



**Stantec**

**Stantec Consulting Services Inc.**  
3017 Kilgore Road Suite 100  
Rancho Cordova CA 95670  
Tel: (916) 861-0400  
Fax: (916) 861-0430

July 20, 2012

Mr. Jerry Wickham  
Alameda County Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**RECEIVED**

**3:33 pm, Jul 23, 2012**

Alameda County  
Environmental Health

RE: **Enclosed Additional Site Assessment Report**  
7-Eleven Store #32266  
1339 North Vasco Road  
Livermore, CA 94551  
Stantec Project #:211502037.230.0502

Dear Mr. Wickham:

Stantec Consulting Services Inc. has been designated as Limited Agent of 7-Eleven, Inc. (7-Eleven) for the purposes of executing and delivering instruments and documents on behalf of 7-Eleven (see attached Limited Authorization form).

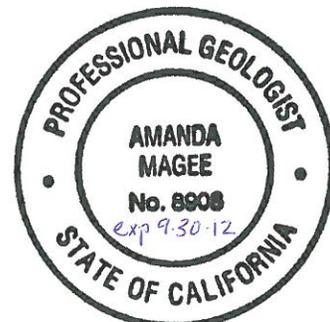
We declare, under penalty of perjury, that the information and/or recommendations contained in the attached assessment report are true and correct to best of our knowledge.

Should you have any questions regarding this site, please contact the undersigned at (916) 861-0400.

Sincerely,  
**Stantec Consulting Services Inc.**

Damon Brown  
Senior Geologic Consultant  
Project Manager

Amanda Magee, P.G.  
Associate Geologist



**LIMITED AUTHORIZATION**

KNOW ALL MEN BY THESE PRESENTS:

That 7-ELEVEN, INC. ("7-Eleven"), a Texas corporation, acting by and through Doug Rosencrans, Vice President, does hereby nominate, constitute and appoint STANTEC CONSULTING SERVICES INC. a Delaware corporation formerly known as Stantec Consulting Corporation, as Limited Agent ("Agent") of 7-Eleven, for purposes of executing and delivering instruments and documents as more particularly described below, and does hereby grant, delegate and invest said Agent with power and authority to execute and deliver for, in the name of, and on behalf of 7-Eleven, and in connection with that certain Amended and Restated Agreement by and between 7-Eleven and Agent dated as of January 1, 2010 (as amended, the "Agreement"), the instruments and documents listed in Attachment I hereto.

Agent may exercise the power and authority herein granted, delegated and invested, in any particular and appropriate transaction or matter, as an agent of 7-Eleven. Any instruments and documents executed and delivered by Agent under this Limited Authorization shall be acts of 7-Eleven and may be relied upon by third parties dealing with 7-Eleven, such acts being hereby ratified and confirmed by virtue hereof. Agent shall deliver all instruments and documents executed and delivered by Agent under this Limited Authorization to 7-Eleven promptly following such execution and delivery.

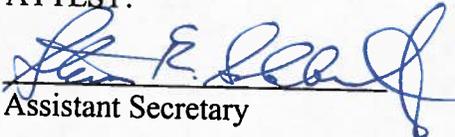
Any and all acts of Agent hereunder shall comply with all applicable federal, state and local laws, regulations, rules and ordinances and with all applicable orders of any courts of competent jurisdiction.

This Limited Authorization shall expire upon the expiration or earlier termination of the Agreement, except as otherwise provided therein, or may be terminated at any time for any reason by 7-Eleven.

APPROVED AND EXECUTED this 10th day of January, 2012, to be effective as of the date hereof.

7-ELEVEN, INC.

ATTEST:

  
Assistant Secretary

By:   
Name: Doug Rosencrans  
Title: Vice President

STATE OF TEXAS       §  
                                  §  
COUNTY OF DALLAS   §

BEFORE ME, the undersigned, a Notary Public in and for the County and State aforesaid, on this day personally appeared Doug Rosencrans and Steven R. Seldowitz, Vice President and Assistant Secretary, respectively, of 7-Eleven, Inc., known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said corporation, a Texas corporation, and that they executed the same as the act of such corporation for the purposes and consideration therein expressed and in the capacities therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 10th day of January, 2012.

Karen Pennell  
NOTARY PUBLIC

My Commission Expires:  
5-1-2013



## ATTACHMENT I

Such permits, reports, applications and other documentation issued by any federal, state or local governmental authority and such other standard form documentation provided by 7-Eleven or third parties to be completed in connection with Agent's performance of environmental consulting services pursuant to the Agreement, including, without limitation, the following:

- a. Waste Manifests;
- b. Waste Characterization Forms;
- c. Bills of Lading;
- d. Waste Disposal Agreements;
- e. Registration and Notification Forms for underground storage tanks;
- f. Incident Reports;
- g. Discharge Notification Forms;
- h. Tank Closure Reports;
- i. Permit Applications, Notices and other documents relating to the investigation, monitoring or remediation work performed under the Agreement;
- j. Reports to state environmental agencies regarding investigation, monitoring or remediation work performed under the Agreement; and
- k. Applications to any state underground storage tank insurance or reimbursement fund;

Provided, however, that in each case, the foregoing authorization shall not extend to any permits, reports, applications or other documentation that contain: (i) any language, the effect of which is to require 7-Eleven to indemnify, defend and/or hold harmless any third party for any act or omission of any kind; or (ii) any statement of any kind, including, without limitation, any representation or warranty, which Agent does not personally know to be true and correct, including, without limitation, any representation concerning the legal existence or financial condition of 7-Eleven.



**Stantec**

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July 20, 2012

Mr. Jerry Wickham  
Alameda County  
Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

RE: **Additional Site Assessment Report**  
7-Eleven Store #32266  
1339 North Vasco Road  
Livermore, CA 94551  
Stantec Project #: 211502037.230

Dear Mr. Wickham:

This report was prepared by Stantec Consulting Services Inc., (Stantec) on behalf of 7-Eleven Inc. (7-Eleven) to document the advancement of four direct-push soil borings (GP-4 through GP-7) at 7-Eleven store #32266, located at 1339 Vasco Road in Livermore, California (Figures 1 and 2). This work was performed in accordance with Stantec's March 5, 2012, *Revised Work Plan for Additional Site Assessment* and the March 26, 2012, approval letter from the Alameda County Environmental Health Services (ACEHS) (Attachment A).

### **INTRODUCTION**

The site is currently operating as a 7-Eleven convenience store and gasoline station with one 10,000-gallon and one 15,000-gallon underground storage tanks (USTs) (Figure 2). Stantec supervised the advancement of four direct-push soil borings (GP-4 through GP-7) to further define the limits of MtBE impacts in soil and groundwater at the site.

The work summarized in this report includes:

1. Obtaining permits
2. Preparing a site-specific *Health and Safety Plan*.
3. Clearing four boring locations using Underground Service Alert (USA) and a private utility locator.
4. Advancement and sampling of four direct-push soil borings.
5. Submitting soil and grab groundwater samples for laboratory analysis.

It should be noted that the March 2012 Workplan indicated that Stantec would complete the investigation in a phased approach; this report describes the first phase of the investigation. The

second phase, which includes the installation of two monitoring wells, will be completed following ACEHS approval.

### **SITE BACKGROUND**

In January 2005, two single-walled steel, fiberglass-jacketed USTs (one 10,000-gallon and one 15,000-gallon) were replaced with new double-walled fiberglass USTs. A total of 26 soil samples were collected during the UST replacement activities as follows:

- Five soil samples from the UST excavation,
- Six soil samples from the beneath the product dispensers,
- Five soil samples from the product line trenches,
- Eleven samples (44 samples combined at laboratory for eleven 4-part composite samples) from the stockpiled UST backfill material.

Total petroleum hydrocarbons as gasoline (TPHg) were not detected above laboratory reporting limits in any of the soil samples collected during the UST replacement activities (Table 1). The maximum concentrations of tertiary butyl alcohol (TBA) and methyl tertiary butyl ether (MtBE) detected were 2.4 milligrams per kilogram (mg/kg) and 2.6 mg/kg, respectively, in UST excavation sample T1-2-12. Total lead was detected in each of the samples at concentrations ranging from 4.98 mg/kg to 28.4 mg/kg.

In addition, a total of three water samples were collected during the 2005 UST replacement activities as follows:

- One grab sample (W1) from water collected/pooled within the excavated UST basin,
- Two samples (BT-1 & BT-2) collected from 20,000-gallon Baker Tanks storing pumped UST excavation water.

MtBE was detected at 180 micrograms per liter (ug/L) and benzene was reported at 25 ug/L in UST excavation water sample W1 (Table 2). TPHg was detected at 3,400 ug/L. No TPHg was detected in either Baker Tank sample (BT-1 or BT-2). Total xylenes were reported in sample BT-1 at 0.70 ug/L. MtBE was detected in both samples at concentrations of 340 ug/L (BT-1) to 400 ug/L (BT-2). Based on the results of the water samples collected, an UST Unauthorized Release report was completed and submitted to the Livermore-Pleasanton Fire Department (LPFD) and the California Regional Water Quality Control Board (CRWQCB).

On December 4, 2008, a Stantec Consulting Corporation (now Stantec Consulting Services Inc. [Stantec]) field scientist collected one soil sample in native soil from beneath four of the six dispensers (D1-5.0, D2-5.0, D3-5.0 and D4-5.0) during fuel system upgrade activities at the site. In addition, Stantec collected four soil samples from stockpiled excavated backfill material. The four stockpile samples were combined at the laboratory for one four-part composite sample SP1(ABCD). TPHg, benzene, toluene, ethyl-benzene and total xylenes (BTEX) were not detected above laboratory reporting limits in the dispenser soil samples collected, with the exception of dispenser sample D2-5. Soil sample D2-5 contained 0.21 mg/kg benzene, 0.59 mg/kg toluene, 0.26 mg/kg ethyl-benzene, 1.4 mg/kg xylenes, and 12 mg/kg TPHg. MtBE and TBA were detected exclusively in soil sample D1-5.5, at concentrations of 0.024 mg/kg and 0.0076 mg/kg, respectively. Di-isopropyl ether (DIPE), ethyl tertiary butyl ether (EtBE), and tertiary amyl methyl ether (TAME) were not detected above laboratory reporting limits in any

dispenser soil samples collected. BTEX, TPHg, MtBE, TBA, DIPE, ETBE, and TAME were not detected at concentrations above laboratory reporting limits in the stockpiled soil sample collected during this investigation. Total lead was detected at concentration of 4.4 mg/kg.

In a letter dated November 20, 2009, the ACEHS requested the submittal of a work plan to investigate potential soil and groundwater contamination at the site based on ACEHS review of the historical site data. Stantec submitted a *Work Plan for Additional Soil and Groundwater Assessment* to the ACEHS on February 1, 2010. The work plan was subsequently approved by the ACEHS in a letter dated March 22, 2010.

On April 20, 2010, Stantec supervised WDC Exploration and Wells (WDC) of Richmond, California, during the advancement of three direct-push soil borings (GP-1 through GP-3) at the site. Eight soil samples were collected from soil borings GP-1 through GP-3 for laboratory analysis. MtBE was reported in soil boring GP-3 at 10 and 15 feet below ground surface (bgs) at concentrations of 0.023 mg/kg and 1.1 mg/kg, respectively. TBA was exclusively detected in soil boring GP-3 at 15 feet bgs at a concentration of 0.0076 mg/kg. TPHg, BTEX, DIPE, EtBE, and TAME were not detected at concentrations above the laboratory reporting limits in soil samples collected from soil borings GP-1 through GP-3. In addition, grab-groundwater samples were collected from each boring. Grab-groundwater samples GP-2W and GP-3W reported MtBE concentrations of 2.9 µg/L and 380 µg/L, respectively. TAME was exclusively detected in grab-groundwater sample GP-3W at a concentration of 0.71 µg/L. TPHg, BTEX, DIPE, EtBE and TBA were not detected at concentrations above the laboratory reporting limits in grab-groundwater samples GP-1 through GP-3.

On May 17, 2010, Stantec submitted the results of the assessment activities in a report titled *Additional Soil and Groundwater Assessment* to the ACEHS.

In a letter dated July 14, 2010, the ACEHS requested the submittal of a work plan to further assess the extent of soil and groundwater contamination, the hydraulic gradient, and to identify potential receptors within a radius of 2,000 feet of the subject site.

On September 29, 2010, Stantec submitted a *Work Plan for Additional Site Assessment and Results of Detailed Well Survey* to the ACEHS and was approved in a letter dated October 25, 2010.

Between February 23 and 24, 2010, Stantec supervised the installation of three groundwater monitoring wells (MW-1, MW-2 and MW-3). On March 25, 2011, Stantec submitted an *Additional Site Assessment Report* to the ACEHS. Soil samples collected from MW-1 and MW-2 did not contain petroleum hydrocarbon concentrations above laboratory reporting limits. MtBE and TBA were reported at concentrations ranging from 0.0082 mg/kg to 0.33 mg/kg in soil samples collected from MW-3.

In a letter dated August 29, 2011, the ACEHS requested the submittal of a work plan for plume delineation to assess whether the plume extends to the water supply of the two wells located approximately 300 feet west of the site. On October 25, 2011, Stantec submitted the *Work Plan for Additional Assessment*. In a letter dated November 21, 2012, the ACEHS requested a revised work plan to address their technical comments. The *Revised Work Plan for Additional*

*Assessment* was submitted on March 5, 2012. The revised work plan was approved by the ACEHS on March 26, 2012.

### **LOCATIONS OF WATER SUPPLY WELLS**

In the ACEHS letter dated March 26, 2012, it was requested that Stantec investigate the locations of the two water supply wells identified 300 feet west of the site in the September 29, 2010 *Work Plan for Additional Site Assessment and Results of Detailed Well Survey*. Stantec conducted further investigations and a physical reconnaissance to determine the status of these two wells.

- 5874 Scenic Avenue (identified as "Well #5" in the well survey report): According to the well log, this well was installed on April 17, 1962 for Charles Ellington. No use description was noted on the well log. It is presumed, based on the previous use of the area, that the well was a private water supply well for irrigation or drinking water. Currently, the address of 5874 Scenic Avenue is not linked to any building, however it is estimated that the address lies on the south side of Scenic Avenue, approximately 300 feet west of the 7-Eleven site. Historic aerial photographs show a structure (possibly a residence) where that address may have been. The surrounding areas were undeveloped and agricultural. That area is now occupied by a single-family housing tract, which was constructed in the 1990s. North of Scenic Avenue is a shopping center constructed in the early 2000s. No evidence of this well was observed during the reconnaissance. Based on this information, it is likely that the well was destroyed during the development of the housing tract; however if the well is still present, it is no longer used as a water supply well.
- Vasco Road and Scenic (identified as "Well #6" in the well survey report): According to the well log, this was a cathodic protection well installed on March 12, 1975 for Pacific Gas and Electric (PG&E). Cathodic protection wells are not used as water supply wells. The well was installed in Scenic Avenue, 220 feet west of the intersection of Vasco Road. No evidence of the cathodic protection well was present during the site reconnaissance; however it is likely that the road has been re-paved since it was installed.

Based on this information, it appears that the dissolved MtBE plume will not impact water supply wells. Tables, figures, and copies of the well logs from the 2010 Well Survey report are included in Attachment B.

### **SOIL BORING, SAMPLING, AND WELL INSTALLATION**

#### ***Permitting/Site-Specific Health and Safety Plan/Utility Clearance***

Soil boring permits were obtained from Zone 7 Water Agency prior to conducting subsurface work at the site. In addition, Stantec obtained encroachment permits from the City of Livermore Community Development Department to advance the soil borings in the Vasco Road right-of-way. Copies of the permits are included in Attachment C.

Stantec prepared site-specific *Health and Safety Plan (HASP)* for the soil boring advancement and sampling activities at the site, as required by the Occupational Health and Safety Administration (OSHA) Standard "Hazardous Waste Operations and Emergency Response"

guidelines (29 CFR 1910.120). The document was reviewed and signed by all Stantec personnel and subcontractors prior to performing work at the site.

Prior to conducting subsurface work at the site, USA was contacted to delineate subsurface piping and/or utilities at the site with surface markings. In addition, a private utility locator service was contracted to clear the area surrounding each of the soil boring locations.

### ***Soil Borings***

Between July 10 and 12, 2012, Stantec supervised as WDC advanced four direct-push soil borings GP-4 through GP-7 at the locations shown on Figure 2. The first five feet of each boring were advanced via hand auger. At five feet bgs, borings GP-4, GP-5, GP-6, and GP-7 were advanced using a truck-mounted rig equipped with a two-inch diameter Macro Core<sup>®</sup> sampling device to a total depth of 25 feet bgs (Table 3). Downhole equipment was properly cleaned before advancing each borehole.

Soil boring and well construction details are summarized in Table 3, and field notes are included in Attachment D.

### ***Soil Sampling***

Soils were continuously cored from borings GP-4 through GP-7 starting at five feet bgs. Soil samples were collected from each direct push soil boring using a two-inch diameter by four-foot long core barrel containing a 1.75-inch diameter clear acrylic sample tube. Sampling equipment was properly cleaned between each sampling interval. Each soil sample was screened for hydrocarbon vapors using a portable photoionization detector (PID). Soils encountered during soil boring advancement were logged using the Unified Soil Classification System by a Stantec field geologist, working under the supervision of a California Professional Geologist.

Soil samples collected for analysis were sealed with Teflon<sup>®</sup> sheets and plastic caps, labeled, and placed on ice in an insulated container accompanied by the appropriate chain of custody (COC) documentation for delivery to Kiff Analytical LLC (Kiff), a California State certified laboratory located in Davis, California. The soil samples were analyzed for TPHg, BTEX, and MtBE by Environmental Protection Agency (EPA) Method 8260B.

### ***Soil Stratigraphy and Geology***

Based on the description of the soil samples collected from soil borings GP-4 through GP-7, the soil stratigraphy encountered consists mainly of clay and gravelly clay from ground surface to about 25 feet bgs. A shallow silt layer was observed in GP-5 and GP-6 to 10 feet bgs, and a sand layer was observed in GP-7 from 11 to 13 feet bgs. Copies of the soil boring logs are included in Attachment E.

### ***Grab-Groundwater Sampling***

Grab groundwater samples were collected from direct-push borings GP-4, GP-5, and GP-7 after collecting the soil samples described above. Water was not encountered in soil boring GP-6 at the total depth of 25 feet bgs. A disposable schedule 20 polyvinyl chloride (PVC) screen was placed in each boring to act as a temporary well. Water samples were collected by lowering a clean disposable ¾"-diameter PVC bailer through the drive rods to groundwater. The groundwater was then decanted from the bailer into 40-ml VOA vials. Each VOA vial was checked to ensure no bubbles were present, labeled, placed on ice, and transported to the

laboratory accompanied by the appropriate COC documentation. Groundwater samples were submitted to the laboratory for analysis of TPHg, BTEX, and MtBE.

Following logging of soil stratigraphy and collection of soil and grab-groundwater samples, soil borings GP-4 through GP-7 were tremie-grouted from total depth to grade with neat cement.

### ***Waste Disposal***

Soil generated during soil boring advancement was temporarily stored on site in DOT approved, properly labeled, 55-gallon drums, pending profiling and disposal. A four-point composite soil sample, SP1(ABCD), was collected from the soil bins and analyzed for TPHg, BTEX, and MtBE by EPA Method 8260B, and total lead by EPA Method 6010B (Table 1). A copy of the certified laboratory analytical reports and chain-of-custody documentation are included in Attachment F. Copies of the waste disposal documentation will be provided under a separate cover.

## **RESULTS OF SAMPLING ANALYSIS**

### ***Soil Sample Analytical Results***

A total of 19 soil samples were collected from soil borings GP-4 through GP-7 for laboratory analysis. BTEX and TPHg were not detected above laboratory reporting limits in any of the soil samples submitted for analysis. MtBE was reported solely in the samples collected from GP-5 at depths of 15, 20, and 25 feet bgs at concentrations of 0.024 mg/kg, 0.056 mg/kg, and 0.024 mg/kg, respectively. Soil sample analytical results are summarized in Table 1, and a copy of the certified laboratory analytical reports and chain-of-custody documentation are included in Attachment F.

### ***Grab-Groundwater Sample Analytical Results***

BTEX was not detected at concentrations above the laboratory reporting limits in any of the grab groundwater samples submitted during this investigation. TPHg was detected in groundwater samples GP-4W and GP-5W at concentrations of 75 µg/L and 95 µg/L, respectively. MtBE was detected in groundwater samples GP-4W and GP-5W at concentrations of 13 µg/L and 350 µg/L, respectively. Groundwater sample analytical results are summarized in Table 2, and a copy of the certified laboratory analytical reports and chain-of-custody documentation are included in Attachment F.

## **SUMMARY AND CONCLUSIONS**

Four soil borings (GP-4, GP-5, GP-6, and GP-7) were advanced between July 10 and 12, 2012. Soil samples collected from the borings did not contain detectable concentrations of BTEX or TPHg. MtBE was reported solely in the soil samples collected from GP-5 at depths of 15 to 25 feet, with a maximum concentration of 0.056 mg/kg. BTEX was not detected at concentrations above the laboratory reporting limits in any of the grab groundwater samples submitted during this investigation. TPHg and MtBE were detected in groundwater samples GP-4W and GP-5W at maximum concentrations of 95 µg/L and 350 µg/L, respectively.

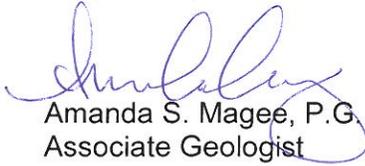
Based on the soil and groundwater analytical data collected during this investigation, Stantec recommends installing monitoring wells MW-4 and MW-5 as described in the March 2005 Workplan at the locations depicted on Figure 2.

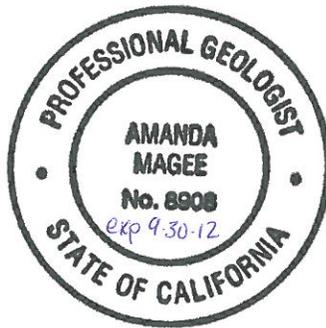
The results of the assessment work will be uploaded to the ACEHS FTP site. In addition, the report will be uploaded to the State of California GeoTracker database in EDF format, per California code AB2886.

Should you have any questions regarding this site, please contact the undersigned at (916) 861-0400.

Sincerely,  
**Stantec Consulting Corporation**

Prepared by:

  
Amanda S. Magee, P.G.  
Associate Geologist



Reviewed by:

  
Damon Brown  
Senior Geologic Consultant  
Project Manager

**ATTACHMENTS**

Figures

Tables

Attachment A – Regulatory Correspondence

Attachment B – Well Survey Report Information

Attachment C – Soil Boring and Encroachment Permits

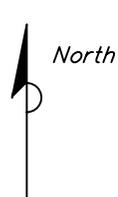
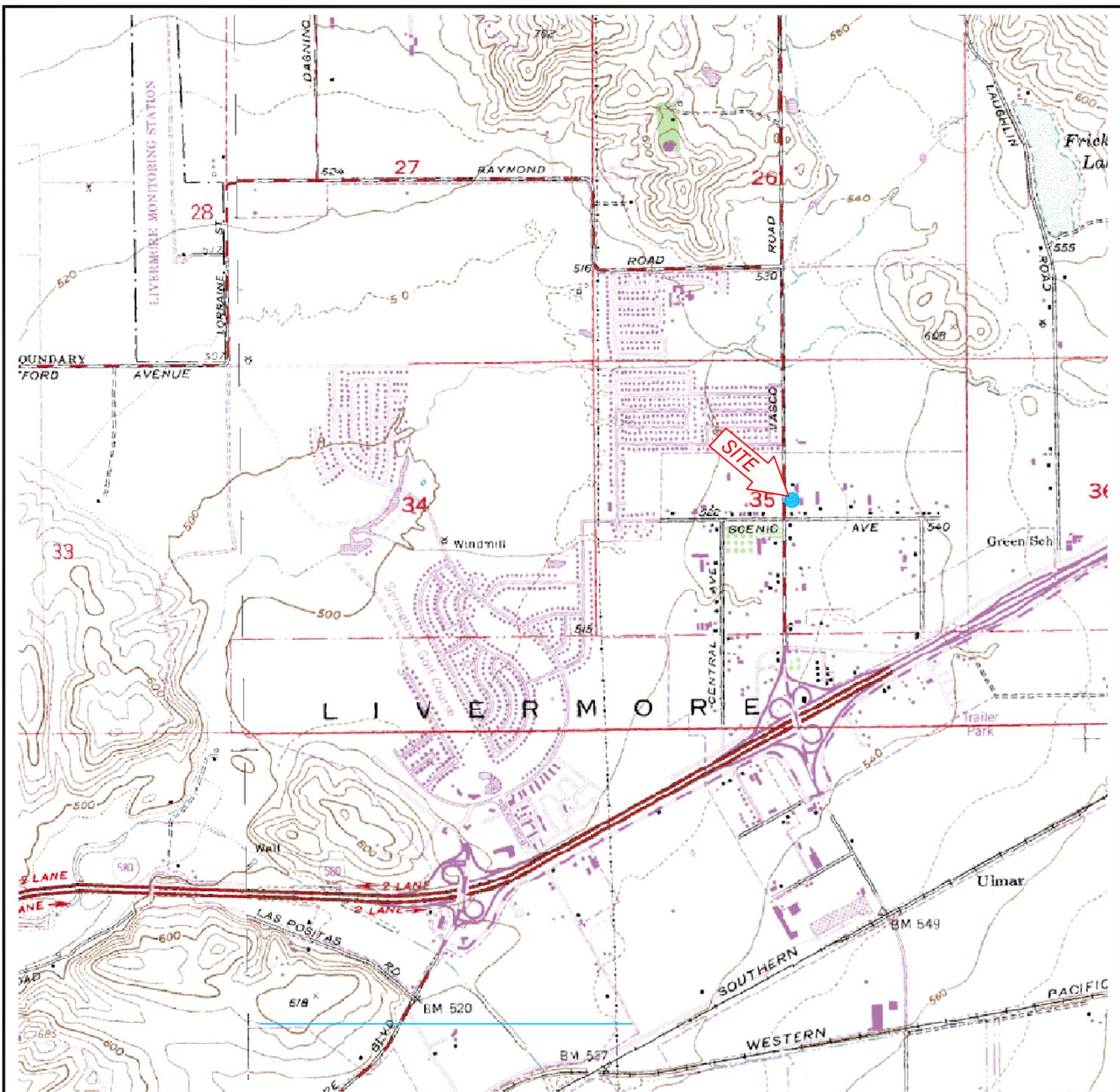
Attachment D – Field Notes

Attachment E – Soil Boring Logs

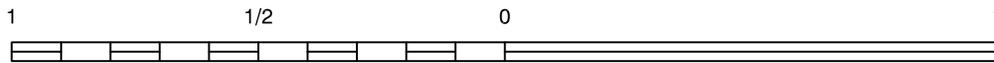
Attachment F – Certified Laboratory Analytical Reports and Chain-of-Custody Documentation

cc: Mr. John Wainwright, Stantec, 308 East 4500 South, Suite 100, Murray, Utah 84101

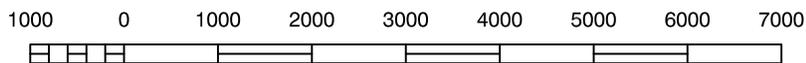
# Figures



CALIFORNIA



SCALE (MILES)



SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE, LIVERMORE, CALIFORNIA



FOR:



STORE NO. 32266  
1339 NORTH VASCO ROAD  
LIVERMORE, CALIFORNIA

**SITE LOCATION MAP**

FIGURE:

**1**

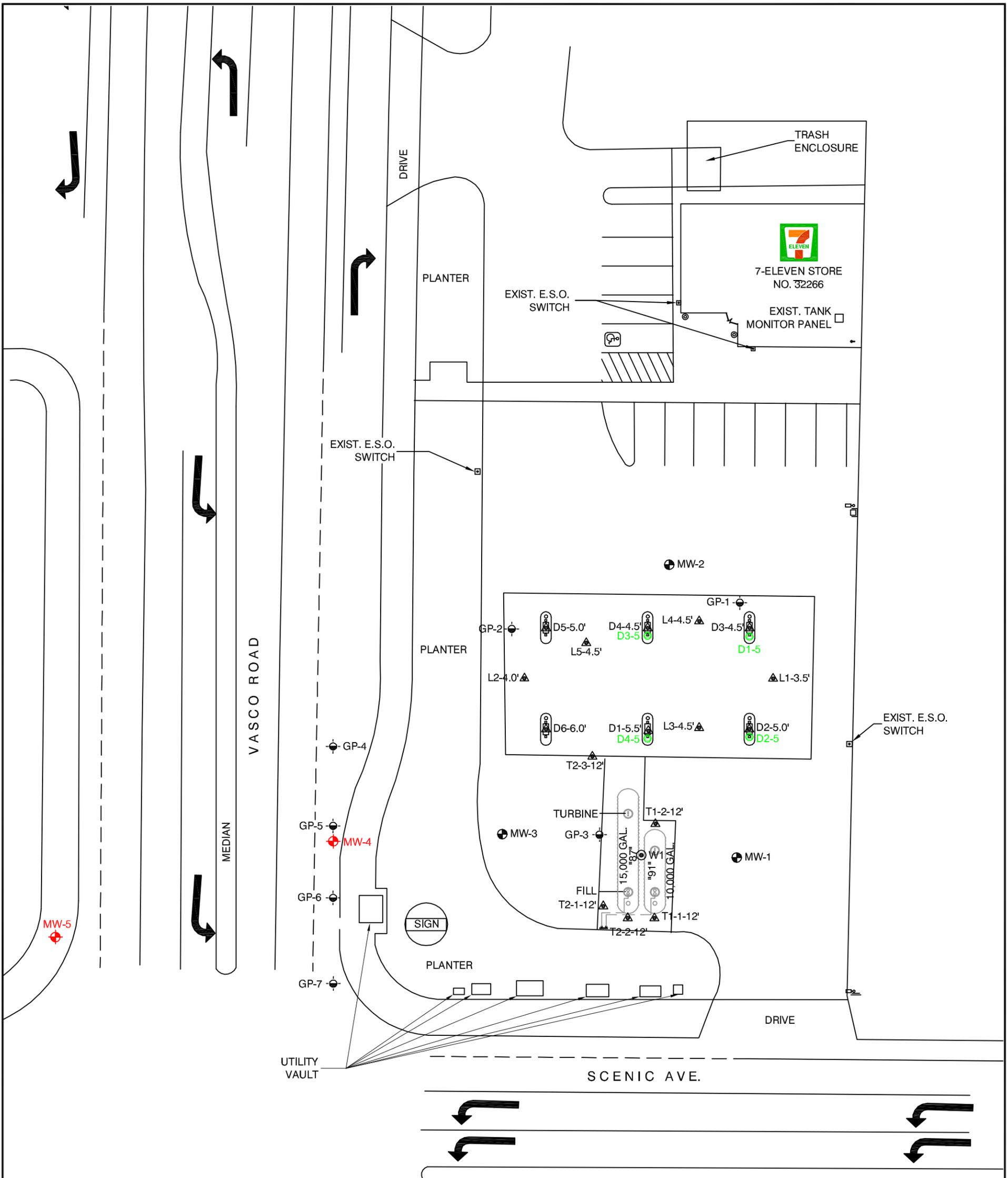
JOB NUMBER:  
211502037

DRAWN BY:  
STA

CHECKED BY:  
PH

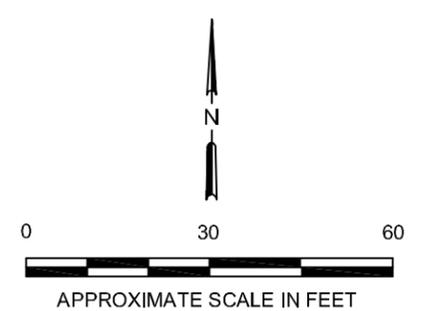
APPROVED BY:  
DB

DATE:  
03/08/11



**LEGEND:**

- MW-4 PROPOSED GROUNDWATER MONITORING WELL
- MW-1 GROUNDWATER MONITORING WELL
- W1 UST EXCAVATION WATER SAMPLE LOCATION
- GP-1 GEOPROBE SAMPLE LOCATION
- L5-4.5' 2005 SOIL SAMPLE LOCATION
- D1-5 2008 SOIL SAMPLE LOCATION



No warranty is made by Stantec Consulting Services Inc. as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.

	<b>FOR:</b>  STORE NO. 32266 1339 NORTH VASCO ROAD LIVERMORE, CALIFORNIA	<b>SITE PLAN WITH PROPOSED MONITORING WELL LOCATIONS</b>		<b>FIGURE:</b>  <span style="font-size: 2em; font-weight: bold;">2</span>
	<b>JOB NUMBER:</b> 211502037	<b>DRAWN BY:</b> STA	<b>CHECKED BY:</b> ASM	<b>APPROVED BY:</b> DB

# Tables

**TABLE 1  
Historical Soil Sample Analytical Results**

7-Eleven Store #32266  
1339 Vasco Road  
Livermore, California

Sample I.D.	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MtBE (mg/kg)	DIPE (mg/kg)	EtBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	EtOH (mg/kg)	Total Lead (mg/kg)	Notes
<b>Dispenser Samples</b>																	
D1-5.5	01/28/05	5.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>6.71</b>	
D2-5.0	01/28/05	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.039</b>	<0.0050	<0.0050	<0.0050	<b>0.016</b>	<0.0050	<0.0050	<b>0.010</b>	<b>6.57</b>	
D3-4.5	01/28/05	4.5	<b>0.026</b>	<b>0.086</b>	<b>0.010</b>	<b>0.055</b>	<1.0	<b>0.14</b>	<0.0050	<0.0050	<0.0050	<b>0.0064</b>	<0.0050	<0.0050	<b>0.27</b>	<b>28.4</b>	<b>J</b>
D4-4.5	01/28/05	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.012</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>6.01</b>	
D5-5.0	01/28/05	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>5.53</b>	
D6-6.0	01/28/05	6.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.018</b>	<0.0050	<0.0050	<0.0050	<b>0.049</b>	<0.0050	<0.0050	<0.010	<b>4.98</b>	
D1-5.5	12/04/08	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.024</b>	<0.0050	<0.0050	<0.0050	<b>0.0076</b>	--	--	--	--	a, c
D2-5.0	12/04/08	5.0	<b>0.21</b>	<b>0.59</b>	<b>0.26</b>	<b>1.4</b>	<b>12</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	b, c
D3-4.5	12/04/08	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	a, c
D4-4.5	12/04/08	5.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	b, c
<b>Line Samples</b>																	
L1-3.5	01/28/05	3.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>5.51</b>	
L2-4.0	01/28/05	4.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>11.2</b>	
L3-4.5	01/28/05	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>7.14</b>	
L4-4.5	02/09/05	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>6.61</b>	
L5-4.5	02/09/05	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>6.49</b>	
<b>UST Excavation Samples</b>																	
T1-1-12	01/28/05	12	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.034</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>5.82</b>	
T1-2-12	01/28/05	12	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>2.4</b>	<0.0050	<0.0050	<b>0.0068</b>	<b>2.6</b>	<0.0050	<0.0050	<0.025	<b>6.49</b>	
T2-1-12	01/28/05	12	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.016</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>6.65</b>	
T2-2-12	01/28/05	12	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.010</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>7.50</b>	
T2-3-12	01/28/05	12	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.18</b>	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>5.66</b>	
<b>Soil Boring Soil Samples</b>																	
GP-1-5	04/20/10	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-1-10	04/20/10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-1-15	04/20/10	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-2-10	04/20/10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-2-15	04/20/10	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-3-5	04/20/10	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-3-10	04/20/10	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.023</b>	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
GP-3-15	04/20/10	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>1.1</b>	<0.0050	<0.0050	<0.0050	<b>0.0076</b>	--	--	--	--	<b>J</b>
GP-4-5	07/10/12	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-4-10	07/10/12	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-4-15	07/10/12	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-4-20	07/10/12	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-4-25	07/10/12	25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-5-5	07/10/12	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	

**TABLE 1**  
**Historical Soil Sample Analytical Results**

7-Eleven Store #32266  
1339 Vasco Road  
Livermore, California

Sample I.D.	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MtBE (mg/kg)	DIPE (mg/kg)	EtBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	EtOH (mg/kg)	Total Lead (mg/kg)	Notes
GP-5-10	07/10/12	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-5-15	07/10/12	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.024</b>	--	--	--	--	--	--	--	--	
GP-5-20	07/10/12	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.056</b>	--	--	--	--	--	--	--	--	
GP-5-25	07/10/12	25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.024</b>	--	--	--	--	--	--	--	--	
GP-6-5	07/11/12	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-6-10	07/11/12	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-6-15	07/11/12	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-6-20	07/11/12	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-6-25	07/11/12	25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-7-5	07/12/12	5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-7-10	07/12/12	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-7-15	07/12/12	15	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
GP-7-20	07/12/12	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	--	
<b>Monitoring Wells</b>																	
MW-1-10	02/23/11	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
MW-1-20	02/23/11	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
MW-2-10	02/24/11	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
MW-2-20	02/24/11	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	--	
MW-3-10	02/23/11	10	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.33</b>	<0.0050	<0.0050	<0.0050	<b>0.0082</b>	--	--	--	--	<b>J</b>
MW-3-20	02/23/11	20	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.22</b>	<0.0050	<0.0050	<0.0050	<b>0.053</b>	--	--	--	--	<b>J</b>
MW-3-25	02/23/11	25	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<b>0.084</b>	<0.0050	<0.0050	<0.0050	<b>0.010</b>	--	--	--	--	<b>J</b>
<b>Stockpile Soil Samples</b>																	
SP1 (ABCD)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.75</b>	
SP1 (EFGH)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>2.66</b>	
SP1 (IJKL)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.30</b>	
SP1 (MNOP)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>4.40</b>	
SP2 (ABCD)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.80</b>	
SP2 (EFGH)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.01</b>	
SP2 (IJKL)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.24</b>	
SP2 (MNOP)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>5.15</b>	
SP2 (QRST)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>2.75</b>	
SP2 (UVWX)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.17</b>	
SP3 (ABCD)	01/28/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>3.14</b>	
SP1 (ABCD)	12/04/08	---	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	--	--	--	<b>4.4</b>	b,c
SP1 (ABCD)	04/20/10	---	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>6.8</b>	e
SP1 (ABCD)	02/24/11	---	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<0.0050	--	--	--	--	--	--	--	<b>7.6</b>	

**TABLE 1**  
**Historical Soil Sample Analytical Results**

7-Eleven Store #32266  
1339 Vasco Road  
Livermore, California

Sample I.D.	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	TPHg (mg/kg)	MtBE (mg/kg)	DIPE (mg/kg)	EtBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	EDB (mg/kg)	EDC (mg/kg)	EtOH (mg/kg)	Total Lead (mg/kg)	Notes
<p><u>Explanation:</u>  TPHg, BTEX, MtBE, DIPE, ETBE, TAME, TBA, EDB, EDC, EtOH by 8260  ft bgs = Feet Below Ground Surface  mg/kg = milligrams per kilogram or parts-per-million  &lt; = Not detected above laboratory reporting limit  UST = Underground Storage Tank</p> <p>TPHg = Total petroleum hydrocarbons-as-gasoline  MtBE = Methyl-tert-butyl ether  DIPE = Diisopropyl ether  EtBE = Ethyl-tert-butyl ether  TAME = Tert-amyl-methyl ether  -- = not analyzed</p> <p>TBA = Tert-butyl alcohol  EDB = 1,2-Dibromoethane  EDC = 1,2-Dichloroethane  EtOH = Ethanol  Total Lead analysis by 6010B</p> <p><b>Notes:</b>  a = Matrix Spike/Matrix Spike Duplicate results for the analytes tert-butanol and toluene were outside of control limits. This may indicate a bias for the sample that was spiked.  Since the LCS recoveries were within control limits, no data are flagged.  b = Matrix Spike/Matrix Spike Duplicate results for the analyte methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.  c = composite soil profile samples  d = Note that dispenser sample names/designations differ in location from dispenser samples collected in 2005.  J = TBA results may be biased slightly high and is flagged with a 'J'. A fraction of MtBE (up to 5%) converts to TBA during the analysis of soil samples.  This conversion effect is considered to be mathematically significant in samples that contain MtBE/TBA in ratios of over 3:1.  e = Matrix Spike/Matrix Spike Duplicate results for the analytes Ethylbenzene, P + M Xylene, O-Xylene, and Toluene were outside of control limits. This may indicate a bias for the sample that was spiked.  Since the LCS recoveries were within control limits, no data are flagged.</p>																	

**TABLE 2**  
**Historical Water and/or Groundwater Sample Analytical Results**

7-Eleven Store #32266  
1339 Vasco Road  
Livermore, California

Sample I.D. (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Total Xylenes (µg/L)	TPHg (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)	EtOH (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)	
<b>UST Excavation Groundwater Sample</b>																				
W1	01/28/05	25	290	62	520	3,400	180	15	<1.5	<1.5	<1.5	<1.5	<1.5	2,600		--	--	--	--	
<b>Baker Tank Samples</b>																				
BT-1	02/04/05	<0.50	<0.50	<0.50	0.70	<50	340	--	--	--	--	--	--	--		--	--	--	--	
BT-2	02/04/05	<0.90	<0.90	<0.90	<0.90	<90	400	--	--	--	--	--	--	--		--	--	--	--	
<b>Grab Groundwater Samples</b>																				
GP-1W	04/20/10	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	--	--	--		--	--	--	--	
GP-2W	04/20/10	<0.50	<0.50		<0.50	<50	2.9	<5.0	<0.50	<0.50	<0.50	--	--	--		--	--	--	--	
GP-3W	04/20/10	<0.50	<0.50	<0.50	<0.50	<50	380	<5.0	<0.50	<0.50	0.71	--	--	--		--	--	--	--	
GP-4W	07/10/12	<0.50	<0.50	<0.50	<0.50	75	13	--	--	--	--	--	--	--	c	--	--	--	--	
GP-5W	07/11/12	<0.50	<0.50	<0.50	<0.50	95	350	--	--	--	--	--	--	--		--	--	--	--	
GP-7W	07/12/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	--	--	--	--	--	--	--		--	--	--	--	
<b>Monitoring Well Samples</b>																				
<b>MW-1</b>																				
530.22	03/16/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		2.04	8.07	0.00	522.15
	05/26/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--	a	0.35	7.88	0.00	522.34
	08/09/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--	a	0.71	8.30	0.00	521.92
	10/17/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		0.5	8.27	0.00	521.95
	01/20/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--	a	0.8	8.51	0.00	521.71
	04/05/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		0.44	8.22	0.00	522.00
<b>MW-2</b>																				
530.55	03/16/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		1.63	8.31	0.00	522.24
	05/26/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		0.46	8.37	0.00	522.18
	08/09/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--	a	0.60	8.82	0.00	521.73
	10/17/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		1.2	8.74	0.00	521.81
	01/20/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--	a	0.7	8.96	0.00	521.59
	04/05/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	--	--	--		0.51	8.88	0.00	521.67
<b>MW-3</b>																				
530.74	03/16/11	<0.50	<0.50	<0.50	<0.50	<50	5,600	170	<0.50	<0.50	10	--	--	--		2.54	9.11	0.00	521.63	
	05/26/11	<0.50	<0.50	<0.50	<0.50	<50	3,200	180	<0.50	<0.50	5.4	--	--	--		0.32	9.15	0.00	521.59	
	08/09/11	<0.50	<0.50	<0.50	<0.50	<50	1,700	78	<0.50	<0.50	2.8	--	--	--		0.42	9.36	0.00	521.38	
	10/17/11	<0.50	<0.50	<0.50	<0.50	<50	1,900	85	<0.50	<0.50	2.9	--	--	--	b	0.6	9.37	0.00	521.37	
	01/20/12	<0.50	<0.50	<0.50	<0.50	<50	1,100	58	<0.50	<0.50	2.2	--	--	--		0.5	9.57	0.00	521.17	
	04/05/12	<2.5	<2.5	<2.5	<2.5	<250	2,000	57	<2.5	<2.5	3.3	--	--	--	b	0.47	9.44	0.00	521.30	

**TABLE 2**  
**Historical Water and/or Groundwater Sample Analytical Results**

7-Eleven Store #32266  
 1339 Vasco Road  
 Livermore, California

Sample I.D. (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Total Xylenes (µg/L)	TPHg (µg/L)	MtBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)	EtOH (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
<p><b>Explanation:</b>                      BTEX, TPHg, MtBE, DIPE, ETBE, TAME, and TBA by 8260B                      TPHg = Total petroleum hydrocarbons-as-gasoline                      MtBE = Methyl-tert-butyl ether                      DIPE = Diisopropyl ether                      EtBE = Ethyl-tert-butyl ether                      TAME = Tert-amyl-methyl ether                      TBA = Tert-butyl alcohol                      EDB = 1,2-Dibromoethane                      EDC = 1,2-Dichloroethane                      EtOH = Ethanol                      TOC = Top of casing elevation in feet above mean sea level                      UST = Underground Storage Tank                      ug/L = micrograms per Liter or parts-per-billion                      mg/L = milligrams per liter                      &lt; = Not detected above laboratory reporting limit                      -- = Not sampled/not measured</p> <p><b>Notes</b>                      a = Matrix Spike/Matrix Spike Duplicate for the analyte MtBE were affected by the analyte concentrations already present in the un-spike sample.                      b = Tert-Butanol results may be biased slightly high. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. Kiff considers this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.                      c = Analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.</p>																			

**Table 3  
Soil Boring Details**

7-Eleven Store #32266  
1339 North Vasco Road  
Livermore, CA

Well I.D.	Drill Date	Boring Depth (feet bgs)	Well Diameter (inches)	Screen		Screen Length (feet)	Comments
				Top (feet bgs)	Bottom (feet bgs)		
<b>Soil Borings</b>							
GP-1	04/20/10	20	--	--	--	--	
GP-2	04/20/10	25	--	--	--	--	
GP-3	04/20/10	30	--	--	--	--	
GP-4	07/10/12	25	--	--	--	--	Off-site soil boring
GP-5	07/10/12	25	--	--	--	--	Off-site soil boring
GP-6	07/11/12	25	--	--	--	--	Off-site soil boring
GP-7	07/12/12	25	--	--	--	--	Off-site soil boring
<b>Monitoring Wells</b>							
MW-1	02/23/11	20	2	5	20	15	
MW-2	02/24/11	20	2	5	20	15	
MW-3	02/23/11	25	2	5	20	15	
MW-4	<b>Proposed</b>	20	2	5	20	15	<b>Proposed off-site monitoring well</b>
MW-5	<b>Proposed</b>	20	2	5	20	15	<b>Proposed off-site monitoring well</b>
<b>Explanation</b>							
bgs = Below ground surface							
-- = Data Not Available/Not Applicable							

# **Attachment A**

## **Regulatory Correspondence**



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

March 26, 2012

Mr. Jose Rios  
7-Eleven, Inc.  
One Arts Plaza  
1722 Routh Street, Suite 1000  
Dallas, TX 75201  
(Sent via E-mail to: [jose.rios@7-11.com](mailto:jose.rios@7-11.com))

Mr. Michael Blau  
Michael H. Blau Trust  
PO Box 2768  
Danville, CA 94526

Subject: Conditional Work Plan Approval for Fuel Leak Case No. RO0002999 and GeoTracker Global ID T10000001067, 7 Eleven #32266, 1339 Vasco Road, Livermore, CA 94551

Dear Mr. Hilliard and Mr. Blau:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above referenced site including the most recent documents entitled, "*Revised Work Plan for Additional Site Assessment*," dated March 5, 2012 (Work Plan) and "*Quarterly Groundwater Monitoring Report – Fourth Quarter 2011*," dated October 3, 2011 (Monitoring Report). In correspondence dated November 21, 2011, ACEH requested that you submit a Revised Work Plan to delineate the plume and to assess whether groundwater contamination from the site potentially could affect water supply wells in the area.

The proposed scope of work is conditionally approved and may be implemented provided that the technical comments below are addressed and incorporated during the proposed investigation. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

### **TECHNICAL COMMENTS**

- 1. Phased Approach.** We have no objection to a phased approach to investigation. However, we request that you submit the results from the first phase of investigation and the results from the well survey requested in technical comment 2 prior to implementing the proposed monitoring well installation.
- 2. Locations of Water Supply Wells.** Figure 3 of the September 29, 2010, "*Work Plan for Additional Site Assessment and Detailed Well Survey*," shows two water supply wells located approximately 300 feet west of the site. It is necessary to inspect these locations and conduct a door to door well survey to assess the accuracy of these water supply well locations and to determine whether these water supply wells remain active or may have been destroyed. This information is necessary to assess whether the plume could impact water supply wells. Please include this information in the Site Investigation Report requested below.
- 3. Groundwater Monitoring.** The existing monitoring wells have been sampled during four consecutive monitoring events. Please consider implementing semi-annual groundwater monitoring for these existing wells in the future unless the groundwater monitoring data is needed in association with ongoing site investigation activities.

Responsible Parties  
RO0002999  
March 26, 2012  
Page 2

### **TECHNICAL REPORT REQUEST**

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

- **April 30, 2012** – Quarterly Groundwater Monitoring Report – Fourth Quarter 2011
- **July 26, 2012** – Site Investigation Report

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org). Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>. As your email address does not appear on the cover page of this notification ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,

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

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Danielle Stefani, Livermore Pleasanton Fire Department, 3560 Nevada St, Pleasanton, CA 94566  
(Sent via E-mail to: [dstefani@lfire.org](mailto:dstefani@lfire.org))

Colleen Winey (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551  
(Sent via E-mail to: [cwiney@zone7water.com](mailto:cwiney@zone7water.com))

Damon Brown, Stantec Consulting Corporation, 3017 Kilgore Road, Suite 100, Rancho Cordova, CA 95670 (Sent via E-mail to: [damon.brown@stantec.com](mailto:damon.brown@stantec.com))

Donna Drogos, ACEH (Sent via E-mail to: [donna.drogos@acgov.org](mailto:donna.drogos@acgov.org))  
Jerry Wickham, ACEH (Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org))

GeoTracker, eFile

# **Attachment B**

## **Well Survey Report Information**

**Table 5**  
**Wells Within 2,000 Feet of Site**

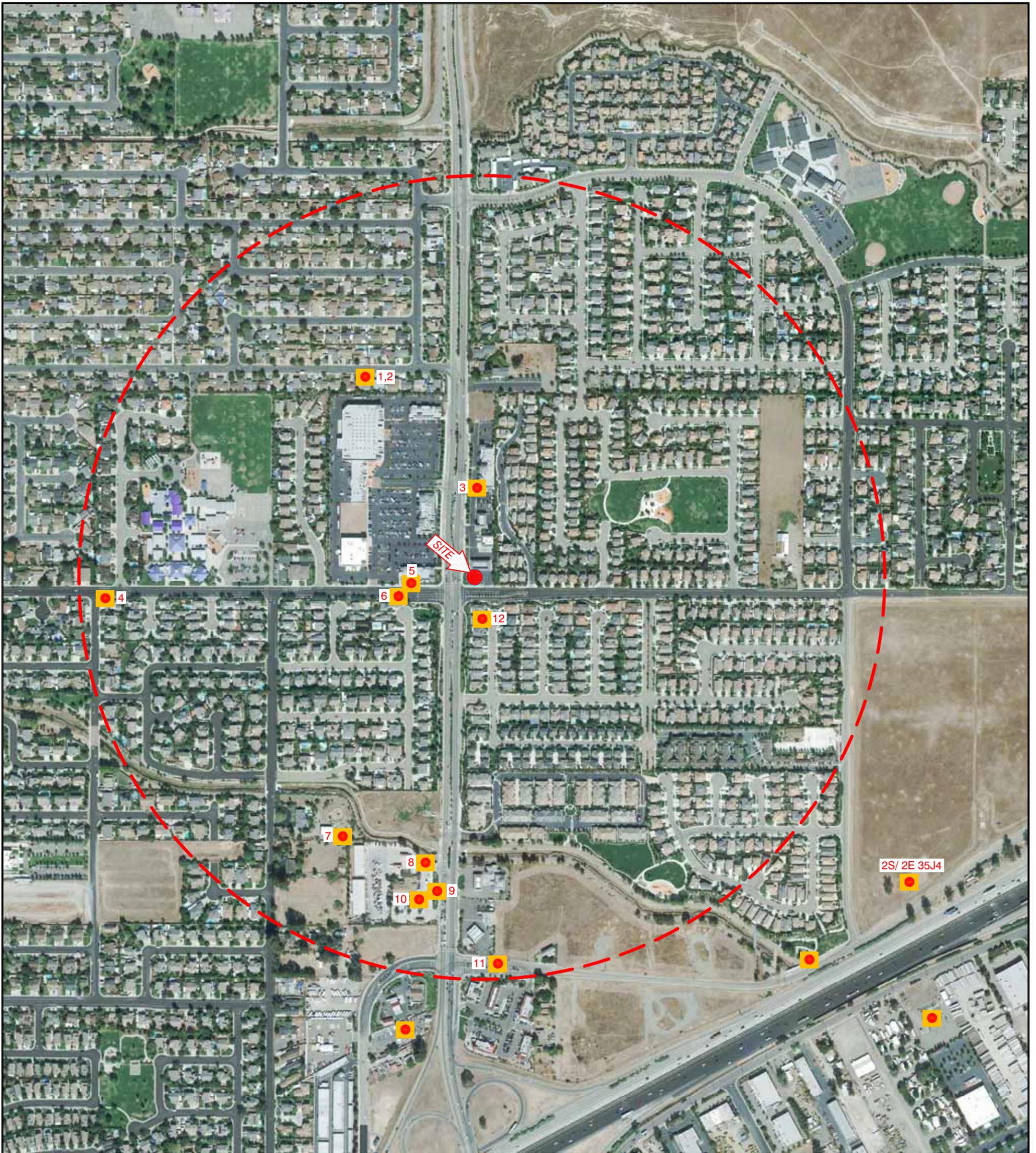
7-Eleven Store #32266  
1339 Vasco Rd  
Livermore, California

Well Label	Distance to Well(s) (feet)	Direction to Well(s)	Well(s) Use	Location of Well(s)	Install Date	Total Depth (feet bgs)	Well Diameter (inches)	Screen		Screen Length (feet)	Owner of Well	Notes	DWR Log # and/or Zone 7 Designation
								Top (feet bgs)	Bottom (feet bgs)				
1	1,100	Northwest	--	--	06/17/50	68	8	61	68	7	Henry Gaventi		DWR Log# 01-1272
2	1,100	Northwest	--	--	06/17/50	68	8	61	68	7	Henry Garaventa		DWR Log# 01-1273
3	450	North	--	1443 Vasco Rd	1951	88	8	76	88	12	Judi Meis		DWR Log# 261450R - Zone 7 Well 2S/2E-35G
4	1,800	West-Southwest	Domestic	5488 Scenic Ave	08/10/60	100	8	--	--	--	H. Hale		DWR Log# 50756
5	300	West	--	5874 Scenic Ave	04/17/62	108	--	--	--	--	Charles Ellington		DWR Log# 01-1274
6	300	West	--	Vasco Rd & Scenic	02/28/75	120	--	95	120	25	Pacific Gas & Elect. Co.		DWR Log# 115712
7	1,400	South-Southwest	Irrigation	1151 Central Ave	06/05/89	106	6.63	35	43	8	David Hughes		DWR Log# 299180 - Zone 7 Well 2S/2E-35L2
								61	81	20			
8	1,350	South	Monitoring	1000 North Vasco Rd	07/17/95	15.8	2	5	15.68	10.68	Geno Macedo		DWR Log#193173
9	1,450	South	Monitoring	1000 North Vasco Rd	07/17/95	15.1	2	5	15.26	10.26	Geno Macedo		DWR Log#193174
10	1,550	South	Monitoring	1000 North Vasco Rd	07/18/95	15.5	2	5	15.05	10.05	Geno Macedo		DWR Log#193175
11	1,850	South	Monitoring	Northfront Rd (near Pleasant Ave.)	08/17/05	31.5	2	20.5	30.5	10	Zone 7 Water District		DWR Log# E073679
12	150	South	--	1289 Vasco Rd	--	--	--	--	--	--	--	A	No DWR Log - Zone 7 Well 2S/2E-35G1

Notes:

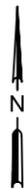
bgs = below ground surface  
"--" = Unknown

A= Zone 7 Water Agency reports this well as "Abandoned or Unlocatable"



LEGEND:

-  = 2,000-FOOT RADIUS
-  = IDENTIFIED WELLS



0 500 1,000

APPROXIMATE SCALE IN FEET

REFERENCE: THIS FIGURE IS BASED ON GOOGLE AERIAL IMAGE.

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 <b>Stantec</b>	FOR: 7-ELEVEN STORE NO. 32266 1339 NORTH VASCO ROAD LIVERMORE, CALIFORNIA		<b>2,000-FOOT RADIUS          WELL SURVEY MAP</b>		FIGURE: <b>3</b>
	JOB NUMBER: 211502037	DRAWN BY: STA	CHECKED BY: PH	APPROVED BY: DB	DATE: 09/29/10



**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

# **Attachment C**

## **Soil Boring and Encroachment Permits**



# ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 245-9306  
E-MAIL [whong@zone7water.com](mailto:whong@zone7water.com)

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Continued Environmental Investigation for 7-Eleven Store #32266 at 1339 North Vasco Road, Livermore, CA

PERMIT NUMBER 2012058  
WELL NUMBER 2S/2E-35G12 (MW-4), 2S/2E-35G13  
APN 099B-8122-001-00 (MW-5)

Coordinates Source \_\_\_\_\_ ft. Accuracy \_\_\_\_\_ ft.  
LAT \_\_\_\_\_ ft LONG \_\_\_\_\_ ft.  
APN \_\_\_\_\_

PERMIT CONDITIONS  
(Circled Permit Requirements Apply)

CLIENT  
Name 7-Eleven, Inc. Jose Rios, Manager, Environmental Services  
Address P.O. Box 741 Phone (925) 828-6592  
City Dallas, TX Zip 75231-0741

- A. GENERAL**
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to your proposed starting date.
  2. Submit to Zone 7 within 60 days after completion of permitted work the original **Department of Water Resources Water Well Drillers Report (DWR Form 188), signed by the driller**.
  3. Permit is void if project not begun within 90 days of approval date.
  4. **Notify Zone 7 at least 24 hours before the start of work.**

APPLICANT  
Name Debbie Lichtenberger for Startec Consulting Services, Inc  
Email deborah.lichtenberger@startec.com Fax 916-281-0330  
Address 3017 Kilgore Road, Suite 100 Phone 916-364-0724  
City Rancho Cordova, CA Zip 95670

- B. WATER SUPPLY WELLS**
1. Minimum surface seal diameter is four inches greater than the well casing diameter.
  2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
  3. Grout placed by tremie.
  4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
  5. A sample port is required on the discharge pipe near the wellhead.

TYPE OF PROJECT:  
Well Construction \_\_\_\_\_ Geotechnical Investigation \_\_\_\_\_  
Well Destruction \_\_\_\_\_ Contamination Investigation   
Cathodic Protection \_\_\_\_\_ Other \_\_\_\_\_

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
  3. Grout placed by tremie.

PROPOSED WELL USE:  
Domestic \_\_\_\_\_ Irrigation \_\_\_\_\_  
Municipal \_\_\_\_\_ Remediation \_\_\_\_\_  
Industrial \_\_\_\_\_ Groundwater Monitoring   
Dewatering \_\_\_\_\_ Other \_\_\_\_\_

- D. GEOTECHNICAL** Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremie cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:  
Mud Rotary \_\_\_\_\_ Air Rotary \_\_\_\_\_ Hollow Stern Auger   
Cable Tool \_\_\_\_\_ Direct Push  Other \_\_\_\_\_

- E. CATHODIC** Fill hole above anode zone with concrete placed by tremie.

DRILLING COMPANY WDC Exploration and Wells

- F. WELL DESTRUCTION** See attached.

DRILLER'S LICENSE NO. 293326

- G. SPECIAL CONDITIONS** Submit to Zone 7 within 60 days after completion of permitted work the well installation report **including all soil and water laboratory analysis results.**

WELL SPECIFICATIONS:  
Drill Hole Diameter 8 in Maximum \_\_\_\_\_  
Casing Diameter 2 in Depth 20 ft.  
Surface Seal Depth 9 ft. Number MW-4 and MW-5

SOIL BORINGS  
Number of Borings 4 Maximum \_\_\_\_\_  
Hole Diameter 2 in Depth 25 ft.

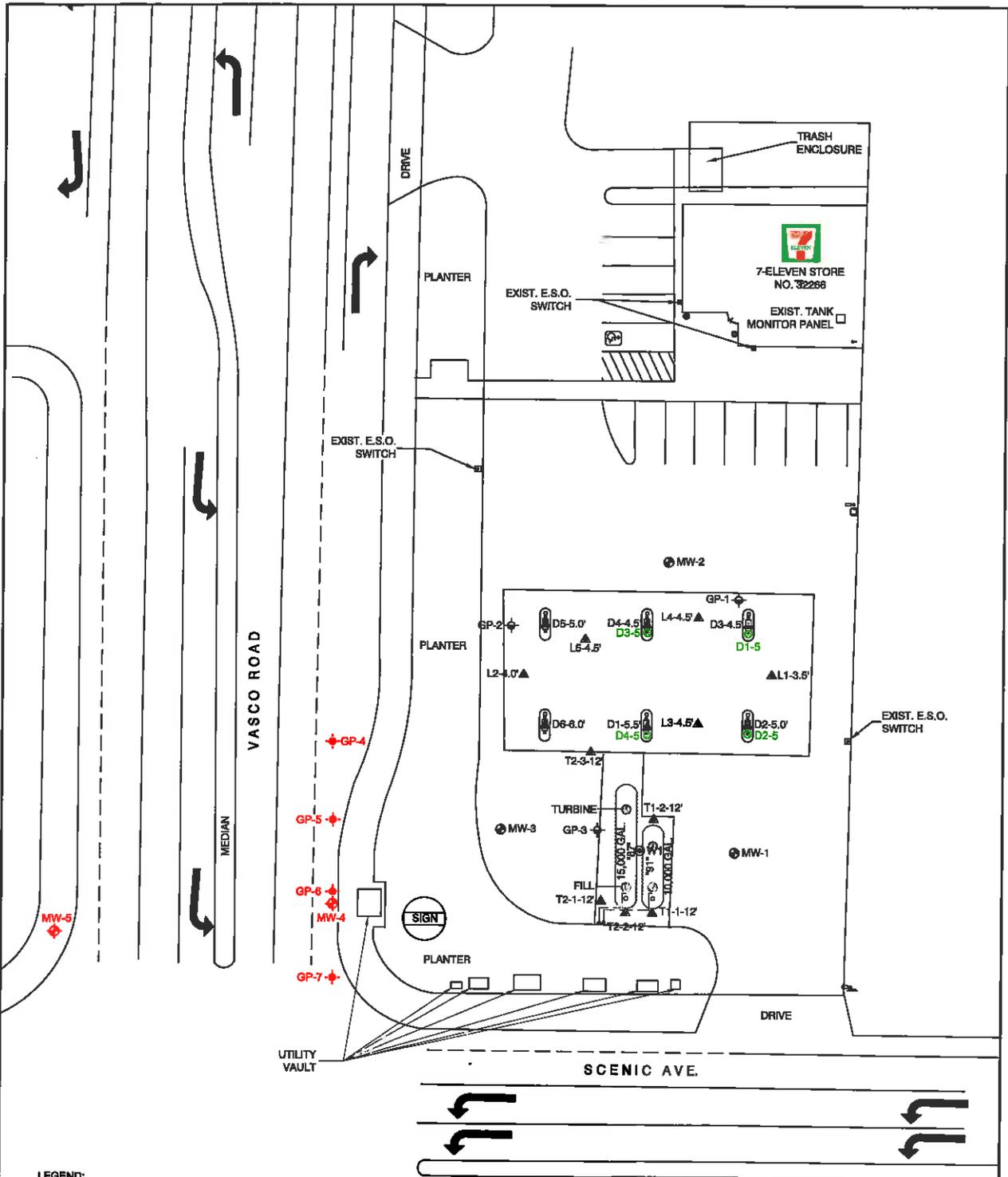
ESTIMATED STARTING DATE after June 1, 2012  
ESTIMATED COMPLETION DATE before June 30, 2012

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

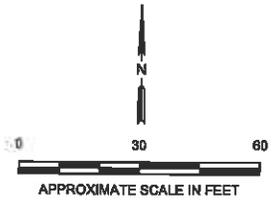
Approved Wynan Hong Date 6/6/12  
Wynan Hong

APPLICANT'S SIGNATURE D. Lichtenberger Date 05/02/12

ATTACH SITE PLAN OR SKETCH



- LEGEND:**
- GP-4 PROPOSED SOIL BORING
  - MW-4 PROPOSED GROUNDWATER MONITORING WELL
  - MW-1 GROUNDWATER MONITORING WELL
  - W1 UST EXCAVATION WATER SAMPLE LOCATION
  - GP-1 GEOPROBE SAMPLE LOCATION
  - L5-4.5' 2005 SOIL SAMPLE LOCATION
  - D1-5 2008 SOIL SAMPLE LOCATION



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	FOR:  STORE NO. 32266 1336 NORTH VASCO ROAD LIVERMORE, CALIFORNIA	<b>SITE PLAN WITH PROPOSED SOIL BORING AND MONITORING WELL LOCATIONS</b>		FIGURE: <b>2</b>
	JOB NUMBER: 211602037			DRAWN BY: STA

**Table 1**  
**Soil Boring Details**  
 7-Eleven Store #32266  
 1339 North Vasco Road  
 Livermore, CA

Well I.D.	Drill Date	Boring Depth (feet bgs)	Well Diameter (inches)	Screen		Screen Length (feet)	Comments
				Top (feet bgs)	Bottom (feet bgs)		
<b>Soil Borings</b>							
GP-1	04/20/10	20	--	--	--	--	
GP-2	04/20/10	25	--	--	--	--	
GP-3	04/20/10	30	--	--	--	--	
GP-4	<i>Proposed</i>	25	--	--	--	--	<i>Proposed off-site soil boring</i>
GP-5	<i>Proposed</i>	25	--	--	--	--	<i>Proposed off-site soil boring</i>
GP-6	<i>Proposed</i>	25	--	--	--	--	<i>Proposed off-site soil boring</i>
GP-7	<i>Proposed</i>	25	--	--	--	--	<i>Proposed off-site soil boring</i>
<b>Monitoring Wells</b>							
MW-1	02/23/11	20	2	5	20	15	
MW-2	02/24/11	20	2	5	20	15	
MW-3	02/23/11	25	2	5	20	15	
MW-4	<i>Proposed</i>	20	2	5	20	15	<i>Proposed off-site monitoring well</i>
MW-5	<i>Proposed</i>	20	2	5	20	15	<i>Proposed off-site monitoring well</i>
<b>Explanation</b>							
bgs = Below ground surface							
-- = Data Not Available/Not Applicable							

# City of Livermore

Community Development Department  
1052 S. Livermore Avenue  
Livermore, CA 94550  
(925) 960-4500

Encroachment  
Permit No. EN120195  
Type: Other

PERMIT TO DO WORK IN ACCORDANCE WITH CHAPTER 12.08 OF THE LIVERMORE MUNICIPAL CODE AND SPECIFICATIONS AS ADOPTED BY THE CITY OF LIVERMORE AND ANY SPECIAL REQUIREMENTS SHOWN OR LISTED HEREIN.

Permit Fee: \$90.00  
Inspection Fee: \$1,000.00  
Bond: \$0.00

**Applicant/Permittee:**

Name: Stantec Consulting Services  
Address: 3017 Kilgore Rd., Suite 100  
Rancho Cordova, Ca., 95670  
Phone: 916-861-0400

**Total: \$1,090.00**

*Paid  
4/18/12*

**Contractor:**

Name: Wdc Exploration & Wells  
Address: 1961 Meeker Ave.  
Richmond, Ca. 94804  
Phone: 510-236-6282

PLEASE READ THIS PERMIT CAREFULLY. KEEP IT AT THE WORK SITE. TO ARRANGE FOR AN INSPECTION, PHONE (925) 960-4500 AT LEAST 24 HOURS BEFORE YOU START WORK.

**JOB LOCATION: 1339 Vasco Road, North \*\*\*\***

**DESCRIPTION OF WORK: Installation of two (2) Monitoring wells to 20 to 25 FBG along with four soil borings. In the locations adjacent to above referenced site. Well lid to be flush with existing sidewalk/pavement and lid to be locking type. See attached plan with proposed well location.**

Length of Excavation: \_ L.F.                      Width: \_ L.F.                      Depth: \_ L.F.

Attention is directed to the General Provisions printed on the reverse side of this permit and to the attached special requirements (to be determined as needed by the Engineering Division).

Prosecution of Work: All work authorized by the permit shall be performed in a workmanlike, diligent, and expeditious manner, and must be completed to the satisfaction of the City Engineer.

Liability and Damages: The permittee shall be responsible for all liability imposed by law for personal injury or property damage which may arise out of the work permitted and done by permittee under this permit, or which may arise out of the failure on the part of the permittee to perform his obligations under said permit in respect to maintenance and encroachment. The permittee shall protect and indemnify the City of Livermore, its officers and employees, and save them harmless in every way from all action at law for damage or injury to persons or property that may arise out of or be occasioned in any way because of his operations as provided in this permit.

Hold Harmless and Indemnification Agreement: Stantec Consulting Services agrees to defend, indemnify and hold the City of Livermore, elected officials, officers, directors, employees, agents and volunteers harmless from and against any and all loss, liability, damage, including reasonable attorney and expert fees and/or court costs, arising out of or in connection with this agreement, except for the gross negligence and willful misconduct of the City of Livermore, its elected officials, officers, directors, employees, agents and volunteers.

**Stantec Consulting Services**

Signature of Permittee:

By: *[Signature]*

Title: Geologist

Date: 7/3/12

Date Work Completed: \_\_\_\_\_

City Engineer

By: *[Signature]*

Date of Issue: 6-11-12

Inspector: \_\_\_\_\_

## CITY OF LIVERMORE GENERAL PROVISIONS

1. The permittee shall begin work as authorized under this permit within 45 days from the date of issuance, unless a different date is stated in the permit. If the work is not begun within 45 days or the time stated in the permit, the permit shall become void. The permit shall be valid for a term of 6 months from the date of issuance, or as otherwise stated on the permit, unless discontinued by the use or removal of the encroachment for which the permit was issued.
2. This permit is issued only for that portion of work in the City of Livermore public right-of-way.
3. All construction shall be in accordance with City Standard Details and Specifications.
4. Permittee shall notify Underground Service Alert (U.S.A.) at 800-227-2600 prior to excavation. All underground contractors must have U.S.A. inquiry identification number.
5. Permittee is hereby cautioned that unless otherwise noted herein, traffic signal detector loops, wiring, etc., shall not be disturbed. Request marking from the City of Livermore Street Maintenance Dept. at 960-8020.
6. All excavations shall conform to the requirement of the State of California Division of Occupational Safety and Health.
7. Permittee shall furnish all safeguards and post warning signs in advance of work area for vehicular traffic and shall clear the roadway of any obstructions or debris at the end of each work day. All safety devices shall conform to the latest edition of the State of California "Manual of Warning Signs, Lights, and Devices for Use in Performance of Work Upon Highways".
8. No public road under the jurisdiction of the City Engineer shall be closed to travel by the general public without special permission, in writing, from the City Engineer (Sec. 12.08.180 Livermore Municipal Code). No lane closures will be allowed between 6:00 a.m. and 9:00 a.m. or between 3:30 p.m. and 6:30 p.m. At other times, at least one lane of traffic shall be kept open to the general public.
9. No more than 300 linear feet of continuous excavation shall be opened at one time. Excavate only that length of trench which can be backfilled and compacted to specified requirements the same day. Temporary pavement must be placed the same day.
10. Backfill shall be placed in accordance with the current City Standard Detail G-1.
11. Metal plates of sufficient thickness for legal load traffic or temporary paving, 1½" minimum thickness and coated with a "non-skid" material, shall be placed over any unpaved areas at the end of each work day. Temporary pavement must be placed around all edges of said plates. Sidewalk construction areas shall be left in a safe condition.
12. Material excavated from within the City road right-of-way under this permit shall be removed from within the right-of-way and disposed of in a legal manner. (Sec. 12.08.170 Livermore Municipal Code)
13. The right-of-way shall be left clean and orderly daily to the satisfaction of the City Engineer or his representative. The permittee shall give particular attention to maintaining the project in a dust-free condition while performing the various items of work and during non-working periods, including weekends.
14. Job sites left in an unsafe condition will be secured by City personnel and the permittee will be billed for all expenses incurred by the City.
15. Final asphalt concrete surfacing shall be placed within 14 days of completion of each 300 linear feet of excavation. If the edges of the trench have been ravelled prior to final surfacing, the edges shall be re-sawn.
16. Where concrete is placed in a planter strip, score lines, construction joints and expansion joints shall be continued across entire sidewalk area. Where curb, gutter and sidewalk are placed monolithically, the "back edge" of the curb shall be scored.
17. No culverts or storm drains are to be cut or disturbed. Direction of flow and capacity of existing surface water drainage facilities shall not be materially changed.
18. Access to public and private properties adjacent to the public road in which work is authorized shall not be denied by reason of such work. Special measures shall be taken to insure passage for emergency vehicles over and at the site of work at all times.
19. In the event that any future improvement of the road right-of-way necessitates the relocation of the encroachment for which this permit is issued, the permittee shall relocate same at his sole expense.
20. Priority shall be given to operations performed under this contract let by the City of Livermore for certain work at this location. Coordination shall be effected through said Contractor and the Project Representative for the City.
21. Any existing facilities damaged or removed in the course of the work shall be replaced in kind or better, including ground and pavement surfaces, signs, striping, markers, curb, gutter, survey monuments, trees and other vegetation, etc., to the satisfaction of the owner of said facility.
22. In accordance with the Livermore Municipal Code, a cash deposit or surety bond may be required. The deposit placed for this work will be held for 90 days after the final inspection.

**PERMITTEE SHALL NOTIFY CITY INSPECTOR AT 960-4500  
WITHIN THREE (3) DAYS AFTER WORK IS COMPLETED.**

**FAILURE TO COMPLY WITH THESE PROVISIONS WILL RESULT IN  
THE CITY'S TAKING WHATEVER MEASURES NECESSARY  
TO CONFORM TO PERMIT CONDITIONS AND  
THE PERMITTEE WILL BE BILLED FOR ALL EXPENSES INCURRED.**

# **City of Livermore**

Encroachment Permit No. EN120195

Community Development Department  
1052 S. Livermore Avenue  
Livermore, CA 94550  
(925) 960-4500

## ***SPECIAL REQUIREMENTS APPLICABLE TO WORK ASSOCIATED WITH***

### ***JOB LOCATION:***

1339 Vasco Road, North \*\*\*\*

***DESCRIPTION OF WORK:*** Installation of two (2) Monitoring wells to 20 to 25 FBG along with four soil borings. In the locations adjacent to above referenced site. Well lid to be flush with existing sidewalk/pavement and lid to be locking type. See attached plan with proposed well location.

1: See Attached Drawing/Plans

2: Traffic control shall be completed per Cal Trans Standards and any additional requirements deemed necessary by the City Engineer.

3: All work shall be completed between the hours of 9 a.m. and 3 p.m.

4: All lane closures/ traffic control shall be done per Cal Trans Standards.

5: Contractor shall repair/replace all damaged curb, gutter and sidewalk damaged as a result of current work being completed per the City Livermore Standard Details.

6: Pedestrian access must be maintained at all times, including if necessary, escorting pedestrians through the work area.

7: All trenchwork and small excavations in the street shall be completed per City Std Detail G-1.

# **Attachment D Field Notes**

JOB NAME:	7-Eleven Store #32266	JOB NUMBER:	211502037.230.0600
SITE ADDRESS:	1339 North Vasco Road	START DATE:	7/10/2012
	Livermore, California	DATE PREPARED:	7/9/2012
PREPARED FOR:	Colin Ryan	PREPARED BY:	Amanda Magee

### SITE VISITATION REPORT

Name(s) Colin Ryan Date: 7/10/12 Did you call in?  Yes  No  
 Arrival Time: 7:30 "Departure Time: \_\_\_\_\_ Who did you call? Damon Brown  
 Weather Notations: SUN CLOUDY RAIN SNOW Temperature: \_\_\_\_\_ F

### DRUM INVENTORY

<u>1</u>	WATER	<u>2</u>	CARBON	TOTAL OPEN TOP	<u>3</u>
	SOIL		EMPTY	TOTAL BUNG TOP	

### HEALTH AND SAFETY ASSESSMENT

#### DESCRIPTION OF ACTIVITIES ONSITE AND NOTES

7:30 - Arrived onsite, reviewed HASP, called in to Damon Brown  
 - Spoke w/ store employee's regarding today's scope of work  
 8:15 - Highway technology arrives onsite  
 - Held H+S meeting  
 8:45 - Begin setup of traffic control  
 9:00 - WDC arrives onsite  
 - Held H+S meeting  
 - Wait for traffic control to be setup  
 11:05 - Final soil sample taken from GP-4  
 - Lower casing for water sample + mch to GP-5  
 11:45 - Jeff Jones w/ Zone 7 arrives to witness grouting of GP-4  
 - Still waiting on water in GP-4  
 - Regulator cleans up to grout in his absence, as long as we use tremie pipe  
 12:20 - Reg broke a handle on the control panel.  
 - They will fix tonight & we will only complete GP-4 + GP-5  
 - Begin cleanup  
 12:40 - Break for lunch  
 12:55 - Return from lunch

JOB NAME:	7-Eleven Store #32266	JOB NUMBER:	211502037.230.0600
SITE ADDRESS:	1339 North Vasco Road Livermore, California	START DATE:	7/10/2012
PREPARED FOR:	Colin Ryan	DATE PREPARED:	7/9/2012
		PREPARED BY:	Amanda Magee

**DESCRIPTION OF ACTIVITIES ON SITE AND NOTES (cont)**

Field Work Conducted By: \_\_\_\_\_ Date: \_\_\_\_\_

1:15 - All water samples taken  
 3:00 - Traffic control down, off the street  
 - Leave site for Sacramento

Day 2 7/11/12

7:30 - Arrived onsite, reviewed HASP, called in to Damon Brown, spoke w/store employees

8:30 - Highway Technologies traffic control arrives onsite

- Held H+S meeting

- Begin traffic control setup

9:00 - Received phone call from WDC, they have a flat tire & will be late to the job

12:00 - WDC arrives onsite

- Held H+S meeting

- Begin setup in GP-6

2:00 - All soil samples taken

- No water present in borehole

- Will grant w/out water sample to get off the street by 2:30

3:00 - Site clean, leave for Sacramento

Day 3 7/12/12

7:30 - Arrived onsite, reviewed HASP, spoke w/store employees

- Called in to Damon Brown

8:30 - Highway Technologies arrives onsite

- Held H+S meeting

- Begin traffic control setup

8:50 - WDC arrives onsite

- Held H+S meeting

9:15 - Begin setup in GP-7 in the street

11:25 - All water & soil samples taken

GP-7-25 was not collected due to ~~falling~~ saturated sample falling out of sleeve.

- WDC leaves site

- Traffic control begins breaking down equipment

12:00 - Site clean, leave for Kiff Analytical

# **Attachment E**

## **Soil Boring Logs**

PROJECT: **7-Eleven Store # 32266**  
 LOCATION: **1339 Vasco Rd., Livermore, CA**  
 PROJECT NUMBER:

WELL/PROBEHOLE/BOREHOLE NO:  
**GP-4**



DRILLING / INSTALLATION:  
 STARTED: **7/10/12** COMPLETED:  
 DRILLING COMPANY: **WDC Drilling**  
 DRILLING EQUIPMENT: **Direct Push**  
 DRILLING METHOD: **Geoprobe**  
 SAMPLING EQUIPMENT: **Acetate Sleeve**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **23**  
 STATIC DTW (ft): **Not Encountered**  
 WELL CASING DIA. (in): **---**  
 LOGGED BY: **Colin Ryan**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **25.0**  
 BOREHOLE DEPTH (ft): **25.0**  
 BOREHOLE DIA. (in): **2**  
 CHECKED BY: **A. Magee**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Hand Clear to 5' bgs.							
5		CL	<b>CLAY</b> ; CL; light brown; high plasticity; hard; moist; no HC odor; (0,5,0,95)		10:40 GP-4-5			0.2	5	
10		CL	<b>CLAY</b> ; CL; light brown; high plasticity; hard; moist; no HC odor; (0,5,0,95)		10:45 GP-4-10			0.2	10	
15		CL	<b>GRAVELLY CLAY</b> ; CL; brown; high plasticity; soft; moist; no HC odor; (15,0,0,85)		10:55 GP-4-15	20		0.1	15	
20		CL	<b>CLAY WITH GRAVEL</b> ; CL; brown; high plasticity; hard; moist; no HC odor; (10,0,0,90)		10:57 GP-4-20			0.2	20	
25		CL	<b>CLAY WITH GRAVEL</b> ; CL; brown; high plasticity; hard; moist; no HC odor; (10,0,0,90) Borehole terminated at 25 feet.		11:05 GP-4-25			0.4	25	

GEO FORM 304 GP-4 TO GP-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/17/12

PROJECT: **7-Eleven Store # 32266**  
 LOCATION: **1339 Vasco Rd., Livermore, CA**  
 PROJECT NUMBER:

WELL/PROBEHOLE/BOREHOLE NO:

**GP-5**



DRILLING / INSTALLATION:  
 STARTED: **7/10/12** COMPLETED:  
 DRILLING COMPANY: **WDC Drilling**  
 DRILLING EQUIPMENT: **Direct Push**  
 DRILLING METHOD: **Geoprobe**  
 SAMPLING EQUIPMENT: **Acetate Sleeve**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **23**  
 STATIC DTW (ft): **15**  
 WELL CASING DIA. (in): ---  
 LOGGED BY: **Colin Ryan**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **25.0**  
 BOREHOLE DEPTH (ft): **25.0**  
 BOREHOLE DIA. (in): **2**  
 CHECKED BY: **A. Magee**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Hand Clear to 5' bgs.							
5		ML	<b>SILT WITH GRAVEL</b> ; ML; light brown; low plasticity; firm to soft; moist; no HC odor; (10,0,85,5)		12:05 GP-5-5			0.4	5	
10		CL	<b>CLAY</b> ; CL; light reddish brown; medium plasticity; soft; moist; no HC odor; (0,0,0,100)		12:07 GP-5-10			0.0	10	
15		CL	<b>CLAY</b> ; CL; light reddish brown; medium plasticity; hard; moist; no HC odor; (0,0,0,100)		12:10 GP-5-15	20		0.4	15	
20		CL	<b>CLAY</b> ; CL; reddish brown; high plasticity; very soft; moist; no HC odor; (0,5,0,95)		12:20 GP-5-20			1.0	20	
25		CL	<b>CLAY</b> ; CL; reddish brown; high plasticity; very soft; wet; no HC odor; (0,0,0,100)		12:25 GP-5-25			0.6	25	
			Borehole terminated at 25 feet.							

GEO FORM 304 GP-4 TO GP-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/17/12

PROJECT: **7-Eleven Store # 32266**  
 LOCATION: **1339 Vasco Rd., Livermore, CA**  
 PROJECT NUMBER:

WELL/PROBEHOLE/BOREHOLE NO:  
**GP-6**



DRILLING / INSTALLATION:  
 STARTED: **7/11/10** COMPLETED:  
 DRILLING COMPANY: **WDC Drilling**  
 DRILLING EQUIPMENT: **Direct Push**  
 DRILLING METHOD: **Geoprobe**  
 SAMPLING EQUIPMENT: **Acetate Sleeve**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **Not Encountered**  
 STATIC DTW (ft): **Not Encountered**  
 WELL CASING DIA. (in): **---**  
 LOGGED BY: **Colin Ryan**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **25.0**  
 BOREHOLE DEPTH (ft): **25.0**  
 BOREHOLE DIA. (in): **2**  
 CHECKED BY: **A. Magee**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Hand Clear to 5' bgs.							
5		ML	<b>SILT</b> ; ML; brown; high plasticity; soft; moist; no HC odor; (0,0,100,0)		1:00 GP-6-5			0.2	5	
10		CL	<b>CLAY</b> ; CL; brown; medium plasticity; hard; moist; no HC odor; (0,5,0,95)		1:05 GP-6-10			0.0	10	
15		CL	<b>CLAY</b> ; CL; brown; high plasticity; soft to firm; moist; no HC odor; (0,0,0,100)		1:08 GP-6-15	20		1.2	15	
20		CL	<b>CLAY</b> ; CL; light brown; high plasticity; soft to firm; moist; no HC odor; (0,0,0,100)		1:10 GP-6-20			0.0	20	
25		CL	<b>CLAY</b> ; CL; light brown; high plasticity; firm; no HC odor; (0,0,0,100)		1:12 GP-6-25			0.0	25	
			Borehole terminated at 25 feet.							

GEO FORM 304 GP-4 TO GP-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/17/12

PROJECT: **7-Eleven Store # 32266**  
 LOCATION: **1339 Vasco Rd., Livermore, CA**  
 PROJECT NUMBER:

WELL/PROBEHOLE/BOREHOLE NO:

**GP-7**



DRILLING / INSTALLATION:  
 STARTED: **7/12/12** COMPLETED:  
 DRILLING COMPANY: **WDC Drilling**  
 DRILLING EQUIPMENT: **Direct Push**  
 DRILLING METHOD: **Geoprobe**  
 SAMPLING EQUIPMENT: **Acetate Sleeve**

NORTHING (ft):  
 LAT:  
 GROUND ELEV (ft):  
 INITIAL DTW (ft): **12**  
 STATIC DTW (ft): **Not Encountered**  
 WELL CASING DIA. (in): **---**  
 LOGGED BY: **Colin Ryan**

EASTING (ft):  
 LONG:  
 TOC ELEV (ft):  
 WELL DEPTH (ft): **25.0**  
 BOREHOLE DEPTH (ft): **25.0**  
 BOREHOLE DIA. (in): **2**  
 CHECKED BY: **A. Magee**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (units)	Depth (feet)	Borehole Backfill
			Hand Clear to 5' bgs.							
5		CL	<b>CLAY</b> ; CL; light brown; high plasticity; soft; moist; no HC odor; (0,0,0,100)		9:50 GP-7-5			0.0	5	
10		SP	<b>SAND</b> ; SP; brown; medium-grained; loose; wet; no HC odor; (0,80,20,0)		9:55 GP-7-10			0.0	10	
15		CL	<b>CLAY WITH GRAVEL</b> ; CL; light brown; medium plasticity; very hard to firm; no HC odor; (5,0,0,95)		10:00 GP-7-15	16		0.0	15	
20		CL	<b>CLAY</b> ; CL; light brown; medium plasticity; very hard to firm; no HC odor; (0,0,0,100)		10:20 GP-7-20			0.0	20	
			No Recovery, saturated soils fell out of acetate sleeve.							
25			Borehole terminated at 25 feet.						25	

GEO FORM 304 GP-4 TO GP-7.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/17/12

**Attachment F**  
**Certified Analytical Laboratory Reports and**  
**Chain-of-Custody Documentation**



## Laboratory Results

Damon Brown  
Stantec Consulting Services Inc.  
3017 Kilgore Road, Suite 100  
Rancho Cordova, CA 95670

Subject : 19 Soil Samples and 3 Water Samples  
Project Name : 7-Eleven Store #32266  
Project Number : 211502037.230.0400

Dear Mr. Brown,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy Turpen

Subject : 19 Soil Samples and 3 Water Samples  
Project Name : 7-Eleven Store #32266  
Project Number : 211502037.230.0400

## Case Narrative

All soil samples were reported on a total weight (wet weight) basis.

GP-4W was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-4-5**

Matrix : Soil

Lab Number : 81894-01

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:00
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:00
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:00
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:00
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:00
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 22:00
1,2-Dichloroethane-d4 (Surr)	97.7		% Recovery	EPA 8260B	07/12/12 22:00
Toluene - d8 (Surr)	94.9		% Recovery	EPA 8260B	07/12/12 22:00

Sample : **GP-4-10**

Matrix : Soil

Lab Number : 81894-02

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:40
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:40
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:40
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:40
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:40
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 21:40
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/12/12 21:40
Toluene - d8 (Surr)	94.3		% Recovery	EPA 8260B	07/12/12 21:40

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-4-15**

Matrix : Soil

Lab Number : 81894-03

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:37
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:37
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:37
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:37
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 21:37
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 21:37
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/12/12 21:37
Toluene - d8 (Surr)	98.2		% Recovery	EPA 8260B	07/12/12 21:37

Sample : **GP-4-20**

Matrix : Soil

Lab Number : 81894-04

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:45
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:45
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:45
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:45
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:45
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 23:45
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	07/12/12 23:45
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	07/12/12 23:45

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-4-25**

Matrix : Soil

Lab Number : 81894-05

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:15
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:15
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:15
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:15
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:15
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 22:15
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/12/12 22:15
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	07/12/12 22:15

Sample : **GP-5-5**

Matrix : Soil

Lab Number : 81894-06

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:19
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:19
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:19
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:19
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:19
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 22:19
1,2-Dichloroethane-d4 (Surr)	109		% Recovery	EPA 8260B	07/12/12 22:19
Toluene - d8 (Surr)	93.7		% Recovery	EPA 8260B	07/12/12 22:19

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-5-10**

Matrix : Soil

Lab Number : 81894-07

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:51
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:51
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:51
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:51
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:51
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 22:51
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/12/12 22:51
Toluene - d8 (Surr)	98.3		% Recovery	EPA 8260B	07/12/12 22:51

Sample : **GP-5-15**

Matrix : Soil

Lab Number : 81894-08

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:55
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:55
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:55
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 22:55
<b>Methyl-t-butyl ether (MTBE)</b>	<b>0.024</b>	0.0050	mg/Kg	EPA 8260B	07/12/12 22:55
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 22:55
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	07/12/12 22:55
Toluene - d8 (Surr)	93.8		% Recovery	EPA 8260B	07/12/12 22:55

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-5-20**

Matrix : Soil

Lab Number : 81894-09

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:34
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:34
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:34
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:34
<b>Methyl-t-butyl ether (MTBE)</b>	<b>0.056</b>	0.0050	mg/Kg	EPA 8260B	07/12/12 23:34
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 23:34
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	07/12/12 23:34
Toluene - d8 (Surr)	93.1		% Recovery	EPA 8260B	07/12/12 23:34

Sample : **GP-5-25**

Matrix : Soil

Lab Number : 81894-10

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:28
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:28
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:28
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/12 23:28
<b>Methyl-t-butyl ether (MTBE)</b>	<b>0.024</b>	0.0050	mg/Kg	EPA 8260B	07/12/12 23:28
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/12 23:28
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	07/12/12 23:28
Toluene - d8 (Surr)	98.2		% Recovery	EPA 8260B	07/12/12 23:28

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-6-5**

Matrix : Soil

Lab Number : 81894-11

Sample Date :07/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:14
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:14
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:14
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:14
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:14
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:14
1,2-Dichloroethane-d4 (Surr)	108		% Recovery	EPA 8260B	07/13/12 00:14
Toluene - d8 (Surr)	93.9		% Recovery	EPA 8260B	07/13/12 00:14

Sample : **GP-6-10**

Matrix : Soil

Lab Number : 81894-12

Sample Date :07/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:04
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:04
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:04
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:04
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:04
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:04
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/13/12 00:04
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	07/13/12 00:04

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-6-15**

Matrix : Soil

Lab Number : 81894-13

Sample Date :07/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:21
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:21
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:21
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:21
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:21
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:21
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	07/13/12 00:21
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	07/13/12 00:21

Sample : **GP-6-20**

Matrix : Soil

Lab Number : 81894-14

Sample Date :07/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:55
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	07/13/12 00:55
Toluene - d8 (Surr)	94.4		% Recovery	EPA 8260B	07/13/12 00:55

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-6-25**

Matrix : Soil

Lab Number : 81894-15

Sample Date :07/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:40
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:40
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:40
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:40
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:40
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:40
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/13/12 00:40
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	07/13/12 00:40

Sample : **GP-7-5**

Matrix : Soil

Lab Number : 81894-16

Sample Date :07/12/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 00:55
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 00:55
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	07/13/12 00:55
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	07/13/12 00:55

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-7-10**

Matrix : Soil

Lab Number : 81894-17

Sample Date :07/12/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:36
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:36
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:36
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:36
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:36
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 01:36
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	07/13/12 01:36
Toluene - d8 (Surr)	93.2		% Recovery	EPA 8260B	07/13/12 01:36

Sample : **GP-7-15**

Matrix : Soil

Lab Number : 81894-18

Sample Date :07/12/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:21
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:21
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:21
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:21
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 01:21
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 01:21
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/13/12 01:21
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	07/13/12 01:21

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-7-20**

Matrix : Soil

Lab Number : 81894-19

Sample Date :07/12/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 10:35
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 10:35
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 10:35
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 10:35
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/12 10:35
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/12 10:35
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/13/12 10:35
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	07/13/12 10:35

Sample : **GP-4W**

Matrix : Water

Lab Number : 81894-20

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 01:13
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 01:13
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 01:13
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 01:13
<b>Methyl-t-butyl ether (MTBE)</b>	<b>13</b>	0.50	ug/L	EPA 8260B	07/14/12 01:13
<b>TPH as Gasoline</b>	<b>75</b>	50	ug/L	EPA 8260B	07/14/12 01:13
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	07/14/12 01:13
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/14/12 01:13

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Sample : **GP-5W**

Matrix : Water

Lab Number : 81894-21

Sample Date :07/10/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 05:35
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 05:35
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 05:35
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 05:35
<b>Methyl-t-butyl ether (MTBE)</b>	<b>350</b>	0.50	ug/L	EPA 8260B	07/14/12 05:35
<b>TPH as Gasoline</b>	<b>95</b>	50	ug/L	EPA 8260B	07/14/12 05:35
1,2-Dichloroethane-d4 (Surr)	98.4		% Recovery	EPA 8260B	07/14/12 05:35
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	07/14/12 05:35

Sample : **GP-7W**

Matrix : Water

Lab Number : 81894-22

Sample Date :07/12/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 00:40
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 00:40
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 00:40
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 00:40
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/14/12 00:40
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/14/12 00:40
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	07/14/12 00:40
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	07/14/12 00:40

**QC Report : Method Blank Data**

Project Name : **7-Eleven Store #32266**

Project Number : **211502037.230.0400**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/2012
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/2012
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/2012
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/2012
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/12/2012
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/12/2012
1,2-Dichloroethane-d4 (Surr)	98.9		%	EPA 8260B	07/12/2012
Toluene - d8 (Surr)	95.3		%	EPA 8260B	07/12/2012
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/2012
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/2012
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/2012
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/2012
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/13/2012
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/13/2012
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	07/13/2012
Toluene - d8 (Surr)	99.3		%	EPA 8260B	07/13/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/13/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/13/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/13/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/13/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/13/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/13/2012
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/13/2012
Toluene - d8 (Surr)	101		%	EPA 8260B	07/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **7-Eleven Store #32266**Project Number : **211502037.230.0400**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	81894-01	<0.0050	0.0394	0.0382	0.0331	0.0314	mg/Kg	EPA 8260B	7/12/12	84.1	82.2	2.28	67.9-120	25
Ethylbenzene	81894-01	<0.0050	0.0394	0.0382	0.0369	0.0348	mg/Kg	EPA 8260B	7/12/12	93.7	91.2	2.64	65.5-127	25
Methyl-t-butyl ether	81894-01	<0.0050	0.0394	0.0382	0.0328	0.0302	mg/Kg	EPA 8260B	7/12/12	83.3	79.1	5.18	57.0-122	25
P + M Xylene	81894-01	<0.0050	0.0394	0.0382	0.0348	0.0331	mg/Kg	EPA 8260B	7/12/12	88.5	86.7	2.07	62.5-124	25
Toluene	81894-01	<0.0050	0.0394	0.0382	0.0347	0.0329	mg/Kg	EPA 8260B	7/12/12	88.2	86.3	2.23	65.7-120	25
Benzene	81892-03	<0.0050	0.0389	0.0385	0.0359	0.0351	mg/Kg	EPA 8260B	7/13/12	92.3	91.3	1.10	67.9-120	25
Ethylbenzene	81892-03	<0.0050	0.0389	0.0385	0.0303	0.0308	mg/Kg	EPA 8260B	7/13/12	77.9	80.2	2.85	65.5-127	25
Methyl-t-butyl ether	81892-03	<0.0050	0.0389	0.0385	0.0407	0.0362	mg/Kg	EPA 8260B	7/13/12	104	94.1	10.5	57.0-122	25
P + M Xylene	81892-03	<0.0050	0.0389	0.0385	0.0292	0.0298	mg/Kg	EPA 8260B	7/13/12	74.9	77.4	3.17	62.5-124	25

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **7-Eleven Store #32266**Project Number : **211502037.230.0400**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Toluene	81892-03	<0.0050	0.0389	0.0385	0.0330	0.0324	mg/Kg	EPA 8260B	7/13/12	84.9	84.2	0.855	65.7-120	25
Benzene	81876-05	4.2	40.0	40.0	42.8	42.4	ug/L	EPA 8260B	7/13/12	96.5	95.5	1.00	80-120	25
Ethylbenzene	81876-05	<0.50	40.0	40.0	39.3	38.1	ug/L	EPA 8260B	7/13/12	98.2	95.2	3.00	80-120	25
Methyl-t-butyl ether	81876-05	9.4	40.0	40.0	50.3	51.6	ug/L	EPA 8260B	7/13/12	102	105	3.19	69.7-121	25
P + M Xylene	81876-05	<0.50	40.0	40.0	38.9	38.0	ug/L	EPA 8260B	7/13/12	97.3	94.9	2.54	76.8-120	25
Toluene	81876-05	<0.50	40.0	40.0	40.8	40.2	ug/L	EPA 8260B	7/13/12	102	100	1.30	80-120	25

**QC Report : Laboratory Control Sample (LCS)**Project Name : **7-Eleven Store #32266**Project Number : **211502037.230.0400**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0387	mg/Kg	EPA 8260B	7/12/12	88.0	67.9-120
Ethylbenzene	0.0387	mg/Kg	EPA 8260B	7/12/12	98.0	65.5-127
Methyl-t-butyl ether	0.0387	mg/Kg	EPA 8260B	7/12/12	88.3	57.0-122
P + M Xylene	0.0387	mg/Kg	EPA 8260B	7/12/12	93.2	62.5-124
Toluene	0.0387	mg/Kg	EPA 8260B	7/12/12	91.4	65.7-120
Benzene	0.0381	mg/Kg	EPA 8260B	7/13/12	99.3	67.9-120
Ethylbenzene	0.0381	mg/Kg	EPA 8260B	7/13/12	100	65.5-127
Methyl-t-butyl ether	0.0381	mg/Kg	EPA 8260B	7/13/12	95.1	57.0-122
P + M Xylene	0.0381	mg/Kg	EPA 8260B	7/13/12	98.4	62.5-124
Toluene	0.0381	mg/Kg	EPA 8260B	7/13/12	97.7	65.7-120
Benzene	39.9	ug/L	EPA 8260B	7/13/12	97.4	80-120
Ethylbenzene	39.9	ug/L	EPA 8260B	7/13/12	99.4	80-120
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/13/12	99.6	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	7/13/12	98.0	76.8-120
TPH as Gasoline	505	ug/L	EPA 8260B	7/13/12	93.1	70.0-130
Toluene	39.9	ug/L	EPA 8260B	7/13/12	103	80-120

Chain of Custody Number:

81894

# Stantec Chain-of Custody Record

Field Office: 077 Sacramento  
 Address: 3017 Kilgore Road, Suite 100  
Rancho Cordova, CA

Additional documents are attached, and are part of this Record.  
 Job Name: 7-Eleven Store #32266  
 Location: 1339 North Vasco Road  
Livermore, CA

Project # 211502037.230 Task # 0400  
 Project Manager Damon Brown  
 Laboratory Kiff Analytical  
 Turnaround Time 2-day

Sampler's Name Colin Ryan  
 Sampler's Signature *Colin Ryan*

Sample ID      Date      Time      Matrix

Analysis Request										Number of Containers		
HCID	TPHg / BTEX / MIBE- EPA 8260	TPHd (Diesel Only) 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile organics 624/8240 (g=GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	5 Oxygenates by EPA 8260B	1,2 DCA - 8260B		Comments/ Instructions	
	X										1	01
	X										1	02
	X										1	03
	X										1	04
	X										1	05
	X										1	06
	X										1	07
	X										1	08
	X										1	09
	X										1	10
	X										1	11

Special Instructions/Comments  
 Global ID #T10000001067  
 email EDD to [debbie.lichtenberger@stantec.com](mailto:debbie.lichtenberger@stantec.com)  
 email lab report to [amanda.magee@stantec.com](mailto:amanda.magee@stantec.com) / [damon.brown@stantec.com](mailto:damon.brown@stantec.com) / [debbie.lichtenberger@stantec.com](mailto:debbie.lichtenberger@stantec.com)

Relinquished by: *Colin Ryan*  
 Sign \_\_\_\_\_  
 Print Colin Ryan  
 Company Stantec  
 Time 12:00 Date 7/12/12

Received by: \_\_\_\_\_  
 Sign \_\_\_\_\_  
 Print \_\_\_\_\_  
 Company \_\_\_\_\_  
 Time \_\_\_\_\_ Date \_\_\_\_\_

Sample Receipt  
 Total no. of containers: \_\_\_\_\_  
 Chain of custody seals: \_\_\_\_\_  
 Rec'd in good condition/cold: \_\_\_\_\_  
 Conforms to record: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
 Sign \_\_\_\_\_  
 Print \_\_\_\_\_  
 Company \_\_\_\_\_  
 Time \_\_\_\_\_ Date \_\_\_\_\_

Received by: TJB  
 Sign *TJB*  
 Print Timothy Baines  
 Company Kiff Analytical  
 Time 1330 Date 07/12/12

Client: Statnec  
 Client Contact: Damon Brown  
 Client Phone: (916) 861-0400  
ext. 230

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**SAMPLE RECEIPT CHECKLIST**

RECEIVER  
TJB  
Initials

SRG#: 81894 Date: 071212

Project ID: 7-Elaven Store #32266

Method of Receipt:  Courier  Over-the-counter  Shipper

**COC Inspection**

Is COC present?  Yes  No  
 Custody seals on shipping container?  Intact  Broken  Not present  N/A  
 Is COC Signed by Relinquisher?  Yes  No Dated?  Yes  No  
 Is sampler name legibly indicated on COC?  Yes  No  
 Is analysis or hold requested for all samples?  Yes  No  
 Is the turnaround time indicated on COC?  Yes  No  
 Is COC free of whiteout and uninitialed cross-outs?  Yes  No, Whiteout  No, Cross-outs

**Sample Inspection**

Coolant Present:  Yes  No (includes water)  
 Temperature °C 5.2 Therm. ID# IR-3 Initial TJB Date/Time 071212/1320  N/A  
 Are there custody seals on sample containers?  Intact  Broken  Not present  
 Do containers match COC?  Yes  No  No, COC lists absent sample(s)  No, Extra sample(s) present  
 Are there samples matrices other than soil, water, air or carbon?  Yes  No  
 Are any sample containers broken, leaking or damaged?  Yes  No  
 Are preservatives indicated?  Yes, on sample containers  Yes, on COC  Not indicated  N/A  
 Are preservatives correct for analyses requested?  Yes  No  N/A  
 Are samples within holding time for analyses requested?  Yes  No  
 Are the correct sample containers used for the analyses requested?  Yes  No  
 Is there sufficient sample to perform testing?  Yes  No  
 Does any sample contain product, have strong odor or are otherwise suspected to be hot?  Yes  No

**Receipt Details**

Matrix SO Container type Sealve # of containers received 19  
 Matrix WA Container type VOA # of containers received 12  
 Matrix \_\_\_\_\_ Container type \_\_\_\_\_ # of containers received \_\_\_\_\_  
 Date and Time Sample Put into Temp Storage Date: 071212 Time: 1330

**Quicklog**

Are the Sample ID's indicated:  On COC  On sample container(s)  On Both  Not indicated  
 If Sample ID's are listed on both COC and containers, do they all match?  Yes  No  N/A  
 Is the Project ID indicated:  On COC  On sample container(s)  On Both  Not indicated  
 If project ID is listed on both COC and containers, do they all match?  Yes  No  N/A  
 Are the sample collection dates indicated:  On COC  On sample container(s)  On Both  Not indicated  
 If collection dates are listed on both COC and containers, do they all match?  Yes  No  N/A  
 Are the sample collection times indicated:  On COC  On sample container(s)  On Both  Not indicated  
 If collection times are listed on both COC and containers, do they all match?  Yes  No  N/A

COMMENTS: Sediment in samples -20 and -22. Bubbles in  
samples -20 (all VOAs), -21 (VOA 4 of 4). TJB 071212 1434