ConocoPhillips
76 Broadway
Sacramento, California 95818

September 28, 2007

Mr. Steven Plunkett
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Re: **Additional Soil and Groundwater Investigation Report**
76 Service Station No. 0752
800 Harrison Street
Oakland, California

Dear Mr. Plunkett:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (916) 558-7612.

Sincerely,

Bill Borgh

Bill Borgh
Site Manager – Risk Management and Remediation

Attachment

1590 Solano Way
#A
Concord, CA 94520

925.688.1200 PHONE
925.688.0388 FAX

www.TRCsolutions.com

September 28, 2007

TRC Project No. 126027

Mr. Steven Plunkett
Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

RE: **Additional Soil and Groundwater Investigation Report**
76 Service Station No. 0752
800 Harrison Street
Oakland, California

Dear Mr. Plunkett:

On behalf of ConocoPhillips, TRC submits this report for Additional Soil and Groundwater Investigation Report documenting site investigation activities conducted at the 76 Service Station No. 0752 located at 800 Harrison Street in Oakland, California (Figure 1).

Please call Keith Woodburne at (925) 688-2488 if you have any questions regarding this report.

Sincerely,

Keith Woodburne, P.G.
Senior Project Manager

Enclosure

cc: William Borgh, ConocoPhillips (electronic upload only)

ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION REPORT

76 Service Station No. 0752
800 Harrison Street
Oakland, California

TRC Project No. 126027

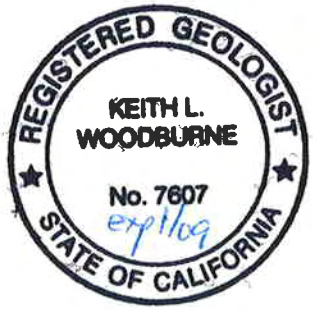
Prepared For:

ConocoPhillips Company
76 Broadway
Sacramento, California

By:

Rachelle Dunn
Senior Staff Geologist

Keith Woodburne P.G.
Senior Project Manager



TRC
1590 Solano Way
Concord, California
(925) 688-1200

September 28, 2007

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1.0 INTRODUCTION

On behalf of ConocoPhillips, TRC submits this report for additional site assessment at 76 Service Station No. 0752, located at 800 Harrison Street in Oakland, California (Figure 1). This work was performed in accordance with the Additional Soil and Groundwater Investigation Work Plan dated March 13, 2006.

The objectives of this assessment were: 1) to further characterize the extent of dissolved-phase hydrocarbons in groundwater to the southeast, west, and southwest; and 2) to assess the potential impacts to deeper water-bearing zones beneath the site, if present.

The scope of work completed during this assessment included the following:

- Advance two onsite deep exploratory borings to evaluate the presence of deeper water-bearing zones and to collect depth-discrete grab groundwater samples using a Cone Penetrometer Testing (CPT) rig equipped with a hydropunch sampling device.
- Advance four offsite exploratory borings to determine the lateral distribution of dissolved-phase hydrocarbons in the shallow water-bearing zone and to collect depth-discrete grab groundwater samples from any deeper water-bearing zone identified in the two onsite borings.
- Installation of up to three offsite monitoring wells. The exact location and screen interval for each monitoring well will be based on analytical results from the depth-discrete groundwater data collected during the hydropunch investigation and those locations and well construction will be confirmed with the Alameda County Health Care Services (ACHCS) prior to rig mobilization.
- Analysis and interpretation of grab groundwater results from the CPT borings to evaluate the need for additional onsite or offsite monitoring wells.
- Preparation of a final technical report documenting the additional assessment activities, including advancement of the CPT borings, grab groundwater sampling procedures, laboratory analytical results, waste characterization, and disposal.

This report documents the additional assessment activities completed between February 5 and 7, 2007 and provides recommendations for additional onsite and offsite monitoring well installations.

2.0 SITE DESCRIPTION

The subject site contains a 76 service station located on the eastern corner of Harrison Street and 8th Street in Oakland, California (Figure 2). The site is located northeast and across 8th Street from a former Shell service station that is located adjacent to and northeast of a currently closed Arco service station. In addition, a gasoline and diesel service station referred to as "Mandarin Auto Service" is located east-southeast of the 76 service station. The current site facilities include a station building, two dispenser islands, and underground storage tanks (USTs).

Currently, there are four groundwater monitoring wells located onsite and four groundwater monitoring wells located offsite, installed within the shallow water-bearing zone.

2.1 Geology and Hydrogeology

The site is underlain by Quaternary-age dune sand deposits referred to as the Merritt Sand. The Merritt Sand is described as typically consisting of loose, well-sorted, fine to medium-grained sand with silt. This sand apparently reaches a maximum depth of approximately 50 feet below grade (fbg) in the Oakland area. (Gettler Ryan, 2001).

Based on the results of Kaprealian Engineering, Inc. (KEI) subsurface studies, the site is underlain by fill materials to a depth of between 1 and 7 fbg. The fill is in turn underlain by unconsolidated sediments to the maximum depth explored of 50 fbg.

The deposits underlying the fill consist of fine-grained sand with silt. This sand sequence is in turn underlain by silty to sandy clay, clayey sand, and clayey or sandy silt, beginning at a depth of between 30 fbg and extending to between 45 and 50 fbg. Beneath the clay sequence between 45 and 50 fbg in select areas is a sand sequence.

Depth to groundwater has been encountered between 16 and 24 fbg. The nearest surface waters are Lake Merritt and the Oakland Estuary which are located approximately 0.5 miles from the site.

The most recent monitoring and sampling event was conducted at the site on March 27, 2007. The measured depth to groundwater on that date ranged from 16.73 to 18.84 feet below the tops of the well casings (TOC). The groundwater flow direction on was toward the southwest with a hydraulic gradient of 0.008 ft/ft. The historical groundwater flow direction has been to the southwest (Figure 3).

3.0 SITE BACKGROUND

November 1990: KEI initial fieldwork was conducted when two USTs and a waste oil tank were removed from the site. The tanks were made of steel, and no apparent holes or cracks were observed in the fuel tanks; however, one ⅛ -inch square hole was observed in the waste oil tank. KEI collected an additional soil sample from the fuel tank pit at a depth of approximately 19 fbg.

December 1990: KEI returned to the site to collect soil samples from beneath the pump islands excavation.

January 1991: At the request of the ACHCS, KEI returned to the site in order to collect one additional soil sample from the waste oil tank pit. After sampling, the waste oil tank pit was excavated to the sample depth of 9.5 fbg.

May 1991: Three monitoring wells and two exploratory borings were installed at the site. The monitoring wells were drilled and completed to total depths ranging from 33 to 35 fbg. The exploratory borings were each drilled to total depths of 23 fbg. Groundwater was encountered at depths ranging from about 22.5 to 24 fbg during drilling.

Based on the analytical results, a monthly groundwater monitoring and quarterly groundwater-sampling program was implemented.

September-October 1992: Three additional monitoring wells were installed to further delineate the extent of groundwater contamination. These wells were drilled to total depths ranging from 32 to 33 fbg. Groundwater was encountered at depths ranging from 21.5 to 23 fbg.

April 1993: Two additional monitoring wells were installed in the vicinity of the site. These monitoring wells were drilled to a total depth of 31 to 33 fbg. Groundwater was encountered at depths of 21 to 21.5 fbg. Based on the analytical results of all of the soil samples collected, KEI concluded that the horizontal extent of the soil contamination at the site had been defined, and that the contamination was limited to the areas beneath the fuel tanks and the southernmost pump island. Based on the groundwater monitoring data collected and evaluated through April of 1993, the groundwater flow direction had been consistently to the southwest or south-southwest. In addition, no free product or sheen had been detected in any well through April of 1993. KEI recommended quarterly monitoring frequency.

February 1994: Ten exploratory borings were completed onsite (EB-3 through EB-12) by KEI. The borings were drilled to a maximum total depth of 20.5 fbg. TPH-g and Benzene were detected in soil at a maximum of 21,000 mg/kg and 7.0 mg/kg respectively, in EB-8 at 18.5 fbg. No groundwater samples were collected from the exploratory borings.

October 2003: Site environmental consulting responsibilities were transferred to TRC.

4.0 SITE INVESTIGATION ACTIVITIES

Under the direct supervision of a TRC field geologist, Gregg In Situ, Inc. of Martinez, California (Gregg) advanced exploratory borings at two onsite and four offsite locations using a CPT rig for the purpose of assessing the lateral and vertical extent of dissolved-phase hydrocarbons, as well as benzene, toluene, ethyl benzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), and other selected volatile organic compounds (VOCs) in groundwater. The CPT boring locations are shown in Figure 2.

4.1 Pre-Field Activities

Underground Services Alert (USA) was notified at least two days prior to field activities to mark underground utilities near proposed boring locations. In addition, a private utility locating service was contracted to check and clear proposed boring locations prior to drilling. Drilling permits were obtained from Alameda County Public Works and excavation permits were obtained from the City of Oakland for the offsite borings (Appendix A).

A site and job specific health and safety plan was prepared for the site that promotes personnel safety and preparedness during the planned field activities. Prior to beginning field activities each day, a "tailgate" safety meeting was conducted with all exclusion zone workers to discuss the health and safety issues and concerns related to the specific scope of work. A copy of the health and safety plan was maintained onsite throughout the field investigation.

4.2 Hydropunch Groundwater Investigation

Four onsite and eight offsite grab groundwater samples were collected during this investigation using the CPT rig equipped with a hydropunch sampling devise for depth-discrete sample collection. At each of the boring locations three separate co-located borings were advanced. The first boring at each location was advanced to a total depth of approximately 50 fbg to determine soil behavior type using the integrated electronic cone system of the CPT rig. Data obtained from the initial logging run was then used to identify potential shallow and deep water-bearing zones for subsequent depth-discrete groundwater sampling. The second and third co-located borings were advanced to the desired depths within the shallow and deeper water-bearing zones determined from analysis of the stratigraphic soil behavior logs (Appendix B). The use of separate co-located borings for each depth-discrete groundwater sample prevents the potential for cross-contamination during boring advancement.

Grab groundwater samples were attempted at two potential water-bearing zones identified at depths of between 21 and 30 fbg (shallow zone) and 42 and 50 fbg (deeper zone). Grab groundwater samples were obtained from the shallow and deeper water-bearing zones at each of the six boring locations (CPT-1 through CPT-6).

Four onsite and eight offsite grab groundwater samples were submitted to a State-certified laboratory for analysis. Groundwater samples were analyzed for total purgeable petroleum hydrocarbons (TPPH), BTEX, and fuel oxygenates including MTBE and ethanol by EPA Method 8260B.

4.3 Groundwater Analytical Results

Shallow Water-Bearing Zone
Hydrocarbon compounds were detected in the shallow water-bearing zone at three of the six boring locations (CPT-2, CPT-4, and CPT-5).

TPPH were detected in the shallow water-bearing zone at three of the six boring locations. TPPH were detected at a maximum concentration of 40,000 micrograms per liter (µg/L) in the sample collected from CPT-2 between the depths of 21 and 25 fbg. Benzene was detected in the shallow water-bearing zone at two of the six boring locations. Benzene was detected at a maximum concentration of 270 µg/L in the sample collected from CPT-5 between the depths of 24 and 26 fbg. Toluene, ethyl benzene and total xylenes were also detected in the shallow water-bearing zone at maximum concentrations of 10 µg/L (CPT-5), 690 µg/L (CPT-2), and 840 µg/L (CPT-2), respectively. MTBE was detected in the shallow water-bearing zone in two of the six boring locations. MTBE was detected at a maximum concentration of 74,000 µg/L in the sample collected from CPT-5 at depths between 24 and 26 fbg.

Deeper Water-Bearing Zone
Hydrocarbon compounds were detected in the deeper water-bearing zone at four of the six boring locations (CPT-1, CPT-2, CPT-5, and CPT-6).

TPPH were detected in the deeper water-bearing zone at four of the six boring locations. TPPH were detected at a maximum concentration of 110 µg/L in the sample collected from CPT-5 between the depths of 45 and 48 fbg. Benzene, ethyl benzene, and total xylenes were detected in

the deeper water-bearing zone at only one of the six boring locations (CPT-2). Benzene, ethyl benzene, and total xylenes were detected at concentrations of 3.6 µg/L, 3.1 µg/L, and 5.9 µg/L, respectively, in the sample collected from CPT-2 between the depths of 47 and 50 fbg. Toluene was detected in the deeper water-bearing zone at two of the six boring locations. Toluene was detected at a maximum concentration of 0.60 µg/L in the sample collected from CPT-1 between the depths of 47 and 50 fbg. MTBE was detected in the deeper water-bearing zone at two of the six boring locations. MTBE was detected at a maximum concentration of 110 µg/L in the sample collected from CPT-5 between the depths of 45 and 48 fbg.

No petroleum hydrocarbons or fuel oxygenates were detected in hydropunch groundwater samples from the shallow or deep zone collected cross-gradient to the Site (CPT-3).

Analytical results from the depth-discrete grab groundwater samples are presented in Table 1. Copies of the laboratory analytical reports and chains of custody documentation are provided in Appendix C.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The concentrations of TPPH, BTEX, and MTBE in the shallow hydropunch groundwater sample collected in borings CPT-2 and CPT-5 are higher than concentrations observed historically in monitoring wells. Higher concentrations are often reported in grab groundwater samples than would typically be reported from fully developed monitoring well samples. However, the presence of groundwater impacts at these two boring locations is consistent with the overall plume as defined by the current monitoring well network.

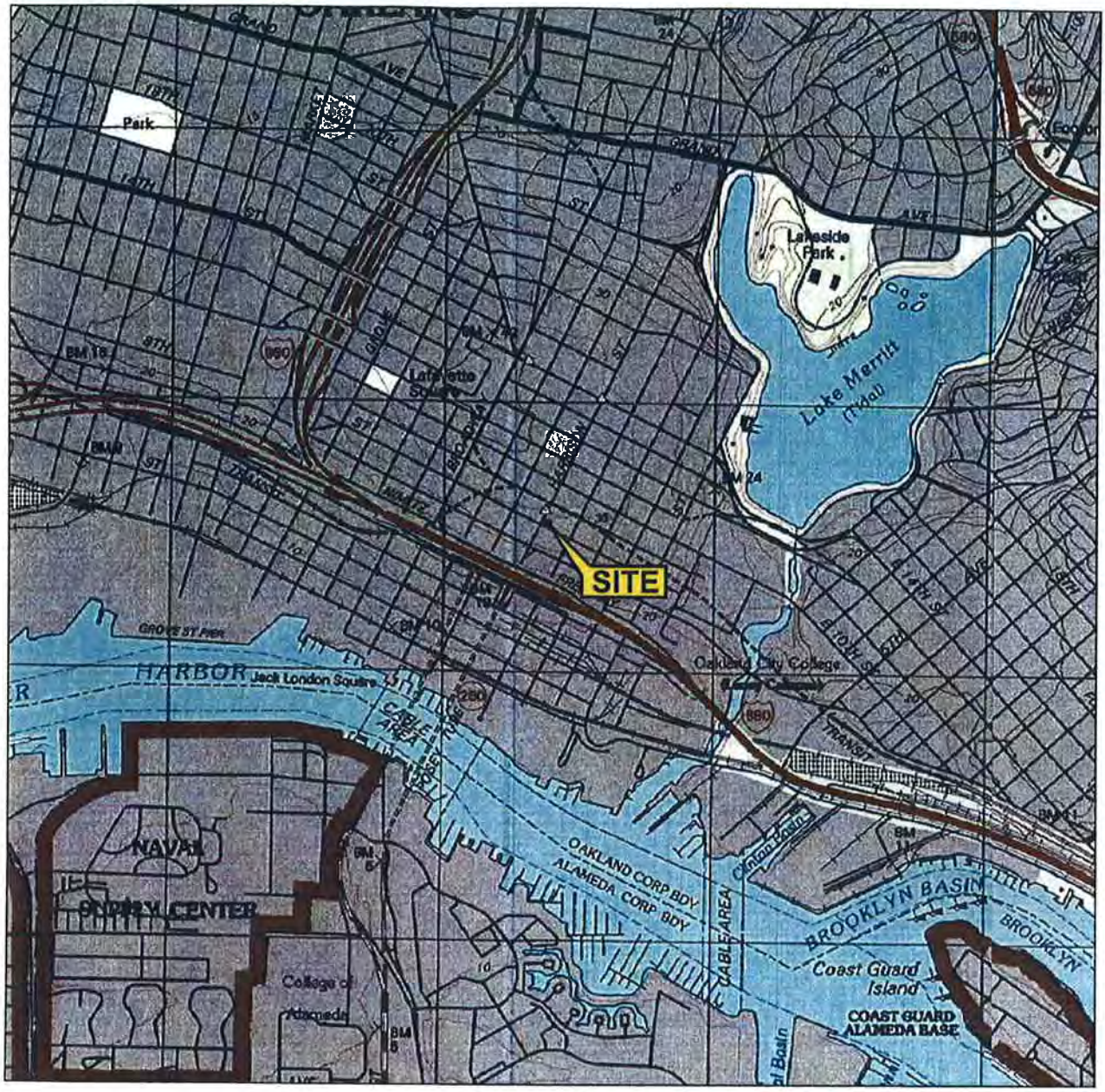
Petroleum hydrocarbons or fuel oxygenates were not detected, or were detected at low concentrations, in borings CPT-1, CPT-3, CPT-4, and CPT-6. These low to non-detect concentrations in both the shallow and deeper water-bearing zones beneath the Site indicate that groundwater impacts are have migrated, both laterally and vertically, beyond the current monitoring well network. However, the lateral migration is restricted to the established downgradient (southwest to south-southwest) direction, consistent with current and historically reported groundwater flow directions (Figure 3). Cross-gradient migration has not been observed and this is supported by the non-detect concentrations reported in boring CPT-3 (Figure 2). Vertical migration of groundwater impacts into the apparent deeper water-bearing zone is evident based on the deeper sample results from onsite borings CPT-2 and offsite boring CPT-5.

In order to confirm the presence of groundwater impacts in the deeper water-bearing zone onsite and offsite, directly downgradient of the Site, and to provide future downgradient monitoring within the shallow water-bearing zone, TRC recommends installation of four additional monitoring wells. One shallow zone monitoring well is proposed near the location of CPT-4 to provide additional downgradient plume definition. Three deeper zone monitoring wells are also proposed; one installed onsite in the vicinity of CPT-2 and two installed on the south side of 8th Street near existing shallow zone wells MW-7 and MW-8.

The three deeper zone wells will provide additional data on possible groundwater impacts to the apparent deeper water-bearing zone beneath the site, identified at depths of between approximately 45 to 50 fbg. In addition, the three deep zone wells will allow for a proper

hydrogeological evaluation of the deep zone flow direction and possible hydraulic connection between the shallow and deeper water-bearing zones. The proposed well locations are shown on Figure 2.

FIGURES



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SOURCE:

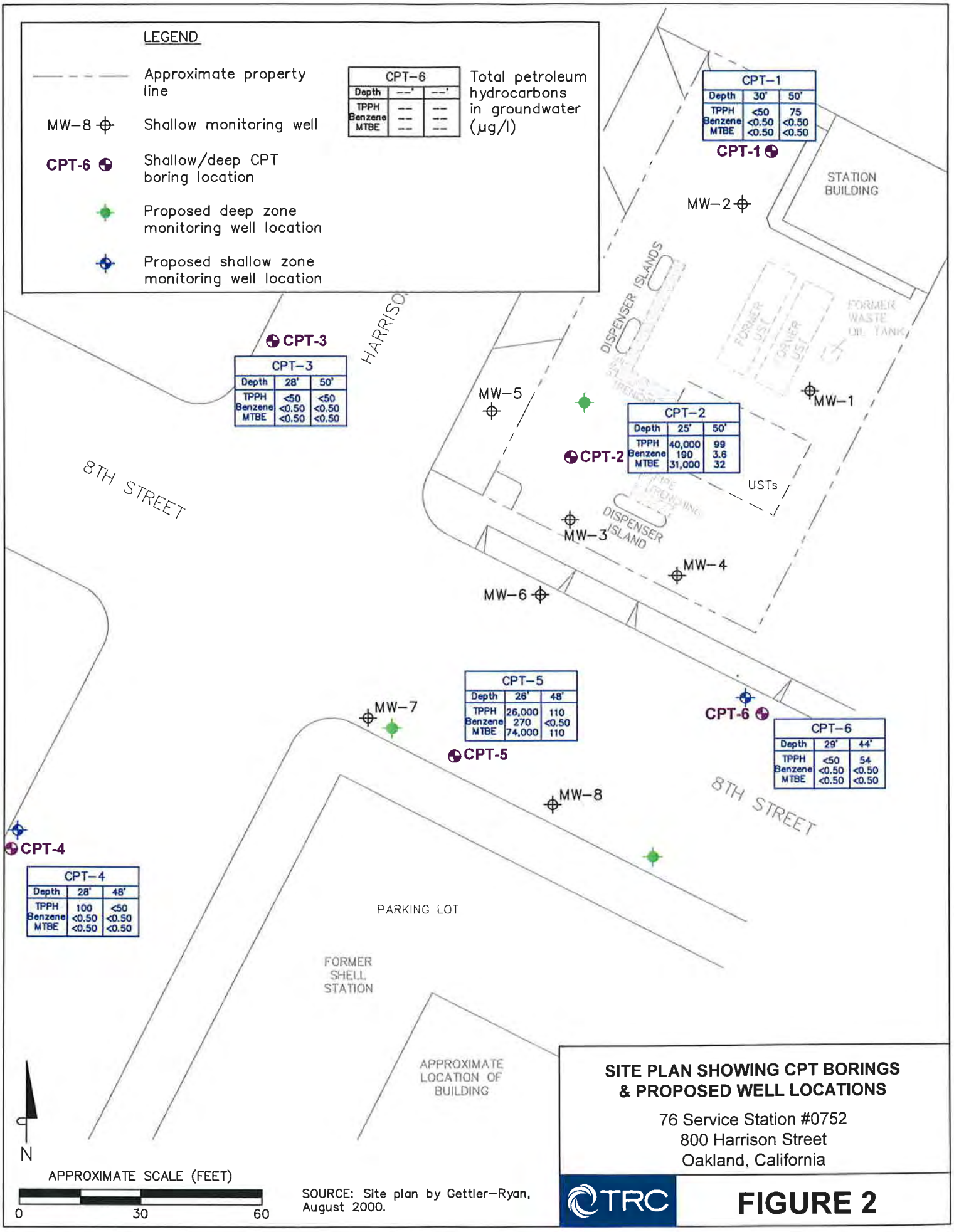
United States Geological Survey
7.5 Minute Topographic Maps:
Oakland East and Oakland West
Quadrangles, California

VICINITY MAP

76 Service Station #0752
800 Harrison Street
Oakland, California

TRC

FIGURE 1



SOURCE: Site plan by Gettler-Ryan, August 2000.

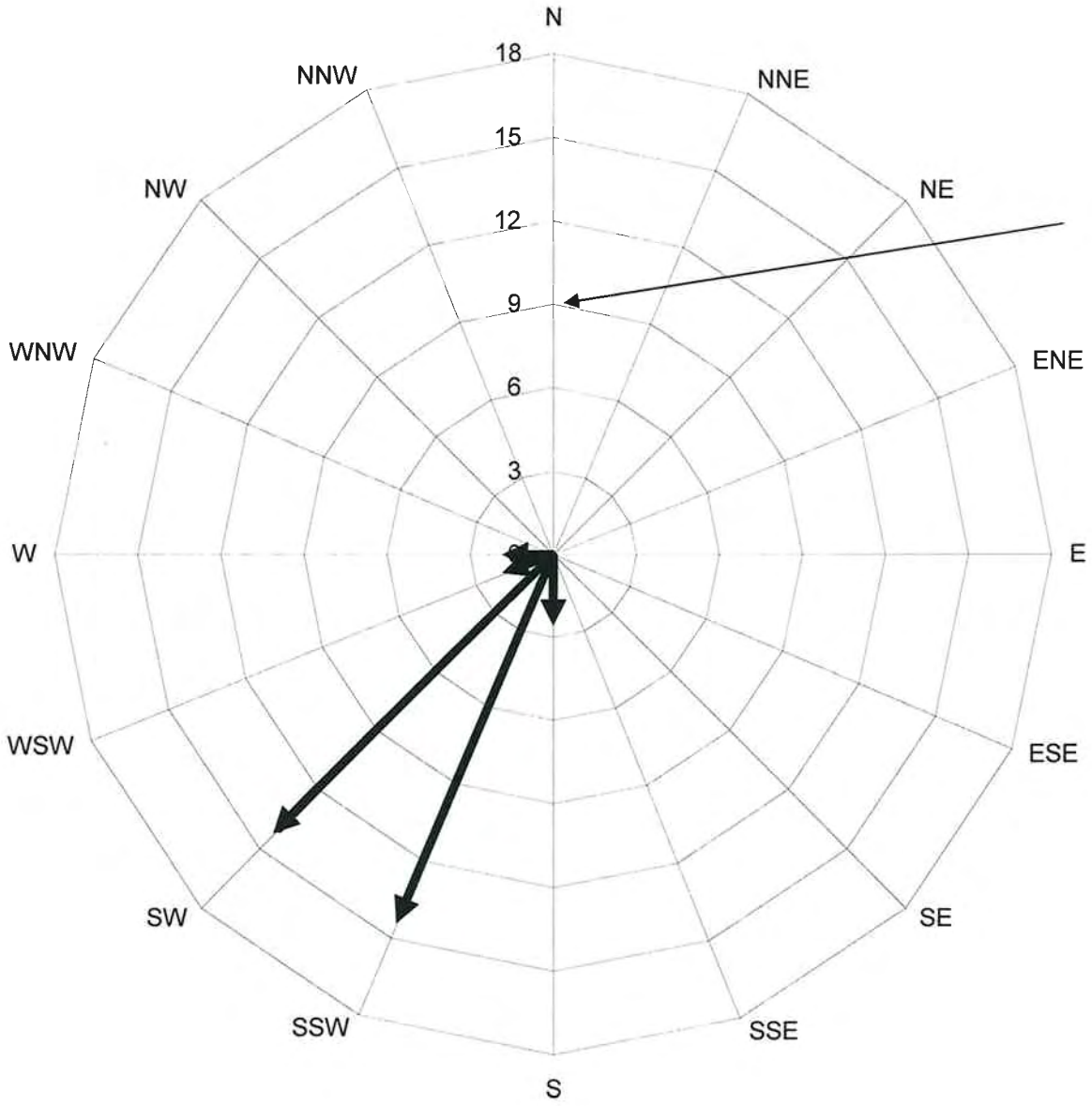
SITE PLAN SHOWING CPT BORINGS & PROPOSED WELL LOCATIONS

76 Service Station #0752
800 Harrison Street
Oakland, California

TRC

FIGURE 2

Figure 3
Historical Groundwater Flow Directions
for Tosco (76) Service Station No. 0752
January 1994 through March 2007



Number of monitoring events in which groundwater was reported to flow in a particular direction.

TABLE

Table 1
GRAB GROUNDWATER ANALYTICAL RESULTS
76 Station #0752
800 Harrison Street, Oakland, CA

Sample ID	Date Sampled	Sample Interval (fbg)	TPPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TAME	TBA	DIPE	ETBE	Ethanol
			Concentrations in micrograms per liter (µg/L)										
CPT-1 @ 30'	2/7/2007	28-30	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-1 @ 50'	2/7/2007	47-50	**75**	<0.50	**0.60**	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-2 @ 25'	2/7/2007	21-25	**40,000**	**190**	<25	**690**	**840**	**31,000**	<25	**5,500**	<25	<25	<12,000
CPT-2 @ 50'	2/7/2007	47-50	**99**	**3.6**	**0.57**	**3.1**	**5.9**	**32**	<0.50	<10	<0.50	<0.50	<250
CPT-3 @ 28'	2/6/2007	26-28	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-3 @ 50'	2/6/2007	47-50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-4 @ 28'	2/5/2007	26-28	**100**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-4 @ 48'	2/5/2007	45-48	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-5 @ 26'	2/5/2007	24-26	**26,000**	**270**	**10**	**2.3**	**20**	**74,000**	**56**	**12,000**	<0.50	**1.0**	<250
CPT-5 @ 48'	2/5/2007	45-48	**110**	<0.50	<0.50	<0.50	<0.50	**110**	<0.50	<10	<0.50	<0.50	<250
CPT-6 @ 29'	2/6/2007	27-29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
CPT-6 @ 44'	2/6/2007	42-44	**54**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250

Notes:

All constituents anaylzed by EPA method 8260B

TPPH = total purgable petroleum hydrocarbons (C6-C12)
MTBE = methyl teriary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
µg/L = micrograms per liter
fbg = feet below grade

APPENDIX A

DRILLING AND EXCAVATION PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 01/18/2007 By jamesy

Permit Numbers: W2007-0068
Permits Valid from 02/01/2007 to 02/09/2007

Application Id:	1168448839529	**City of Project Site:** Oakland
Site Location:	800 Harrison Street and surrounding streets	
Project Start Date:	02/01/2007	**Completion Date:** 02/09/2007
Applicant:	TRC - Jeremy Kearns 1590 Solano Way Suite A, Concord, CA 94520	**Phone:** 925-688-2487
Property Owner:	Company ConocoPhillips 76 Broadway, Sacramento, CA 95818	**Phone:** --
Client:	Company ConocoPhillips 76 Broadway, Sacramento, CA 95818	**Phone:** --
Contact:	Jeremy Keanrs	**Phone:** 925-688-2487 **Cell:** 925-260-3495

	Total Due:	$200.00
Receipt Number: WR2007-0026	**Total Amount Paid:**	$200.00
Payer Name : TRC Solutions Inc.	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 18 Boreholes
Driller: GREGG DRILLING AND TESTING - Lic #: 485165 - Method: CPT **Work Total: $200.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2007-0068	01/18/2007	05/02/2007	18	1.50 in.	50.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 at least five (5) working days prior to

starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX A

DRILLING AND EXCAVATION PERMITS

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 HARRISON ST Parcel# 001 -0185-013-00 Appl# X0700121

Descr soil boring N of 8th St on Harrison Permit Issued 01/25/07

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	--License Classes--
Owner	TOSCO CORPORATION				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	TRC LOWNEY/J KEARNS		(925)260-3495		
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$414.25 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh

ADDRESS:

JOB SITE

DIST:

Date: 01/25/07 Amt Paid: $1,931.25
By: SKJ Register R03 Receipt# 113992

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

2 of 8"

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X0700121 *	900 HARRISON ST.

APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER
1/30/07	2/9/07	(Permit not valid without 24-Hour number) (925) 260-3495

CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #
C57 # 485165	585033

ATTENTION:

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- **48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.**

3- **48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # BB1060214 Company Name GREGG DRILLING & TESTING

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ ☐ Agent for ☐ Contractor ☐ Owner 1/25/07

Signature of Permittee Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

forms/ops/excavate.pg2 (04/98)

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 ,• Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 HARRISON ST Parcel# 001 -0185-013-00 Appl# OB070101

block traffic on Harrison and 8th St per approved TCP Permit Issued 01/25/07
dates are not consecutive: Jan 30, Feb 01, 02, 05
soil boring N of 8th St on Harrison

Nbr of days: 4 Linear feet: 200
Effective: 01/30/07 Expiration: 02/05/07

SHORT TERM NON-METERED

		Applcnt	Phone#	Lic#	--License Classes--
Owner	TOSCO CORPORATION				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	TRC LOWNEY/J KEARNS		(925)260-3495		
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$620.80 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$480.00	Permit
$.00	Process	$51.40	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$28.40	Tech Enh

JOB SITE

ADDRESS:

DIST:

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 1/25/07

Issued by: _____ _____

Date: 01/25/07 Amt Paid: $1,931.25
By: SKJ Register R03 Receipt# 113992

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 HARRISON ST Parcel# 001 -0185-013-00 Appl# OB070102

block Meters HA-801;-803; 8-270;-268 plus two at metered rates NOTE: 3 spaces no fee ref X0700121/-122/-123 dates are not consecutive: Jan 30, Feb 01, 02, 05 thru 09

Permit Issued 01/25/07

Nbr of days: 8
Effective: 01/30/07

Nbr of meters: 3
Expiration: 02/09/07

SHORT TERM METERED

		Applcnt	Phone#	Lic#	--License Classes--
Owner	TOSCO CORPORATION				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	TRC LOWNEY/J KEARNS		(925)260-3495		
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$896.20 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$720.00	Permit
$.00	Process	$74.20	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$41.00	Tech Enh

ADDRESS:

DIST:

JOB SITE

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 1/25/07

Issued by: _____

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 HARRISON ST Parcel# 001 -0185-013-00 Appl# X0700123

Descr soil boring on 8th St Permit Issued 01/25/07

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	--License Classes--
Owner	TOSCO CORPORATION				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	TRC LOWNEY/J KEARNS		(925)260-3495		
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$414.25	TOTAL FEES PAID AT ISSUANCE		
$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh

ADDRESS:

DIST:

JOB SITE

Date: 01/25/07 Amt Paid: $2,759.75
By: SKJ Register R03 Receipt# 113993

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

On ~~Hegenberger~~ 8th St

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X 0 7 0 0 1 2 3	* 800 HARRISON ST
APPROX. START DATE: 1/30/07 / APPROX. END DATE: 2/9/07	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number): (925) 260-5495
CONTRACTOR'S LICENSE # AND CLASS: ~~585033~~ C57 # 485165	CITY BUSINESS TAX #: 585033

ATTENTION:

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- **48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.**

3- **48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # BB1060261 Company Name GREGG DRILLING & TESTING

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

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X _____ ☑ Agent for ☐ Contractor ☐ Owner — Date 1/25/07
Signature of Permittee

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 HARRISON ST Parcel# 001 -0185-013-00 Appl# X0700122

Descr soil boring S of 8th St on Harrison Permit Issued 01/25/07

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

		Applcnt	Phone#	Lic#	--License Classes--
Owner	TOSCO CORPORATION				
Contractor	GREGG DRILLING & TESTING, INC.	X	(925)313-5800	485165	C57
Arch/Engr					
Agent	TRC LOWNEY/J KEARNS		(925)260-3495		
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553				

$414.25 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$300.00	Permit
$.00	Process	$34.30	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$18.95	Tech Enh

ADDRESS:

DIST:

JOB SITE

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

5 of 8"

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X 0 7 0 0 1 2 2 *	800 HARRISON ST
APPROX. START DATE: 1/30/07 / APPROX. END DATE: 2/9/07	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number): (925) 260-3495
CONTRACTOR'S LICENSE # AND CLASS: C57 # 485165	CITY BUSINESS TAX #: 585033

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☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

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☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

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Policy # BB1046261 Company Name GREGG DRILLING & TESTING

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

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X _____ ☐ Agent for ☐ Contractor ☐ Owner — Date 1/25/07

Signature of Permittee

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

forms/ops/excavate.pg2 (04/98)

APPENDIX B

CPT SITE INVESTIGATION REPORT (GREGG DRILLING)

GREGG IN SITU, INC.

GEOTECHNICAL AND ENVIRONMENTAL INVESTIGATION SERVICES

February 12, 2007

TRC
Attn: Keith Woodborne
1590 Solano Way, Suite A
Concord, California 94520

Subject: CPT Site Investigation
76 Service Station #0752
Oakland, California
GREGG Project Number: 07-036MA

Dear Mr. Woodborne:

The following report presents the results of GREGG Drilling & Testing's Cone Penetration Test investigation for the above referenced site. The following testing services were performed:

1	Cone Penetration Tests	(CPTU)	☒
2	Pore Pressure Dissipation Tests	(PPD)	☒
3	Seismic Cone Penetration Tests	(SCPTU)	☐
4	Resistivity Cone Penetration Tests	(RCPTU)	☐
5	UVIF Cone Penetration Tests	(UVIFCPTU)	☐
6	Groundwater Sampling	(GWS)	☒
7	Soil Sampling	(SS)	☐
8	Vapor Sampling	(VS)	☐
9	Vane Shear Testing	(VST)	☐
10	SPT Energy Calibration	(SPTE)	☐

A list of reference papers providing additional background on the specific tests conducted is provided in the bibliography following the text of the report. If you would like a copy of any of these publications or should you have any questions or comments regarding the contents of this report, please do not hesitate to contact our office at (925) 313-5800.

Sincerely,
GREGG Drilling & Testing, Inc.

Mary Walden
Operations Manager

Cone Penetration Test Sounding Summary

-Table 1-

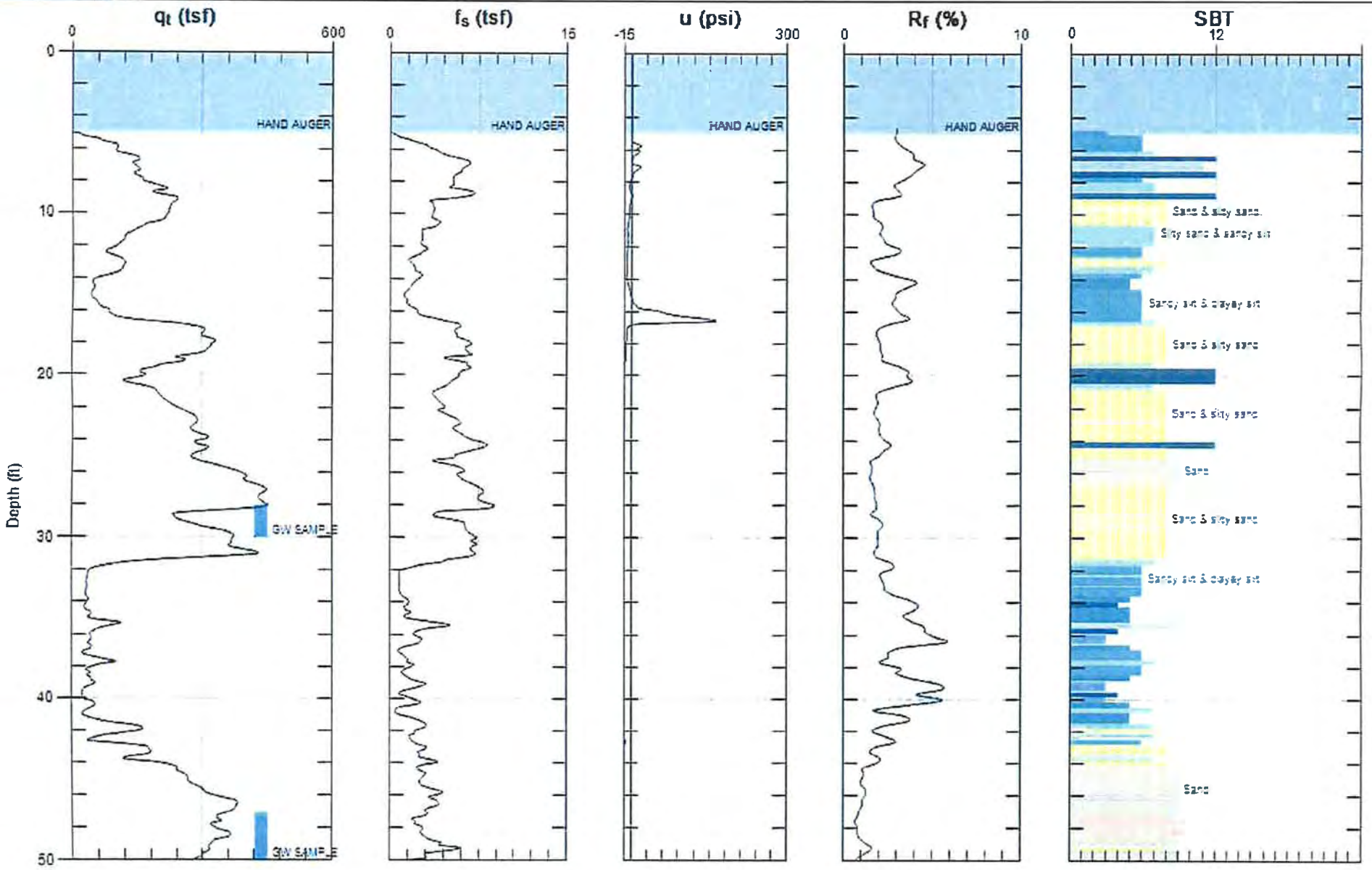
CPT Sounding Identification	Date	Termination Depth (Feet)	Depth of Groundwater Samples (Feet)	Depth of Soil Samples (Feet)	Depth of Pore Pressure Dissipation Tests (Feet)
CPT-01	2/07/07	50	30, 50	-	-
CPT-02	2/07/07	50	25, 50	-	27.9
CPT-03	2/06/07	50	28, 50	-	-
CPT-04	2/05/07	50	28, 48	-	-
CPT-05	2/05/07	50	26, 48	-	-
CPT-06	2/06/07	50	29, 44	-	-

GREGG

TRC

Site: 76 SERVICE STA. #0752 Engineer: K.WOODBORNE

Sounding: CPT-01 Date: 2/7/2007 12:12



Max. Depth: 50.200 (ft)

Avg. Interval: 0.328 (ft)

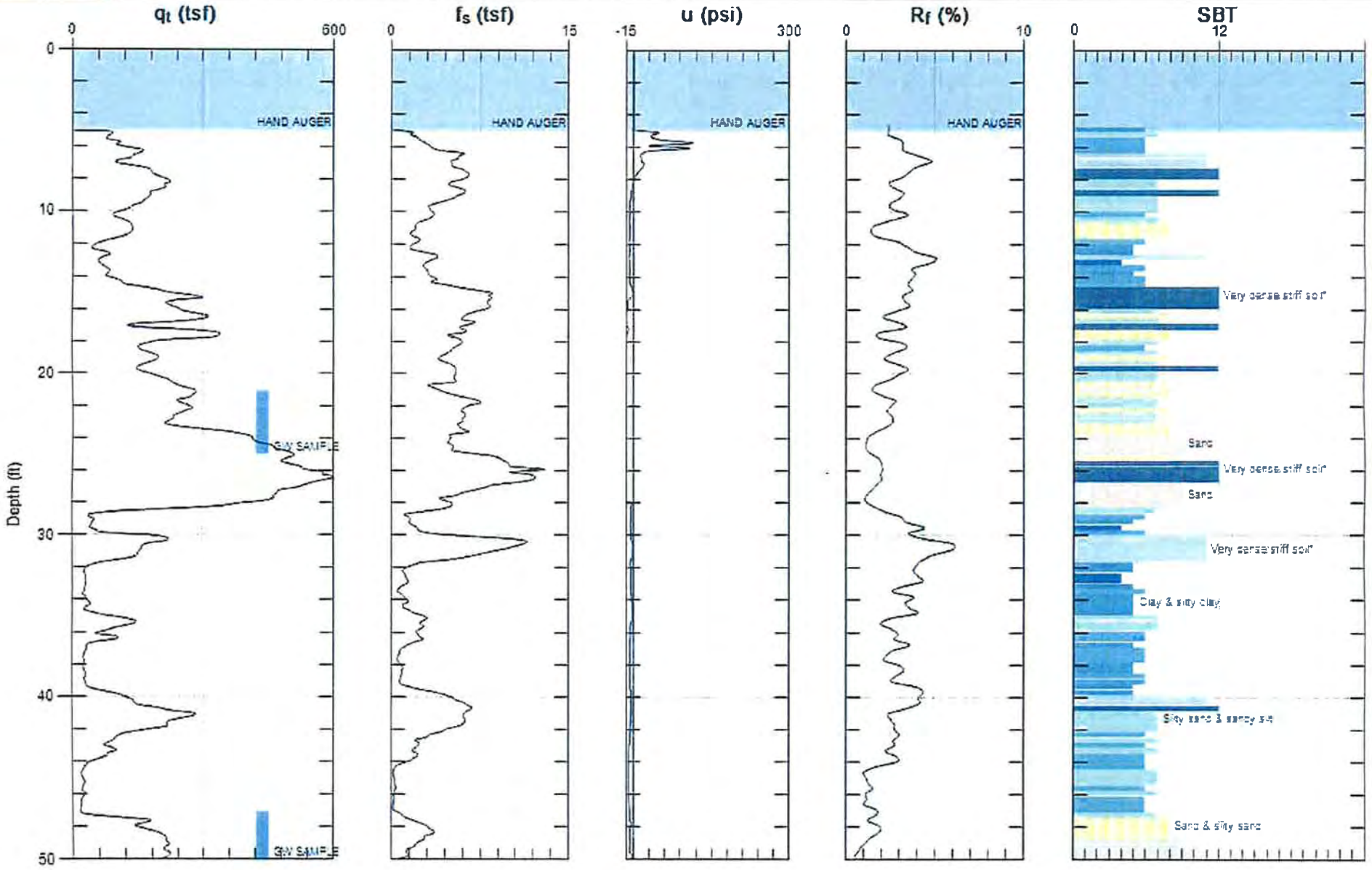
SBT: Soil Behavior Type (Robertson 1990)

GREGG

TRC

Site: 76 SERVICE STA. #0752 **Engineer: K.WOODBORNE**

Sounding: CPT-02 **Date: 2/7/2007 07:25**



Max Depth: 50.200 (ft)
Avg Interval: 0.328 (ft)

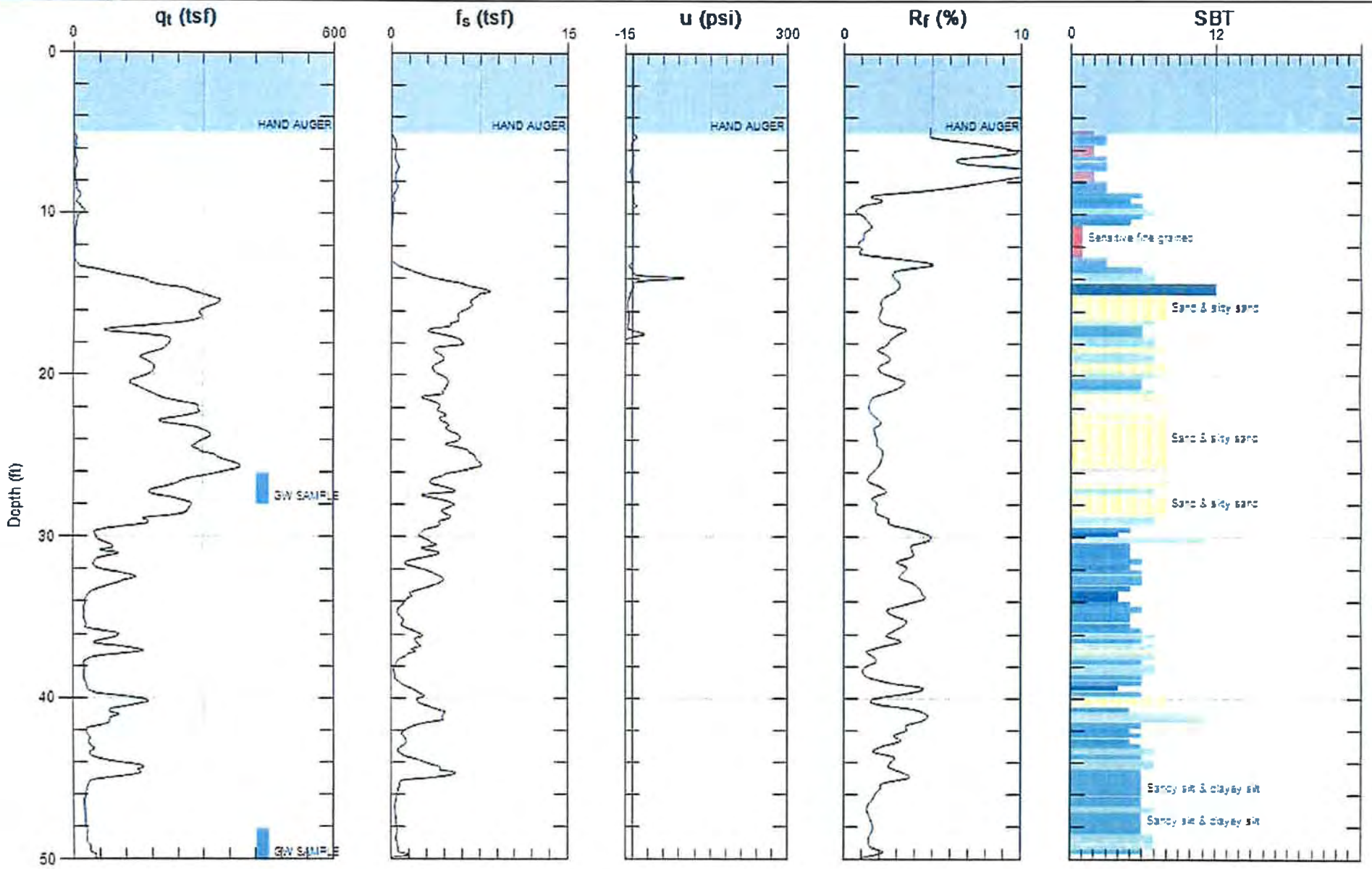
SBT Soil Behavior Type (Robertson 1990)

GREGG

TRC

Site: 76 SERVICE STA. #0752 Engineer: K.WOODBORNE

Sounding: CPT-03 Date: 2/6/2007 11:06



Max Depth: 50.030 (ft)
Avg Interval: 0.328 (ft)

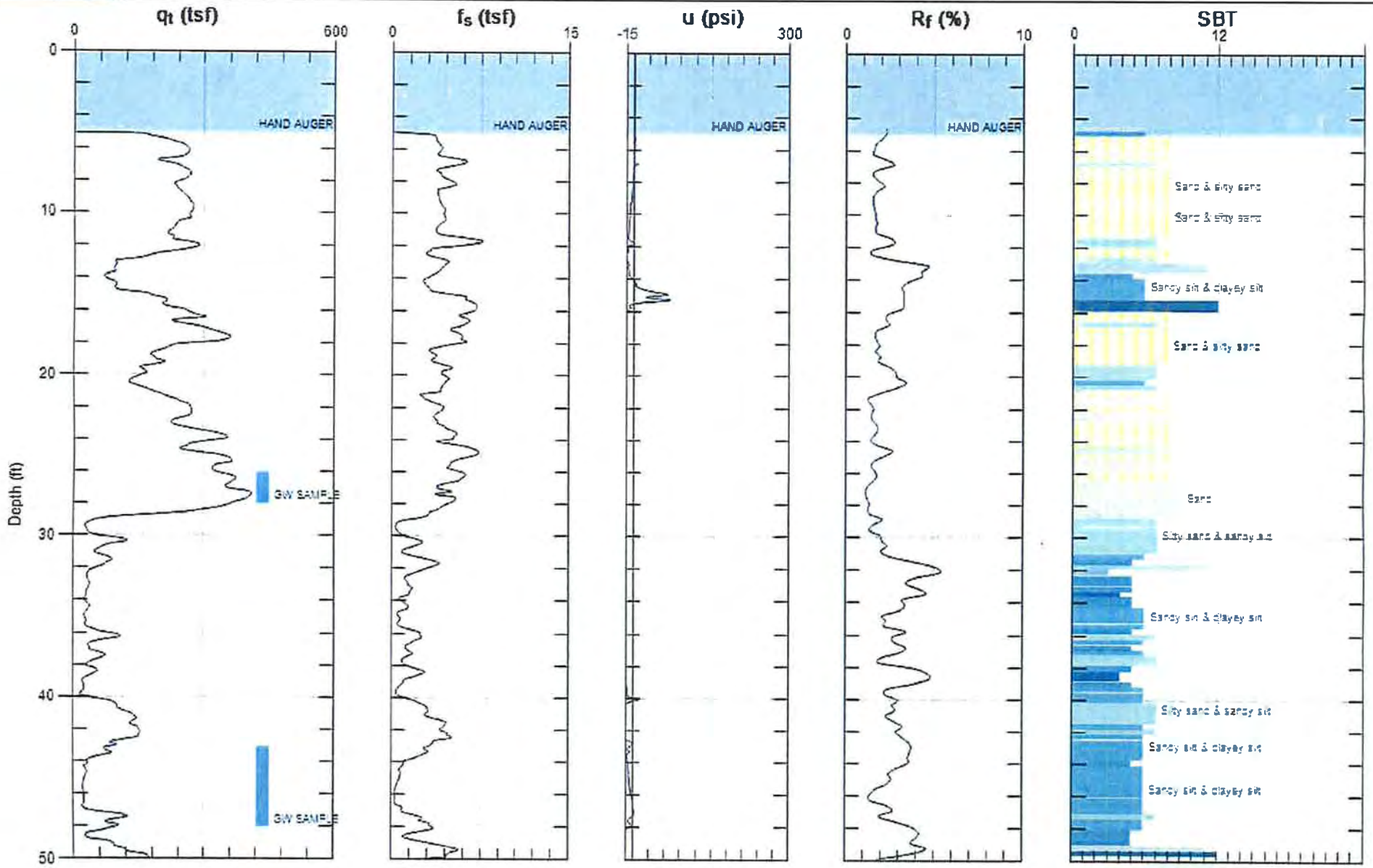
SBT: Soil Behavior Type (Robertson 1990)

GREGG

TRC

Site: 76 SERVICE STA #0752 Engineer: K.WOODBORNE

Sounding: CPT-04 Date: 2/5/2007 11:43



Max Depth: 50.200 (ft)
Avg Interval: 0.328 (ft)

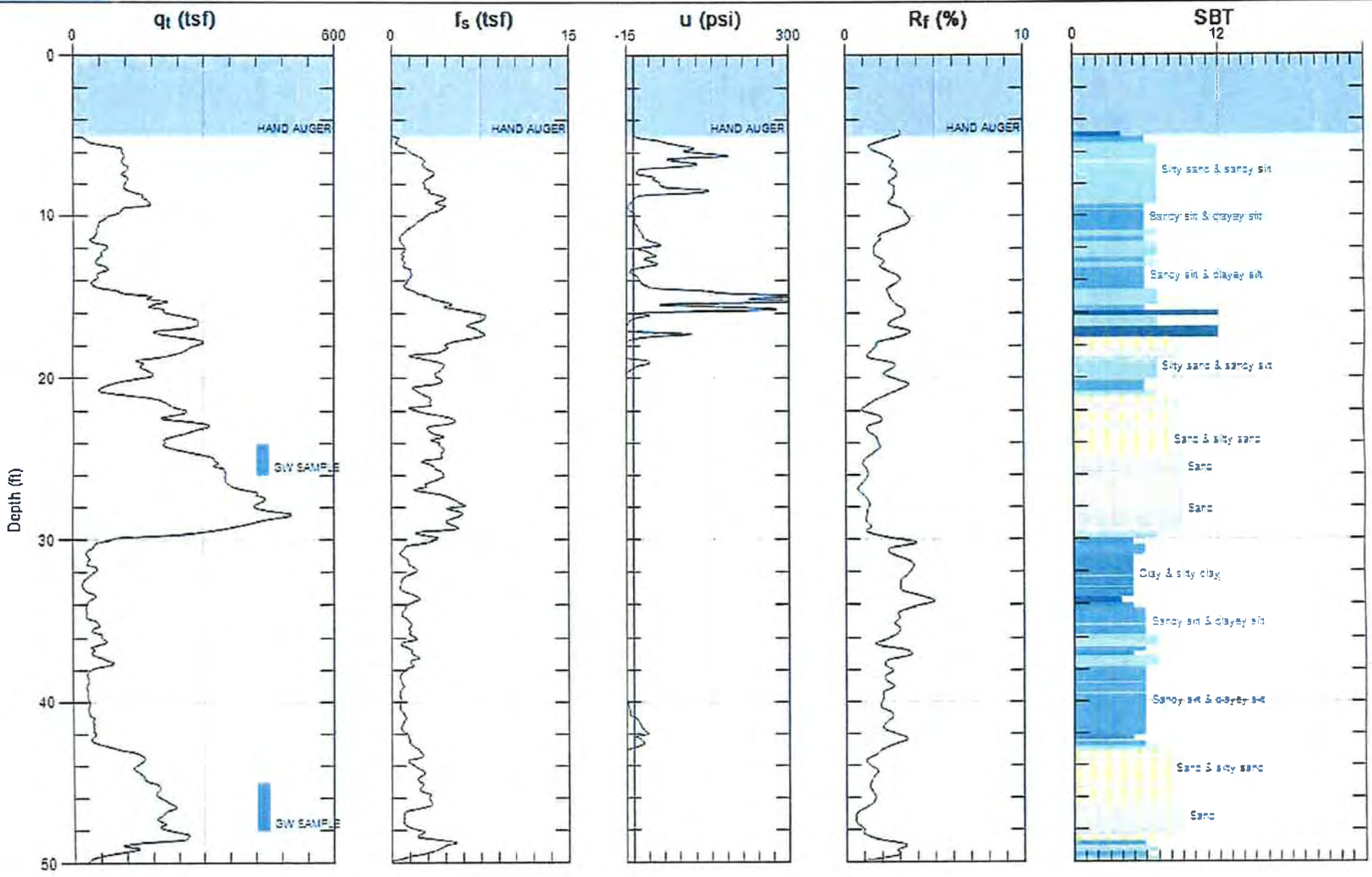
SBT Soil Behavior Type (Robertson 1990)

GREGG

TRC

Site: 76 SERVICE STA. #0752 **Engineer: K.WOODBORNE**

Sounding: CPT-05 **Date: 2/5/2007 08:08**



Max. Depth: 50.030 (ft)
Avg. Interval: 0.328 (ft)

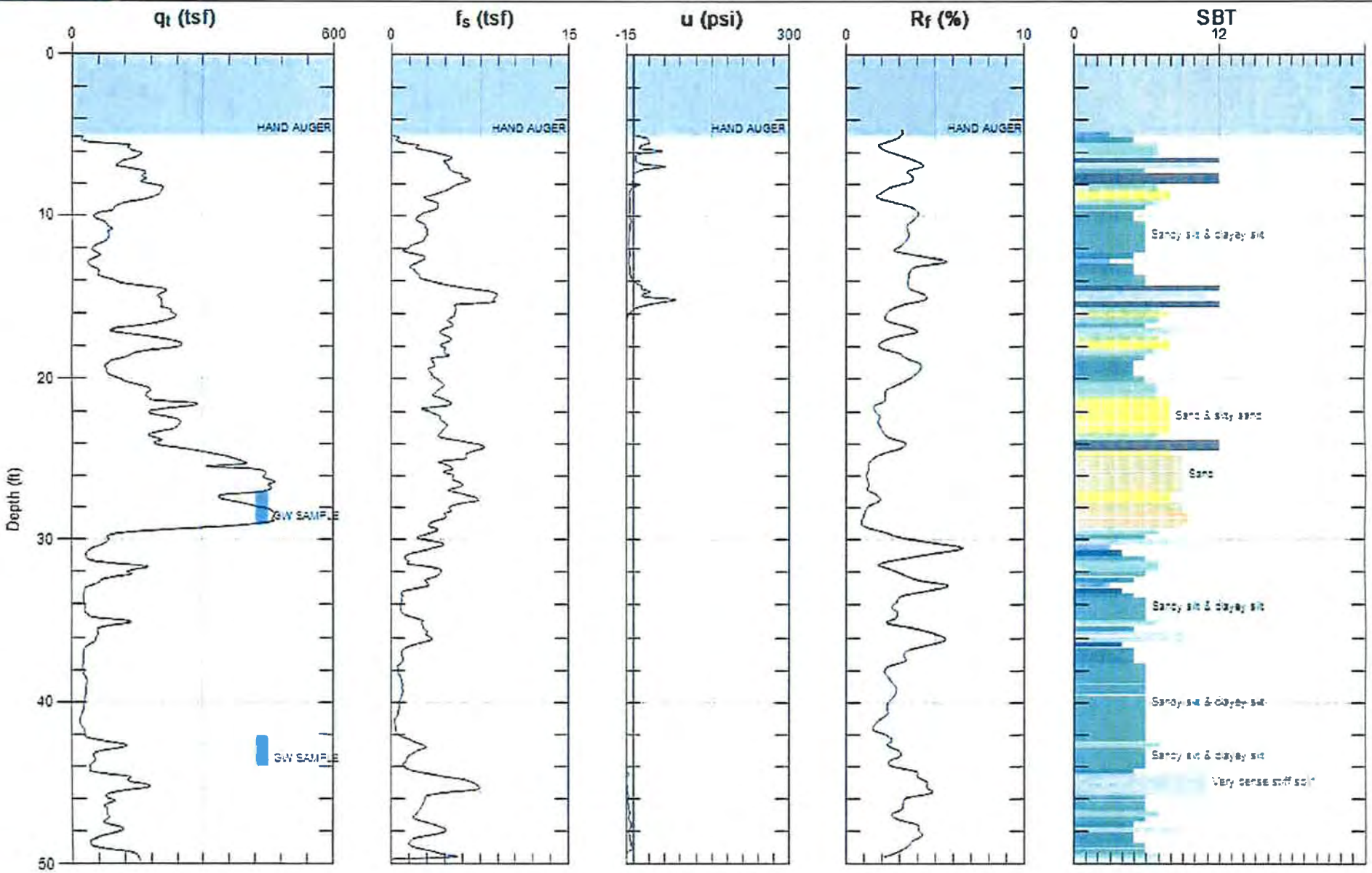
SBT: Soil Behavior Type (Robertson 1990)

GREGG

TRC

Site: 76 SERVICE STA. #0752 **Engineer: K.WOODBORNE**

Sounding: CPT-06 **Date: 2/6/2007 07:41**



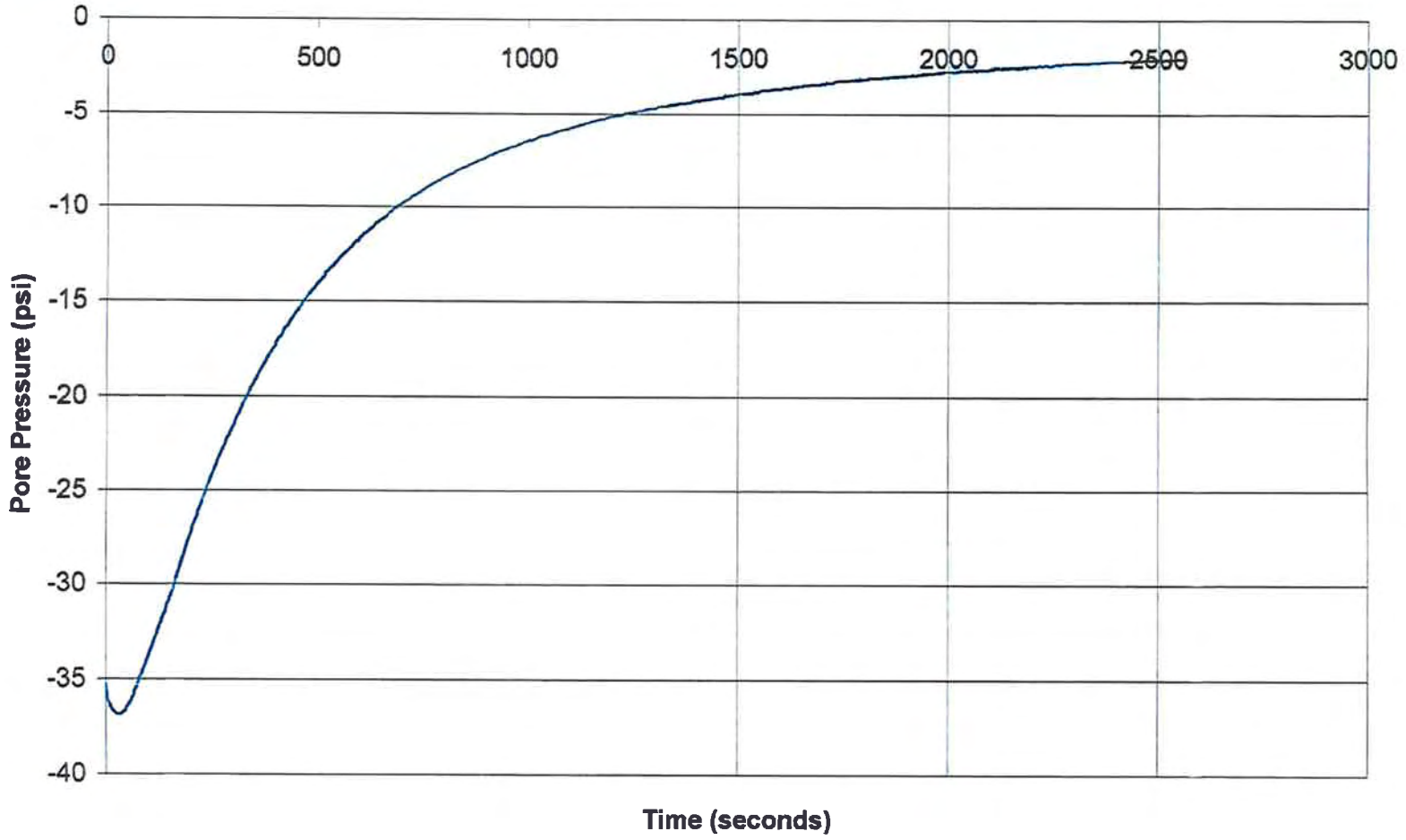
Max. Depth: 49.870 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

GREGG DRILLING & TESTING

Pore Pressure Dissipation Test

Sounding: CPT-02
Depth: 27.887
Site: 76 SERVICE STA.
Engineer: K.WOODBORNE



APPENDIX CPT

Cone Penetration Test Data & Interpretation

Soil behavior type and stratigraphic interpretation is based on relationships between cone bearing (q_c), sleeve friction (f_s), and pore water pressure (u_2). The friction ratio (R_f) is a calculated parameter defined by $100 f_s/q_c$ and is used to infer soil behavior type. Generally:

Cohesive soils (clays)

- High friction ratio (R_f) due to small cone bearing (q_c)
- Generate large excess pore water pressures (u_2)

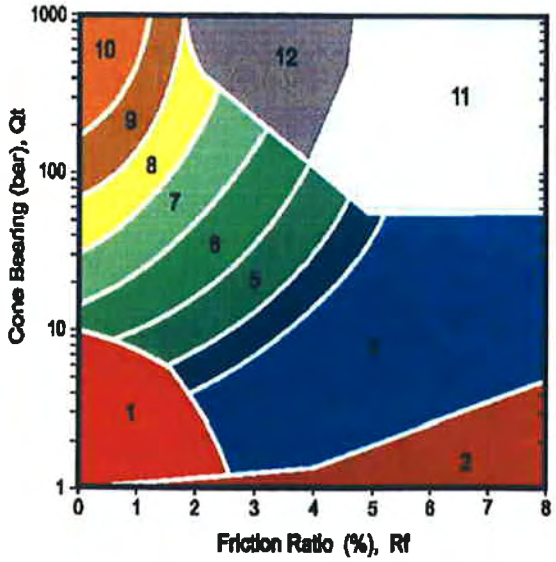
Cohesionless soils (sands)

- Low friction ratio (R_f) due to large cone bearing (q_c)
- Generate very little excess pore water pressures (u_2)

A complete set of baseline readings are taken prior to and at the completion of each sounding to determine temperature shifts and any zero load offsets. Corrections for temperature shifts and zero load offsets can be extremely important, especially when the recorded loads are relatively small. In sandy soils, however, these corrections are generally negligible.

The cone penetration test data collected from your site is presented in graphical form in Appendix CPT. The data includes CPT logs of measured soil parameters, computer calculations of interpreted soil behavior types (SBT), and additional geotechnical parameters. A summary of locations and depths is available in Table 1. Note that all penetration depths referenced in the data are with respect to the existing ground surface.

Soil interpretation for this project was conducted using recent correlations developed by Robertson, 1990, *Figure SBT*. Note that it is not always possible to clearly identify a soil type based solely on q_c, f_s, and u_2. In these situations, experience, judgment, and an assessment of the pore pressure dissipation data should be used to infer the soil behavior type.



ZONE	Qt/N	SBT
1	2	Sensitive, fine grained
2	1	Organic materials
3	1	Clay
4	1.5	Silty clay to clay
5	2	Clayey silt to silty clay
6	2.5	Sandy silt to clayey silt
7	3	Silty sand to sandy silt
8	4	Sand to silty sand
9	5	Sand
10	6	Gravely sand to sand
11	1	Very stiff fine grained*
12	2	Sand to clayey sand*

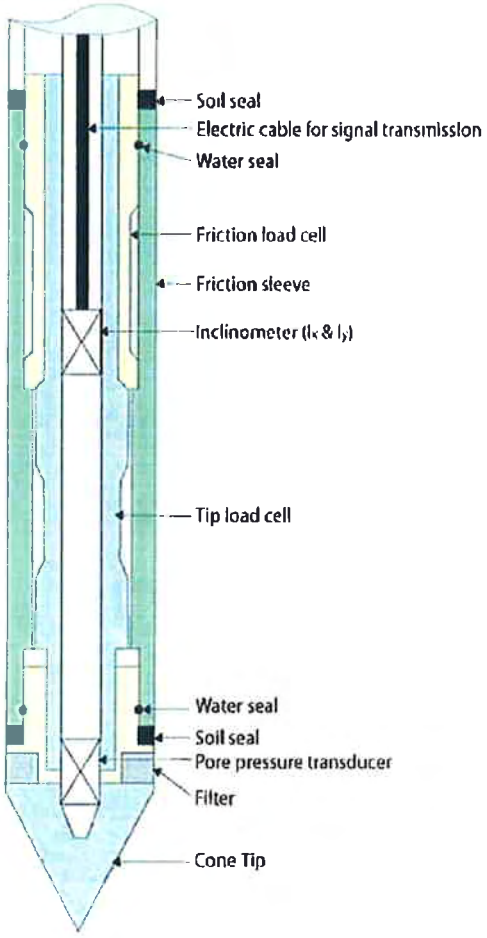
*over consolidated or cemented

Figure SBT

Cone Penetration Testing Procedure (CPT)

Gregg Drilling & Testing, Inc. carries out all Cone Penetration Tests (CPT) using an integrated electronic cone system, *Figure CPT*. The soundings were conducted using a 20 ton capacity cone with a tip area of 15 cm^2 and a friction sleeve area of 225 cm^2. The cone is designed with an equal end area friction sleeve and a tip end area ratio of 0.85.

The cone takes measurements of cone bearing (q_c), sleeve friction (f_s) and penetration pore water pressure (u_2) at 5-cm intervals during penetration to provide a nearly continuous hydrogeologic log. CPT data reduction and interpretation is performed in real time facilitating on-site decision making. The above mentioned parameters are stored on disk for further analysis and reference. All CPT soundings are performed in accordance with revised (2002) ASTM standards (D 5778-95).



The cone also contains a porous filter element located directly behind the cone tip (u_2), *Figure CPT*. It consists of porous plastic and is 5.0mm thick. The filter element is used to obtain penetration pore pressure as the cone is advanced as well as Pore Pressure Dissipation Tests (PPDT's) during appropriate pauses in penetration. It should be noted that prior to penetration, the element is fully saturated with silicon oil under vacuum pressure to ensure accurate and fast dissipation.

When the soundings are complete, the test holes are grouted using a Gregg In Situ support rig. The grouting procedures generally consist of pushing a hollow CPT rod with a "knock out" plug to the termination depth of the test hole. Grout is then pumped under pressure as the tremie pipe is pulled from the hole. Disruption or further contamination to the site is therefore minimized.

APPENDIX PPD

Pore Pressure Dissipation Tests (PPDT)

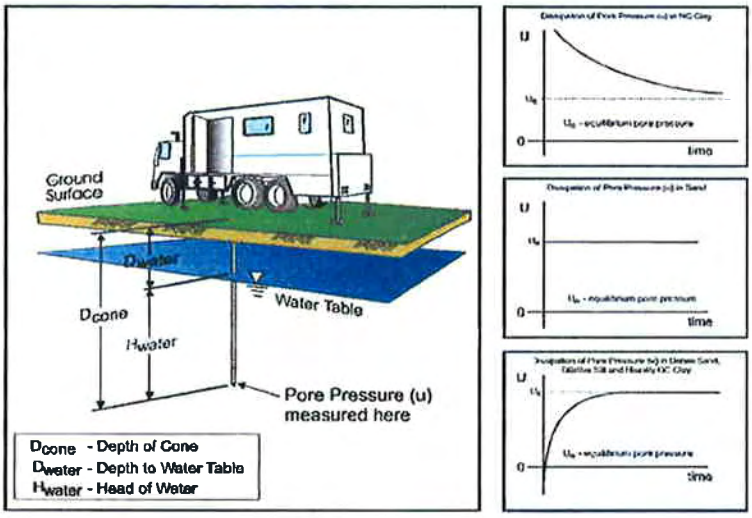
Pore Pressure Dissipation Tests (PPDT's) conducted at various intervals measured hydrostatic water pressures and determined the approximate depth of the ground water table. A PPDT is conducted when the cone is halted at specific intervals determined by the field representative. The variation of the penetration pore pressure (u) with time is measured behind the tip of the cone and recorded by a computer system.
Pore pressure dissipation data can be interpreted to provide estimates of:

- Equilibrium piezometric pressure
- Phreatic Surface
- In situ horizontal coefficient of consolidation (c_h)
- In situ horizontal coefficient of permeability (k_h)

In order to correctly interpret the equilibrium piezometric pressure and/or the phreatic surface, the pore pressure must be monitored until such time as there is no variation in pore pressure with time, *Figure PPDT*. This time is commonly referred to as t_{100}, the point at which 100% of the excess pore pressure has dissipated.

A complete reference on pore pressure dissipation tests is presented by Robertson et al. 1992.

A summary of the pore pressure dissipation tests is summarized in Table 1. Pore pressure dissipation data is presented in graphical form in Appendix PPDT.



Water Table Calculation

$$D_{water} = D_{cone} - H_{water}$$

where $H_{water} = U_e$ (depth units)

Useful Conversion Factors: 1psi = 0.704m = 2.31 feet (water)
1tsf = 0.958 bar = 13.9 psi
1m = 3.28 feet

Figure PPDT

APPENDIX GWS

Groundwater Sampling (GWS)

Gregg In Situ, Inc. conducts groundwater sampling using a Hydropunch® type groundwater sampler, *Figure GWS*. The groundwater sampler has a retrievable stainless steel or disposable PVC screen with steel drop off tip. This allows for samples to be taken at multiple depth intervals within the same sounding location. In areas of slower water recharge, provisions may be made to set temporary PVC well screens during sampling to allow the drill rig to advance to the next sample location while the groundwater is allowed to infiltrate.

The groundwater sampler operates by advancing 1 ¾ inch hollow push rods with the filter tip in a closed configuration to the base of the desired sampling interval. Once at the desired sample depth, the push rods are retracted; exposing the encased filter screen and allowing groundwater to infiltrate hydrostatically from the formation into the inlet screen. A small diameter bailer (approximately ½ or ¾ inch) is lowered through the push rods into the screen section for sample collection. The number of downhole trips with the bailer and time necessary to complete the sample collection at each depth interval is a function of sampling protocols, volume requirements, and the yield characteristics and storage capacity of the formation. Upon completion of sample collection, the push rods and sampler, with the exception of the PVC screen and steel drop off tip are retrieved to the ground surface, decontaminated and prepared for the next sampling event.

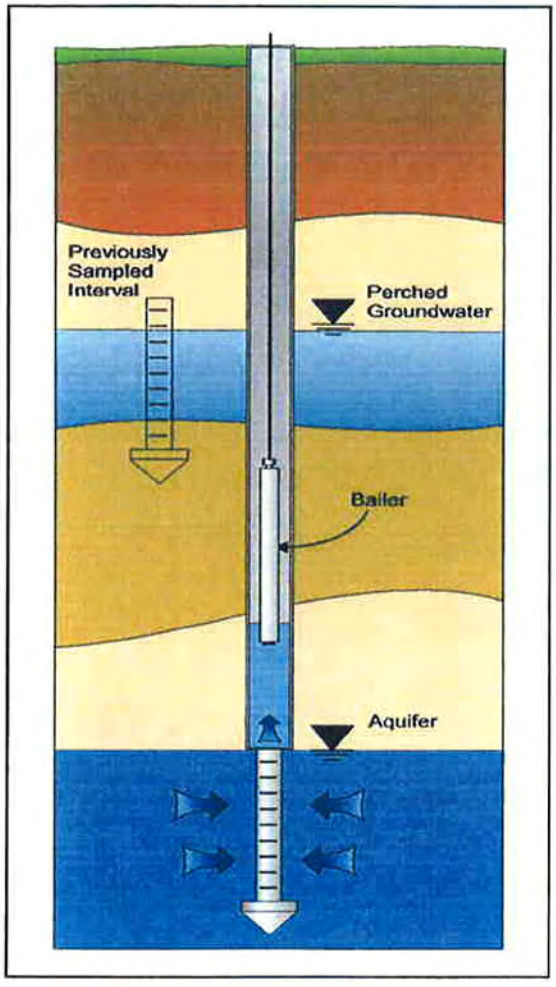


Figure GWS

A summary of the groundwater samples collected, including the sampling date, depth and location identification, is presented in Table 1 and the corresponding CPT plot.

For a detailed reference on direct push groundwater sampling, refer to Zemo et. al., 1992.

Bibliography

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Copies of ASTM Standards are available through www.astm.org

APPENDIX C

LABORATORY REPORTS
AND
CHAINS OF CUSTODY DOCUMENTATION

Date of Report: 02/20/2007

Keith Woodburne

TRC
1590 Solano Way, Suite A
Concord, CA 94520

RE: 0752
BC Work Order: 0701685

Enclosed are the results of analyses for samples received by the laboratory on 02/08/2007 21:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Hooker
Client Service Rep

Authorized Signature

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne		**Reported:** 02/20/2007 12:15

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701685-01	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/05/2007 10:00	Global ID:
	Sampling Location:	CPT-526	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT-526	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-02	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/05/2007 10:30	Global ID:
	Sampling Location:	CPT-548	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 548	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-03	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/05/2007 13:30	Global ID:
	Sampling Location:	CPT-428	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT- 428	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-04	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/05/2007 14:00	Global ID:
	Sampling Location:	CPT-448	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 448	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-05	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/06/2007 09:15	Global ID:
	Sampling Location:	CPT-629	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 629	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:

TRC	Project: 0752	**Reported:** 02/20/2007 12:15
1590 Solano Way, Suite A	Project Number: [none]	
Concord, CA 94520	Project Manager: Keith Woodburne	

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701685-06	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/06/2007 10:15	Global ID:
	Sampling Location:	CPT-644	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 644	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-07	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/06/2007 12:45	Global ID:
	Sampling Location:	CPT-328	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 328	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-08	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/06/2007 14:00	Global ID:
	Sampling Location:	CPT-350	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 350	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-09	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/07/2007 10:15	Global ID:
	Sampling Location:	CPT-225	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 225	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-10	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/07/2007 11:10	Global ID:
	Sampling Location:	CPT-250	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 250	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:

TRC
1590 Solano Way, Suite A
Concord, CA 94520

Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

Reported: 02/20/2007 12:15

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0701685-11	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/07/2007 13:50	Global ID:
	Sampling Location:	CPT-130	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 130	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:
0701685-12	**COC Number:**	---	**Receive Date:**	02/08/2007 21:45	Delivery Work Order:
	Project Number:	0752	**Sampling Date:**	02/07/2007 14:40	Global ID:
	Sampling Location:	CPT-150	**Sample Depth:**	---	Matrix: W
	Sampling Point:	CPT - 150	**Sample Matrix:**	Water	Samle QC Type (SACode): CS
	Sampled By:	TRC of TRCC			Cooler ID:

TRC
1590 Solano Way, Suite A
Concord, CA 94520

Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

Reported: 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-01 | **Client Sample Name:** 0752, CPT-526, CPT-526, 2/5/2007 10:00:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	270	ug/L	25		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710	ND	A01
Ethylbenzene	2.3	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
Methyl t-butyl ether	74000	ug/L	500		EPA-8260	02/12/07	02/16/07 17:43	SDU	MS-V12	1000	BQB0710	ND	A01
Toluene	10	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
Total Xylenes	20	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
t-Amyl Methyl ether	56	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
t-Butyl alcohol	12000	ug/L	500		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710	ND	A01
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
Ethyl t-butyl ether	1.0	ug/L	0.50		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710	ND	
Total Purgeable Petroleum Hydrocarbons	26000	ug/L	2500		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710	ND	A01,A53
1,2-Dichloroethane-d4 (Surrogate)	103	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 17:43	SDU	MS-V12	1000	BQB0710		
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710		
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 17:43	SDU	MS-V12	1000	BQB0710		
Toluene-d8 (Surrogate)	98.3	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:52	SDU	MS-V12	50	BQB0710		
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 17:43	SDU	MS-V12	1000	BQB0710		
4-Bromofluorobenzene (Surrogate)	115	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 06:04	DKC	MS-V12	1	BQB0710		

TRC
1590 Solano Way, Suite A
Concord, CA 94520

Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

Reported: 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-02 | **Client Sample Name:** 0752, CPT-548, CPT - 548, 2/5/2007 10:30:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	110	ug/L	2.5		EPA-8260	02/15/07	02/16/07 17:17	SDU	MS-V12	5	BQB0709	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	110	ug/L	50		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709		
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 17:17	SDU	MS-V12	5	BQB0709		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 17:17	SDU	MS-V12	5	BQB0709		
4-Bromofluorobenzene (Surrogate)	98.8	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 17:17	SDU	MS-V12	5	BQB0709		
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:18	SDU	MS-V12	1	BQB0709		

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne	**Reported:** 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-03 | **Client Sample Name:** 0752, CPT-428, CPT- 428, 2/5/2007 1:30:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	100	ug/L	50		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	99.8	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709		
4-Bromofluorobenzene (Surrogate)	96.3	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 01:45	SDU	MS-V12	1	BQB0709		

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne	**Reported:** 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-04 | **Client Sample Name:** 0752, CPT-448, CPT - 448, 2/5/2007 2:00:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709	ND	
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:11	SDU	MS-V12	1	BQB0709		

TRC
1590 Solano Way, Suite A
Concord, CA 94520

Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

Reported: 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-05 | **Client Sample Name:** 0752, CPT-629, CPT - 629, 2/6/2007 9:15:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709		
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 02:37	SDU	MS-V12	1	BQB0709		

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-06 | **Client Sample Name:** 0752, CPT-644, CPT - 644, 2/6/2007 10:15:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	54	ug/L	50		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	99.8	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709		
4-Bromofluorobenzene (Surrogate)	99.3	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:04	SDU	MS-V12	1	BQB0709		

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-07 | **Client Sample Name:** 0752, CPT-328, CPT - 328, 2/6/2007 12:45:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710	ND	
1,2-Dichloroethane-d4 (Surrogate)	107	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710		
Toluene-d8 (Surrogate)	99.0	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 08:39	DKC	MS-V12	1	BQB0710		

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-08 **Client Sample Name:** 0752, CPT-350, CPT - 350, 2/6/2007 2:00:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710	ND	
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710		
Toluene-d8 (Surrogate)	98.2	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710		
4-Bromofluorobenzene (Surrogate)	99.1	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:05	DKC	MS-V12	1	BQB0710		

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Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

Reported: 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-09 | **Client Sample Name:** 0752, CPT-225, CPT - 225, 2/7/2007 10:15:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	190	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Ethylbenzene	690	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Methyl t-butyl ether	31000	ug/L	250		EPA-8260	02/12/07	02/16/07 00:26	SDU	MS-V12	500	BQB0710	ND	A01
Toluene	ND	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Total Xylenes	840	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
t-Amyl Methyl ether	ND	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
t-Butyl alcohol	5500	ug/L	500		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Diisopropyl ether	ND	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Ethanol	ND	ug/L	12000		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Ethyl t-butyl ether	ND	ug/L	25		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
Total Purgeable Petroleum Hydrocarbons	40000	ug/L	2500		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:26	SDU	MS-V12	500	BQB0710		
1,2-Dichloroethane-d4 (Surrogate)	106	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:26	SDU	MS-V12	500	BQB0710		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710		
4-Bromofluorobenzene (Surrogate)	108	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:31	DKC	MS-V12	50	BQB0710		
4-Bromofluorobenzene (Surrogate)	99.3	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/16/07 00:26	SDU	MS-V12	500	BQB0710		

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne	**Reported:** 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-10 | **Client Sample Name:** 0752, CPT-250, CPT - 250, 2/7/2007 11:10:00AM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	3.6	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Ethylbenzene	3.1	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Methyl t-butyl ether	32	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Toluene	0.57	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Total Xylenes	5.9	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
Total Purgeable Petroleum Hydrocarbons	99	ug/L	50		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710	ND	
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710		
Toluene-d8 (Surrogate)	99.4	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710		
4-Bromofluorobenzene (Surrogate)	104	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 09:57	DKC	MS-V12	1	BQB0710		

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne	**Reported:** 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-11 **Client Sample Name:** 0752, CPT-130, CPT - 130, 2/7/2007 1:50:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Toluene	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710		
4-Bromofluorobenzene (Surrogate)	104	%	86 - 115 (LCL - UCL)		EPA-8260	02/12/07	02/13/07 10:23	DKC	MS-V12	1	BQB0710		

TRC 1590 Solano Way, Suite A Concord, CA 94520	Project: 0752 Project Number: [none] Project Manager: Keith Woodburne	**Reported:** 02/20/2007 12:15

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0701685-12 | **Client Sample Name:** 0752, CPT-150, CPT - 150, 2/7/2007 2:40:00PM, TRC

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Toluene	0.60	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Ethanol	ND	ug/L	250		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	
Total Purgeable Petroleum Hydrocarbons	75	ug/L	50		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	02/15/07	02/16/07 03:30	SDU	MS-V12	1	BQB0709		

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Project: 0752
Project Number: [none]
Project Manager: Keith Woodburne

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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
Benzene	BQB0709	Matrix Spike	0701687-01	0	23.230	25.000	ug/L		92.9		70 - 130	
		Matrix Spike Duplicate	0701687-01	0	23.920	25.000	ug/L	3.0	95.7	20	70 - 130	
Toluene	BQB0709	Matrix Spike	0701687-01	0	22.380	25.000	ug/L		89.5		70 - 130	
		Matrix Spike Duplicate	0701687-01	0	23.030	25.000	ug/L	2.9	92.1	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BQB0709	Matrix Spike	0701687-01	ND	10.680	10.000	ug/L		107		76 - 114	
		Matrix Spike Duplicate	0701687-01	ND	10.560	10.000	ug/L		106		76 - 114	
Toluene-d8 (Surrogate)	BQB0709	Matrix Spike	0701687-01	ND	10.140	10.000	ug/L		101		88 - 110	
		Matrix Spike Duplicate	0701687-01	ND	10.160	10.000	ug/L		102		88 - 110	
4-Bromofluorobenzene (Surrogate)	BQB0709	Matrix Spike	0701687-01	ND	10.180	10.000	ug/L		102		86 - 115	
		Matrix Spike Duplicate	0701687-01	ND	9.9900	10.000	ug/L		99.9		86 - 115	
Benzene	BQB0710	Matrix Spike	0701493-01	0.10000	25.740	25.000	ug/L		103		70 - 130	
		Matrix Spike Duplicate	0701493-01	0.10000	24.840	25.000	ug/L	3.6	99.4	20	70 - 130	
Toluene	BQB0710	Matrix Spike	0701493-01	0.98000	26.120	25.000	ug/L		101		70 - 130	
		Matrix Spike Duplicate	0701493-01	0.98000	25.690	25.000	ug/L	2.2	98.8	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BQB0710	Matrix Spike	0701493-01	ND	10.730	10.000	ug/L		107		76 - 114	
		Matrix Spike Duplicate	0701493-01	ND	10.370	10.000	ug/L		104		76 - 114	
Toluene-d8 (Surrogate)	BQB0710	Matrix Spike	0701493-01	ND	9.8800	10.000	ug/L		98.8		88 - 110	
		Matrix Spike Duplicate	0701493-01	ND	9.8000	10.000	ug/L		98.0		88 - 110	
4-Bromofluorobenzene (Surrogate)	BQB0710	Matrix Spike	0701493-01	ND	10.440	10.000	ug/L		104		86 - 115	
		Matrix Spike Duplicate	0701493-01	ND	10.220	10.000	ug/L		102		86 - 115	

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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Benzene	BQB0709	BQB0709-BS1	LCS	23.470	25.000	0.50	ug/L	93.9		70 - 130		
Toluene	BQB0709	BQB0709-BS1	LCS	22.140	25.000	0.50	ug/L	88.6		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BQB0709	BQB0709-BS1	LCS	10.660	10.000		ug/L	107		76 - 114		
Toluene-d8 (Surrogate)	BQB0709	BQB0709-BS1	LCS	10.040	10.000		ug/L	100		88 - 110		
4-Bromofluorobenzene (Surrogate)	BQB0709	BQB0709-BS1	LCS	10.010	10.000		ug/L	100		86 - 115		
Benzene	BQB0710	BQB0710-BS1	LCS	24.410	25.000	0.50	ug/L	97.6		70 - 130		
Toluene	BQB0710	BQB0710-BS1	LCS	24.010	25.000	0.50	ug/L	96.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BQB0710	BQB0710-BS1	LCS	10.280	10.000		ug/L	103		76 - 114		
Toluene-d8 (Surrogate)	BQB0710	BQB0710-BS1	LCS	9.8900	10.000		ug/L	98.9		88 - 110		
4-Bromofluorobenzene (Surrogate)	BQB0710	BQB0710-BS1	LCS	10.290	10.000		ug/L	103		86 - 115		

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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Ethylbenzene	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Toluene	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Total Xylenes	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
t-Amyl Methyl ether	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BQB0709	BQB0709-BLK1	ND	ug/L	10		
Diisopropyl ether	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Ethanol	BQB0709	BQB0709-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BQB0709	BQB0709-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BQB0709	BQB0709-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BQB0709	BQB0709-BLK1	107	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BQB0709	BQB0709-BLK1	97.0	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BQB0709	BQB0709-BLK1	99.6	%	86 - 115 (LCL - UCL)		
Benzene	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
Ethylbenzene	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
Toluene	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
Total Xylenes	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
t-Amyl Methyl ether	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BQB0710	BQB0710-BLK1	ND	ug/L	10		
Diisopropyl ether	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		
Ethanol	BQB0710	BQB0710-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BQB0710	BQB0710-BLK1	ND	ug/L	0.50		

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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Total Purgeable Petroleum Hydrocarbons	BQB0710	BQB0710-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BQB0710	BQB0710-BLK1	98.4	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BQB0710	BQB0710-BLK1	99.6	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BQB0710	BQB0710-BLK1	101	%	86 - 115 (LCL - UCL)		

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A53	Chromatogram not typical of gasoline.