Stantec Consulting Services Inc. 11130 NE 33rd Place, Suite 200 Bellevue, Washington 98004 425.869.9448



June 22, 2015 File: 185750037

Attention: Ms. Laura Klasner
Washington State Department of Ecology
Central Regional Office – Independent Cleanup Program
15 W. Yakima Ave., Ste 200
Yakima, WA 98902

Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

• **Site Name:** Former 7-Eleven Store No. 25821

• Site Address: 1824 George Washington Way, Richland, WA

Facility Site ID: 77113577Cleanup Site ID: 6650

Dear Ms. Klasner,

On behalf of 7-Eleven, Inc. (7-Eleven), this letter report presents the results of the groundwater monitoring events conducted during the first and fourth quarters 2013 at former 7-Eleven store number 25821 (the Site), by Stantec Consulting Services Inc. (Stantec). The property currently operates as a Subway Sandwich Shop in a mixed commercial and residential neighborhood in Richland (*Figures 1 and 2*).

SITE BACKGROUND

Based on aerial photographs, architectural drawings, and Richland property records, a retail gasoline station (Wascher Mobil Gas) was installed at the property in 1949 and operated through 1984. Subsequently, the property operated as a 7-Eleven convenience store with retail gasoline station from 1984 through 1989. The second generation gasoline station consisted of three 12,000 gallon fiberglass USTs used to store unleaded gasoline and associated distribution equipment. The location of previous configurations is presented on *Figures 3a, 3b,* and *4*.

The initial release was reported to Ecology in 1989 during removal of the second generation 7-Eleven USTs and dispensing equipment. Approximately 82 cubic yards of petroleum impacted soil was excavated and transported offsite at that time. Monitoring wells were installed beginning in 1989 until 2013 (MW-1 through MW-12). In 1996, oxygen release compound was placed in MW-7 to promote biological degradation and quarterly nitrate injections were conducted from 1999 to 2001. Recent groundwater sampling indicates that dissolved TPH-G impacts above Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) are limited to MW-6.



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Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

Stantec currently conducts groundwater monitoring at the Site on a semi-annual basis.

Environmental activities conducted at the Site are summarized in the following documents:

- Stantec, 2004. Limited Phase II Environmental Site Assessment Report for 7-Eleven, Inc., 1824 George Washington Way, Richland, Washington. December 3.
- State of Washington Department of Ecology, 2013. Site Hazard Assessment, February 15.

GROUNDWATER MONITORING AND SAMPLING RESULTS

Figures 3a and 3b illustrate the groundwater elevations and groundwater gradient for the events as well as the cumulative groundwater flow direction for the site over time. Figure 4 presents the laboratory analytical results from the sampling events with data posted near each respective well.

Table 1 summarizes historical and current analytical results and groundwater elevation data.

Graphs 1 through 3 depict contaminant concentrations in a select well versus groundwater elevations over time. Graph 4 depicts the cumulative groundwater flow direction for the site over time. Copies of the laboratory analytical reports and chain of custody documents are provided in Attachment A. For each sampling event, all indicated wells were purged and sampled in accordance with the procedures detailed in Attachment B.

First Quarter 2013 conducted on February 27th 2013:

- The average depth to groundwater was 16.63-feet below top of casing (TOC) and ranged from 16.02- to 17.25-feet bgs. Groundwater flowed in a southwesterly direction with an average hydraulic gradient of 0.002-vertical feet per horizontal foot (ft/ft).
- Groundwater samples were collected from monitoring wells MW-3, MW-6, MW-7, and MW-8; and,
- Groundwater samples were analyzed for total petroleum hydrocarbons characterized as gasoline (TPH-G) by method NWTPH-Gx; benzene, toluene, ethyl benzene, and total xylenes (BTEX); methyl tertiary butyl ether (MTBE) and 1, 2-dichromoethane (EDC) by EPA Method 8260B; 1,2-dibromoethane (EDB) by EPA Method 504.1; and total lead by Method EPA 200.7. During the subject sampling event, Ecology Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs)



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Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

for the following analytes were exceeded in groundwater samples collected from the following wells:

o TPH-G: MW-6 [2,000 micrograms per liter (μg/l)]

Fourth Quarter 2013 conducted on October 17th 2013:

- The average depth to groundwater was 16.10-feet below TOC and ranged from 14.96- to 16.80-feet bgs. Groundwater flowed in a southwesterly direction with an average hydraulic gradient of 0.0017-ft/ft.
- Groundwater samples were collected from monitoring wells MW-3, MW-6, MW-7, and MW-8, MW-9, MW-10, MW-11, and MW-12; and,
- Groundwater samples were analyzed for TPH-G by method NWTPH-Gx; BTEX by EPA Method 8260B; MTBE; EDB; EDC; and dissolved lead. During the subject sampling event, MTCA Method A CULs for the following analytes were exceeded in groundwater samples collected from the following wells:
 - o TPH-G: MW-6

DISCUSSION

The concentrations of petroleum hydrocarbons for MW-6 continue to fluctuate above the MTCA Method A CULs.

Stantec recommends continued periodic groundwater monitoring and sampling of selected wells to further evaluate dissolved concentration trends and seasonal groundwater fluctuations.

LIMITATIONS AND CERTIFICATION

This document entitled Former 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of 7-Eleven Inc. (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third



Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by

(signature)

Deitrie Hanson

Reviewed by

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Adam Valenti, PE

If you have any questions or require additional information, please contact Paul Fairbairn at (425) 289-7343.

Regards,

Stantec Consulting Services Inc.

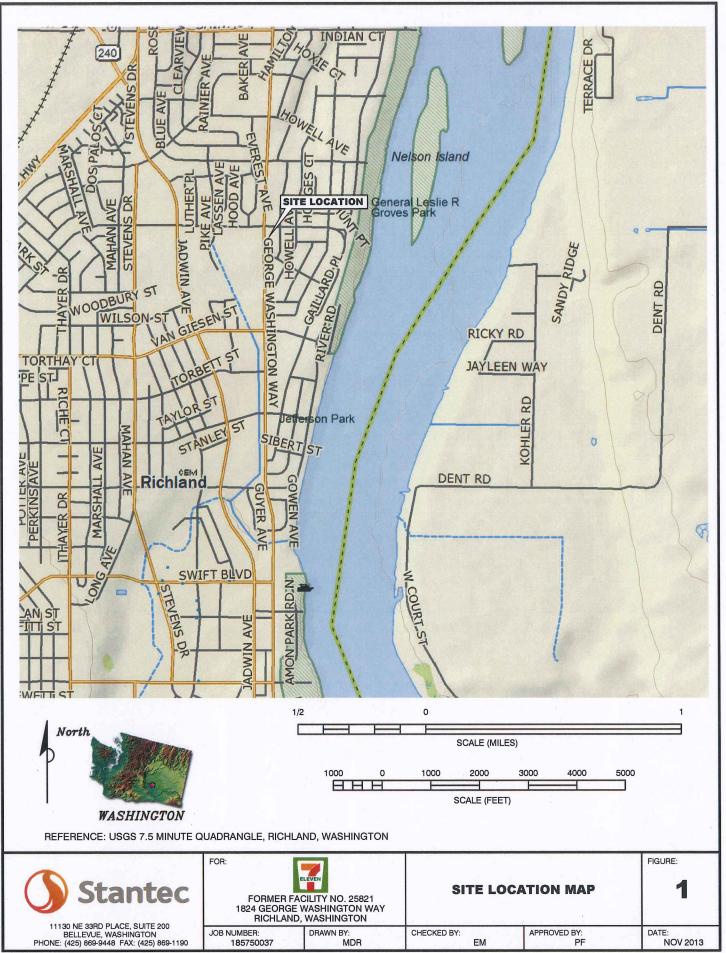
Paul Fairbairn Project Manager Phone: 425-289-7343

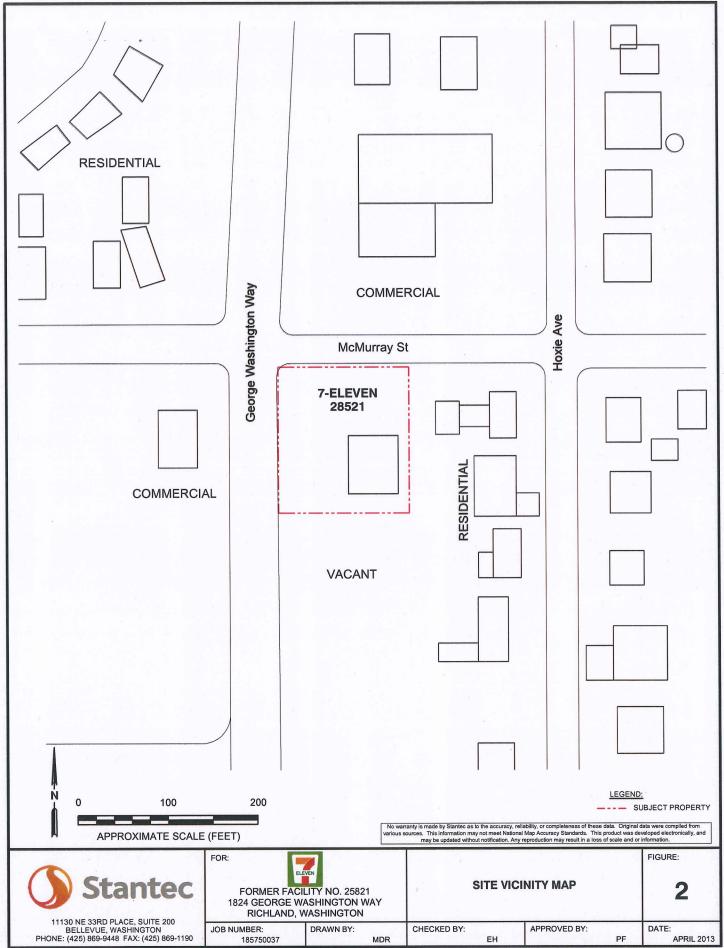


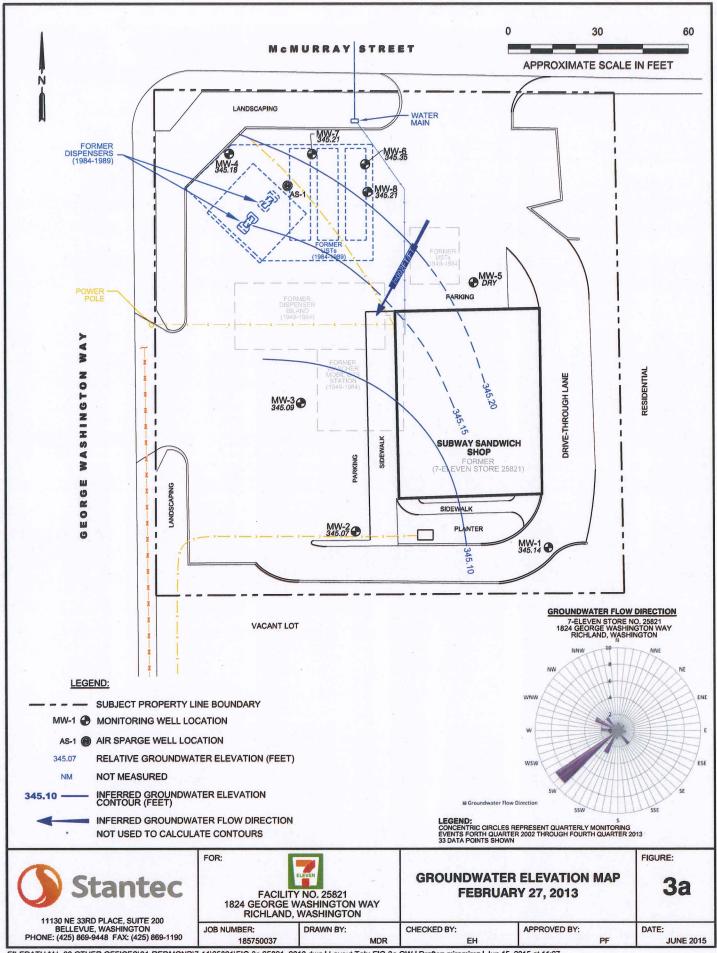
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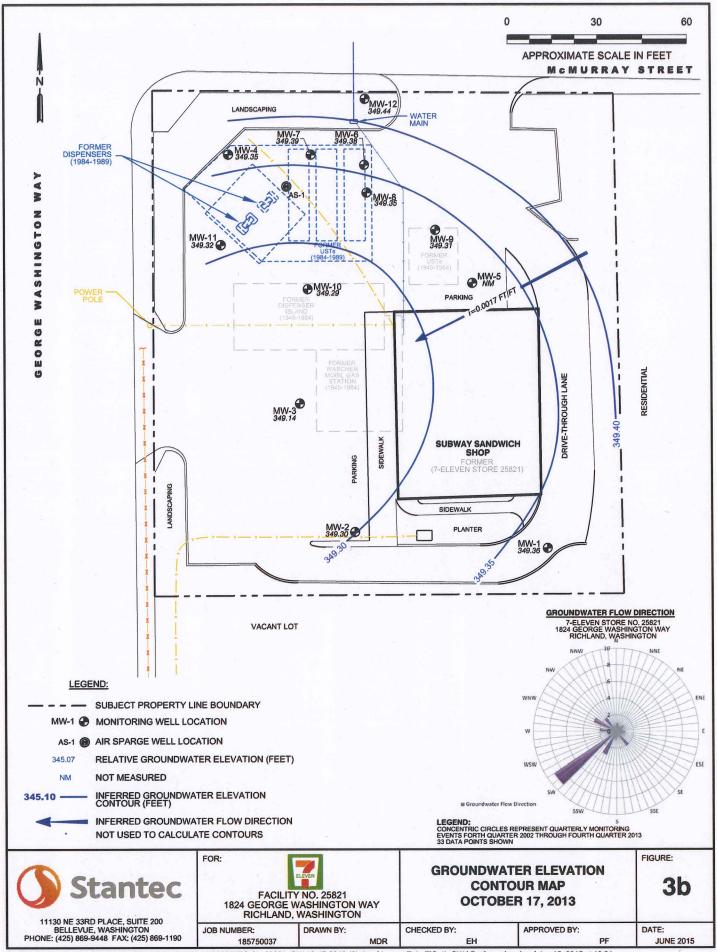
FIGURES, GRAPHS, and TABLES

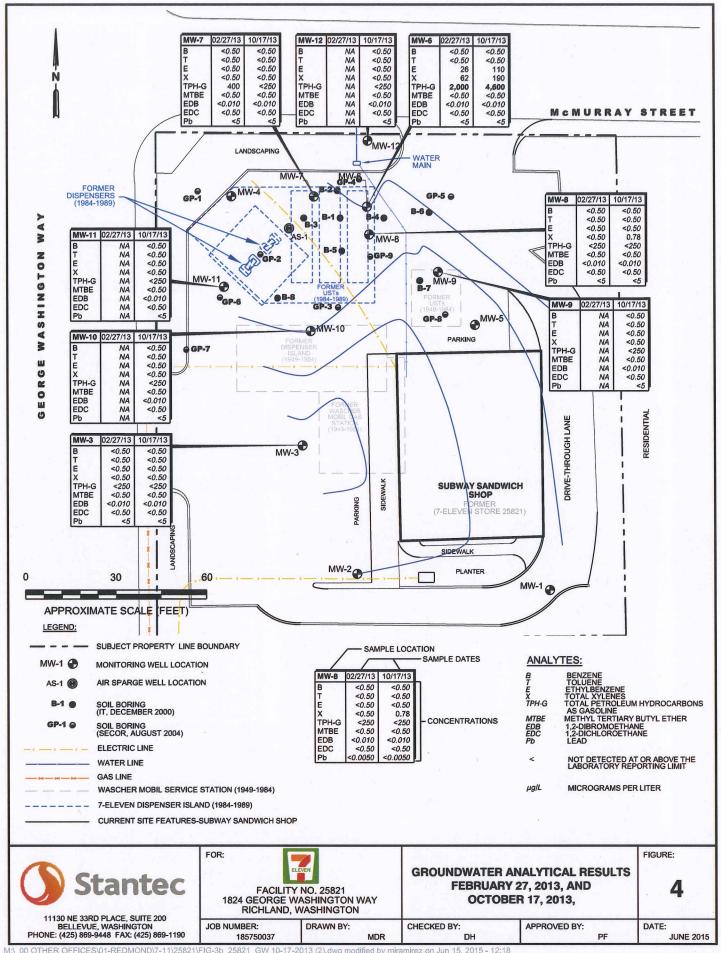
7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

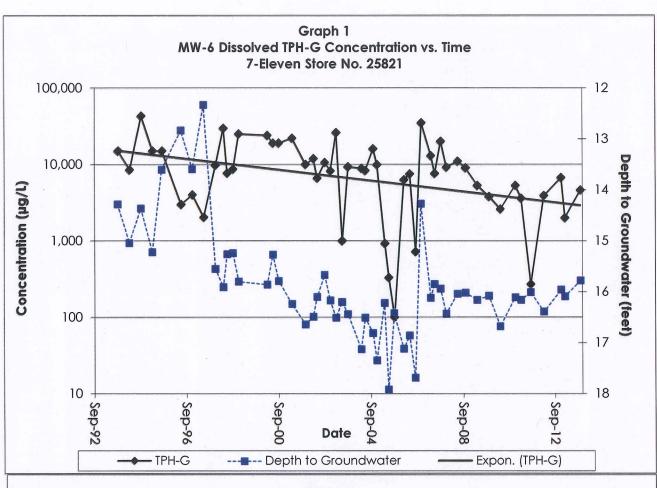


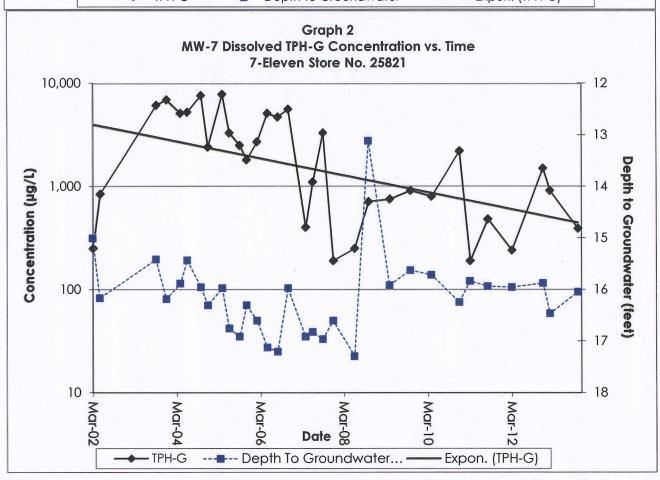


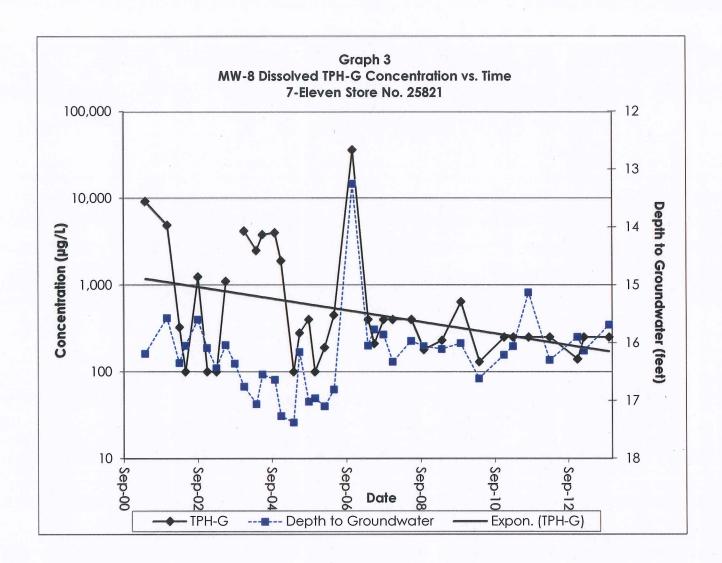




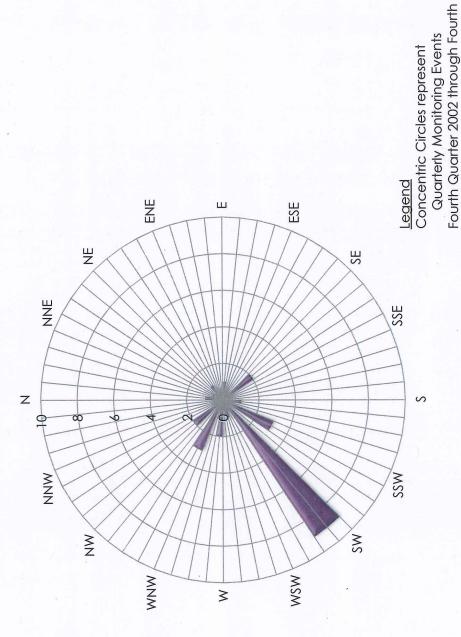








Graph 4
Groundwater Flow Direction Rose Diagram 7-Eleven Store No. 25821
1824 George Washington Way Richland, Washington



Groundwater Flow Direction

Quarter 2013 33 Data Points Shown

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	EDB	EDC	МТВЕ	Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-1 ^a	06/30/89	<0.5	<0.5	<0.5	<1.0			-0-	1		15.56	346.82
362.38	06/24/97	J_/- J				EU 6 17 W	10/10		-		13.47	348.91
	10/25/00					- nu		-(4	1>		DRY	T 1
The state of	11/22/00					-	1,-	-			DRY	TT 1 -
	04/24/01	3 1			1 1			-	-	-	DRY	- 1881 - L
000	11/00/01									-	DRY	-
	11/02/01		-	-							DRY	
	03/07/02										DRY	
-	09/13/02	-							-		DRY	
1-1-19	12/13/02					-2.7			-		DRY	-
	03/20/03	-	-								DRY	-
	06/06/03									-	DRY	-
14.00	09/18/03	-			-	-					DRY	-
	12/04/03			-					-		DRY	
1000	04/02/04		-					-	-		DRY	
	06/29/04	-	-	-		- 10		-	-	-	16.45	345.93
		B 1 1										
99.34	10/06/04		-	-			-	-	, 	-	16.50	345.88
	12/23/04					-	. /			_	DRY	-
	04/07/05					-				_	15.99	346.39
	06/21/05			1			T	J 5	-	-	DRY	
	09/21/05	100 - 100							-		DRY	M 30
	11/22/05								-	-	DRY	
	02/06/06			-							DRY	
	05/30/06		-							 	DRY	
				-						-	DRY	-
	08/14/06	-		-							16.83	345.55
	06/05/07		 -	-						+	10.03	343.33
	09/27/07			-	-				-	_	16.95	345.43
5 x 00 F	12/07/07							-	-		DRY	-
	04/07/10	<0.20	<1	0.2	1.52	<100	< 0.0095	<0.20	<0.20		17.73	344.65
. 1104	12/12/12	- 1		-					-		17	345.38
	02/27/13	-	-	-	-	- 85	1 -16			8	17.24	345.14
366.11	10/17/13	- 1		-	1	9 1985	3 9		-	-	16.75	349.36
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

Well ID				Ethyl-	Total						Depth To Groundwater (feet from	Groundwate Elevation
(TOC)	Sample Date	Benzene	Toluene	benzene	Xylenes	TPH-G	EDB	EDC	MTBE	Lead	TOC)	(feet)
MW-2	06/30/89	<0.5	<0.5	<0.5	<1.0	- 1E-		-			14.44	347.88
362.32	09/01/93	<0.3	<0.3	<0.3	<0.5	<10	_		-	-	15.29	347.03
	03/18/94	<0.3	<0.3	<0.3	<0.5	<10	11-97		-		16.11	346.21
	09/19/94						1				15.39	346.93 345.14
	03/02/95	<u> </u>				71	(m)		-	-	17.18	345.14
	08/09/95			_	1					_	14.63	347.69
_									-		13.92	348.40
-	06/13/96								-		14.74	347.58
-	12/11/96 06/24/97						1	_			13.40	348.92
	12/30/97					5 5 - 1-0	7 -	_		-	16.65	345.67
	12/30/77											$T = Alp_1 \dots Z_1$
-	04/01/98		-		TV 4-193	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			- 1	-	16.75	345.57
	06/25/98	=	-		_				-	-	16.95	345.37
	09/24/98	3		-	T - 40			1 -	-	-	16.25	346.07
	12/15/98	1 - I	-				11	N	- II		16.83	345.49
9/49	03/31/00	I	-		J F.	_ Y - E 1	1 - 1	1	1	-	16.95	345.37
			and the last							-	16.33	345.99
20,610	06/13/00	A LINE TO A						J -	-		DRY	343.77
-	09/13/00	- 1						-		-	16.35	345.97
	10/25/00			-	-	7				-	DRY	
	11/22/00	0			-		-	1 -			DRY	- Table 1
	04/24/01		70.00							 	DKI	
	11/02/01	-		-							DRY	
	03/07/02			-							DRY	-
	09/13/02	-	-			1 -				-	DRY	
	12/13/02			-	77.4					-	DRY	
12 80	03/20/03			-	TO_E	7-2	<u> </u>			_	17.42	344.90
	03/20/03											
0000	06/06/03	<1.0	<1.0	<1.0	<2.0	<100		J -	- 1		17.23	345.09
	09/18/03		-		1			-	-		17.50	344.82
20.00	12/04/03	L - 1	C 475, 224	0.000				je =6)		Title +	DRY	
Mark Control	04/02/04	10 O.E. 1	-	-							18.21	344.11
27.134	06/29/04	<1.0	<1.0	<1.0	<2.0	<100	L			-	17.66	344.66
45.65	10/06/04	<1.0	<1.0	<1.0	<2.0	<100					17.84	344.48
	12/23/04	Variation I	BURNES CONTRACT		M -	-			-	-	18.41	343.91
	04/07/05			-	1 4 y-1 1 5			-		5 K = 2 K	18.96	343.36
	06/21/05		- 10		-	Alte-est.	<u> </u>	-		-	DRY	Blench Blench
	09/21/05	-		-	-	-	-	-		-	DRY	
										-	DRY	+
	11/22/05					<100	-			-	18.20	344.12
	02/06/06	<1.0	<1.0	<1.0	<2.0 <2.0	<100					17.90	344.42
	05/30/06	<1.0	<1.0	<1.0			-	Y -			DRY	-
	08/14/06	-			1 -	-	-		-	 -	DRY	
	04/10/07				1		*****				3	
	06/05/07		_	-		_	-			-	16.00	346.32
	09/27/07		† -		-			-	-		16.95	345.37
	12/07/07	-		-	-		_				DRY	
	04/07/10	<0.2	<1	<0.2	<0.6	<100	<0.0095	<0.20	<0.20		17.74	344.58
	12/12/12		-		-		-			-	17.02	345.30
											17.05	345.07
	02/27/13	-		-	-	-		-		-	17.25	345.07
366.10	10/17/13	-	-	-	-	-	-	-	-	-	16.80	347.30
No. American	od A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	EDB	EDC	MTBE	Lead	Depth To Groundwater (feet from TOC)	Groundwate Elevation (feet)
MW-3	06/30/89	<0.5	<0.5	<0.5	0.7						14.19	347.94
362.13	09/01/93				0.7	- 550					15.12	347.01
302.13	03/18/94	<0.3	<0.3	<0.3	<0.5	<10					15.84	346.29
	09/19/94										15.12	347.01
	03/02/95										15.96	346.17
-	03/02/73										100	0.0.17
	08/09/95	-				T	20			-	14.37	347.76
	06/13/96					F F				-	13.68	348.45
	12/11/96								-	-	14.41	347.72
	06/24/97					- E				-	13.13	349.00
	12/30/97			-			- - =		- T	-	16.47	345.66
						2 3 3 2 3						
	04/01/98			- 1	1						16.58	345.55
	06/25/98			-					- 1		16.15	345.98
	09/24/98	- L			- I I						16.11	346.02
	12/15/98	-			-			-		-	16.66	345.47
	03/31/00				-						16.73	345.40
		1									Treserve	
	06/13/00	14 4				1, -1-1		1=:	- ((-) []		16.21	345.92
	09/13/00	- 1		-		. (C)					15.01	347.12
	10/25/00		-				1	<u> </u>	- 1	-	16.26	345.87
-17	11/22/00	-			-			7,-1	- 7		16.48	345.65
11155	04/24/01		-		3 17 1	J/77		-		-	17.11	345.02
											17.50	0.45.70
60 1	11/02/01		\	-	11						16.50	345.63
100	03/07/02						<u> </u>	-		-	17.26	344.87
757	05/31/02	<0.5	<1.0	<1.0	<3.0		-		-		16.85	345.28
	09/13/02	<0.5	<1.0	<1.0	<2.0	<100	-	-			16.51	345.62
	12/13/02	<0.5	<1.0	<1.0	<3.0	<100		-			17.04	345.09
	02/00/02	41.0	<1.0	<1.0	<0.0	<100				-	17.36	344.77
	03/20/03	<1.0 <1.0	<1.0	<1.0	<2.0 <2.0	<100	-		-		17.05	345.08
	06/06/03 09/18/03	<1.0	<1.0	<1.0	<2.0	<100				-	17.34	344.79
	12/04/03		<u> </u>								DRY	344.77
	04/02/04	<1.0	<1.0	<1.0	<2.0	<100					16.00	346.13
	04/02/04	1.0	<u> </u>	V1.0	12.0	100					10.00	340.13
	06/29/04	<1.0	<1.0	<1.0	<2.0	<100				_	17.51	344.62
	10/06/04	<1.0	<1.0	<1.0	<2.0	<100	1			-	17.69	344.44
3110	12/23/04	-					- TAT - 1	-	1		18.20	343.93
1615	04/07/05		_		-			1-			19.68	342.45
100	06/21/05	-	-			3 1				-	17.46	344.67
					1							
	09/21/05									-	DRY	-
	11/22/05	1000-00	-	-	1 -	T 34 L L L	3	T - 3			18.01	344.12
	02/06/06	<1.0	<1.0	<1.0	<2.0	<100		-	1	-	18.00	344.13
6. 14.	05/30/06			-					/		17.75	344.38
	08/14/06				L 1	[] 4.7	Ji K.	1 /	- 1	- 1	DRY	4 -
	04/10/07	1		-		-4					17.01	345.12
	06/05/07			J 1		M			- 1	-	16.14	345.99
200	09/27/07					J		-	-		16.83	345.30
	12/07/07	-									DRY	
	06/11/08	<1.0	<1.0	<1.0	<2.0	230				-	16.54	345.59
											1100	0.15.15
	10/29/08	<1.0	<1.0	<1.0	<2.0	<100				-	16.98	345.15
- 1	04/13/09	<1.0	<1.0	<1.0	<2.0	<100			1 - 1		17.15	344.98
	10/22/09							<0.20			DRY	242.50
	04/07/10	<0.2	<1.0	<0.2	<0.6	<100	<0.0096	<0.20	<0.20	-	19.55	342.58
	12/16/10	<0.50	<0.50	<0.50	<0.50	<250	-	-		-	17.10	345.03
3 2 3	03/08/11	<0.50	<0.50	<0.50	<0.50	<250		- I			17.01	345.12
	08/03/11	<0.50	<0.50	<0.50	<0.50	<250					16.13	346.00
1000		<0.50	<0.50	16.0	1.3	660	<0.010	<0.50	<0.50	<5	17.22	344.91
	03/27/12	<0.50	<1	<1	<3	<100	<0.010	<1	<1	<1	16.86	345.27
	12/12/12 02/27/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	17.04	345.27
	02/2//13	-0.50	10.00	-0.50	-0.00	-200	-0.010	-0.00	-5.50	10	17.04	340.07
365.81	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	16.67	349.14
TC 4 14 - 11	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

	TO BE CARREST AND				No. of the last						Depth To	
											Groundwater	Groundwat
Vell ID			2 40 7 40	Ethyl-	Total						(feet from	Elevation
TOC)	Sample Date	Benzene	Toluene	benzene	Xylenes	TPH-G	EDB	EDC	MTBE	Lead	TOC)	(feet)
MW-4	06/30/89	<0.5	<0.5	<0.5	<1.0		- 1.0		_		13.74	348.09
61.83	09/01/93	0.4	<0.3	<0.3	<0.5	<10			_	-	14.66	347.17
-	03/18/94	<0.3	<0.3	<0.3	<0.5	<10				The Park of the Pa	15.45	346.38
	09/19/94		/a			1 1	- A-		-	-	13.76	348.07
	03/02/95				- cas	H 44	h	-	- 1		15.62	346.21
	08/09/95	3 -			-		7 1		-	-	13.98	347.85
	06/13/96		-	-					-		13.23	348.60
	12/11/96	<u> </u>				- 1			Y -		13.97	347.86
EV Ch	06/24/97		-	_			1 to 1			-	12.75	349.08
20 64	12/30/97		-								15.95	345.88
										-	14.05	345.58
	04/01/98	-	E	w			- 144		<u> </u>	-	16.25	
1019	06/25/98		-		1		I	-			15.70	346.13
1800	09/24/98		-				I			-	15.64	346.19
. R. S.	12/15/98	-	-		1		[V 1]		-		16.18 16.29	345.65 345.54
20.53	03/31/00	-			1 - 1	- 10		-	-		10.29	345.54
										_	15.74	346.09
100	06/13/00		-		-	-	-	-	-		15.74	346.28
-	09/13/00	-	-		-	-	-		-	=	15.72	346.20
-115	10/25/00			°	II					-	16.08	345.75
	11/22/00	May -					1		-	 -	16.66	345.17
11.00	04/24/01	<0.5	<0.5	<0.5	<1.0	<100		-	-		10.00	040.17
200				.0.5	-11.5	1100			-	-	16.02	345.81
	11/02/01	<0.5	<0.5	<0.5	<1.5	<100					16.82	345.01
	03/07/02					 <100	3/15		- 1 E		16.49	345.34
	05/31/02	<0.5	<1.0	<1.0	<1.0		- 100 P		-		16.09	345.74
- 1253	09/13/02	<0.5	<1.0	<1.0	<2.0	<100 <100	7 20			-	16.55	345.28
	12/13/02	<0.5	<1.0	<1.0	<3.0	<100					10.00	
	00/00/00	11.0	<1.0	<1.0	<2.0	<100	1 -015		_		16.92	344.91
4	03/20/03	<1.0	<1.0	<1.0	<2.0	<100	1 2 6		_		16.61	345.22
	06/06/03 09/18/03	<1.0 <1.0	<1.0	<1.0	<2.0	<100			721	5	16.82	345.01
	12/04/03	<1.0	<1.0	<1.0	<2.0	<100	_		<u> </u>	_	17.38	344.45
No. of the	04/02/04	<1.0	<1.0	<1.0	<2.0	<100	-150	_			17.53	344.30
	04/02/04	<u> </u>	1.0	11.0	12.0	1100						777
Total I	06/29/04	-		-	-	7 - 9343	7 4 (9)		0		17.03	344.80
No.	10/06/04	<1.0	<1.0	<1.0	<2.0	<100			-		17.21	344.62
	12/23/04							-	-	-	17.75	344.08
100 0	04/07/05	<1.0	<1.0	<1.0	<2.0	<100		-	-	-	17.89	343.94
- 11	06/21/05					- A - I		-		-	17.03	344.80
	00/21/00											
	09/21/05		-		-		- -	-	- 1		DRY	-
91,044	11/22/05	-	-	-	7 1		or - - I				17.94	343.89
Live	02/06/06	<1.0	<1.0	<1.0	<2.0	<100	1 - 5-	- U	- 1		17.55	344.28
AL R.	05/30/06	0	-	-	(c			-	77.7		17.25	344.58
	08/14/06					·		-	4	-	DRY	
Tark Him			in in the second									
LIGHT	04/10/07	- 1				M		-	-	-	16.53	345.30
TE ALL	06/05/07	- 1		10.57-1				-	- 1		16.25	345.58
West of	09/27/07	- 1		-	-	M	That - and -	-	-	-	16.38	345.45
	12/07/07								-	-	DRY	245.59
	04/13/09		7			-48.0	10.4		-		16.25	345.58
											14.47	245.2
11,048	10/22/09		-				404	(A -	16.47	345.36
	04/07/10	<0.20	<1	<0.20	<0.60	<100	<0.0097	<0.20	<0.20	-	17.11	344.72
	12/12/12	- 1		-			- 12	-	-		16.38	345.45
	02/27/13			77-2	- 15 5/ ()	25 20 h		64	-	-	16.65	345.18
865.54	10/17/13			-						-	16.19	349.3
	hod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	трн-С	EDB	EDC	МТВЕ	Lead	Depth To Groundwater (feet from TOC)	Groundwate Elevation (feet)
MW-5	07/01/89	<0.5	0.8	<0.5	4.2	7.172-10.17					14.05	347.96
362.01	09/01/93	2.0	0.5	5.0	1.0	290	1 - 1 <u>- 1</u> (910) 1	er engel	- C		14.98	347.03
	03/18/94	<0.3	1.0	7.0	6.0	37		-			15.76	346.25
_ 57.71	09/19/94	1.5	0.7	14.0	38.0	420	-1-2017		F741-0		15.02	346.99
	03/02/95	5.4	8.0	13.0	63.0	930	-200		10	-	15.90	346.11
	08/09/95	<0.3	<0.3	1.3	1.0	210	<u> </u>	- DE	-	7/	14.28	347.73
	06/13/96	<0.5	<0.5	12.7	30.1	424			-	<2.0	13.53	348.48
	12/11/96	<0.5	0.8	33.5	210.0	1,860			1 L	<2.0	14.30	347.71
	06/24/97	<0.5	<0.5	<0.5	1.5	<50				4.09	13.00	349.01
	12/30/97	<0.5	<0.5	<0.5	<1.0	<50				<2.0	16.27	345.74
	04/01/98	1	-	1				- 0-			DRY	- 11
-	06/25/98	<0.3	<0.3	<0.5	<0.6	<100	-51	-		<5	15.96	346.05
	09/24/98		7 (1-1)	-				-) -		15.91	346.10
00.00	12/15/98	1 -	-	-			1	-	7 -	-	DRY	
	03/31/00	- 1				(00),(1)					DRY	-
- 7	06/13/00		-	·			1 -411		n	-	DRY	
	09/13/00	0.01 1.01				- 1		-	, 		DRY	
	10/25/00		-		J 1-1	=1		-	-	-	DRY	- 1
	11/22/00						-	-	A	-	DRY	
- 511	04/24/01	- 1	-	-		1, 400,00				-	DRY	
	11/02/01	- 1			T	1 -00				-	DRY	
-0.9	03/07/02	- 1			-		-0.0	-	- 9-	-	DRY	-
	09/13/02	11	-	-					-	-	DRY	-
	12/13/02			-			_		-		DRY	-
	03/20/03					-0.01			-	-	DRY	-
-												
	06/06/03	-		-							DRY	
	09/18/03		-					-			DRY	-
	12/04/03	-	-			- 19			-		DRY	Mary 1
	04/02/04	-								-	DRY	-
	06/29/04			-			L) -(1) (17.25	344.76
	10/06/04	- 1				h					17.45	344.56
	12/23/04	-	-	-	-			-		-	DRY	-
	04/07/05	-	-	-	7 -				- 1	-	DRY	-
-12	06/21/05	-	-	-	-			-	-		17.47	344.54
200	09/21/05	-	-	-	-	IV. V			1 - 1		DRY	-
100	0.5 (0.0 (0.4											
	05/30/06							-		-	DRY	
	08/14/06	<1.0	<1.0	<1.0	<2.0	<100	-	-	-	-	18.01	344.00
	04/10/07	-	-		-	1E. V		-	-		DRY	
	06/05/07	-			-	-	-	-		-	DRY	
	09/27/07		-		-		-11.1	J 31 2 7 7		-	DRY	-
	10/07/07		-								55%	
- 1717	12/07/07							-	1 . (8)-	-	DRY	245.54
	06/11/08	<4.0	<4.0	<4.0	<8.0	<400		-	11.5-	-	16.45	345.56
	10/29/08		-		-	-		-	-	-	DRY	
	04/13/09		-	-	-	-		-			DRY	
	10/22/09		-	-		-9,01	10-10			-	DRY	
To No.	04/07/10										DDV	
W OLD	04/07/10			-	-		-	-	1 - 1	-	DRY	-
773	12/16/10	-		- /-	-			-	7/3-	-	DRY	
er black	03/08/11		 <0.50	 	<0.50		-		-		DRY	24/ 10
	08/03/11	<0.50	<0.50	<0.50	<0.50	<250	-	-		-	15.82	346.19
	03/27/12	-		-	-		-	-		-	DRY	
80 kg	10/10/10	-				Dn: \\/a!					DDV	-
	12/12/12	 				Dry Well					DRY	
	02/27/13					Dry Well					DRY	
	10/17/13	-				Dry Well			_	-	DRY	-
			Name and Address of the Owner, where									
		The second secon	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15	MATERIAL PROPERTY OF THE PARTY	

/ell ID				Ethyl-	Total			- TDC	AATDE	logel	Depth To Groundwater (feet from TOC)	Groundwate Elevation (feet)
TOC)	Sample Date	Benzene	Toluene	benzene	Xylenes	TPH-G	EDB	EDC	MTBE	Lead		
лW-6	09/01/93	65.0	120.0	87.0	3,000	15,000	H - 81	4 the		-	14.27	347.16
61.43	03/18/94	14.0	140.0	82.0	3,800	8,500	1 - 171	-			15.03	346.40
	09/19/94	<3.0	120.0	140.0	4,700	43,000	F 0.8x	-8			14.35	347.08
17 61	03/02/95	14.0	38.0	33.0	1,500	15,000	- (th)	-	<u> </u>		15.21	346.22
17.6	08/09/95	<1.5	32.0	23.0	1,200	15,000	1 22.5	1	<u> </u>		13.59	347.84
	00/07/70											
47.50	06/13/96	<0.5	1.2	3.2	155	3,000		1 - 1	-	6.63	12.82	348.61
	12/11/96	3.2	7.1	11.2	387	4,000	-1 1.08		<u> </u>	3.75	13.58	347.85
-	06/24/97	<2.50	<2.50	6.4	211	2,040	F 0.015	<u> </u>		2.58	12.32	349.11
1000	12/30/97	17.1	<2.50	49.7	695	9,770				2.47	15.54	345.89
-	04/01/98	28.0	44.5	328.0	5,370	29,700	T0.19	-/6	1	-	15.90	345.53
-	04/01/70	20.0	77.0	020.0	0,0.0							
-	06/25/98	1.9	19.0	120.0	2,200	7,700		_	- /	8	15.25	346.18
Tri xi		54.5	66.6	202.0	2,150	8,680	1 - 1 Alexandra	<u> </u>			15.23	346.20
	09/24/98			56	6,500	25,000		1	-	13	15.79	345.64
	12/15/98	<3	525.0		2,900	24,000		- I		25	15.85	345.58
	03/31/00	<5	23.0	82						-	15.26	346.17
	06/13/00	<0.5	<0.5	88	2,500	19,000		-			10.20	
				150	1 100	10 000		70		-	15.78	345.65
	09/13/00	<50	<50	<50	1,100	19,000				-	15.33	346.10
	10/25/00			-		-					15.54	345.89
and partial	11/22/00		-	-	1	-	-					345.20
	04/24/01	<25	<25	560	4,900	22,000	1			-	16.23	345.20
	11/02/01	<12	19.0	210	1,200	10,000	I A.	-		-	16.63	344.60
											17.40	24405
	03/07/02	<0.5	8.6	83.6	432	11,900		Y			16.48	344.95
	05/31/02	3.5	3.3	155	889	6,610		- 1	-	-	16.09	345.34
-	09/13/02	4.5	4.3	252	907	10,600		-	-		15.66	345.77
	12/13/02	<0.5	<1.0	227	889	8,220		-			16.16	345.27
-	03/20/03	23.0	5.9	370	1,940	26,000	100		_	-	16.50	344.93
-	03/20/03	23.0	5.7	0,0	1,, 10					17.		
	0.410.4100	40	4.0	10.0	10.0	1,000				-	16.19	345.24
	06/06/03	4.0	4.0	240	1.020	9.300 ⁽⁰⁾			_	-	16.43	345.00
	09/18/03	4.8	4.0	240		heen Observ	and the second second second				16.81	344.62
	12/04/03			1 150				_		1 -	17.12	344.31
	04/02/04	<1.0	<1.0	150	1,260	8,900				-	16.50	344.93
and the last of	06/29/04	3.8	1.1	110	940	8,300		-	-		10.50	044.70
											16.80	344.63
45-19	10/06/04	3.1	1.3	300	1,620	16,000		_			17.34	344.09
	12/23/04	3.6	<1.0	210	1,190	9,900			-			345.22
	04/07/05	<1.0	<1.0	<1.0	<2.0	920		-	- 1		16.21	
13614	06/21/05	<1.0	2.2	1	<2.0	330					17.91	343.52
	09/21/05	<1.0	<1.0	<1.0	<2.0	<100		-	\	-	16.41	345.02
	0.72.70				March 1							
	11/22/05						1		-		18.04	343.39
710 4-17	02/06/06	3.8	<1.0	110	400	6,300	-			-	17.11	344.32
	05/30/06	7.9	<1.0	130	770	7,500			-		16.85	344.58
		5.4	<1.0	<1.0	1.3	720					17.68	343.75
	08/14/06	14	290	1,300	7,600	35,000	-	_		-	14.26	347.17
- melionary	11/07/06	14	270	1,300	7,000	00,000						
	04/10/07	10	-10	260	1,200	13,000			-		16.11	345.32
	04/10/07	12	<4.0		540	7,600	1 20		-	177	15.84	345.59
1745	06/05/07	11	<4.0	140						-	15.93	345.50
	09/27/07	9.0	<10	620	3,300	20,000				-	16.42	345.01
	12/07/07	5.5	<4.0	280	1,290	9,200		-		_	16.03	345.40
	06/11/08	12	<10	250	940	11,000			-	-	10.03	0.40.40
		The second of				0.555					16.01	345.42
	10/29/08	7.3	<4.0	240	1,040	9,000		-	-	-	16.15	345.28
	04/13/09	9.0	<4.0	75	198	5,300		-	-	-		
	10/22/09	5.5	<4.0	90	206	3,800					16.07	345.36
11.00	04/07/10	<0.4	<2.0	52	97	2,600	<0.0096 ^q	<0.40	<0.40	0 -	16.67	344.76
	12/16/10	<0.50	<0.50	73	240	5,300			-	-	16.10	345.33
	, . , , ,											
	03/08/11	<0.50	<0.50	42	140	3,600		-	-	-	16.15	345.28
	08/03/11	<0.50	<0.50	7.6	30	270				-	16.00	345.43
		<0.50	<0.50	63	180	3,900	<0.010	<0.50	<0.50	<5	16.38	345.05
	03/27/12			140	360	6,700	<0.01	<1	<1	1.14	15.95	345.48
	12/12/12	3.50	14			2,000	<0.010	<0.50	<0.50	<5	16.08	345.35
	02/27/13	<0.50	<0.50	26	62	2,000	~0.010	-0.00	0.00			
365.15	10/17/13	<0.50	<0.50	110	190	4,600	<0.010	<0.50	<0.50	<5	15.77	349.38
						800/1,000 ^b		5	Augment and	15		

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	EDB	EDC	MTBE	Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-7	12/11/96		-			- B.	-			-	-	- : -
361.23	06/24/97						-1040		E E -		12.17	349.06
III IV DIA	04/24/01	J	-	7		1558	-0.00	- ·	- I		16.03	345.20
	11/02/01	<1	1.0	17.0	49.0	6,100				-	15.41	345.82
	03/07/02	<0.5	2.2	5.9	13.5	6,900					16.18	345.05
	05/31/02	1.5	1.6	6.7	28.6	5,110			-	-	15.88	345.35
- 1	09/13/02	3.5	1.2	8.8	13.0	5,240					15.43	345.80
	12/13/02	<0.5	<1.0	9.0	<3.0	7,600	_			-	15.95	345.28
The sale	03/20/03	12.0	<1.0	1.6	3.1	2,400	- 61		7		16.30	344.93
92.50	06/06/03	5.7	<1.0	8.0	17.2	7,800					15.97	345.26
	00/00/03	3.7	V1.0	0.0	17.2						13.77	343.26
	09/18/03	6.1	<1.0	5.4	5.7	3,600 ⁽⁰⁾		1		-	16.22	345.01
	12/04/03	7.4	<5.0	<5.0	<10	3,300	- 41E	-			16.75	344.48
	04/02/04	6.3	<1.0	2.0	2.2	2,500	- 6		-		16.91	344.32
10.00	06/29/04	3.7	<1.0	1.0	<2.0	1,800		-		-	16.30	344.93
	10/06/04	4.6	<1.0	2.0	<2.0	2,700			-	-	16.60	344.63
- T CM	12/23/04	7.8	1.7	2.5	4.6	5,100			_		17.12	344.11
	04/07/05	6.9	<1.0	1.1	<2.0	4,700					17.12	344.03
10.44	06/21/05	5.7	<1.0	1.6	1.7	5,600		3 -15			15.97	345.26
100	09/21/05	<4.0	<4.0	<4.0	<8.0	<400	-				16.91	344.32
10.00	11/22/05	2.6	<1.0	<1.0	<2.0	1,100	-036		12-	100	16.82	344.41
	02/06/06	5.8	<1.0	1.3	<2.0	3,300		-			16.96	344.27
	05/30/06	<1.0	<1.0	<1.0	<2.0	190			-		16.60	344.63
T 17 17 17 17 17 17 17 17 17 17 17 17 17	08/14/06	3.8	<1.0	<1.0	<2.0	250				-	17.29	343.94
	11/07/06	11	<1.0	17	18.5	710					13.11	348.12
	04/10/07	1.4	<1.0	<1.0	<2.0	750		77 = 7			15.11	345.32
	06/05/07	3.0	<1.0	<1.0	<2.0	910	- 10	1		-	15.62	345.61
	09/27/07	5.1	<4.0	<4.0	<8.0	800				J	15.71	345.52
	12/07/07	11	<1.0	<1.0	<2.0	2,200				-	16.24	344.99
	06/11/08	<1.0	<1.0	<1.0	<2.0	190	- 01.	-			15.83	345.40
	10/29/08	<4.0	<4.0	<4.0	<8.0	480	-		-		15.93	345.30
	04/13/09	1.7	<1.0	<1.0	<2.0	240	-	- I	-		15.95	345.28
	10/22/09	3.0	1.4	<1.0	4.5	1,500	- ac	-	- 0 -		15.87	345.36
	04/07/10	<0.2	<1	0.24	1.63	910	<0.0096 ^q	<0.20	<0.20		16.46	344.77
W-1	12/16/10	<0.50	<0.50	<0.50	<0.50	390	1918	-			16.04	345.19
20,010	03/08/11	<0.50	<0.50	<0.50	<0.50	290	-105	7 - 6-0		-	15.93	345.30
1 2 74	08/03/11	<0.50	<0.50	<0.50	<0.50	<250			-		15.00	346.23
	03/27/12	<0.50	<0.50	<0.50	<0.50	840	<0.010	<0.50	<0.50	<5	16.16	346.23
	12/12/12	<1	1.4	<1	<3	340	<0.010	<1	<1	<1	15.77	345.46
	02/27/13	<0.50	<0.50	<0.50	<0.50	400	<0.010	<0.50	<0.50	<5	16.02	345.46
364.95	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	15.56	345.21
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

				不是		The state of					Depth To Groundwater	Groundwate
												Elevation
Well ID				Ethyl-	Total				MATRE	land	(feet from TOC)	(feet)
(TOC)	Sample Date	Benzene	Toluene	benzene	Xylenes	TPH-G	EDB	EDC	MTBE	Lead		
MW-8	04/24/01	<5	40.0	49.0	840.0	9,200			-		16.18	345.16
361.34	11/02/01	5.9	43.0	32.0	240.0	4,900			-		15.56	345.78
	03/07/02	<0.5	<1.0	<1.0	<3.0	326					16.34	345.00
16.00	05/31/02	<0.5	<1.0	<1.0	1.4	<100	1 -0.00	4 -57		-	16.04	345.30
125.75	09/13/02	1.6	0.6	20.0	54.5	1,240		1 - 7 - 1	-	-	15.59	345.75
												0.15.01
15.84	12/13/02	<0.5	<1.0	<1.0	<3.0	<100	. F - A.BC.	- 1			16.08	345.26
CHAN	03/20/03	<1.0	<1.0	<1.0	<2.0	<100		4 2 -4 2 1	<u> </u>	-	16.43	344.91
87.54	06/06/03	<1.0	<1.0	13.0	44	1,100	- L-0.58	1 -2 10	-		16.03	345.31
1 MAR	09/18/03	<1.0	<1.0	97	187	5,200 ⁽⁰⁾	-1E	= - 27			16.35	344.99
4.31	12/04/03	4.5	1.9	100	57	4,200	(II. 04)		(1+)	-	16.75	344.59
				0.4	100	2,500	- 12			_	17.05	344.29
	04/02/04	2.1	3.4	96	130 241	3,800			22.		16.54	344.80
	06/29/04	2.7	2.2	83	156	4.000		+ = -	-	-	16.63	344.71
	10/06/04	1.9	2.3	100			1 - 105				17.26	344.08
	12/23/04	2.5	4.1	67	11.8	1,900	1 -112		- 1		17.37	343.97
Let (A.)	04/07/05	<1.0	<1.0	<1.0	<2.0	<100	-14		770		17.57	040.77
11.376	06/21/05	<1.0	2.3	1.2	1.1	280	1 - 10.1	-	-		16.15	345.19
	09/21/05	16.0	<4.0	<4.0	<8.0	<400	T 20155				17.01	344.33
	11/22/05	<1.0	<1.0	<1.0	<2.0	<100	75-01-1		Α	-	16.95	344.39
	02/06/06	<1.0	<1.0	1.4	<2.2	190	- F - 1.25	14-0-			17.09	344.25
	05/30/06	<1.0	<1.0	1.0	29.0	450	/ -	-	1 -		16.80	344.54
											17.47	343.87
17.74	08/14/06			-					-	-	13.24	343.87
	11/07/06	12	330	1,600	9,500	36,000		-	0	0		345.30
	04/10/07	<4.0	<4.0	<4.0	<8.0	<400	-4.53	3 6 4- 3	-	-	16.04 15.76	345.58
24,000	06/05/07	<1.0	<1.0	<1.0	7.2	210	-1,81	-	7 A = 1	-	15.85	345.49
	09/27/07	<4.0	<4.0	8.7	4.9	<400		7 - C-1		-	15.65	343.47
	10/07/07	-110	<4.0	<4.0	<8.0	<400	1-5	1-1-1	-	-	16.32	345.02
	12/07/07	<4.0 <4.0	<4.0	<4.0	<8.0	<400	7.00	(2-1.5)	- I		15.96	345.38
100 000	06/11/08	<1.0	<1.0	11	<2.0	180		1 - 1	7-1		16.05	345.29
	10/29/08	4.3	9.6	3.4	10.1	230	-	7-0		3	16.10	345.24
	04/13/09	<1.0	<1.0	22	18.0	640				A	16.00	345.34
	10/22/09	1.0	1.0	1 22	10.0	040						
	04/07/10	<0.2	<1.0	0.75	0.31	130	< 0.0096	<0.20	<0.20	-	16.61	344.73
	12/16/10	<0.50	<0.50	1.9	18	<250	1 E	4	Victor 1	-	16.20	345.14
	03/08/11	<0.50	<0.50	<0.50	< 0.50	<250	- N. I		-	1	16.05	345.29
	08/03/11	<0.50	<0.50	<0.50	<0.50	<250			-		15.12	346.22
	03/27/12	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	11	16.29	345.05
									1	1.05	15.00	345.45
	12/12/12	<1	<1	<1	4.2	140	<0.01	<1	<1	1.05	15.89 16.13	345.45
	02/27/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5		
365.03	10/17/13	<0.50	<0.50	<0.50	0.78	<250	<0.010	<0.50	<0.50	<5	15.68	349.35
											The State of the State	
MTCA Met	hod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15	Control of	

TABLE 1 GROUNDWATER MONITORING AND ANALYTICAL RESULTS

7-Eleven Store No. 25821

1824 George Washington Way, Richland, Washington All results in micrograms per liter (µg/L), except where noted

Well ID (TOC)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-G	EDB	EDC	МТВЕ	Lead	Depth To Groundwater (feet from TOC)	Groundwater Elevation (feet)
MW-9 365.32	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	16.01	349.31
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		
MW-10 365.77	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	16.48	349.29
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		
MW-11 365.57	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	16.25	349.32
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15	Date of the later of the	表现是 对可能等限
MW-12 364.40	10/17/13	<0.50	<0.50	<0.50	<0.50	<250	<0.010	<0.50	<0.50	<5	14.96	349.44
MTCA Meth	nod A Cleanup Level	5	1,000	700	1,000	800/1,000 ^b	0.01	5	20	15		

TOC = top of casing elevation. Elevations are based on a survey by Rogers Surveying, Inc. and are relative to mean sea level.

TPH-G = total petroleum hydrocarbons as gasoline

mg/L = milligrams per liter

q

= less than the laboratory practical quantitation limits

= not measured, not available or not sampled

 $^{\circ}$ = Hydrocarbons outside the defined gasoline range are present in the sample

= surrogate recovery is outside of the control limits

MTCA = Model Toxics Control Act

Bold values exceed MTCA Method A Cleanup Levels

 $^{\rm a}$ MW-1 has been dry and not sampled since 09/01/93

 $^{\rm b}$ The TPH-G cleanup level is reduced from 1,000 $\mu {\rm g/L}$ to 800 $\mu {\rm g/L}$ if benzene is present in the sample

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Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

ATTACHMENT A

LABORATORY ANALYTICAL REPORT AND CHAIN OF CUSTODY DOCUMENTATION

7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report



Date: 03/08/2013

Laboratory Results

Paul Fairbairn Stantec Consulting Corporation - Redmond, WA 12034 134th Court Northeast Suite 102 Redmond, WA 98052

Subject: 4 Water Samples

Project Name: 1Q13 GWM EVENT Project Number: 185750037.200.0400

Dear Mr. Fairbairn,

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

Troy D. Turpen



Project Name :

1Q13 GWM EVENT

Project Number: 185750037.200.0400

Sample: MW-3

Matrix: Water

Lab Number : 84203-01

Report Number: 84203 Date: 03/08/2013

Sample Date :02/27/2013		Method		Not would have been all as one differ			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed		
Lead	< 0.0050	0.0050	mg/L	EPA 200.7	03/08/13 12:49		
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
Gasoline Range Organics	< 250	250	ug/L	NWTPH-Gx	03/05/13 21:46		
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:48		
age special transition of the contract of the	102		% Recovery	EPA 8260B	03/06/13 15:48		
1,2-Dichloroethane-d4 (Surr)	102			EPA 8260B	03/06/13 15:48		
Toluene - d8 (Surr)	94.4		% Recovery		03/05/13 21:46		
4-Bromofluorobenzene (Surr)	93.6		% Recovery	NWTPH-Gx	03/03/13 21.40		



Project Name: **1Q13 GWM EVENT** Project Number: 185750037.200.0400 Report Number: 84203

Date: 03/08/2013

Sample: MW-8

Lab Number: 84203-02

Sample Date :02/27/2013		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead	< 0.0050	0.0050	mg/L	EPA 200.7	03/08/13 12:53
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
Gasoline Range Organics	< 250	250	ug/L	NWTPH-Gx	03/05/13 22:56
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:12
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	03/06/13 15:12
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	03/06/13 15:12
4-Bromofluorobenzene (Surr)	93.0		% Recovery	NWTPH-Gx	03/05/13 22:56



Project Name: 1Q13 GWM EVENT

Project Number: 185750037.200.0400

Sample: MW-7

Matrix: Water

Lab Number: 84203-03

Report Number: 84203

Date: 03/08/2013

Sample Date :02/27/20)13		N 0 = 41a a al		· Control of the control	
Parameter Maria		Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead	Leaf DAY N	< 0.0050	0.0050	mg/L	EPA 200.7	03/08/13 12:57
Benzene		< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
Toluene		< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
Ethylbenzene		< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
Total Xylenes		< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
Methyl-t-butyl ether (M	TBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
Gasoline Range Orga	nics + week	400	250	ug/L	NWTPH-Gx	03/05/13 23:34
1,2-Dichloroethane		< 0.50	0.50	ug/L	EPA 8260B	03/06/13 15:47
1,2-Dichloroethane-d4	(Surr)	99.4		% Recovery	EPA 8260B	03/06/13 15:47
Toluene - d8 (Surr)	ècasi ak.	100:		% Recovery	EPA 8260B	03/06/13 15:47
4-Bromofluorobenzene	(Surr)	95.6		% Recovery	NWTPH-Gx	03/05/13 23:34



Project Name : **1Q13 GWM EVENT**

Project Number: 185750037.200.0400

Report Number: 84203

Date: 03/08/2013

Sample: MW-6

Matrix: Water

Lab Number: 84203-04

Sample Date: 02/27/2013

Sample Date :02/2/1/2013		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead	< 0.0050	0.0050	mg/L	EPA 200.7	03/08/13 13:01
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 16:21
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 16:21
Ethylbenzene	26	0.50	ug/L	EPA 8260B	03/06/13 16:21
Total Xylenes	62	0.50	ug/L	EPA 8260B	03/06/13 16:21
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 16:21
Gasoline Range Organics	2000	250	ug/L	NWTPH-Gx	03/06/13 00:12
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/06/13 16:21
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	03/06/13 16:21
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	03/06/13 16:21
4-Bromofluorobenzene (Surr)	94.5		% Recovery	NWTPH-Gx	03/06/13 00:12

Date: 03/08/2013

Project Number: 185750037.200.0400 Project Name: 1Q13 GWM EVENT

QC Report : Method Blank Data

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	:	Method			,				Mongoon	Method	Analysis	Date
Parameter	Measured Value	Limit	g Units	Method	Date Analyzed	Parameter	ter		Value	Limit Units	Method	Analyzed
Lead	< 0.0050	0.0050	mg/L	EPA 200.7	03/07/2013							
Gasoline Range Organics	< 250	250	ng/L	NWTPH-Gx	03/05/2013							
4-Bromofluorobenzene (Surr)	91.2		%	NWTPH-Gx	03/05/2013							
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/06/2013							
Ethylbenzene	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Toluene	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Total Xylenes	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
1,2-Dichloroethane	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	03/06/2013							
Toluene - d8 (Surr)	100		%	EPA 8260B	03/06/2013							
Benzene	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Ethylbenzene	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Toluene	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Total Xylenes	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ng/L	EPA 8260B	03/06/2013							
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/06/2013							
1,2-Dichloroethane-d4 (Surr)	8.66		%	EPA 8260B	03/06/2013							
Toluene - d8 (Surr)	101		%	EPA 8260B	03/06/2013			: •				

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number: 84203

Date: 03/08/2013

Project Name: 1Q13 GWM EVENT

Project Number: 185750037.200.0400

Spiked Relative Sample Relative Iive Percent Percent ent Recov. Diff. Limit	51 75-125 20	4 75.7-122 25	80-120 25	1 80-120 25	1 69.7-121 25	4 76.8-120 25	80-120 25	75.7-122 25	
Duplicate Spiked Sample Relative Percent Percent Recov. Diff.	1 0.0851	4 0.404	8 1.64	8 0.941	7 0.521	5 0.444	9 1.57	1.36	
Spiked Spill Sample San Percent Per Recov. Rec	88.2 88.1	97.8 97.4	98.4 96.8	99.7 98.8	96.2 95.7	94.9 94.5	98.4 96.9	96.4 95.1	
S Date Analyzed F	3/7/13 8	3/6/13 9	3/6/13 9	3/6/13 9	3/6/13 9	3/6/13 9	3/6/13 9	3/6/13	
Analysis Method	EPA 200.7	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B	EPA 8260B	
olicate Spiked nple ue Units	mg/L	ng/L	ng/L	ng/L	T/Bn	J/Bn	T/6n	ug/L	
Dul Val	0.352	39.0	38.7	39.5	40.2	37.8	38.8	38.0	
Spiked Sample Value	0.353	39.1	39.4	30°C	40.4	38.0	39.4	38.6	
Spike Dup. Level	0.400	40.0	40.0	40.0	40.1	40.0	40.0	40.0	
Spike Level	0.400	40.0	40.0	40.0	40.1	40.0	40.0	40.0	
Sample Value	84192-01 < 0.0050 0.400	<0.50	<0.50	<0.50	8.	<0.50	<0.50	<0.50	
Spiked Sample	84192-01	nane 84205-01 <0.50	84205-01	84205-01 <0.50	ether 84205-01 1.8	84205-01 <0.50	84205-01 <0.50	nane 84205-03 <0.50	
Parameter	Lead	1,2-Dichloroethane 84		Ethylbenzene	Methyl-t-butyl ether 842	P + M Xylene	Toluene	1,2-Dichloroethane 84	Benzene

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Date: 03/08/2013

QC Report: Matrix Spike/ Matrix Spike Duplicate

Project Number: 185750037,200.0400 Project Name: 1Q13 GWM EVENT

	Spiked	Sample Spike	Spike	Spike Dup.	Spiked Sample) <u>.</u>	Analysis	Spiked Sample Date Percer	_ o =	\Box 000 \Box 0	Relative Percent	uplicate Spiked piked Sample Sample ample Relative Percent ercent Percent Pikecov.	Relative Percent Diff.
Parameter	Sample	Value	Level	Level	Value	value	OUITS	Method	Allalyzed	Vecov.	Yecov.			
Ethylbenzene														
	84205-03 <0.50	<0.50	40.0	40.0	40.2	39.4	ng/L	EPA 8260B	3/6/13	100	98.6	1.76	80-120	25
Methyl-t-butyl ether	ther													
	84205-03 3.7	3.7	40.1	40.1	43.6	43.5	ng/L	EPA 8260B	3/6/13	99.5	99.3	0.132	69.7-121	25
P + M Xylene														
	84205-03 <0.50	<0.50	40.0	40.0	39.8	39.0	ng/L	EPA 8260B	3/6/13	99.5	97.4	2.05	76.8-120	25
Toluene														
	84205-03 < 0.50	<0.50	40.0	40.0	40.1	39.4	ng/L	EPA 8260B	3/6/13	100	98.4	1.76	80-120	25

Date: 03/08/2013

QC Report : Laboratory Control Sample (LCS)

Project Name: 1Q13 GWM EVENT Project Number: 185750037.200.0400

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit	
Lead	0.400	mg/L	EPA 200.7	3/7/13	9.96	85-115	
1,2-Dichloroethane	40.0	ng/L	EPA 8260B	3/6/13	7.86	75.7-122	
Benzene	40.0	ng/L	EPA 8260B	3/6/13	99.8	80-120	
Ethylbenzene	40.0	ng/L	EPA 8260B	3/6/13	103	80-120	
Methyl-t-butyl ether	40.1	ng/L	EPA 8260B	3/6/13	97.5	69.7-121	
P + M Xylene	40.0	ng/L	EPA 8260B	3/6/13	98.4	76.8-120	
Toluene	40.0	ng/L	EPA 8260B	3/6/13	100	80-120	
1,2-Dichloroethane	39.8	ng/L	EPA 8260B	3/6/13	98.9	75.7-122	
Benzene	39.8	ng/L	EPA 8260B	3/6/13	99.2	80-120	
Ethylbenzene	39.8	ng/L	EPA 8260B	3/6/13	101	80-120	
Methyl-t-butyl ether	39.9	ng/L	EPA 8260B	3/6/13	100	69.7-121	
P + M Xylene	39.8	ng/L	EPA 8260B	3/6/13	9.66	76.8-120	
Toluene	39.8	ng/L	EPA 8260B	3/6/13	100	80-120	

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Date: 03/08/2013

QC Report : Sample Duplicate

Project Name: 1Q13 GWM EVENT

Project Number: 185750037.200.0400

Parameter	Sample ID	Units	Analysis Method	Date Analyzed	Sample Value	Duplicate Value	RPD	RPD Limit
Gasoline Range Organics	84203-01	ng/L	NWTPH-Gx	3/5/13	< 250	< 250	S	25

KIFF ANALYTICAL, LLC

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			-			For La			10	02	03	104										A Pre	% ``
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**	Π			4,414		11/11/11																#	i.
Chain-of-Custody Record and Analysis Request				 			_		\sim	$\overline{}$	7	$\overline{}$										Therm. ID#	
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sis		\vdash					(A)	W.E.T. Lead (S'	1111												Sample Receipt		-
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A		circle method						Mercury (EPA 2		r		ŕ									Sam		
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SAMPLE RECEIPT CHECKLIST

RECEIVER	
TTR	
Initials	

srg#: 84203	Date: 0305/3
Project ID: 1013 GWM Event	
	∑ Shipper
Method of Receipt: ☐ Courier ☐ Over-the-counter Shipping Only: ☐ FedEx * ☐ OnTrac * ☑ Greyhound ☐ Other *Service le	
	verified Finding of Statutes (1417).
COC Inspection	NACE NO.
	Yes No No Intact Broken Not present N/A
	Yes No
	Yes No
1	Yes
Is the turnaround time indicated on COC?	Yes No No, Whiteout No, Cross-outs
Is COC free of whiteout and uninitialed cross-outs?	Yes No, Whiteout No, Cross-outs
Sample Inspection	DE CONTROL CONTROL
Coolant Present: X Yes No (includes water) Temperature °C 38 Therm. ID# TR-I Initial TJB	Date/Time 0305/3/1/5/ \(\square\)N/A
Temperature °C 38 Therm. ID# TR- Initial TJB Are there custody seals on sample containers?	Date/Time USUS/3/1/5 N/A Intact Broken Not present
Do containers match COC? Yes No No, COC lists abset	
Are there samples matrices other than soil, water, air or carbon?	Yes No
Are any sample containers broken, leaking or damaged?	Yes No
	Yes, on COC Not indicated N/A Yes No N/A
	Yes □ No □ N/A □ No
	Yes No
Is there sufficient sample to perform testing?	Yes No
Does any sample contain product, have strong odor or are otherwise susp	ected to be hot? Yes KNO
Receipt Details Matrix VA Container type VOA # of container	ware received 20
	ners received 20 ners received 4
Matrix Container type # of container	ners received
Date and Time Sample Put into Temp Storage Date: 030513	Time:
Quicklog	43.
	le 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
	ole container(s) On Both Not indicated
If project ID is listed on both COC and containers, do they all match? Are the sample collection dates indicated: On COC On samp	☐ Yes ► No ☐ N/A le container(s) ☐ On Both ☐ Not indicated
If collection dates are listed on both COC and containers, do they all mate	
Are the sample collection times indicated: On COC On samp	le container(s) On Both Not indicated
If collection times are listed on both COC and containers, do they all mat	ch? K Yes No N/A
COMMENTS: Metals method is not speci	field on COC. SR will log
in the method as EPA 200.7	unless project history or
CS dictate otherwise. TJB 0305	, O
	25821; SR will log
in the project name and number as	
1307	



Subcontract Laboratory Report Attachments





CALSCIENCE

WORK ORDER NUMBER: 13-03-0294

The difference is service

ResultLink)

Email your PM)



AIR SOIL WATER MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: 1Q13 GWM EVENT

Attention: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618-6505

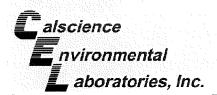
amande Porter

Approved for release on 03/11/2013 by: Amanda Porter

Project Manager



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



<u>Contents</u>

Client Project Name: 1Q13 GWM EVENT Work Order Number: 13-03-0294

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2	Quality Control Sample Data	4
	2.1 MS/MSD and/or Duplicate	
	2.2 LCS/LCSD	- 5
3	Glossary of Terms and Qualifiers	. 6
4	Chain of Custody/Sample Receipt Form	7



Analytical Report



Kiff Analytical

2795 2nd Street, Suite 300 Davis, CA 95618-6505

Date Received:

Work Order No:

Preparation: Method:

Units: Salating of Asian Asian Asian

03/06/13

13-03-0294

EPA 504.1 Ext. EPA 504.1

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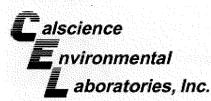
Project: 1Q13 GWM EVENT

Page 1 of 1

Client Sample Number			L	ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3			13-03	-0294-1-A	02/27/13 08:47	Aqueous	GC 40	03/06/13	03/07/13 01:02	130306L11
Parameter Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	72 140	* * *	4 T 4 T			
1,2-Dibromoethane	ND	0.010	1							
MW-8	The second secon		13-03	-0294-2-A	02/27/13 09:40	Aqueous	GC 40	03/06/13	03/07/13 01:25	130306L11
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual						
1,2-Dibromoethane	ND	0.010	1							
MW-7			13-03	-0294-3-A	02/27/13 10:29	Aqueous	GC 40	03/06/13	03/07/13 01:49	130306L11
Parameter Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>						
1,2-Dibromoethane	ND	0.010	1							
MW-6			13-03	3-0294-4-A	02/27/13 11:03	Aqueous	GC 40	03/06/13	03/07/13 02:12	130306L11
Parameter	Result	RL	<u>DF</u>	Qual						
1,2-Dibromoethane	ND	0.010	1							
Method Blank			099-1	2-520-381	N/A	Aqueous	GC 40	03/06/13	03/06/13 22:17	130306L11
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>						
1,2-Dibromoethane	ND	0.010	1							







Quality Control - Spike/Spike Duplicate



Kiff Analytical 2795 2nd Street, Suite 300 Davis, CA 95618-6505 Date Received: Work Order No: Preparation: Method: 03/06/13 13-03-0294 EPA 504.1 Ext. EPA 504.1

Project 1Q13 GWM EVENT

Quality Control Sample ID		Matrix Instrument		Date Prepared	Date Analyzed	MS/MSD Batch Number	
13-03-0033-1			Aqueous	GC 40	03/06/13	03/06/13	130306S11
<u>Parameter</u>	SAMPLE CONC	SPIKE ADDED	MS MS CONC %RI		MSD %REC CL %REC	<u>RPD</u>	RPD CL Qualifiers
1,2-Dibromoethane	ND	0.2857	0.2640 9	2 0.2350	82 60-140	12	0-25





Quality Control - LCS/LCS Duplicate



Kiff Analytical 2795 2nd Street, Suite 300 Davis, CA 95618-6505

Date Received: Work Order No: Preparation: Method:

N/A 13-03-0294 EPA 504.1 Ext. EPA 504.1

Project: 1Q13 GWM EVENT

Quality Control Sample ID	Matrix		Instrument		ate pared	Date Analyzed	1	LCS/LCSD Batc Number	h.
099-12-520-381	Aqueous	•	GC 40	03/	06/13	03/06/13		130306L11	
<u>Parameter</u>	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	<u>RPD</u>	RPD CL	Qualifier
1,2-Dibromoethane	0.2857	0.2810	98	0.2750	96	60-140	2	0-25	
1,2-Dibromo-3-Chloropropane	0.2857	0.2710	95	0.2830	99	60-140	4	0-25	





Glossary of Terms and Qualifiers



Work Order Number: 13-03-0294

<u>Qualifier</u>	<u>Definition</u>
	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
В	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample

analysis does not meet Calscience's internal HT, results will be appropriately qualified.

Garden Grove, CA 92841-1427 7440 Lincoln Way Calscience 714-895-5494 × × × Ethylene Dibromide by EPA 504 (1) Matrix Recommended but not mandatory to complete this section: 9 × × × × Water Deliverables to (Email Address): 2795 Second Street, Suite 300 Sampling Company Log Code: Container / Preservative inbox@kiffanalytical.com EDF Report? Lab: 530.297.4800 Fax: 530.297,4808 Davis, CA 95618 Global ID: N N N enoV Im 04 AOV 10:29 02/27/13 11:03 02/27/13 09:40 Time 02/27/13 08:47 Sampling 530-297-4808 02/27/13 84203 Date P.O. No.: Project Contact (Hardcopy or PDF to) FAX No. KIFF Analytical LLC 1Q13 GWM EVENT Jennifer Worsley 530-297-4800 Designation Company/Address: Kiff Analytical 185750037 roject Number: Project Address: Project Name: Sample Phone No.: MW-3 **MW-8** MW-6 **MW-7**

Please refer to attached Test Detail. Please provide a Washington EIM. Accounts Payable Remarks: Bill to: उ Received by Laboratory Time Received by: Time Received by: 00:00 0358 1700 Time 1/2/13 Date

Page 7 of 10

Chain-of-Custody Record and Analysis Request Page 1 of 1 Due Date: 13-03-0294 × March 11, 2013 84203 **Analysis Request** COC No.

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11

For Lab Use Only

DNTRAC

Relinquished by:

Refinduished by:

Relinquished by:



800.334.5000 ontrac.com

Date Printed 3/5/2013

Shipped From: KIFF ANALYTICAL 2795 2ND STREET 300 DAVIS, CA 95618



Tracking#D10010558167718

Sent By: SAMPLE RECEIVINGX125

Phone#: (530)297-4800

wgt(lbs): 6

Reference: SUBS 84203

Reference 2: 600

Ship To Company:

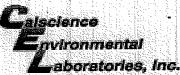
CALSCIENCE ENVIRONMENTAL LABS 7440 LINCOLN WAY GARDEN GROVE, CA 92841 SAMPLE RECEIVING (714)895-5494 Service: S

Sort Code: ORG

Special Services:

Signature Required



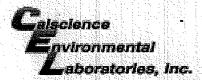


WORK ORDER #: 13-03- 2 2 9 4

CLIENT: CAFF	AMPLE RECEIF		ooler <u> </u>	ega da Li
화사는 이 경기가 가는 것이다. 이 가는 것이 되었습니다. 그는 것이 그 이 사람들은 것이 되었습니다.	: - 0.2°C (CF) =e criteria (PM/APM contacted by: e criteria but received on ice/chille	C	☐ Sample	2
CUSTODY SEALS INTACT: Cooler Sample		lot Present □ N/A lot Present	Initial Initial	10/
□ No analysis requested. □ No Sampler's name indicated on CO Sample container label(s) consists Sample container(s) intact and go Proper containers and sufficient Analyses received within holding pH / Res. Chlorine / Diss. Sulfide Proper preservation noted on CO □ Unpreserved vials received for	plete or # of containers logged in based on t relinquished.	sample labels. nquished		
Volatile analysis container(s) free Tedlar bag(s) free of condensation CONTAINER TYPE: Solid: □4ozCGJ □8ozCGJ Water: □VOA □VOAh □VOA □500AGB □500AGJ □500AG □250PB □250PBn □125PB Air: □Tedlar® □Canister Otle Container: C: Clear A: Amber P: Plastic G	on	□) □EnCores [®] □Terra □125AGBp □1AGB □250CGBs □1PB)PJna₂ □ □ □ t#: Labeled/	⊔ Cores [®] □ <u></u> □1AGBna₂ □1PBna □ □ □	□1AGBs □500PB : <u>h.U</u>

Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 u: Ultra-pure znna: ZnAc2+NaOH f: Filtered

Scanned by:



WORK ORDER #: 13-03- 2 2 9 9

SAMPLE ANOMALY FORM

Sample(s) NOT RECEIVED but listed on COC Sample(s) received but NOT LISTED on COC Holding time expired – list sample ID(s) and test Insufficient quantities for analysis – list test Improper container(s) used – list test Improper preservative used – list test No preservative noted on COC or label – list test & notify lab Sample labels illegible – note test/container type Sample labels illegible – note test/container type Sample labels in Sample ID Date and/or Time Collected Project Information # of Container(s) Analysis Sample container(s) compromised – Note in comments Broken Sample container(s) not labeled Air sample container(s) not labeled Air sample container(s) compromised – Note in comments Flat Very low in volume Leaking (transferred - duplicate bag submitted) Leaking (transferred into Calscience Tedlar® Bag*) Cher: Deter: HEADSPACE – Containers with Bubble > 6mm or ¼ inch: Sample # Container % of visit Sample # Container % of	SAMPLE	es - co	NTAIN	ERS & L	ABELS:			Comme	nts:			
Holding time expired – list sample ID(s) and test Insufficient quantities for analysis – list test Improper container(s) used – list test Improper preservative used – list test Mo preservative noted on COC or label – list test & notify lab Sample label(s) do not match COC – Note in comments Sample ID Date and/or Time Collected Project Information # of Container(s) Analysis Sample container(s) compromised – Note in comments Broken Sample container(s) compromised – Note in comments Hat Project Information Hat Project Info			计过程 军,死,如秦国武军	图400 · 100	搜查协会的复数基础分配 电压	10.4						
Insufficient quantities for analysis – list test Jimproper container(s) used – list test Jimproper preservative used – list test No preservative noted on COC or label – list test & notify lab Sample labels illegible – note test/container type Sample labels illegible – note test/container type Sample label(s) do not match COC – Note in comments Sample ib Date and/or Time Collected Project Information # of Container(s) Analysis Sample container(s) compromised – Note in comments Water present in sample container Broken Sample container(s) not labeled Air sample container(s) compromised – Note in comments Very low in volume Leaking (Not transferred - duplicate bag submitted) Leaking (transferred into Calscience Tedlar® Bag*) Other: HEADSPACE – Containers with Bubble > 6mm or ½ inch: Sample Ø Container @ Sample Ø Container @ Bot Visis Sample Ø Container Bot Contain	☐ Samp	ole(s) re	ceived I	out NOT I	ISTED on C	COC						
Improper container(s) used – list test	☐ Holdi	ng time	expired	i – list sar	nple ID(s) ar	d test						
Improper preservative used – list test	□ Insuf	ficient c	quantitie	s for ana	lysis – list te	est		(-1) t	v (-4)) vec	erved	
No preservative noted on COC or label – list test & notify lab Sample labels illegible – note test/container type Sample label(s) do not match COC – Note in comments Sample ID Date and/or Time Collected Project Information # of Container(s) Analysis Sample container(s) compromised – Note in comments Water present in sample container Broken Sample container(s) not labeled Air sample container(s) not labeled Air sample container(s) compromised – Note in comments Flat Very low in volume Leaking (Not transferred - duplicate bag submitted) Leaking (transferred into Calscience Tedlar® Bag*) Leaking (transferred into Client's Tedlar® Bag*) Other: HEADSPACE – Containers with Bubble > 6mm or 1/4 inch: Sample & Container ¼ of Vidis Sample # Container D(a) Received Received Received Received Container Received Container Received Container Received Container Received Container Container Received Received Received Received Received Receive	□ļmpre	oper coi	ntainer(:	s) used –	list test			_EH	ylene	Dik	oromid	e by
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□ Sample label(s) do not match COC − Note in comments □ Sample ID □ Date and/or Time Collected □ Project Information □ # of Container(s) □ Analysis □ Sample container(s) compromised − Note in comments □ Water present in sample container □ Broken □ Sample container(s) not labeled □ Air sample container(s) compromised − Note in comments □ Flat □ Very low in volume □ Leaking (Not transferred - duplicate bag submitted) □ Leaking (transferred into Calscience Tedlar® Bag*) □ Leaking (transferred into Client's Tedlar® Bag*) □ Other: HEADSPACE − Containers with Bubble > 6mm or 1/4 inch: Sample # Container # of Vrisis Sample # Container ID(s) # of Vrisis Received Receiv	☐ Samı	ole labe	ls illegik	ole – note	test/containe	er type				Mari.		
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Date: 11/01/2013

Laboratory Results

Paul Fairbairn Stantec Consulting Corporation - Redmond, WA 11130 NE 33rd Place, Suite 200 Bellevue, WA 98004

Subject: 8 Water Samples

Project Name: 4Q13 GWM 25821 Project Number: 185750037

Dear Mr. Fairbairn,

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

Troy D. Turpen



Date: 11/01/2013

Subject : Project Name : 8 Water Samples 4Q13 GWM 25821

Project Number:

185750037

Case Narrative

Samples MW-3, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11 and MW-12 were filtered in the laboratory for metals analysis.

Matrix Spike/Matrix Spike Duplicate results for some analytes were outside of control limits. This may indicate a bias for the samples that were spiked. Since the LCS recoveries were within control limits, no data are flagged.



Project Name : 4Q13 GWM 25821

Project Number: 185750037

Report Number: 86345

Date: 11/01/2013

Sample: MW-3

Matrix: Water

Lab Number: 86345-01

Sample Date :10/17/2013				
Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 09:48
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
< 250	250	ug/L	NWTPH-Gx	10/28/13 18:41
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 18:41
96.1		% Recovery	EPA 8260B	10/28/13 18:41
100		% Recovery	EPA 8260B	10/28/13 18:41
101		% Recovery	NWTPH-Gx	10/28/13 18:41
	Value < 0.0050 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 96.1 100	Value Limit < 0.0050	Measured Value Reporting Limit Units < 0.0050	Measured Value Reporting Limit Units Analysis Method < 0.0050



Project Name: 4Q13 GWM 25821

Project Number: 185750037

Sample: MW-6

Matrix: Water

Lab Number: 86345-02

Report Number: 86345

Date: 11/01/2013

Sample Date :10/17/2013

Sample Date :10/1//2013						
Parameter		Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved	11	< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:00
Benzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 12:50
Toluene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 12:50
Ethylbenzene		110	0.50	ug/L	EPA 8260B	10/28/13 12:50
Total Xylenes		190	0.50	ug/L	EPA 8260B	10/28/13 12:50
Methyl-t-butyl ether (MTBI	Ε)	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 12:50
Gasoline Range Organic	:s	4600	250	ug/L	NWTPH-Gx	10/28/13 12:50
1,2-Dichloroethane		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 12:50
1,2-Dichloroethane-d4 (Su	urr)	98.9		% Recovery	EPA 8260B	10/28/13 12:50
Toluene - d8 (Surr)	NOStra A	101		% Recovery	EPA 8260B	10/28/13 12:50
4-Bromofluorobenzene (S	urr)	99.7		% Recovery	NWTPH-Gx	10/28/13 12:50



Sample: MW-7

Project Name: 4Q13 GWM 25821

Project Number: 185750037

Matrix: Water

Lab Number : 86345-03

Report Number: 86345 Date: 11/01/2013

Sample Date :10/17/2013			Method			
Parameter		Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved		< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:04
Benzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
Toluene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
Ethylbenzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
Total Xylenes		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
Methyl-t-butyl ether (MTBE		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
Gasoline Range Organics		< 250	250	ug/L	NWTPH-Gx	10/28/13 19:14
1,2-Dichloroethane		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:14
1,2-Dichloroethane-d4 (Su	rr) Marijaja	95.2		% Recovery	EPA 8260B	10/28/13 19:14
Toluene - d8 (Surr)		100		% Recovery	EPA 8260B	10/28/13 19:14
4-Bromofluorobenzene (Su	ırr) gərələrini	101		% Recovery	NWTPH-Gx	10/28/13 19:14



Project Name: 4Q13 GWM 25821

Project Number: 185750037

Sample: MW-8

Matrix : Water

Lab Number : 86345-04

Report Number: 86345

Date: 11/01/2013

Sample Date :10/17/2013

Sample Date :10/1//2013					
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved	 < 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:08
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:47
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:47
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:47
Total Xylenes	0.78	0.50	ug/L	EPA 8260B	10/28/13 19:47
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:47
Gasoline Range Organics	< 250	250	ug/L	NWTPH-Gx	10/28/13 19:47
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 19:47
1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery	EPA 8260B	10/28/13 19:47
	100		% Recovery	EPA 8260B	10/28/13 19:47
4-Bromofluorobenzene (Surr)	102		% Recovery	NWTPH-Gx	10/28/13 19:47



Project Name : 4Q13 GWM 25821

Project Number: 185750037

Report Number: 86345

Date: 11/01/2013

Sample: MW-9 Matrix: Water

Lab Number: 86345-05

Sample Date :10/17/2013					
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved	< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:12
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
Gasoline Range Organics	< 250	250	ug/L	NWTPH-Gx	10/28/13 20:23
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:23
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/28/13 20:23
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/28/13 20:23
4-Bromofluorobenzene (Surr)	99.6		% Recovery	NWTPH-Gx	10/28/13 20:23



Project Name: 4Q13 GWM 25821

Project Number: 185750037

Sample: MW-10

Matrix: Water

Lab Number: 86345-06

Report Number: 86345

Date: 11/01/2013

Sample Date :10/17/2013

Sample Date :10/17/2013			8 8 - 41I			
Parameter (1986)		Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved	130, 1186	< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:16
Benzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
Toluene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
Ethylbenzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
Total Xylenes		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
Gasoline Range Organics		< 250	250	ug/L	NWTPH-Gx	10/28/13 20:56
1,2-Dichloroethane		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 20:56
1,2-Dichloroethane-d4 (Sur	T)	98.3		% Recovery	EPA 8260B	10/28/13 20:56
Toluene - d8 (Surr)	\$5.000 000	100		% Recovery	EPA 8260B	10/28/13 20:56
4-Bromofluorobenzene (Su	rr): Printer	/ 10 2		% Recovery	NWTPH-Gx	10/28/13 20:56



Project Name : 4Q13 GWM 25821

Project Number: 185750037

Report Number: 86345

Date: 11/01/2013

Sample: MW-11

Matrix: Water

Lab Number: 86345-07

	Mathad			
Measured Value	Reporting Limit	Units	Analysis Method	Date/Time Analyzed
< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:26
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
< 250	250	ug/L	NWTPH-Gx	10/28/13 21:34
< 0.50	0.50	ug/L	EPA 8260B	10/28/13 21:34
102		% Recovery	EPA 8260B	10/28/13 21:34
100		% Recovery	EPA 8260B	10/28/13 21:34
100		% Recovery	NWTPH-Gx	10/28/13 21:34
	Value < 0.0050 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 102	Value Limit < 0.0050	Measured Value Reporting Limit Units < 0.0050	Measured Value Reporting Limit Units Analysis Method < 0.0050



Project Name: 4Q13 GWM 25821

Project Number: 185750037

Sample: MW-12

Lab Number : 86345-08

Report Number: 86345

Date: 11/01/2013

Sample Date :10/17/2013

Sample Date :10/17/2013			Mathaal			
Parameter 1997		Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead, Dissolved	g Sp. 1985	< 0.0050	0.0050	mg/L	EPA 200.7	10/29/13 10:30
Benzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
Toluene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
Ethylbenzene		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
Total Xylenes		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
Methyl-t-butyl ether (MTBE) .	< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
Gasoline Range Organics		< 250	250	ug/L	NWTPH-Gx	10/28/13 22:07
1,2-Dichloroethane		< 0.50	0.50	ug/L	EPA 8260B	10/28/13 22:07
1,2-Dichloroethane-d4 (Sur	T) saga - ek .	, 100a-a		% Recovery	EPA 8260B	10/28/13 22:07
Toluene - d8 (Surr)	dardha. Ar .	.101		% Recovery	EPA 8260B	10/28/13 22:07
4-Bromofluorobenzene (Su	rr)	101		% Recovery	NWTPH-Gx	10/28/13 22:07

Matrix: Water

Date: 11/01/2013

QC Report : Method Blank Data

Project Name: 4Q13 GWM 25821

Project Number: 185750037

10/28/2013 10/28/2013 10/28/2013 Date Analyzed 10/29/2013 10/28/2013 10/28/2013 10/28/2013 10/28/2013 10/28/2013 10/28/2013 **EPA 8260B EPA 8260B EPA 8260B EPA 8260B** NWTPH-Gx NWTPH-Gx **EPA 8260B EPA 8260B EPA 8260B EPA 8260B** Analysis Method **EPA 200.7** Units mg/L ng/L ug/L ug/L ug/L ng/L Method Reporting Limit 0.0050 0.50 0.50 0.50 250 Measured Value < 0.0050 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 0.50 < 250 97.2 102 4-Bromofluorobenzene (Surr) 1,2-Dichloroethane-d4 (Surr) Methyl-t-butyl ether (MTBE) Gasoline Range Organics 1,2-Dichloroethane Toluene - d8 (Surr) Lead, Dissolved Total Xylenes Ethylbenzene Parameter Benzene Toluene

Method Measured Reporting Analysis Date
Parameter Value Limit Units Method Analyzed

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number: 86345

Date: 11/01/2013

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name: 4Q13 GWM 25821

Project Number: 185750037

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Spiked Sample Date Percent Analyzed Recov.	Duplicat Spiked Sample Percent Recov.	e Spiked Sample Relative Percent Percent Recov. Diff. Limit	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Lead, (Dis)	86345-01	86345-01 < 0.0050 0.400	0.400	0.400	0.384	0.388	mg/L	EPA 200.7	10/29/13 95.8	8.96	0.984	75-125	20
1,2-Dichloroethane 86	345-02	<0.50	39.3	39.8	38.0	39.3	ug/L	EPA 8260B	10/28/13 96.7	98.8	2.10	70.0-130	25
Benzene	86345-02 <0.50	<0.50	39.3	39.8	38.3	38.8	ng/L	EPA 8260B	10/28/13 97.5	97.5	0.0304	70.0-130	25
Ethylbenzene	86345-02 110	110	39.3	39.8	140	137	ug/L	EPA 8260B	10/28/13 77.0	69.4	10.3	70.0-130	25
Methyl-t-butyl ether 86	ether 86345-02	<0.50	39.2	39.6	29.1	30.9	ug/L	EPA 8260B	10/28/13 74.2	78.1	5.02	70.0-130	25
P + M Xylene	86345-02 120	120	39.3	39.8	149	146	ug/L	EPA 8260B	10/28/13 77.3	68.4	12.2	70.0-130	25
Toluene	86345-02 <0.50	<0.50	39.3	39.8	39.0	39.2	J/bn	EPA 8260B	10/28/13 99.3	98.5	0.824	70.0-130	25

KIFF ANALYTICAL, LLC

Date: 11/01/2013

QC Report : Laboratory Control Sample (LCS)

Project Name : 4Q13 GWM 25821

Project Number: 185750037

Lead, (Dis) 0.400 mg/L EPA 200.7 1,2-Dichloroethane 40.0 ug/L EPA 8260B Benzene 40.0 ug/L EPA 8260B Ethylbenzene 40.0 ug/L EPA 8260B	EPA 200.7	10/29/13		Limit
vroethane 40.0 ug/L 40.0 ug/L ene 40.0 ug/L			100	85-115
40.0 ug/L ene 40.0 ug/L	EPA 8260B	10/28/13	96.4	70.0-130
40.0 ug/L	EPA 8260B	10/28/13	98.6	70.0-130
	EPA 8260B	10/28/13	6.66	70.0-130
	EPA 8260B	10/28/13	71.3	70.0-130
40.0 ug/L	EPA 8260B	10/28/13	100	70.0-130
40.0 ug/L	EPA 8260B	10/28/13	8.66	70.0-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

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SAMPLE RECEIPT CHECKLIST

Chain-of-Custody:	Yes	No	Documented on COC Labels	၁၀၁	Labels	
Is COC present?			Sample ID			
Is COC signed by relinquisher?	\		Project ID			
Is COC dated by relinquisher?	/		Sample Date		\	
Is the sampler's name on the COC?			Sample Time		\	Suple
Are there analyses or hold for all samples?			Does COC match project history?	project ł	nistory?	A/N/Z

	Documented on	ပ္ပ	Labels	Discrepancies:	
	Sample ID				
1	Project ID	\			
	Sample Date				
	Sample Time		7	Suple 38 hus "1325" on all culturals.	all contrary
	Does COC match project history?	project h	iistory?	☐ N/A ☐ Yes ☐	No
2	Comments:				
2					
Γ					
				1 1	
1					

Yes

¥

N/A

Are sample custody seals intact?

Samples:

Are sample containers intact? Is preservation documented?

	Proceed W	Client Com	
20			
Paly			
43	\(\frac{1}{2}\)		

Page 15 of 15

of Containers

Container Type

Sar

Are sample container types correct?

Are samples within holding time?

Are preservatives acceptable?

In-house Analysis:

Is there adequate sample volume?

Receipt Details: Matrix



Subcontract Laboratory Report Attachments





CALSCIENCE

WORK ORDER NUMBER: 13-10-2006

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Kiff Analytical

Client Project Name: 4Q13 GWM 25821

Attention: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618-6505

amande Porter

Approved for release on 11/01/2013 by: Amanda Porter

Project Manager



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

ResultLink)

Email your PM)



Contents

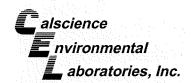
Client	Project	Name:	
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4Q13 GWM 25821

Work Order Number: 1

13-10-2006

1	Work Order Narrative
2	Client Sample Data
3	Quality Control Sample Data
4	Sample Analysis Summary
5	Glossary of Terms and Qualifiers
6	Chain of Custody/Sample Receipt Form



Work Order Narrative

Work Order: 13-10-2006 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 10/26/13. They were assigned to Work Order 13-10-2006.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Analytical Report

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95618-6505

Date Received:

10/26/13 13-10-2006

Work Order: Preparation:

EPA 504.1 Ext.

Method: Units:

EPA 504.1 ug/L

Project: 4Q13 GWM 25821

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time QC Batch ID Analyzed
MW-3	13-10-2006-1-A	10/17/13 16:30	Aqueous	GC 40	10/30/13	10/30/13 131030L04 16:17
<u>Parameter</u>		Result	<u>RL</u>	•	DF	<u>Qualifiers</u>
1,2-Dibromoethane		ND	0.0	010	1	

MW-6 13-10-2006-2	2-A 10/17/13 12:00	Aqueous GC 40	10/30/13	10/30/13 131030L04 16:40
Parameter 1,2-Dibromoethane	<u>Result</u> ND	<u>RL</u> 0.010	<u>DF</u> 1	Qualifiers

MW-7 13-10-	-2006-3-A 10/17/13 11:35	Aqueous GC 40	10/30/13	10/30/13 131030L04 17:03
<u>Parameter</u>	Result	RL	<u>DF</u>	<u>Qualifiers</u>
1,2-Dibromoethane	ND	0.010	1	

MW-8 13-10-2006-4-A		Aqueous GC 40	10/30/13	10/30/13 131030L04 17:26
<u>Parameter</u>	Result	RL	DE	<u>Qualifiers</u>
1,2-Dibromoethane	ND	0.010	1	

MW-9 13-10-2006-5-A	10/17/13 13:10	Aqueous GC 40	10/30/13	10/30/13 131030L04 17:49
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qualifiers
1,2-Dibromoethane	ND	0.010	1	

MW-10 13-10-2006-6-A	10/17/13 15:55	Aqueous GC 40	10/30/13	10/30/13 131030L04 18:12
<u>Parameter</u>	Result	RL	<u>DF</u>	<u>Qualifiers</u>
1,2-Dibromoethane	ND	0.010	1	

RL: Reporting Limit.

MDL: Method Detection Limit.

DF: Dilution Factor.



Analytical Report

Kiff Analytical

2795 2nd Street, Suite 300 Davis, CA 95618-6505

Date Received:

Work Order:

Preparation:

Method: Units:

10/26/13

13-10-2006 EPA 504.1 Ext.

EPA 504.1

ug/L

Project: 4Q13 GWM 25821

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	13-10-2006-7-A	10/17/13 15:20	Aqueous	GC 40	10/30/13	10/30/13 18:37	131030L04
<u>Parameter</u>		<u>Result</u>	<u>RL</u>		<u>DF</u>	<u>Qu</u>	alifiers
1,2-Dibromoethane		ND	0.0	110	1		

MW-12	13-10-2006-8-A 10/17/13 13:45	Aqueous GC 40	10/30/13 10/30/ 19:01	13 131030L04
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Qualifiers</u>
1,2-Dibromoethane	ND	0.010		

Method Blank	099-12-520-408 N/A	Aqueous GC 40 10	0/30/13 10/30/13 131030L04
metrica Diana	000 12 020 100 1M/A	Addeons Co to 1	15:53
			10.03
Parameter	Popult		DF Qualifiers
<u>Falailielei</u>	<u>Result</u>	RL \	<u>DF</u> <u>Qualifiers</u>
1.2-Dibromoethane	ND	0.010	그렇게 하다를 하고 있는 것들은 이번 화장하실 때문에 만든다.
1,2-Dibioinochiane		0.010	대를 하는데 가르는 사람들이 그를 즐겁게 들어 내려가 되었다.





Quality Control - LCS/LCSD

Kiff Analytical

2795 2nd Street, Suite 300 Davis, CA 95618-6505

Project: 4Q13 GWM 25821

Date Received:

Work Order: Preparation:

Method:

10/26/13

13-10-2006

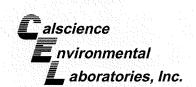
EPA 504.1 Ext.

EPA 504.1

Page 1 of 1

Quality Control Sample ID		Matrix	. In	strument	Date Prepare	ed Date A	nalyzed	LCS/LCSD Ba	atch Number
099-12-520-408		Aqueous	; G	C 40	10/30/13	10/30/	13 15:07	131030L04	
<u>Parameter</u>	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
1,2-Dibromoethane	0.2857	0.2870	100	0.3410	119	60-140	17	0-25	
1,2-Dibromo-3-Chloropropane	0.2857	0.2780	97	0.3580	125	60-140	25	0-25	zyldken.





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Work Order: 13-10-2006				Page 1 of 1
Method EPA 504.1	Extraction EPA 504.1 Ext.	Chemist ID 669	Instrument GC 40	Analytical Location
mercula todo con transportação do como extraordo do como porto a primer.				

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841



Glossary of Terms and Qualifiers

Page 1 of 1 Work Order: 13-10-2006

Qualifiers	<u>Definition</u>	
*		
<	Less than the indicated value.	
>	Greater than the indicated value.	
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without full clarification.	
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound in control and, therefore, the sample data was reported without further clarification.	
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference associated LCS recovery was in control.	The
4	The MS/MSD RPD was out of control due to suspected matrix interference.	
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.	
6	Surrogate recovery below the acceptance limit.	
7	Surrogate recovery above the acceptance limit.	
В	Analyte was present in the associated method blank.	
BU	Sample analyzed after holding time expired.	
BV	Sample received after holding time expired.	
Е	Concentration exceeds the calibration range.	
ET	Sample was extracted past end of recommended max. holding time.	
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.	
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbon were also present (or detected).	
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons also present (or detected).	were
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.	
JA	Analyte positively identified but quantitation is an estimate.	
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).	
ND	Parameter not detected at the indicated reporting limit.	
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.	
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.	
Х	% Recovery and/or RPD out-of-range.	
Z	Analyte presence was not confirmed by second column or GC/MS analysis.	
	the state of the s	

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero



KIFF Analytical LLC

Q 1 For Lab Use Only 4 Chain-of-Custody Record and Analysis Request N Page 1 of 1 TAT 13-10-2006 Please refer to attached Test Detail 4-Days × × × × × 86345 Accounts Payable **Analysis Request** Garden Grove, CA 92841-1427 Remarks: 7440 Lincoln Way Bill to: Calscience 714-895-5494 × × × × × × × EDB/DBCb Py EPA 504 (1) Car Matrix Recommended but not mandatory to complete this section: 9 Water × × × × × × × 2795 Second Street, Suite 300 Deliverables to (Email Address) Sampling Company Log Code: Container / Preservative Received by Laboratory: inbox@kiffanalytical.com EDF Report? Lab: 530.297.4800 Fax: 530.297.4808 Time Received by: Received by Davis, CA 95618 Global ID: Time Time 8 SnoV Im 04 AOV 2 2 2 2 2 N (81813) Date 10/6/12 15:20 11:35 12:00 10/17/13 13:10 15:55 13:45 10/17/13 16:30 10/17/13 12:30 Date Time Date Sampling 10/17/13 530-297-4808 86345 10/17/13 10/17/13 10/17/13 10/17/13 Date Project Contact (Hardcopy or PDF to): P.O. No.: FAX No. Company/Address: 530-297-4800 Designation Kiff Analytical **Troy Turpen** Project Number: 185750037 4Q13 GWM 25821 Project Address: Project Name: Relinquished by: Relinquished by Relinquished by: Sample Phone No.: MW-10 MW-11 MW-12 MW-3 9-WM 6-WM MW-8 **MW-7**



Page 9 of 12

Test Detail for Kiff Work Order: 86345

EDB/DBCP by EPA 504 (1) Ethylene Dibromide



800.334.5000 ontrac.com



Date Printed 10/25/2013

Shipped From: KIFF ANALYTICAL 2795 2ND STREET 300 DAVIS, ČA 95618 Tracking#D10010628143010

Sent By: SAMPLE RECEIVINGX125

Phone#: (530)297-4800

wgt(lbs): 25

Reference: SUBS 86345

Reference 2: 600

Ship To Company:

CALSCIENCE ENVIRONMENTAL LABS 7440 LINCOLN WAY GARDEN GROVE, CA 92841 SAMPLE RECEIVING (714)895-5494 Service: S

Sort Code: ORG

Special Services:
Saturday Delivery
Signature Required



CLIENT: KIFF		10/26/1.	3
TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C -	- 6.0 °C, not frozen except se		
Temperature $2 \cdot 2 ^{\circ}C \cdot 0.2 ^{\circ}C (CF) = 2$	O°C	☐ Sample	
☐ Sample(s) outside temperature criteria (PM/APM contacte			
☐ Sample(s) outside temperature criteria but received on ice		ing.	
☐ Received at ambient temperature, placed on ice for		e Elizableki eti. Bullan kendalar	
Ambient Temperature: ☐ Air ☐ Filter		Checked by: $\underline{\mathcal{S}}$	202
Ambient Temperature. 27 m			
CUSTODY SEALS INTACT:			ねつ
☑ Cooler □ □ No (Not Intact)	☐ Not Present ☐ N/A	Checked by: $\underline{\mathscr{S}}$	02
□ Sample □ □ No (Not Intact)	✓ Not Present	Checked by: <u>£</u>	180
	Yes	535 November N/	/Δ
SAMPLE CONDITION.	100]
Chain-Of-Custody (COC) document(s) received with sam			
COC document(s) received complete			J
☐ Collection date/time, matrix, and/or # of containers logged in bas☐ No analysis requested. ☐ Not relinquished. ☐ No date/time	e relinquished.		
☐ No analysis requested. ☐ Not relinquished. ☐ No date/timescampler's name indicated on COC			Z
Sample container label(s) consistent with COC			
Sample container(s) intact and good condition			
Proper containers and sufficient volume for analyses requ			
Analyses received within holding time			
Aqueous samples received within 15-minute holding ti	•		
			<u>1</u>
□ pH □ Residual Chlorine □ Dissolved Sulfides □ Di	, .		
☑ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	🗹	. 🗆	
Tedlar bag(s) free of condensation		. □ · □ ·	1
CONTAINER TYPE:			
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve (_) □EnCores [®] □Terra	aCores® □	
Aqueous: ZVÔA □VOAh □VOAna₂ □125AGB □125A	GBh □125AGBp □1AGB	□1AGBna₂ □1A	AGBs
□500AGB □500AGJ □500AGJs □250AGB □2500	GB □250CGBs □1PB	□1PB na □500	PB
□250PB □250PB n □125PB □125PB znna □100PJ			
Air: □Tedlar [®] □Canister Other: □ Trip Blank Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc	Lot#: Labeled	d/Checked by: 69	34

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH/f: Filtered Scanned by:



Reference: 7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

ATTACHMENT B

SITE VISITATION REPORT/FIELD NOTES STANTEC MONITORING WELL PURGING AND SAMPLING PROCEDURES

7-Eleven Store 25821 Annual 2013 Groundwater Monitoring and Sampling Report

	WORK REC	QUEST FORM	ELEVEN
Stantec JOB NAME:	Former 7-Eleven 25821	JOB NUMBER:	185750037
			3/0-1/2
SITE ADDRESS:	1824 George Washington	START DATE:	4 6 7 1 3
PREPARED FOR:	Richland, WA Emily Harper	PREPARED BY:	Emily Harper
	IOTE:	REVIEWED BY:	Paul Fairbairn
VORK DESCRIPTION:	IOTE.	REVIEWED B1.	Faui FaiiDairii
1. Review H&S Plan.			
	ck in with Station Manager and c		
	ct Health and Safety briefing and		termine any traffic flow.
	llowing gauging order on Sampli		
	ample wells following the sampling water in drug		ey are labeled properly and secured.
	all waste drums generated by Sta		
	the office prior to leaving the site		
		Numbers:	
		d Travel Time	
		37.200.0700	
	Paul Fairbairn in Star	s Information: ntec Office : (425) 298-10 tec Cell: (206) 369-8383	16
ANALYTICAL REQUIREN	MENTS:	EQUIPMENT NEED	ED
			≣D:
NV	VTPH-Gx	H&S plan	ED:
NV BT			ED :
NV BT	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc	t sample
NV BT	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc Low-Flow Purging/Sar	t sample mpling Equipment
NW BT	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc Low-Flow Purging/Sar Oil/Water Interface Pr	t sample mpling Equipment obe
NW BT	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc Low-Flow Purging/Sar Oil/Water Interface Pr Disposable bailers/ Re	t sample mpling Equipment obe ope
NW BT	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc Low-Flow Purging/Sar Oil/Water Interface Pr Disposable bailers/ Re Peristaltic Pump & Tu	t sample mpling Equipment obe ope
BI	VTPH-Gx FEX (8260)	H&S plan Safety Equipment Delineators Mini cooler for produc Low-Flow Purging/Sar Oil/Water Interface Pr Disposable bailers/ Re	t sample mpling Equipment obe ope

COMPLETED:

AUTHORIZATION:



1st QUARTER 2013 SAMPLING REQUEST



7-Eleven Service Station No.25821- Located at 1824 George Washington; Richland, WA 99354 *Review and sign HASP prior to arriving on site. Check in with station manager and Stantec Project Manager Paul Fairbairn: Cell: 206 369 8383; Office: 425 298 1016 *The wells are now historically clean, if product or sheen is found, use Stop Work Authority and contact the 7-Eleven Project Manager Paul Fairbaim immediately. *NWTPH-Gx, BTEX (8260), MTBE, EDC, EDB *Please gauge all selected wells first and proceed to sample all wells unless otherwise noted. Implement Stantec low flow purging and sampling procedures. *Store water in drum on-site. Label drum with contents with a Non Hazardous Waste Drum label and note in the field log Project No. 185750037 Number MW-8 MW-7 MW-6 MW-5 MW-3 ₩ell 200.0700 Gaug. Freq. Task No. wells gauged without sampling: Gaug. Order ယ Ċī N Well Gallons Purged: Samp. G N w _ NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead Project Manager Paul Fairbairn Analyses 02/22/13 Depth Date Well Screen Top of Casing 줔 E Dia. Total wells sampled: Depth of Pump intake (ft bTOC) Client Contact Comments Jose Rios



SITE VISITATION REPORT

1Q13 - Former 7-Eleven Service Station No. 25821- Richland, WA



re(s) <u>EMLY HARP</u> Date: <u>11:45</u> ral Time: 5:20 Departure Time: 11:45	Time of Arrival Call-In: Time of Departure Call-In 12:	10/A 104
	Who did you call?	Paul Fairbairn
DRUM INV	/ENTORY	
WATER CARBON	TOTAL OPEN TOP	<u> </u>
SOIL EMPTY	TOTAL BUNG TOP	
HEALTH AND SAFE	ETY ASSESSMENT	
VISIBILITY - DARKIN FARLY AM		
DELL NEATION (ESP. DRIVE THRU WIT		
COID STRESS		
PROPER PRE		
FRUCH POINT, PRUPTR CIFTING		
DESCRIPTION OF ACTIVIT	TIES ONSITE AND NOTES	
5: 20 ARRIVE ONSTE, SAFETY LIST	I, DON PFE	
5: 30 SPEAK W MUGR AGOUT BEIL	JUMBON	
5.34 SITELALK, ST UP DECOM		
5: 37 GAVOE LELLS (MW-1+MW-		
5:55 INTERFACE ACTINGUE LE	AVE STIE CO TO SAFIMAY (O	ALKED ACRUSS ST)
TO SURCHASE BATTERIE		
6: 15 RETURNED TO SITE, CARS PAL		DARKED ON
RIMAININGHTUS, LAIT	FOR CLEARNUE	
6.35 GAUGE NETTS REMINING		
7: 30 BEGIN SAMPLING WELLS		
11:14 REGIN CLEANUP + DECON		
	M ALROSS ST) TO GET ICH	efor sample
12:04 DEPART SAFEWAY OF FI	NISHED W SITE	
		- H7



Stantec HYDROLOGIC DATA SHEET



Cougo	Date:	2	1271	13	
Gauge	Date:	-	, ,	19	

Project Name: Former 7-Eleven #25821

185750037 Project Number:

DTP = Depth to Free Product (FP or NAPH) Below TOC DTW = Depth to Groundwater Below TOC DTB = Depth to Bottom of Well Casing Below TOC Flow through cell calibrated Y N_____

WELL OR		antere for 🖟 out to a continue post	MEASUREMENTS			•	service and pro-solver	te a sestepa a a quatro	proposition process as the constant on	
LOCATION	· · · · · · · · · · · · · · · · · · ·	eran eran eran eran eran eran eran eran	TIME	DTP (feet)	DTW (feet)	DTB (feet)	PURGE? (Y/N)	SHEEN? (Y/N)	SAMPLE? (Y/N)	COMMENTS / PROBI CALIBRATION
MW-1			534		17.24	19.68	Ν	1	N	DRIVE THRU
MW-2	:		546	j.	17.25	18.12	\sim		V	
MW-3		િસ	555		17.04	14.50	Y	N	Υ	
MW-4			6:50		16.65	18.40	N		N	
MW-5			7:04		NA	16.58	N	/	M	DRYNELL
MW-6			7:19		16.08	19.15	Ϋ́	N_	Y	
MW-7	-		7:32		16:02	1819	Σ_	N_	$\downarrow \chi$	
MW-8			7:41		16.13	26.86	Y	N	Υ	
							A TOTAL CONTRACTOR		111111111111111111111111111111111111111	
						Lifeta,	<u></u>			
							Α.			Processor and the control of the con
	đ									The second secon
4.5	. Šiliaka,				a ngagadi	2	200	1997	1 2	
				¥						

₩ w	Sta /ATER SAMPLE	nntec FIELD DATA SI	(EET		ELEVEN
Stantec PROJECT #: 185750037	Purged 8	Sampled By:		Well & Samp	le ID:
CLIENT NAME: 7-Eleven	EMILY HAR			MM-3	ле по.
LOCATION: 1824 George Washington Way; Ric	to the state of th				
		2 10			
Purged & Sampled Date:	START (2400hr):	- 8:10		LOW-FLOW US	-n. 💙
SAMPLE TYPE: Groundwater x	Sample Time: §	Treatm	ent Effluent	Other	<u> </u>
CASING DIAMETER: 2" (0.16)	4" 6" (0.6)	(1.46)			
DEPTH TO BOTTOM (feet) = 19.50 DEPTH TO WATER (feet) = 17.00 WATER COLUMN HEIGHT (feet) = 2.01			ACTUAL PUF	RGE (GL) = <u>/,/</u>	SL
	FIELD ME	ASUREMENTS			
DATE TIME VOLUME	TEMP (degrees C) 11. (6) 12. 3(p 12. 86 12. 89 12. 81 11. 60 12. 44	CONDUCTIVITY (umhos/cm) . & 1 0 . & 2 0 9 . & 2 1 . & 3 3 3 . & 3 5 . & 3 4 . & 3 7	6.34 6.59 6.59	COLOR (visual) CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR CLEAR	0.R.P. 238.0 215.4 185.4 191.2 157.2 151.4 148.0
Calculated Variance of Final Three Samples Acceptable Variance Limits		≤ 3%	≤ 0.1		₹\//27 ≤10%
DEPTH TO PURGE INTAKE DURING PUR	GE: 16.50	SAMPLE D	τw:2	(
QTY OF SAMPLE VESSELS & PRESERVATIV 3-HCL VOA'S PER WELL 1-HNO3 poly	E :		ANAL' NWT	PH-g	
2 NON ARS - VOAS			MTBE, E		
PURGING EQUIPMENT:			total SAMPLING E		
Geotech Peristaltic pump			Υ:		
	- Callestin-C	veo V			
Flow Through Cell Disconnected Prior to Sampl	e Collection?:	YES <u>&</u>	_ NO_	ROKKED - I	

Page | of 5

WELL INTEGRITY: ___()∠__

REMARKS:____

SIGNATURE:

	Stantec WATER SAMPLE FIELD DATA SHEET	e de No
Stantec	Purged & Sampled By:	Well & Sample ID:
PROJECT #: 185750037 CLIENT NAME: 7-Eleven	E. HARPER	MW-5
LOCATION: 1824 George Washington Way; R		
Purged & Sampled Date:	START (2400hr):	LOW-FLOW USED:
2/12-1/13	Sample Time: Surface Water Treatment Ef	
SAMPLE TYPE: Groundwater x		
CASING DIAMETER: 2" (0.16)	(0.6) 6" (1.46)	 N. C. Serre Serre Community of the Community
DEPTH TO BOTTOM (feet) = DEPTH TO WATER (feet) = WATER COLUMN HEIGHT (feet) =	DOY WE'LL AC	TUAL PURGE (GL) =
	FIELD MEASUREMENTS	
Calculated Variance of Final Three Sampl Acceptable Variance Lim DEPTH TO PURGE INTAKE DURING PU QTY OF SAMPLE VESSELS & PRESERVAT 3 HCL VOA'S PER WELL 1-HNO3 poly	es: iits: ≤ 10% ≤ 3% RGE: SAMPLE DTW:	pH (units) (visual) O.R.P. (visual)
2 NON RES VOAS		MTBE, EDB, EDC total lead
PURGING EQUIPMENT:	SA	MPLING EQUIPMENT:
Geotech Peristaltic pump	Trans.	YSI
Flow Through Cell Disconnected Prior to Sam WELL PAD CONDITION: <u>GOUD</u> WELL VAULT CONDITION: <u>GOUD</u> WELL INTEGRITY: <u>Caoil</u>	SEAL PRESENT?: YS	
REMARKS: DRY WELL		

SIGNATURE:

Page 2-of 5

		<i>Stantec</i> LE FIELD DATA SH	IEET		ELEVEN
Stantec PROJECT #: 185750037	Puroe	ed & Sampled By:		Well & Samı	ale ID:
CLIENT NAME: 7-Eleven		HARIER		WW - 8	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
LOCATION: 1824 George Washington Way; Ric					
			- Annual Control of Co		
Purged & Sampled Date:	START (2400hr)	: 09:10			
2/27/13	Sample Time:	09:40		LOW-FLOW US	ED: 🖔
SAMPLE TYPE: Groundwater x	Surface Wa	ter Treatme	ent Effluent	Other _	
CASING DIAMETER: 2" (0.16)	4" (0.6)	6" (1.46)			
DEPTH TO BOTTOM (feet) = 26.8 DEPTH TO WATER (feet) = 16.1 WATER COLUMN HEIGHT (feet) = 10.3	3		ACTUAL PUF	RGE (GL) =	15 L
	FIELD	MEASUREMENTS			
DATE TIME VOLUME 1/17/13 (2400hr) (&L)L 09:18 .50L 09:31 .50L 09:37 .75L	TEMP (degrees C) 11.95 12.55 13.35 13.67	CONDUCTIVITY (umhos/cm) . 7 . 7 . 7 . 7 . 7	pH (units) 4.03 7.32 7.34 7.360	COLOR (visual) LIFAR CLEAR CLEAR CLEAR	0.R.P. -39.6 -46.3 -45.7 -37.6
Calculated Variance of Final Three Samples Acceptable Variance Limits	: ≤10%	≤3%	≤ 0.1		<u>1</u> ≤ 10%
DEPTH TO PURGE INTAKE DURING PUR	3E: <u>ZW, DW</u>	SAMPLE D	IW:		
QTY OF SAMPLE VESSELS & PRESERVATIV	E:		ANAL	YSES;	
3-HCL VOA'S PER WELL			NWT		
1-HNO3 poly 2 Nongress voas			BTEX-9 MTBE, EI		
			total		
PURGING EQUIPMENT:			SAMPLING E	QUIPMENT:	
Geotech Peristaltic pump			Y	SI	
Flow Through Cell Disconnected Prior to Sample	e Collection?:	YES <u>\</u>	NO_		
WELL PAD CONDITION: <u>ら </u>		WELL CASING C	CONDITION:	Con	
WELL VAULT CONDITION: 6000		SEAL PRESENT?: 7	(LS B	OLTS PRESENT?	3/3 405
WELL INTEGRITY: 6000		WELL TAG: N/		LOCK#: \mathcal{N}	

2 CRAIKED BOLT SELVES, BUT BOLTS PRESTINI

SIGNATURE:

REMARKS:_

Page 3 of 5

3

	Sta	ntec		
	WATER SAMPLE	TELD DATA SH	EET	
Stantec PROJECT #: 185750037	Purged &	Sampled By:	W	/ell & Sample ID:
CLIENT NAME: 7-Eleven	EMILYH		<u>ww</u>	- 7
LOCATION: 1824 George Washington Wa	y; Richland, WA			
Purged & Sampled Date:	START (2400hr):	09:55	en de la companya de La companya de la companya del companya de la companya del companya de la c	erine () is a separate of the angree of
2/77-//3		29	LOW	-FLOW USED:
SAMPLE TYPE: Groundwater	x Surface Water		ent Effluent	Other
CASING DIAMETER: 2" (0.10)	6' (0.6) 6"	(1.46)		en de Proposition de la companya della companya de la companya della companya del
DEPTH TO BOTTOM (feet) =	8.19			
	16.02			4
WATER COLUMN HEIGHT (feet) =	2,17		ACTUAL PURGE	()= 1,5 L
	FIELD MEA	SUREMENTS		
DATE TIME (2400hr) (2	C L	(umhos/cm) . 688 . 689 . 689 . (691	7.64	(visual) LEAR 18.0 LEAR -16.4 LEAR -49.1 LEAR -62.7 ≤ 10%
DEPTH TO PURGE INTAKE DURING	PURGE: 17.19	SAMPLE D	TW:	
QTY OF SAMPLE VESSELS & PRESERY THICK VOA'S PER W 1-HNO3 poly 2 NON PRES V			ANALYSES: NWTPH-g BTEX-g (8260) MTBE, EDB, ED total lead	
PURGING EQUIPME	NT:		SAMPLING EQUIP	MENT:
Geotech Peristaltic pu	ımp		YSI	Referència de está.
Flow Through Cell Disconnected Prior to S WELL PAD CONDITION:		WELL CASING	NO	
WELL VAULT CONDITION: DAMAC		AL PRESENT?:	7	1
WELL INTEGRITY:AIR		VELL TAG:	<i> </i>	K#: <u>N/A</u>
REMARKS: PERI FUMP DICT	TREFORE 1ST P	EADING -:	STOP TO RE	puct pump

SIGNATURE:

Page 4 of 5

S	Sta VATER SAMPLE I	<i>ntec</i> FIELD DATA SH	IEET	ELEVEN
Stantec PROJECT #: 185750037	Puraed &	Sampled By:		Well & Sample ID:
CLIENT NAME: 7-Eleven	EMINHA			MN-6
LOCATION: 1824 George Washington Way; Rid				
Purged & Sampled Date:	START (2400hr):	10:40		
2/27/13	Sample Time:	<u>1:03 </u>		LOW-FLOW USED;
SAMPLE TYPE: Groundwater x	Surface Water	Treatmo	ent Effluent	Other
CASING DIAMETER: 2" (0.16)	4" 6"	(1.46)		
DEPTH TO BOTTOM (feet) = 19.15				
DEPTH TO WATER (feet) = 16.0	8			
WATER COLUMN HEIGHT (feet) =3	<u>07 </u>		ACTUAL PUR	GE(9K)= 1.35 L
	FIELD MEA	SUREMENTS		
DATE TIME (2400hr) (GC) L- 2/17/13 (2400hr) (GC) L- 10:51 .35 L- 10:57 .90 L 11:00 L.20 L Calculated Variance of Final Three Samples	14.07 14.78 15.00 15.15	CONDUCTIVITY (umhos/cm) .643 .650 .654 .658	pH (units) 7.44 7.34 7.31 7.30	COLOR (visual) (visual) (LIFAR -89.2 LUFAR -102.60 CLEAR -113.7 CLFAR -122.7
Acceptable Variance Limits		≤3%	≤ 0.1	≤10%
DEPTH TO PURGE INTAKE DURING PUR	GE: <u>14.00</u>	SAMPLE D1	rw:>	X
QTY OF SAMPLE VESSELS & PRESERVATIVE 38-HCL VOA'S PER WELL 1-HN03 poly 2 NON PRES VOAS	E :		ANALY NWTP BTEX-g (MTBE, ED total l	PH-g (8260) B, EDC
PURGING EQUIPMENT:			SAMPLING E	QUIPMENT:
Geotech Peristaltic pump			YS	
Flow Through Cell Disconnected Prior to Sampl	e Collection?:	YES 🏲	NO	
WELL PAD CONDITION: Gab		WELL CASING C	CONDITION:	BOOK SMALL CRACK
WELL VAULT CONDITION: 6K-BU	ILDUP SE	AL PRESENT?: YC	<u></u> €	OLTS PRESENT?: YES 3/3
WELL INTEGRITY: 6000	W	ELL TAG: N/A		LOCK#: N/A
REMARKS: SMALL CRACK	- NEAR TO	OF CASI	ING ON	EAST SIDE (photo)
SIGNATURE:				Page ${\cal S}$ of ${\cal S}$

Distribution: White - Lab; Pink - Originator Rev. 031308

Section Sect	Second Second Second Secon	Relinquished by:		Relinquished by:	Relinquished by:				10(00 0		. A I	~ - ∞	MW-3	Sample Designation			Project Address:	1013 GWM EVENI		#:0.4 P.O. #	Fax Number: 425 - 298-1019	nber: 198 -1016	/Address: 134版 CT NE	DAUL FAIRBAIRN	Project Contact (Hardcopy or PDF To):	Analytical LC
Time Received by Laboratory Requires	Sierve Grand Regent Ell Agent File State (FPA 8260B) Time Received by Laboratory Time Received by Lab	Date		Date	4,	Pario						2/27/3 09:40	17:3 8:4:72	Date Time			Sampling						(JO2			2795 2110 30 est, Davis, CA 95618 Lab: 530.297.48 Eav: 530.297.4
Water Soil Air Six Request Request For Lab Use Of Chair-of-Custody Record and Carlot of Chair of	None	=		i						X	X X	S S	0 0	S S) ml V leeve oly	OA.	Conta		Sampler Sig	Sampler Pri	Bill to:	User Study	User Localio		Washington	
Soil Air Six Air Air Six Air Air	Soil Air		<u> </u>							700		000	0000	T	ediar ICI INO ₃				gnature:	HARPER			j on to:	1		
Tor Lab Use Only Tor Lab Use Only Tor Lab Use Only	Time									X	0 - - -				Soil Air MTBE		ppb (E	PA	3260	В)						SRG # / Lab No.
TPH as Dieser (EFA 0015M) TPH as Motor Oil (EPA 8015M) CAM 17 Metals (EPA 200.7 / 6010) S Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010) S Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010)	The state of the column The	c				Remarks:				ð		> @	\$\bar{2}{2}		5 Oxygo 7 Oxyg Lead 5	enates (genates Scav. (*	5 (5 ox	y + I	1,2 E	, MeOH DB) (E	l) (EP <i>l</i>	8260			Chain-of-	
(FDA 2454 / 7470 / 7471)	Mercury (EPA 245.1 / 7470 / 7471)		For Lab Use C												Volatil Volatil TPH a	e Orga e Orga is Dies is Moto	nics F nics (I el (EP or Oil (uil Li EPA A 80 EPA	st (E 524.: 15M) 801	PA 826 2 Drinki) 5M)	ng Wa	ter)	GE GE	Analysis Requ	Record	
										 X		S [2	5	8	Mercu Total W.E.1	ury (EP Lead (I I. Lead	A 245 EPA 2 (STL	.1 / 7 00.7	470	/7471)		7 / 6010	cle method	est		Pag

Stantec ;	WORK REC	QUEST FORM	REVE
JOB NAME:	Former 7-Eleven 25821	JOB NUMBER:	185750037
SITE ADDRESS:	1824 George Washington	START DATE:	ッカ ッ 人3
	Richland, WA		
PREPARED FOR:	Detrie Hanson F H	PREPARED BY:	Øeitrie Hansen ∆H √
N	OTE:	REVIEWED BY:	Paul Fairbairn
WORK DESCRIPTION:			
1. Review H&S Plan.			
	k in with Station Manager and c	ontact Paul Fairbairn	
	ct Health and Safety briefing and		rmine any traffic flow
	llowing gauging order on Sampli		ming dry remo now.
	ample wells following the sampling		
o. Take a druin for purge	water. Store purge water in dru	ms onsite, make sure they	are labeled properly and secur
7. Take an inventory of a	all waste drums generated by Sta	antec at the site, and mark	locations on site plan.
8. Cali Paul Fairbairn in t	the office prior to leaving the site		
		lumbers:	
		d Travel Time	
	1857500	37.200.0700	
		Information:	
		tec Office: (425) 298-1016	
	Paul Fairbairn Stant	ec Cell: (206) 369-8383	
ANALYTICAL REQUIREM	ENTS:	EQUIPMENT NEEDED	
n n	TPH-GV	H&S olan	
	TPH-Gx	H&S plan	
BT	TPH-Gx EX (8260) IBE, Dissolved Lead	H&S plan Safety Equipment Delineators	

Delineators
Mini cooler for product sample
Low-Flow Purging/Sampling Equipment
Oil/Water Interface Probe
Disposable bailers/ Rope
Peristaltic Pump & Tubing
Drum and labels

AUTHORIZATION:

COMPLETED:

Stantec

SITE VISITATION REPORT





Name(s)	.Deitrie Hanson	: D	ate: 10/17/1	3	Time of Arrival Call-In:	8:40
Arrival Time:	g:30	Departure T	,,)	Time of Departure Call-In	17:00
111101111111111111111111111111111111111		•			Who did you call?	Paul Fairbairn
	WATER SOIL		CARBON EMPTY	well in	DRY 5 FROM TOTAL OPENTO Stall Still TOTAL BUNGTO NO NEL Arans	
			HEALTH AND	SAFETY A	SSESSMENT	
- 15F H	-MSP LOG	- (WHT)	SHIFLO S	UB ON	रा (ह)	
	ME + ERP	san, sedik yeshbos Kabilan dan se	IRST AID t	FIRE E	XT.	
	TRAHIC		PROPER TOD	<u>v</u>		
	SLUPE	,	UBUC IN	0		
	Stop work					
		DES	CDIDTION OF A	CTIVITIES	ONSITE AND NOTES	
B: 30	A00mE				L WHITE SHEITD AF	READYHERE
6:40	(AUEO P		DENC HOLD	Andrew Same	The second secon	
0:11	MENTAL.	NOCEN	BREIF W	RENI	8	
0.50	TALK	SIBLAY	USHIER	6 MAN	IAGER	
8: 00	SET LAP F	ELANI D	SAMPLU	U() +0	ρ	
9:15	REGIN GAUG					The second secon
a: 50	RTN HODE	SZ NUCIT	E-will co	OA DILE	SURVEY DATA IN CE	PORT TODAL.
10:40	finished a	مدنم ا	call to safe	was to	busice_	
<u> </u>	BFGIN SAN	3 11 6 7	@ MW 7		. (184). (1. (184).	
110:41					derov tods	
17:00			70			
17.05	SOUL	1181E -V	-iu Pick W	D SAM	PLES @ How site	
17:10	DEPART					
		Tarres and a second				
	The second secon			regisk Willel WSAZ		
	granders and second					1/2 /-
						1 1/2
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Stantec HYDROLOGIC DATA SHEET



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Project Name: Former 7-Eleven #25821

Field Technician: Deitrie Hanson. E. HARIEQ

Project Number:

185750037

DTP = Depth to Free Product (FP or NAPH) Below TOC DTW = Depth to Groundwater Below TOC DTB = Depth to Bottom of Well Casing Below TOC

Flow through cell calibrated Y 8 N____

Wells checked for product and gauged prior to commencement of bailing or purging the wells Y N___

WELL OR			MEASUR	REMENTS					
LOCATION		TIME	DTP (feet)	DTW (feet)	DTB (feet)	PURGE? (Y/N)	SHEEN? (Y/N)	SAMPLE? (Y/N)	COMMENTS / PROBE CALIBRATION
MW-1		9:14		16.75	19.73	N	414	N	
MW-2		9:30		16.80	18.10	N	N/A	N	
MW-3		9:37		16.67	19:33			γ	
MW-4		9:47		1479	18.41	N	N/A	N	
MW-5		9:53		16.46	16.50	N	A(V)	M	DRY
MW-6		10:05		15:77	19.06			V	
MW-7		10:14	es 1851	15.56	18.03	Y	NO	γ	
NW-8		10:20	Ĭ.c.	15.68	16.75			V	
MW-9		10:25		16.01	23.18			γ	
MW-10		10:28			23.10			γ	
MW-11		10:33		16.25	4.70			Υ	
MW-12		10:40		14.96	21.60			γ	



3rd QUARTER 2013 SAMPLING REQUEST

7.Flavon Service	Station No 25821-	. Located	at 1824 George W	Vashing	7.Fleven Service Station No 25821-1 ocated at 1824 George Washington: Richland, WA 99354						
						1		<u> </u>			
Project No.	Task				Project Manager	Date		 G E	15- 15-15 15- 15-15 15- 15-	Client Contact:	
185750037	200.0700				Paul Fairbaim	10/03/13		至	QFA.	Jose Rios	1,
ġ								-			
Well	Gaud.	Gaud.	Mel	Samp.	Analyses	Well	Top of Casing		Depth of Pump intake	Comments	
Number	Freq.	Order	Number	Order		Depth	Screen	Dia.	(ft bTOC)		
MW-3		-		-	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Tolal Lead						
MW-5		2		2	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Tolal Lead						
MW-6		5		5	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
MW-7		4		4	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
MW-8		ო		3	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
WW-9		ဖ		9	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
MW-10		7		7	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
MW-11		8		∞	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
MW-12		6		6	NWTPHG, BTEX (8260), EDB, EDC, MTBE, Total Lead						
Notes:											
*Review and si	ign HASP prior t	to arriving	on site. Chec	k in w	*Review and sign HASP prior to arriving on site. Check in with station manager and Stantec Project Manager Paul Fairbairn: Cell: 206 369 8383; Office: 425 298 1016	baim: Cell: 2	06 369 83	83; Off	ce: 425 298 10	ИБ	
* Implement St	* Implement Stantec low flow purging and sampling procedures.	ourging a	nd sampling pr	ocedu	Ires.						
*NWTPH-Gx,	*NWTPH-Gx, BTEX (8260), MTBE, EDC, EDB, Dissolved Lead	(TBE, EC	C, EDB, Disso	ived L							
*The wells are	now historically	clean, if	product or shee	en is fo	*The wells are now historically clean, if product or sheen is found, use Stop Work Authority and contact the 7-Eleven Project Manager Paul Fairbairn immediately.	oject Manag	er Paul Fa	airbairn i	mmediately.		
*Please gauge	e all selected we	lls first ar	ad proceed to s	ample	*Please gauge all selected wells first and proceed to sample all wells unless otherwise noted.					2000 - 20	
*Store water	in drum on-site.	Label dr.	um with content	ts with	*Store water in drum on-site. Label drum with contents with a Non Hazardous Waste Drum label and note in the field log	50					
	No.	wells dan	No. wells gauged without sampling:	mpling				Total we	Total wells sampled:		
)	. Popula Burded) irond		ĺ					
			CallOlis	26.5							

Stantec V	Stantec VATER SAMPLE FIELD DATA SHI	
PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc. LOCATION: 1824 George Washington Way; F	Purged & Sampled By:	Well & Sample ID: MW-7
Purged & Sampled Date: 10/13/13 SAMPLE TYPE: Groundwater x CASING DIAMETER: 2"	4"_7/6"	LOW-FLOW USED: nt Effluent Other
Casing Volume: (liters per foot) DEPTH TO BOTTOM (feet) = 18.00 DEPTH TO WATER (feet) = 15.50 WATER COLUMN HEIGHT (feet) = 2.40		ACTUAL PURGE (\$ L) = 3, 15 L
	FIELD MEASUREMENTS	
Calculated Variance of Final Three Samples Acceptable Variance Limits DEPTH TO PURGE INTAKE DURING PURGE QTY OF SAMPLE VESSELS & PRESERVATION 3-HCL VOA'S PER WELL 2-Unpreserved VOAs	S: <u>≤ 10%</u> <u>≤ 3%</u> GE: <u>16 5 A</u> SAMPLE DTV VE:	ANALYSES: PH-G, BTEX (8260), MTBE, EDC
2-Unpreserved VOAs 1-Unpreserved 250 mL Poly		EDB Dissolved Lead
PURGING EQUIPMENT: Geotech Peristaltic pump		SAMPLING EQUIPMENT: YSI
Flow Through Cell Disconnected Prior to Samp	ole Collection?: YES	NO
WELL PAD CONDITION: OK WELL VAULT CONDITION: OK WELL INTEGRITY: OK REMARKS: WELL LID DAMAGE	WELL CASING COL	NDITION: GOOD
SIGNATURE:	2	Page 1 of &

◯ Stantec	Sta WATER SAMPLE	antec : FIELD DATA SI	Œ		ELEVEN
PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc. LOCATION: 1824 George Washington V	E. Harpy	& Sampled By:		Well & Samp MW-6	
Purged & Sampled Date: 10/04/13 SAMPLE TYPE: Groundwater	START (2400hr): Sample Time: x Surface Wate	11:40 12:00 r Treatm	ent Effluent	LOW-FLOW US	ED: 6
CASING DIAMETER: 2" (6)	S 4" (0.6)	(1.46)			. Paint (incide) Section (incide)
	7-7 3.19		ACTUAL PUR	3E (\$L) = <u>2</u> .	25 L
	FIELD MI	EASUREMENTS			
11:50 0.5	(L) (degrees C) 0 20.57 0 20.72 -S 70.76	CONDUCTIVITY (umhos/cm) 1 939 1.4860 1.940 1.946	pH (units) 5.61 5.35 5.17 5.26	COLOR (visual) LIEAR CUEAR CLEAR CUEAR	0.R.P. - 78.3 - 108.5 - 112.7 - 118.6
Calculated Variance of Final Three S Acceptable Variance	e Limits: <u>≤ 10%</u>	≤3% L SAMPLE D	≤ 0.1		≤ 10%
DEPTH TO PURGE INTAKE DURING	3 PURGE: <u>(8.00 t)</u>	SAMILE E			
QTY OF SAMPLE VESSELS & PRESE		N	ANALY VTPH-G. BTEX (8	/SES: 3260), MTBE, EDC	<u>Nasagawa II.</u> Tunggala
3-HCL VOA'S PER 1 2-Unpreserved VO			ED	Application of the second of t	
1-Unpreserved 250 n			Dissolve	d Lead	*, *
BUSONO FOLUNI	ENT	1	SAMPLING E	QUIPMENT:	
PURGING EQUIPM Geotech Peristaltic			Y5		
Flow Through Cell Disconnected Prior	to Sample Collection?:	YES X	NO		nanjago estinggo
WELL PAD CONDITION: Con		WELL CASING	CONDITION:	3 000	
WELL VAULT CONDITION:		SEAL PRESENT?: 1	<u>65</u>	OLTS PRESENT?	3/3
WELL INTEGRITY: 600	<u> </u>	WELL TAG: N	<u> </u>	LOCK#: N	<u>k</u>
REMARKS:					
		7			No.

Calculated Variance of Final Three Samples: Acceptable Variance Limits: ≤ 10% ≤ 3% ≤ 0.1 ≤ 10°	CLIENT NAME: 7-Eleven, Inc. C.	LIENT NAME: 7-Eleven, Inc. C. HARQES MW-8	Stantec V	Sta VATER SAMPLE	nntec FIELD DATA S	HEET		ELEVE
DOCATION: 1824 George Washington Way; Richland, WA	Time	No. 1824 George Washington Way; Richland, WA	PROJECT #: 185750037	Purged 8	Sampled By:		Well & Sam	ple ID:
Purged & Sampled Date: START (2400hr):	Purged & Sampled Date: START (2400hr): 12:12 Sample Time: 12:30 LOW-FLOW USED: 12:30 LOW-F	Purged & Sampled Date: START (2400hr): 12 1/2	CLIENT NAME: 7-Eleven, Inc.	E.HAR	PER		MW-	8
Sample Time: 12.3	Sample Time: 12.	Sample Time: 12 30 LOW-FLOW USED: 6	ATION: 1824 George Washington Way;	Richland, WA		The Region of Control of Control		
SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other	PLE TYPE: Groundwater X Surface Water Treatment Effluent Other	Column C						
ASSING DIAMETER: 2"	G DIAMETER: Volume: (illers per foot) 2" \(\frac{1}{(0.6)} \) 4" \(\frac{1}{(0.6)} \) 6" \(\frac{1}{(1.46)} \) H TO BOTTOM (feet) = \(\frac{1}{5} \) \(\frac{1}{6} \)	S DIAMETER:	_10/13/13	Sample Time: /	<u> U BO </u>		LOW-FLOW US	SED: 6
ACTUAL PURGE (Not.) = 1.0 -	Volume: (liters per foot) (0.16) (0.6) (1.46)	Volume: (liters per foot) (0.16) (0.6) (1.46) TO BOTTOM (feet) = 16.75 TO WATER (feet) = 15.68 COLUMN HEIGHT (feet) = 11.07 ACTUAL PURGE (\$\frac{1}{2}\)L) = 2.00 L FIELD MEASUREMENTS TIME	WPLE TYPE: Groundwater x	Surface Water	Treatn	nent Effluent	Other _	
REPTH TO WATER (feet) = 15.68	TO WATER (feet) = 15.68	TO WATER (feet) = 15.68 R COLUMN HEIGHT (feet) = 11.03 FIELD MEASUREMENTS FIELD MEASUREMENTS FILID MEA	경우 가지 하는 것이 가장 하면 가장 하는 것이 되었다. 그 그는 그는 것이 한 국가는		(1.46)			
FIELD MEASUREMENTS FIELD MEASUREMENTS PATE TIME (2400hr) (L) (degrees C) (unihos/cm) (units) (visual) (visual	FIELD MEASUREMENTS CONDUCTIVITY PH COLOR O.R.P. (visual) (vi	ACTUAL PURGE (ML) = 1.00						
FIELD MEASUREMENTS DATE TIME VOLUME (degrees C) (umhos/cm) (units) (visual) (visual) (12:2.1 0.5.0 21.2.2 2.7.71 5.7.4 CLFAR 73.2 (12:2.4 1.0.0.2 71.79 2.8.29 5.77 CLFAR 2.7.0 (12:2.4 1.0.0.2 71.79 2.8.29 5.7.0 CLFAR 2.7.0 (12:2.4 1.0.0.2	FIELD MEASUREMENTS TIME VOLUME (degrees C) (umhos/cm) (units) (visual) 12:21 0.50 21:22 2.771 5.24 CLEAR 73.2 12:24 1.00 7.12 2.829 5.0 CLEAR 24.0 12:24 1.40 21.22 2.853 5.05 CLEAR 24.0 12:24 1.40 21.22 2.853 5.05 CLEAR 24.0 THO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: FSAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC EDB 1-Unpreserved VOAs EDB 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI hrough Cell Disconnected Prior to Sample Collection?: YES NO LL PAD CONDITION: 0 V - QUSTY SEAL PRESENT?: 49 BOLTS PRESENT?: 3/3 WELL INTEGRITY: GOOD WELL TAG: N/A LOCK#: N/A	TIME		the state of the s				
DATE TIME VOLUME TEMP CONDUCTIVITY pH COLOR (Junits) (Juni	Time	TIME	ER COLUMN HEIGHT (feet) = 11.	93		ACTUAL PUR	$GE(\mathbf{K}L) = \underline{2}.$	<u>00 L</u>
DIST(1)	12			FIELD MEA	ASUREMENTS			
12:21	12:21	12:21	ATE TIME VOLUME		그는 그들은 사람들이 가장 하는 것이 되었다.	(4) (4) (4) (4) (4) (4) (4) (4) (4) (4)		O.R.P.
Calculated Variance of Final Three Samples: Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10* DEPTH TO PURGE INTAKE DURING PURGE: 1S ← SAMPLE DTW: STY OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI TO WELL PAD CONDITION: G >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	12:24	12:24 1.00 21.19 28.29 S.U CLFR 21.0 23.0		The second secon				727
Calculated Variance of Final Three Samples: Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10° DEPTH TO PURGE INTAKE DURING PURGE: 15 € SAMPLE DTW: TY OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump VSI VELL PAD CONDITION: G SAMPLE DTW: WELL TAG: VALUE AND CONCEPT STREET SAMPLE SAMPLING EQUIPMENT: VELL VAULT CONDITION: O V - 2 USY WELL TAG: VALUE AND CONCEPT STREET SAMPLED SEAL PRESENT?: 2/3 WELL TAG: VALUE AND CONCEPT STREET SAMPLED SEAL PRESENT?: 2/3 WELL TAG: VALUE AND CONCEPT STREET SAMPLED SEAL PRESENT?: 2/3 WELL TAG: VALUE AND CONCEPT STREET SAMPLED SEAL PRESENT?: 2/3 WELL TAG: VALUE AND CONCEPT STREET SAMPLED SEAL PRESENT?: 2/3	12: 23	International Program Inte	The state of the s			3.07		A CONTRACTOR OF THE STATE OF
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: TY OF SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAs EDB 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI WELL PAD CONDITION: G SOO WELL CASING CONDITION: GOOD ELL VAULT CONDITION: OV - QUSTY SEAL PRESENT?: 3/3 WELL INTEGRITY: GOOD WELL TAG: V/A LOCK#: V/A	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHOOLITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WELL T	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(The state of the s	21.22	Committee of the commit	5.05		27.0
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: Y OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 1-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump YSI WELL PAD CONDITION: G >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHOOLITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WELL T	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(<u> </u>	
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Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHOOLITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WELL T	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(<u> </u>	
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHOOLITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WELL T	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(\ \ \ \ \
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: TY OF SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS EDB 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI WELL PAD CONDITION: G >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHURCH PAD CONDITION: GOOD WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WE	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(ΔL_{\odot} .
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤106 DEPTH TO PURGE INTAKE DURING PURGE: 1.5	Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% PTH TO PURGE INTAKE DURING PURGE: 1.5 Q. SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump PURGING EQUIPMENT: Geotech Peristaltic pump YSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHURCH PAD CONDITION: GOOD WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: WE	Acceptable Variance Limits: \$\leq 10\%\$ \$\leq 3\%\$ \$\leq 0.1\$ \$\leq 10\%\$ TH TO PURGE INTAKE DURING PURGE: \$\leq 25 \text{ Q}\$ SAMPLE DTW: \$\leq 3\mathbb{A}\$ SAMPLE VESSELS & PRESERVATIVE: ANALYSES: 3-HCL VOA'S PER WELL NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: YES \(\) NO L PAD CONDITION: G \(\) WELL CASING CONDITION: G \(\) BOLTS PRESENT?: 3/3 WELL INTEGRITY: G \(\) WELL TAG: \(\) \(\) \(\) LOCK#: \(\) \(17.11
DEPTH TO PURGE INTAKE DURING PURGE: 2.5 Q. SAMPLE DTW: TY OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 1-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump TYSI WELL PAD CONDITION: WELL CASING CONDITION: SEAL PRESENT?: WELL TAG:	TH TO PURGE INTAKE DURING PURGE: 15 Q SAMPLE DTW: F SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 1-Unpreserved VOAS 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump TYSI CANALYSES: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI CHOOLITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG:	TH TO PURGE INTAKE DURING PURGE: 25 Q: SAMPLE DTW: SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI Trough Cell Disconnected Prior to Sample Collection?: L PAD CONDITION: G 200 WELL CASING CONDITION: G 201 WELL TAG: MA LOCK#: MA KS:	선 이 이는 사람들은 이 아이들은 그래요 사람들은 것은 사람이 되었는데 이 작가를 하는 것을 하는 것 같아.					2400
ANALYSES: 3-HCL VOA'S PER WELL 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump WELL PAD CONDITION: WELL VAULT CONDITION: WELL INTEGRITY: WELL INTEGRITY: WELL TAG: WELL TAG: WELL CASING CONDITION: WELL TAG: WELL TAG: WELL TAG: WELL CASING CONDITION: WELL TAG: WELL TAG: WELL CASING CONDITION: WELL TAG: WELL TAG: WELL TAG: WELL CASING CONDITION: WELL TAG: WELL TAG	ANALYSES: 3-HCL VOA'S PER WELL 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI hrough Cell Disconnected Prior to Sample Collection?: LL PAD CONDITION: GOOD WELL CASING CONDITION: OV QUSTY SEAL PRESENT?: WELL TAG: WELL TAG: WELL TAG: WELL TAG: LOCK#: LOCK#:	ANALYSES: 3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump YSI POD CONDITION: ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: YSI POD WELL CASING CONDITION: GOOD WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: W	Acceptable Variance Limit			<u> </u>		≤ 10%
3-HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump WELL PAD CONDITION: GWELL VAULT CONDITION: WELL INTEGRITY: WELL INTEGRITY: GOOD NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead NO VSI NO WELL CASING EQUIPMENT: YES NO WELL CASING CONDITION: SEAL PRESENT?: WELL TAG: WELL TA	3-HCL VOA'S PER WELL 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump Tysi Chrough Cell Disconnected Prior to Sample Collection?: VAULT CONDITION: WELL CASING CONDITION: WELL TAG: WELL TAG: WELL TAG: NOTE TO SAMPLING EQUIPMENT: YES NOTE TO SAMPLING EQUIPMENT: WELL CASING CONDITION: WELL TAG: WEL	3-HCL VOA'S PER WELL 2-Unpreserved VOAS 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI PAD CONDITION: GOOD WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: GS: WELL TAG: WELL TAG: WELL TAG: WELL TAG: WITH A CONDITION: SEAL PRESENT?: WELL TAG: WEL	PTH TO PURGE INTAKE DURING PUR	GE: <u>15 A</u>	SAMPLE D	тw:	≤	
2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump VSI OW Through Cell Disconnected Prior to Sample Collection?: WELL PAD CONDITION: GOOD WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: COOD WELL TAG: W	2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI hrough Cell Disconnected Prior to Sample Collection?: LL PAD CONDITION: GOOD VAULT CONDITION: OK - QUSY WELL TAG: WELL TAG: VALUE TAG: V	2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI rough Cell Disconnected Prior to Sample Collection?: L PAD CONDITION: GROWN WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG: W		IVE:		ANALY	YSES:	
1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump OW Through Cell Disconnected Prior to Sample Collection?: WELL PAD CONDITION: GEODE WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: GEODE Dissolved Lead NO YES NO WELL CASING CONDITION: SEAL PRESENT?: WELL TAG: WELL	1-Unpreserved 250 mL Poly PURGING EQUIPMENT: Geotech Peristaltic pump hrough Cell Disconnected Prior to Sample Collection?: LL PAD CONDITION: GOOD VAULT CONDITION: OK - RUSY WELL TAG: WELL TAG: LOCK#: LOCK#: Dissolved Lead Dissolved Lead NO YSI BOLTS PRESENT?: 3/3	PURGING EQUIPMENT: Geotech Peristaltic pump TOUGH Cell Disconnected Prior to Sample Collection?: PAD CONDITION: GOOD WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: GOOD WELL TAG: WE	dan mengangan pengganan pengganan dan pengganan pengganan menggangan penggangan dan menggangan penggangan peng		<u> </u>	San State State State State State State State		
PURGING EQUIPMENT: Geotech Peristaltic pump YSI OW Through Cell Disconnected Prior to Sample Collection?: WELL PAD CONDITION: GOOD WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: GOOD WELL TAG: PURGING EQUIPMENT: Geotech Peristaltic pump YSI hrough Cell Disconnected Prior to Sample Collection?: YES K NO LL PAD CONDITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL CASING CONDITION: SEAL PRESENT?: WELL INTEGRITY: WELL INTEGRITY: GOOD WELL TAG: W	PURGING EQUIPMENT: Geotech Peristaltic pump Trough Cell Disconnected Prior to Sample Collection?: PAD CONDITION: GOOD WELL CASING CONDITION: GOOD WELL TAG: W					The same of the same of the		
Geotech Peristaltic pump WELL PAD CONDITION: ELL VAULT CONDITION: WELL INTEGRITY: GOOD WELL TAG: WELL TA	Geotech Peristaltic pump YSI hrough Cell Disconnected Prior to Sample Collection?: LL PAD CONDITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL CASING CONDITION: WELL TAG:	Geotech Peristaltic pump YSI rough Cell Disconnected Prior to Sample Collection?: YES K NO L PAD CONDITION: Good AULT CONDITION: OK - QUSTY WELL INTEGRITY: Good WELL TAG: NA LOCK#: NA KS:	r-onpreserved 200 IAL POly			DISSOIVE	u Leso	
WELL PAD CONDITION: Good WELL CASING CONDITION: Good WELL VAULT CONDITION: OK - RUSTY SEAL PRESENT?: 199 BOLTS PRESENT?: 3/3 WELL INTEGRITY: Good WELL TAG: NA LOCK#: NA	hrough Cell Disconnected Prior to Sample Collection?: VES_KNO WELL CASING CONDITION: VAULT CONDITION: OK - RUSY SEAL PRESENT?: WELL TAG: VALUE TA	rough Cell Disconnected Prior to Sample Collection?: YES X NO WELL CASING CONDITION: GOOD WELL CASING CONDITION: GOOD WELL TAG: WELL TAG	PURGING EQUIPMENT:			SAMPLING E	QUIPMENT:	
WELL PAD CONDITION: GOOD WELL CASING CONDITION: GOOD WELL CASING CONDITION: GOOD WELL TAG: WA LOCK#: WA	WELL CASING CONDITION: GOOD VAULT CONDITION: OK - QUSTY WELL INTEGRITY: GOOD WELL TAG: VA LOCK#: N/K	WELL CASING CONDITION: GOOD WALL CONDITION: GOOD WELL TAG: W	Geotech Peristaltic pump			YS	S	
WELL INTEGRITY: GOOD WELL TAG: WA LOCK#: NA	WELL INTEGRITY: GOOD WELL TAG: NA LOCK#: NA	WELL INTEGRITY: GOOD WELL TAG: WA LOCK#: N/A	Through Cell Disconnected Prior to Sam	ple Collection?:	YES_K	NO_		
WELL INTEGRITY: GOOD WELL TAG: WA LOCK#: WA	WELL INTEGRITY: COON WELL TAG: NA LOCK#: NA	WELL INTEGRITY: GOOD WELL TAG: WA LOCK#: WA	ELL PAD CONDITION: G 000		WELL CASING C	ONDITION:	COOL	
		(S:	L VAULT CONDITION: <u>のドー &</u>	btγ sea	AL PRESENT?:	<u>ү</u> 97 вс	OLTS PRESENT?	3/3
	₹KS:		WELL INTEGRITY: 6000	W	ELL TAG: W/	1	LOCK#: <u> </u>	
医肌性畸胎 医 病 医乳腺			APKC.					
EMARKS: ALA, ALA, ALA, ALA, ALA, ALA, ALA, ALA								

PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc. OCATION: 1824 George Washington Way; F	Purged & Sampled By: ELLARPER Richland, WA	Well & Sample ID:
Purged & Sampled Date:		
SAMPLE TYPE: Groundwater x	START (2400hr): 12:40 Sample Time: 13:10 Surface Water Treatment Effluent	LOW-FLOW USED: 5
CASING DIAMETER: 2" X (0.16)	4" (0.6) 6" (1.46)	THE STATE OF STATES AND ASSESSED.
DEPTH TO BOTTOM (feet) = 23.18 DEPTH TO WATER (feet) = 16.0 WATER COLUMN HEIGHT (feet) = 7		PURGE (\$L) = 3.25
	FIELD MEASUREMENTS	
DATE (2400hr) (L) (12'48 0.45 (12'51 0.35 (12'57 1.50 (13'00 2.50 (13'00 2.50 (13'00 2.50 (13'00 2.45 (13'00 2.45 (13'00 2.45 (13'00 2.45 (13'00 2.45 (13'00 2.45 (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45) (13'00 2.45 (13'00 2.45) (13'00 2.45 (14'00 2.45) (15'00 2.45 (15'00 2.45) (15'00 2.45 (15'00 2.45)	ts: <u>≤ 10%</u> <u>≤ 3%</u> <u>≤ 0.°</u> RGE: <u>22.00</u> A SAMPLE DTW: RIVE:A	(visual) 3
2-Unpreserved VOAs	Dis	EDB ssolved Lead
1-Unpreserved 250 mL Pol	<u> </u>	
PURGING EQUIPMENT: Geotech Peristaltic pump		NG EQUIPMENT: YSI
Flow Through Cell Disconnected Prior to San	ipie concouoni.	
WELL PAD CONDITION: 6000 - WELL INTEGRITY: 6000 - REMARKS:	SEAL PRESENT?: Yes	BOLTS PRESENT?: 1/2

	WATER SAMPLE	: FIELD DATA S	HEET		ary	
PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc.				Well & Sample ID:		
OCATION: 1824 George Washington Way	E HAP-PER			MW-12		
		.0				
Purged & Sampled Date:	START (2400hr):	13:20			~	
io/i크/i3 SAMPLE TYPE: Groundwater ;	Sample Time: Surface Water	13:45 Troots	t Efficant	LOW-FLOW US	SED: ()	
			nent Effluent	Other _		
CASING DIAMETER: 2" X Casing Volume: (liters per foot) (0.16)	4* <u>(0.6)</u> 6	(1.46)				
EPTH TO BOTTOM (feet) =						
DEPTH TO WATER (feet) = [4, 9]						
VATER COLUMN HEIGHT (feet) = 6.0	A second of the		ACTUAL PUR	RGE (6 L) = <u>3</u> ,	<u>08 l</u>	
	FIELD ME	ASUREMENTS				
DATE TIME VOLUME の月413 (2400hr) (L)	TEMP (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	0.R.P.	
13:30 0.50	19.76	2.721	6.49	GRY/CL	48.6	
13:33 0.75	19.85	2.716	5.98	GRY/CL	56.9	
13:36 1.15	_ 19.91	2.681	5.48	GRY/CL	<u>68.5</u>	
13:39 1.50	19.92	2.632	5.26	GRYCL	76.7	
1 13:41 1.00 13:44 2.50	_ <u>19.96</u> 20.15	2.608 2.597	5.19 5.23	GRY/CL	38.5	
		<u></u>		CLEAR	70.5	
				$\rightarrow \overline{}$		
					15 Th	
Calculated Variance of Final Three Samp						
Acceptable Variance Lin	its: <u>≤ 10%</u>	≤ 3%	≤0.1		≤10%	
DEPTH TO PURGE INTAKE DURING PU	RGE: <u>20.60 f</u> }	SAMPLE D	тw: <u>></u>	<u> </u>		
TY OF SAMPLE VESSELS & PRESERVA			ANALY			
3-HCL VOA'S PER WELL		<u>Nv</u>		3260), MTBE, EDC		
2-Unpreserved VOAs 1-Unpreserved 250 mL Poly			ED Dissolve			
	-		DISSUIVE	u Loau		
PURGING EQUIPMENT:		SAMPLING EQUIPMENT:				
Geotech Peristaltic pump			YS	3)		
low Through Cell Disconnected Prior to Sa	mple Collection?:	YES X	NO			
WELL PAD CONDITION: (5005	NBN	WELL CASING C	ONDITION:	G000-We	w	
ELL VALUE CONDITION						
'ELL VAULT CONDITION: 6006 - N	<u>ルー</u> SE	AL PRESENT?: Y	<u>ሂ</u> ડ BC	OLTS PRESENT?	7/2	
WELL INTEGRITY: 6000 ~ 1	JOW V	VELL TAG: BHV	321	LOCK#: W/	Δ	
EMARKS:				ameter attaktive		
				and the second s		

◯ Stantec	Stantec NATER SAMPLE FIELD DATA	SHEET
PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc.	Purged & Sampled By:	Well & Sample ID: MW-11
LOCATION: 1824 George Washington Way;	1.1.7.10	
Purged & Sampled Date: \(\frac{10}{13} \) SAMPLE TYPE: Groundwater x	START (2400hr): 14:40 Sample Time: 15:20 Surface Water Tree	LOW-FLOW USED: (5
CASING DIAMETER: 2" 6 (0.16)	- 4" (0.6) 6" (1.46)	
DEPTH TO BOTTOM (feet) = 22.7 DEPTH TO WATER (feet) = 16.2 WATER COLUMN HEIGHT (feet) = 6.1	5	ACTUAL PURGE (\$L) = 4.25 L
	FIELD MEASUREMENTS	
TIME		
DEPTH TO PURGE INTAKE DURING PU	RGE: 22 ft SAMPL	E DTW:
QTY OF SAMPLE VESSELS & PRESERVA 3-HCL VOA'S PER WELI 2-Unpreserved VOAs 1-Unpreserved 250 mL Po	TIVE:	ANALYSES: NWTPH-G, BTEX (8260), MTBE, EDC EDB Dissolved Lead
PURGING EQUIPMENT		SAMPLING EQUIPMENT:
Geotech Peristaltic pump		YSI
Flow Through Cell Disconnected Prior to Sa WELL PAD CONDITION: 600 - N WELL VAULT CONDITION: 600 - N WELL INTEGRITY: 600 - N REMARKS:	WELL CASING SEAL PRESENT?:	NONG CONDITION: GOOD - NEW GLES BOLTS PRESENT?: 1/2 LOCK#: N/A
SIGNATURE:		Page 🕖 of 🧷

PROJECT #: 185750037 Purged & Sampled By: CLIENT NAME: 7-Eleven, Inc. CCATION: 1824 George Washington Way; Richland, WA Purged & Sampled Date: START (2400hr): 5 : 2 9 Sample Time: 5 : 5 5 SAMPLE TYPE: Groundwater x Surface Water Treatment Effluent Other CASING DIAMETER: 2"	Stantec		antec				
CLIENT NAME: 7-Eleven, Inc. [2] ACDEC		ATER SAMPLE	FIELD DATAS	HEET		मध्य	
CLIENT NAME: 7-Eleven, Inc. E	PROJECT #: 185750037	Purged & Sampled By:			Well & Sample ID:		
Purged & Sampled Date: START (2400hr): S : 2 Sample Time: S : 5 Sample Time:	CLIENT NAME: 7-Eleven, Inc.						
SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other	LOCATION: 1824 George Washington Way; Ri	ichland, WA					
SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other	Purged & Sampled Date:	START (2400hr):	15: 29				
SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other		A COLUMN TO THE RESIDENCE OF THE PARTY OF TH	18:55		LOW-FLOW USED:		
Calculated Variance of Final Three Samples: Acceptable Variance Limits: S10% S3% S0.1 S10%	SAMPLE TYPE: Groundwater x	Surface Water	Treatn	nent Effluent_	Other		
DEPTH TO WATER (feet) = 1(0, \(\frac{1}{2} \)			the second control of				
DEPTH TO WATER (feet) = 1(0, \(\frac{1}{2} \)	DEPTH TO BOTTOM (feet) = 23.()						
NATER COLUMN HEIGHT (feet) =							
DATE TIME VOLUME TEMP CONDUCTIVITY pH COLOR O.R.P.				ACTUAL PUF	RGE (\$L) = 3	.25L	
Calculated Variance of Final Three Samples: Acceptable Variance Limits: \$10% SAMPLE DTW: ANALYSES: 3-HCL VOA'S PER WELL SAMPLE DEB SAMPLING EQUIPMENT: Calculated Variance ded Prior to Sample Collection?: VELL PAD CONDITION: Carb - New VELL VAULT CO		FIELD ME.	ASUREMENTS				
Calculated Variance of Final Three Samples: Acceptable Variance Limits: S10% S3% S0.1 S10%	DATE TIME VOLUME	TEMP	CONDUCTIVITY	oH	COLOR	O.R.P.	
1.45		(degrees C)	(umhos/cm)				
15:49							
Calculated Variance of Final Three Samples: Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% DEPTH TO PURGE INTAKE DURING PURGE: 12.0 (SAMPLE DTW: SAMPLE VESSELS & PRESERVATIVE: 3.HCL VOA'S PER WELL 2-Unpreserved VOAs 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: Geotech Peristaltic pump YSI Flow Through Cell Disconnected Prior to Sample Collection?: WELL PAD CONDITION: GOOD NEW VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 115		21.03	A CONTRACTOR OF THE PROPERTY OF				
Calculated Variance of Final Three Samples: Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% DEPTH TO PURGE INTAKE DURING PURGE: 12.0 (1 SAMPLE DTW: SAMPLE DTW: SAMPLE VESSÈLS & PRESERVATIVE: NWTPH-G, BTEX (8260), MTBE, EDC 2-Unpreserved VOAs EDB 1-Unpreserved 250 mL Poly Dissolved Lead PURGING EQUIPMENT: SAMPLING EQUIPMENT: Geotech Peristaltic pump YSI Flow Through Cell Disconnected Prior to Sample Collection?: YES NO WELL PAD CONDITION: GOOD NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 112 VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 112 VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 112 **VICTOR Through Cell Disconnected Prior to Sample Collection?** VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 112 **VICTOR Through Cell Disconnected Prior to Sample Collection?** VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 112 **VICTOR Through Cell Disconnected Prior to Sample Collection?** VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 112 **VICTOR Through Cell Disconnected Prior To Sample Collection?** VELL VAULT CONDITION: GOOD NEW SEAL PRESENT?: 112 **VICTOR THROUGH CELL THROUGH CEL		4.11				30.6	
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% DEPTH TO PURGE INTAKE DURING PURGE: 12.0 (1) SAMPLE DTW: CITY OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 4-CUnpreserved VOAs 5-CUNPRESERVED (8260), MTBE, EDC 2-Unpreserved VOAS 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 1-Unp	<u>/ </u>		<u> 4972</u>	3.34	<u>uear</u>	<u> 23.U </u>	
Acceptable Variance Limits: ≤10% ≤3% ≤0.1 ≤10% DEPTH TO PURGE INTAKE DURING PURGE: 12.0 (1) SAMPLE DTW: CITY OF SAMPLE VESSELS & PRESERVATIVE: 3-HCL VOA'S PER WELL 4-CUnpreserved VOAs 5-CUNPRESERVED (8260), MTBE, EDC 2-Unpreserved VOAS 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 6-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 1-Unpreserved 250 mL Poly 5-CUNPRESERVED (8260), MTBE, EDC 1-Unpreserved 250 mL Poly 1-Unp							
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WELL PAD CONDITION: GOOD - NEW WELL CASING CONDITION: GOOD - NEW SEAL PRESENT?: 105 BOLTS PRESENT?: 2/2							
VELL VAULT CONDITION: 600 - NEW SEAL PRESENT?: 405 BOLTS PRESENT?: 2/2							
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SIGNATURE:

Page 7 of 8

◯ Stantec V	Stante VATER SAMPLE FIEL		ELEVEN		
PROJECT #: 185750037 CLIENT NAME: 7-Eleven, Inc.	Purged & Samp	Well & Sample ID:			
LOCATION: 1824 George Washington Way; F					
Purged & Sampled Date: 16/13/13 SAMPLE TYPE: Groundwater x		30 Treatment Effluent	LOW-FLOW USED:		
CASING DIAMETER: 2" (0.16)	4") (0.6) 6" (1.46	3)	THE STREET STREET		
DEPTH TO BOTTOM (feet) = 19.5 DEPTH TO WATER (feet) = 16.6 WATER COLUMN HEIGHT (feet) = 2.8	7	ACTUAL PUR	GE (GL) = 2-00 L		
	FIELD MEASUR	EMENTS			
Calculated Variance of Final Three Sample Acceptable Variance DURING PUR	(degrees C) (21.13 2. 21.07 2. 21.04 2. 71.03 2. 35: ≤10%	DNDUCTIVITY pH (units) 1.527 7.68 1.509 7.54 1.749 7.45 1.766 2.36 ≥ 3% ≤ 0.1	COLOR (visual) (VEAR		
QTY OF SAMPLE VESSELS & PRESERVAT	rive:	ANAL	YSES:		
3-HCL VOA'S PER WELL		NWTPH-G, BTEX (8260), MTBE, EDC			
2-Unpreserved VOAs 1-Unpreserved 250 mL Poly		EDB Dissolved Lead			
, 019.3331700 250 77E 1 07	4				
PURGING EQUIPMENT:		SAMPLING E			
Geotech Peristaltic pump	<u> </u>	<u> </u>			
Flow Through Cell Disconnected Prior to San	nple Collection?: Y	ES: 🥱 (September NO)	entre og egytt typeliner lærtet fra term og er		
WELL PAD CONDITION:	A. P. C.	ELL CASING CONDITION:			
WELL VAULT CONDITION: OF	SEAL PF	RESENT?: Mgg B	OLTS PRESENT?: 1/2		
WELL INTEGRITY: POSSIBLY CO		TAG: MA	LOCK#: N/L		
REMARKS: TOOK DICTURE & N	NV = 3 tor Hamage	retervice			
SIGNATURE:	12		Page Sof S		

Project Address: Lashington 1824 GEORGE LASHINGTON Fax Number: 415 - 869 - 1190 Project #: P.O Distribution: White - Lab; Pink - Originator Rev. 031308 Phone Number: 425 - 869 - 9448 Company / Address: Relinquished by: M4-8 RICHIAND, WA 1130 NE 33 CM PIRE BELEVIVE, WA delinquished by: Mw - 10 P-WM Was Sigh とり出 roject Name: \$5755037 NW1-ANT FEBREAT SY 3/2/ J- MIN マとしい ect Contact (Hardcopy or PDF To): Sample Designation P.O. #: 25821 2795 2nd Street, Suite 300 Davis, CA 95618 Lab: 530.297.4800 Fax: 530.297.4802 **沙木**/0i Date Sampling 16:30 13:45 .\$5:\$1 تة 0 12:30 8:4 Date Date 10/18/13 1:35 35 Time Bill to: Washington EIM Report? Sampler Signature: Sampler Print Name: EMILY HARPER User Location ID: 0 40 ml VOA OX Jser Study ID: Sleeve Poly 358 Time X 0 Time Time Glass Tedlar Received by Laboratory: Received by: Received by: HCI HNO₃ None Ø ĕ Water SRG # / Lab No. Soil 중 Аіг MTBE @ 0.5 ppb (EPA 8260B) BTEX (EPA 8260B) NW-TPH Gx Kemarks: Temp °C 5 Oxygenates (MTBE, DIPE, ETBE, TAME, TBA) (EPA 8260 Chain-of-Custody Record and Analysis Request 7 Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B) Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B) Initials Volatile Halocarbons (EPA 8260B) Volatile Organics Full List (EPA 8260B) Volatile Organics (EPA 524.2 Drinking Water) For Lab Use Only: Analysis Request TPH as Diesel (EPA 8015M) Date TPH as Motor Oil (EPA 8015M) CAM 17 Metals (EPA 200.7 / 6010) 5 Waste Oli Metals (Cd,Cr,Nl,Pb,Zn) (EPA 200.7 / 6010) Mercury (EPA 245.1 / 7470 / 7471) Sample Receipt Total Lead (EPA 200.7 / 6010) TIME W.E.T. Lead (STLC) Page NW-TPHDx Therm. ID# EDC, EDB DISSOLVED LEAD □ 12 hr <u>₹</u>826 **율** □ Coglant Present TAT Yes 9

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For Lab Use Only

STANTEC MONITORING WELL PURGING AND SAMPLING PROCEDURES

Monitoring well purging and sampling was conducted using U.S. Environmental Protection Agency (EPA) approved low-flow sampling techniques.

Purging Procedures

- A. Using a decontaminated instrument (i.e., tape measure, continuity meter, or interface probe) measure the depth to groundwater in reference to the measuring point at the top of the casing. Measure the total depth of the well to calculate the height and volume of water in the borehole.
- B. Based on previously obtained data, if a monitoring well is suspected of containing liquid-phase hydrocarbon (LPH) concentrations, lower a transparent bailer into the well to evaluate the presence of a LPH sheen on the water table.
- C. Decontaminate the purge pump and/or PVC bailers by scrubbing in Alconox detergent solution, followed by a tap water rinse and then a deionized water rinse.
- D. Purge, by low-flow pumping (less than 0.5 liters per minute) for approximately five minutes. If low-flow purging is not possible and bailing is used to purge the well, then a minimum of three well volumes will be removed. If the well goes dry, the procedure listed in step E2 (below) should be followed. Parameters should be measured after each ½-casing volume is removed.
- E. Conduct field measurements (i.e., pH, specific conductivity, temperature, and oxidation-reduction potential) note clarity, color, turbidity, and odor of purge water, and measure depth to groundwater.
 - 1. If the well has not been purged dry, continue to pump and conduct field measurements (including depth to water) again every five minutes during purging.
 - a) If the first through third series of measurements vary by less than 10 percent, the well has been adequately purged. Allow the well to recover to 80 percent of its static condition and begin the sampling procedure.
 - b) If the measurements vary by 10 percent or greater, repeat Step E1 above.
 - c) If a minimum of three parameters cannot be measured during purging, remove three well volumes prior to sampling.
 - 2. If the well has been purged dry, measure the water level and allow the well to recharge to 80 percent, or for two hours, whichever occurs first. Calculate the percent recovery, and begin the sampling procedure.

Sampling Procedures

- Use the pump to collect the groundwater sample.
- Transfer the groundwater sample into the appropriate container(s). Where applicable, some containers
 are completely filled to achieve zero headspace. Label the samples according to location and date
 of collection.
- Enter the samples into Chain-of-Custody and preserve on ice until delivery to the analytical laboratory. Complete the Well Development or Purging/Sampling Log to be stored in the project file.

When requested by the client, collect a bailer rinsate blank of deionized water to check decontamination procedure. In addition, trip blanks prepared by the laboratory and kept with the samples may be included to check for cross contamination of samples within the cooler. Additional and/or alternate QA/QC samples can be collected and analyzed upon client request.