/kg	5.0	5.0	LP/DJ

Client: Geocon Evironmental
Attn: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Date Received: 02/16/99
Date Sampled: 02/16/99
Date Digested: 02/18/99
Digestion Method: 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
33252-058	B39-1	EPA 6010 (Lead)	02/18/99	77	Soil, mg/kg	5.0	5.0	LP/DJ
33252-059	B39-2	EPA 6010 (Lead)	02/18/99	19	Soil, mg/kg	5.0	5.0	LP/DJ
33252-060	B41-S	EPA 6010 (Lead)	02/18/99	239	Soil, mg/kg	5.0	5.0	LP/DJ
33252-060Dup	B41-S	EPA 6010 (Lead)	02/18/99	324	Soil, mg/kg	5.0	5.0	LP/DJ
33252-061	B41-1	EPA 6010 (Lead)	02/18/99	26	Soil, mg/kg	5.0	5.0	LP/DJ
33252-062	B43-S	EPA 6010 (Lead)	02/18/99	197	Soil, mg/kg	5.0	5.0	LP/DJ
33252-063	B43-1	EPA 6010 (Lead)	02/18/99	60	Soil, mg/kg	5.0	5.0	LP/DJ
33252-064	B43-2	EPA 6010 (Lead)	02/18/99	146	Soil, mg/kg	5.0	5.0	LP/DJ
33252-065	B45-S	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-066	B45-1	EPA 6010 (Lead)	02/18/99	21	Soil, mg/kg	5.0	5.0	LP/DJ
33252-067	B45-2	EPA 6010 (Lead)	02/18/99	17	Soil, mg/kg	5.0	5.0	LP/DJ
33252-068	B47-S	EPA 6010 (Lead)	02/18/99	82	Soil, mg/kg	5.0	5.0	LP/DJ
33252-069	B47-1	EPA 6010 (Lead)	02/18/99	13	Soil, mg/kg	5.0	5.0	LP/DJ
33252-070	B47-2	EPA 6010 (Lead)	02/18/99	159	Soil, mg/kg	5.0	5.0	LP/DJ
33252-070Dup	B47-2	EPA 6010 (Lead)	02/18/99	14	Soil, mg/kg	5.0	5.0	LP/DJ
33252-071	B49-S	EPA 6010 (Lead)	02/18/99	55	Soil, mg/kg	5.0	5.0	LP/DJ
33252-072	B49-1	EPA 6010 (Lead)	02/18/99	89	Soil, mg/kg	5.0	5.0	LP/DJ
33252-073	B49-2	EPA 6010 (Lead)	02/18/99	51	Soil, mg/kg	5.0	5.0	LP/DJ
33252-074	B51-S	EPA 6010 (Lead)	02/18/99	46	Soil, mg/kg	5.0	5.0	LP/DJ
33252-075	B51-1	EPA 6010 (Lead)	02/18/99	46	Soil, mg/kg	5.0	5.0	LP/DJ
33252-076	B51-2	EPA 6010 (Lead)	02/18/99	90	Soil, mg/kg	5.0	5.0	LP/DJ
33252-077	B53-S	EPA 6010 (Lead)	02/18/99	75	Soil, mg/kg	5.0	5.0	LP/DJ
33252-078	B53-1	EPA 6010 (Lead)	02/18/99	22	Soil, mg/kg	5.0	5.0	LP/DJ
33252-079	B53-1.5	EPA 6010 (Lead)	02/18/99	10	Soil, mg/kg	5.0	5.0	LP/DJ
33252-080	B55-S	EPA 6010 (Lead)	02/18/99	79	Soil, mg/kg	5.0	5.0	LP/DJ
33252-080Dup	B55-S	EPA 6010 (Lead)	02/18/99	79	Soil, mg/kg	5.0	5.0	LP/DJ
33252-081	B55-1	EPA 6010 (Lead)	02/18/99	19	Soil, mg/kg	5.0	5.0	LP/DJ
33252-082	B55-2	EPA 6010 (Lead)	02/18/99	64	Soil, mg/kg	5.0	5.0	LP/DJ
33252-083	B57-S	EPA 6010 (Lead)	02/18/99	293	Soil, mg/kg	5.0	5.0	LP/DJ
33252-084	B57-1	EPA 6010 (Lead)	02/18/99	496	Soil, mg/kg	5.0	5.0	LP/DJ
33252-085	B57-2	EPA 6010 (Lead)	02/18/99	101	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit ND = Not Detected (Below DLR) DF = Dilution Factor

Reviewed/Approved By: _____ Date: 2/24/99
Cheryl De Los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Client: Geocon Evironmental
Attn: Joel Kloth

Client's Project: Rte.5, #08900-06-18
Date Received: 02/16/99
Date Sampled: 02/16/99
Date Digested: 02/18/99
Digestion Method: 3050

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results	Matrix, Units	MDL	DLR	Analyst
33252-086	B59-S	EPA 6010 (Lead)	02/18/99	379	Soil, mg/kg	5.0	5.0	LP/DJ
33252-087	B59-1	EPA 6010 (Lead)	02/18/99	83	Soil, mg/kg	5.0	5.0	LP/DJ
33252-088	B59-2	EPA 6010 (Lead)	02/18/99	7.2	Soil, mg/kg	5.0	5.0	LP/DJ
33252-088Dup	B59-2	EPA 6010 (Lead)	02/18/99	7.2	Soil, mg/kg	5.0	5.0	LP/DJ

MDL = Method Detection Limit ND = Not Detected (Below DLR) DF = Dilution Factor

Reviewed/Approved By: _____ Date: 2/24/99
Cheryl De Los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/16/99
Date Sampled: 02/16/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33252-007	B5-S	EPA 9045 (pH)	02/18/99	8.4	Soil, pH units	---	---	OL
33252-018	B13-S	EPA 9045 (pH)	02/18/99	8.8	Soil, pH units	---	---	OL
33252-022	B15-1	EPA 9045 (pH)	02/18/99	8.8	Soil, pH units	---	---	OL
33252-040	B27-1	EPA 9045 (pH)	02/18/99	8.8	Soil, pH units	---	---	OL
33252-047	B31-2	EPA 9045 (pH)	02/18/99	8.4	Soil, pH units	---	---	OL
33252-054	B37-S	EPA 9045 (pH)	02/18/99	8.6	Soil, pH units	---	---	OL
33252-067	B45-2	EPA 9045 (pH)	02/18/99	9.3	Soil, pH units	---	---	OL
33252-072	B49-1	EPA 9045 (pH)	02/18/99	8.8	Soil, pH units	---	---	OL
33252-086	B59-S	EPA 9045 (pH)	02/18/99	8.2	Soil, pH units	---	---	OL
33252-086Dup	B59-S	EPA 9045 (pH)	02/18/99	8.3	Soil, pH units	---	---	OL

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 2/23/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Spike Recovery and RPD Summary Report

Method: EPA 6010 (Lead)
Analyst: LP/OL
Data File: ICAP90218-1
QA File: 9049-1

Date Analyzed: 2/18/99
Date Digested: 2/18/99
Sample ID: See below
Matrix: Soil
QAQC Batch No: ICAP990218S-1

SAMPLE ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC	RPD	RPD Limit	MDL
33252-010	mg/kg	5.0	4.8	96	ND	15	21	33	250	206	208	76	77	68-106	1	20	0.25
33252-020*	mg/kg	5.0	4.8	96	ND	193	188	3	250	333	329	56	54	68-106	1	20	0.25
33252-030*	mg/kg	5.0	4.6	92	ND	176	161	9	250	437	331	104	62	68-106	28	20	0.25
33252-040	mg/kg	5.0	4.6	92	ND	17	17	0	250	222	222	82	82	68-106	0	20	0.25
33252-050	mg/kg	5.0	4.6	92	ND	9.1	16	55	250	209	205	80	78	68-106	2	20	0.25
33252-060	mg/kg	5.0	4.5	90	ND	239	324	30	250	473	391	94	61	68-106	19	20	0.25
33252-070	mg/kg	5.0	4.4	88	ND	14	159	168	250	206	208	77	78	68-106	1	20	0.25
33252-080	mg/kg	5.0	4.4	88	ND	79	79	0	250	263	245	74	66	68-106	7	20	0.25
33252-088	mg/kg	5.0	4.5	90	ND	7.2	7.2	0	250	212	203	82	78	68-106	4	20	0.25

* RPD and %REC out of the limit is due to the sample matrix.

Approved by: David J. Kern
Inorganics Supervisor

Date: 2/23/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA 6010
Analyst: LP/SER
Data File: ICAP9061-2
QA File: 9061-2GC

Date Analyzed: 03/02/99
Date Digested: 03/02/99
Sample ID: 33252-007
Matrix: Soil/Solid
QC Batch NO:ICAP 990302S-2

SAMPLE ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
Antimony	mg/kg	1.0	0.95	95	ND	0.77	1.0	26	125	95	95	75	75	32-110	0	20	0.25
Arsenic	mg/kg	1.0	1.0	100	ND	29	33	13	125	147	147	94	94	68-105	0	20	0.25
Barium	mg/kg	1.0	1.0	100	ND	62	60	3	125	176	174	91	90	22-170	1	20	0.05
Beryllium	mg/kg	1.0	1.0	100	ND	0.083	0.063	27	125	116	115	93	92	47-134	1	20	0.05
Cadmium	mg/kg	1.0	0.98	98	ND	ND	ND	0	125	106	104	85	83	65-106	2	20	0.15
Chromium	mg/kg	1.0	0.97	97	ND	3.6	3.9	8	125	120	118	93	92	61-128	2	20	0.15
Cobalt	mg/kg	1.0	0.89	89	ND	2.9	3.1	7	125	113	112	88	87	68-112	1	20	0.15
Copper	mg/kg	1.0	1.1	110	ND	11	11	0	125	107	105	77	75	60-133	2	20	0.15
Lead	mg/kg	1.0	0.98	98	ND	188	151	22	125	296	328	86	112	68-106	10	20	0.25
Molybdenum	mg/kg	1.0	0.96	96	ND	2.0	2.3	14	125	115	113	90	89	67-107	2	20	0.25
Nickel	mg/kg	1.0	0.93	93	ND	2.9	3.1	7	125	112	113	87	88	29-155	1	20	0.15
Selenium	mg/kg	1.0	0.91	91	ND	0.62	0.36	53	125	101	100	80	80	51-114	1	20	0.25
Silver	mg/kg	0.75	0.77	103	ND	ND	ND	0	125	97	95	78	76	45-111	2	20	0.05
Thallium	mg/kg	1.0	1.1	110	ND	ND	ND	0	125	118	115	94	92	60-111	3	20	0.25
Vanadium	mg/kg	1.0	0.97	97	ND	10	12	18	125	127	127	94	94	71-116	0	20	0.15
Zinc	mg/kg	1.0	0.95	95	ND	55	46	18	125	159	167	83	90	47-128	5	20	0.50

Approved by: LiPing Liu
Inorganics Supervisor

Date: 3/23/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/HP
Data File: AA90226-1
QA File: 9057-1

Date Analyzed: 02/26/99
Date Extracted: 02/24/99
Sample ID: see below
Matrix: STLC EXTRACT
QC Batch Number PBF990226ST-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33252-018	mg/L	5.0	4.6	92	ND	25	23	8	25	48	48	92	92	50-150	0	50	0.15
33252-060	mg/L	5.0	5.3	106	ND	1.5	1.8	18	5.0	5.6	5.9	82	88	50-150	7	50	0.15
33379-020	mg/L	5.0	5.1	102	ND	36	40	11	50	83	87	94	102	50-150	8	50	0.15

Approved by: David J. Kern
Inorganics Supervisor

Date: 02/26/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA 6010
Analyst: LP/SER
Data File: ICAP9061-2
QA File: 9061-2GC

Date Analyzed: 03/02/99
Date Digested: 03/02/99
Sample ID: 33252-007
Matrix: Soil/Solid
QC Batch NO:ICAP 990302S-2

SAMPLE ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
Antimony	mg/kg	1.0	0.95	95	ND	0.77	1.0	26	125	95	95	75	75	32-110	0	20	0.25
Arsenic	mg/kg	1.0	1.0	100	ND	29	33	13	125	147	147	94	94	68-105	0	20	0.25
Barium	mg/kg	1.0	1.0	100	ND	62	60	3	125	176	174	91	90	22-170	1	20	0.05
Beryllium	mg/kg	1.0	1.0	100	ND	0.083	0.063	27	125	116	115	93	92	47-134	1	20	0.05
Cadmium	mg/kg	1.0	0.98	98	ND	ND	ND	0	125	106	104	85	83	65-106	2	20	0.15
Chromium	mg/kg	1.0	0.97	97	ND	3.6	3.9	8	125	120	118	93	92	61-128	2	20	0.15
Cobalt	mg/kg	1.0	0.89	89	ND	2.9	3.1	7	125	113	112	88	87	68-112	1	20	0.15
Copper	mg/kg	1.0	1.1	110	ND	11	11	0	125	107	105	77	75	60-133	2	20	0.15
Lead	mg/kg	1.0	0.98	98	ND	188	151	22	125	296	328	86	112	68-106	10	20	0.25
Molybdenum	mg/kg	1.0	0.96	96	ND	2.0	2.3	14	125	115	113	90	89	67-107	2	20	0.25
Nickel	mg/kg	1.0	0.93	93	ND	2.9	3.1	7	125	112	113	87	88	29-155	1	20	0.15
Selenium	mg/kg	1.0	0.91	91	ND	0.62	0.36	53	125	101	100	80	80	51-114	1	20	0.25
Silver	mg/kg	0.75	0.77	103	ND	ND	ND	0	125	97	95	78	76	45-111	2	20	0.05
Thallium	mg/kg	1.0	1.1	110	ND	ND	ND	0	125	118	115	94	92	60-111	3	20	0.25
Vanadium	mg/kg	1.0	0.97	97	ND	10	12	18	125	127	127	94	94	71-116	0	20	0.15
Zinc	mg/kg	1.0	0.95	95	ND	55	46	18	125	159	167	83	90	47-128	5	20	0.50

Approved by: LPL for
LiPing Liu
Inorganics Supervisor

Date: 3/4/99

Advanced Technology Laboratories

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/16/99
Date Sampled: 02/16/99
Date Extracted: 02/27/99
Extraction Method: WET (Title 22, CCR, 6626.100 Appendix II)
Date Amended: 03/04/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33252-001	B1-S	EPA 7420 (Lead)	03/01/99	68	STLC Extract, mg/L	0.15	1.05	DJ
33252-002	B1-1	EPA 7420 (Lead)	02/26/99	45	STLC Extract, mg/L	0.15	0.90	DJ
33252-004	B3-S	EPA 7420 (Lead)	03/01/99	23	STLC Extract, mg/L	0.15	0.45	DJ
33252-005	B3-1	EPA 7420 (Lead)	02/26/99	20	STLC Extract, mg/L	0.15	0.45	DJ
33252-007	B5-S	EPA 7420 (Lead)	03/01/99	19	STLC Extract, mg/L	0.15	0.45	DJ
33252-009	B7-S	EPA 7420 (Lead)	03/01/99	7.8	STLC Extract, mg/L	0.15	0.15	DJ
33252-013	B9-1	EPA 7420 (Lead)	02/26/99	9.7	STLC Extract, mg/L	0.15	0.15	DJ
33252-014	B9-1.5	EPA 7420 (Lead)	03/01/99	23	STLC Extract, mg/L	0.15	0.60	DJ
33252-015	B11-S	EPA 7420 (Lead)	02/26/99	5.3	STLC Extract, mg/L	0.15	0.15	DJ
33252-018	B13-S	EPA 7420 (Lead)	02/26/99	25	STLC Extract, mg/L	0.15	0.60	DJ
33252-018Dup	B13-S	EPA 7420 (Lead)	02/26/99	23	STLC Extract, mg/L	0.15	0.60	DJ
33252-020	B13-1.5	EPA 7420 (Lead)	02/26/99	10	STLC Extract, mg/L	0.15	0.15	DJ
33252-024	B17-S	EPA 7420 (Lead)	02/26/99	2.1	STLC Extract, mg/L	0.15	0.15	DJ
33252-025	B17-1	EPA 7420 (Lead)	02/26/99	8.4	STLC Extract, mg/L	0.15	0.15	DJ
33252-028	B19-1	EPA 7420 (Lead)	02/26/99	4.8	STLC Extract, mg/L	0.15	0.15	DJ
33252-030	B21-S	EPA 7420 (Lead)	02/26/99	0.60	STLC Extract, mg/L	0.15	0.15	DJ
33252-033	B23-S	EPA 7420 (Lead)	03/01/99	14	STLC Extract, mg/L	0.15	0.30	DJ
33252-034	B23-1	EPA 7420 (Lead)	02/26/99	0.62	STLC Extract, mg/L	0.15	0.15	DJ
33252-048	B33-S	EPA 7420 (Lead)	02/26/99	0.44	STLC Extract, mg/L	0.15	0.15	DJ
33252-058	B39-1	EPA 7420 (Lead)	03/01/99	5.6	STLC Extract, mg/L	0.15	0.15	DJ
33252-060	B41-S	EPA 7420 (Lead)	02/26/99	1.5	STLC Extract, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: [signature] for
Cheryl de los Reyes
Technical Operations Manager

Date: 3/4/99

This cover letter is an integral part of this analytical report.

April 7, 1999

ELAP No.: 1838

Geocon Environmental
6970 Flanders Drive
San Diego, CA 92121

ATTN: Marc Barton
SUBJECT: AMENDED REPORT

Client's Project: Rte.5, #08900-06-18
Lab No.: 33252-001/088

The report was amended for the following:

STLC result was added for Lab#33252-063 (B43-1).

Please disregard all previous documentation that corresponds to the pages(s) enclosed.

Sincerely,

Cheryl De Los Reyes
Technical Operations Manager
CDR/ra

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client to whom it is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purpose without authorization is prohibited.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/16/99
Date Sampled: 02/16/99
Date Extracted: 02/24/99, * 03/10/99
Extraction Method: WET (Title 22, CCR, 6626.100 Appendix II)
Date Amended: 03/23/99, 04/07/99

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results.	Matrix, Units	MD	DLR	Analyst
33252-060Dup	B41-S	EPA 7420 (Lead)	02/26/99	1.8	STLC Extract, mg/L	0.15	0.15	DJ
33252-062*	B43-S	EPA 7420 (Lead)	03/15/99	6.5	STLC Extract , mg/L	0.15	0.15	DJ
33252-062Dup*	B43-S	EPA 7420 (Lead)	03/15/99	3.7	STLC Extract , mg/L	0.15	0.15	DJ
33252-063*	B43-1	EPA 7420 (Lead)	03/12/99	3.1	STLC Extract , mg/L	0.15	0.15	DJ
33252-064*	B43-2	EPA 7420 (Lead)	03/12/99	5.1	STLC Extract , mg/L	0.15	0.15	DJ
33252-064Dup*	B43-2	EPA 7420 (Lead)	03/12/99	5.4	STLC Extract , mg/L	0.15	0.15	DJ
33252-068	B47-S	EPA 7420 (Lead)	02/26/99	0.44	STLC Extract, mg/L	0.15	0.15	DJ
33252-070	B47-2	EPA 7420 (Lead)	03/01/99	2.7	STLC Extract, mg/L	0.15	0.45	DJ
33252-072	B49-1	EPA 7420 (Lead)	02/26/99	0.47	STLC Extract, mg/L	0.15	0.15	DJ
33252-076	B51-2	EPA 7420 (Lead)	03/01/99	5.0	STLC Extract, mg/L	0.15	0.15	DJ
33252-077	B53-S	EPA 7420 (Lead)	02/26/99	0.48	STLC Extract, mg/L	0.15	0.15	DJ
33252-080	B55-S	EPA 7420 (Lead)	03/01/99	1.5	STLC Extract, mg/L	0.15	0.15	DJ
33252-080Dup	B55-S	EPA 7420 (Lead)	03/01/99	1.3	STLC Extract, mg/L	0.15	0.15	DJ
33252-083	B57-S	EPA 7420 (Lead)	02/26/99	1.2	STLC Extract, mg/L	0.15	0.15	DJ
33252-084	B57-1	EPA 7420 (Lead)	02/26/99	1.9	STLC Extract, mg/L	0.15	0.15	DJ
33252-085	B57-2	EPA 7420 (Lead)	02/26/99	0.70	STLC Extract, mg/L	0.15	0.15	DJ
33252-086	B59-S	EPA 7420 (Lead)	02/26/99	0.98	STLC Extract, mg/L	0.15	0.15	DJ
33252-087	B59-1	EPA 7420 (Lead)	03/01/99	3.4	STLC Extract, mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: [signature] Date: 4/7/99
Cheryl de los Reyes
Technical Operations Manager

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/OL
Data File: AA90315-2
QA File: 9074-2

Date Analyzed: 03/15/99
Date Digested: 03/13/99
Sample ID: SEE BELOW
Matrix: STLC EXTRACT
QC Batch NO: PBF990315ST-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33252-062	mg/L	5.0	5.2	104	ND	3.7	6.5	55	5.0	8.2	8.4	90	94	50-150	4	50	0.15

Approved by: Liu
Liping Liu
Inorganics Supervisor

Date: 3/15/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/SER
Data File: AA90312-1
QA File: 9071-1

Date Analyzed: 03/12/99
Date Digested: 03/10/99
Sample ID: SEE BELOW
Matrix: STLC EXTRACT
QC Batch NO: PBF990312ST-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33709-010	mg/L	5.0	5.2	104	ND	5.2	9.3	57	5.0	9.4	9.7	84	90	50-150	7	50	0.15
33709-020	mg/L	5.0	4.5	90	ND	7.0	4.6	41	5.0	11	11	80	80	50-150	0	50	0.15
33643-030	mg/L	5.0	4.5	90	ND	8.5	7.0	19	5.0	14	13	110	90	50-150	20	50	0.15
33252-064	mg/L	5.0	4.7	94	ND	5.1	5.4	6	5.0	10	10	94	92	50-150	2	50	0.15

Approved by: _____
Liping Liu
Inorganics Supervisor

Date: 3/15/99

Advanced Technology Laboratories

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/OL
Data File: AA90301-2
QA File: 9060-2

Date Analyzed: 03-01-99
Date Digested: 02-27-99
Sample ID: SEE BELOW
Matrix: STLC EXTRACT
QC Batch NO: PBF990301ST-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33252-080	mg/L	5.0	4.7	94	ND	1.5	1.3	14	5.0	5.7	6.0	84	90	50-150	7	50	0.15
33286-028	mg/L	5.0	4.8	96	ND	17	14	19	5.0	20	20	60	60	50-150	0	50	0.15
33286-062	mg/L	5.0	5.3	106	ND	9.3	8.8	6	5.0	14	15	94	114	50-150	19	50	0.15
33504-003	mg/L	5.0	5.3	106	ND	17	7.6	76	5.0	24	24	140	140	50-150	0	50	0.15

Approved by: PPR for
Liping Liu
Inorganics Supervisor

Date: 3/4/99

Advanced Technology

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/16/99
Date Sampled: 02/16/99
Date Extracted: 03/08/99
Extraction Metho WET (Title 22, CCR, 66261.100, Appendix II) Modified

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MD	DLR	Analyst
33252-001	B1-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ **Date:** 3/12/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Advanced Technology Laboratories
1510 E. 33rd Street Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

Client: Geocon Environmental
Attn: Joel Kloth

Client's Project: Rte. 5, #08900-06-18

Date Received: 02/16/99
Date Sampled: 02/16/99
Date Extracted: 03/06/99
Extraction Metho(WET (Title 22, CCR, 66261.100, Appendix II) Modified

Lab No.	Sample I.D.	Analysis	Date Analyzed	Results,	Matrix, Units	MDL	DLR	Analyst
33252-002	B1-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-004	B3-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-005	B3-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-007	B5-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-009	B7-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-013	B9-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-014	B9-1.5	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-015	B11-S	EPA 7420 (Lead)	03/08/99	0.17	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-018	B13-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-020	B13-1.5	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-020Dup	B13-1.5	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-025	B17-1	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-033	B23-S	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-058	B39-1	EPA 7420 (Lead)	03/08/99	0.53	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-064	B43-2	EPA 7420 (Lead)	03/08/99	0.38	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-076	B51-2	EPA 7420 (Lead)	03/08/99	0.19	STLC DI Water Extract , mg/L	0.15	0.15	DJ
33252-076Dup	B51-2	EPA 7420 (Lead)	03/08/99	ND	STLC DI Water Extract , mg/L	0.15	0.15	DJ

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DF = Dilution Factor (DLR/MDL)

Reviewed/Approved By: _____ Date: 3/9/99
Cheryl de los Reyes
Technical Operations Manager

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/OL
Data File: AA90308-1
QA File: 9067-1

Date Analyzed: 03/08/99
Date Digested: 03/06/99
Sample ID: SEE BELOW
Matrix: DI Water Extract
QC Batch NO: PBF990308DI-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33252-020	mg/L	5.0	4.9	98	ND	ND	ND	0	5.0	4.8	5.2	96	104	50-150	8	50	0.15
33252-076	mg/L	5.0	4.9	98	ND	0.19	ND	*	5.0	5.3	5.4	102	104	50-150	0	50	0.15
33286-045	mg/L	5.0	4.9	98	ND	ND	ND	0	5.0	4.6	5.0	92	100	50-150	8	50	0.15
33286-063	mg/L	5.0	5.0	100	ND	ND	ND	0	5.0	5.2	5.2	104	104	50-150	0	50	0.15
33599-007	mg/L	5.0	5.0	100	ND	ND	ND	0	5.0	5.2	5.4	104	108	50-150	4	50	0.15

*Sample result is at/near the detection limit.

Approved by: _____
Liping Liu
Inorganics Supervisor

Date: 3/9/99

Advanced Technology

Spike Recovery and RPD Summary Report

Method: EPA7420(Lead)
Analyst: DJ/HP/SER
Data File: AA90310-1-2
QA File: 9068-1

Date Analyzed: 03/10/99
Date Digested: 03/08/99
Sample ID: SEE BELOW
Matrix: DI Water/STLC Extract
QC Batch NO: PBF990310W-1

SPL ID	UNITS	LCS Conc	LCS Res	% Rec	METH BLANK	SPL CONC	SPL DUP	% Dev	SPK ADDED	MS RESULT	MSD RESULT	%MS REC	%MSD REC	% REC Limit	RPD	RPD Limit	MDL
33286-083	mg/L	5.0	5.1	102	ND	ND	ND	0	5.0	3.3	4.6	66	92	50-150	33	50	0.15

Approved by: _____
Liping Liu
Inorganics Supervisor

Date: 3/12/99

Advanced Technology Laboratories

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: BV Date: 2-16 Time: 20:15

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 08900-016-18 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) [illegible] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [illegible] Date: 2/16/99 Time: 5:01
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/16/99
Signature: Renae Hines

Send Report To:
Attn: _____
Co: SAME 7420
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments:
Test for total lead via 6010. Samples with total lead between 75 mg/kg and 1000 mg/kg test WET with Citric acid. Those analyzed via WET Citric with ~~total~~ STLC over 5.0 mg/L, test WET-DI 7420.

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb; PH 9045A

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total Pb	PH 9045A	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-001	B1-S	9:39	2/16										X		X							E	1	J G		
	002	B1-1	9:42																								
	003	B1-2	9:46																								
	004	B3-S	9:57																								
	005	B3-1	9:59																								
	006	B3-2	10:04																								
	007	B5-S	10:07												X												
	008	B5-1	10:09																								
	009	B7-S	10:16																								
	010	B7-1	10:18																								

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-10 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 5:01
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/16/99
Renae Hines (Signature)

Send Report To:
Attn: _____
Co: SAME
Address: _____
City: _____ State: _____ Zip: _____

Special Instructions/Comments: SEE PAGE 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); ~~Metals Total~~ (CAC-6010/7000); pH 9045A

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals Total	pH 9045A	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-011	B7-2	2/16	10:22										X		X							E	1	J G		
	012	B9-S		10:24																							
	013	B9-1		10:27																							
	014	B9-1.5		10:29																							
	015	B11-S		10:33																							
	016	B11-1		10:34																							
	017	B11-2		10:35																							
	018	B13-S		10:38											X												
	019	B13-1		10:40																							
	020	B13-1.5		10:43																							

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

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Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Klotz
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: I-5 Project #: 08900-06-18
Sampler: (Printed Name) Marc Barton (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 5:09
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Marc Barton Date: 2/16/99
Print Name
Signature: [signature]

Send Report To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See P. 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb; PH 9045-17

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL; SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☐ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total (CAC-6010/7000)	PH 9045-17			SOLID • SOIL	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-021	B15-S	2/16	10:47										X				X							E	1	5:6		
	022	B15-1		10:48											X														
	023	B15-2		10:51																									
	024	B17-S		10:54																									
	025	B17-1		10:56																									
	026	B17-2		11:00																									
	027	B19-S		11:04																									
	028	B19-1		11:05																									
	029	B19-2		11:07																									
	030	B21-S		11:10																									

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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CHAIN OF CUSTODY RECORD

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FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8100-06-18 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 5:03
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/16/99
Signature: Renae Hines

Send Report To:
Attn: _____
Co: SAME
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments: See page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000); Pb; pH 9045A

CIRCLE APPROPRIATE MATRIX: SOLID (SOIL) SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total	Pb	pH 9045A	SOLID (SOIL)	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-031	B21-1	2/16	11:11										X			X							E	1	J G		
	032	B21-2		11:13																								
	033	B23-S		11:15																								
	034	B23-1		11:17																								
	035	B23-2		11:18																								
	036	B25-S		11:21																								
	037	B25-1		11:22																								
	038	B25-2		11:24																								
	039	B27-S		11:26																								
	040	B27-1		11:27											X													

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 08900-06-18 Sampler: (Printed Name) Mark Wanek (Signature) Mark Wanek

Relinquished by: (Signature and Printed Name) Mark Wanek Date: 2-16-99 Time: 4:15 Received by: (Signature and Printed Name) [illegible] Date: 2/16/99 Time: 5:05
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Mark Wanek Date: 2/16/99
Print Name
Signature

Send Report To:
Attn: _____
Co: Same
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
PAGE 1's GOT it GOIN' ON, (so you should see it!!!)

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000) Pb; pH 9045A

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☑ OTHER _____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total	pH 9045A	SOLID • SOIL	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-041	B27-2	2/16	11:29										X		X							E	1	J G		
	042	B29-5		11:31																							
	043	B29-1		11:32																							
	044	B29-2		11:34																							
	045	B31-5		11:37																							
	046	B31-1		11:39																							
	047	B31-2		11:43											X												
	048	B33-5		11:45																							
	049	B33-1		11:46																							
	050	B33-2		11:48																							

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

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FOR LABORATORY USE ONLY:

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Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Marc Barton (Signature) [signature]

Relinquished by: (Signature and Printed Name) Marc Barton [signature] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 5:05
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Marc Barton Date: 2/16/99
Print Name
[signature]
Signature

Send Report To:
Attn: _____
Co: Same
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Page 7

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CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Pb	pH	SOLID	OIL	WATER	DRINKING WATER	AIR	WIPE	OTHER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	33252-051	B35-S	2/16	11:51									X			X							E	1	5 6		
	052	B35-1		11:53																							
	053	B35-2		11:55																							
	054	B37-S		11:58										X													
	055	B37-1		12:00																							
	056	B37-2		12:01																							
	057	B39-S		12:04																							
	058	B39-1		12:06																							
	059	B39-2		12:07																							
	060	B41-S		12:10																							

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
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Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 4:15 Received by: (Signature and Printed Name) [signature] Date: 2/16/99 Time: 4:15
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/16/99
Renae Hines (Signature)

Send Report To:
Attn: _____
Co: SAME
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments: See page 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

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☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

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CIRCLE APPROPRIATE MATRIX: SOLID • SOIL; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

PRESERVATION

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total	PH 9045A	SOLID • SOIL	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-061	B41-1	2/16	12:12									X			X							E	1	J G		
	062	B43-S		12:17																							
	063	B43-1		12:19																							
	064	B43-2		12:20																							
	065	B45-S		12:23																							
	066	B45-1		12:24																							
	067	B45-2		12:25											X												
	068	B47-S		12:27																							
	069	B47-1		12:28																							
	070	B47-2		12:30																							

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
1510 E. 33rd Street
Signal Hill, CA 90807
(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☐

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 8900-06-18 Sampler: (Printed Name) Mark Wanek (Signature) Mark Wanek

Relinquished by: (Signature and Printed Name) Mark Wanek Date: 2-16-99 Time: 4:15 Received by: (Signature and Printed Name) [illegible] Date: 2/16/99 Time: 17:05
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:

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Mark Wanek Date: 2/16/99
Print Name
Mark Wanek
Signature

Send Report To:
Attn: _____
Co: Same
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments: See Pg 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____

* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); ~~8015M~~ Total (CAC-6010/7000); Pb; Pt Pd Rh

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☑ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020/BTEX	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Total	Pb	Pt Pd Rh	SOLID • SOIL • SLUDGE	OIL • SOLVENT • LIQUID	WATER • WASTEWATER	DRINKING WATER	AIR	WIPE • FILTER	OTHER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-071	B49-S	2/16	12:34										X			X							E	1	J G		
	072	B49-1		12:37												X												
	073	B49-2		12:39																								
	074	B51-S		12:42																								
	075	B51-1		12:44																								
	076	B51-2		12:46																								
	077	B53-S		12:50																								
	078	B53-1		12:52																								
	079	B53-1.5		12:55																								
	080	B55-S		1:01																								

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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=$Na_2S_2O_3$

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

CHAIN OF CUSTODY RECORD

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(562) 989-4045 • FAX (562) 989-4040

FOR LABORATORY USE ONLY:

Batch #: _____ D.O. # _____
P.O.#: _____
Logged By: _____ Date: _____ Time: _____

Method of Transport: Walk-in ☐ Courier ☐ UPS ☐ FED. EXP. ☐ ATL ☑

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

Client: GEOCON ENVIRONMENTAL - SAN DIEGO
Attn: Joel Kloth
Address: 6970 Flanders Drive
City: San Diego State: CA Zip Code: 92121
TEL: (619) 558-6100
FAX: (619) 558-8437

Project Name: Rte 5 Project #: 08900-06-818
Sampler: (Printed Name) Renae Hines (Signature) Renae Hines

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[illegible]	2/16/99	4:15	[illegible]	2/16/	17:03

SHIP TO LAB: (SUB CONTRACT) _____
TEST: _____
ATL #: _____
DATE: _____
CLIENT I.D. _____

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Renae Hines (Print Name) Date: 2/16/99
Renae Hines (Signature)

Send Report To:
Attn: _____
Co: SAME
Address: _____
City _____ State _____ Zip _____

Special Instructions/Comments: SEE PAGE 1

Unless otherwise requested, all samples will be disposed 45 days after receipt.

Sample Archive/Disposal:
☐ Laboratory Standard
☐ Other _____
☐ Return To: _____
* $10.00 FEE PER HAZARDOUS SAMPLE DISPOSAL.

Circle or Add Analysis(es) Requested: 601/8010 (Halogenated Volatiles-GC); 602/8020/BTEX (Aromatic Volatiles-GC); 608/8080 (Pesticides/PCB-GC); 624/8240 (Volatiles-GC/MS); 8260 (Volatiles-GC/MS); 625/8270 (BNA-GC/MS); 8015M TPHG/BTEX(COMBINATION); 8015M TPH/D (Diesel-GC); 418.1 (TPH-IR); Metals-Total (CAC-6010/7000); Pb; RT 9045A

CIRCLE APPROPRIATE MATRIX: SOLID • SOIL • SLUDGE; OIL • SOLVENT • LIQUID; WATER • WASTEWATER; DRINKING WATER; AIR; WIPE • FILTER; OTHER

QA/QC: RTNE ☐ RWQCB ☐ WIP ☐ NAVY ☐ CT ☒ OTHER _____

ITEM	LAB USE ONLY: Batch #: Lab No.	Sample Description: Sample I.D.	Date	Time	601/8010	602/8020	608/8080	624/8240	8260	625/8270	8015M TPHG/BTEX	8015M TPH/D	418.1	Metals-Total	Pb	RT 9045A	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	33252-081	B55-1	2/16	1:02										X			E	1	J G		
	082	B55-2		1:04																	
	083	B57-S		1:07																	
	084	B57-1		1:10																	
	085	B57-2		1:12																	
	086	B59-S		1:16												X					
	087	B59-1		1:18																	
	088	B59-2		1:22																	

• TAT starts 8 a.m. following day if samples received after 5 p.m.

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

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=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=$Na_2S_2O_3$

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

APPENDIX C

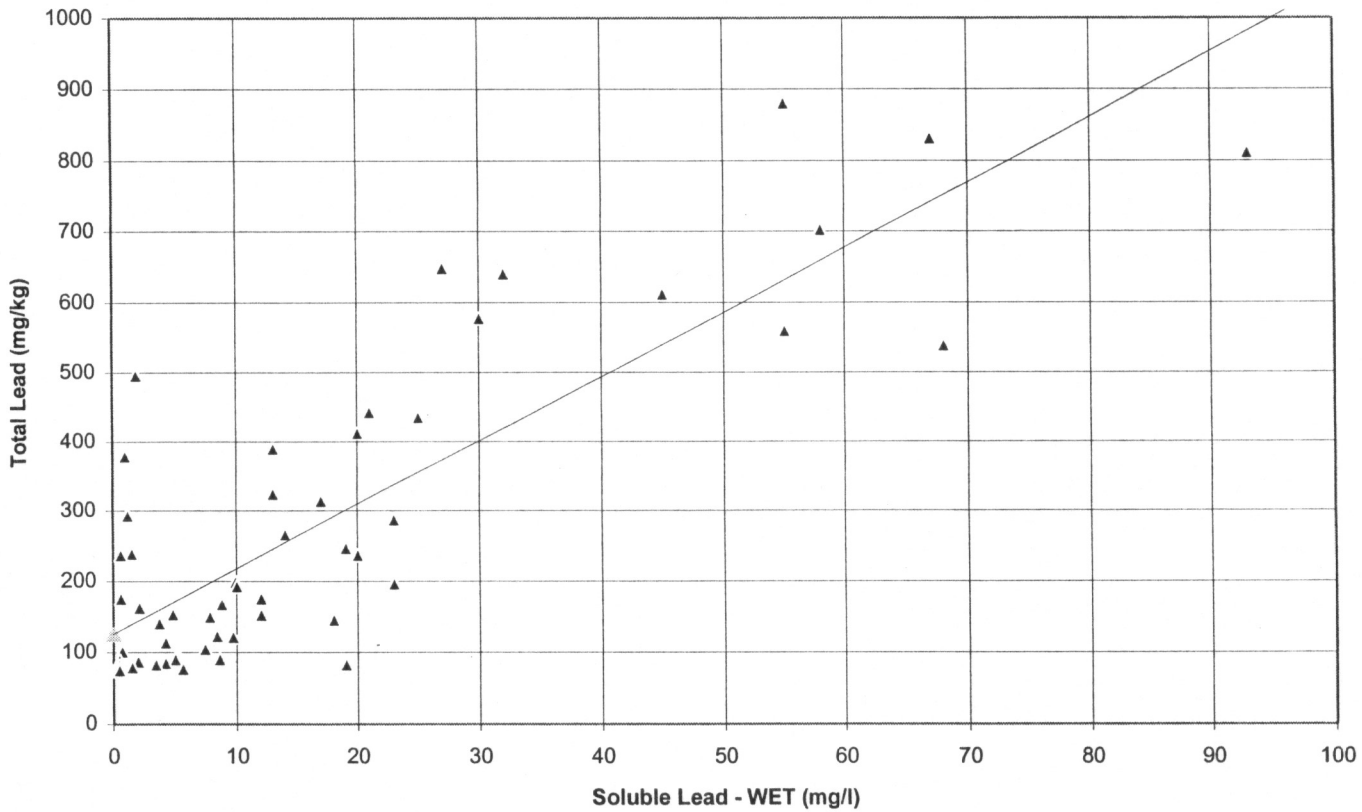
Project Name: Route 5 Mission Bay
Project Number: 08900-06-18
Task Order Number: 11-07580K-PK

Regression Analysis Results for Total Lead vs. Soluble Lead (WET)

Regression Output:

Constant (b)	125.93
Slope (m)	9.20
Correlation (r)	0.84
Number of Observatons	56
Total Lead Mean	278
Total Lead Standard Deviation	222
Soluble Lead (WET) Mean	17
Soluble Lead (WET) Standard Deviation	20

Total Lead vs. Soluble Lead (WET)



Project Name: Route 5 Mission Bay
Project No.: 08900-06-18
Task Order No.: 11-07580K-PK

Block Diagrams - 80% UCL for Lognormal Distribution

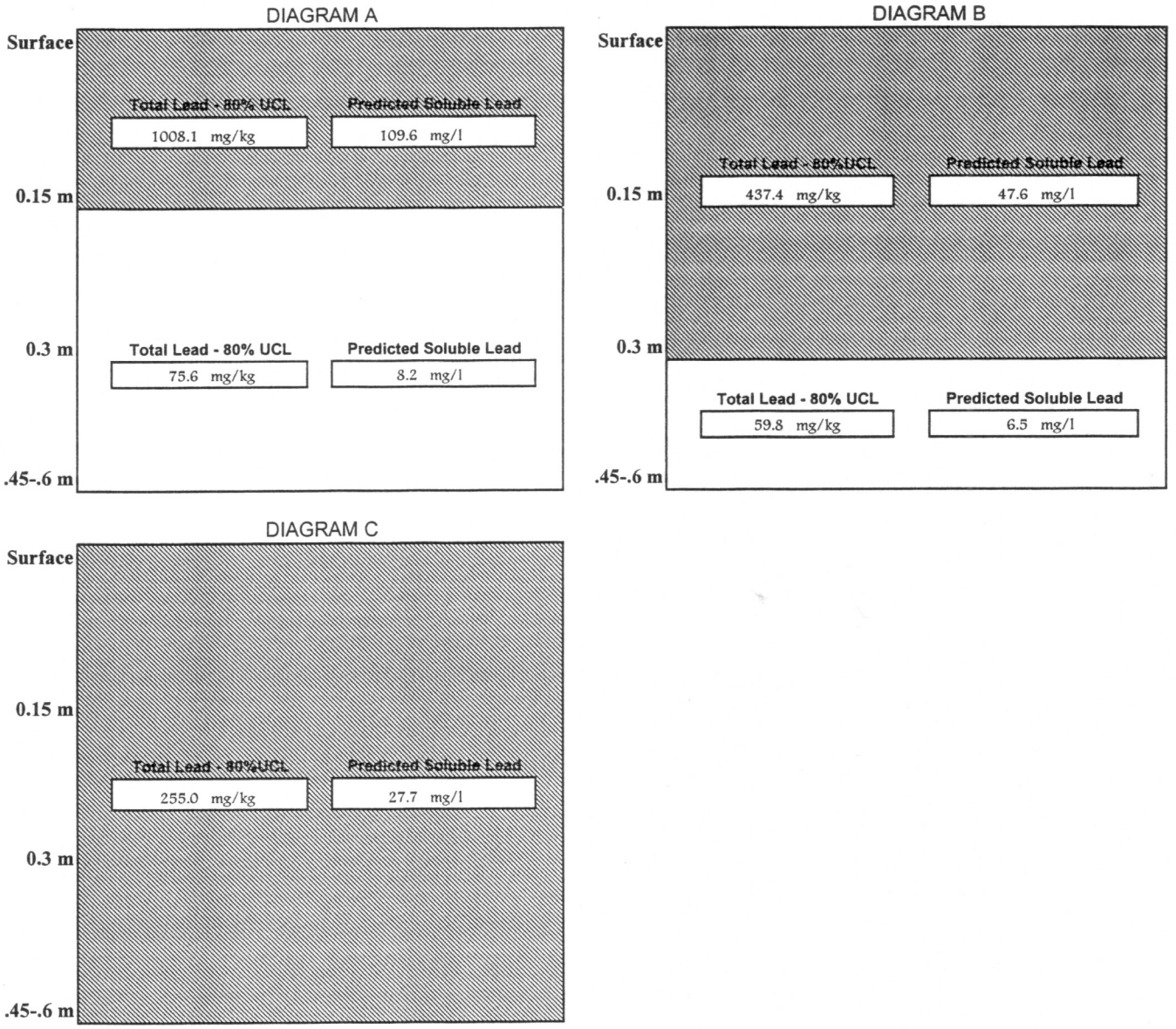


DIAGRAM A --	Separate the top	0.15 m	of soil from the remaining underlying soil
DIAGRAM B --	Separate the top	0.3 m	of soil from the remaining underlying soil
DIAGRAM C --	Analysis of the entire	.45-.6 m	as a single unit

The above diagrams show the total and predicted soluble lead concentrations in each grouping of soil depending on how the various levels of soil are segregated. For instance, Diagram A shows a scenario where the top 0.15 m of soil is excavated and kept separate from the underlying soil. In this case, the top 0.15 m of soil would be expected to exhibit an average total lead concentration of 1008.1 mg/kg and an average (WET-Citric Acid) soluble lead concentration of 109.6 mg/l. The underlying soil would be expected to exhibit an average total lead concentration of 75.6 mg/kg and an average (WET -Citric Acid) soluble lead concentration of 8.2 mg/l.

Project Name: Route 5 Mission Bay
Project No.: 08900-06-18
Task Order No.: 11-07580K-PK

Block Diagrams - 95% UCL for Lognormal Distribution

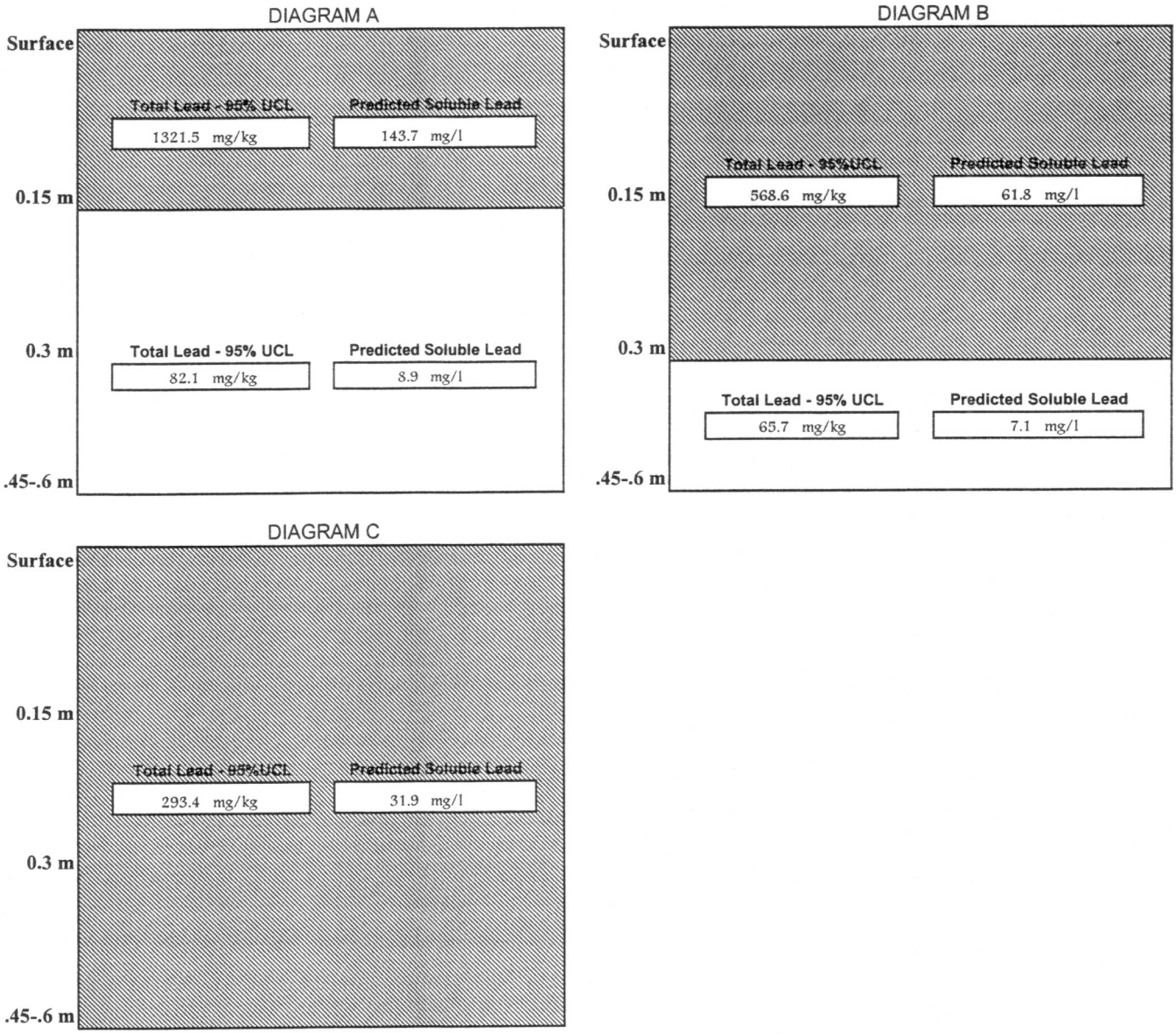


DIAGRAM A -- Separate the top 0.15 m of soil from the remaining underlying soil
DIAGRAM B -- Separate the top 0.3 m of soil from the remaining underlying soil
DIAGRAM C -- Analysis of the entire .45-.6 m as a single unit

The above diagrams show the total and predicted soluble lead concentrations in each grouping of soil depending on how the various levels of soil are segregated. For instance, Diagram A shows a scenario where the top 0.15 m of soil is excavated and kept separate from the underlying soil. In this case, the top 0.15 m of soil would be expected to exhibit an average total lead concentration of 1321.5 mg/kg and an average (WET-Citric Acid) soluble lead concentration of 143.7 mg/l. The underlying soil would be expected to exhibit an average total lead concentration of 82.1 mg/kg and an average (WET -Citric Acid) soluble lead concentration of 8.9 mg/l.