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San Francisco Regional Office

6920 Koll Center Parkway, Suite 216
Pleasanton, CA 94566
(925) 426-2600
FAX (925) 426-0106

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FACSIMILE COVER SHEET

To: Ms. Rebecca Chou **Fax No:** 213/576-6640

Company: Los Angeles Regional Water Quality Control Board

From: Trevor A. Donaghu
Senior Project Manager
Real Estate and Financial Services

Date: November 22, 1999 10:18 AM

Number of Pages (including cover sheet): 21

Please confirm receipt: ☐ YES ☑ NO

If you do not receive the number of pages specified, please call (925) 426-2600

COMMENTS

Los Nietos Business Park
Santa Fe Springs, California
SLIC Case No. 83

The soil investigation report for the above site is attached. Please contact me with any questions at (925) 426-2625. Thank you.

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(JW) # 883

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November 19, 1999

Mr. Jimmy Woo
LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
320 West 4th Street, Suite 200
Los Angeles, California 90013

Clayton Project No. 70-00302.00

Subject: **Soil Investigation – Northern Excavation**
Los Nietos Business Center
9120-9160 South Norwalk Boulevard
11925-11933 East Los Nietos Road
Santa Fe Springs, California
SLIC Case No. 883

Dear Mr. Woo:

Clayton Environmental Consultants, a division of Clayton Group Services (Clayton), on behalf of WHC-Six Real Estate Limited Partnership (WHC-Six), is pleased to submit this report on the soil investigation at the above-referenced subject property (Figure 1). This investigation was performed in accordance with our workplan, dated November 5, 1999, which was approved in Rebecca Chou's November 8, 1999 letter.

Background

Applied Geosciences Inc. conducted extensive remedial work at the subject property in 1988, including the excavation and removal of petroleum hydrocarbon-impacted soil. As part of the remedial activities, approximately 6,400 cubic yards of soil were excavated to depths ranging from 25 to 47 feet below ground surface (bgs) along the northern border of the subject property. The base and sidewalls of the excavation were sampled for total petroleum hydrocarbons (TPH). However, no testing for volatile organic compounds (VOCs) was conducted.

Following the remedial activities, the subject property was redeveloped in 1988. Portions of the former excavation are now covered with buildings.

In September 1999, Clayton installed a monitoring well (MW-6) to a depth of 58 feet along the northern boundary of the subject property, within the limits of the previously excavated area. Soil samples were collected at 5-foot intervals during drilling and analyzed for VOCs. Laboratory results show that VOCs were not detected above their

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respective method detection limits in any of the soil samples, with the exception of the saturated soil sample collected at the groundwater interface (50 feet bgs), which contained 13 micrograms per kilogram (ug/kg) tetrachloroethene (PCE). The PCE detected in the 50-foot sample is attributed to PCE-contaminated groundwater migrating onto the subject property from upgradient sources. Groundwater samples were collected from MW-6 on September 13, 1999. Laboratory analysis reported concentrations of PCE at 75.5 micrograms per liter (ug/l) PCE, 7.2 ug/l trichloroethene (TCE), and 2.4 ug/l 1,2-dichloroethene (1,2-DCE).

Purpose

The purpose of the additional soil sampling is to assess the soil under and around the former northern excavation area of the subject property. The additional soil sampling was requested by the Los Angeles Regional Water Quality Control Board (RWQCB), in Rebecca Chou's letter dated November 8, 1999.

Field Activities

Soil boring and sampling activities were conducted on November 12, 1999, under the supervision of Clayton Geologist Brian Hawes. Soil boring CPT-1 was completed with a hand auger. The remaining soil borings were completed using a cone penetrometer (CPT) contracted from Gregg Drilling, of Irvine, California.

Soil Boring and Sampling

Clayton completed five soil borings to 10 feet below ground surface (bgs) (CPT-1 & CP-4 through CPT-7) (Figure 1) and one soil boring to 42 feet bgs (CPT-2) in and around the former northern excavation area. The 10-foot soil borings were completed near the accessible edges of the former excavation, and the 42-foot boring was completed through the southern portion of the former excavation. Refusal was encountered at approximately 42 feet in CPT-2.

Clayton experienced difficult drilling conditions at the subject property. Several borings were attempted near the southern edge of the excavation area, and refusal was encountered at approximately 5 feet. CPT-2, located in the middle of the southern portion of the excavation, encountered refusal at approximately 42 feet bgs.

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At each soil boring location, the CPT was advanced to immediately above the target depth, at which point it was retracted and fitted with a soil sampling probe. The probe was then advanced to the target depth. One soil sample was collected at 10 feet bgs in each of the 10-foot soil borings, and soil samples were collected at 10 and 40 feet bgs in the 42-foot boring. Soil samples were screened for VOCs using a photoionization detector (PID), and submitted to a laboratory for analysis for VOCs. PID screening results are listed in Table 1 to the right.

Table 1
PID Soil Screening Results

Sample	PID Reading (ppm)
CPT-1-10	0.0
CPT-2-10	0.0
CPT-2-40	39.8
CPT-4-10	0.3
CPT-5-10	0.0
CPT-6-10	0.2
CPT-7-10	0.0

Upon completion of field activities, all soil borings were backfilled with bentonite chips and hydrated with water prior to being patched with concrete or asphalt.

Soils

All soil samples, with the exception of CPT-2-10, were collected from native soil adjacent to the former excavation.

Based on CPT logs (attached), the subject property is underlain by clays, silts, and silty sands. All of the collected soil samples appeared to be native soil, with the exception of the 10-foot sample from CPT-2. Sample CPT-2-10 appeared to be fill. Groundwater was not encountered during soil boring activities.

Laboratory Analyses

Soil samples were transported to Del Mar Analytical in Irvine, California, and analyzed for VOCs using USEPA Method 8260. Certified analytical laboratory reports are attached.

Volatile organic compounds (VOCs) were not detected in any of the soil samples except the 40-foot sample from boring CPT-2, which contained PCE and some other low concentrations of petroleum-related compounds, as indicated in Table 2.

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Table 2
Soil VOC Results
September 1999
All results are in micrograms per kilogram

Compound	CPT-1-10	CPT-2-10	CPT-2-40	CPT-4-10	CPT-5-10	CPT-6-10	CPT-7-10	PRG*
n-Butylbenzene	ND	ND	14	ND	ND	ND	ND	130,000
sec-Butylbenzene	ND	ND	6.3	ND	ND	ND	ND	100,000
p-Isopropyltoluene	ND	ND	12	ND	ND	ND	ND	--
Naphthalene	ND	ND	45	ND	ND	ND	ND	55,000
n-Propylbenzene	ND	ND	3.9	ND	ND	ND	ND	130,000
PCE	ND	ND	4.4	ND	ND	ND	ND	4,700
1,2,4-trimethylbenzene	ND	ND	8.3	ND	ND	ND	ND	51,000
1,3,5-trimethylbenzene	ND	ND	2	ND	ND	ND	ND	21,000

* Preliminary Remediation Goal (Residential). "--" indicates no listed PRG.

Discussion

The absence of PCE in shallow soil at the subject property is further evidence that the source of PCE contamination in groundwater is an upgradient source and did not originate at the subject property.

As noted on the lab reports, the detection limit for samples collected from CPT-2 was 1 ug/kg versus 10 ug/kg for MW-6. PCE was detected 4.4 ug/kg at 40 feet in CPT-2. The presence of this PCE is most likely an artifact of the underlying groundwater contamination. The presence of PCE at 40 feet may be due to the capillary fringe extending to that depth and/or may be related to volatilization of PCE in the groundwater.

Furthermore, when organic compounds such as PCE exist in soil and they are exposed to groundwater (or leaching from rainwater) they partition between the soil and the water in predictable ways. This partitioning depends on chemical and physical properties of the compound and of the soil. Clayton used the ASTM Risk-Based Corrective Action (RBCA) methodology from Standard E 1739-95 and the Groundwater Services, Inc. RBCA computer program, to determine this partitioning for PCE. Using the conservative Tier I default values for soil parameters, the model predicts that PCE will partition such that the concentration in soil is about 250 times greater than that in groundwater. Therefore, the concentration of PCE in groundwater in MW-6 at the subject site is over 30 times the soil concentration detected at CPT-2. This indicates that the source of PCE in groundwater is not from subsurface soil leaching into the groundwater. Furthermore, as you know, CPT-2 is located approximately 150 feet downgradient from MW-6, where groundwater is known to be contaminated with PCE.

The other VOCs in the soil are likely associated with petroleum hydrocarbons and may be residual concentrations left in soil following the historic excavation. The low soil concentrations, relatively low toxicities, and absence of these compounds in groundwater indicate that these compounds are stable and have not impacted groundwater.

Summary and Conclusions

- Soil samples were collected from native soil adjacent to the former excavation.
- Chlorinated VOCs were not detected in any of the soil samples collected except the one soil sample from boring CPT-2 at 40 feet, which contained very low concentrations of PCE. The PCE in this sample is attributed to contaminated groundwater underlying the sample.
- Soil samples collected by Clayton in September 1999 during the installation of monitoring well MW-6, located approximately 150 feet north of CPT-2, in the northern portion of the former excavation, also did not contain VOCs, with the exception of one sample, at a depth of 50 feet. That sample, which was located in the water-bearing zone, contained 13 ug/kg PCE, and the PCE in soil was attributed to its contact with the groundwater. These results are consistent with results for CPT-2; however, the detection limit for CPT-2 was an order of magnitude lower than that for MW-6.
- The VOCs detected during this investigation and during the installation of MW-6 are substantially lower than their respective USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential soil.
- Information presented in Clayton's *Additional Monitoring Well Installation, Groundwater Sampling, and File Review* report (September 29, 1999) indicated that groundwater underlying the subject property is contaminated with PCE, TCE, and other VOCs, and noted several documented upgradient sources of the contamination.
- All of the soil sample data collected to date from the subject property continue to confirm that there is no onsite source of PCE. The absence of PCE in all of the shallow soil samples collected at the subject property during this investigation is further evidence that the source of PCE contamination in groundwater and subsurface soil has not originated at the subject property, but at an upgradient source.
- With the exception of PCE, none of the compounds found in soil during this assessment have been detected in groundwater during previous groundwater sampling by Clayton and others at the subject property. The other VOCs in the

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soil are likely associated with petroleum hydrocarbons and may be residual concentrations left in soil following the historic excavation. The low soil concentrations and absence of these compounds in groundwater indicate that these compounds pose little concern to groundwater under the subject property.

WHC-Six will continue to monitor groundwater at the subject property, pursuant to the requirements of the RWQCB's November 4, 1999 letter. However, Clayton and WHC-Six believe that the additional soil sampling conducted pursuant to the approved workplan has confirmed cleanup of the bottom and sidewalls of the northern area excavation as requested in the letter. We therefore request that the RWQCB issue a soil closure for this site. Since the real estate transaction is a time-sensitive issue, your prompt attention is appreciated.

Please contact Trevor Donaghu at (925) 426-2625 or Rick Fehler at (925) 426-2608 with any questions. Thank you in advance for your assistance and consideration.

Sincerely,

Trevor A. Donaghu
Senior Project Manager
Real Estate and Financial Services

Jon A. Rosso, P.E.
Director
Environmental Risk Management and Remediation
San Francisco Regional Office

Attachments

1. Figure 1 – Sample Locations
2. CPT Log
3. Analytical Laboratory Reports

cc: WHC-Six Real Estate Limited Partnership, c/o Vera Ingram, Archon Group, L.P.
Brad Burton, Archon Group, L.P.
Steve Campbell, AMB
Richard D. Fehler, Vice President, Clayton Environmental Consultants

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ATTACHMENT 1

FIGURE 1 – SAMPLE LOCATIONS

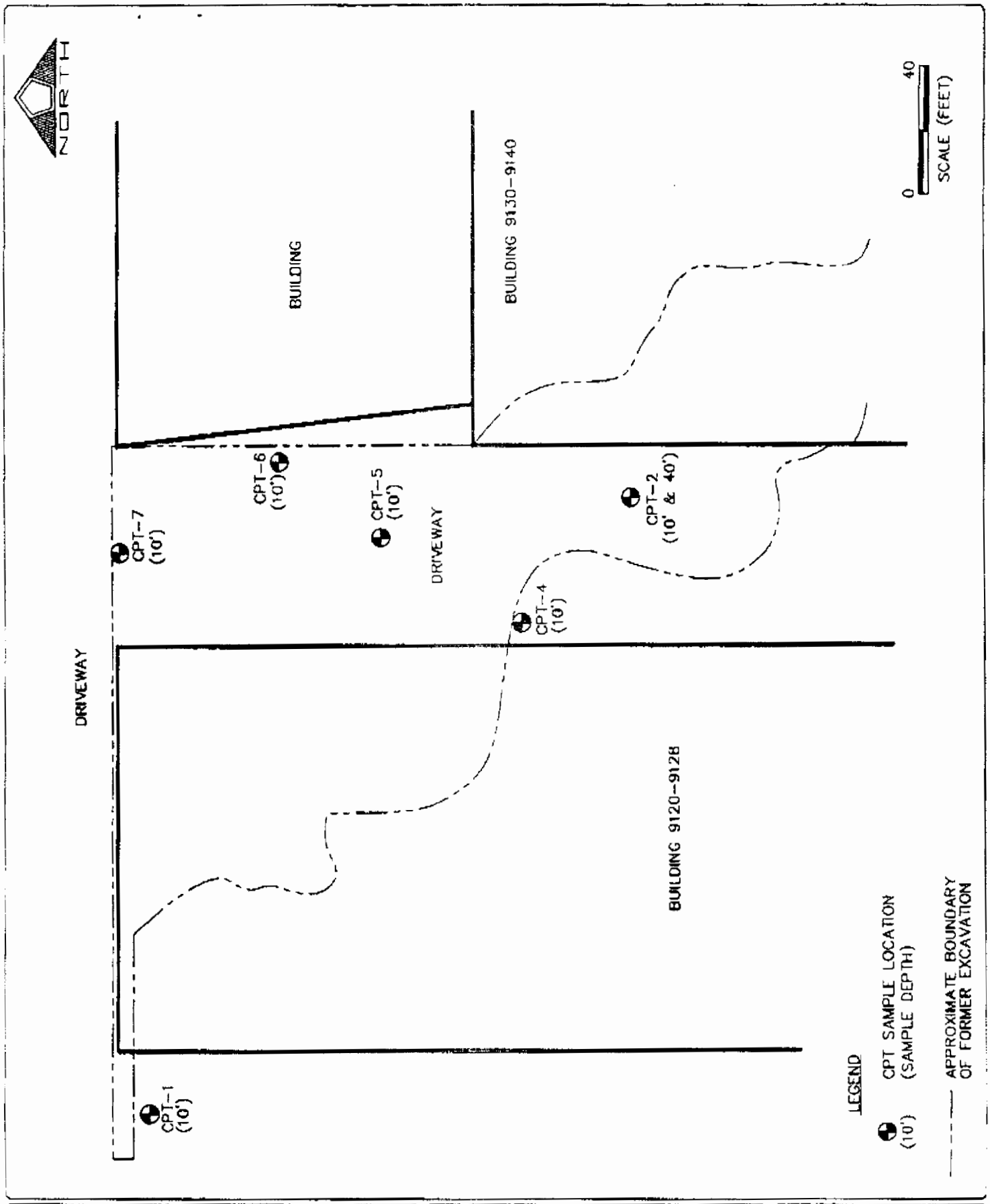

FIGURE	SAMPLE LOCATIONS	CLAYTON	DATE: 11/16/99
1	LOS NIETOS BUSINESS CENTER SANTE FE SPRINGS, CALIFORNIA	3811 SOUTH HARBOR BOULEVARD, SUITE 200 SANTA ANA, CALIFORNIA 92704 PHONE: (714) 431-4100 FAX: (714) 825-0835	DRAWN BY: BRG CHECKED BY: GW PROJECT NO: 70-00302.00.001 CAD NO: 00302002

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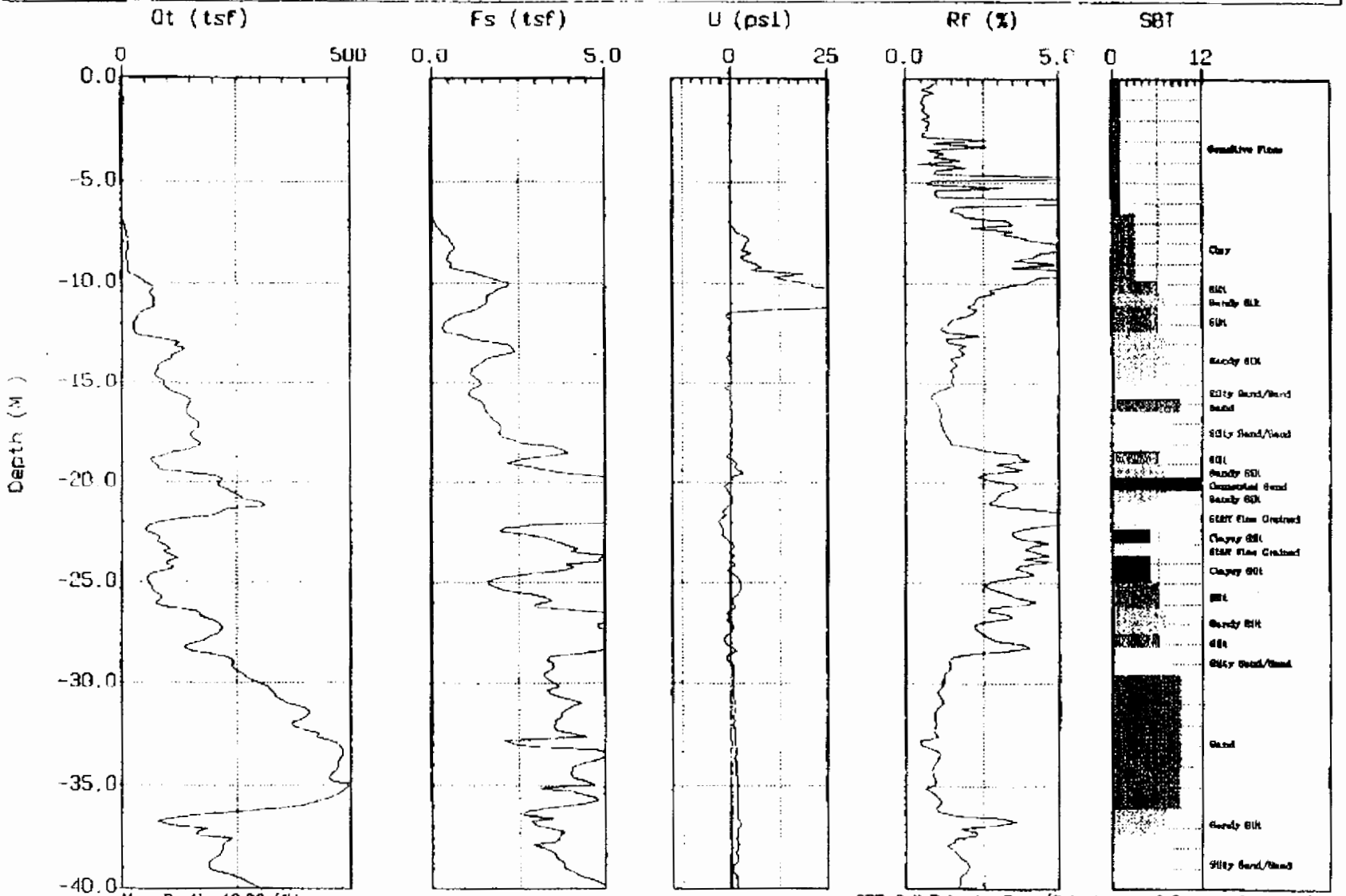
ATTACHMENT 2

CPT LOG

GREGG

CLAYTON

Site : LOS NIETOS BOSSN. PARK Geologist : B.HAWES
Location : CPT-2A Date : 11:12:99 09:02



Max. Depth: 40.03 (ft)

Depth Inc: 0.164 (ft)

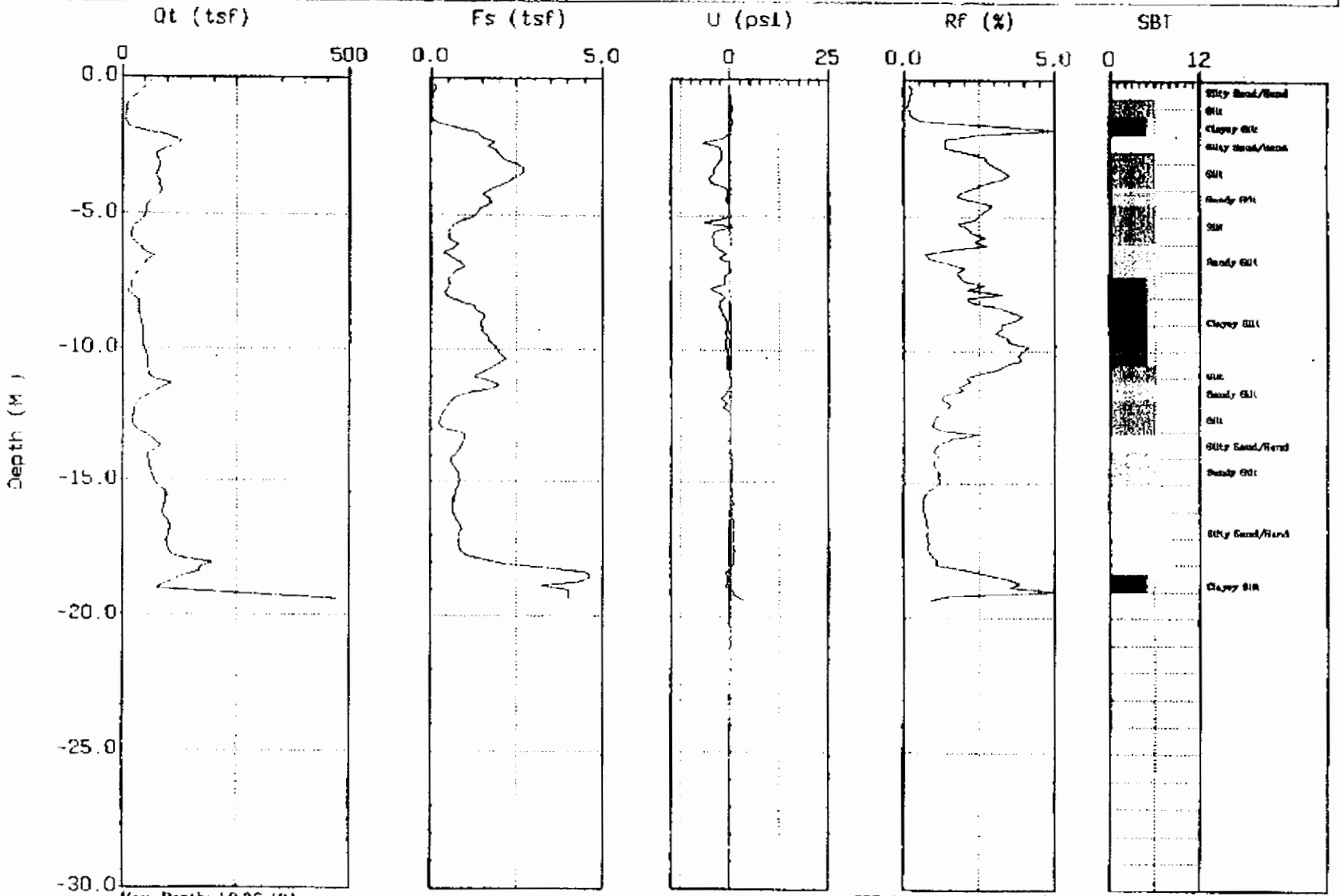
SBT: Soil Behavior Type (Robertson and Campanella 1988)

GREGG

CLAYTON

Site : LOS NIETOS BUSSN.PRK.
Location : CPT-2

Geologist : B.HAWES
Date : 1:12:99 08:36



Max. Depth: 19.36 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson and Campanella 1988)

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ATTACHMENT 3

ANALYTICAL LABORATORY REPORT

Del Mar Analytical

2672 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
8830 South 51st St., Suite B-109, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

LABORATORY REPORT

Prepared For: Clayton Env. Consultants
3611 S. Harbor Blvd., Suite 260
Santa Ana, CA 92704

Attention: Ed Stewart
Project: 70-00302.00.001
Los Nietos Business Center

Sampled: 11/12/99
Received: 11/12/99
Reported: 11/16/99

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

CA ELAP Certificate #1197
AZ DHS License #AZ0428

DEL MAR ANALYTICAL

Fred Haley
Project Manager

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16521 Stratman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
4640 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 260	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-7-10	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01844	Analyzed: 11/16/99
	QC Batch: IK15081S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits)	
Dibromofluoromethane (80-120)	106%
Toluene-d8 (81-117)	104%
4-Bromofluorobenzene (74-121)	99%

DEL MAR ANALYTICAL (ELAP #1197)
Fred Haley
Project Manager

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0890 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 260	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-2-10	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01844S	Analyzed: 11/15/99
	QC Batch: IK15091S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	104%
Toluene-d8 (81-117)	103%
4 Bromofluorobenzene (74-121)	99%

DEL MAR ANALYTICAL (ELAP #1197)
Fred Haley
Project Manager

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Del Mar Analytical

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Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 260	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-2-40	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01846	Analyzed: 11/15/99
	QC Batch: IK15091S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	**p-Isopropyltoluene**	**2.0**	**12**
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	**Naphthalene**	**5.0**	**45**
n-Butylbenzene	**5.0**	**14**	**n-Propylbenzene**	**2.0**	**3.9**
sec-Butylbenzene	**5.0**	**6.3**	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	**Tetrachloroethene**	**2.0**	**4.4**
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	**1,2,4-Trimethylbenzene**	**2.0**	**8.3**
1,2-Dichlorobenzene	2.0	N.D.	**1,3,5-Trimethylbenzene**	**2.0**	**2.0**
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits)	
Dibromofluoromethane (80-120)	103%
Toluene-d8 (81-117)	105%
4-Bromofluorobenzene (74-121)	104%

DEL MAR ANALYTICAL (ELAP #1197)
Fred Haley
Project Manager

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Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 260	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-4-10	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01847	Analyzed: 11/15/99
	QC Batch: IK15091S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropane	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits)	
Dibromofluoromethane (80-120)	105%
Toluene-d8 (81-117)	107%
4-Bromofluorobenzene (74-121)	99%

DEL MAR ANALYTICAL (ELAP #1197)
Fred Haloy
Project Manager

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2630 South 15th St., Suite D-120, Phoenix, AZ 85014 (480) 785-0043 FAX (480) 785-0851

Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 260	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-6-10	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01846	Analyzed: 11/15/99
	QC Batch: IK15091S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	104%
Toluene-d8 (81-117)	105%
4-Bromofluorobenzene (74-121)	98%

DEL MAR ANALYTICAL (ELAP #1197)
Fred Haley
Project Manager

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8436 South 51st St., Suite D-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Clayton Env. Consultants	Client Project ID: 70-00302.00.001	Sampled: 11/12/99
3611 S. Harbor Blvd., Suite 250	Los Nietos Business Center	Received: 11/12/99
Santa Ana, CA 92704	Sample Descript: Soil, CPT-1-10	Extracted: 11/15/99
Attention: Ed Stewart	Lab Number: IK01850	Analyzed: 11/15/99
	QC Batch: IK15091S	Reported: 11/16/99

VOLATILE ORGANICS by GC/MS (EPA 8260B)

Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)	Analyte	Reporting Limit µg/Kg (ppb)	Sample Result µg/Kg (ppb)
Benzene	2.0	N.D.	Ethylbenzene	2.0	N.D.
Bromobenzene	5.0	N.D.	Hexachlorobutadiene	5.0	N.D.
Bromochloromethane	5.0	N.D.	Isopropylbenzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.	p-Isopropyltoluene	2.0	N.D.
Bromoform	5.0	N.D.	Methylene chloride	20	N.D.
Bromomethane	5.0	N.D.	Naphthalene	5.0	N.D.
n-Butylbenzene	5.0	N.D.	n-Propylbenzene	2.0	N.D.
sec-Butylbenzene	5.0	N.D.	Styrene	2.0	N.D.
tert-Butylbenzene	5.0	N.D.	1,1,1,2-Tetrachloroethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.	1,1,2,2-Tetrachloroethane	2.0	N.D.
Chlorobenzene	2.0	N.D.	Tetrachloroethene	2.0	N.D.
Chloroethane	5.0	N.D.	Toluene	2.0	N.D.
Chloroform	2.0	N.D.	1,2,3-Trichlorobenzene	5.0	N.D.
Chloromethane	5.0	N.D.	1,2,4-Trichlorobenzene	5.0	N.D.
2-Chlorotoluene	5.0	N.D.	1,1,1-Trichloroethane	2.0	N.D.
4-Chlorotoluene	5.0	N.D.	1,1,2-Trichloroethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.	Trichloroethene	2.0	N.D.
1,2-Dibromo-3-chloropropane	5.0	N.D.	Trichlorofluoromethane	5.0	N.D.
1,2-Dibromoethane	2.0	N.D.	1,2,3-Trichloropropane	10	N.D.
Dibromomethane	2.0	N.D.	1,2,4-Trimethylbenzene	2.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.	1,3,5-Trimethylbenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.	Vinyl chloride	5.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.	o-Xylene	2.0	N.D.
Dichlorodifluoromethane	5.0	N.D.	m,p-Xylenes	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.			
1,2-Dichloroethane	2.0	N.D.			
1,1-Dichloroethene	5.0	N.D.			
cis-1,2-Dichloroethene	2.0	N.D.			
trans-1,2-Dichloroethene	2.0	N.D.			
1,2-Dichloropropane	2.0	N.D.			
1,3-Dichloropropane	2.0	N.D.			
2,2-Dichloropropane	2.0	N.D.			
1,1-Dichloropropene	2.0	N.D.			
cis-1,3-Dichloropropene	2.0	N.D.			
trans-1,3-Dichloropropene	2.0	N.D.			

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recoveries (Accept. Limits):	
Dibromofluoromethane (80-120)	105%
Toluene-d8 (81-117)	105%
4-Bromofluorobenzene (74-121)	98%

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