SKC 3567

APR 02 2002

Groundwater Monitoring Report
January to June 2002

64th Street Properties
Emeryville, California

Prepared for:

SIMEON Commercial Properties
San Francisco, California

Prepared by:

Erler & Kalinowski, Inc.
(EKI 990016.05)

29 March 2002

Erler & Kalinowski, Inc.

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Ravi Arulanantham, Ph.D.
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Susan Hugo
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Groundwater Monitoring Report
January to June 2002
64th Street Properties, Emeryville, California
(EKI 990016.05)

Dear Dr. Arulanantham and Ms. Hugo:

On behalf of SIMEON Commercial Properties, Erler & Kalinowski, Inc., is pleased to present this report summarizing results of groundwater monitoring activities conducted at the 64th Street Properties located at 1480 64th Street, Emeryville, California on 5 February 2002. If you have any questions, please call.

Very truly yours,

ERLER & KALINOWSKI, INC.

Anona L. Dutton
Staff Hydrogeologist

Derby Davidson, P.E.
Project Engineer

cc: Pierson Forbes, SIMEON Commercial Properties
Maurice Kaufman, City of Emeryville

Groundwater Monitoring Report
January to June 2002
64th Street Properties
Emeryville, California

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

On behalf of SIMEON Commercial Properties ("SIMEON"), Erler & Kalinowski, Inc. ("EKI") is pleased to present this report summarizing the results of groundwater monitoring activities conducted at the 64th Street Properties located at 1480 64th Street in Emeryville, California ("Site") on 5 February 2002. The location of the Site is shown on Figure 1.

Groundwater monitoring at the Site is conducted in accordance with the *Final Risk Management Plan for the 64th Street Properties*, dated 30 August 1999 ("RMP"). The RMP was approved by the California Regional Water Quality Control Board, San Francisco Bay Region ("RWQCB"), and the Alameda County Department of Environmental Health ("ACDEH") in a letter dated 15 October 1999. The RMP requires the measurement of water levels and the collection of groundwater samples from four monitoring wells (i.e., SMW-1, SMW-2, SMW-3, and SMW-4) installed at the Site. The approximate locations of these wells are shown on Figure 2.

The groundwater monitoring specified in the RMP is required to be performed quarterly for the first year, semi-annually for the second year, and annually thereafter. All groundwater samples are required to be analyzed for total extractable petroleum hydrocarbons as diesel ("TEPH"). The groundwater samples are also required to be analyzed for volatile organic compounds ("VOCs") on an annual basis. Data from the monitoring events are reported to the RWQCB and the ACDEH.

The objectives of the groundwater monitoring program established in the RMP are to monitor TEPH and VOC concentrations in groundwater at the perimeter and downgradient of the Site and to verify the stability or decline of TEPH concentrations over time. Groundwater samples collected from the four monitoring wells on 5 February 2002 were analyzed for TEPH and VOCs.

2.0 GROUNDWATER MONITORING

Per the RMP, monitoring at the Site includes measuring groundwater levels and collecting groundwater samples from Site monitoring wells SMW-1 through SMW-4 (Figure 2). EKI conducted monitoring activities at the Site on 5 February 2002 as described below.

2.1 Water Level Monitoring

Prior to sampling, EKI measured water levels in each well using a pre-cleaned electronic sounding tape. Water level data obtained by EKI was used to assess the magnitude and direction of the hydraulic gradient in the shallow water-bearing zone at the Site (see

Section 3.1 below). Historic measured water level data and water level data collected on 5 February 2002 are summarized in Table 1.

2.2 Groundwater Sampling and Laboratory Analyses

Prior to sampling, groundwater was purged until at least three of four parameters (temperature, specific conductance, pH, and turbidity) stabilized. Approximately three well-casing volumes of groundwater were removed from each well. Groundwater samples were collected from wells SMW-1, SMW-2, SMW-3, and SMW-4. Copies of groundwater purge sample forms are included in Appendix A.

Groundwater samples from the wells were collected using PVC bailers suspended by nylon string. Separate disposable PVC bailers were used at each well. Well SMW-4, which contains a thin layer of floating product (i.e., less than 0.03 feet), was sampled through a stilling tube.

Rinsate from equipment cleaning and purged groundwater from the wells were contained and stored on-Site in 55-gallon drums. SIMEON will dispose of the rinse water and purged groundwater in accordance with applicable laws and regulations.

Groundwater samples were labeled, logged on a chain-of-custody document, and packed on ice in a chilled ice chest for transport to the laboratory. Samples were analyzed by Curtis & Tompkins, Ltd., of Emeryville, California, for TEPH with silica gel cleanup using EPA Method 8015M and VOCs using EPA Method 8260B. Analytical results for the 5 February 2002 monitoring event are summarized in Tables 2 and 3 and are shown on Figures 3 and 4. Copies of laboratory reports from these groundwater analyses are included in Appendix B. Groundwater analytical results are discussed in Section 3.2 below.

3.0 EVALUATION OF HYDRAULIC GRADIENT AND GROUNDWATER SAMPLING RESULTS

This section summarizes (a) hydraulic groundwater gradient information obtained at the Site on 5 February 2002, (b) groundwater analytical results from on-Site groundwater monitoring conducted on 5 February 2002, and (c) quality control results.

3.1 Hydraulic Gradient

The groundwater potentiometric surface contour map for the Site shallow water-bearing zone shown on Figure 2 is based on water levels measured in wells SMW-1, SMW-2, SMW-3, and SMW-4 on 5 February 2002. As shown on Figure 2, the direction of the hydraulic gradient in the shallow water-bearing zone is westerly across the southwestern portion of the Site. The estimated magnitude of the hydraulic gradient across the Site is 0.009 ft/ft.

3.2 Groundwater Analytical Results

3.2.1 TEPH Groundwater Sampling Data

Current and historic TEPH data detected in groundwater samples collected from wells SMW-1, SMW-2, SMW-3, and SMW-4 are summarized in Table 2 and on Figure 3.

On 5 February 2002, TEPH was not detected at a concentration above 50 micrograms per liter ("ug/L") in the groundwater sample collected from downgradient monitoring well SMW-1. TEPH was detected at concentrations of 84 ug/L, 100 ug/L, and 3,600 ug/L in the groundwater samples collected from monitoring wells SMW-2, SMW-3, and SMW-4, respectively. As indicated above, the groundwater sample from monitoring well SMW-4 was collected through a stilling tube because of the presence of a thin layer of floating product. Although the measured TEPH concentrations from well SMW-4 should represent levels dissolved in groundwater on the southern property boundary, it is possible that free-phase hydrocarbons became entrained in the sample collected from well SMW-4.

As shown in Table 2 and on Figure 3, the TEPH data from the 5 February 2002 monitoring event for monitoring wells SMW-1 and SMW-3 are generally consistent with historic Site data. Although TEPH was not detected during prior groundwater sampling events at well SMW-2, the 84 ug/L of TEPH detected on 5 February 2002 is near the detection limit and is consistent with results from historic grab groundwater samples collected in the vicinity of well SMW-2 (see Figure 3). In contrast, the TEPH concentrations detected in groundwater from well SMW-4 are significantly elevated relative to the historic data. It is currently unknown if the elevated concentration of TEPH detected at well SMW-4 is an anomalous result or is indicative of an increasing trend of TEPH in groundwater in the vicinity of well SMW-4. At this time, EKI proposes to continue monitoring the groundwater monitoring wells and evaluating TEPH concentration trends in groundwater in accordance with the protocol established in the RMP.

3.2.2 VOC Groundwater Sampling Data

Current and historic VOC data detected in groundwater samples collected from wells SMW-1, SMW-2, SMW-3, and SMW-4 are summarized in Table 3 and on Figure 4. Cis-1,2-dichloroethene ("c-1,2-DCE"), trans-1,2-dichloroethene ("t-1,2-DCE"), and trichloroethene ("TCE") were detected at low concentrations in the groundwater sample collected from well SMW-3. In addition, methyl tertiary-butyl ether ("MTBE") was detected at a concentration just over the detection limit in the groundwater sample collected from well SMW-2. VOCs were not detected in the samples collected from wells SMW-1 and SMW-4.

In general, the results of the VOC analysis are consistent with results from groundwater samples collected in 2001.

3.3 Quality Control Results

All QA/QC analytical results, including laboratory blanks, blank spikes, and surrogates were within (a) generally accepted laboratory QA/QC protocols and (b) requirements of the laboratory's internal quality control procedures. The data collected during the 5 February 2002 monitoring event are considered acceptable and useable for their intended purpose.

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA

64th Street Properties, Emeryville, California

Well Number	Date	Well Elevation (1) (Feet Above MSL)	Depth to Water (Feet)	Groundwater Elevation (Feet Above MSL)
SMW-1	1-Feb-01	12.21	5.68	6.53
	24-May-01	12.21	5.67	6.54
	7-Aug-01	12.21	5.92	6.29
	2-Nov-01	12.21	5.78	6.43
	5-Feb-02	12.21	6.12	6.09
SMW-2	1-Feb-01	11.54	4.67	6.87
	24-May-01	11.54	4.92	6.62
	7-Aug-01	11.54	5.35	6.19
	2-Nov-01	11.54	5.08	6.46
	5-Feb-02	11.54	5.25	6.29
SMW-3	1-Feb-01	12.31	5.60	6.71
	24-May-01	12.31	5.63	6.68
	7-Aug-01	12.31	6.10	6.21
	2-Nov-01	12.31	5.95	6.36
	5-Feb-02	12.31	6.11	6.20
SMW-4	1-Feb-01	12.25	2.41 (2)	9.84 (2)
	24-May-01	12.25	2.43 (2)	9.82 (2)
	7-Aug-01	12.25	2.20 (2)	10.05 (2)
	2-Nov-01	12.25	2.10 (2)	10.15 (2)
	5-Feb-02	12.25	2.43 (2)	9.82 (2)

Notes:

(1) Surveyed elevation from mark on the top of the PVC casing; feet above mean sea level.

(2) A thin layer of floating product was observed in this well. The floating product thickness was less than 0.03 feet.

TABLE 2
SUMMARY OF GROUNDWATER CHEMICAL ANALYTICAL DATA - TEPH

64th Street Properties, Emeryville, California

Date	TEPH (ug/L) (1)			
	SMW-1	SMW-2	SMW-3	SMW-4
1-Feb-01	<50 (3)	<50	**140**	**360**
24-May-01	<50	<50	**74**	**300**
7-Aug-01	<50	<50	**140**	**280**
2-Nov-01	<50	<50	<50	**260**
5-Feb-02	<50	**84**	**100**	**3,600**

Notes and abbreviations:

(1) TEPH is quantified as diesel. Samples were analyzed by EPA Method 8015M after performance of a silica gel cleanup in the laboratory.

TEPH = total extractable petroleum hydrocarbons
ug/L = micrograms per liter (ppb)
<50 = not detected at laboratory detection limit of 50 ug/L

TABLE 3
SUMMARY OF GROUNDWATER CHEMICAL ANALYTICAL DATA - VOCs

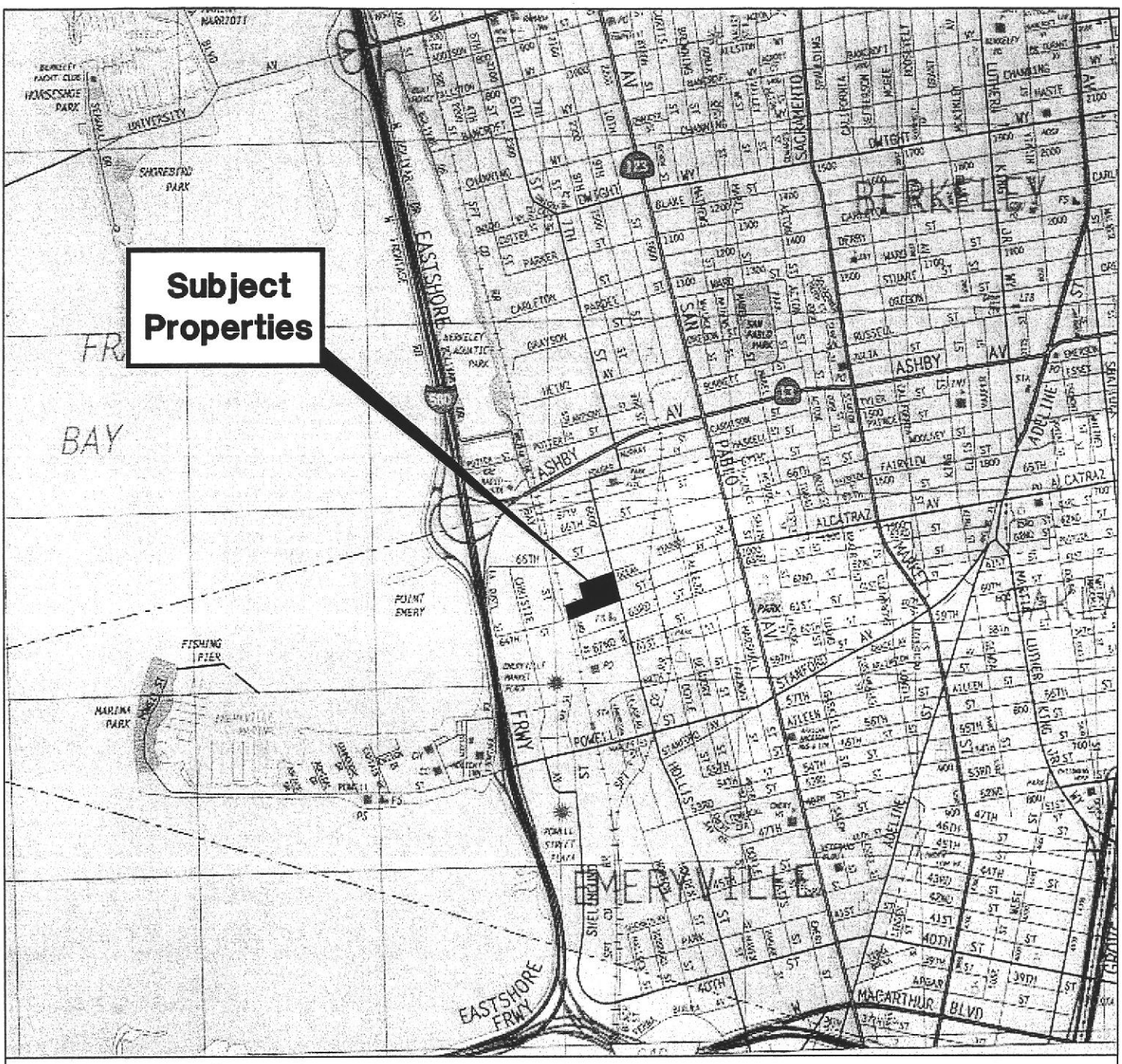
64th Street Properties, Emeryville, California

Sample	Date	VOC Concentrations (ug/L) (1)			
		MTBE	t-1,2-DCE	c-1,2-DCE	TCE
SMW-1	1-Feb-01	<5	<5	<5	<5
	5-Feb-02	<5	<5	<5	<5
SMW-2	1-Feb-01	<5	<5	<5	<5
	5-Feb-02	**5.1**	<5	<5	<5
SMW-3	1-Feb-01	<5	<5	**14**	<5
	5-Feb-02	<5	**5.6**	**13**	**8.9**
SMW-4	1-Feb-01	<5	<5	<5	<5
	5-Feb-02	<5	<5	<5	<5

Notes and abbreviations:

(1) VOCs not listed were not detected using EPA Method 8260B.

VOC = volatile organic compound
MTBE = methyl tertiary-butyl ether
t-1,2-DCE = trans-1,2-dichloroethene
c-1,2-DCE = cis-1,2-dichloroethene
TCE = trichloroethene
ug/L = micrograms per liter (ppb)
<5 = not detected at laboratory detection limit of 5 ug/L.



Basemap Source: Thomas Guide Maps.

N

0 2000 4000

(Approximate Scale in Feet)

Notes:

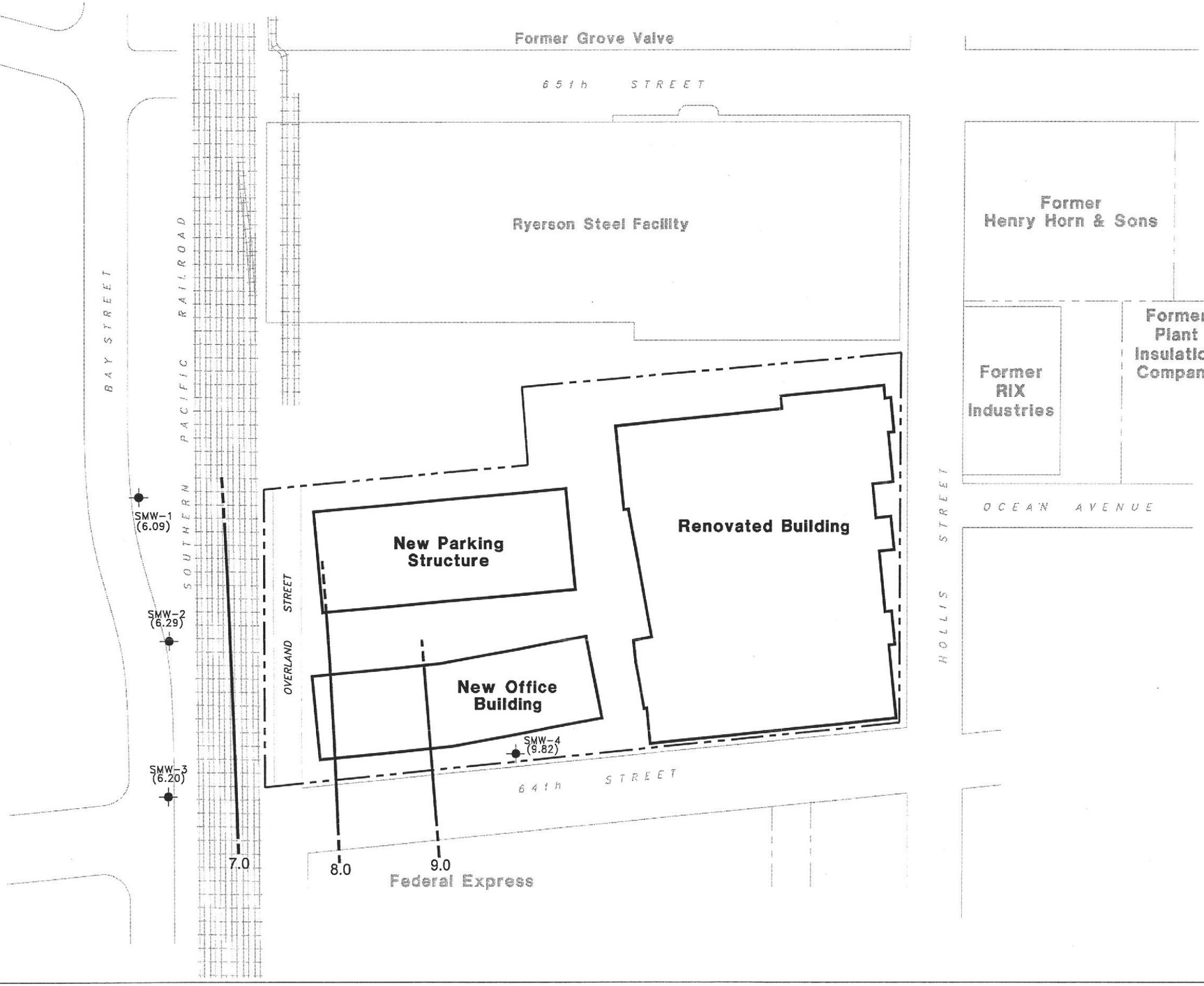
1. All locations are approximate.

Erler & Kalinowski, Inc.

Site Location

64th Street Properties
Emeryville, CA
March 2002
EKI 990016.05

Figure 1



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- 7.0 — Estimated Groundwater Potentiometric Surface, in Feet Above Mean Sea Level
- Monitoring Well Constructed After Redevelopment
- (6.53) Water Level in Feet Above Mean Sea Level

Notes:

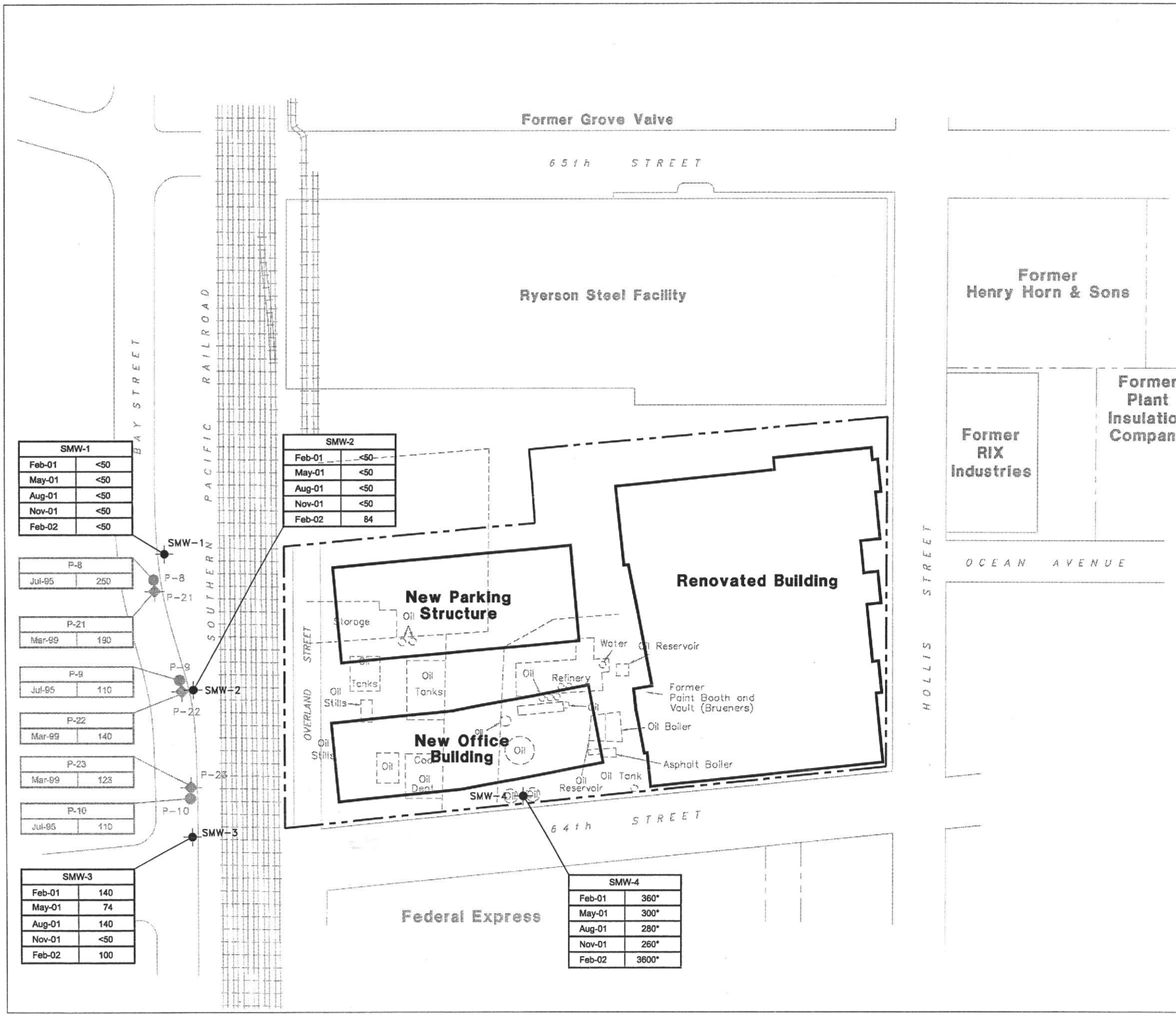
1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater elevations measured 5 February 2002.

Erler & Kalinowski, Inc.

Estimated Groundwater Potentiometric Surface Contour Map

64th Street Properties
Emeryville, CA
March 2002
EKI 990016.05
Figure 2

G:\990016.05\March02\Fig-2 Estimated Groundwater.dwg



SMW-1	
Feb-01	<50
May-01	<50
Aug-01	<50
Nov-01	<50
Feb-02	<50

SMW-2	
Feb-01	<50
May-01	<50
Aug-01	<50
Nov-01	<50
Feb-02	84

P-8	
Jul-95	250

P-21	
Mar-99	190

P-9	
Jul-95	110

P-22	
Mar-99	140

P-23	
Mar-99	123

P-10	
Jul-95	110

SMW-3	
Feb-01	140
May-01	74
Aug-01	140
Nov-01	<50
Feb-02	100

SMW-4	
Feb-01	360*
May-01	300*
Aug-01	280*
Nov-01	260*
Feb-02	3600*

N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Historical Site Features (1911 Sanborn Map)
- Grab Groundwater Sampling Location Collected by EKI, 1995
- Grab Groundwater Sampling Location Collected by EKI, 1999
- Monitoring Well Constructed After Redevelopment

Notes:

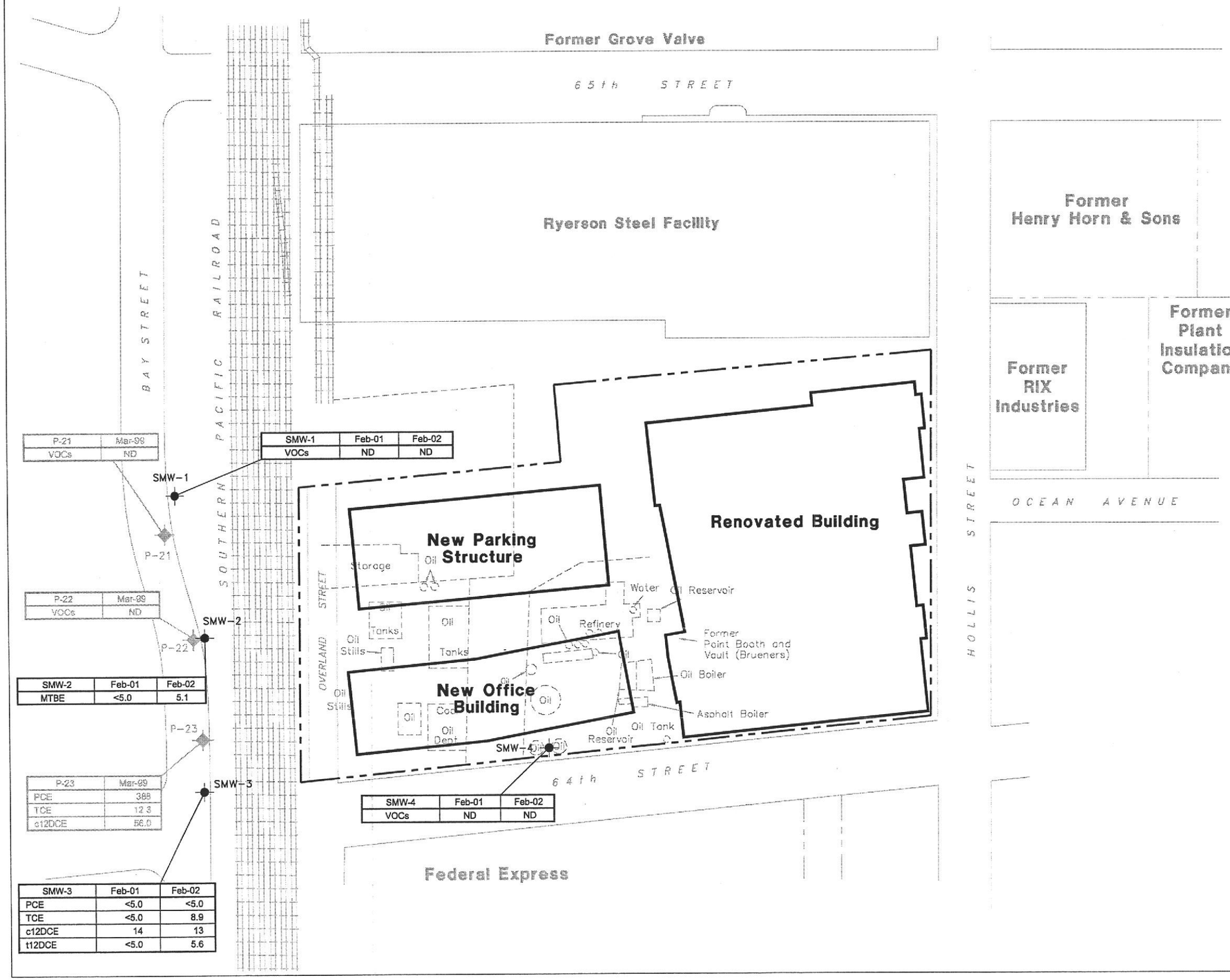
1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in ug/L.
4. "*" Indicates that a sheen was observed in this well. Groundwater sample was collected through a stilling tube.

Erler & Kalinowski, Inc.

Concentrations of Total Extractable Petroleum Hydrocarbons in Groundwater

64th Street Properties
Emeryville, CA
March 2002
EKI 990016.05
Figure 3

3:\990016.05\March02\Fig-3 Concentration Total Extractable.dwg



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Historical Site Features (1911 Sanborn Map)
- Grab Groundwater Sampling Location Collected by EKI, 1999
- Monitoring Well Constructed After Redevelopment

Abbreviations:

VOCs	=	Volatile Organic Compounds
PCE	=	Tetrachloroethene
TCE	=	Trichloroethene
c12DCE	=	cis-1,2-Dichloroethene
ND	=	Not Detected at Laboratory Detection Limit
MTBE	=	Methyl Tertiary-Butyl Ether

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in ug/L.

Erler & Kalinowski, Inc.

Concentrations of Volatile Organic Compounds in Groundwater

64th Street Properties
Emeryville, CA
March 2002
EKI 990016.05
Figure 4

G:\990016.05\March02\Fig-4 Concentration of Halogenated.dwg

APPENDIX A

Groundwater Purge Sample Forms for 5 February 2002

Daily Inspection Report No. _____

Erler & Kalinowski, Inc.

Sheet: 1 of _____

Contractor: —

EKI Staff On-site: ROGER LIOU

Weather:

Date: 4 FEBRUARY 2002

Project: SIMEON - EMERYVILLE

EKI Job No.: 990016.05

Temperature: _____ F Max _____ F Min

Work Hours: 08:45 to 15:30 Memos Issued:

Photos: —

Special Conditions, Delays, Changes: —

Accidents, Damage: —

Sampling, Testing: PURGED SAMPLE 4 WELLS

Visitors to Site: BARBARA WELLS - PROPERTY MANAGER

Work Report (Work done, Personnel/Equipment working): I ARRIVED ON SITE AND CALIBRATED FIELD INSTRUMENTS.

09:13 I STARTED PURGING SMW-3 USING A PERISTALTIC PUMP AND DEDICATED TUBING. I COLLECTED A SAMPLE USING A DEDICATED BAILER. SAMPLES WERE PLACED IN A COOLER WITH ICE.

10:58 I PURGED AND SAMPLED SMW-2, AS ABOVE.

12:08 I PURGED AND SAMPLED SMW-1, AS ABOVE.

I TRANSFERRED PURGE WATER INTO EXISTING DRUMS IN THE STORAGE AREA OF THE PARKING GARAGE.

13:47 I STARTED PURGING SMW-4. AFTER ALL SHEEN WAS REMOVED I SAMPLED THE WELL WITH THE BAILER. PURGE WATER WAS PLACED W/OTHER.

1550 SAMPLES WERE LOGGED IN AT CURTIS & THOMPKINS

Distribution: Project Inspection File (orig)
Project Manager

By: Roger Liou

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: Simeon - Emeryville DATE: 2/5/02
PROJECT NUMBER: 990016.05 WELL NUMBER: SMW-1 PERSONNEL: R.D.Lucas

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15.23	-	6.12	=	9.11	*	0.64	=	5.83

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
Submersible pump ___
Peristaltic pump X AND Bailer X (DEDICATED)
Other _____

PURGE DEPTH: VARIABLE

START TIME: 12:08 END TIME: 12:47

TOTAL GALLONS PURGED: 16.0

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)	(SEE SMW-3)	
pH		
pH		
Turbidity, NTU		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-1	12:50	1 AMBER 3 VOAs + HCl

SAMPLE METHOD: Bailer X (DEDICATED) other ___
COMMENTS:

Time	12:20	12:28	12:39	12:47				
Volume Purged (gallons)	4.0	8.0	12.0	16.0				
Temperature (degrees C)	16.5	16.4	16.7	16.6				
pH	7.16	7.16	7.14	7.12				
Specific Conductivity @ 25 C (millimhos/cm)	1.142	1.198	1.267	1.257				
Turbidity (NTU) /Appearance	455.	586.	—	840.				
Depth to Water during purge (feet)	7.20	7.10	7.14	7.11				
Number of Casing Volumes removed	0.69	1.37	2.06	2.74				
Purge Rate (gallons/minute)	0.33	0.50	0.36	0.50				

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SIMEON-EMERYVILLE DATE: 2/5/02
PROJECT NUMBER: 9900605 WELL NUMBER: SMW-2 PERSONNEL: R.D.Lloyd

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15.13	−	5.25	=	9.88	*	0.64	=	6.32

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
Submersible pump ___ AND Bailer X (DEDICATED)
Peristaltic pump X Other ___

PURGE DEPTH: VARIABLE

START TIME: 10:58 END TIME: 11:40

TOTAL GALLONS PURGED: 16.

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH		
pH	(SEE SMW-3)	
Turbidity, NTU		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-2	11:46	3 VOAs+HCl 1-1L. AMBER

SAMPLE METHOD: Bailer X (DEDICATED) other ___
COMMENTS:

Time	11:07	11:18	11:28	11:40				
Volume Purged (gallons)	3.2	7.0	12.0	16.0				
Temperature (degrees C)	15.9	16.0	16.2	16.2				
pH	6.56	6.81	6.87	6.90				
Specific Conductivity @ 25 C (millimhos/cm)	0.658	0.652	0.652	0.652				
Turbidity (NTU) /Appearance	166.	128.	226.	435.				
Depth to Water during purge (feet)	5.80	5.85	5.87	5.87				
Number of Casing Volumes removed	0.51	1.11	1.90	2.53				
Purge Rate (gallons/minute)	0.36	0.35	0.50	0.33				

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SIMEON - EMERYVILLE DATE: 2/5/02
PROJECT NUMBER: 990016.05 WELL NUMBER: SMW-3 PERSONNEL:

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15.21	-	6.11	=	9.1	*	0.64	=	5.82

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
Submersible pump ___ Bailer ___
Peristaltic pump X Other _____

PURGE DEPTH:_____

START TIME: 9:13 END TIME: 10:26

TOTAL GALLONS PURGED: 15

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)	0.994	1.000
pH	7.01	7.01
pH	4.01	4.01
Turbidity, NTU	0.02	0.02
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-3	10:36	3 VOAs + HCl 1-1 L. AMBER

SAMPLE METHOD: Bailer X (DEDICATED) other ___
COMMENTS:

Time	9:25	9:47	9:57	10:11	10:26			
Volume Purged (gallons)	1.0	5.6	8.0	11.3	15.0			
Temperature (degrees C)	—	18.0	17.9	18.1	18.2			
pH	6.97	7.05	7.05	7.04	7.01			
Specific Conductivity @ 25 C (millimhos/cm)	1.014	1.007	0.993	0.914	0.836			
Turbidity (NTU) /Appearance	—	16.9	7.89	3.18	3.06			
Depth to Water during purge (feet)	6.60	7.90	8.20	8.48	8.62			
Number of Casing Volumes removed	0.17	0.96	1.37	1.94	2.58			
Purge Rate (gallons/minute)	0.08	0.21	0.24	0.24	025			

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: Simeon - Emeryville DATE: 2/5/02
PROJECT NUMBER: 9900/6.05 WELL NUMBER: SMW-4 PERSONNEL: RDLeon

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15	-	2.43	=	12.57	*	0.64	=	8.04

Mult. for casing diam. = 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
Submersible pump ___ Bailer X (DEDICATED)
Peristaltic pump X Other ___

PURGE DEPTH: 2.5

START TIME: ~~13:47~~ 13:47 END TIME: 15:09

TOTAL GALLONS PURGED: 32

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH	(SEE SMW-3)	
pH		
Turbidity, NTU		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SWM-4	15:11	

SAMPLE METHOD: Bailer X (DEDICATED) other ___

COMMENTS: SLIGHT SHEEN (DARK) ON BAILED WATER, (AT THE START) H_2S-LIKE ODOR

Time	14:07	14:16	14:22	14:32	14:47	14:55	15:01	15:09
Volume Purged (gallons)	4.0	8.0	12.0	16.0	20.0	24.00	28.0	32.0
Temperature (degrees C)	17.3	17.3	17.1	17.0	17.2	17.0	16.7	16.6
pH	7.14	7.12	7.03	6.92	7.05	7.10	7.07	7.08
Specific Conductivity @ 25 C (millimhos/cm)	1.041	1.030	1.053	1.074	1.069	1.064	1.062	1.058
Turbidity /Appearance (NTU)	GRAY/CLEAR	ODOR →						
Depth to Water during purge (feet)	2.43	2.43	—	—	—	—	—	—
Number of Casing Volumes removed	0.50	0.99	1.49	1.99	2.49	2.98	3.48	3.98
Purge Rate (gallons/minute)	0.20	0.44	0.67	0.40	0.27	0.50	0.67	0.50

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

CONSULTING ENGINEERS AND SCIENTISTS 1730 South Amphlett Blvd. Suite 320 San Mateo CA 94402 PHONE: 650-578-1172 FAX: 650-578-9131

Project Name	Project No.	ANALYSES REQUESTED	EKI COC No.
Simeon	9900016.05		
Project Location: Emeryville, CA	Laboratory: Curtis & Thomkins		
Report Results to: DERBY DAVIDSON	Sampled By: ROGER D. LUOMA		

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	EXPECTED TURNAROUND	Remarks
SMW-2		2/5/02	11:46	WATER	3 VOAs + HCl, 1-1 L. AMBER	X	X	X	10 day	
SMW-4		2/5/02	15:11	WATER	↓ ↓		X	X	↓	
SMW-3		2/5/02	10:36	WATER	3 VOAs + HCl, 1-1 L. AMBER		X	X		
SMW-1		2/5/02	12:50	WATER	↓ ↓	↓	X	X	↓	

Special Instructions:

	Date	Time	
Relinquished by: (Signature) [signature]	2/5/02	15:50	Received by: (Signature) [signature] 2/5/02 15:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)

APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documents
for 5 February 2002

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

Erler & Kalinowski, Inc.
1870 Ogden Drive
Burlingame, CA 94010-5306

Date: 14-FEB-02
Lab Job Number: 156850
Project ID: N/A
Location: Emeryville

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

156850

CONSULTING ENGINEERS AND SCIENTISTS
1730 South Amphlett Blvd. Suite 320 San Mateo CA 94402
PHONE: 650-578-1172 FAX: 650-578-9131

Project Name	Project No.	ANALYSES REQUESTED	EKI COC No.
Simeon	9900016.05		
Project Location: Emeryville, CA	Laboratory: Curtis & Thomkins		
Report Results to: DERBY DAVIDSON	Sampled By: ROGER D. LUCAS		

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	EXPECTED TURNAROUND	Remarks
SMW-2		2/5/02	11:46	WATER	3 VOAs + HCl, 1-1 L. Amber	X	X	X	10 day	
SMW-4		2/5/02	15:11	WATER	↓ ↓		X	X	↓	
SMW-3		2/5/02	10:36	WATER	3 VOAs + HCl, 1-1 L. Amber		X	X		
SMW-1		2/5/02	12:50	WATER	↓ ↓	↓	X	X		

Received ☒ On Ice ☐ Cold ☐ Ambient ☒ Intact

Preservation Correct? ☒ Yes ☐ No ☐ N/A

Special Instructions:

	Date	Time	Received by: (Signature)
Relinquished by: (Signature) Roger D. Lucas	2/5/02	15:50	Pat Flynn 2/5/02 15:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	8015B(M)
Matrix:	Water	Sampled:	02/05/02
Units:	ug/L	Received:	02/05/02
Diln Fac:	1.000	Prepared:	02/06/02
Batch#:	69953		

Field ID: SMW-2
Type: SAMPLE
Lab ID: 156850-001
Analyzed: 02/08/02
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	84 Y	50

Surrogate	%REC	Limits
Hexacosane	89	44-121

Field ID: SMW-4
Type: SAMPLE
Lab ID: 156850-002
Analyzed: 02/08/02
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	3,600 H Y	50

Surrogate	%REC	Limits
Hexacosane	88	44-121

Field ID: SMW-3
Type: SAMPLE
Lab ID: 156850-003
Analyzed: 02/08/02
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	100 Y	50

Surrogate	%REC	Limits
Hexacosane	80	44-121

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits fuel pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	8015B(M)
Matrix:	Water	Sampled:	02/05/02
Units:	ug/L	Received:	02/05/02
Diln Fac:	1.000	Prepared:	02/06/02
Batch#:	69953		

Field ID:	SMW-1	Analyzed:	02/08/02
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	156850-004		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	86	44-121

Type:	BLANK	Analyzed:	02/07/02
Lab ID:	QC169706	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	88	44-121

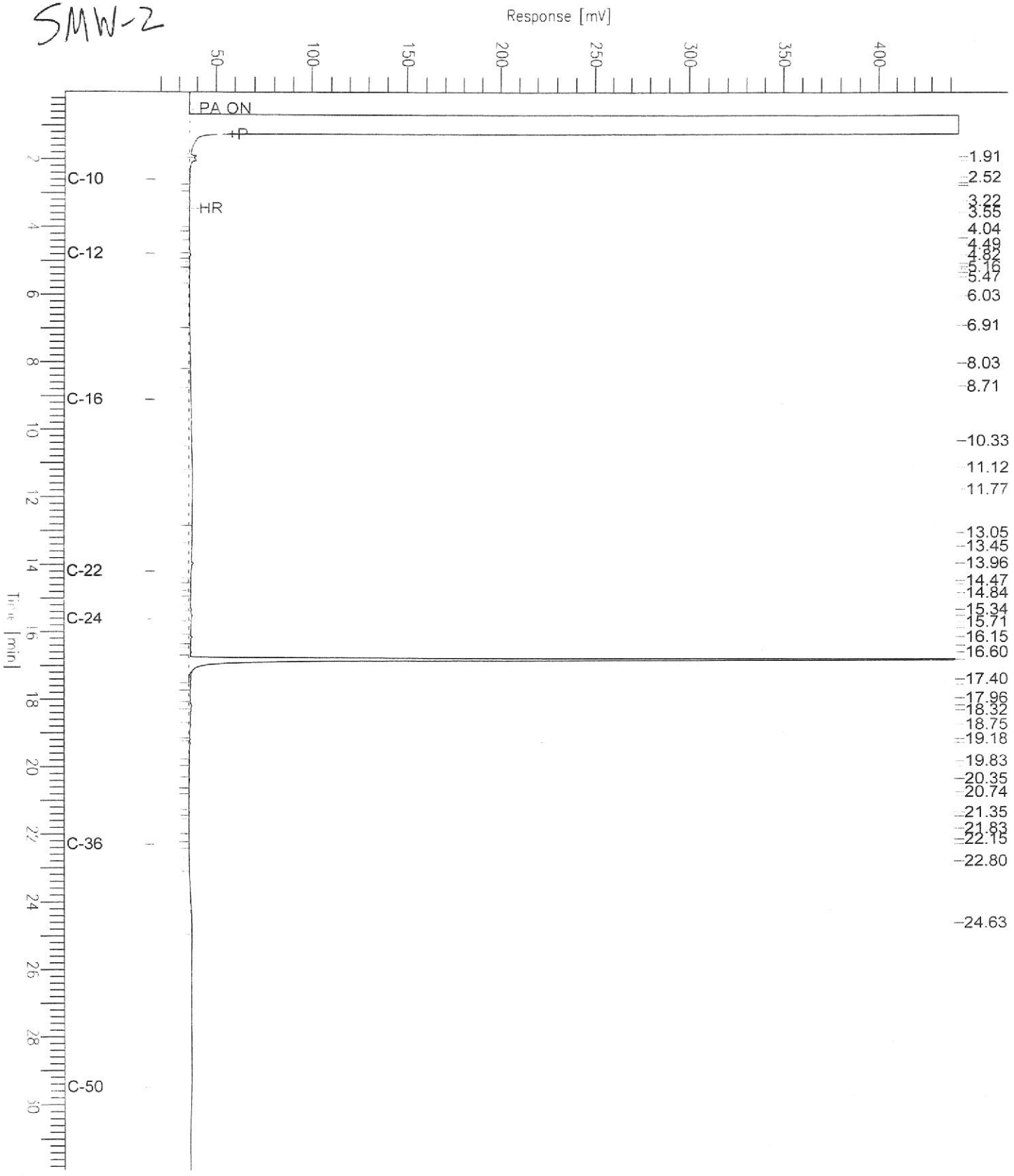
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits fuel pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 156850-001sg,69953
FileName : G:\GC11\CHA\038A025.RAW
Method :
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 69953 Page 1 of 1
Date : 2/8/02 11:14 AM
Time of Injection: 2/8/02 05:04 AM
Low Point : 17.22 mV High Point : 443.96 mV
Plot Scale: 426.7 mV

SMW-2

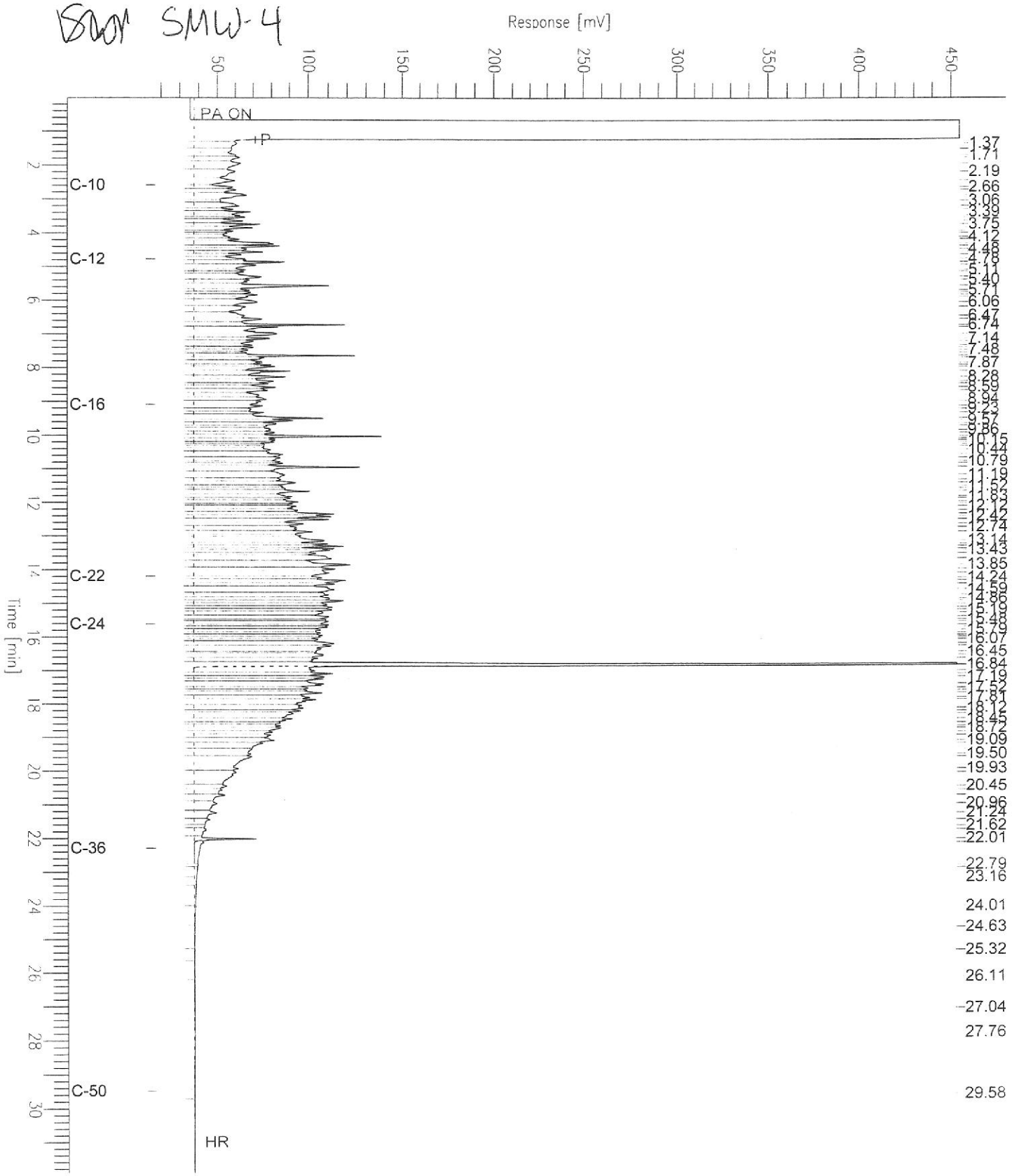


Chromatogram

Sample Name : 156850-002sg,69953
FileName : G:\GC11\CHA\038A026.RAW
Method :
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 69953 Page 1 of 1
Date : 2/8/02 01:37 PM
Time of Injection: 2/8/02 05:44 AM
Low Point : 17.16 mV High Point : 455.03 mV
Plot Scale: 437.9 mV

Blank SMW-4

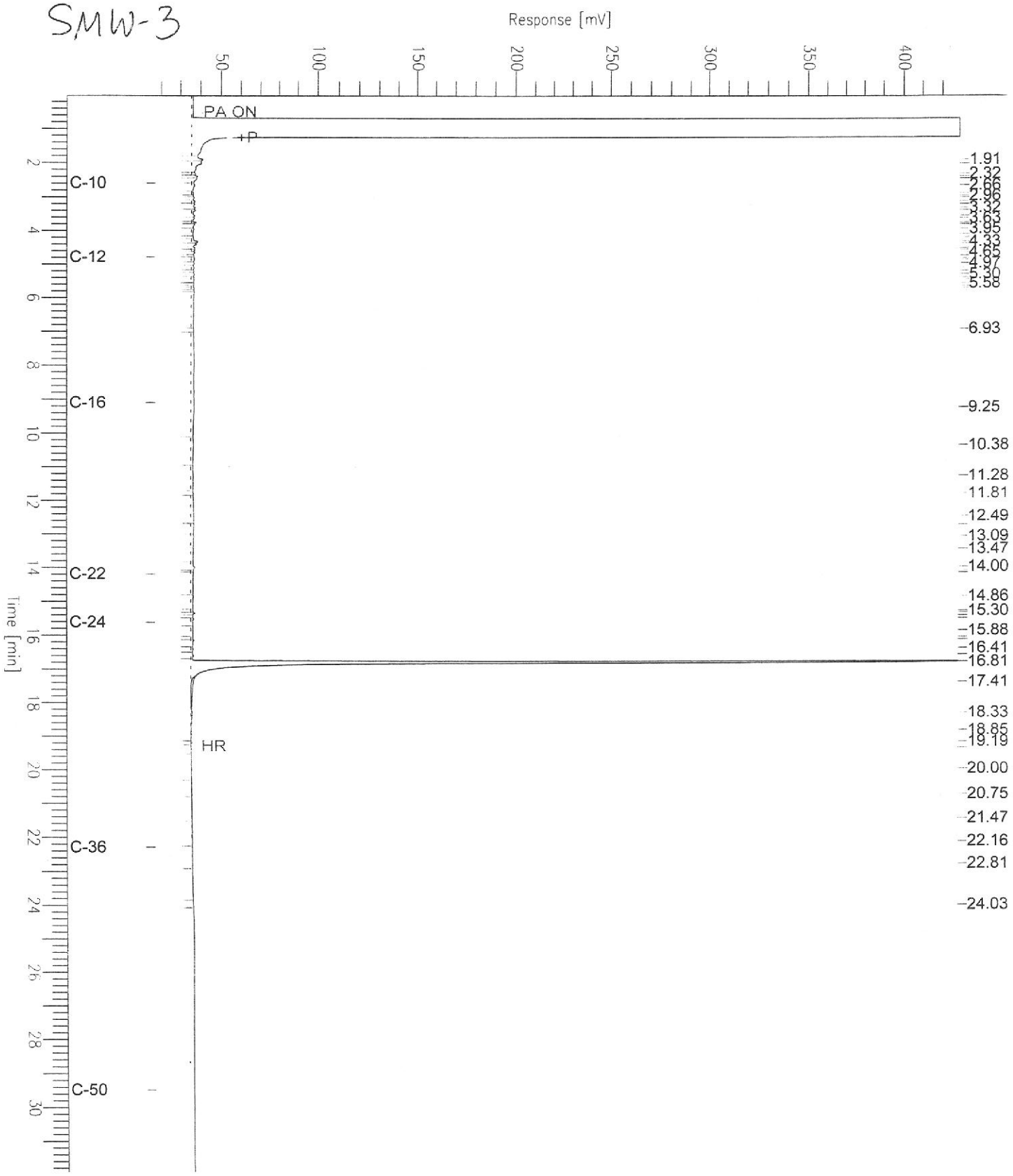


Chromatogram

Sample Name : 156850-003sg,69953
FileName : G:\GC11\CHA\038A027.RAW
Method :
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 69953 Page 1 of 1
Date : 2/8/02 01:37 PM
Time of Injection: 2/8/02 06:23 AM
Low Point : 17.05 mV High Point : 428.77 mV
Plot Scale: 411.7 mV

SMW-3

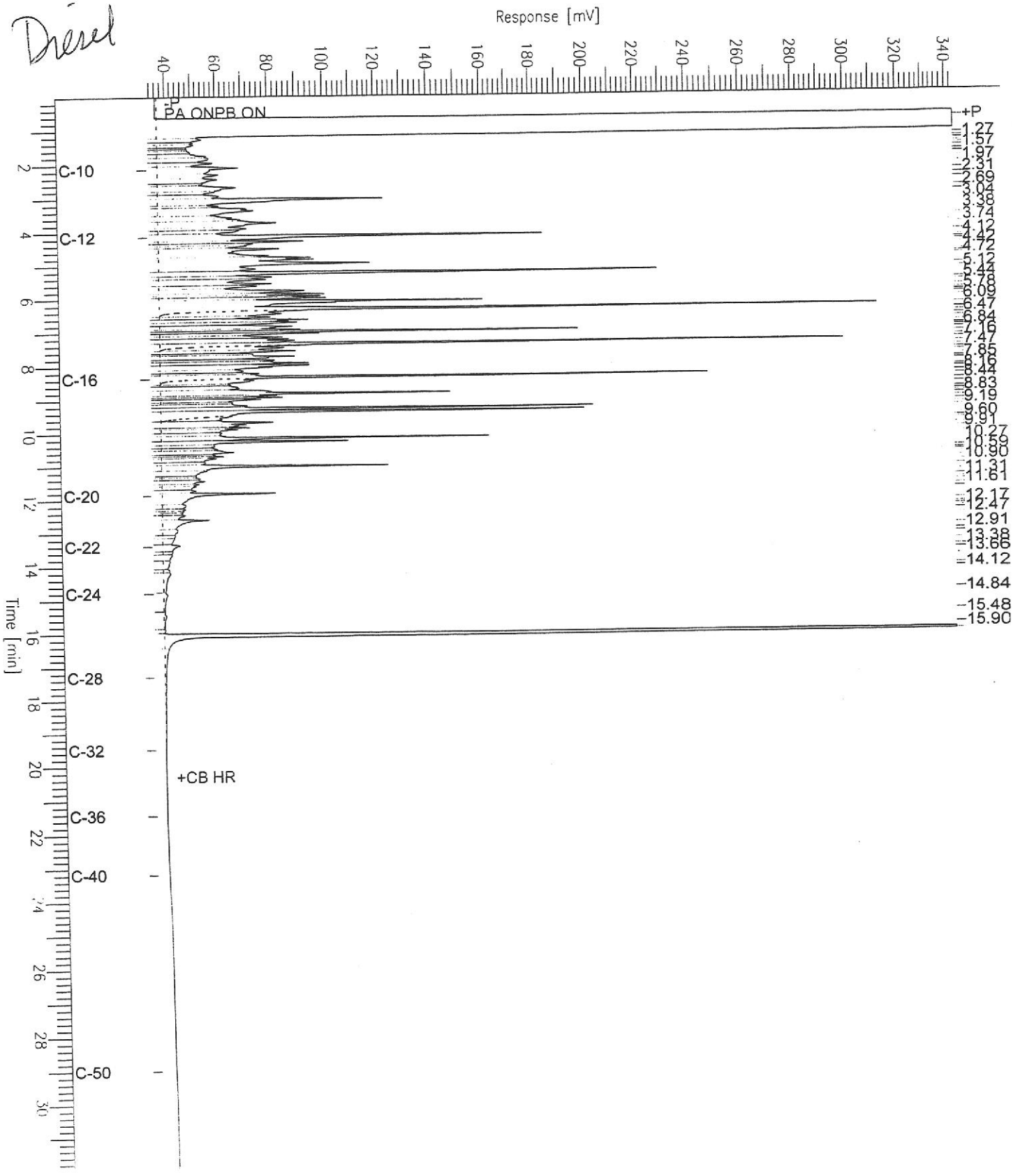


Chromatogram

Sample Name : ccv,02ws0083,dsl
FileName : G:\GC13\CHB\038B006.RAW
Method : BTEH028.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 33 mV

Sample #: 500mg/L
Date : 2/7/02 03:47 PM
Time of Injection: 2/7/02 03:10 PM
Low Point : 32.92 mV High Point : 343.25 mV
Plot Scale: 310.3 mV

Diesel



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	8015B(M)
Matrix:	Water	Batch#:	69953
Units:	ug/L	Prepared:	02/06/02
Diln Fac:	1.000	Analyzed:	02/07/02

Type: BS
Lab ID: QC169707
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,066	83	45-110

Surrogate	%REC	Limits
Hexacosane	88	44-121

Type: BSD
Lab ID: QC169708
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,044	82	45-110	1	22

Surrogate	%REC	Limits
Hexacosane	90	44-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-2	Batch#:	70101
Lab ID:	156850-001	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	5.1	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-2	Batch#:	70101
Lab ID:	156850-001	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-122
1,2-Dichloroethane-d4	112	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	106	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-4	Batch#:	70101
Lab ID:	156850-002	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-4	Batch#:	70101
Lab ID:	156850-002	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-122
1,2-Dichloroethane-d4	112	78-123
Toluene-d8	106	80-110
Bromofluorobenzene	103	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-3	Batch#:	70101
Lab ID:	156850-003	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	5.6	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	13	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	8.9	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-3	Batch#:	70101
Lab ID:	156850-003	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	106	80-110
Bromofluorobenzene	106	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-1	Batch#:	70101
Lab ID:	156850-004	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	SMW-1	Batch#:	70101
Lab ID:	156850-004	Sampled:	02/05/02
Matrix:	Water	Received:	02/05/02
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	102	80-110
Bromofluorobenzene	103	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC170232	Batch#:	70101
Matrix:	Water	Analyzed:	02/13/02
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC170232	Batch#:	70101
Matrix:	Water	Analyzed:	02/13/02
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-122
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	106	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	156850	Location:	Emeryville
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	70101
Units:	ug/L	Analyzed:	02/13/02
Diln Fac:	1.000		

Type: BS Lab ID: QC170229

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	50.28	101	74-132
Benzene	50.00	51.06	102	80-116
Trichloroethene	50.00	53.17	106	80-119
Toluene	50.00	51.49	103	80-120
Chlorobenzene	50.00	50.81	102	80-117

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	102	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	102	80-115

Type: BSD Lab ID: QC170230

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	51.35	103	74-132	2	20
Benzene	50.00	48.26	97	80-116	6	20
Trichloroethene	50.00	51.45	103	80-119	3	20
Toluene	50.00	50.50	101	80-120	2	20
Chlorobenzene	50.00	51.12	102	80-117	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	97	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	105	80-115

RPD= Relative Percent Difference