October 14, 2011

Jerry Wickham, CEG
Senior Hazardous Materials Specialist
Alameda County Environmental Health
1131Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Sunol Tree Gas**
3004 Andrade Road, Sunol
Fuel Leak Case No. RO0002448

Dear Mr. Wickham:

Enclosed is the *Addendum to the IRAP* for the subject LUFT site. In compliance with state and local regulations, electronic submittals of this report have been uploaded to the Geotracker database and the Alameda County ftp website.

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

Please call Tim Cook at Cook Environmental Services at (925) 478-8390 if you have questions or comments in regards to the technical content of this report.

Very truly yours,

Khan Petroleum, Inc.

Obaid Abdullah
President

cc: Jennifer Rice, Esq
Tim Cook, Cook Environmental Services, Inc.

October 14, 2011

Jerry Wickham, CEG
Senior Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Addendum to Interim Remedial Action Plan**
Sunol Tree Gas
3004 Andrade Road, Sunol
Fuel Leak Case No. RO0002448

Dear Mr. Wickham:

This *Addendum to Interim Remedial Action Plan* for Sunol Tree Gas ("the Site") located at 3004 Andrade Road in Sunol, Alameda County (**Figure 1**) is submitted in response to our meeting of March 9, 2011 and is submitted to revised the *Interim Remedial Action and Pilot Test Work Plan* (IRAP) dated March 15, 2011.

The purpose of this document is to revise our plan to conduct a pilot test using ozone sparge technology which addresses low level MtBE contamination at the Site. This addendum to the IRAP describes methods and procedures to conduct a pilot test evaluating the effectiveness of ozone sparging to reduce MtBE concentrations in groundwater downgradient from the site. As a demonstration, we selected the intermediate water-bearing zone (30-45 fbg) immediately upgradient of Transect A-A' for the installation of additional monitoring wells and ozone sparge wells. The locations chosen are upgradient of the highest MtBE concentrations in groundwater previously observed along Transect A-A' (**Figure 2**).

Background

Three cone penetrometer (CPT) borings (CPT-1 through CPT-3) were advanced on July 25, 2011 at the locations shown on **Figure 2** to accurately determine depth intervals associated with the shallow, intermediate and deep water-bearing zones. CPT-1 was located approximately 45 feet upgradient of CMT-7. CPT-2 and CPT-3 were located approximately 54 feet and 38 feet, respectively, upgradient of CMT-4. CMT-4 and CMT-7 have consistently exhibited the highest MtBE concentrations. CPT-1, CPT-2 and CPT-3 hit refusal at depths of 51, 55 and 55 feet below grade (fbg), respectively. The depth to the intermediate and deep water bearing zones in the locations of the CPT borings are estimated to be approximately 55 and 65 fbg, respectively. CPT-1 was able to penetrate just to the top of the intermediate water-bearing zone (51 fbg). CPT-2 was able to penetrate approximately 3 feet into the intermediate zone (55 fbg) and CPT-3 was able to penetrate approximately one foot into the intermediate zone (53 fbg). Depth intervals for collecting groundwater sampling from the deep zones was determined using the spacing between these water bearing zones established in well logs for CMT-4 and CMT-7. CPT

logs showing the stratigraphy encountered in the CPT borings are provided in **Appendix A**. The methods and procedures used for CPT borings is provided in **Appendix B**.

Groundwater samples were collected from a boring located one foot from CPT-3 on July 25 and from borings one foot from CPT-1 and CPT-2 on July 26, 2011. Water samples were collected in all three water bearing zones (27, 55 and 65 feet below grade) using a Hydropunch sampler. The sampler provides depth discrete water samples by advancing a well point to a pre-designated depth and pulling the drill string back up to 18 inches and exposing a stainless steel screen. A sample is withdrawn using a peristaltic pump and dedicated sample tubing.

Samples were collected in 40 ml VOA vials preserved with concentrated hydrochloric acid. Two VOA vials were filled per sample and sealed such that there was no headspace. The vials were then chilled to 4 degrees Celsius in a sample cooler and transported to McCampbell Analytical Laboratory that same day under chain of custody control. Samples were analyzed for fuel oxygenates (including MtBE and tBA) by EPA method 8260B. Laboratory reports are provided in **Appendix C**.

Fuel oxygenates were not detected in any of the nine water samples collected. Based on these results, CES determined that this locale would not be an effective location to locate ozone sparge wells to conduct the ozone sparge pilot test. CES contacted Jerry Wickham of ACEH via email to inform him of these results. He requested submittal of a work plan addendum for the pilot test. ACEH would establish a revised submittal date for the pilot test report upon review of the work plan addendum.

Revised Scope of Work

The scope of work for this Addendum to the IRAP includes the following tasks:

- Obtaining approval of the addendum to the IRAP from ACEH;
- Obtain well permits from Alameda County Public Works Agency;
- Obtain permission to install the two ozone sparge wells from the owner of the T-Bear Ranch;
- Notify USA Alert of well locations and obtain underground utility clearance;
- Install two pilot test ozone sparge wells approximately 15 feet upgradient of existing wells CMT-4 and CMT-7, on the T-Bear Ranch property;
- Survey ozone sparge wells;
- Install mobile ozone sparge system, including electrical and plumbing hookups;
- Perform startup activities;
- Perform operation and maintenance activities on the ozone sparge system for three months;
- Collect groundwater samples from the two downgradient multi-chamber wells and analyze for dissolved oxygen, total chromium, hexavalent chromium, bromide, bromated and fuel oxygenates;
- Prepare a *Pilot Test Report* for submittal to ACEH;
- Submit survey data, lab data, and the *Pilot Test Report* to the ACEH FTP site and the SWRCB Geotracker database.

Planning

Upon approval of this Addendum to the IRAP by Alameda County Environmental Health (ACEH), Cook Environmental Services, Inc. (CES) will contact the owner of the T-Bear Ranch to access his property, obtain well permits from Alameda County Public Works, contract with a C-57 licensed drilling contractor, and notify USA Alert of the proposed ozone sparge wells so that a utility location survey will be completed. A site specific Health and Safety Plan for the fieldwork will be prepared in compliance with 29 CFR 1910.120.

Field Work

The drilling contractor will advance the two ozone sparge wells in the locations shown on **Figure 3**. These wells will be located approximately 15 upgradient of CMT-4 and CMT-7 and will inject ozone into the intermediate water-bearing zone (depth interval 40 to 42 fbg) as determined from the boring logs for CMT-4 and CMT-7. The intermediate water-bearing zone in wells CMT-4 and CMT-7 yielded the highest MtBE concentrations during the April 2010 sampling event. A cross-section of multiple well sampling intervals along the two traverses as well as MtBE concentrations for the April 2010 sampling event is presented on **Figure 4**.

All three sampling intervals in wells CMT-4 and CMT-7 will be used to monitor groundwater quality during the ozone pilot test. These monitoring wells screen the shallow, intermediate and deep water bearing zone at approximately 20, 40 and 50 fbg.

Sparge wells O-1 and O-2 will have a 30-inch long sparge diffuser that will be surrounded by #60 sugar sand. Approximately 2 feet of bentonite slurry will be placed above the sand to seal the diffuser and prevent short-circuiting of ozone to the surface via the well annulus. The remainder of the annulus will be sealed with neat cement slurry. A ¾-inch diameter riser will extend from the surface to the sparge diffuser. Surface completion of the sparge wells will be in a traffic box. Check valves will prevent the backflow of ozone to the ozone generator. Wellhead adapters and HDPE tubing will connect the sparge wells to the ozone treatment unit.

A licensed well surveyor will survey the latitude and longitude of ozone sparge wells O-1 and O-2 to tie them into the existing survey network. Survey coordinates will be uploaded to the ACEH ftp site and the Geotracker database.

The ozone treatment unit will be trailer mounted and capable of producing at least 0.5 pounds of ozone per day. The initial treatment cycle will pump ozone to each sparge well at 30 minute intervals and will run for 22 hours per day. The unit will derive electrical power from a 20 amp circuit subpanel on the main power panel at the Sunol Tree Gas Station. Since the pilot test is temporary a flexible SO cord will provide power from the subpanel to the treatment system.

Monitoring

Constituents to be monitored in wells CMT-4 and CMT-7 include dissolved oxygen (DO), oxidation potential (eH), total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene and total xylenes (BTEX), fuel oxygenates (MtBE, tBA, EtBE, TAME and DIPE), bromide ion (Br^-), bromate (BrO_3^-), total chromium (Cr) and hexavalent chromium (Cr^{+6}). Samples will be collected immediately prior to the pilot test and bi-weekly during the pilot test. Sampling protocols and handling procedures will follow EPA guidance. Electronic copies of

sample results will be uploaded to the ACEH ftp site and the Geotracker database within one week of receipt.

Contingency Plan

If toxic daughter products (Cr^{+6} and BrO_3^-) in wells CMT-4 and CMT-7 exceed environmental screening levels (ESLs) established for drinking water aquifers with residential land use then confirmation samples for Cr^{+6} and BrO_3^- will be collected from these wells within seven days. If Cr^{+6} and BrO_3^- are again detected in these wells above ESLs, the ozone treatment system will be shut down. Confirmation samples will be collected from CMT-4 and CMT-7 on a weekly basis until these constituents drop below their respective ESLs.

Duration

The pilot test will last for three months from startup. At the end of that time the trailer mounted ozone treatment unit will be demobilized from the site. The results will be evaluated and the findings will be transmitted to ACEH in a *Pilot Test Report*.

Reporting

A Pilot Test Report will be submitted to ACEH within four weeks of concluding the pilot test. The report will contain methods and procedures used to install the sparge wells and ozone sparge system, pilot test monitoring results, descriptions of detections of toxic daughter products and descriptions of any contingency measures employed. In addition, recommendations will be made with respect to a final remediation plan (FRP) for the Site.

We request that you respond with your comments to this IRAP. Please call me at (925) 478-8390 if you have questions or comments in regards to the technical content of this document.

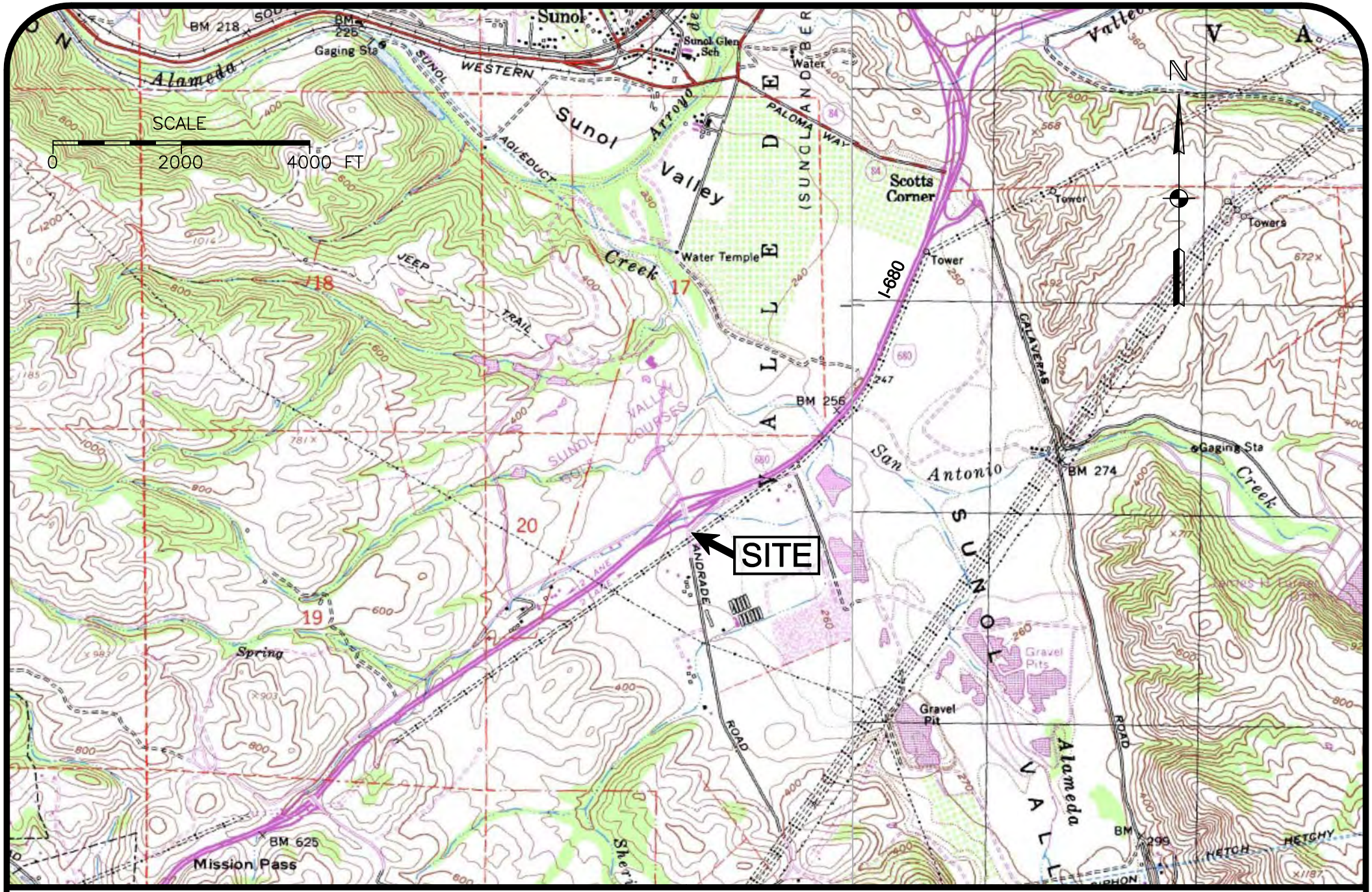
Very truly yours,

Cook Environmental Services, Inc.

Tim Cook, P.E.
President

cc: Jennifer Rice, Esq
Obaid Abdullah, Kahn Petroleum

FIGURES



Cook Environmental Services, Inc.
1485 Treat Blvd. Ste. 203A
Walnut Creek, CA
(925) 478-8390 work
(925) 787-6869 cell
tcook@cookenvironmental.com

Sunol Tree Gas Station
Site Location Map
3004 Andrade Road
Sunol, CA 94586

Project: 1024	Figure: 1
Date: 10/14/11	
Scale: 1" = 2000 '	

Sunol Tree Gas Station
CPT Boring Locations
3004 Andrade Road
Sunol, CA 94586

Figure: 2

Project 1024 | Date: 10/14/11 | Scale: 1" = 100'

N

Athenour Way

Sunset Riding Academy
7587 Athenour Way

Well # A1

T Bear Ranch

PZ-3a PZ-3b

EB-2

T Bear Ranch
Water Well

PZ-2b

PZ-2a

CMT-9
CMT-8
CMT-7
EB-1
CMT-5
PZ-1b
CMT-6
CMT-4
CMT-3
CMT-2
CMT-1

CPT-1
PZ-1a
CPT-3
CPT-2

Access Road

Sunol Tree
Gas Station

Covered Dispenser
Islands

Sunol Tree
Water Well

CMT-12
Store

CMT-11
CMT-10

Overhead Electrical Lines

Driving Range Netting (fence)

Andrade Road

Golf Driving Range
3220 Andrade Road

SCALE
0 100 200 FT

Residential Well # G1

Golf Range Well # A2

TOP OF CASING ELEVATION DATA

Well ID	Elev. (ft)*
PZ-1a	274.50
PZ-1b	274.62
PZ-2a	267.94
PZ-2b	267.94
PZ-3a	271.40
PZ-3b	271.16

LEGEND

- EB - Exploratory Boring: Weber, Hayes & Associates
- PZ - 1a — PZ - Driven Probe, converted to a shallow Piezometer Well (0.75" diameter) in July 2004 by Weber, Hayes & Associates
- PZ - 1b — PZ - Driven Probe, converted to a deep Piezometer Well (0.75" diameter) in July 2004 by Weber, Hayes & Associates
- Approximate location of water supply well
- Underground Fuel Storage Tanks
- Previous Boring: Clearwater Consultants, 2002
- Monitoring Well with Significant MtBE Concentration
- Planned Ozone Sparge Well
- Cone Penetrometer Test (CPT) borings advanced on July 25, 2011

*NOTE:
All well head elevations were surveyed by Robert McGregor (Lic. #5946); PZ wells on July 26, 2004 and CMT wells on January 21, 2005.

*NOTE:
Adapted from Weber, Hayes & Associates figures in their June 30, 2008 "Carbon System Test Results" report.

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Walnut Creek, CA 94597
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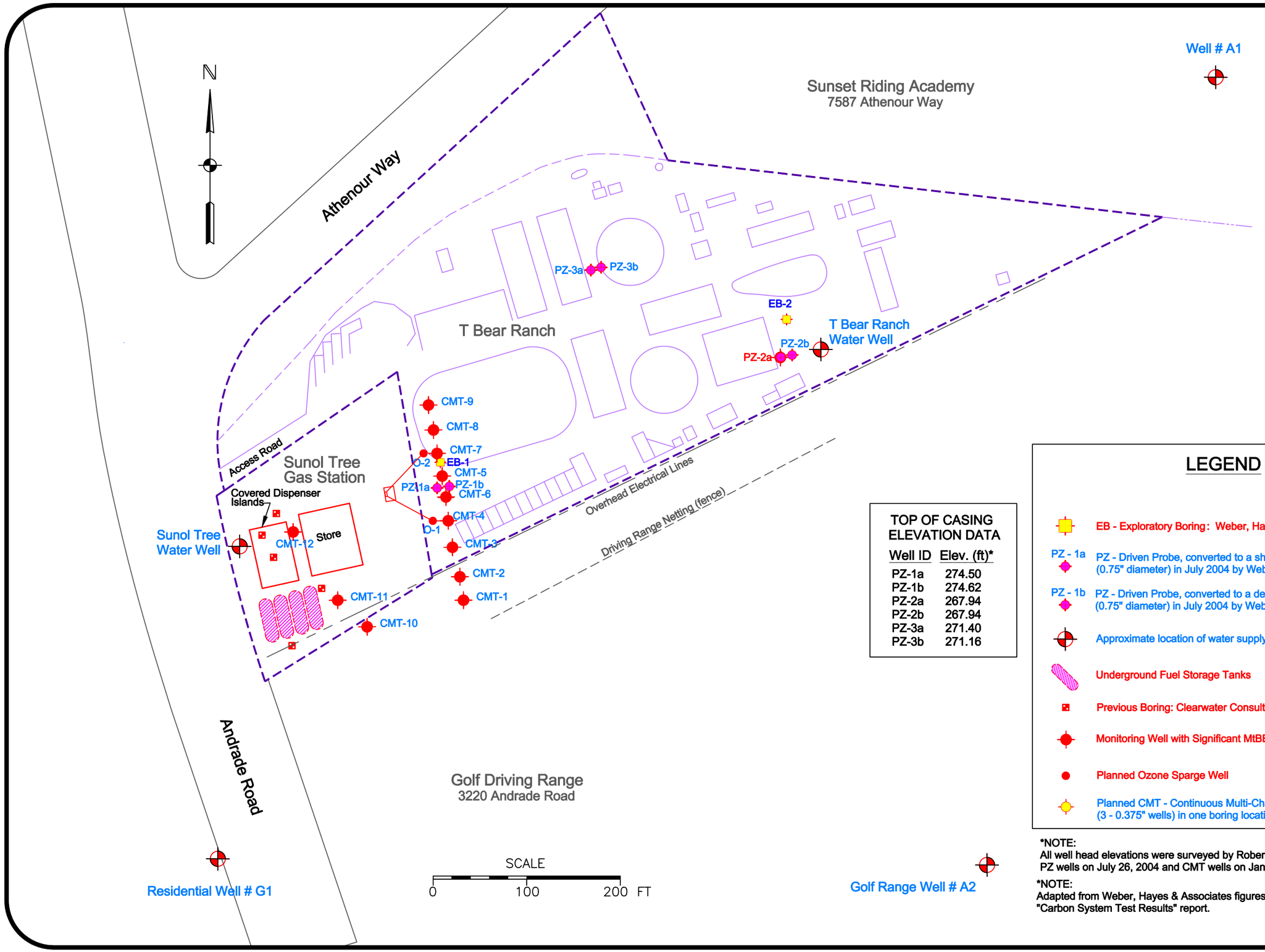

TOP OF CASING ELEVATION DATA

Well ID	Elev. (ft)*
PZ-1a	274.50
PZ-1b	274.62
PZ-2a	267.94
PZ-2b	267.94
PZ-3a	271.40
PZ-3b	271.16

LEGEND

- EB - Exploratory Boring: Weber, Hayes & Associates
- PZ - 1a — PZ - Driven Probe, converted to a shallow Piezometer Well (0.75" diameter) in July 2004 by Weber, Hayes & Associates
- PZ - 1b — PZ - Driven Probe, converted to a deep Piezometer Well (0.75" diameter) in July 2004 by Weber, Hayes & Associates
- Approximate location of water supply well
- Underground Fuel Storage Tanks
- Previous Boring: Clearwater Consultants, 2002
- Monitoring Well with Significant MtBE Concentration
- Planned Ozone Sparge Well
- Planned CMT - Continuous Multi-Chamber Tubing Wells (3 - 0.375" wells) in one boring location

*NOTE:
All well head elevations were surveyed by Robert McGregor (Lic. #5946); PZ wells on July 26, 2004 and CMT wells on January 21, 2005.

*NOTE:
Adapted from Weber, Hayes & Associates figures in their June 30, 2008 "Carbon System Test Results" report.

Figure: 3

Project 1024 | Date: 10/14/11 | Scale: 1" = 100 '

Sunol Tree Gas Station
Ozone Sparge Pilot Test Layout
3004 Andrade Road
Sunol, CA 94586

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Walnut Creek, CA 94597
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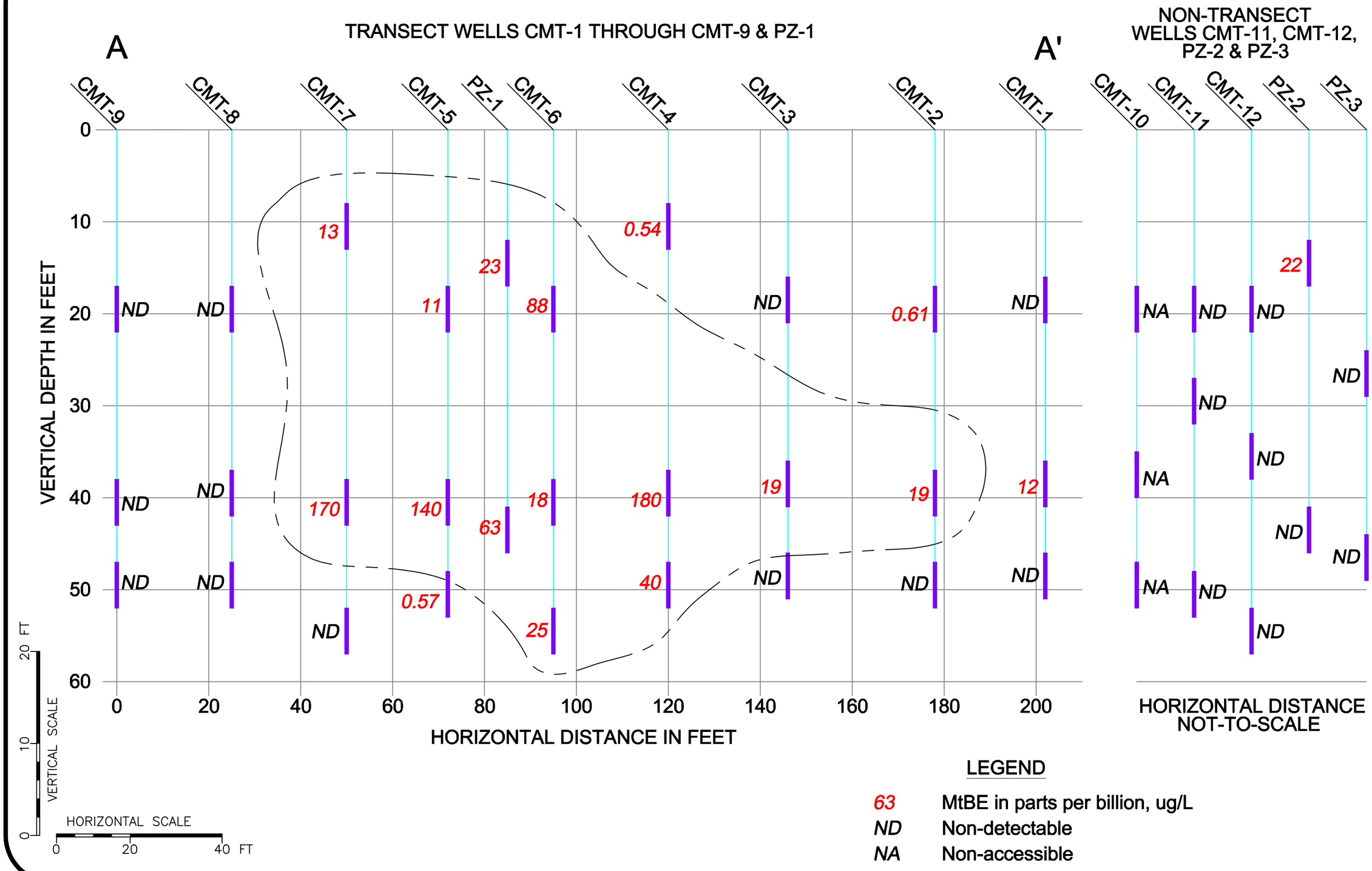
tcook@cookenvironmental.com

Sunol Tree Gas Station
MtBE Concentrations in Transect A-A'
3004 Andrade Road
Sunol, CA 94586

Figure: 4

Project 1024 | Date: 10/14/11 | Scale: as shown



LEGEND

63	MtBE in parts per billion, ug/L
ND	Non-detectable
NA	Non-accessible

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Walnut Creek, CA 94597
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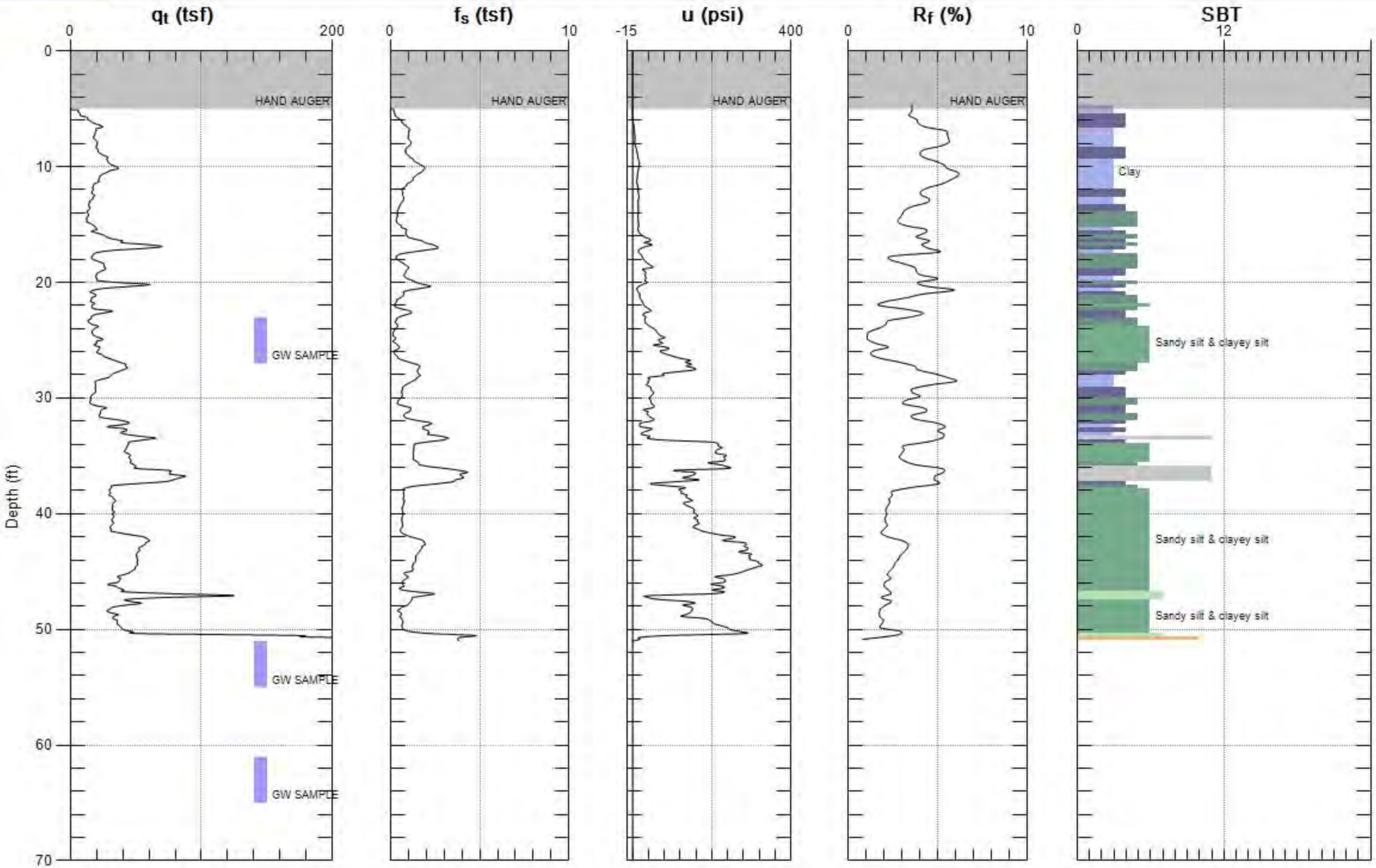
tcook@cookenvironmental.com

APPENDIX A
CPT Logs

COOK ENVIRONMENTAL

Site: KHAN
Sounding: CPT-01

Engineer: T. COOK
Date: 7/25/2011 08:45



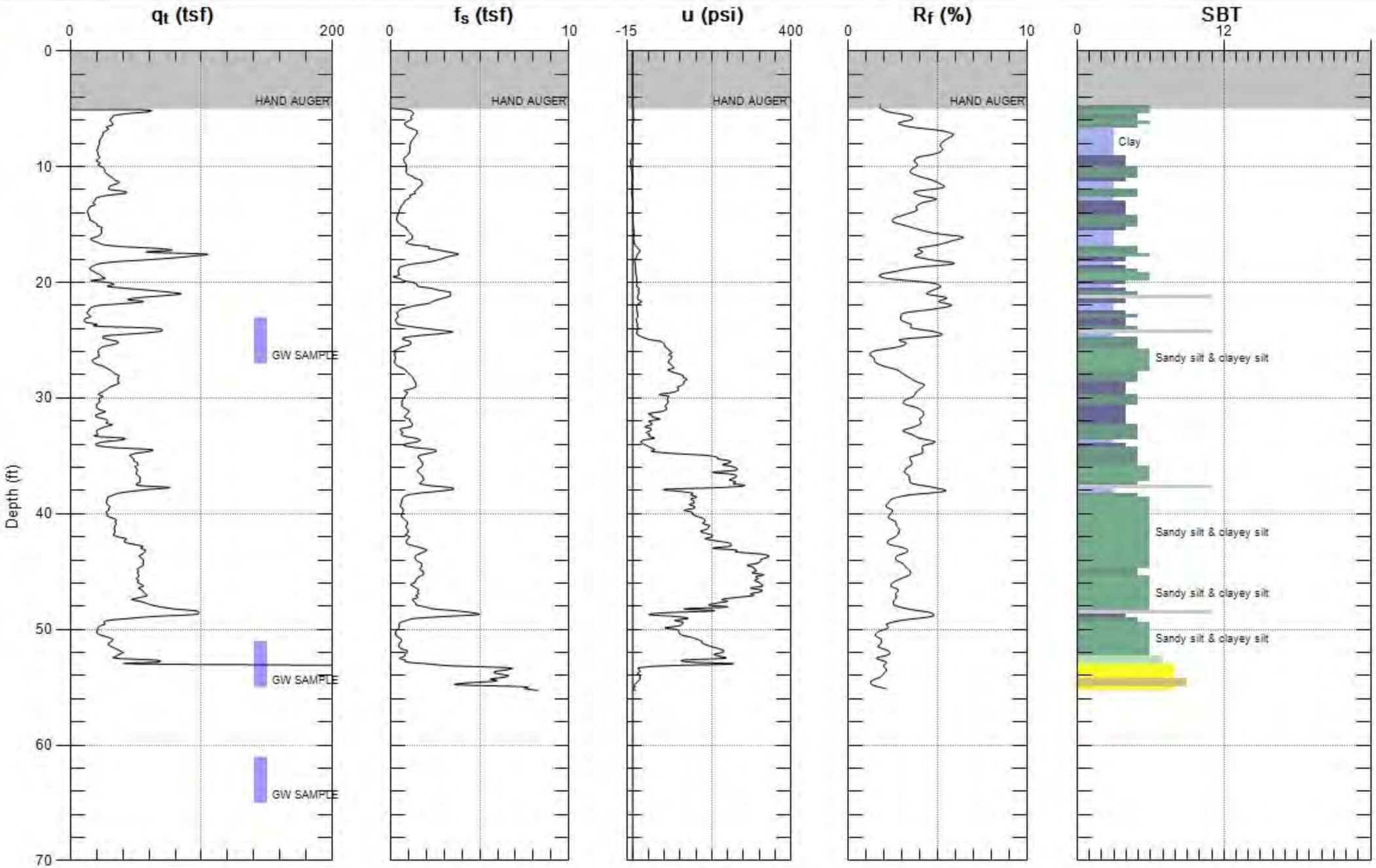
Max. Depth: 51.017 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

COOK ENVIRONMENTAL

Site: KHAN
Sounding: CPT-02

Engineer: T. COOK
Date: 7/25/2011 11:20



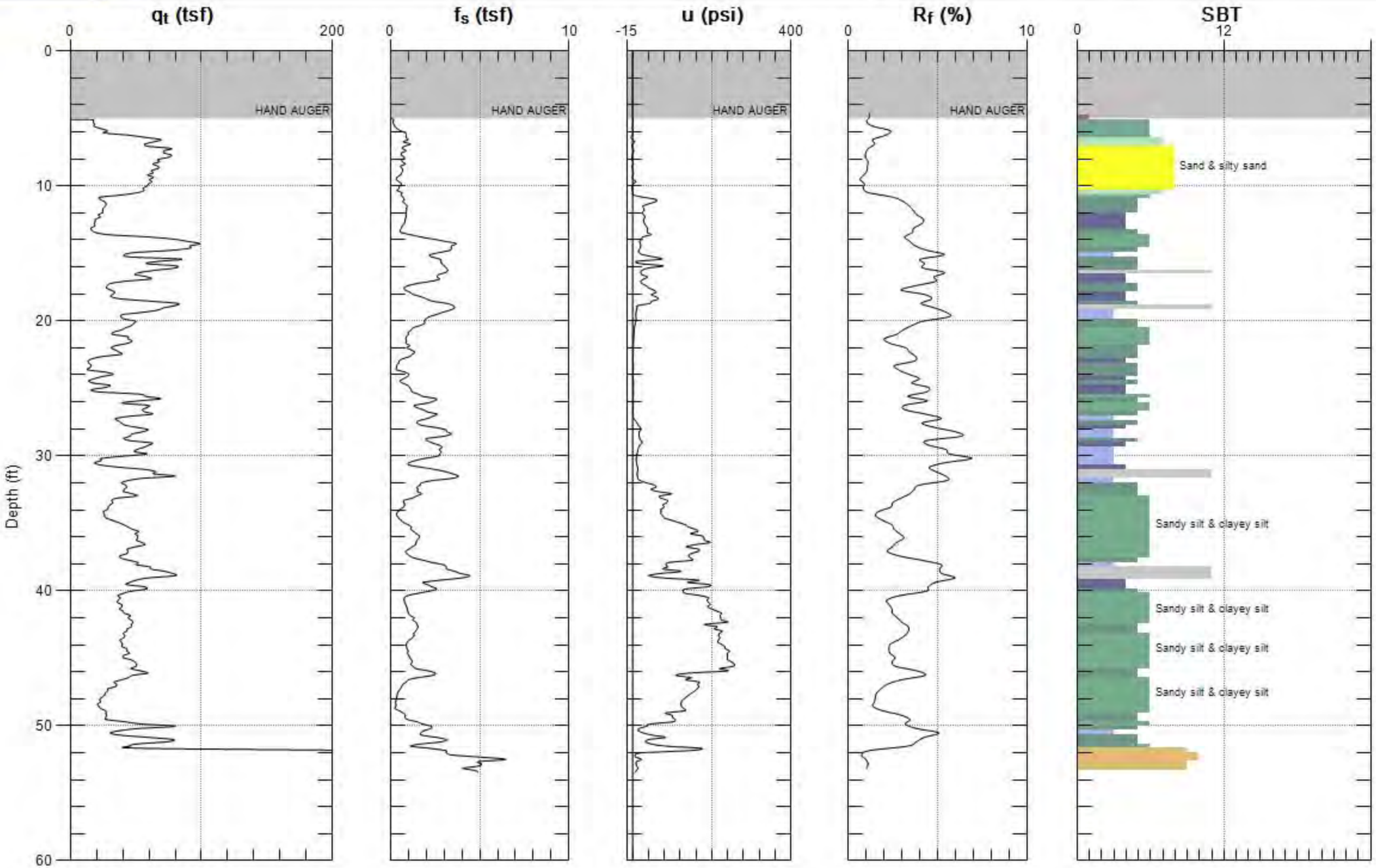
Max. Depth: 55.282 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

COOK ENVIRONMENTAL

Site: KHAN
Sounding: CPT-03

Engineer: T. COOK
Date: 7/25/2011 01:36



Max. Depth: 53.478 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

APPENDIX B
CPT Methods & Procedures

Cone Penetration Testing Procedure (CPT)

Gregg Drilling 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 0.80.

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 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 (2007) ASTM standards (D 5778-07).

The cone also contains a porous filter element located directly behind the cone tip (u_2). 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 oil under vacuum pressure to ensure accurate and fast dissipation.

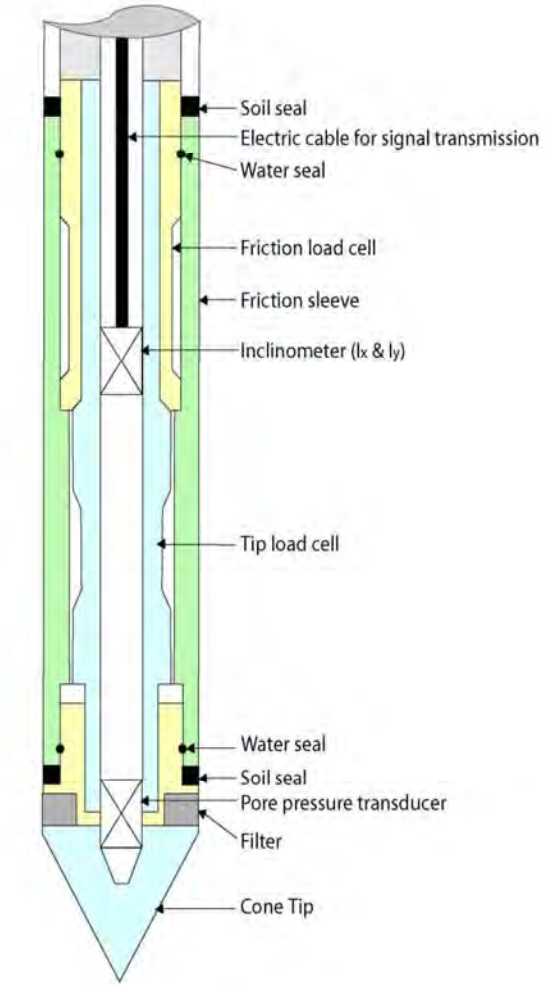


Figure CPT

The cone has the following accuracy:
1 tsf for q_c, 0.02 tsf for f_s and 0.5 psi for u_2. In soft clays, a lower capacity cone should be used for improved accuracy.

When the soundings are complete, the test holes are grouted. The grouting procedures generally consist of pushing a hollow tremie pipe with a "knock out" plug to the termination depth of the CPT 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.

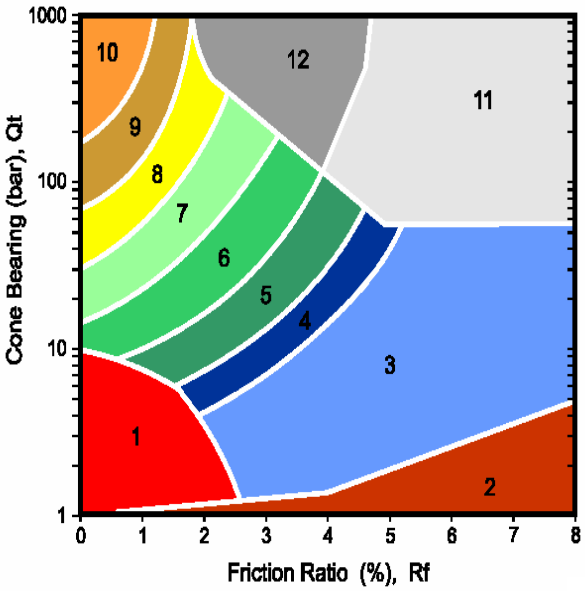
Cone Penetration Test Data & Interpretation

The Cone Penetration Test (CPT) data collected from your site are presented in graphical form in the attached report. The plots include interpreted Soil Behavior Type (SBT) based on the charts described by Robertson (1990). Typical plots display SBT based on the non-normalized charts of Robertson et al (1986). For CPT soundings extending greater than 50 feet, we recommend the use of the normalized charts of Robertson (1990) which can be displayed as SBTn, upon request. The report also includes spreadsheet output of computer calculations of basic interpretation in terms of SBT and SBTn and various geotechnical parameters using current published correlations based on the comprehensive review by Lunne, Robertson and Powell (1997), as well as recent updates by Professor Robertson. The interpretations are presented only as a guide for geotechnical use and should be carefully reviewed. Gregg Drilling & Testing Inc. do not warranty the correctness or the applicability of any of the geotechnical parameters interpreted by the software and do not assume any liability for any use of the results in any design or review. The user should be fully aware of the techniques and limitations of any method used in the software.

Some interpretation methods require input of the groundwater level to calculate vertical effective stress. An estimate of the in-situ groundwater level has been made based on field observations and/or CPT results, but should be verified by the user.

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.

Note that it is not always possible to clearly identify a soil type based solely on q_t, 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 correct soil behavior type.



(After Robertson, et al., 1986)

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

*over consolidated or cemented

Figure SBT

APPENDIX C
Laboratory Analytical Reports

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Analytical Report

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1024; Khan Petroleum	Date Sampled: 07/26/11
		Date Received: 07/26/11
	Client Contact: Tim Cook	Date Reported: 07/28/11
	Client P.O.:	Date Completed: 07/27/11

WorkOrder: 1107713

July 28, 2011

Dear Tim:

Enclosed within are:

1) The results of the **6** analyzed samples from your project: **#1024; Khan Petroleum,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1107713

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

RUSH

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☒ 48 HR ☐ 72 HR ■ 5 DAY

GeoTracker EDF ■ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Tim Cook Bill To: Same

Company: Cook Environmental Services

1485 Treat Blvd., Ste 203A

Walnut Creek, CA 94597 E-Mail: tcook@cookenvironmental.com

Tele: 925-478-8390 Fax:

Project #: 1024 Project Name: Khan Petroleum

Project Location: Sunol

Sampler Signature: Lorraine Fuller

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs) 8 OXYS only	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	RCRA 8 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis	Comments
+2 CPT-1-1	24'-27'	7-26	7:42am	2	VOA	X					X	X													X							
+5 CPT-1-2	52'-55'	7-26	8:50am	2	VOA	X					X	X													X							
+2 CPT-1-3	62'-65'	7-26	8:52am	2	VOA	X					X	X													X							
+2 CPT-2-1	24'-27'	7-26	10:21am	2	VOA	X					X	X													X							
+5 CPT-2-2	52'-55'	7-26	10:42am	2	VOA	X					X	X													X							
+5 CPT-2-3	62'-65'	7-26	11:15am	2	VOA	X					X	X													X							

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By:	Date:	Time:	Received By:
Lorraine Fuller	7-26	2:32	Mel Vall
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/T: 3.8

GOOD CONDITION

HEAD SPACE ABSENT

DECHLORINATED IN LAB

APPROPRIATE CONTAINERS

PRESERVED IN LAB

VOAS O&G METALS OTHER

PRESERVATION pH<2

COMMENTS:

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1107713 **ClientCode: CESW**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597
925-937-1759 FAX: 925-937-1759

Email: tcook@cookenvironmental.com
cc:
PO:
ProjectNo: #1024; Khan Petroleum

Bill to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597

Requested TAT: 2 days

Date Received: **07/26/2011**
Date Printed: **07/26/2011**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1107713-001	CPT-1-1	Water	7/26/2011 7:42	☐	A	A										
1107713-002	CPT-1-2	Water	7/26/2011 8:50	☐	A											
1107713-003	CPT-1-3	Water	7/26/2011 8:52	☐	A											
1107713-004	CPT-2-1	Water	7/26/2011 10:21	☐	A											
1107713-005	CPT-2-2	Water	7/26/2011 10:42	☐	A											
1107713-006	CPT-2-3	Water	7/26/2011 11:15	☐	A											

Test Legend:

1	9-OXYS_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **Cook Environmental Services, Inc.**
Date and Time Received: **7/26/2011 2:35:18 PM**

Project Name: **#1024; Khan Petroleum**
Checklist completed and reviewed by: Zoraida Cortez

WorkOrder N°: **1107713** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 3.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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Cook Environmental Services, Inc.	Client Project ID: #1024; Khan Petroleum	Date Sampled: 07/26/11
		Date Received: 07/26/11
1485 Treat Blvd, Ste. 203A	Client Contact: Tim Cook	Date Extracted: 07/27/11
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 07/27/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1107713

Lab ID	1107713-001A	1107713-002A	1107713-003A	1107713-004A	Reporting Limit for DF =1	
Client ID	CPT-1-1	CPT-1-2	CPT-1-3	CPT-2-1		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND	ND	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND	NA	0.5
Ethanol	ND	ND	ND	ND	NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methanol	ND	ND	ND	ND	NA	500
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	125	121	124	126		
Comments	b1	b1	b1	b1		

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1024; Khan Petroleum	Date Sampled: 07/26/11
		Date Received: 07/26/11
	Client Contact: Tim Cook	Date Extracted: 07/27/11
	Client P.O.:	Date Analyzed: 07/27/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1107713

Lab ID	1107713-005A	1107713-006A			Reporting Limit for DF =1	
Client ID	CPT-2-2	CPT-2-3				
Matrix	W	W				
DF	1	1			S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND			NA	0.5
t-Butyl alcohol (TBA)	ND	ND			NA	2.0
1,2-Dibromoethane (EDB)	ND	ND			NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND			NA	0.5
Diisopropyl ether (DIPE)	ND	ND			NA	0.5
Ethanol	ND	ND			NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND			NA	0.5
Methanol	ND	ND			NA	500
Methyl-t-butyl ether (MTBE)	ND	ND			NA	0.5
Surrogate Recoveries (%)						
%SS1:	125	123				
Comments	b1	b1				

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 59984 WorkOrder: 1107713

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: 1107683-002A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	89.3	84.5	5.54	77.2	78.4	1.50	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	120	113	6.19	105	105	0	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	99.6	96.8	2.89	84.7	87.9	3.62	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	108	101	6.72	92.2	93.7	1.68	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	117	109	6.65	98.8	101	2.35	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	104	97.5	6.62	89	91	2.24	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	109	103	5.64	94.4	96.1	1.80	70 - 130	30	70 - 130	30
%SS1:	104	25	101	101	0	102	102	0	70 - 130	30	70 - 130	30
%SS2:	99	25	98	99	1.04	98	98	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 59984 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107713-001A	07/26/11 7:42 AM	07/27/11	07/27/11 5:06 AM	1107713-002A	07/26/11 8:50 AM	07/27/11	07/27/11 5:50 AM
1107713-003A	07/26/11 8:52 AM	07/27/11	07/27/11 6:32 AM	1107713-004A	07/26/11 10:21 AM	07/27/11	07/27/11 7:14 AM
1107713-005A	07/26/11 10:42 AM	07/27/11	07/27/11 7:59 AM	1107713-006A	07/26/11 11:15 AM	07/27/11	07/27/11 8:41 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

Analytical Report

Cook Environmental Services, Inc. 1485 Treat Blvd, Ste. 203A Walnut Creek, CA 94597	Client Project ID: #1024; Khan Petroleum	Date Sampled: 07/25/11
		Date Received: 07/26/11
	Client Contact: Tim Cook	Date Reported: 07/28/11
	Client P.O.:	Date Completed: 07/27/11

WorkOrder: 1107714

July 28, 2011

Dear Tim:

Enclosed within are:

1) The results of the **3** analyzed samples from your project: **#1024; Khan Petroleum,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

RUSH 1107714

CHAIN OF CUSTODY RECORD

McCAMPBELL ANALYTICAL, INC.
1534 Willow Pass Rd.
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

TURN AROUND TIME ☐ RUSH ☐ 24 HR ■ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? Coelt (Normal) Yes Write On (DW) No

Report To: Tim Cook Bill To:
Company: Cook Environmental Services, Inc.
1485 Treat Blvd, Suite 203A
Walnut Creek, CA 94597 E-Mail: tcook@cookenvironmental.com
Tele: (925) 478-8390 Fax: (925) 478-8394
Project #:1024 Project Name: Kahn Petroleum
Project Location: 3004 Andrade Road, Sunol, CA
Sampler Name & Signature: LorraineFuller

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	TPH-g, BTEX & 9 Oxys by 8260	TPH as Diesel (8015) & TPHmo	EPA 8260 – Full Scan	8310 Pluse 2-methyl napthalene	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 8260 (9 oxys only)	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	SPLC Leach	TTLC Leach	Comments
CPT-3-1	7'-10'	7-25	3:19pm	2	VOAS	X						X													X								
CPT-3-2	52'-55'	7-25	3:45pm	2	VOAS	X						X													X								
CPT-3-3	62'-65'	7-25	4:14pm	2	VOAS	X						X													X								

Relinquished By: LorraineFuller Date: 7-25 Time: 6:07pm Received By: Tim Cook
Relinquished By: Tim Cook Date: 7/26 Time: 1:41p Received By:
Relinquished By: LorraineFuller Date: 7-26 Time: 2:32 Received By:

ICE/t° 3.8 COMMENTS:
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

PRESERVATION VOAS | O&G | METALS pH<2 | OTHER

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1107714 **ClientCode: CESW**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597
925-937-1759 FAX: 925-937-1759

Email: tcook@cookenvironmental.com
cc:
PO:
ProjectNo: #1024; Khan Petroleum

Bill to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597

Requested TAT: 2 days

Date Received: **07/26/2011**
Date Printed: **07/26/2011**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1107714-001	CPT-3-1	Water	7/25/2011 15:19	☐	A	A										
1107714-002	CPT-3-2	Water	7/25/2011 15:45	☐	A											
1107714-003	CPT-3-3	Water	7/25/2011 16:14	☐	A											

Test Legend:

1	9-OXYS_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **Cook Environmental Services, Inc.**
Date and Time Received: **7/26/2011 2:53:55 PM**

Project Name: **#1024; Khan Petroleum**
Checklist completed and reviewed by: Zoraida Cortez

WorkOrder N°: **1107714** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 3.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Client contacted: Date contacted: Contacted by:

Comments:

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Cook Environmental Services, Inc.	Client Project ID: #1024; Khan Petroleum	Date Sampled: 07/25/11
		Date Received: 07/26/11
1485 Treat Blvd, Ste. 203A	Client Contact: Tim Cook	Date Extracted: 07/27/11
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 07/27/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1107714

Lab ID	1107714-001A	1107714-002A	1107714-003A		Reporting Limit for DF =1	
Client ID	CPT-3-1	CPT-3-2	CPT-3-3			
Matrix	W	W	W			
DF	1	1	1		S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND		NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND		NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND		NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND		NA	0.5
Ethanol	ND	ND	ND		NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND		NA	0.5
Methanol	ND	ND	ND		NA	500
Methyl-t-butyl ether (MTBE)	ND	ND	ND		NA	0.5
Surrogate Recoveries (%)						
%SS1:	99	99	99			
Comments	b1	b1	b1			

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 59984 WorkOrder: 1107714

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: 1107683-002A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	89.3	84.5	5.54	77.2	78.4	1.50	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	120	113	6.19	105	105	0	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	99.6	96.8	2.89	84.7	87.9	3.62	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	108	101	6.72	92.2	93.7	1.68	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	117	109	6.65	98.8	101	2.35	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	104	97.5	6.62	89	91	2.24	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	109	103	5.64	94.4	96.1	1.80	70 - 130	30	70 - 130	30
%SS1:	104	25	101	101	0	102	102	0	70 - 130	30	70 - 130	30
%SS2:	99	25	98	99	1.04	98	98	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 59984 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107714-001A	07/25/11 3:19 PM	07/27/11	07/27/11 6:35 AM	1107714-002A	07/25/11 3:45 PM	07/27/11	07/27/11 7:13 AM
1107714-003A	07/25/11 4:14 PM	07/27/11	07/27/11 7:52 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer