

Stantec Consulting Corporation

3017 Kilgore Road Suite 100 Rancho Cordova CA 95670 Tel: (916) 861-0400 Fax: (916) 861-0430

July 8, 2011

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

RECEIVED

11:26 am, Jul 12, 2011 Alameda County Environmental Health

RE: Enclosed Quarterly Groundwater Monitoring Report, Second Quarter 2011

7-Eleven Store #32266 1339 North Vasco Road Livermore, CA 94551 Stantec Project #:211502037.220.0506

Dear Mr. Wickham:

Stantec Consulting Corporation 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 Corporation

Damon Brown Geologic Associate Project Manager Ed Simonis, PG Senior Geologist

LIMITED AUTHORIZATION

KNOW ALL MEN BY THESE PRESENTS:

That 7-ELEVEN, INC. ("7-Eleven"), a Texas corporation, acting by and through Gary C. Lockhart, Vice President, does hereby nominate, constitute and appoint STANTEC CONSULTING CORPORATION, a Delaware corporation formerly known as SECOR International Incorporated, 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 Agreement by and between 7-Eleven and Agent, dated as of February 1, 2003 (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 or may be terminated at any time for any reason by 7-Eleven.

APPROVED AND EXECUTED this $22^{\mu\nu}$ day of MAy, 2008, to be effective as of June 1, 2008.

7-ELEVEN, INC.

ATTEST:

Assistant Secretary

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;

<u>Provided</u>, 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.



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Quarterly Groundwater Monitoring Report Second Quarter 2011

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

Stantec Project No.: 211502037.220.0506

Submitted to:

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

Prepared on behalf of:

7-Eleven, Inc. Mr. Ken Hilliard P.O. Box 711 Dallas, TX 75221-0711

July 8, 2011



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3017 Kilgore Road Suite 100 Rancho Cordova CA 95670 Tel: (916) 861-0400 Fax: (916) 861-0430

DATE: July 8, 2011

7-ELEVEN, INC. SEMI-ANNUAL REPORT

Store Number: 7-Eleven Store #32266
Site Address: 1339 North Vasco Road, Livermore, CA 94551
7-Eleven Contact: Mr. Ken Hilliard
Consulting Company: Stantec Consulting Corporation – Mr. Damon Brown
Stantec Project No.: 211502037.220.0506
Primary Agency: Alameda County Environmental Health Services (ACEHS)

WORK PERFORMED THIS PERIOD [Second Quarter 2011]

1. Conducted quarterly groundwater monitoring and sampling on May 26, 2011, and generated the quarterly report.

WORK PROPOSED FOR NEXT PERIOD [Third Quarter 2011]

1. Perform quarterly groundwater monitoring and sampling during third quarter 2011, and prepare the quarterly report.

DISCUSSION

The site is an active 7-Eleven convenience store and retail gasoline fueling facility with one 15,000-gallon and one 10,000-gallon gasoline underground storage tanks (UST) (Figures 1 and 2). Current groundwater monitoring and sampling data are summarized in Table 1, and presented on Figures 2 and 3. Historical groundwater monitoring and sampling results are summarized in Table 2. The well completion details are summarized in Table 3. A groundwater gradient and flow direction diagram is presented as Figure 4 and summarized in Table 4.

Current Site Information

t Phase of Project:	Groundwater Monitoring
ency of Monitoring and Sampling:	Quarterly, Three wells- MW-1, MW-2, and MW-3
uid Phase Hydrocarbons Present On-site:	No
Supply Wells within a 2,000-foot radius and espective Direction:	Three water supply wells (2,000 feet north, south, and southwest of site)
t Remediation Techniques:	None
s for Discharge:	None
c Range in Depth to Water, Q1-11 to Q2-1 ured Below Top of Casing)	MW-1, 7.88 to 8.07 feet
uid Phase Hydrocarbons Present On-site: Supply Wells within a 2,000-foot radius and espective Direction: t Remediation Techniques: s for Discharge: c Range in Depth to Water, Q1-11 to Q2-1	and MW-3 No Three water supply wells (2,000 feet north, south, and southwest of site) None None

July 8, 2011 Page 2 of 5

Current Quarter Monitoring Data	(See Figure 2 and Table 1)
Wells Monitored and Sampled:	Three wells- MW-1 through MW-3
Dissolved Oxygen Concentrations Measured In:	Three wells- MW-1 through MW-3
Depth to Groundwater (DTW) (Measured Below Top of Casing)	7.88 to 9.15 feet
Average Change in Groundwater Elevation Since Last Event:	0.03 foot increase
Groundwater Flow Direction and Gradient:	West-Southwest @ 0.01 foot per foot (Figure 2)
Current Quarter Analytical Data	(See Figure 3 and Table 1)
Maximum TPHg Concentrations	Not Detected, <50 μg/L
Maximum Benzene Concentrations	Not Detected, <0.50 μg/L
Maximum MtBE Concentrations	MW-3, 3,200 μg/L
Maximum TBA Concentrations	MW-3, 180 μg/L

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. 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).

July 8, 2011 Page 3 of 5

On December 4, 2008, Stantec's 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 μ g/L and 380 μ g/L, respectively. TAME was exclusively detected in grab-groundwater sample GP-3W at a concentration of 0.71 μ g/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. The work plan was subsequently approved by the ACEHS 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

July 8, 2011 Page 4 of 5

were reported at concentrations ranging from 0.0082 mg/kg to 0.33 mg/kg in soil samples collected from MW-3.

MONITORING AND SAMPLING PROCEDURES

The depth to water was measured to within 0.01 foot bgs in monitoring wells MW-1, MW-2, and MW-3 from the top of casing (TOC) using a water level indicator. Dissolved oxygen concentrations were also measured in the wells using a YSI Model Pro20 dissolved oxygen meter equipped with a down hole sensor.

Well purging and sampling equipment was thoroughly cleaned prior to purging and sampling the well. The sampling procedure for the wells included measuring the water level and purging of approximately three casing volumes of water (or to dryness). The equipment and purging methods used for the current sampling event are noted on the field data sheets in Attachment A. During purging, temperature, pH, and electrical conductivity were monitored. After purging, the water level was allowed to recover to 80% of the original level prior to collection of the water sample. Groundwater samples were collected using a disposable Teflon® bailer, placed into appropriate Environmental Protection Agency (EPA) approved containers, labeled, logged onto chain-of-custody documents, and transported on ice to a California state-certified laboratory. Copies of the field notes are in Attachment A.

GROUNDWATER SAMPLE ANALYSES AND RESULTS

The groundwater samples collected from MW-1, MW-2, and MW-3 were analyzed for the presence of BTEX, TPHg, MtBE, TBA, DIPE, EtBE, and TAME by EPA Method 8260B. The certified laboratory analytical report and chain-of-custody documentation are presented as Attachment B.

Groundwater analytical results are presented on Figure 3, and are summarized in Tables 1 and 2.

PURGE AND RINSATE WATER DISPOSAL

Water generated during well sampling and equipment cleaning was pumped into a Stantec truck-mounted water tank. The water was transferred into properly labeled 55-gallon drums and stored on-site. The drummed non-hazardous petroleum hydrocarbon contaminated water is transported quarterly by Belshire Environmental to DeMenno Kerdoon in Compton, California, for disposal.

The results of this quarterly groundwater monitoring report 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.

July 8, 2011 Page 5 of 5

If you have any questions or comments regarding the contents of this report, please contact the undersigned at (916) 861-0400.

Sincerely,

Stantec Consulting Corporation

Prepared by:

Patrick Herrmann Project Scientist

Reviewed by:

Ed Simonis, P.G. Senior Geologist

ATTACHMENTS

Figures Tables

Attachment A - Field Notes

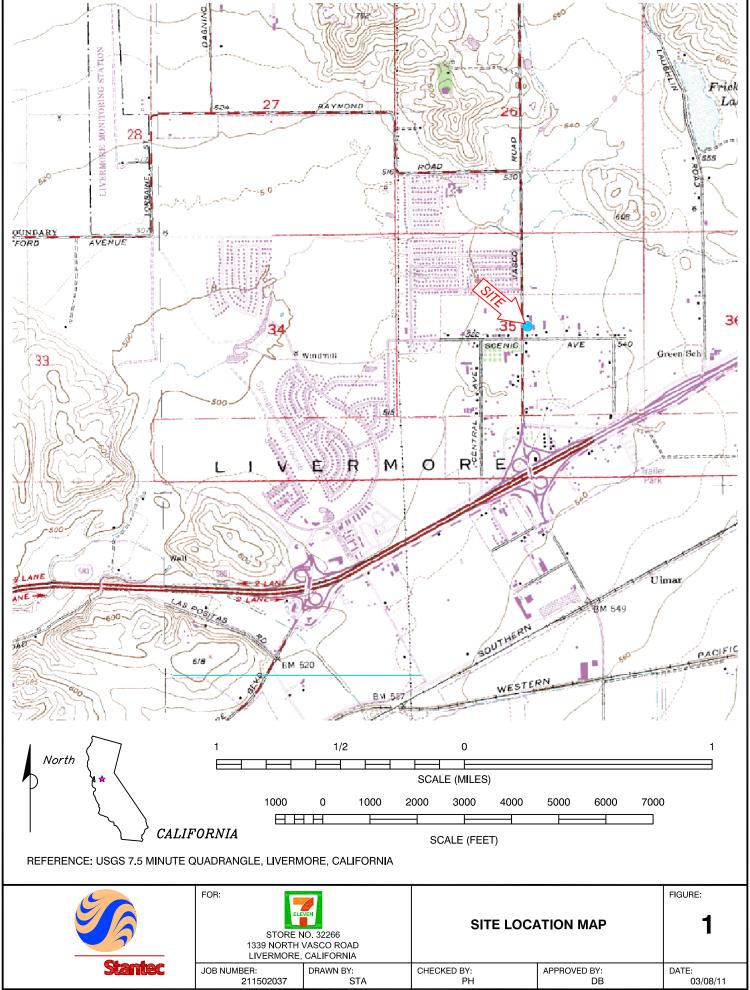
Attachment B - Certified Laboratory Analytical Reports and Chain-of-Custody Documentation

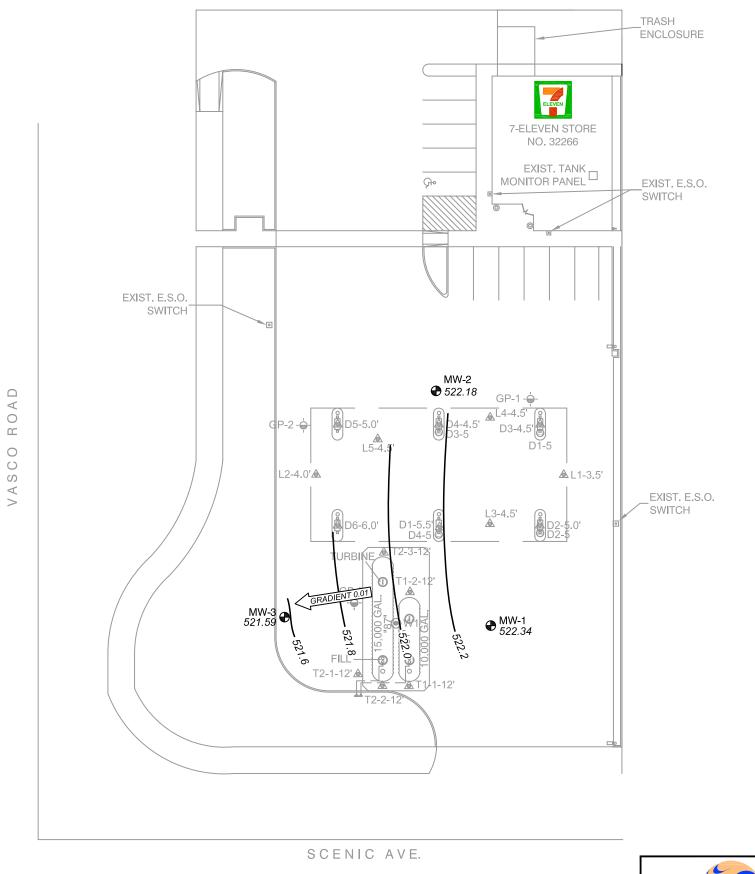
c: John Wainwright, Stantec, 308 East 4500 South, Suite 100, Murray, Utah 84107-3957

Reviewed by:

Damon Brown Geologic Associate Project Manager

Figures

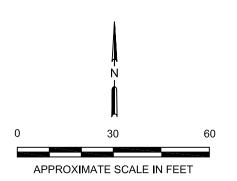




LEGEND:

MW-1 GROUNDWATER MONITORING WELL UST EXCAVATION WATER SAMPLE LOCATION W1 💿 GEOPROBE SAMPLE LOCATION GP-1-⊕-2008 SOIL SAMPLE LOCATION L5-4.5' 🛦 D1-5 ◎ 2005 SOIL SAMPLE LOCATION APPROXIMATE GROUNDWATER FLOW GRADIENT DIRECTION AND GRADIENT (FT/FT) GROUNDWATER ELEVATION CONTOUR 522.0 (FEET ABOVE MEAN SEA LEVEL) GROUNDWATER ELEVATION 522.18

(FEET ABOVE MEAN SEA LEVEL)



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FOR: STORE NO. 32266 1339 NORTH VASCO ROAD LIVERMORE, CALIFORNIA

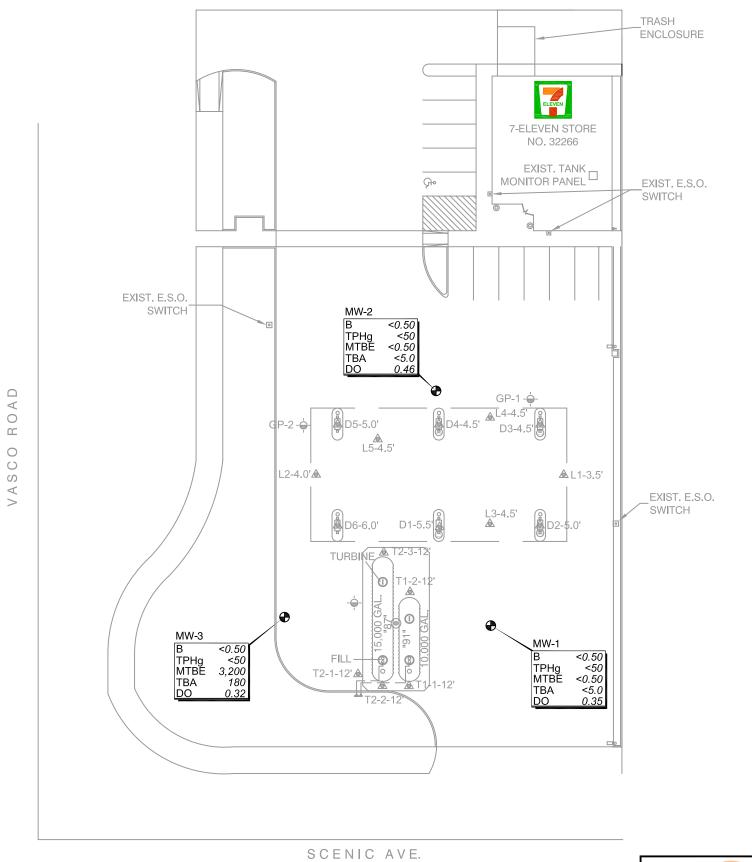
GROUNDWATER ELEVATION CONTOUR MAP MAY 26, 2011

FIGURE:

DATE:

JOB NUMBER: DRAWN BY: CHECKED BY: 211502037

APPROVED BY:



LEGEND:

D1-5 🔘

MW-1 → GROUNDWATER MONITORING WELL

W1 ○ UST EXCAVATION WATER SAMPLE LOCATION

GP-1 → GEOPROBE SAMPLE LOCATION

L5-4.5' △ 2008 SOIL SAMPLE LOCATION

B BENZENE (μg/L)

TPHg TOTAL PETROLEUM HYDROCARBONS

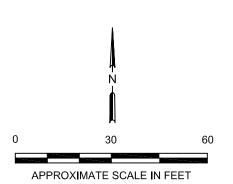
2005 SOIL SAMPLE LOCATION

AS GASOLINE (µg/L)

MtBE METHYL TERTIARY BUTYL ETHER (µg/L)

TBA TERTIARY BUTYL ALCOHOL (μg/L)

 $\mu g/L$ MICROGRAMS PER LITER



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FOR:

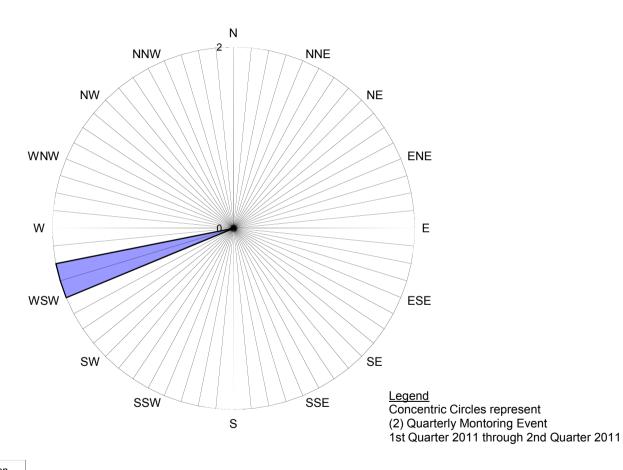
STORE NO. 32266
1339 NORTH VASCO ROAD
LIVERMORE, CALIFORNIA

JOB NUMBER: DRAWN BY:

GROUNDWATER HYDROCARBON CONCENTRATION MAP MAY 26, 2011 FIGURE:

NUMBER:
211502037DRAWN BY:
STACHECKED BY:
PHAPPROVED BY:
EKSDATE:
0

Figure 4
Groundwater Flow Direction Rose Diagram
7-Eleven #32266
1339 North Vasco, Livermore, California



■Groundwater Flow Direction

Tables

TABLE 1 Second Quarter 2011 Groundwater Monitoring and Analytical Data

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

Well ID/ Elevation (TOC)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (μg/L)	TPHg (μg/L)	MtBE (μg/L)	TBA (μg/L)	DIPE (μg/L)	EtBE (μg/L)	TAME (µg/L)	Notes	Dissolved Oxygen (mg/L)	DTW (feet)	SPT (feet)	WTE (feet)
MW-1	05/26/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50	а	0.35	7.88	0.00	522.34
530.22																
MW-2	05/26/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	<0.50	<0.50	<0.50		0.46	8.37	0.00	522.18
530.55																
MW-3	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
530.74																

Explanation:

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

TOC = Top of casing elevation in feet above mean sea level

ug/L = micrograms per Liter or parts-per-billion

mg/L = milligrams per liter

< = Not detected above laboratory reporting limit

Notes

a = Matrix Spike/Matrix Spike Duplicate for the analyte MtBE were affected by the analyte concentrations already present in the un-spike sample.

TABLE 2 Historical Water and/or Groundwater Sample Analytical Results

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

Sample				Ethyl												Dissolved			
I.D.	Date	Benzene	Toluene	Benzene	Xvlenes	TPHa	MtBE	ТВА	DIPE	EtBE	TAME	EDB	EDC	EtOH	Notes	Oxygen	DTW	SPT	WTE
(TOC)	Duto	(µg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	140100	(mg/L)	(feet)	(feet)	(feet)						
UST Excava	tion Ground			1137	(1.3-)	1137	1137	1137	1137	113-7	(13-7	1137	1137	1137			()	(,	
W1	01/28/05	25	290	62	520	3,400	180	15	<1.5	<1.5	<1.5	<1.5	<1.5	2,600					
Baker Tank	Baker Tank Samples																		
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							-					
Grab Groun	Grab Groundwater Samples																		
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	<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			-			-		
Monitoring '	Well Sample	es																	
MW-1																			
530.22	03/16/11	< 0.50	< 0.50	<0.50	< 0.50	<50	<0.50	<5.0	< 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				а	0.35	7.88	0.00	522.34
MW-2																			
530.55	03/16/11	< 0.50	< 0.50	<0.50	<0.50	<50	<0.50	<5.0	<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					0.46	8.37	0.00	522.18
MW-3																			
530.74		<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

Explanation:

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

< = Not detected above laboratory reporting limit

-- = Not sampled/not measured

a = Matrix Spike/Matrix Spike Duplicate for the analyte MtBE were affected by the analyte concentrations already present in the un-spike sample.

7-Eleven Stores\32266\Tables\32266 Current Groundwater.xlsx Page 1 of 1

Table 3 Soil Boring Details

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

		Boring	Well	Screen		Screen	
Well	Drill	Depth	Diameter	Тор	Bottom	Length	Comments
I.D.	Date	(feet bgs)	(inches)	(feet bgs)	(feet bgs)	(feet)	
Soil Borings	S						
GP-1	04/20/10	20					
GP-2	04/20/10	25		-			
GP-3	04/20/10	30					
Monitoring	Wells						
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	

Explanation
bgs = Below ground surface
--- = Data Not Available/Not Applicable

Table 4 **Groundwater Gradient and Flow Direction**

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

Well No.	Monitoring Date	DTW	Groundwater Gradient		Groundwater Flow Direction														
		(ft bgs)	(feet per foot)	N	NNE	NE	ENE	Е	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
MW-1	03/16/11	8.07	0.008	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	05/26/11	7.88	0.007	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
													ļ				ļ		<u> </u>
Aver	age Values	7.98	0.008	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Minum	um Values	7.88	0.007																
Maxim	um Values	8.07	0.008																

Explanation

TOC = Top of Casing (elevation in feet above mean sea level)

DTW = Depth to water below grade surface as measured from TOC

2 Events Number of Events

Attachment A Field Notes

	Maria III	7 FL	#20000		IOD NUMBER	244502027 220 2700
JOB NAME		7-Eleven St	······································	·	JOB NUMBER: START DATE:	211502037.220.0700 5 26 11
SITE AUUF	NEGO.	Livermore, C			DATE PREPARED:	5/19/2011
 PREPAREI	D FOR:	Brian Branso			PREPARED BY:	Patrick Herrmann
					ON REPORT	
Name(s)	BRIAN	BRANSCU		5 26 11	Did you call in?	(Yes) No
Arrival Time			"Departure Time:		Who did you call?	Patrick Hermann
Weather N	otations:	(SUN)	CLOUDY	RAIN	SNOW	Temperature 60'S F
	- Som	eone use	d our emptu	drum ons	ite and placed HA	LWASTE in it.
2*		- WASTE	٠)	DRUM INV		
\		WATER	0	CARBON	TOTAL OP	EN TOP 3
0	-	SOIL	0	EMPTY	TOTAL BUI	NG TOP
-				P) A 1 P A 2 P A	TV 4005001517	
00E 11-	0-11	0 h	······································		TY ASSESSMENT	TO SI FILE
PPE, HO	Spiral	Koute, H	ASP, Delive	J	s, venice toot	Traffic, Slipstrips Falls,
Depe	ot We	ork, Ju	un Protectio	Λ ⁻ .		
<u>-</u>		•	,			
			•			
	1430 1430	Opened Purged No En the a	then guar then san npty drum ompany wh waste sti npty 55-gu	ged well holed we onsite o service deer on al drum	it. Drove to c Drove back to	it appears that used it and put stockton, picked up site.
-						· · · · · · · · · · · · · · · · · · ·
			,			
	······································		***************************************			
			· · · · · · · · · · · · · · · · · · ·			
······································					***************************************	
<u> </u>						
·· ·		······································				

JOB NAME:	7-Eleven Store #32266	JOB NUMBER:	211502037.220.0700	
SITE ADDRESS:	1339 North Vasco Road	START DATE:	5/26/11	
	Livermore, California	DATE PREPARED:	5/19/2011	
PREPARED FOR:	Brian Branscum	PREPARED BY:	Patrick Herrmann	

GROUNDWATER GAUGING FORM

MEASURED TO TOC

WELL I.D.	CONST.	WELL DIAM.	WELL ELEV. TOC	DTB	WTO	DTP/PT	D.O. (mg/L)	TIME	COMMENTS Please note if well needs locking cap or street box repair
MW-1	20	2"		18.96	7.88	1	0.35	1045	
MW-2	20	2"		19.20	8.37	ı	0.46	1055	
MW-3	20	2"		20.03	9.15	,	0.32	1105	

XX /	Stantec Consul			
PROJECT #: 7-Eleven Store #32266 CLIENT NAME: 7-Eleven, Inc. LOCATION: 1339 North Vasco Road, Livern	PURGED BY: Brian I	Branscum Branscum	WELL I.D.: MW SAMPLE I.D.: MW QA SAMPLES: N	
DATE PURGED 5 26 11 DATE SAMPLED 5 26 11 SAMPLE TYPE: Groundwater X	START (2400hr) SAMPLE TIME (2400hr) Surface Water	1115 1135 Treatment Effluen		131
CASING DIAMETER: 2" X Casing Volume: (gallons per foot) (0.17)	3" 4" (0.67	5" (1.02)	(1.50) 8" (2.60)	Other ()
DEPTH TO BOTTOM (feet) = 18.9 DEPTH TO WATER (feet) = 7.5 WATER COLUMN HEIGHT (feet) = 11.6	88	CASING VOLUM CALCULATED P ACTUAL PURGE	URGE (gal) = 5.4	
DATE TIME (2400hr) (gal) 5 26 11 1125 1.8 1128 3.6 1131 5.4	(degrees C) (ur 19.8 11 20.5 1-	UCTIVITY pH nhos/cm) (unit 691 7.1 763 6.9 195 6.9	s) (visual) D BRN BRN	TURBIDITY (NTU) MEDILOW MEDICOW MEDICOW
SAMPLE DEPTH TO WATER: 8.40	SAMPLE INFORI		LE TURBIDITY:	EDLOW
80% RECHARGE: Y YES NO ODOR: NA SAMPLE VE	ANALYSES: SSEL / PRESERVATIVE:	BTEX, TPHg, 5 Oxygena HCL	tes (EPA 8260B)	
PURGING EQUIPMENT Bladder Pump Bailer (To Centrifugal Pump Bailer (P) X Submersible Pump Bailer (St Pump Dedicated Pump Depth: Pump Depth: WELL INTEGRITY: GOOD	VC)	Bladder Pump Centrifugal Pump Submersible Pump Peristalic Pump	ING EQUIPMENT Bailer (Teflon) X Bailer (PV Bailer (Stainless State) Dedicated K#: YES	•
REMARKS: D.O 0.35				Page / of 3

Stantec Consulting Corp.									
	W A	ATER SAMPI	LE FIELD I)ATA SH	EET				
PROJECT #: 7-Eleven Store : CLIENT NAME: 7-Eleven, Inc. LOCATION: 1339 North Vas		PURGED BY: SAMPLED BY: nore, Califor	Brian Branso Brian Branso		WELL I.I SAMPLE QA SAM	E I.D.: <u>MW-</u>	2		
DATE PURGED 5 26 DATE SAMPLED 5 2		START (2400hr) SAMPLE TIME (END (240		_01		
SAMPLE TYPE: Groun	ndwater X	Surface Wa	ter	Treatment	Effluent	Other			
CASING DIAMETER: Casing Volume: (gallons per foot)	2" <u>X</u> (0.17)	3" (0.38)	(0.67)	5" (1.02)	6" (1.50)	(2.60)	Other ()		
DEPTH TO BOTTOM (feet) = DEPTH TO WATER (feet) = WATER COLUMN HEIGHT (feet)	9.3 = 10.8	31		CALCUL	VOLUME (gal) = ATED PURGE (ga . PURGE (gal) =	1.8 1) = 5.4 7.5			
		FIELD 1	MEASUREMEN	NTS					
DATE TIME (2400hr) 5 26 11 1155 1158	VOLUME (gal) 1.8 3.6 5.4	TEMP. (degrees C) 20.6 19.2 18.7	CONDUCTI (umhos/c 2057 2060 2029	cm) 1	pH (units) 6.90 6.93 6.92	COLOR (visual) BRN BRN BON	TURBIDITY (NTU) MEDICON MEDICON		
SAMPLE DEPTH TO WATER:	8.61	SAMPL	E INFORMATIO		SAMPLE TURBII	DITY: ME	:D w		
80% RECHARGE: X YES	NO	ANA	LYSES: BTEX		Oxygenates (EPA 8				
odor: NA	SAMPLE VES	SSEL / PRESERVA		CL					
PURGING EC Bladder Pump Centrifugal Pump X Submersible Pump Peristalic Pump Other: Pump Depth:	Bailer (Te	VC) ainless Steel)	SAMPLING EQUIPMENT Bladder Pump Bailer (Teflon) Centrifugal Pump X Bailer (PVC or X disposabl Submersible Pump Bailer (Stainless Steel) Peristalic Pump Dedicated Other:						
WELL INTEGRITY: GOOT REMARKS: D.O 0.46	>				LOCK#: <u>\\</u> 1	<u>ES</u>			
	18						- 7 . 3		
SIGNATURE:	4.02						Page Z of 3		

Stantec Consulting Corp.										
W	ATER SAMPLE	FIELD DATA S	SHEET							
PROJECT #: 7-Eleven Store #32266 CLIENT NAME: 7-Eleven, Inc. LOCATION: 1339 North Vasco Road, Livern	SAMPLED BY:	-								
DATE PURGED 5 26 11 DATE SAMPLED 5 26 11 SAMPLE TYPE: Groundwater X	START (2400hr) _ SAMPLE TIME (24 Surface Water		END (2 12-3-5 ent Effluent	400hr) 12 3	31					
CASING DIAMETER: 2" $\frac{X}{(0.17)}$	3" 4"	(0.67) 5" (1.0)	2) 6" (1.50)	8" (2.60)	Other ()					
` '	.63 .15 88	CALC	IG VOLUME (gal) = ULATED PURGE (g AL PURGE (gal) =							
	FIELD ME	EASUREMENTS								
DATE TIME (2400hr) (TEMP. (degrees C) 19.9 20.2 20.3	CONDUCTIVITY (umhos/cm) 1162 1118 1148	pH (units) 7.00 6.94 6.88	COLOR (visual) BRN BRN	TURBIDITY (NTU) MEDICAL MEDICAL MEDICAL					
SAMPLE DEPTH TO WATER: 9.4	SAMPLE I	NFORMATION	SAMPLE TURE	BIDITY:	.bw					
80% RECHARGE: X YES NO	ANALY	SES: BTEX, TPHg,	5 Oxygenates (EPA	8260B)						
ODOR: NA SAMPLE VE	ESSEL / PRESERVAT	IVE: HCL	SAMPLING EQ	UIPMENT						
Bladder Pump Bailer (T Centrifugal Pump Bailer (P X Submersible Pump Bailer (S Peristalic Pump Dedicate Other: Pump Depth:	VC) tainless Steel)	Bladder Pump Centrifugal Pump Submersible Pump Peristalic Pump Dedicated Other:								
WELL INTEGRITY: GOOD REMARKS: D.O 0.32 SIGNATURE:			LOCK#: ¥I	`	Page 3 of 3					

Attachment B Certified Laboratory Analytical Reports and Chain-of-Custody Documentation



Date: 06/08/2011

Laboratory Results

Damon Brown Stantec Consulting Corporation 3017 Kilgore Road, Suite 100 Rancho Cordova, CA 95670

Subject: 3 Water Samples

Project Name: 7-Eleven Store #32266 Project Number: 211502037.220

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 standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. 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,



Date: 06/08/2011

Subject: 3 Water Samples
Project Name: 7-Eleven Store #32266

Project Number: 211502037.220

Case Narrative

Matrix Spike/Matrix Spike Duplicate results associated with sample MW-1 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.



Date: 06/08/2011

Project Name: 7-Eleven Store #32266

Project Number: 211502037.220

Sample: MW-1 Matrix: Water Lab Number: 77637-01

Sample Date :05/26/2011

Cample Date .03/20/2011		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/02/11 01:52
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/02/11 01:52
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/02/11 01:52
1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery	EPA 8260B	06/02/11 01:52
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/02/11 01:52



Date: 06/08/2011

Project Name: 7-Eleven Store #32266

Project Number: 211502037.220

Sample: MW-2 Matrix: Water Lab Number: 77637-02

Sample Date :05/26/2011

Cample Date .03/20/2011		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/08/11 02:51
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/08/11 02:51
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/08/11 02:51
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/08/11 02:51
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	06/08/11 02:51



Date: 06/08/2011

Project Name: 7-Eleven Store #32266

Project Number: 211502037.220

Sample: MW-3 Matrix: Water Lab Number: 77637-03

Sample Date :05/26/2011

Sample Date .05/26/2011		Method				
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed	
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Methyl-t-butyl ether (MTBE)	3200	5.0	ug/L	EPA 8260B	06/02/11 13:38	
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Tert-amyl methyl ether (TAME)	5.4	0.50	ug/L	EPA 8260B	06/01/11 21:57	
Tert-Butanol	180	5.0	ug/L	EPA 8260B	06/01/11 21:57	
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/01/11 21:57	
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	06/01/11 21:57	
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/01/11 21:57	

Date: 06/08/2011

QC Report : Method Blank Data

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

		Method			
	Measured	Reporting	J	Analysis	Date
Parameter	Value	Limit	Units	Method	Analyzed
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/02/2011
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/07/2011
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/07/2011
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/07/2011
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	06/07/2011
Toluene - d8 (Surr)	98.4		%	EPA 8260B	06/07/2011
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/01/2011
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/01/2011
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/01/2011
1,2-Dichloroethane-d4 (Surr)	96.5		%	EPA 8260B	06/01/2011
Toluene - d8 (Surr)	101		%	EPA 8260B	06/01/2011

		Method			
	Measured	Reporti	ng	Analysis	Date
Parameter	Value	Limit	Units	Method	Analyzed

Date: 06/08/2011

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

QC Report : Matrix Spike/ Matrix Spike Duplicate

	0 " 1		0 "	Spike	Spiked	Duplicate Spike	e ed		5.	Spiked Sample	Duplicat Spiked Sample	Relative	Spiked Sample Percent	Relative Percent
Parameter	Spiked Sample	Sample Value	Spike Level	Dup. Level	Sample Value	Samble Value	Units	Analysis Method	Date Analyzed	Percent Recov.	Percent Recov.	Percent Diff.	Recov. Limit	Diff. Limit
Methyl-t-butyl e	ther													
	77639-02	<0.50	40.2	39.6	39.7	36.0	ug/L	EPA 8260B	6/2/11	98.7	91.1	7.99	69.7-121	25
Benzene														
	77689-02	<0.50	40.0	40.0	40.8	39.5	ug/L	EPA 8260B	6/7/11	102	98.8	3.25	80-120	25
Diisopropyl ethe	er													
	77689-02	<0.50	39.6	39.6	41.2	39.8	ug/L	EPA 8260B	6/7/11	104	100	3.29	80-120	25
Ethyl-tert-butyl	ether													
	77689-02	<0.50	39.9	39.9	38.9	37.9	ug/L	EPA 8260B	6/7/11	97.4	94.8	2.68	76.5-120	25
Ethylbenzene														
	77689-02	<0.50	40.0	40.0	43.4	42.4	ug/L	EPA 8260B	6/7/11	108	106	2.40	80-120	25
Methyl-t-butyl e	ther													
	77689-02	<0.50	40.2	40.2	38.4	35.6	ug/L	EPA 8260B	6/7/11	95.4	88.5	7.52	69.7-121	25
P + M Xylene														
	77689-02	<0.50	40.0	40.0	43.3	42.2	ug/L	EPA 8260B	6/7/11	108	105	2.76	76.8-120	25
Tert-Butanol														
	77689-02	<5.0	193	193	205	209	ug/L	EPA 8260B	6/7/11	106	108	1.88	80-120	25
Tert-amyl-methy	yl ether													
	77689-02	<0.50	39.9	39.9	39.2	38.1	ug/L	EPA 8260B	6/7/11	98.3	95.5	2.92	78.9-120	25

Date: 06/08/2011

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

QC Report : Matrix Spike/ Matrix Spike Duplicate

	Chilead	Camania	Cnilca	Spike	Spiked	Duplicate Spike	e d	Analysis	Dete	Spiked Sample	Duplicate Spiked Sample	Relative	Spiked Sample Percent	Relative Percent
Parameter	Spiked Sample	Sample Value	Spike Level	Dup. Level	Sample Value	Sample Value	Units	Analysis Method	Date Analyzed	Recov.	Percent Recov.	Percent Diff.	Limit	Diff. Limit
Toluene														
	77689-02	<0.50	40.0	40.0	40.7	39.7	ug/L	EPA 8260B	6/7/11	102	99.3	2.47	80-120	25
Benzene														
	77637-03	<0.50	40.0	40.0	42.6	42.1	ug/L	EPA 8260B	6/1/11	106	105	1.16	80-120	25
Diisopropyl ethe														
Etherd tout brother	77637-03	<0.50	40.0	40.0	39.7	40.2	ug/L	EPA 8260B	6/1/11	99.2	100	1.32	80-120	25
Ethyl-tert-butyl														
Etho dh a a a a	77637-03	<0.50	39.9	39.9	37.2	38.1	ug/L	EPA 8260B	6/1/11	93.2	95.4	2.24	76.5-120	25
Ethylbenzene														
Madhad Abadad	77637-03	<0.50	40.0	40.0	43.1	42.8	ug/L	EPA 8260B	6/1/11	108	107	0.532	80-120	25
Methyl-t-butyl														
D . M. W. Jana	77637-03	2100	40.2	40.2	2060	2100	ug/L	EPA 8260B	6/1/11	0.00	32.0	200	69.7-121	25
P + M Xylene														
Tank Dadamal	77637-03	<0.50	40.0	40.0	40.0	40.2	ug/L	EPA 8260B	6/1/11	100	100	0.335	76.8-120	25
Tert-Butanol														
-	77637-03	180	193	193	392	404	ug/L	EPA 8260B	6/1/11	110	116	5.42	80-120	25
Tert-amyl-methy														
	77637-03	5.4	39.9	39.9	46.0	46.5	ug/L	EPA 8260B	6/1/11	102	103	1.12	78.9-120	25

Date: 06/08/2011

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

QC Report : Matrix Spike/ Matrix Spike Duplicate

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spike Sample Value		Analysis Method	Date Analyzed	Percent	Duplicate Spiked Sample Percent Recov.	Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Toluene														
	77637-03	<0.50	40.0	40.0	43.5	43.0	ug/L	EPA 8260B	6/1/11	109	107	1.19	80-120	25

Date: 06/08/2011

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

QC Report : Laboratory Control Sample (LCS)

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	6/2/11	97.6	69.7-121
Benzene	39.9	ug/L	EPA 8260B	6/7/11	101	80-120
Diisopropyl ether	39.5	ug/L	EPA 8260B	6/7/11	104	80-120
Ethyl-tert-butyl ether	39.8	ug/L	EPA 8260B	6/7/11	99.0	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	6/7/11	107	80-120
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	6/7/11	96.3	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	6/7/11	107	76.8-120
TPH as Gasoline	504	ug/L	EPA 8260B	6/7/11	101	70.0-130
Tert-Butanol	193	ug/L	EPA 8260B	6/7/11	108	80-120
Tert-amyl-methyl ether	39.8	ug/L	EPA 8260B	6/7/11	99.9	78.9-120
Toluene	39.9	ug/L	EPA 8260B	6/7/11	101	80-120
Benzene	40.0	ug/L	EPA 8260B	6/1/11	104	80-120
Diisopropyl ether	40.0	ug/L	EPA 8260B	6/1/11	95.8	80-120
Ethyl-tert-butyl ether	39.9	ug/L	EPA 8260B	6/1/11	94.9	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	6/1/11	106	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	6/1/11	84.7	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	6/1/11	98.8	76.8-120
TPH as Gasoline	501	ug/L	EPA 8260B	6/1/11	84.1	70.0-130
Tert-Butanol	193	ug/L	EPA 8260B	6/1/11	106	80-120
Tert-amyl-methyl ether	39.9	ug/L	EPA 8260B	6/1/11	104	78.9-120

Date: 06/08/2011

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

QC Report : Laboratory Control Sample (LCS)

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ua/L	EPA 8260B	6/1/11	106	80-120

Chain of Custody Number: 77 637

			St	ant	tec	; (Cha	ain	-of	Cu	sto	ody	Re	100	ď					╛
	amento ore Road, S Cordova, C)							•	Job	Add Nam ation	ne:	7-E	leve	n Sto orth	ore #32266 Vasco Road	and are part of this Record		- -
Project # 21150203 Project Manager Dame Laboratory Kiff Analy Turnaround Time S Sampler's Name Brian	on Brown /tical tandard	Task#	220.0410		X - EPA 8260	el Only) fied)	WTPH 418.1	olatiles	Volatile rganics 624/8240 (g=GC/MS)	d Volatiles	Semi-volatile Organics 325/8270 (GC/MS)	tes	EPA		sis Re	eque	st		of Containers	200000000000000000000000000000000000000
Sampler's Signature Sample ID		Time	Matrix	HCI-preserved	тРНg/ВТЕХ	TPHd (Diesel Only) 8015 (modified)	TPH 418.1/WTPH	Aromatic Volatiles 602/8020	Volatile rga 624/8240 (g	Halogenate 601/8010	Semi-volati 625/8270 ((5 Oxygena EPA 8260E	Chloroform, PCE - 8260B					Comments/ Instructions	Number of	i i i i i i i i i i i i i i i i i i i
MW-1 MW-2	5/26/11	1135 1205	Water Water	3	X X							X							3	╼
MW-3	√	1235	Water	3	X							X							3	, °
Special Instructions/Comp	nents			Re	ling	uishe	d bv:					Re	ceive	d by:				Sample Receipt		
Special Instructions/Comments 5 Oxygenates - MtBE, EtBE, DIPE, TAME, TBA Global ID #T10000001067 email EDD to patrick.herrmann@stantec.com email lab report to patrick.herrmann@stantec.com /			m	Relinquished by: Sign Print BRIAN BRANSO Company Time 0715 Date 611					پ	m	Received by: Sign Print Company Time Date				Date_		Total no. of containers: Chain of custody seals: Rec'd in good condition/cold: Conforms to record:			
damon.brown@stantec.com / patrick.schiller@stantec.com			Sig Pri Co	Sign Sign Print Print Company Cor					Received by: Sign Print Company F: ff 4 (42) Time 1130 Date 660//1					Client: Stantec Client Contact: Damon Client Phone: (916) 861-0400 ext. 230		_ _ 				

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Date: 5/26/11 Page 10fl



SAMPLE RECEIPT CHECKLIST

RECEIVER	
1,=	
Initials	

SKG#:	77657	Date: O	60111
Project I	D: 7-Eleven	Store #322	66
Method	of Receipt: Courier	Over-the-counter	Shipper
COC Inspection Is COC present? Custody seals on shipping cor Is COC Signed by Relinquish Is sampler name legibly indic Is analysis or hold requested f Is the turnaround time indicat Is COC free of whiteout and the	ntainer? er? Yes No ated on COC? For all samples ed on COC?	Yes Intact Dated? Yes Yes Yes Yes Yes Yes Yes	No Broken Not present N/A No No No No No No No No No, Whiteout No, Cross-outs
Sample Inspection Coolant Present: Temperature °C			
Quicklog Are the Sample ID's indicated. If Sample ID's are listed on both Is the Project ID indicated: If project ID is listed on both Are the sample collection dat. If collection dates are listed of Are the sample collection time. If collection times are listed of COMMENTS:	oth COC and containers, do t On COC On COC and containers, do they es indicated: On COC n both COC and containers, des indicated: On COC	sample container(s) all match? Yes \(\) N On sample container(s) to they all match? Ye On sample container(s)	es No N/A n Both Not indicated o N/A s) On Both Not indicated es No N/A s) On Both Not indicated o N/A o Not indicated
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