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**Groundwater Monitoring Report
January to June 2003**

**64th Street Properties
Emeryville, California**

Alameda County
MAR 10 2003
Environmental Health

Prepared for:

SIMEON Commercial Properties
San Francisco, California

Prepared by:

Erler & Kalinowski, Inc.
(EKI 990016.05)

6 March 2003

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6 March 2003

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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 2003
64th Street Properties, Emeryville, California
(EKI 990016.05)

Dear Ms. Graham 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 6 February 2003. Please call with any questions or comments (650) 292-9100.

Very truly yours,

ERLER & KALINOWSKI, INC.

Hae Won Lee
Staff Engineer

Derby Davidson, P.E.
Project Engineer

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

**Groundwater Monitoring Report
January to June 2003
64th Street Properties
Emeryville, California**

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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 6 February 2003. The location of the Site is shown on Figure 1.

Groundwater monitoring at the Site was 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. As recommended in the July to December 2002 Groundwater Monitoring Report, monitoring is being performed on a semi-annual basis to verify that downgradient TEPH concentrations remain stable. 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 6 February 2003 were analyzed for TEPH. Groundwater samples for VOC analysis were inadvertently not collected for this report. Consequently samples will be collected for VOC analysis in the next sampling event, which is scheduled for August 2003. The most recent VOC analyses were conducted on 5 February 2002. For VOC data for the 2002 year, please refer to the January to June 2002 Groundwater Monitoring Report dated 11 October 2002 and prepared by EKI on behalf of SIMEON.

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 6 February 2003 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 were 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 6 February 2003 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., a sheen less than 0.03 feet), was sampled through a stilling tube.

Rinsate from equipment cleaning and purged groundwater from the wells was 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. Analytical results for the 6 February 2003 monitoring event are summarized in Table 2 and are shown on Figure 3. 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 6 February 2003, (b) groundwater analytical results from on-site groundwater monitoring conducted on 6 February 2003, 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 6 February 2003. 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. This groundwater gradient is consistent with prior monitoring events.

3.2 Groundwater Analytical Results

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.

TEPH was not detected at a concentration above 50 micrograms per liter ("ug/L") in the groundwater samples collected on 6 February 2003 from downgradient monitoring wells SMW-1, SMW-2, and SMW-3. TEPH was detected at a concentration of 2,100 ug/L in the groundwater sample collected from monitoring well SMW-4. 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 concentration 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 6 February 2003 monitoring event for monitoring wells SMW-1, SMW-2, and SMW-3 are generally consistent with historic Site data. The TEPH concentration that was detected in groundwater from well SMW-4 was similar to the concentrations detected in February and August 2002, but an order of magnitude greater than concentrations found in the preceding four groundwater sampling events. Although the concentrations detected in samples collected from well SMW-4 in 2002 and 2003 are significantly elevated compared to 2001 data, they are consistent with concentrations detected in site groundwater samples collected prior to redevelopment (see Figure 3). Thus, 2001 data may reflect transient conditions, while 2002 and 2003 data may reflect long-term norms. As noted above, the apparent increase in TEPH concentrations at well SMW-4 have not resulted in an increase in TEPH concentrations downgradient of the site (i.e. in wells SMW-1 through SMW-3). Monitoring will continue on a semi-annual basis to verify that downgradient groundwater concentrations remain stable.

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 6 February 2003 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
	21-Aug-02	12.21	5.95	6.26
	6-Feb-03	12.21	6.09	6.12
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
	21-Aug-02	11.54	5.23	6.31
	6-Feb-03	11.54	5.36	6.18
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
	21-Aug-02	12.31	6.05	6.26
	6-Feb-03	12.31	6.20	6.11
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)
	21-Aug-02	12.25	2.23 (2)	10.02 (2)
	6-Feb-03	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	<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
21-Aug-02	<50	69	<50	8,000
6-Feb-03	<50	<50	<50	2,100

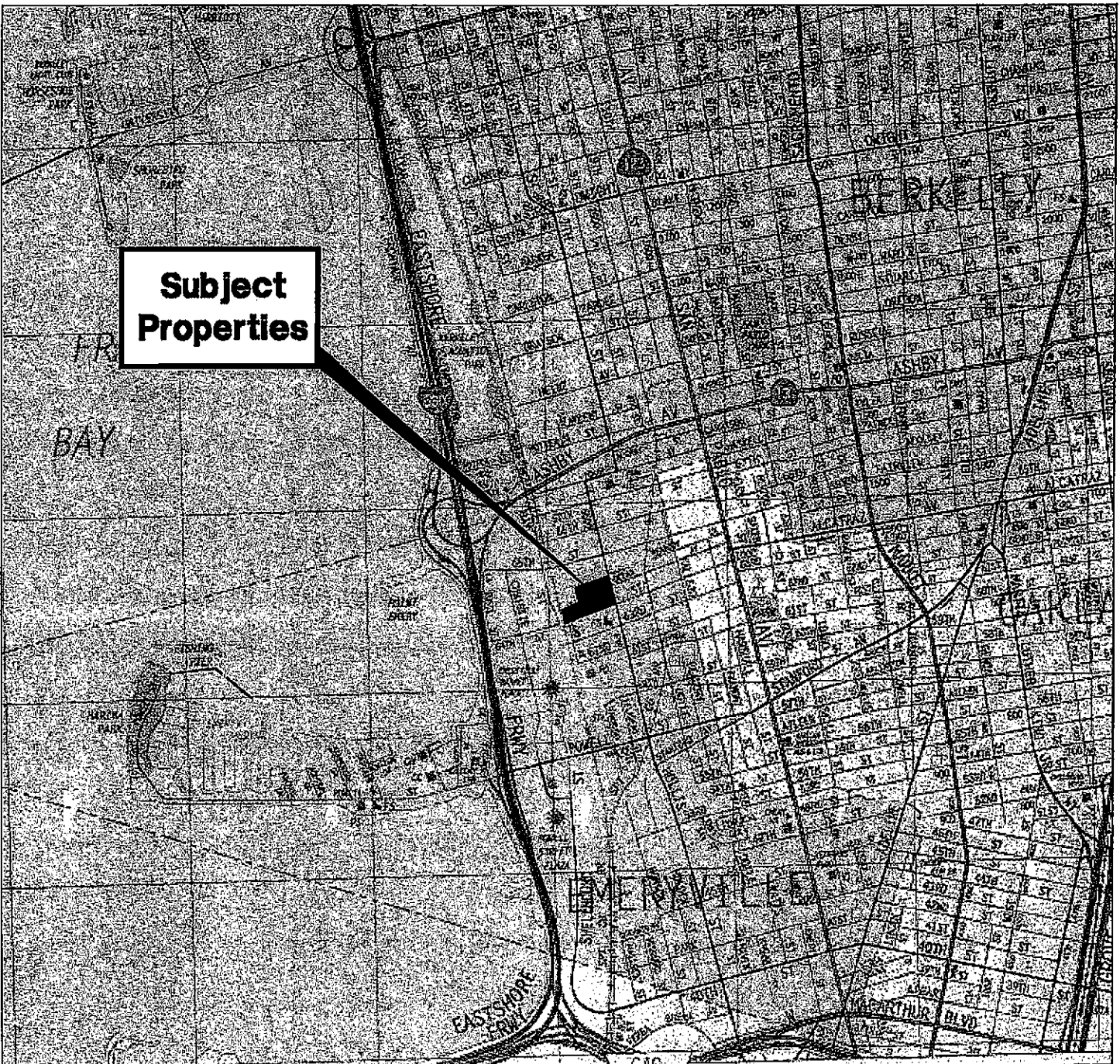
Notes and abbreviations:

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

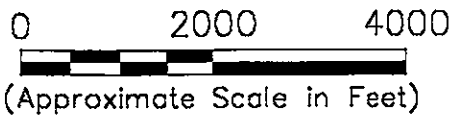
TEPH = total extractable petroleum hydrocarbons

ug/L = micrograms per liter (ppb)

<50 = not detected at laboratory detection limit of 50 ug/L



Basemap Source: Thomas Guide Maps.



Notes:

- 1. All locations are approximate.

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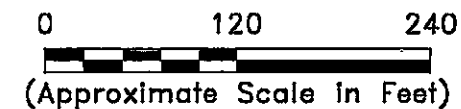
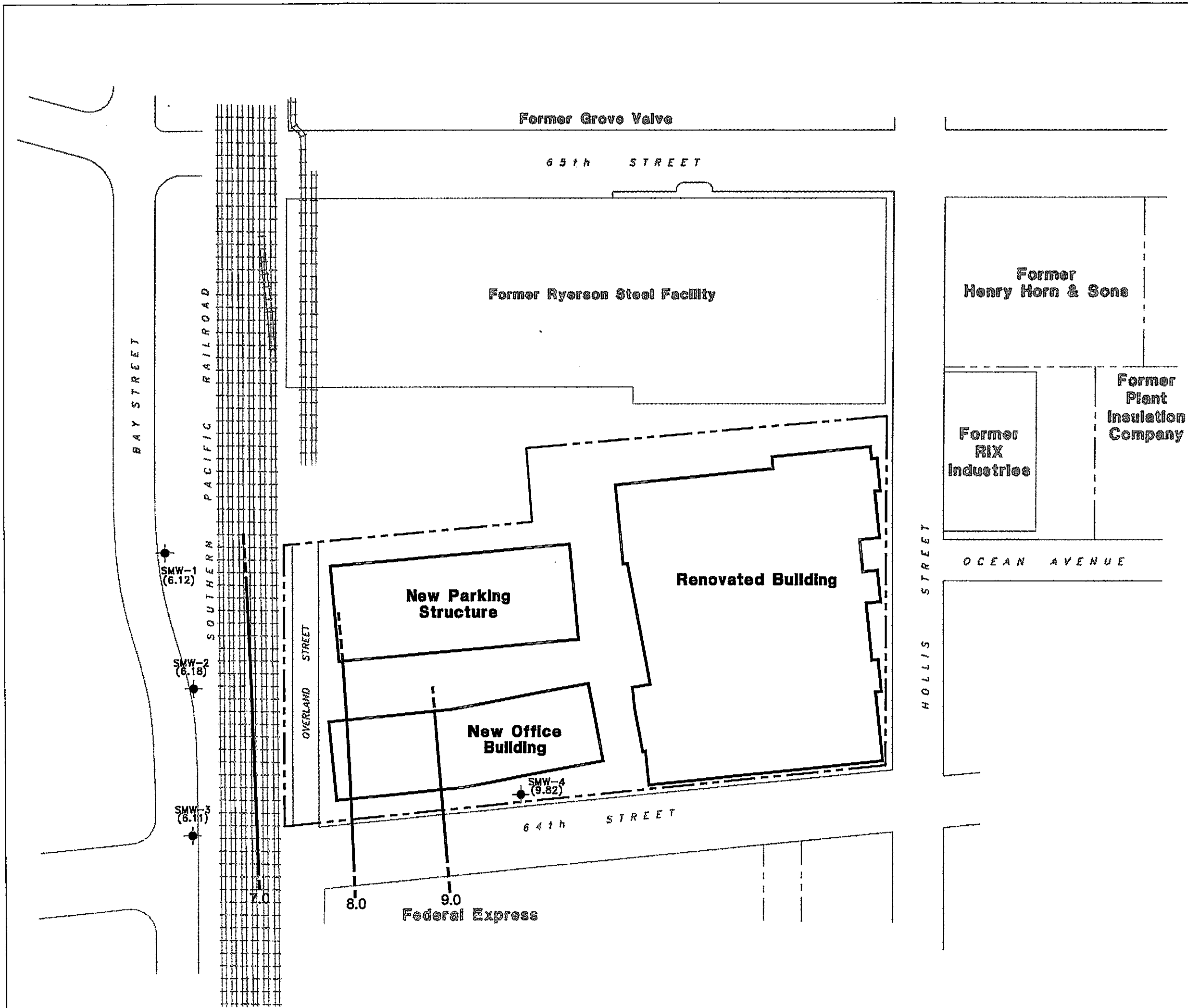
Site Location

64th Street Properties
Emeryville, CA

March 2003

EKI 990016.05

Figure 1



LEGEND

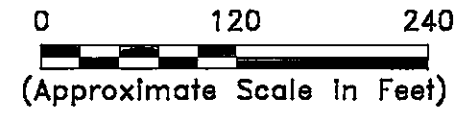
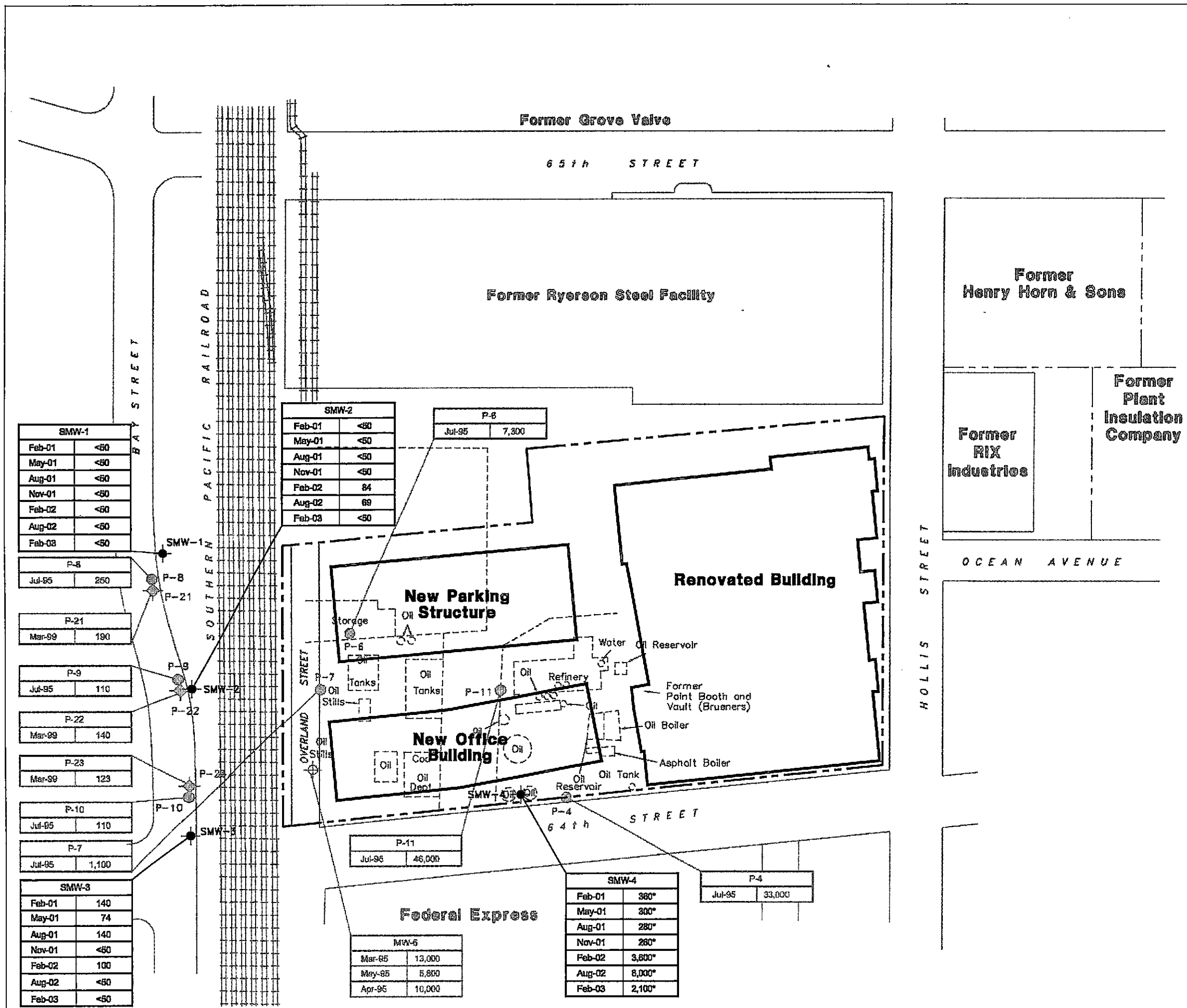
- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- 7.0 Estimated Groundwater Potentiometric Surface, in Feet Above Mean Sea Level
- Monitoring Well Constructed After Redevelopment
- (6.18) Water Level in Feet Above Mean Sea Level

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater elevations measured 6 February 2003

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Estimated Groundwater Potentiometric Surface Contour Map
 64th Street Properties
 Emeryville, CA
 March 2003
 EKI 990016.05
 Figure 2



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 Destroyed Prior to Redevelopment
- Monitoring Well Constructed After Redevelopment

Notes:

1. All locations are approximate.
2. Base map 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.

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Concentrations of Total Extractable Petroleum Hydrocarbons in Groundwater
 64th Street Properties
 Emeryville, CA
 March 2003
 EKI 990016.05
 Figure 3

APPENDIX A

Groundwater Purge Sample Forms for 6 February 2003

Daily Inspection Report No. _____

Contractor: _____
 EKI Staff On-Site: ROGER LEON
 Weather: CLEAR
 Temperature: _____ °F Min to _____ °F Max
 Work Hours: 07:55 to _____ Memos Issued: _____
 Photos: _____
 Special Conditions, Delays, Changes: _____

Sheet: _____ of _____
 Date: 6 FEB 2003
 Project: SIMEON
 EKI Job No: 990016.05

Accidents, Damage: _____

Sampling, Testing: PURGED/SAMPLE WELLS SMW-1 → SMW-4

Visitors to Site: _____

Work Report (Work done, Personnel/Equipment working): ⁰⁸⁰⁰ I OPENED WELLS

WELL	TIME OPENED	TIME MEASURED	DEPTH TO WATER
SMW-1	08:05	08:32	6.09 ft
SMW-2	08:14	08:20	5.36 ft.
SMW-3	08:18	08:22	6.20 ft.
SMW-4	12:03	12:15	2.43 6.09 ft.

AFTER CALIBRATING FIELD INSTRUMENTS, I STARTED PURGING SMW-1 WITH A DEDICATED BAILER, THEN COLLECTED A SAMPLE AT 09:19 AND PLACED IT IN A COOLER.

09:45 I PURGED & SAMPLED SMW-2 IN THE SAME MANNER AT 10:25.

10:48 I STARTED PURGING SMW-3 IN THE SAME MANNER, THEN COLLECTED A SAMPLE.

11:40 I TRANSFERRED PURGE WATER TO A DRUM AT THE STORAGE ROOM IN THE PARKING GARAGE.

12:21 I PURGED SMW-4 WITH DEDICATED BAILERS. THERE WAS A STRONG ODOR OF DECAYING ORGANIC MATTER AND A SLIGHT SHEEN. AFTER PURGING 30 ASING VOLUMES, I MADE A "STILLING TUBE" BY TAPING A PIECE OF ALUMINIUM FOIL OVER THE END OF A PIECE OF 2 INCH PVC PIPE. THE FOIL COVERED END WAS PLACED BELOW THE SURFACE OF THE WATER AND THEN A NEW BAILER WAS USED TO PIERCE THE FOIL AND COLLECT A WATER SAMPLE.

AFTER CLOSING THE WELL, PURGE WATER WAS PLACED IN A DRUM AS ABOVE, THEN SAMPLES WERE TAKEN TO CURTIS & TOMPKINS LAB IN BERKELEY.

Roger Leon

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SIMEON DATE: 06 FEB 03
 PROJECT NUMBER: 990016.04 WELL NUMBER: SMW-1 PERSONNEL: R.D. Lion

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>15.23</u>	<u>6.09</u>	<u>9.14</u>	<u>* 0.64</u>	<u>= 5.85</u>

Mult. for casing diam. = 1-inch=0.041; 2-inch=0.16; 4-inch=0.64

PURGE METHOD:

Submersible pump Dedicated Bailer
 Peristaltic pump Other

INSTRUMENT CALIBRATION

	Field measure	Standard measure
Instrument		
Conductivity, (millimhos/cm @ 25C)	<u>10.35</u>	<u>1000</u>
pH	<u>6.98</u>	<u>7.01</u>
pH	<u>4.01</u>	<u>4.01</u>
Turbidity, NTU	<u>0.02</u>	<u>0.02</u>
Temperature		
Depth Probe#		

PURGE DEPTH: BOTTOM

START TIME: 08:42 END TIME: 09:19

TOTAL GALLONS PURGED: 18

SAMPLES: Field I.D. SMW-1 Time Collected 09:19 Containers & Preservation 3 - 40-ml VGAs w/ HCL
1 - 1-liter amber glass

SAMPLE METHOD: Dedicated Bailer Peristaltic Pump other

COMMENTS:

Time	<u>08:53</u>	<u>09:04</u>	<u>09:15</u>	<u>09:18</u>				
Volume Purged (gallons)	<u>5.0</u>	<u>10.0</u>	<u>16.0</u>	<u>18.0</u>				
Temperature (degrees C)	<u>16.8</u>	<u>17.0</u>	<u>17.0</u>	<u>16.9</u>				
pH	<u>6.95</u>	<u>7.20</u>	<u>7.05</u>	<u>7.15</u>				
Specific Conductivity @ 25 C (millimhos/cm)	<u>1.222</u>	<u>1.269</u>	<u>1.274</u>	<u>1.287</u>				
Turbidity (NTU) / Appearance	<u>138.</u>	<u>—</u>	<u>401.</u>	<u>—</u>				
Depth to Water during purge (feet)	<u>7.82</u>	<u>7.03</u>	<u>7.18</u>	<u>—</u>				
Number of Casing Volumes removed	<u>0.85</u>	<u>1.71</u>	<u>2.73</u>	<u>3.08</u>				
Purge Rate (gallons/minute)	<u>0.45</u>	<u>0.45</u>	<u>0.55</u>	<u>0.67</u>				

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SIMEON DATE: 06 FEB 03
 PROJECT NUMBER: 990016.04 WELL NUMBER: SMW-2 PERSONNEL: R.D. Lion

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)	Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
<u>15.13</u>	<u>5.25</u>	<u>9.88</u>	<u>0.64</u>	<u>6.32</u>

Mult. for casing diam. = 1-inch=0.041; 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
 Submersible pump Dedicated Bailer
 Peristaltic pump Other

PURGE DEPTH: BOTTOM

START TIME: 09:45 END TIME: 10:22

TOTAL GALLONS PURGED: 19

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (millimhos/cm @ 25C)		
pH		(SEE SMW-1)
pH		
Turbidity, NTU		
Temperature		
Depth Probe#		

SAMPLES:	<u>Field I.D.</u>	<u>Time Collected</u>	<u>Containers & Preservation</u>
	<u>SMW-2</u>	<u>10:25</u>	3 - 40 ml VOAs w/ HCL <u>1 - 1-liter amber glass</u>

SAMPLE METHOD: Dedicated Bailer Peristaltic Pump other

COMMENTS:

Time	<u>09:54</u>	<u>10:07</u>	<u>10:22</u>				
Volume Purged (gallons)	<u>7.0</u>	<u>14.0</u>	<u>19.0</u>				
Temperature (degrees C)	<u>16.9</u>	<u>16.5</u>	<u>16.7</u>				
pH	<u>6.93</u>	<u>6.86</u>	<u>6.78</u>				
Specific Conductivity @ 25 C (millimhos/cm)	<u>0.649</u>	<u>0.648</u>	<u>0.650</u>				
Turbidity (NTU) / Appearance	<u>376,</u>	<u>875.</u>	<u>486.</u>				
Depth to Water during purge (feet)	<u>6.18</u>	<u>6.41</u>	<u>5.80</u>				
Number of Casing Volumes removed	<u>1.10</u>	<u>2.21</u>	<u>3.00</u>				
Purge Rate (gallons/minute)	<u>0.78</u>	<u>0.54</u>	<u>0.33</u>				

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: SIMEON DATE: 06/02/03
 PROJECT NUMBER: 990016.04 WELL NUMBER: SMW-3 PERSONNEL: R.D. Lwin

WELL VOLUME CALCULATION:
 Depth of Well (ft.) 15.21 - Depth to Water (ft.) 6.21 = Water Column (ft.) 9.00
 Multiplier (below) 0.64 = Casing Vol. (gallons) 5.76
 Mult. for casing diam. = 1-inch=0.041; 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
 Submersible pump Dedicated Bailer
 Peristaltic pump Other
 PURGE DEPTH: BOTTOM
 START TIME: 10:48 END TIME: 11:20
 TOTAL GALLONS PURGED: 19.0

INSTRUMENT CALIBRATION
 Instrument Conductivity, (millimhos/cm @ 25C)
 Field measure pH
 Standard measure pH (SEE SMW-1)
 Turbidity, NTU
 Temperature
 Depth Probe#

SAMPLES: Field I.D. SMW-3 Time Collected 11:20 Containers & Preservation
~~2 - 40-ml VOAs w/ HCL~~
 1 - 1-liter amber glass

SAMPLE METHOD: Dedicated Bailer Peristaltic Pump other

COMMENTS:

Time	10:58	11:08	11:20				
Volume Purged (gallons)	8.0	14.0	19.0				
Temperature (degrees C)	19.0	19.6	19.5				
pH	6.91	6.96	6.89				
Specific Conductivity @ 25 C (millimhos/cm)	0.980	0.950	1.046				
Turbidity (NTU) / Appearance	150	354	461				
Depth to Water during purge (feet)	10.06	11.90	~				
Number of Casing Volumes removed	1.39	2.43	3.30				
Purge Rate (gallons/minute)	0.85	0.60	0.42				

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: Simson DATE: 06 FEBRUARY 03
 PROJECT NUMBER: 990016.04 WELL NUMBER: SMW-4 PERSONNEL: RDLion

WELL VOLUME CALCULATION:
 Depth of Well (ft.) 15. Depth to Water (ft.) 2.43 Water Column (ft.) = 12.57 Multiplier (below) * 0.64 Casing Vol. (gallons) = 8.04
 Mult. for casing diam. = 1-inch=0.041; 2-inch=0.16; 4-inch=0.64

PURGE METHOD:
 Submersible pump Dedicated Bailer
 Peristaltic pump Other
 PURGE DEPTH: BOTTOM
 START TIME: 12:21 END TIME: 1:30
 TOTAL GALLONS PURGED: 25.0

INSTRUMENT CALIBRATION
 Instrument Conductivity, (millimhos/cm @ 25C) Field measure (SEE SMW-1) Standard measure
 pH
 pH
 Turbidity, NTU
 Temperature
 Depth Probe#

SAMPLES: Field I.D. SMW-4 Time Collected 13.11 Containers & Preservation 2 - 40 ml VOAs w/ HCL
1 - 1-liter amber glass

SAMPLE METHOD: ~~Dedicated~~ ^{NEW} Bailer Peristaltic Pump other
 COMMENTS: THROUGH STILLING TUBE

Time	12:40	12:50	13:01					
Volume Purged (gallons)	8.0	16.0	25					
Temperature (degrees C)	16.9	17.0	16.9					
pH	6.60	6.53	6.44					
Specific Conductivity @ 25 C (millimhos/cm)	1106	1186	1191					
Turbidity (NTU) / Appearance	—	207.	—					
Depth to Water during purge (feet)	—	3.20	—					
Number of Casing Volumes removed	0.99	1.99	3.11					
Purge Rate (gallons/minute)	0.42	0.80	0.82					

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 Simeon		Project No. 9900016.04				ANALYSES REQUESTED							EKI COC No.		
Project Location Emeryville, CA		Laboratory Curtis & Tompkins				EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel						EXPECTED TURNAROUND	Remarks <i>Standard TAT</i>
Report Results to: <i>DERBY DAVIDSON</i>		Sampled By: <i>ROGER LION</i>													
Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative										
SMW-1		<i>6 FEB 03</i>	<i>09:19</i>	<i>WATER</i>	1 - 1-L amber	-	X	X						10 day	
SMW-2		<i>6 FEB 03</i>	<i>10:25</i>	<i>WATER</i>	1 - 1-L amber	-	X	X						10 day	
SMW-3		<i>6 FEB 03</i>	<i>11:20</i>	<i>WATER</i>	1 - 1-L amber	-	X	X						10 day	
SMW-4		<i>6 FEB 03</i>	<i>13:11</i>	<i>WATER</i>	1 - 1-L amber	-	X	X						10 day	
Preservation Correct? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A						Received <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Intact									
Special Instructions:															
Relinquished by: (Signature) <i>[Signature]</i>		Date <i>2/6/03</i>		Time <i>13:45</i>		Received by: (Signature) <i>Pat Plumm 2/6/03 O&T 13:45</i>									
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 6 February 2003



COPY

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: 18-FEB-03
Lab Job Number: 163529
Project ID: 9900016.04
Location: Simeon

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

This package may be reproduced only in its entirety.

163527

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		9900016.04											
Project Location		Laboratory		EPA 8021 - VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel						EXPECTED TURNAROUND	Remarks
Emeryville, CA		Curtis & Tompkins											
Report Results to:			Sampled By:										
DERBY DAVIDSON			ROGER LION										
Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative								
SMW-1		6 FEB 03	09:19	WATER	1 - 1-L amber	-	X	X					10 day
SMW-2		6 FEB 03	10:25	WATER	1 - 1-L amber	-	X	X					10 day
SMW-3		6 FEB 03	11:20	WATER	1 - 1-L amber	-	X	X					10 day
SMW-4		6 FEB 03	13:11	WATER	1 - 1-L amber	-	X	X					10 day
Preservation Correct? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A						<input checked="" type="checkbox"/> Received <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Intact							
Special Instructions:													
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							
[Signature]				2/6/3	13:45	[Signature] 2/6/03 05T 13:45							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							
Relinquished by: (Signature)				Date	Time	Received by: (Signature)							

-1
-2
-3
-4

Standard TA

Total Extractable Hydrocarbons

Lab #:	163529	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	9900016.04	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/06/03
Units:	ug/L	Received:	02/06/03
Diln Fac:	1.000	Prepared:	02/07/03
Batch#:	79041		

Field ID:	SMW-1	Analyzed:	02/12/03
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	163529-001		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	77	39-137

Field ID:	SMW-2	Analyzed:	02/11/03
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	163529-002		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	81	39-137

Field ID:	SMW-3	Analyzed:	02/11/03
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	163529-003		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	80	39-137

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

Page 1 of 2

Total Extractable Hydrocarbons

Lab #:	163529	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	9900016.04	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	02/06/03
Units:	ug/L	Received:	02/06/03
Diln Fac:	1.000	Prepared:	02/07/03
Batch#:	79041		

Field ID:	SMW-4	Analyzed:	02/11/03
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	163529-004		

Analyte	Result	RL
Diesel C10-C24	2,100 H Y	50

Surrogate	%REC	Limits
Hexacosane	87	39-137

Type:	BLANK	Analyzed:	02/12/03
Lab ID:	QC204140	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	90	39-137

H= Heavier hydrocarbons contributed to the quantitation
 Y= Sample exhibits fuel pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Chromatogram

Sample Name : 163529-004sg,79041
FileName : G:\GC17\CHA\042A006.RAW
Method : ATEH042.MTH
Start Time : 0.01 min
Scale Factor: 0.0

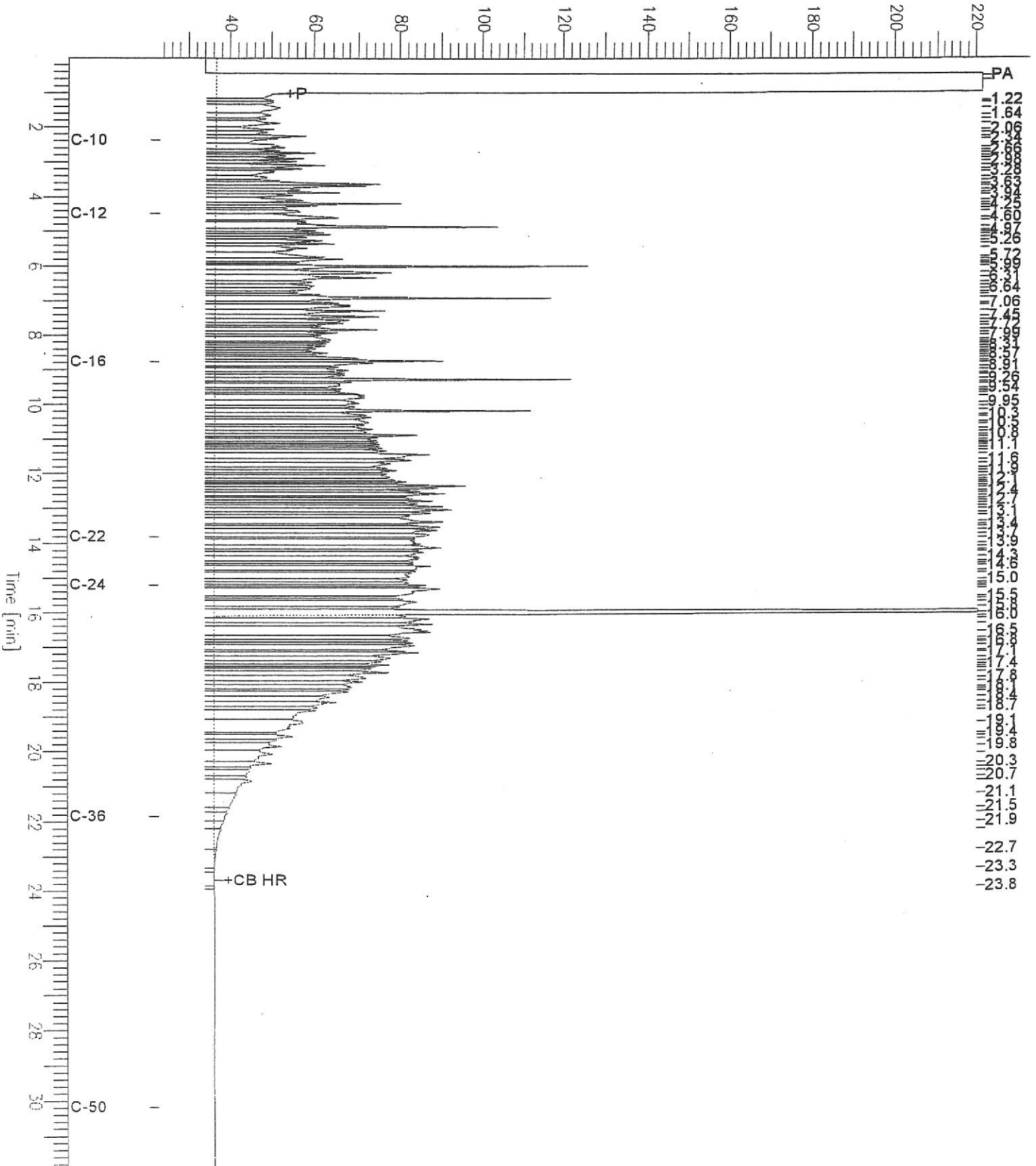
End Time : 31.91 min
Plot Offset: 23 mV

Sample #: 79041
Date : 2/12/03 09:01 AM
Time of Injection: 2/11/03 09:37 PM
Low Point : 23.18 mV
Plot Scale: 198.5 mV
High Point : 221.71 mV

Page 1 of 1

SMW-4

Response [mV]



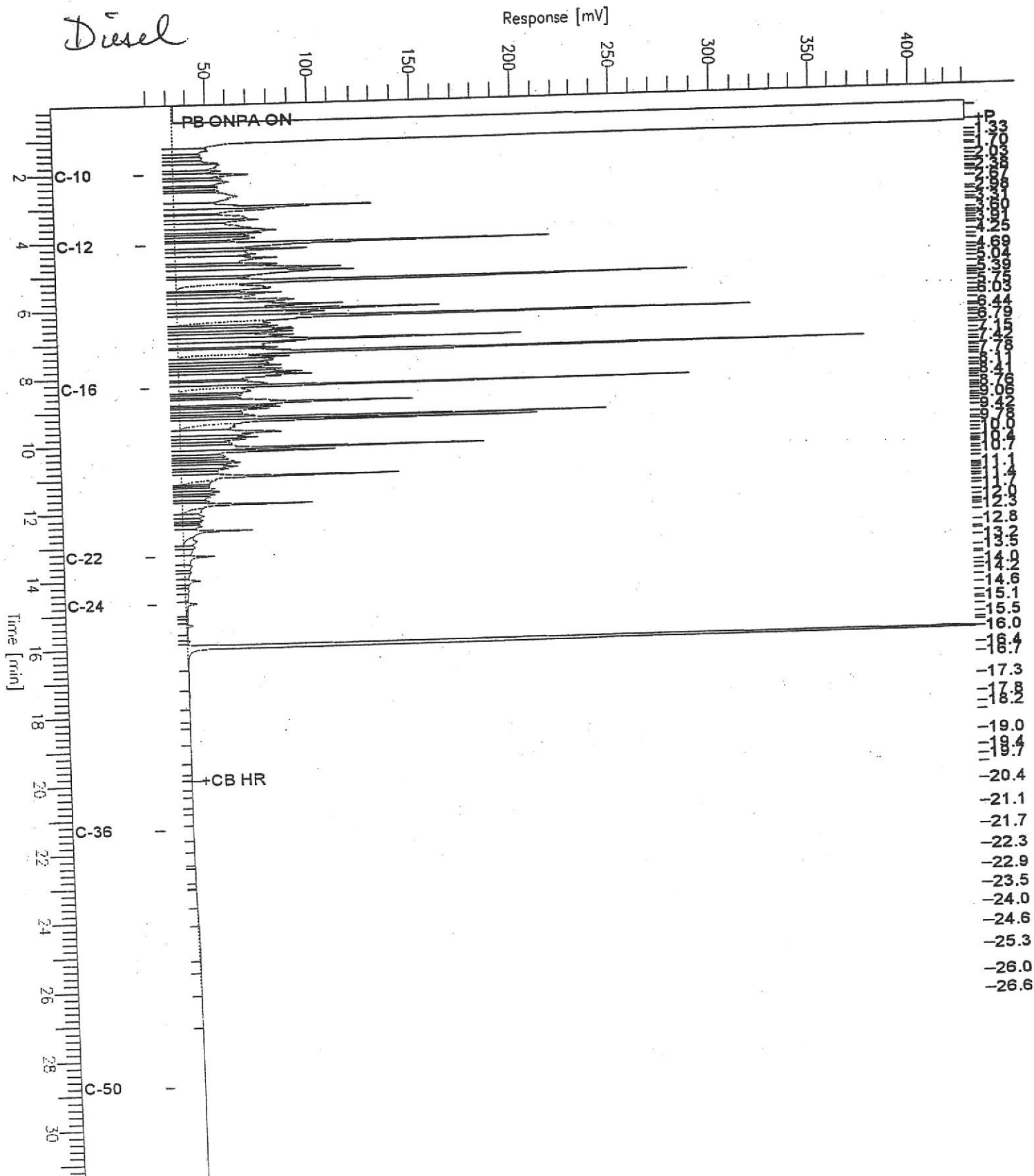
Chromatogram

Page 1 of 1

File Name : ccv_02ws2069.dsl
eName : G:\GC15\CHB\0418002.RAW
Mod : BTEH037.MTH
rt Time : 0.01 min
le Factor : 0.0

End Time : 31.91 min
Plot Offset: 18 mV

Sample #: 500mg/L
Date : 2/10/03 10:30 AM
Time of Injection: 2/10/03 09:45 AM
Low Point : 18.15 mV
Plot Scale: 412.9 mV
High Point : 431.04 mV





Total Extractable Hydrocarbons

Lab #:	163529	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520C
Project#:	9900016.04	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	79041
Units:	ug/L	Prepared:	02/07/03
Diln Fac:	1.000	Analyzed:	02/12/03

Type: BS
 Lab ID: QC204141
 Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,675	67	37-120

Surrogate	%REC	Limits
Hexacosane	75	39-137

Type: BSD
 Lab ID: QC204142
 Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,908	76	37-120	13	26

Surrogate	%REC	Limits
Hexacosane	83	39-137