SECOR

SECOR INTERNATIONAL INCORPORATED

www.secor.com

2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

DATE: March 10, 2005

7-ELEVEN, INC. QUARTERLY REPORT

Store No.: 24013 Address:	7607 Broadway, Lemon Grove, CA
7-Eleven Inc. Environmental Engineer:	Mr. Ken Hilliard
Consulting Co./Contact Person:	SECOR / Mr. Patrick McConnell
SECOR Project No.:	08EL.24013.05.0506
Primary Agency/Regulatory ID No.:	County of San Diego, Land and Water Quality Division (LWQD)/H20571-001

WORK PERFORMED THIS QUARTER [First - 2005]:

1. Prepared first quarter groundwater sampling and status report. Groundwater monitoring activities were conducted on January 31, 2005.

WORK PROPOSED FOR NEXT QUARTER [Second - 2005]:

1. Perform second quarter groundwater sampling and prepare status report.

Current Phase of Project:	Groundwater Monitoring	(Assmnt, Remed., etc.)
Frequency of Sampling:	Quarterly	(Quarterly, etc.)
Frequency of Monitoring:	Quarterly	(Monthly, etc.)
Are Liquid Phase Hydrocarbons Present On-site:	No	(Yes/No)
Cumulative LPH Recovered to Date:	None	(gallons)
LPH Recovered This Quarter:	None	(gallons)
Bulk Soil Removed to Date:	None	(cubic yards)
Bulk Soil Removed This Quarter:	None	(cubic yards)
Water Wells or Surface Waters w/in a 2000' Radius & Their Respective Directions:	None	(Distance and Direction)
Current Remediation Techniques:	None	(SVES, LPH Removal, etc.)
Permits for Discharge:	None	(NPDES, POTW, etc.)
Approximate Depth to Groundwater:	4.81 to 6.31	(Measured Feet)
Groundwater Gradient:	Northeast	(Direction)
	0.009	(Magnitude)

Discussion: On January 31, 2005, the depths to static water ranged between 4.81 to 6.31 feet below ground surface (bgs). The calculated groundwater flow direction was to the northeast with an approximate gradient of 0.009 ft/ft. All wells were purged and sampled in accordance with the attached procedures. Total petroleum hydrocarbons characterized as gasoline (TPHg) concentrations were detected in the groundwater samples collected from MW-2 and MW-3b at concentrations of 147 micrograms per liter (µg/L) and 84 µg/L, respectively. TPHg was not detected in MW-1, MW-4, MW-5, and MW-6 above a laboratory reporting limit of 50 µg/L.

DATE: March 10, 2005

7-ELEVEN QUARTERLY GROUNDWATER MONITORING REPORT (CONT'D)
7-ELEVEN Facility #24013

Benzene was detected in the groundwater sample collected from MW-2 at a concentration of 1.6 µg/L. Benzene was not detected in MW-1, MW-3b, MW-4, MW-5, and MW-6 above a laboratory reporting limit of 1.0 µg/L. Methyl-t-butyl ether (MTBE) was detected in the groundwater samples collected from MW-1, MW-2, MW-3b, and MW-4 at concentrations of 12 µg/L, 13 µg/L, 58 µg/L, and 1.1 µg/L, respectively. MTBE was not detected in MW-5 and MW-6 above a laboratory reporting limit of 1.0 µg/L.

Based on these results, SECOR recommends evaluation of the site for closure (No Further Action). For the Second Quarter of 2005, SECOR will perform quarterly groundwater sampling, and prepare agency-required reports.

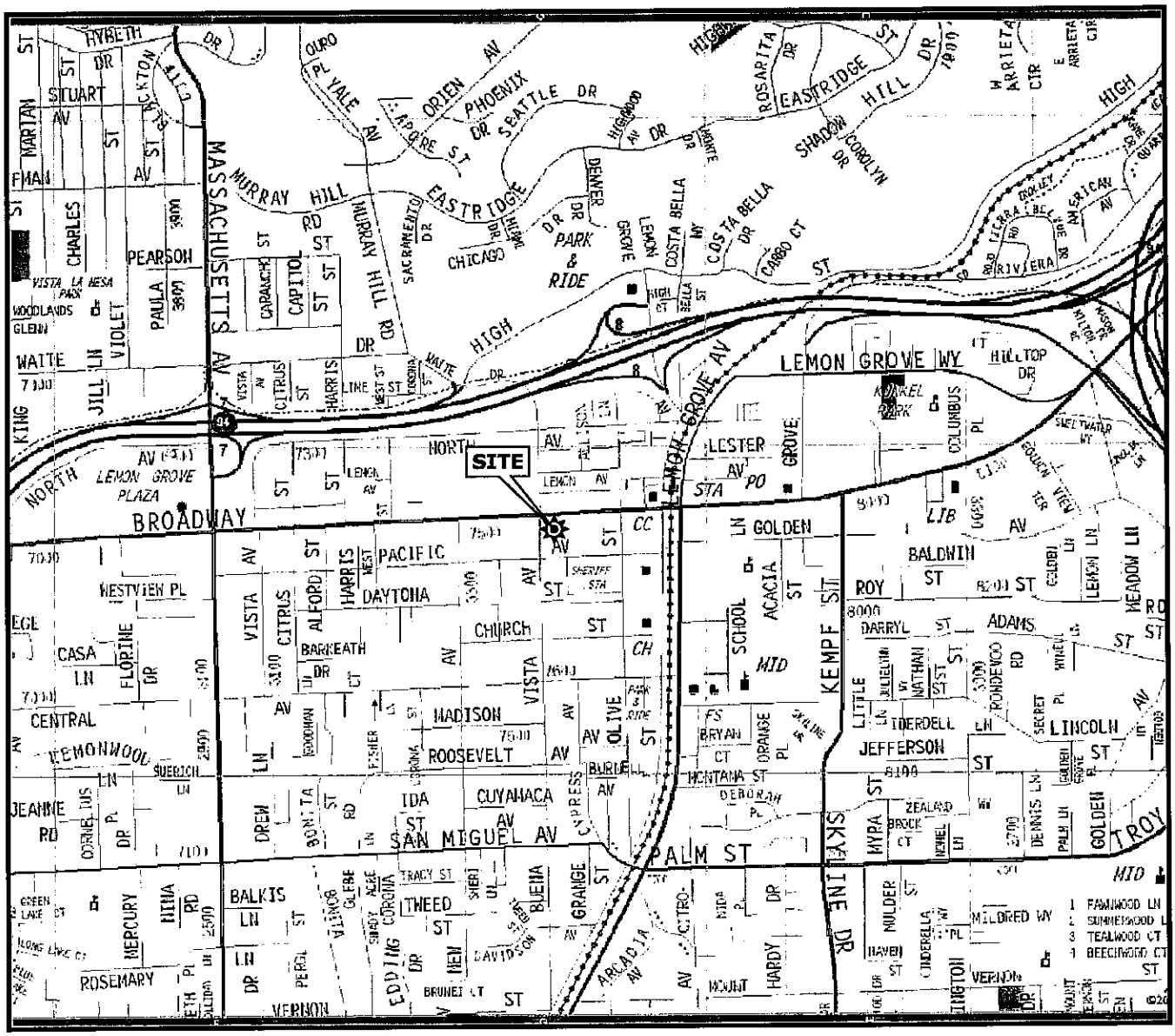
ATTACHED:

- Site Location Map (Figure 1)
- Groundwater Summary Map – First Quarter, 2005 (Figure 2)
- Benzene Isoconcentration Map – First Quarter, 2005 (Figure 3)
- MTBE Isoconcentration Map – First Quarter, 2005 (Figure 4)
- Summary of Groundwater Quality and Elevation Data (Table 1)
- Laboratory Reports and Chain-of-Custody Documentation
- Monitoring Well Gauging Log
- Well Purging and Sampling Logs
- Monitoring Well Purging and Sampling Procedures

Debra A. Eaker
Staff Geologist

Patrick A. McConnell, R.G. #7205
Senior Geologist

REGISTERED GEOLOGIST
PATRICK
A.
McCONNELL
NO. 7205
EXP. 10/06
STATE OF CALIFORNIA



REFERENCE: 2003 THOMAS GUIDE CD-ROM, PAGE & GRID 1270 G6.

N

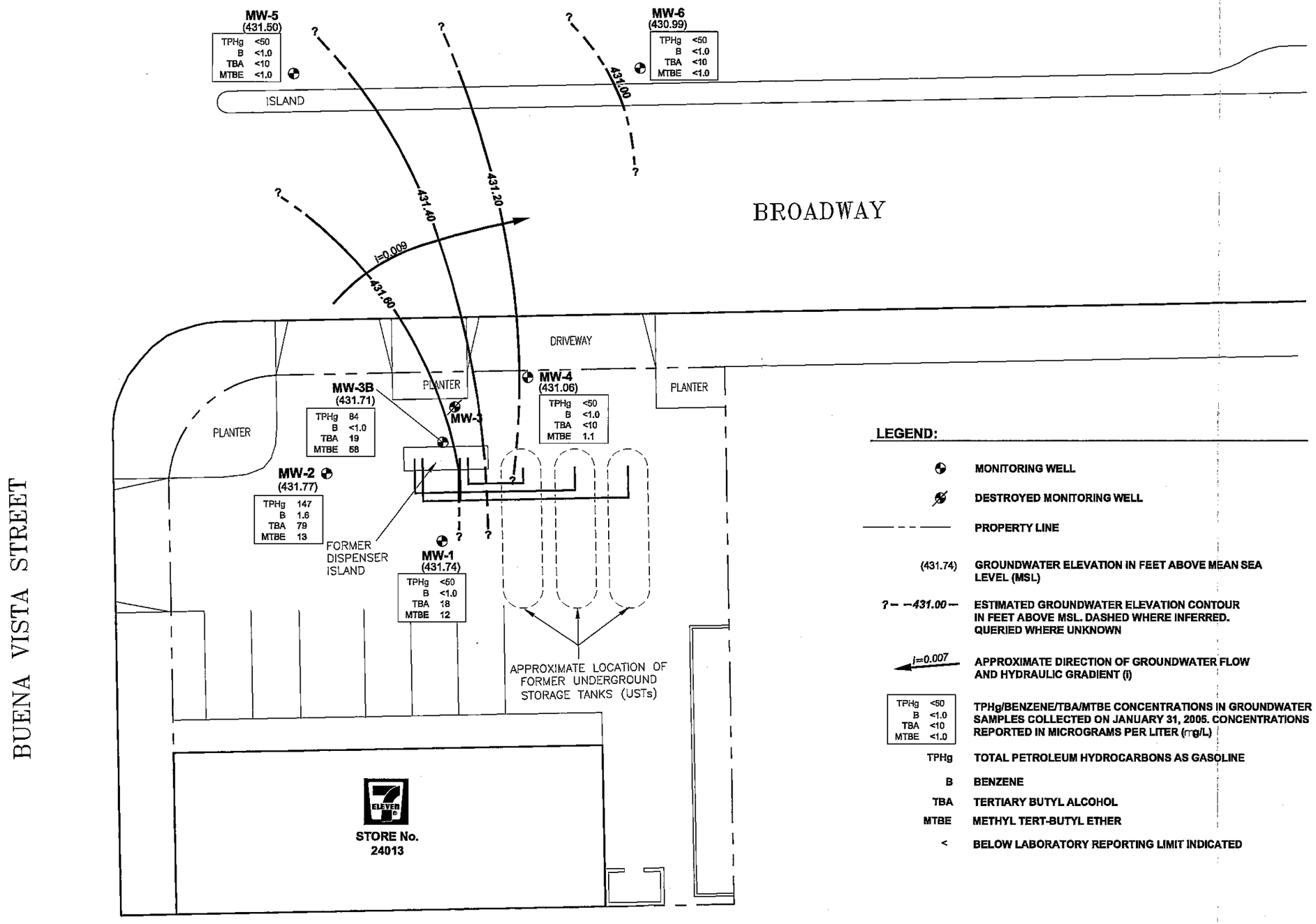
0 1320 2640

APPROXIMATE SCALE IN FEET

SECOR 2655 Camino del Rio North, Suite 302 San Diego, California 619-296-6195/Fax 619-296-6199	FOR: 7-ELEVEN LOCATION NO. 24013 7607 Broadway Lemon Grove, California		SITE LOCATION MAP		FIGURE: 1
	JOB NUMBER: 08EL.24013.05	DRAWN BY: RJO	CHECKED BY:	APPROVED BY:	DATE: 7/7/04

FILEPATH: P:\CAD\ALLPROJECTS2004DWGS\7-ELEVEN 2004\24013-2K4\24013SLM.DWG MODIFIED BY LHUNTER ON MAR 08, 2005 - 12:07

24013SLM



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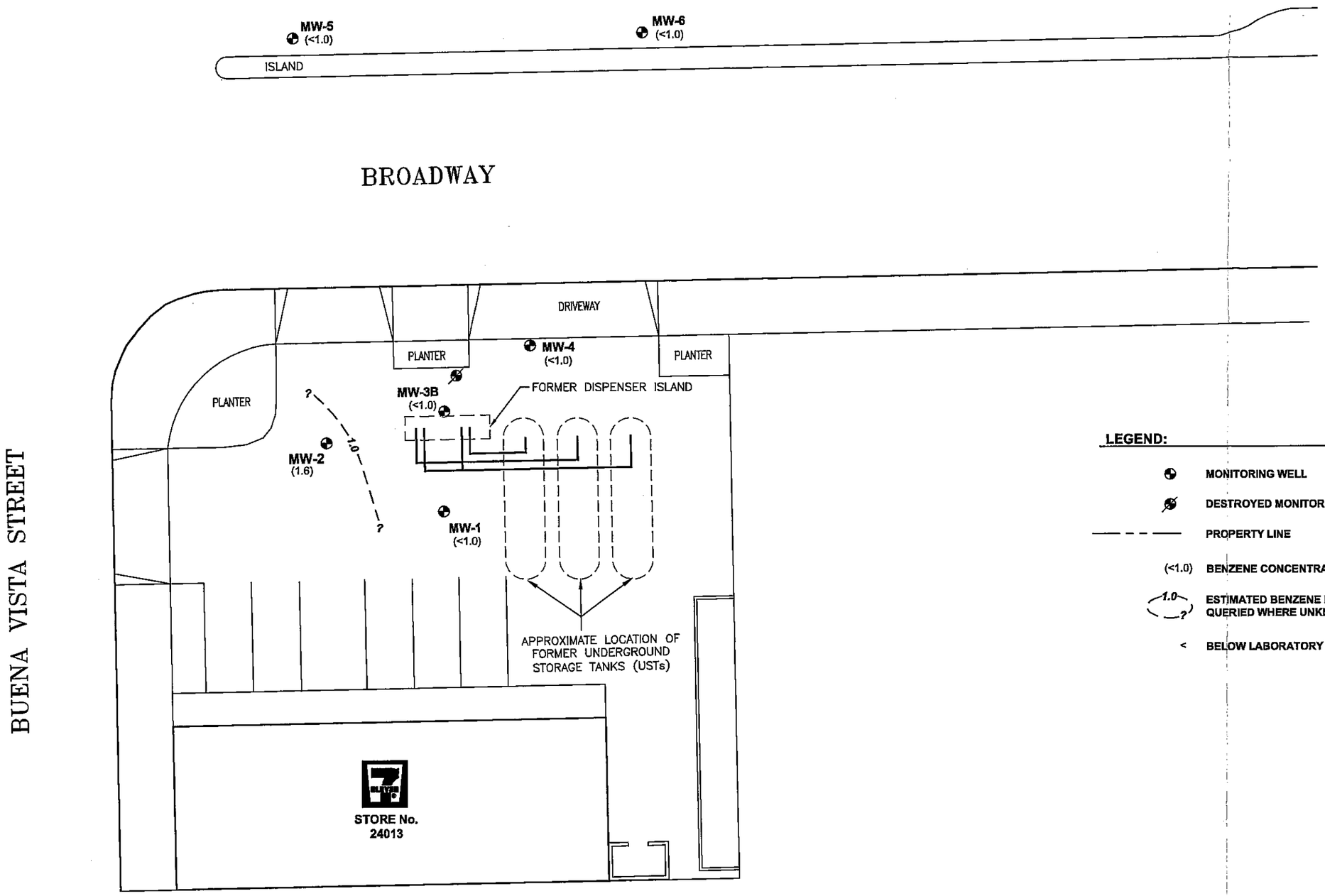
FOR:
7-ELEVEN LOCATION NO. 24013
7607 Broadway
Lemon Grove, California

GROUNDWATER SUMMARY MAP
FIRST QUARTER, 2005

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
08EL.24013.05	KM			02/23/05

FILEPATH: P:\CAD\ALLPROJECTS2005DWGS\7-ELEVEN 2005\24013-2K5\24013GWIQ-05.DWG MODIFIED BY LHUNTER ON MAR 08, 2005 - 13:21



LEGEND:

- MONITORING WELL
- DESTROYED MONITORING WELL
- PROPERTY LINE
- (<1.0) BENZENE CONCENTRATION IN MICROGRAMS PER LITER ($\mu g/L$)
- 1.0 ? ESTIMATED BENZENE ISOCONCENTRATION CONTOUR IN $\mu g/L$, QUERIED WHERE UNKNOWN
- < BELOW LABORATORY REPORTING LIMIT INDICATED

N

0 20 40

SCALE IN FEET

SECOR
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San Diego, California
619-296-6195/Fax 619-296-6199

FOR:				FIGURE:
7-ELEVEN LOCATION NO. 24013 7607 Broadway Lemon Grove, California		BENZENE ISOCONCENTRATION MAP FIRST QUARTER, 2005		3
JOB NUMBER: 08EL.24013.05	DRAWN BY: KM	CHECKED BY:	APPROVED BY:	DATE: 02/23/05

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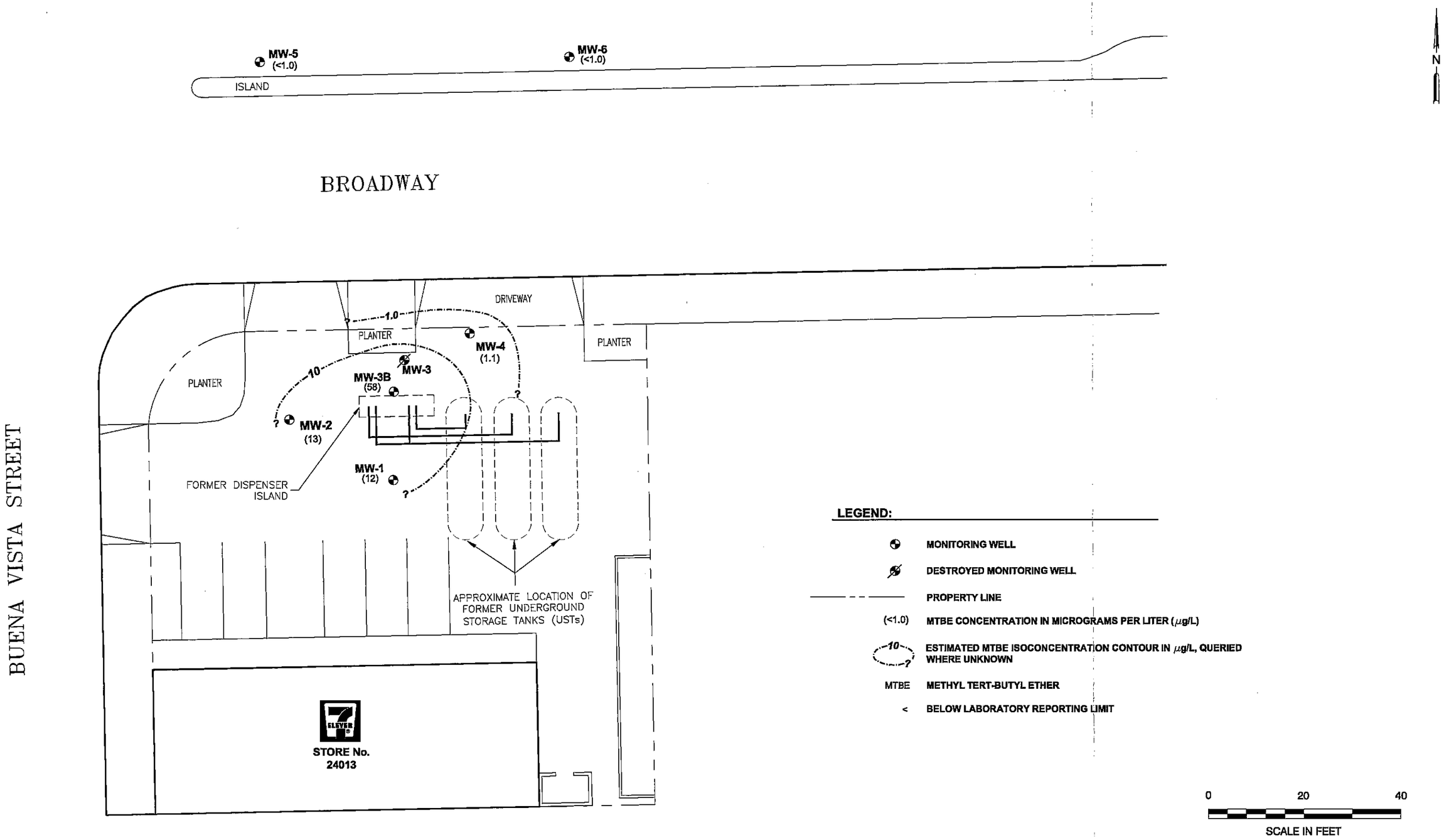

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FOR:
7-ELEVEN LOCATION NO. 24013
7607 Broadway
Lemon Grove, California

MTBE ISOCONCENTRATION MAP
FIRST QUARTER, 2005

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
08EL.24013.05	KM			02/23/05

FILEPATH: P:\CAD\ALLPROJECTS2005DWGS\7-ELEVEN 2005\24013-2K5\24013MTBEIQ-05.DWG MODIFIED BY LHUNTER ON MAR 08, 2005 - 13:22

TABLE 1
SUMMARY OF GROUNDWATER QUALITY AND ELEVATION DATA
7-Eleven Location No. 24013
All concentrations in micrograms per liter (µg/L).

Well ID/ TOC (ft MSL)	Date	DTW (ft)	GW Elevation (ft/MSL)	TPHg	B	T	E	X	TAME	TBA	DIPE	ETBE	MTBE
MW-1	05/11/01	7.86	430.19	160	0.9	<0.5	2.8	16	<0.5	27	2.3	<0.5	8.3
438.05	09/10/01	8.21	429.84	3,900	39	26	180	520	<0.5	45	4.6	<0.5	19
	12/10/01	8.36	429.69	470	7.3	<0.5	63	2.1	<0.5	35	2.3	<0.5	9.7
	03/11/02	8.38	429.67	690	13	0.6	63	7.0	<0.5	54	2.5	<0.5	16
	06/19/02	8.26	429.79	530	7.2	<0.5	80	4.3	<0.5	45	3.0	<0.5	15
	09/09/02	7.53	430.52	470	5.9	<0.5	58	4.3	<0.5	38	2.9	<0.5	16
	12/03/02	7.43	430.62	240	3.5	<0.5	40	1.7	<0.5	16	1.6	<0.5	8.6
	02/11/03	7.53	430.52	<50	1.6	<0.5	4.7	<0.5	<0.5	9.5	1.7	<0.5	14
	05/08/03	7.22	430.83	430	6.6	<0.5	57	5.4	<0.5	68	5.0	<0.5	18
	08/11/03	6.73	431.32	440	5.0	<0.5	23	2.8	<0.5	72	5.3	<0.5	19
	11/05/03	7.22	430.83	1,900	<0.5	<0.5	24	4.6	<0.5	<5.0	<0.5	<0.5	16
438.05*	02/09/04	7.45	430.60	176	2.6	<5.0	8.2	<5.0	2.3	31	1.8	<1.0	11
	05/13/04	7.05	431.00	183	3.0	<5.0	19	<5.0	1.8	21	2.1	<1.0	10
	08/19/04	7.10	430.95	239	3.2	<5.0	21	6.8	<1.0	43	2.9	<1.0	13
	11/18/04	6.88	431.17	71	1.1	<5.0	6.0	<5.0	<1.0	23	<1.0	<1.0	9.9
	01/31/05	6.31	431.74	<50	<1.0	<5.0	<5.0	<5.0	<1.0	18	2.9	<1.0	12
MW-2	05/11/01	7.51	430.34	420	2.0	5.7	4.3	52	<0.5	110	31	<0.5	<0.5
437.85	09/10/01	7.77	430.08	4,700	50	180	210	680	<0.5	230	59	<0.5	0.5
	12/10/01	8.06	429.79	1,100	17	3.0	110	39	<0.5	200	61	<0.5	<0.5
	03/11/02	8.19	429.66	770	15	1.6	69	23	<0.5	200	54	<0.5	<0.5
	06/19/02	8.08	429.77	420	5.3	0.6	23	8.9	<0.5	140	46	<0.5	<0.5
	09/09/02	7.24	430.61	980	19	1.2	81	19	<0.5	140	45	<0.5	0.5
	12/03/02	7.29	430.56	650	18	0.5	54	12	<0.5	180	60	<0.5	0.8
	02/11/03	7.33	430.52	160	4.3	<0.5	6.8	<0.5	<0.5	93	43	<0.5	<0.5
	05/08/03	7.10	430.75	940	15	<0.5	120	6.1	<0.5	180	110	<0.5	0.6
	08/11/03	6.70	431.15	970	13	3.3	46	37	<0.5	210	57	<0.5	1.1
	11/05/03	6.99	430.86	69	2.9	<0.5	1.1	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5
437.86*	02/09/04	7.25	430.61	420	2.0	<5.0	3.9	5.7	12	125	42	<1.0	<1.0
	05/13/04	6.83	431.03	80	2.1	<5.0	<5.0	6.6	7.6	102	52	<1.0	<1.0
	08/19/04	6.81	431.05	178	2.9	<5.0	13	15	<1.0	127	56	<1.0	<1.0
	11/18/04	6.73	431.13	63	1.0	<5.0	<5.0	<5.0	<1.0	141	<1.0	<1.0	<1.0
	01/31/05	6.09	431.77	147	1.6	<5.0	8.3	16	8.1	79	42	<1.0	13

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SUMMARY OF GROUNDWATER QUALITY AND ELEVATION DATA
7-Eleven Location No. 24013
All concentrations in micrograms per liter (µg/L).

Well ID/ TOC (ft MSL)	Date	DTW (ft)	GW Elevation (ft/MSL)	TPHg	B	T	E	X	TAME	TBA	DIPE	ETBE	MTBE
MW-3	05/11/01	6.89	429.85	280	<0.5	<0.5	2.4	1.1	2.2	340	0.5	<0.5	520
436.74	09/10/01	7.33	429.41	<200	<2.0	<2.0	<2.0	<2.0	<2.0	190	<2.0	<2.0	410
	12/10/01	7.34	429.40	<50	0.8	<0.5	<0.5	<0.5	<0.5	90	<0.5	<0.5	190
	03/11/02	7.28	429.46	92	0.8	<0.5	<0.5	0.9	3.8	2,800	0.6	<0.5	3,900
	06/19/02	7.24	429.50	90	<0.5	<0.5	<0.5	<0.5	<0.5	60	<0.5	<0.5	110
	09/09/02	Well Destroyed											
MW-3b	02/09/04	6.64	430.58	167	<1.0	<5.0	1.0	1.0	<1.0	12	12	<1.0	66
437.22*	05/13/04	6.19	431.03	133	<1.0	<5.0	<5.0	<5.0	<1.0	17	14	<1.0	69
	08/19/04	6.25	430.97	88	<1.0	<5.0	<5.0	<5.0	<1.0	19	16	<1.0	72
	11/18/04	6.03	431.19	129	<1.0	<5.0	<5.0	<5.0	<1.0	24	<1.0	<1.0	84
	01/31/05	5.51	431.71	84	<1.0	<5.0	<5.0	<5.0	<1.0	19	16	<1.0	58
MW-4	05/11/01	8.68	427.30	<50	<0.5	<0.5	<0.5	<0.5	<0.5	55	<0.5	<0.5	45
435.98	09/10/01	6.11	429.87	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	3.2
	12/10/01	6.27	429.71	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5	<0.5	4.7
	03/11/02	6.29	429.69	87	<0.5	<0.5	<0.5	0.7	<0.5	<5.0	<0.5	<0.5	1.2
	06/19/02	6.16	429.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	0.7
	09/09/02	5.44	430.54	230	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	1.0
	12/03/02	5.33	430.65	<50	<0.5	<0.5	2.6	<0.5	<0.5	<5.0	<0.5	<0.5	1.6
	02/11/03	5.44	430.54	120	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	1.6
	05/08/03	5.15	430.83	<50	<0.5	<0.5	1.2	0.8	<0.5	<5.0	<0.5	<0.5	1.7
	08/11/03	4.90	431.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	9.2
	11/05/03	5.13	430.85	<50	1.7	<0.5	2.7	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5
435.97*	02/09/04	5.35	430.62	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	05/13/04	4.96	431.01	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	08/19/04	5.03	430.94	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	11/18/04	4.89	431.08	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	01/31/05	4.91	431.06	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	1.1
MW-5	02/09/04	12.80	423.61	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
436.41*	05/13/04	5.68	430.73	--	--	--	--	--	--	--	--	--	--
	06/17/04	10.24	426.17	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	08/19/04	5.58	430.83	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	11/18/04	5.49	430.92	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	01/31/05	4.91	431.50	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0

TABLE 1
SUMMARY OF GROUNDWATER QUALITY AND ELEVATION DATA
7-Eleven Location No. 24013
All concentrations in micrograms per liter (µg/L).

Well ID/ TOC (ft MSL)	Date	DTW (ft)	GW Elevation (ft/MSL)	TPHg	B	T	E	X	TAME	TBA	DIPE	ETBE	MTBE
MW-6 435.80*	02/09/04	5.20	430.60	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	05/13/04	5.16	430.64	102	9.7	7.4	<5.0	8.6	<1.0	<10	<1.0	<1.0	<1.0
	08/19/04	5.24	430.56	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	11/18/04	4.87	430.93	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0
	01/31/05	4.81	430.99	<50	<1.0	<5.0	<5.0	<5.0	<1.0	<10	<1.0	<1.0	<1.0

Notes:

TOC	=	Top of casing
ft/MSL	=	Feet above mean sea level
DTW	=	Depth to static water
GW Elev.	=	Groundwater elevation
B	=	Benzene
T	=	Toluene
E	=	Ethylbenzene
X	=	Total xylenes
--	=	Not Analyzed
TPHg	=	Total petroleum hydrocarbons characterized as gasoline
TAME	=	T-amyl methyl ether
TBA	=	T-butyl alcohol
DIPE	=	Di-isopropyl ether
ETBE	=	Ethyl-t-butyl ether
MTBE	=	Methyl-t-butyl ether
<	=	Results below laboratory reporting limits shown
*	=	Wellhead elevation surveyed on 2/9/04

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Secor (10521)
ATTN: Jenna Lynch
2655 Camino Del Rio North
Suite #302
San Diego, CA 92108

LAB REQUEST 144556

REPORTED 02/09/2005

RECEIVED 02/01/2005

PROJECT 08EL.24013.04 7-11 #24013

SUBMITTER Client

COMMENTS Global ID: T0607391309

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
592509	MW-1
592510	MW-2
592511	MW-3b
592512	MW-4
592513	MW-5
592514	MW-6
592515	Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Order #: 592509 **Client:** Secor

Matrix: WATER **Client Sample ID:** MW-1

Date Sampled: 01/31/2005

Time Sampled: 13:20

Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/03/05	LB
Ethyl benzene	ND	1	5	ug/L	02/03/05	LB
Gasoline	ND	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	12	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	ND	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	2.9	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	18	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	105			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	100			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592510 **Client:** Secor
Matrix: WATER **Client Sample ID:** MW-2
Date Sampled: 01/31/2005
Time Sampled: 12:55
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	1.6	1	1	ug/L	02/03/05	LB
Ethyl benzene	8.3	1	5	ug/L	02/03/05	LB
Gasoline	147	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	13	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	16	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	42	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	8.1	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	79	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	105			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	98			%	70 - 130	
Surr3 - Toluene-d8	107			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592511 **Client:** Secor
Matrix: WATER **Client Sample ID:** MW-3b
Date Sampled: 01/31/2005
Time Sampled: 13:12
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/03/05	LB
Ethyl benzene	ND	1	5	ug/L	02/03/05	LB
Gasoline	84	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	58	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	ND	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	16	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	19	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	106			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	102			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	109			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592512 **Client:** Secor
Matrix: WATER **Client Sample ID:** MW-4
Date Sampled: 01/31/2005
Time Sampled: 13:01
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/03/05	LB
Ethyl benzene	ND	1	5	ug/L	02/03/05	LB
Gasoline	ND	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	1.1	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	ND	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	ND	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	108			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	102			%	70 - 130	
Surr3 - Toluene-d8	103			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592513 **Client:** Secor
Matrix: WATER **Client Sample ID:** MW-5
Date Sampled: 01/31/2005
Time Sampled: 12:27
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/03/05	LB
Ethyl benzene	ND	1	5	ug/L	02/03/05	LB
Gasoline	ND	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	ND	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	ND	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	105			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	99			%	70 - 130	
Surr3 - Toluene-d8	103			%	70 - 130	
Surr4 - p-Bromofluorobenzene	107			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592514 **Client:** Secor
Matrix: WATER **Client Sample ID:** MW-6
Date Sampled: 01/31/2005
Time Sampled: 12:28
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/03/05	LB
Ethyl benzene	ND	1	5	ug/L	02/03/05	LB
Gasoline	ND	1	50	ug/L	02/03/05	LB
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	02/03/05	LB
Toluene	ND	1	5	ug/L	02/03/05	LB
Xylenes, total	ND	1	5	ug/L	02/03/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/03/05	LB
Isopropyl ether (DIPE)	ND	1	1	ug/L	02/03/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/03/05	LB
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	02/03/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	103			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	100			%	70 - 130	
Surr3 - Toluene-d8	104			%	70 - 130	
Surr4 - p-Bromofluorobenzene	106			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 592515 **Client:** Secor

Matrix: WATER **Client Sample ID:** Laboratory Method Blank

Date Sampled:

Time Sampled:

Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8260B Secor SD - BTEX/MTBE Only						
Benzene	ND	1	1	ug/L	02/02/05	LB
Ethyl benzene	ND	1	5	ug/L	02/02/05	LB
Gasoline	ND	1	50	ug/L	02/02/05	LB
Methyl-tert-butylether (MTBE)	ND	1	1	ug/L	02/02/05	LB
Toluene	ND	1	5	ug/L	02/02/05	LB
Xylenes, total	ND	1	5	ug/L	02/02/05	LB
Ethyl-tertbutylether (ETBE)	ND	1	1	ug/L	02/02/05	LB
Isopropyl ether (DIPE)	ND	1	1	ug/L	02/02/05	LB
Tert-amylmethylether (TAME)	ND	1	1	ug/L	02/02/05	LB
Tertiary butyl alcohol (TBA)	ND	1	10	ug/L	02/02/05	LB
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	109			%	70 - 130	
Surr2 - 1,2-Dichloroethane-d4	113			%	70 - 130	
Surr3 - Toluene-d8	102			%	70 - 130	
Surr4 - p-Bromofluorobenzene	101			%	70 - 130	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

ASSOCIATED LABORATORIES

QA REPORT FORM - METHOD 8260 / 624 / 524.2

QC Sample: MS / MSD - Water Samples 144370-814

Analysis Date: February 2, 2005 8:23 PM

Applies to: LR 144481, 144385, 144370, 144376, 144556, 144337

Reporting Units = ug/L

Matrix Spike / Matrix Spike Duplicate

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spk Dup.	%Rec MS	%Rec MSD	RPD	QC Limits RPD	QC Limits %REC
1,1-Dichloroethene	ND	50	57.20	57.37	114	115	0	22	59-172
MTBE	ND	50	50.33	49.19	101	98	2	24	62-137
Benzene	ND	50	50.56	51.30	101	103	1	24	62-137
Trichloroethene	ND	50	51.91	52.19	104	104	1	21	66-142
Toluene	ND	50	53.53	54.57	107	109	2	21	59-139
Chlorobenzene	ND	50	52.75	53.57	106	107	2	21	60-133

QC Sample: LCS/LCSD 1:25 PM
Analysis Date: February 2, 2005

Lab Controlled Spike / Lab Controlled Spike Duplicate

Test	Sample Result	Spike Added	LCS Spike	LCS Spk Dup.	%Rec LCS	%Rec LCS D	RPD	QC Limits RPD	QC Limits %REC
1,1-Dichloroethene	ND	50	57.05	59.56	114	119	4	22	59-172
MTBE	ND	50	48.49	48.74	97	97	1	24	62-137
Benzene	ND	50	49.97	51.79	100	104	4	24	62-137
Trichloroethene	ND	50	53.84	56.50	108	113	5	21	66-142
Toluene	ND	50	53.97	58.22	108	116	8	21	59-139
Chlorobenzene	ND	50	52.57	56.67	105	113	8	21	60-133
Gasoline	ND	1,000	877	880	88	88	0	20	NA

Method Blank = All ND

SURROGATE (QC Limits : 70-135)

Compound	MB 1	MB 2	MS	MSD	LCS	LCSD
DBFM	108	109	110	109	106	106
1,2-DCA	110	113	105	104	103	102
Tol-d8	102	102	97	101	97	98
p-BFB	107	101	108	106	107	103

ASSOCIATED LABORATORIES

QA REPORT FORM - METHOD 8260 / 624 / 524.2

QC Sample: MS / MSD - Water Samples 144594-752

Analysis Date: February 3, 2005 11:06 PM

Applies to: LR 144481, 144556, 144594, 144659

Reporting Units = ug/L

Matrix Spike / Matrix Spike Duplicate

Test	Sample Result	Spike Added	Matrix Spike	Matrix Spk Dup.	%Rec MS	%Rec MSD	RPD	QC Limits RPD	QC Limits %REC
1,1-Dichloroethene	ND	50	57.00	56.24	114	112	1	22	59-172
MTBE	ND	50	47.94	46.65	96	93	3	24	62-137
Benzene	ND	50	49.97	49.86	100	100	0	24	62-137
Trichloroethene	ND	50	50.94	51.62	102	103	1	21	66-142
Toluene	ND	50	52.06	52.33	104	105	1	21	59-139
Chlorobenzene	ND	50	50.83	52.07	102	104	2	21	60-133

QC Sample: LCS/LCSD 1:08 PM
Analysis Date: February 3, 2005

Lab Controlled Spike / Lab Controlled Spike Duplicate

Test	Sample Result	Spike Added	LCS Spike	LCS Spk Dup.	%Rec LCS	%Rec LCS D	RPD	QC Limits RPD	QC Limits %REC
1,1-Dichloroethene	ND	50	59.93	49.90	120	100	18	22	59-172
MTBE	ND	50	51.38	43.51	103	87	17	24	62-137
Benzene	ND	50	52.28	44.39	105	89	16	24	62-137
Trichloroethene	ND	50	54.58	48.15	109	96	13	21	66-142
Toluene	ND	50	55.90	48.50	112	97	14	21	59-139
Chlorobenzene	ND	50	54.14	47.81	108	96	12	21	60-133
Gasoline	ND	1,000	811	708	81	71	14	20	NA

Method Blank = All ND

SURROGATE (QC Limits : 70-135)

Compound	MB 1	MB 2	MS	MSD	LCS	LCSD
DBFM	111	113	109	106	110	110
1,2-DCA	113	112	103	10	104	106
Tol-d8	103	102	99	100	101	103
p-BFB	107	107	106	104	105	103

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868-1225 - 714/771-6900 FAX 714/538-1209

Cooler Receipt Form

Client: Secor Project: 08EL.24013.04

Date Cooler Received: 2/1/05 Date Cooler Opened: 2/1/05

Was cooler scanned for presence of radioactivity ? Yes/No
If yes was radioactivity results above 25 cpm ? Yes/No

Was a shipper's packing slip attached to the cooler ? Yes/No

If the cooler had custody seal(s), were thy signed and intact ? Yes/No/Na

Was the cooler packed with: Ice ✓ Ice Packs ____ Bubble wrap ____
Styrofoam ____ Paper ____ None ____ Other ____

Cooler Temperature: 4.3° C *
*cooler needs to be received @ 4°C with an acceptable range of 2°- 6 °C

If samples were hand delivered do they meet the temp. criteria, which should be @ 4°C with an acceptable range of 2°- 6 °C ? Yes/No

If no explain: ____

Were all samples sealed in plastic bags ? Yes/No

Did all samples arrive intact ? If no, indicate below. Yes/No

Were all samples labeled correctly ? (ID's Dates, Times) If no, indicate below. Yes/No

Can the tests required be ran with the provided containers, If no indicate below. Yes/No

Was sufficient sample volume sent for all containers ? Yes/No

Were any VOA vials received with head space ? Yes/No/Na

Was the correct preservatives used ?
If no, see the pH log for a list of samples containers regarding pH Yes/No/Na

Any other important information: ____

Receiving Department: M Date: 2/1

SECOR CHAIN-OF-CUSTODY RECORD

14556 COC # 03663

Page 1 of 1

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: 008 – San Diego	Project No.: 08EL24013.04 Task: 0704
Send Report To: 2655 Camino del Rio N, #302, San Diego, CA 92108	Project Name: 7-11 #24013
	Project Manager: Jenna Lynch
Telephone: 619-296-6195	Laboratory: Associated Laboratories
Fax / E-Mail: 619-296-6199 jlynch@secor.com	

Sample No. / Identification	SAMPLE Date	Time	Matrix*	Container & Size **	Preservative	Number of Containers	TPH-g/BTEX/MTBE/8260	TAME/TBA/DIPE/ETBE	REMARKS / PRECAUTIONS
MW-1	1/31/05	1320	AQ	3V, 40mL	HCl, ice		X	X	EDF format
MW-2		1255					X	X	Please fax or
MW-3b		1312					X	X	E-mail results
MW-4		1301					X	X	
MW-5		1227					X	X	
MW-6		1228					X	X	

ANALYSES / METHOD REQUEST

TAT: ☒ Normal ☐ Rush ☐ Other _____

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other _____

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: Jacob Morell

Shipment Method:

Airbill Number:

	Signature	Print Name	Company	Date	Time
1a Relinquished by:	[signature]	Jacob Morell	Secor	2/1/05	1200
1b Received by:	[signature]	[signature]	Alpha	2/1/05	1200
2a Relinquished by:	[signature]	[signature]	Alpha	2/1/05	1430
2b Received by:	[signature]	DUONG	Associated lab	2/1/05	1435
3a Relinquished by:					
3b Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other

**Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

2-2-05 8:08

SECOR

MONITORING WELL GAUGING LOG

Site Name & Facility No: **7-11 #24013** Date: 1/31/2005

Project Number: 08EL.24013.04 / 0704 Field Representative(s): JH, WW

Checked by: CK

Well No.	Previous QTR DTW	Gauging Time	Depth to Floating Product	Depth to Water (ft)	Floating Product Thickness	Total Casing Depth (ft)	Casing Elevation[1]	Groundwater Elevation[1]	Corrected Groundwater Elevation[1]*	Comments
MW-1	6.88	0853	—	6.31	—	19.95	438.05	431.74 ✓		
MW-2	6.73	0850	—	6.09	—	19.99	437.86	~~431.77~~ 431.77 ✓		
MW-3b	6.03	0859	—	5.51	—	14.50	437.22	431.71 ✓		
MW-4	4.89	0901	—	4.91	—	20.23	435.97	431.06 ✓		
MW-5	5.49	1015	—	4.91		14.29	436.41	431.50 ✓		
MW-6	4.87	1019	—	4.81	—	14.90	435.80	430.99 ✓		

Notes:
1 = feet above mean sea level unless noted otherwise
* = elevation adjusted by adding (.75 x product thickness) to measured water elevation
\- = not measured due to the presence of liquid-phase hydrocarbons

Sheen = discontinuous, non-measurable thickness of LPH
Trace = continuous, non-measurable thickness of LPH

SECOR INTERNATIONAL INCORPORATED	WELL PURGING / SAMPLING LOG		Well No: MW- 1
	Project Name: 7-11 #24013		Date: 1/31/2005
	Project Number: 08EL.24013.04 / 0704		Sample Time: 1320
	SECOR Rep: W Wong	Checked by:	Sample No: MW- 1

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist # 7

Purging Equipment / Method: ___ Vac Truck ___ Submersible Pump X Bailer ___ Other

pH Temp/Conductivity Meter Type / ID: 1

Sampling Method: ___ Teflon Bailer X Disposable Bailer ___ Other:

Decontamination Method: ___ Steam / High Pressure Wash X 3 Stage (Alconox, Tap & DI rinse) ___ Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 (10) 12

Casing Diameter (in): 2 (4)

Depth to Water (DTW_1) (ft): 6.31

Total Well Depth (DTB) (ft): 19.95

Water Column: 13.64

Floating Product: —

Thickness (in): —

Borehole Volume (gal): 20.46

1.5 Borehole Volumes (gal): 30.69

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1114	Started Purging					
1116	15.96	~~20.5~~ 13.5	7.23	23.6	1126	tan/white, med silt, odor
1120	dry	~~31~~ 20.5	7.31	23.8	1178	"
1320	9.11	sample				

Maximum Drawdown (DTW_2) (ft) = dry/19.95

H^2O Removal Rate (GPM) = 3.42

___ Fast Recharging Well

X Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1320

Depth to Water at time of sampling (DTW_3): ~~1320~~ 9.11

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg, BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes: H slow (79%) Very, very close to fast, should purge 1.5 BHV

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(6.31) - (9.11)}{(6.31) - (19.95)} = \frac{-2.8}{-13.64}$$

$$= 79\ \%$$

19.4

80% Recharge = 9.04

SECOR

INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Project Name:	7-11 #24013	Well No:	MW- 2
Project Number:	08EL.24013.04 / 0704	Date:	1/31/2005
SECOR Rep:	J. Morell	Sample Time:	1255
Checked by:	M	Sample No:	MW- 2

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist # 1

Purging Equipment / Method: ___ Vac Truck ___ Submersible Pump X Bailer ___ Other

pH Temp/Conductivity Meter Type / ID: 1

Sampling Method: ___ Teflon Bailer X Disposable Bailer ___ Other:

Decontamination Method: ___ Steam / High Pressure Wash ___ 3 Stage (Alconox, Tap & DI rinse) ___ Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 (10) 12

Casing Diameter (in): 2 (4)

Depth to Water (DTW_1) (ft): 6.09

Total Well Depth (DTB) (ft): 19.99

Water Column: 13.90

Floating Product: —

Thickness (in): —

Borehole Volume (gal): 20.85

1.5 Borehole Volumes (gal): 31.28

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1047	Started Purging					
1052	13.51	~~21~~ 14	7.26	24.2	1002	Tan, odorless, hazy
1055	Dry	~~31.5~~ 21	7.25	24.2	1014	"
1255	13.50	Sample				

Maximum Drawdown (DTW_2) (ft) = 19.99

H^2O Removal Rate (GPM) = 2.62

___ Fast Recharging Well

X Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1255

Depth to Water at time of sampling (DTW_3): 13.50

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg, BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 (DTB-DTW_1)
2	10	1.14 (DTB-DTW_1)
4	10	1.50 (DTB-DTW_1)
4	12	1.95 (DTB-DTW_1)
6	10	2.11 (DTB-DTW_1)

Notes: H Slow (33%)

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(6.09) - (13.50)}{(6.09) - (19.99)} = \frac{7.41}{13.9} = 47\%$$

80% Recharge = 2.87

SECOR INTERNATIONAL INCORPORATED	WELL PURGING / SAMPLING LOG	Well No: MW- 3b
	Project Name: 7-11 #24013	Date: 1/31/2005
	Project Number: 08EL.24013.04 / 0704	Sample Time: 1312
	SECOR Rep: J. Morell / Checked by:	Sample No: MW- 3b

PURGING & SAMPLING EQUIPMENT / METHOD	WELL SPECIFICATIONS & MEASUREMENTS	
Water Level Meter Type & ID: Solinist # 1	Borehole Diameter (in): 8 (10) 12	
Purging Equipment / Method: ___Vac Truck X Bailer ___Submersible Pump ___Other	Casing Diameter (in): 2 (4)	
pH Temp/Conductivity Meter Type / ID: 1	Depth to Water (DTW_1) (ft): 5.51	
Sampling Method: ___Teflon Bailer X Disposable Bailer ___Other:	Total Well Depth (DTB) (ft): 14.50	Water Column: 8.99
Decontamination Method: ___Steam / High Pressure Wash X 3 Stage (Alconox, Tap & DI rinse) ___Other:	Floating Product: —	Thickness (in): —
	Borehole Volume (gal): 13.99	1.5 Borehole Volumes (gal): 20.24

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1112	Started Purging					
1116	13.01	13.5 ~~13.5~~	7.22	23.5	9.54	Tan, odorless, cloudy
1140	0.7	20.5 ~~20.5~~ ~~[illegible]~~	7.23	23.7	9.50	"
1312	6.05	Sample				

Maximum Drawdown (DTW_2) (ft) = 14.50

H^2O Removal Rate (GPM) = .64

X Fast Recharging Well

___ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1312

Depth to Water at time of sampling (DTW_3): 6.05

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg; BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes: 99% / ~90 min

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(5.51) - (6.05)}{(5.51) - (14.50)} = \frac{-.54}{-8.99} = \cancel{96}\ 94\ \%$$

80% Recharge = 7.30

SECOR

INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Project Name:	7-11 #24013
Project Number:	08EL.24013.04 / 0704
SECOR Rep:	W. Wong
Checked by:	
Well No:	MW- 4
Date:	1/31/2005
Sample Time:	1301
Sample No:	MW- 4

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist # 1

Purging Equipment / Method: ___ Vac Truck ✗ Bailer ___ Submersible Pump ___ Other

pH Temp/Conductivity Meter Type / ID: 1

Sampling Method: ___ Teflon Bailer ✗ Disposable Bailer ___ Other:

Decontamination Method: ___ Steam / High Pressure Wash ✗ 3 Stage (Alconox, Tap & DI rinse) ___ Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 (10) 12

Casing Diameter (in): 2 (4)

Depth to Water (DTW_1) (ft): 4.91

Total Well Depth (DTB) (ft): 20.23

Water Column: 15.32

Floating Product: —

Thickness (in): —

Borehole Volume (gal): 22.98

1.5 Borehole Volumes (gal): 34.47

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1050	Started Purging					
1053	10.94	~~23~~ 15	7.53	22.8	7110	tan, low/med silt, odorless
1055	14.97	~~34.5~~ 23	7.50	23.7	9370	"
1100	dry	Sample 34.5	7.50	24.0	9490	
1301	12.21	sample				

Maximum Drawdown (DTW_2) (ft) = dry / ~~4.91~~ 20.23

H^2O Removal Rate (GPM) = 3.14

___ Fast Recharging Well

✗ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1301

Depth to Water at time of sampling (DTW_3): 12.21

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg, BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes: H Slow (41%)

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(4.91) - (12.21)}{(4.91) - (20.23)} = \frac{-7.3}{-15.32}$$

$$= 52\ \%$$

80% Recharge = 7.97

SECOR

INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Project Name:	7-11 #24013	Well No:	MW- 5
Project Number:	08EL.24013.04 / 0704	Date:	1/31/2005
SECOR Rep:	J. Morell	Sample Time:	1227
Checked by:		Sample No:	MW- 5

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist # 1

Purging Equipment / Method: ___ Vac Truck ___ Submersible Pump X Bailer ___ Other

pH Temp/Conductivity Meter Type / ID: 1

Sampling Method: ___ Teflon Bailer ___ Disposable Bailer ___ Other:

Decontamination Method: ___ Steam / High Pressure Wash X 3 Stage (Alconox, Tap & DI rinse) ___ Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 (10) 12

Casing Diameter (in): 2 (4)

Depth to Water (DTW_1) (ft): 4.91

Total Well Depth (DTB) (ft): 14.25 — Water Column: 9.34

Floating Product: — Thickness (in):

Borehole Volume (gal): 14.01 — 1.5 Borehole Volumes (gal): 21.02

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1022	Started Purging					
1025	10.71	9	7.42	24.0	8.35	white, no odor, hazy
1027	Dry	14.5	7.45	24.1	8.42	" "
1227	12.37	Sample				

Maximum Drawdown (DTW_2) (ft) = 14.25

H^2O Removal Rate (GPM) = 2.9

___ Fast Recharging Well

X Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1227

Depth to Water at time of sampling (DTW_3): 12.37

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg, BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes: Hist. slow

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(4.91)-(12.37)}{(4.91)-(14.25)} = \frac{7.46}{9.34} = 20\%$$

80% Recharge = 6.77

SECOR

INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Project Name:	7-11 #24013
Project Number:	08EL.24013.04 / 0704
SECOR Rep:	W Wong
Checked by:	
Well No:	MW- 6
Date:	1/31/2005
Sample Time:	1228
Sample No:	MW- 6

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist # 1

Purging Equipment / Method: ___ Vac Truck ✓ Bailer ___ Submersible Pump ___ Other

pH Temp/Conductivity Meter Type / ID: 1

Sampling Method: ___ Teflon Bailer ✓ Disposable Bailer ___ Other:

Decontamination Method: ___ Steam / High Pressure Wash ✓ 3 Stage (Alconox, Tap & DI rinse) Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 (10) 12

Casing Diameter (in): 2 (4)

Depth to Water (DTW_1) (ft): 4.81

Total Well Depth (DTB) (ft): 14.90

Water Column: 10.09

Floating Product: —

Thickness (in): —

Borehole Volume (gal): 15.14

1.5 Borehole Volumes (gal): 22.71

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1026	Started Purging					
1027	10.98	~~15~~ 5 10	7.48	22.7	6720	yellow/brown, low silt, odorless
1028	dry	~~25~~ 15 15	7.49	23.1	6880	yellow/brown, low/med silt, odorless
1228	10.54	sample				

Maximum Drawdown (DTW_2) (ft) = dry/14.20

H^2O Removal Rate (GPM) = 7.75

___ Fast Recharging Well

✓ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1228

Depth to Water at time of sampling (DTW_3): 10.54

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	(HCL & ICE) or NONE	TPHg, BTEX, MTBE, (8015, 8260)
			DIPE, TAME, ETBE, TBA (8260b)

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes: ~~H Slow (44%)~~ H Slow (37%)

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(4.81) - (10.54)}{(4.81) - (14.90)} = \frac{-5.73}{-10.09}$$

$$= 43\ \%$$

80% Recharge = ~~7.79~~ 6.83

MONITORING WELL PURGING AND SAMPLING PROCEDURES

Monitoring well purging and sampling methods follow the procedures outlined by the County of San Diego, Environmental Health Services, Site Assessment and Mitigation (SAM) Manual (2004).

Purge 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 LPH concentrations, lower a transparent bailer into the well to evaluate the presence of hydrocarbon 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 pumping or bailing, approximately one borehole volume of groundwater as calculated according to the thickness of the water column and the diameter of the borehole.

E. Conduct field measurements (i.e., pH and conductivity) after approximately one borehole volume has been purged, or if the water level in the well is so low as to prevent further purging (dry).

1) If the well has not been purged dry, continue to bail and/or pump and conduct field measurements again following removal of each successive one-half borehole volume of water.

a) If the first and second series of measurements vary by less than ten 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 ten percent or greater, repeat Step D1 above.

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.

a) If the well recovers less than 80 percent within two hours, it is a slow recharging well. Begin the sampling procedure.

b) If the well recovers to 80 percent or more within two hours, it is a fast recharging well. Repeat Step D1 above.

Sampling Procedures

- Use a disposable bailer to collect the groundwater sample.
- Fit the stopcock onto the base of the bailer and transfer the groundwater sample into the appropriate container(s). here applicable, some containers are completely filled to achieve zero headspace. Label the samples according to location and date of collection.
- Enter the samples into SECOR Chain-of-Custody protocol and preserve on ice until delivery to the analytical laboratory. Complete the Well Development/Purging/Sampling Log to be stored in the project file.

When requested by the client, collect 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 field QA/QC samples can be collected and analyzed upon client request.