



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

November 6, 2009

Mr. Ian Robb (*Sent via E-mail to: ianrobb@chevron.com*)
Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583-2324

Ms. Chris Davidson (*Sent via E-mail to: cedavidson@ci.livermore.ca.us*)
City of Livermore Economic Development
1052 S. Livermore Ave.
Livermore, CA 94550

Subject: Fuel Leak Case No. RO0002908 and Geotracker Global ID T0600196622, Miller Square Park,
2259 First Street, Livermore, CA 94550

Dear Mr. Robb and Ms. Davidson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above referenced site including the recently submitted document entitled, "*Revised Work Plan*," dated September 28, 2009, which was prepared on behalf of Chevron by Conestoga-Rovers & Associates. In correspondence dated August 4, 2009, ACEH requested that you address our technical comments on a June 10, 2009 document entitled, "*Pilot Test Work Plan or Draft Corrective Action Plan*."

The September 28, 2009 Revised Work Plan does not adequately address our technical comments and is rejected. The deficiencies in the September 28, 2009 Revised Work Plan are discussed in the technical comments below. We request that you prepare a Revised Work Plan that addresses the issues discussed in the technical comments below **no later than January 10, 2010**.

TECHNICAL COMMENTS

1. **Potential Remedial Options.** The discussions of potential remedial options are acceptable and no revisions are required to this section of the Revised Work Plan.
2. **Proposed Well Locations.** The Revised Work Plan maintains the four previously proposed locations and adds one location in a proximal cross gradient location to the former USTs. No wells are proposed downgradient of sampling locations CPT1 through CPT3 where TPHg was detected in groundwater at concentrations ranging from 10,000 to 47,000 micrograms per liter. In addition, three of the proposed monitoring wells are located in a linear pattern that is perpendicular to the west northwest groundwater flow direction that occurs within this area of Livermore. Although the proposed well configuration has limitations, the proposed fifth well may provide sufficient information to estimate the hydraulic gradient at the site. Therefore, we do not object to the proposed locations with the added caveat that additional downgradient delineation may be necessary contingent upon groundwater sampling results from the proposed wells.

- Proposed Well Screen Intervals.** Our August 4, 2009 correspondence objected to the installation of monitoring wells with screen intervals from 30 to 55 feet bgs and requested that the well screen intervals target discrete water bearing layers and not create vertical conduits for ambient well flow. The September 28, 2008 Revised Work Plan maintains the proposal to install monitoring wells with screen intervals from 30 to 55 feet bgs. This proposal is not acceptable and causes us to reject the Work Plan. Technical comment 2 in our August 4, 2009 correspondence provided specific examples of why the proposed screen intervals are not appropriate. Continuing to propose wells within long screen intervals seems particularly inconsistent given the stated objective of the well installation. We generally concur with the discussion in the third sentence of section 3.0 of the Revised Work Plan regarding the need to define plume distribution and target the correct interval for remediation, "so that any remedial option will target the appropriate zones of impact with the best chance of success." The information derived from long screen wells represents a composite of the vertical hydraulic gradient and a mixing of groundwater from separate zones. As a result, screening wells over 25 foot intervals does not allow the appropriate vertical intervals to be targeted. Where necessary, multiple wells must be installed to monitor separate vertical intervals. In the revised Work Plan requested below, please propose screen intervals that will achieve the objective of targeting the appropriate vertical interval, are based on the distribution of likely water-bearing layers, and do not create vertical conduits for ambient flow.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **January 10, 2010** – Revised Work Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same

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reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

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If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Attachments: ACEH Correspondence dated August 4, 2009

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway
Livermore, CA 94551 (Sent via E-mail to: cdizon@zone7water.com)

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566 (Sent via E-mail to: DStefani@lpfire.org)

John Rigter, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566 (Sent via E-mail to: jrigter@lpfire.org)

Brandon Wilken, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A
Emeryville, CA 94608 (Sent via E-mail to: BWilken@croworld.com)

Donna Drogos, ACEH (Sent via E-mail to: donna.drogos@acgov.org)

Jerry Wickham, ACEH (Sent via E-mail to: jerry.wickham@acgov.org)

Geotracker, File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	ISSUE DATE: July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

- 1) Obtain User Name and Password:
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to dehloptoxic@acgov.org
 - Or
 - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape and Firefox browsers will not open the FTP site.
 - b) Click on File, then on Login As.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-93

August 4, 2009

Mr. Ian Robb
Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583-2324

Ms. Chris Davidson
City of Livermore Economic Development
1052 S. Livermore Ave.
Livermore, CA 94550

Subject: Fuel Leak Case No. RO0002908 and Geotracker Global ID T0600196622, Miller Square Park,
2259 First Street, Livermore, CA 94550

Dear Mr. Robb and Ms. Davidson:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above referenced site including the recently submitted document entitled, "*Pilot Test Work Plan or Draft Corrective Action Plan*," dated June 10, 2009, which was prepared on behalf of Chevron by Conestoga-Rovers & Associates. Although the document is entitled, "*Pilot Test Work Plan or Draft Corrective Action Plan*," the document does not propose a pilot test or corrective action. Instead, the document is a work plan to install four monitoring wells for the purpose of collecting additional data for one year prior to evaluating remedial options.

Based on the extent of contamination and elevated concentrations of fuel hydrocarbons, remedial action will be required for the site. We do not object to the collection of additional data that are necessary for the more effective or more efficient development of feasible remedial alternatives for the site. However, the data collection must be necessary for and focused towards the development of remedial alternatives. It is not clear that well installation and sampling of the monitoring wells for a period of one year is necessary prior to implementing any pilot testing or additional data collection specifically for the purpose of evaluating remedial alternatives.

In the Revised Work Plan requested below, we request that you review and discuss specific possible remedial options for the site. For each remedial option, please identify any additional data collection that is necessary for evaluation of the remedial options considered for the site. For the remedial options considered, please carefully review whether it is necessary to delay all pilot testing and data collection for one year to sample the proposed monitoring wells. Please provide the rationale for delaying pilot testing or corrective action for each remedial option considered. Pilot testing activities that can be conducted concurrently with well installation and sampling must be proposed in the Revised Work Plan.

We request that you prepare a Revised Work Plan that addresses the issues discussed in the previous two paragraphs and the technical comments below. Please submit the Revised Work Plan **no later than September 30, 2009**.

TECHNICAL COMMENTS

- 1. Proposed Monitoring Well Locations.** Three of the four proposed monitoring wells are located in a linear pattern that is perpendicular to the west northwest groundwater flow direction that occurs within the area of Livermore. The wells are apparently located adjacent to locations where groundwater contamination has been detected by previous sampling activities. Please give more consideration to the known sources and hydraulic gradient in proposing a groundwater monitoring network rather than targeting previous sampling locations. We request that you revise the proposed monitoring well locations in the Revised Work Plan requested below.
- 2. Proposed Well Screen Intervals.** The proposed screen intervals for the four monitoring wells are 30 to 55 feet bgs based on previous depth to first encountered water and variable groundwater elevations at nearby sites. Site hydrogeologic conditions than variable depths to first encountered groundwater must be considered in designing well screen intervals. The well screen intervals must target discrete water bearing layers and not create vertical conduits for ambient well flow. Where necessary, multiple wells must be installed to monitor separate vertical intervals. Since the proposed well locations are adjacent to previous soil borings, the hydrogeologic conditions at the proposed locations are known and must be considered. As one example, we have attached the CPT log for boring CPT-1, which is adjacent to one of the proposed well locations. As shown on Attachment 1, the proposed well screen interval from 30 to 55 feet bgs connects three separate coarse-grained layers that are separated by finer grained layers. A well constructed in this manner at the proposed location would provide a conduit for vertical flow and water levels in the well would be affected by vertical gradients between the difference intervals. Clearly, the proposed well screen interval for a well adjacent to CPT-1 would not be appropriate. A second example of the need to consider the site hydrogeology is shown on Attachment 2, which is the CPT log for boring CPT-5. The proposed well adjacent to CPT-5 would be screened exclusively in the finer-grained soils consisting of silts and clays present between approximately 11 and 55 feet bgs. The proposed well screen would not intersect any permeable water-bearing layers. Therefore, the proposed well at this location would not provide sufficient data on contaminant migration off-site since the well does not intersect the likely pathway for contaminant migration. Please review site hydrogeology and propose screen intervals that are appropriate for the site.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **September 30, 2009 – Revised Work Plan**

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

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PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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AGENCY OVERSIGHT

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If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,



Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Attachments: CPT Logs for CPT-1 and CPT-5

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon, QIC 80201, Zone 7 Water Agency, 100 North Canyons Parkway
Livermore, CA 94551

Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566

John Rigter, Livermore-Pleasanton Fire Department, 3560 Nevada Street
Pleasanton, CA 94566

Charlotte Evans, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A
Emeryville, CA 94608

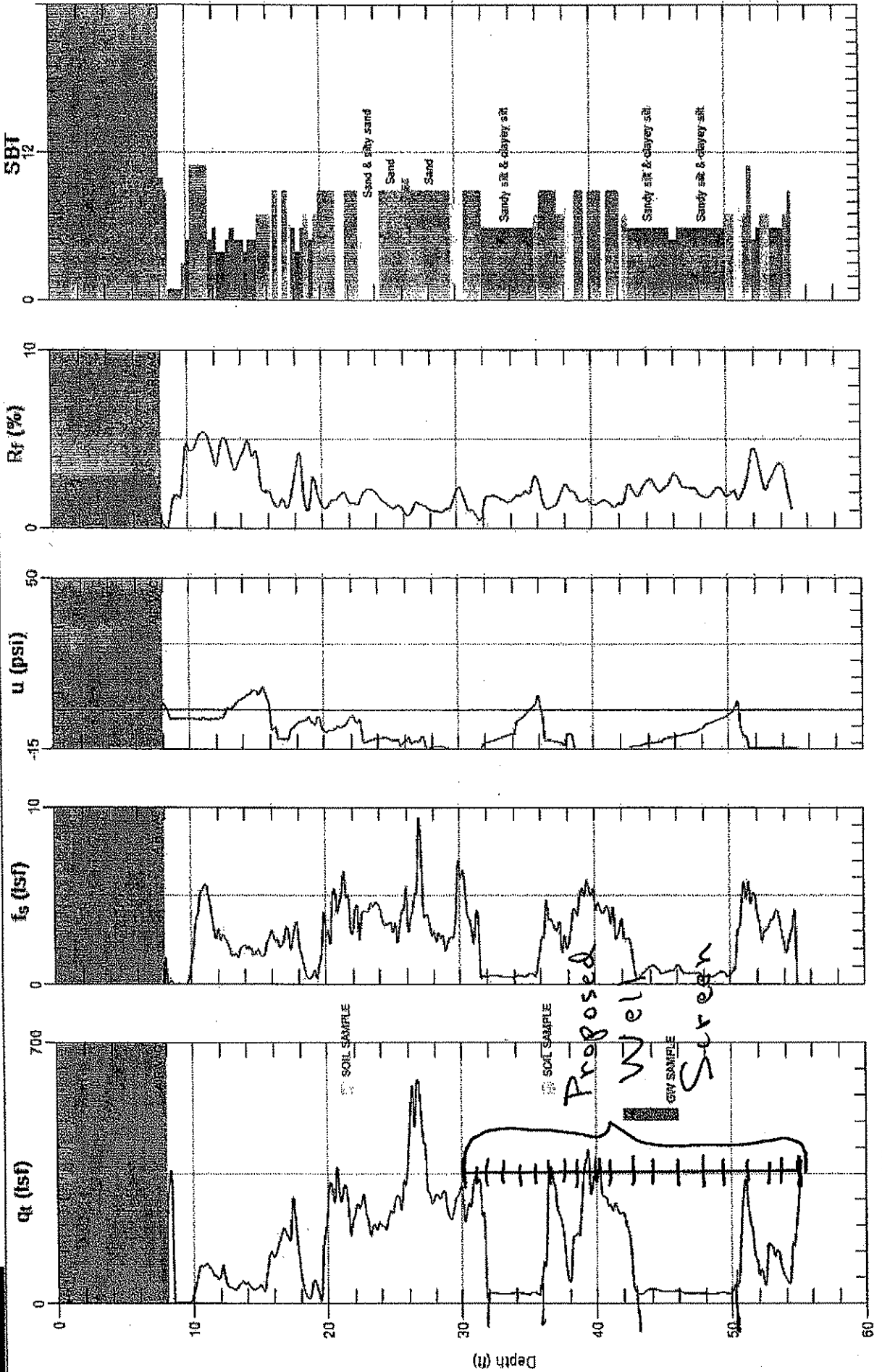
Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Attachment A



Site: FMR. TEXACO 30-7233
Sounding: CPT-01

Engineer: C.EVANS
Date: 2/5/2008 08:10



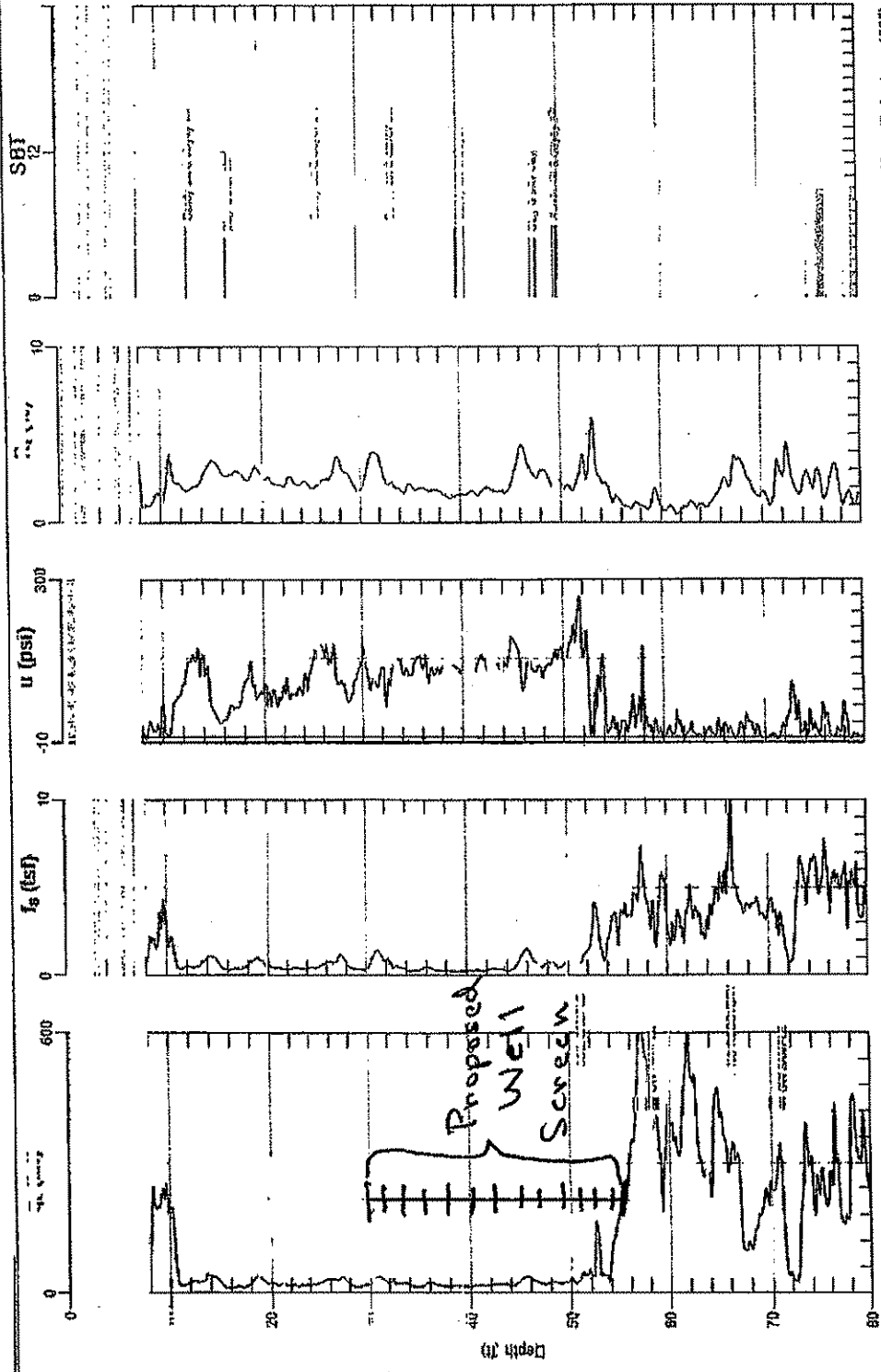
Max. Depth: 55.118 (ft)
Avg. Interval: 0.328 (ft)

Attachment B

GREGG CONESTOGA ROVERS

Site: CHEVRON 30-7233
Contract: CP76

Engineer: LHULL
Date: 11/3/2008 09:42



SBT: Soil Behavior Type (Robertson 1998)

Max Depth: 80.052 (ft)
Avg. Interval: 0.323 (ft)