Groundwater Monitoring Report
July to December 2004
and Cap Status Report

64th Street Properties
Emeryville, California

Prepared for:

SIMEON Commercial Properties
San Francisco, California

Prepared by:

Erler & Kalinowski, Inc.
(EKI 990016.05)

7 October 2004

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7 October 2004

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1515 Clay Street, Suite 1400
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Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Groundwater Monitoring Report and Cap Assessment
July to December 2004
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 and cap status assessment conducted at the 64th Street Properties located at 1480 64th Street, Emeryville, California on 4 August 2004.

Please call with any questions or comments (650) 292-9100.

Very truly yours,

ERLER & KALINOWSKI, INC.

Hae Won Lee
Staff Engineer

Theodore G. Erler, P.E.
President

Michelle Kriegman King, Ph.D.
Project Manager

cc: Pierson Forbes (3 copies), SIMEON Commercial Properties
Maurice Kaufman, City of Emeryville

Groundwater Monitoring Report
July to December 2004
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 the cap status assessment and groundwater monitoring activities conducted at the 64th Street Properties located at 1480 64th Street in Emeryville, California ("Site") on 4 August 2004. The location of the Site is shown on Figure 1.

Groundwater monitoring and the cap status assessment at the Site were 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. Groundwater monitoring was performed quarterly in 2001, semi-annually in 2002, and has continued to be performed semi-annually to date. As recommended in the July to December 2002 Groundwater Monitoring Report, monitoring is being performed on a semi-annual basis to verify that downgradient petroleum hydrocarbon 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 have been 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 4 August 2004 were analyzed for TEPH and VOCs.

The RMP also requires that the Site cap be assessed every two years to see if there has been damage or disturbance that could possibly expose potentially impacted underlying soil. All soil required to be capped are to be covered with materials such as concrete building slabs, pavement, or clean soil cover. The clean soil cover is to be at least 3 feet thick. This report includes a current assessment of the cap status.

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 4 August 2004 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 4 August 2004 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 was sampled through a stilling tube. A sheen, a strong organic odor, and dark colored sediment were observed at well SMW-4, along with a slight amount of floating product.

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 using EPA Method 8015M with silica gel cleanup and for VOCs using EPA Method 8260B. Analytical results for the 4 August 2004 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 4 August 2004, (b) groundwater analytical results from on-site groundwater monitoring conducted on 4 August 2004, 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 4 August 2004. 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 0.0095 ft/ft. This groundwater gradient is consistent with prior monitoring events.

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.

TEPH was not detected at a concentration above 50 micrograms per liter ("ug/L") in the groundwater samples collected on 4 August 2004 from downgradient monitoring wells SMW-1, SMW-2, and SMW-3. TEPH was detected at a concentration of 1,600 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. 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.

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") was detected at a concentration of 5.9 ug/L in the groundwater sample collected from well SMW-3. No other VOCs were detected in this sample. VOCs analyzed using EPA Method 8260B were not detected in the groundwater samples collected from wells SMW-1, SMW-2, and SMW-4.

In general, the results of the VOC analyses are consistent with results from previous groundwater samples.

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 4 August 2004 monitoring event are considered acceptable and useable for their intended purpose.

4.0 CAP STATUS ASSESSMENT

In accordance with the RMP, Areas A and C are required to be capped with buildings, asphalt, concrete, or 3 feet of clean fill in landscaped areas. Areas A and C are shown on Figure 5. In accordance with the RMP, EKI observed the Site landscaped and paved areas to assess whether the cap materials are significantly damaged or disturbed. On 4 August 2004, EKI conducted a visual cap assessment. The landscaping appeared to be in place as it was 3 years ago with no visible signs of degradation. Photographs taken for the cap status assessment can be seen in Appendix C. Refer to Figure 5 to identify photograph locations.

In addition to the visual assessment, EKI spoke with Barbara Wells, Simeon's property manager for the Site, on 4 August 2004 to identify possible subgrade repairs or construction activities that may have damaged or disturbed the cap materials. Ms. Wells stated that, to her knowledge and except as indicated below, there were no subgrade utility repairs, broken irrigation lines, dead tree or bush removal or replacement, or erosion that exposed the potentially impacted, underlying soil. Ms. Wells stated that a rainwater leader was repaired on the 6401 64th Street property, on the southern side of the building facing 64th Street. The repair necessitated a portion of the sidewalk pavement to be replaced. Photographs of the repaired leader and replaced sidewalk pavement can be seen in Appendix C (Photos 14 and 15).

5.0 CONCLUSION

Groundwater monitoring at the Site has been conducted from January 2001 to December 2004 in general accordance with the groundwater monitoring plan as described in the RMP. In addition, the Site cap appears to have been maintained in accordance with the RMP requirements.

This section summarizes groundwater analytical results for TEPH and VOCs at the Site during the past four years and presents Simeon's plan to reduce groundwater monitoring from bi-annual to annual monitoring.

5.1 Groundwater Chemical Analytical Results from 2001 to 2004

5.1.1 TEPH Summary

Samples were collected and analyzed for TEPH quarterly in 2001 and bi-annually in 2002, 2003, and 2004. Analytical data from downgradient monitoring wells SMW-1, SMW-2, and SMW-3 during these sampling events have shown TEPH concentrations to be consistently low or not detected, indicating that migration of petroleum hydrocarbons from the former oil refinery at the Site has not occurred.

Monitoring well SMW-4, which is located in the vicinity of the former refinery, was expected to contain residual free phase hydrocarbons that could give rise to significant variation in the groundwater chemical analytical results (EKI, 1999). Groundwater samples from this well have been collected through a stilling tube to reduce the likelihood that residual petroleum hydrocarbon would become entrained in the samples. From the last quarterly sampling event in 2001 to the first bi-annual sample event in 2002, analytical results show an order of magnitude increase in TEPH concentration. This order of magnitude difference in analytical results for samples from well SMW-4 may be evidence of the expected variation or may be an artifact of the change in personnel conducting the sampling, which occurred between the two sampling events. The increase in TEPH concentration could also be evidence of soil disturbance related to construction activities on the Site in 2000 and 2001, which may not have manifested itself until a year after construction completion. TEPH concentrations in samples from well SMW-4 have been stable since February 2002 and visible product appeared to have decreased since February 2001.

Whatever the case may be, when the site groundwater data are taken as a whole (i.e., wells SMW-1 through SMW-4), the bi-annual analytical results in 2002, 2003, and 2004 show TEPH concentrations are stable or possibly decreasing.

5.1.2 VOC Summary

Samples were collected and analyzed for VOCs yearly in 2001 and 2002 and biannually in 2004. As can be seen in Table 3 of this groundwater monitoring report, except for a few instances, VOCs were generally not detected. Analytical results show methyl tertiary-butyl ether concentration, trans-1,2-dichloroethene, and trichloroethene were only detected once at concentrations slightly above detection limits in the 2002 sampling event. Analytical results for groundwater samples from well SMW-3 show cis-1,2-dichloroethene concentrations steadily declining from 2001 to 2004.

5.2 Groundwater Monitoring Frequency Reduced to Annual Monitoring

Overall, analytical data from the 2001 to 2004 indicate that water quality conditions are stable or improving at the Site. Based upon the consistent results during the past four years of groundwater monitoring and in accordance with the schedule for the groundwater monitoring program described in the approved RMP, Simeon is planning to reduce the

groundwater monitoring frequency from bi-annual to annual monitoring to confirm groundwater conditions at the Site are stable.

6.0 REFERENCES

Erler & Kalinowski, Inc., 30 August 1999, *Final Risk Management Plan for the 64th Street Properties*, Emeryville, California

Erler & Kalinowski, Inc., 2 April 2001, *Quarterly Groundwater Monitoring Report, January to March 2001*, Emeryville, California

Erler & Kalinowski, Inc., 21 June 2001, *Quarterly Groundwater Monitoring Report, April to June 2001*, Emeryville, California

Erler & Kalinowski, Inc., 5 September 2001, *Quarterly Groundwater Monitoring Report, July to September 2001*, Emeryville, California

Erler & Kalinowski, Inc., 20 November 2001, *Quarterly Groundwater Monitoring Report, October to December 2001*, Emeryville, California

Erler & Kalinowski, Inc., 28 March 2002, *Groundwater Monitoring Report, January to June 2002*, Emeryville, California

Erler & Kalinowski, Inc., 11 October 2002, *Groundwater Monitoring Report, July to December 2002*, Emeryville, California

Erler & Kalinowski, Inc., 6 March 2003, *Groundwater Monitoring Report, January to June 2003*, Emeryville, California

Erler & Kalinowski, Inc., 26 August 2003, *Groundwater Monitoring Report, January to June 2003*, Emeryville, California

Erler & Kalinowski, Inc., 26 February 2004, *Groundwater Monitoring Report, January to June 2004*, Emeryville, California

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
	7-Aug-03	12.21	6.61	5.60
	4-Feb-04	12.21	5.25	6.96
	4-Aug-04	12.21	6.28	5.93
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
	7-Aug-03	11.54	5.92	5.62
	4-Feb-04	11.54	4.39	7.15
	4-Aug-04	11.54	5.64	5.90
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
	7-Aug-03	12.31	6.81	5.50
	4-Feb-04	12.31	5.25	7.06
	4-Aug-04	12.31	6.36	5.95
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)

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-4	7-Aug-03	12.25	2.54 (2)	9.71 (2)
	4-Feb-04	12.25	2.25 (3)	10.00 (3)
	4-Aug-04	12.25	2.54 (4)	9.71 (4)

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, which is the minimum measurable thickness by the oil/water interface meter.
(3) A sheen was observed, along with dark colored sediment but no free product layer.
(4) A sheen was observed, along with a strong organic odor and dark colored sediment. A slight amount of floating product was present.

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**
7-Aug-03	<50	<50	<50	**1,100**
4-Feb-04	<50	<50	<50	**900**
4-Aug-04	<50	<50	<50	**1,600**

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

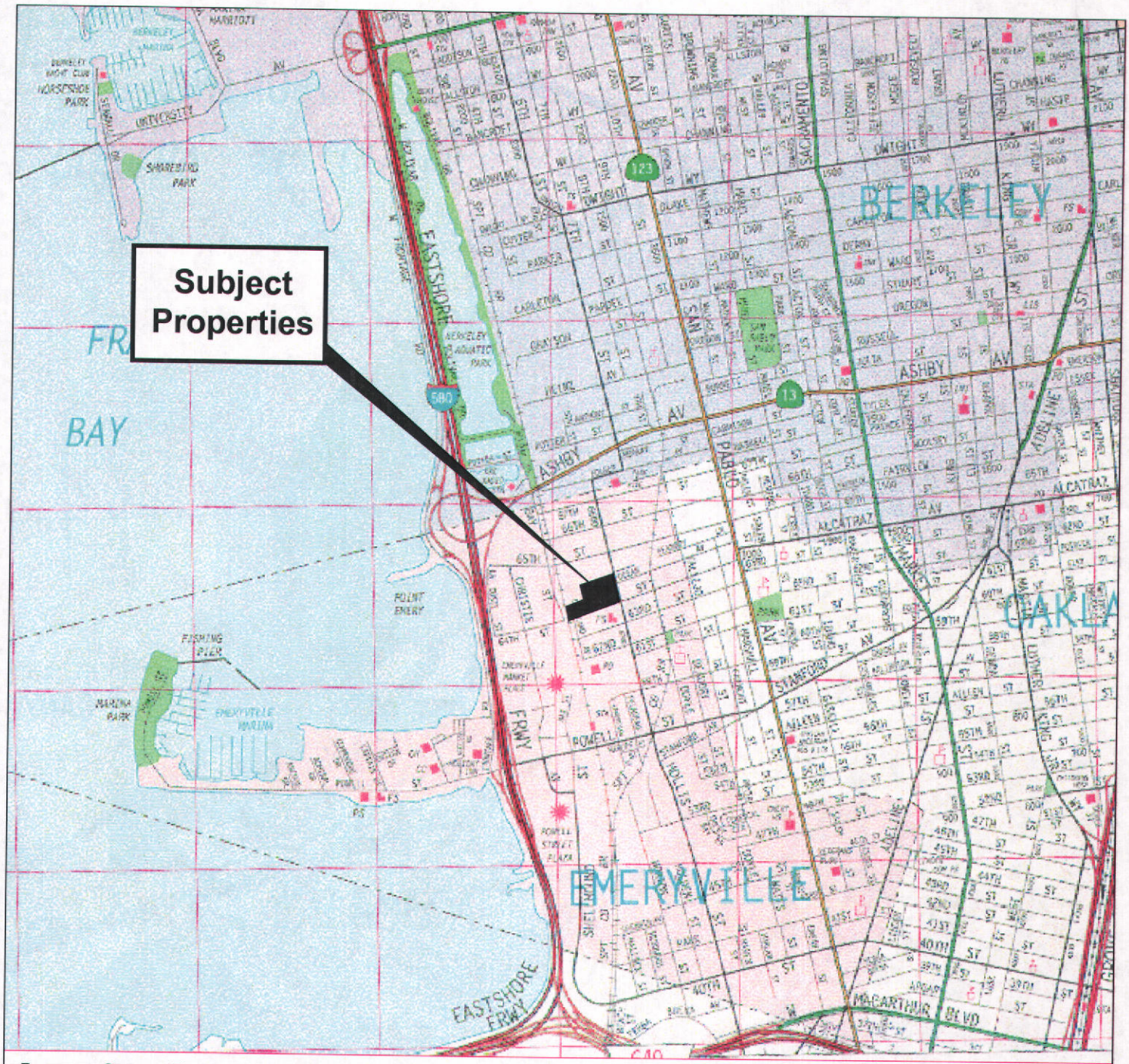
64th Street Properties, Emeryville, California

Sample	Date (2)	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
	4-Feb-04	<5	<5	<5	<5
	4-Aug-04	<5	<5	<5	<5
SMW-2	1-Feb-01	<5	<5	<5	<5
	5-Feb-02	**5.1**	<5	<5	<5
	4-Feb-04	<5	<5	<5	<5
	4-Aug-04	<5	<5	<5	<5
SMW-3	1-Feb-01	<5	<5	**14**	<5
	5-Feb-02	<5	**5.6**	**13**	**8.9**
	4-Feb-04	<5	<5	**5.8**	<5
	4-Aug-04	<5	<5	**5.9**	<5
SMW-4	1-Feb-01	<5	<5	<5	<5
	5-Feb-02	<5	<5	<5	<5
	4-Feb-04	<5	<5	<5	<5
	4-Aug-04	<5	<5	<5	<5

Notes and abbreviations:

(1) VOCs not listed were not detected using EPA Method 8260B.
(2) Groundwater samples for VOC analysis were inadvertently not collected in 2003.

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)

Erler & Kalinowski, Inc.

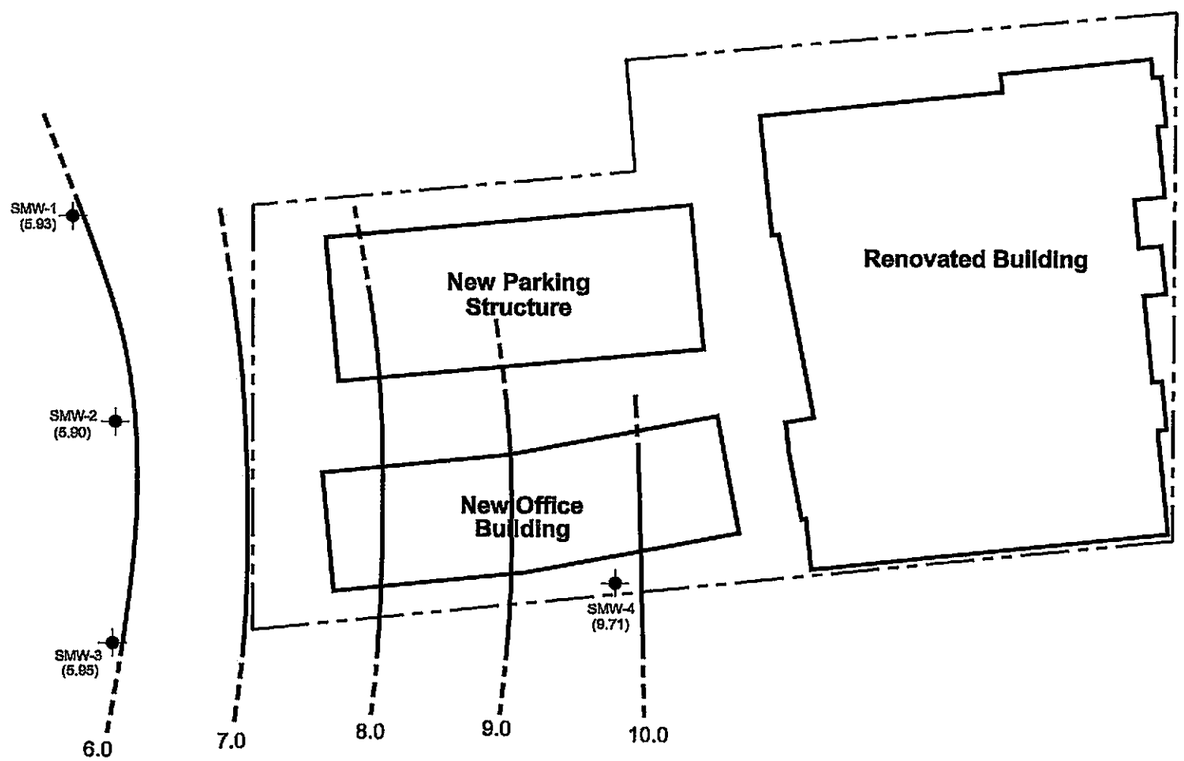
Site Location

64th Street Properties
Emeryville, CA
October 2004
EKI 990016.05

Figure 1

Notes:

1. All locations are approximate.



LEGEND

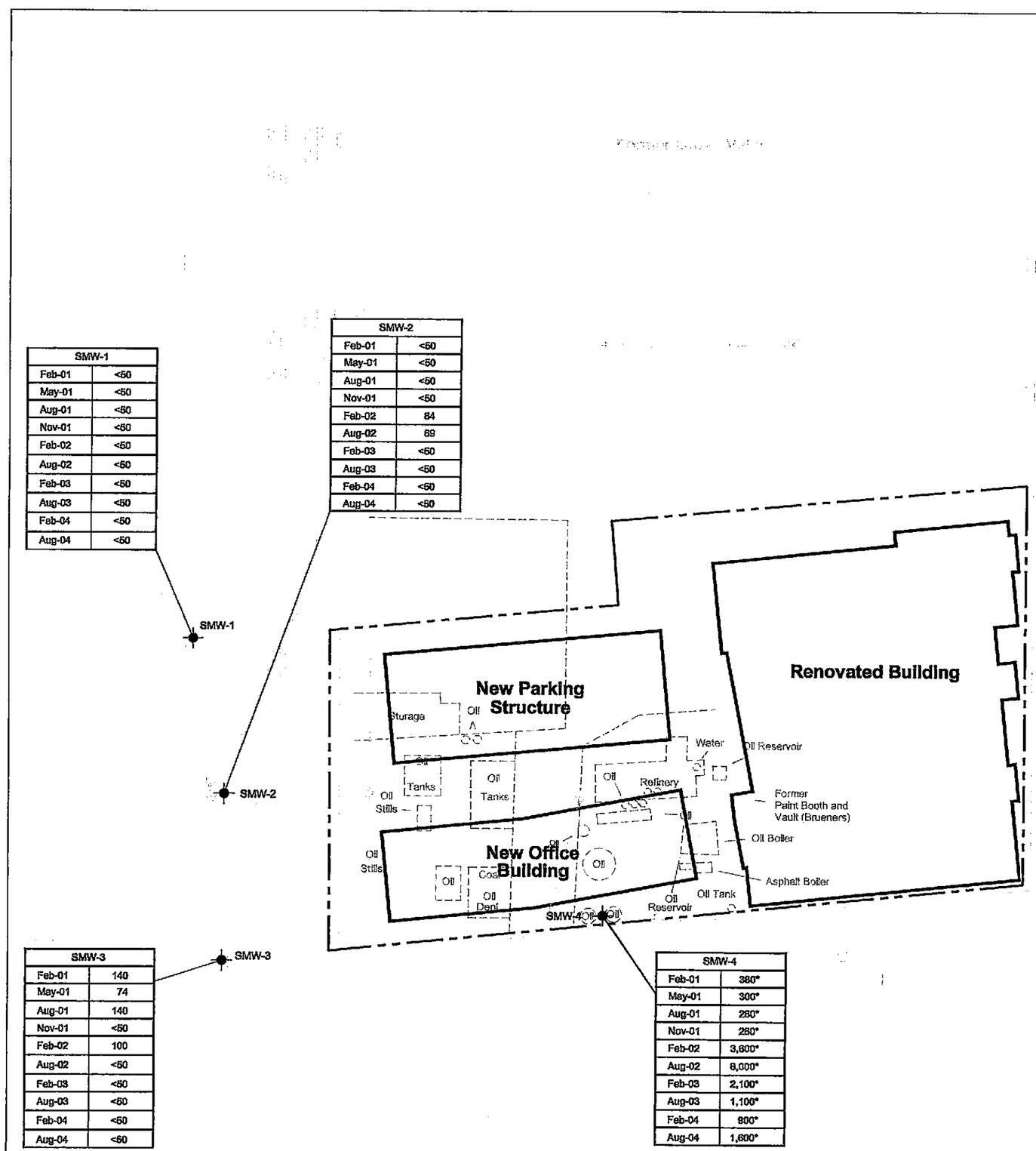
- Railroad Tracks
- Boundary of 64th Street Properties
- 7.0 — Estimated Groundwater Potentiometric Surface, in Feet Above Mean Sea Level
- Monitoring Well Constructed After Redevelopment
- (5.90) Water Level in Feet Above Mean Sea Level

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Groundwater elevations measured 4 August 2004.

Erler & Kalinowski, Inc.

Estimated Groundwater Potentiometric Surface Contour Map
64th Street Properties
Emeryville, CA
October 2004
EKI 990016.05
Figure 2



N

0 120 240

(Approximate Scale in Feet)

LEGEND

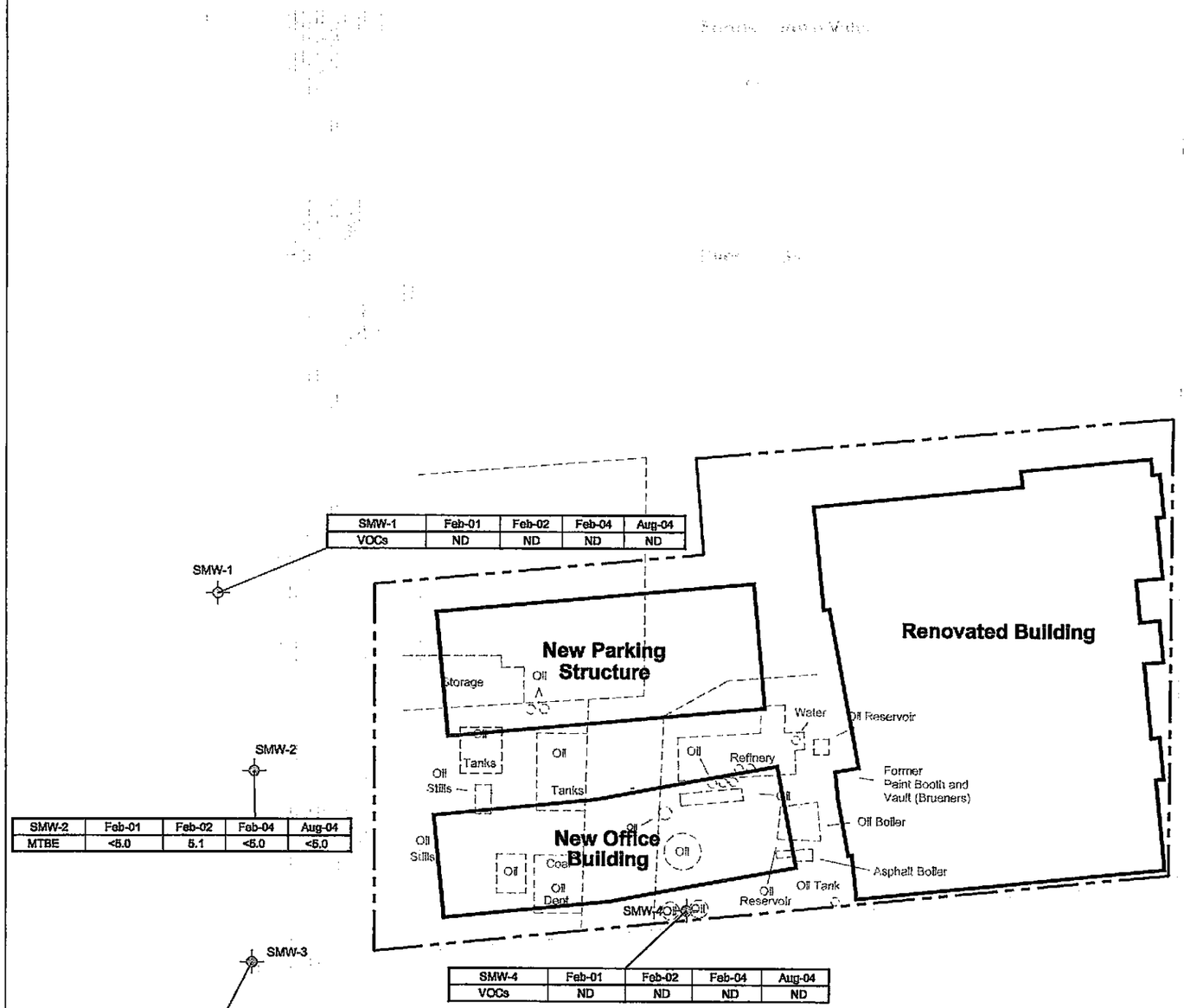
- Railroad Tracks
- Approximate Property Boundary
- Boundary of 64th Street Properties
- Historical Site Features (1911 Sanborn Map)
- Grab Groundwater Sampling Location Collected by EKI, 1995
- Grab Groundwater Sampling Location Collected by EKI, 1999
- Monitoring Well Destroyed Prior to Redevelopment
- 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
October 2004
EKI 990016.05
Figure 3



SMW-1	Feb-01	Feb-02	Feb-04	Aug-04
VOCs	ND	ND	ND	ND

SMW-2	Feb-01	Feb-02	Feb-04	Aug-04
MTBE	<5.0	5.1	<5.0	<5.0

SMW-3	Feb-01	Feb-02	Feb-04	Aug-04
PCE	<5.0	<5.0	<5.0	<5.0
TCE	<5.0	8.9	<5.0	<5.0
c12DCE	14	13	5.8	6.9
t12DCE	<5.0	5.6	<5.0	<5.0

SMW-4	Feb-01	Feb-02	Feb-04	Aug-04
VOCs	ND	ND	ND	ND

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:

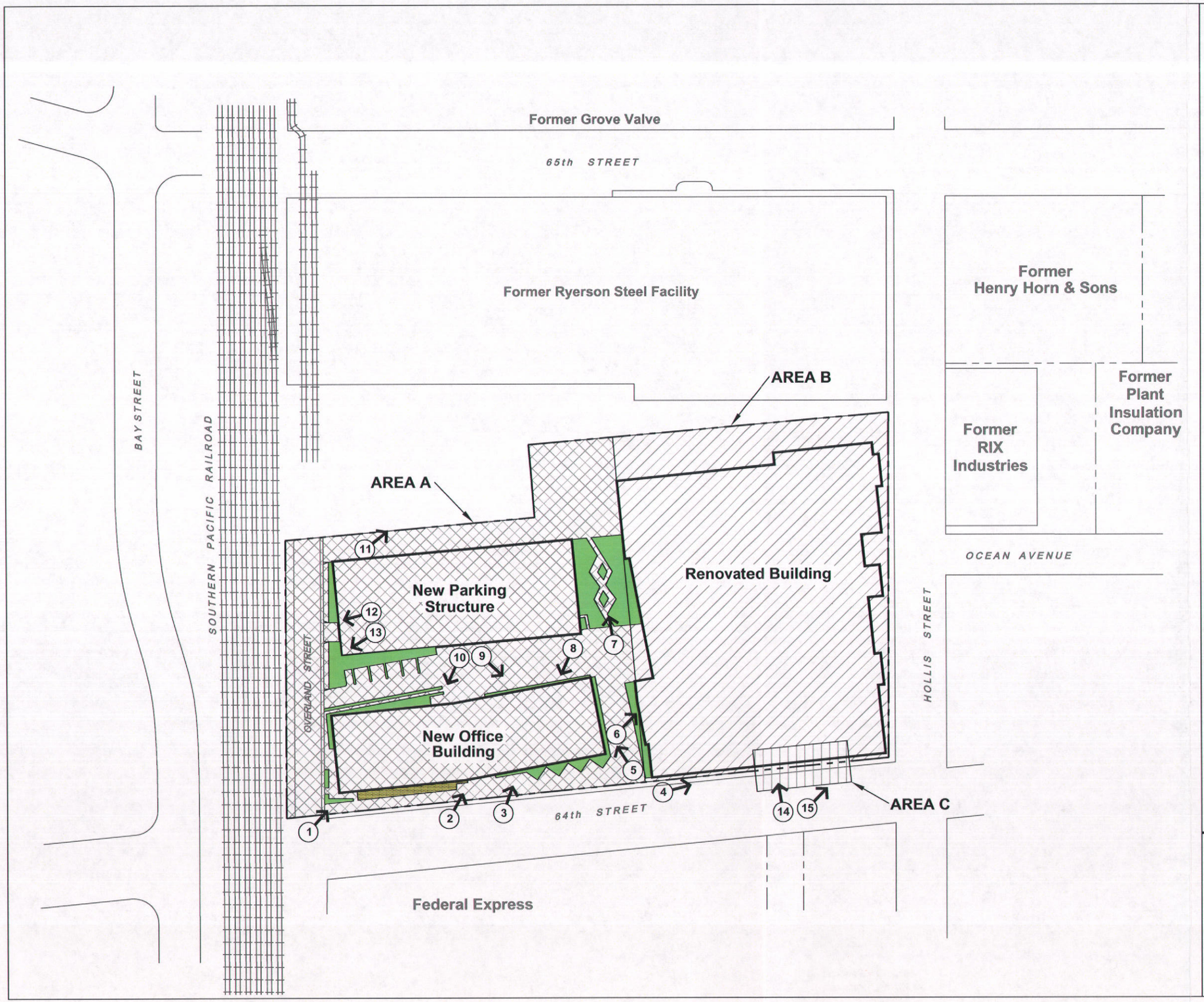
1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Concentrations are in ug/L. Only those VOCs detected in the current or previous sampling rounds are posted.

Erler & Kalinowski, Inc.

Concentrations of Detected Volatile Organic Compounds in Groundwater

64th Street Properties
Emeryville, CA
October 2004
EKI 990016.05

Figure 4



N

0 120 240

(Approximate Scale in Feet)

LEGEND

- Railroad Tracks
- Boundary of 64th Street Properties
- Landscape Area
- Landscape Area Which Does Not Have 3 Feet of Clean Cover Everywhere (Note 3)
- ← 15 — Direction of Arrow Indicates Viewpoint of Photographer and Number Indicates Photo Number (Note 4)
- Area A
- Area B
- Area C

Notes:

1. All locations are approximate.
2. Basemap taken from Sanborn maps dated 1911 and 1967.
3. Within 2 feet of the edges, clean fill thickness varies between 1 and 3 feet. Clean fill is thinnest at the edge of this landscape area.
4. See Appendix C of Groundwater Monitoring Report, July to December 2004, for photographs.

Erler & Kalinowski, Inc.

Cap Status Assessment
Photograph Locations

64th Street Properties
Emeryville, CA
October 2004
EKI 990016.05

Figure 5

APPENDIX A

Groundwater Purge Sample Forms for 4 August 2004

Daily Inspection Report No. _____

Erler & Kalinowski, Inc.

Sheet: _____ of _____

Date: 4 August 04

Project: Simeon - Emeryville

EKI Job No.: 990016.05

Contractor: _____

07:30 I ARRIVED ON SITE, OPENED WELLS SMW-1, -2, AND -3.

07:57 I CALIBRATED FIELD INSTRUMENTS, THEN STARTED PURGING SMW-1 USING A PERISTALTIC PUMP AND DEDICATED TUBING.

WELL: SMW-1	SMW-2	SMW-3	SMW-4
DEPTH TO WATER: 6.28 ft.	5.32 ft.	6.45 ft	2.54 ft
TIME MEASURED: 07:56	08:17	08:19	12:45

A SAMPLE WAS COLLECTED FROM SMW-1 THROUGH THE PERISTALTIC PUMP. SAMPLES WERE LABELLED AND PLACED IN A COOLER WITH ICE.

09:23 I PURGED, THEN SAMPLED SMW-2 IN THE SAME MANNER.

10:53 I PURGED, THEN SAMPLED SMW-3 IN THE SAME MANNER.

AT SMW-4, WHICH HAD A SLIGHT SHEEN AND STRONG ORGANIC ODOR. I USED AN OIL ABSORBENT PAD TO SWAB THE CASING AND REMOVE SLIGHT AMOUNT OF FLOATING PRODUCT. I BAILED VIGOROUSLY, REMOVING BLACK SEDIMENT FROM BOTTOM OF WELL, THEN SHIFTED PERISTALTIC PUMP TUBE TO SURFACE TO REMOVE ANY ADDITIONAL SHEEN.

14:10 I CAPPED A CLEAN PIECE OF PVC PIPE WITH CLEAN ALUMINUM FOIL SECURELY TAPED ON. I LOWERED THE CAPPED END BELOW THE WATER LEVEL, THEN DROPPED A NEW BAILER THROUGH THE FOIL TO FILL WITH WATER. THIS WAS COLLECTED AS A SAMPLE.

THE WELLS WERE SECURED RUSTED PADLOCKS AT SMW-1, -2, & -3 WERE REPLACED.

PURGED WATER WAS PLACED IN THE STORAGE ROOM IN THE PARKING GARAGE.

I DID A VISUAL SURVEY OF PLANTER AREAS FOR SIGNS OF DISTURBANCE OF THE CAP OF CLEAN SOIL. I DIDN'T OBSERVE ANY AREAS WHERE THE MULCH OR PLANTINGS APPEARED TO HAVE BEEN DISTURBED, OR WHERE THERE WAS EROSION.

Distribution: Project Inspection File (orig)
Project Manager

By: Raymond Shum

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: **Simeon** DATE: 4 August 2004

PROJECT NUMBER: **990016.05** 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)
15.23	-	6.28	=	8.95	*	0.64	=	5.73

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

PURGE METHOD:

Submersible pump ___ Dedicated Bailer ___

Peristaltic pump X Other _____

PURGE DEPTH: ~

START TIME: 07:57 END TIME: 09:01

TOTAL GALLONS PURGED: 17.6

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (micromhos/cm @ 25C)	1413.	1413.
pH	6.99	7.00
pH	4.06	4.00
Turbidity, NTU		
~~D. O., mg/L~~		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-1	09:04	3 VOAs + HCl; 1-1L. AMBER

SAMPLE METHOD: Dedicated Bailer ___ Peristaltic Pump X other ___

COMMENTS:

Time	08:10	08:23	08:36	08:51	09:01			
Volume Purged (gallons)	3.4	7.1	10.7	15.	17.6			
Temperature (degrees C)	20.7	20.9	20.9	20.9	20.9			
pH	6.72	6.70	6.74	6.74	6.78			
Specific Conductivity @ 25 C (micromhos/cm)	1531.	1415.	1381.	1345.	1334.			
Turbidity (NTU) /Appearance	6.71	0.91	0.86	0.57	1.02			
Disolved Oxygen (milligrams/liter)	~~6.81~~	—	—	—	—			
Depth to Water during purge (feet)	6.86	6.94	6.96	6.99	6.98			
Number of Casing Volumes removed	0.59	1.24	1.86	2.62	3.07			
Purge Rate (gallons/minute)	0.25	0.28	0.28	0.297	0.26			

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: **Simeon** DATE: 4 Aug 04

PROJECT NUMBER: **990016.05** WELL NUMBER: SMW-2 PERSONNEL: RDhon

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)		Water Column (ft.)	Multiplier (below)	Casing Vol. (gallons)
15.13	- 5.64 @09:19	=	9.49	* 0.64	= 6.07

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

PURGE METHOD:

Submersible pump ___ Dedicated Bailer ___

Peristaltic pump X Other _____

PURGE DEPTH: —

START TIME: 09:23 END TIME: 10:37

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (micromhos/cm @ 25C)		
pH		
pH	(SEE SMW-1)	
Turbidity, NTU		
D. O., mg/L		
Temperature		
Depth Probe#		

SAMPLES: Field I.D. SMW-2 Time Collected 10:38 Containers & Preservation 3 VOAs + HCL, 1-1L Amber

SAMPLE METHOD: Dedicated Bailer ___ Peristaltic Pump X other ___

COMMENTS:

Time	09:35	09:47	10:00	10:12	10:21	10:37		
Volume Purged (gallons)	3.0	6.2	9.6	12.6	15.1	18.5		
Temperature (degrees C)	20.7 ~~7.01~~	20.8	20.7	20.7	20.8	20.7		
pH	7.01	7.01	7.01	7.03	7.03	6.67		
Specific Conductivity @ 25 C (micromhos/cm)	693.	671.	662.	636.	644.	645.		
Turbidity (NTU) /Appearance	3.14	1.58	1.61	0.76	0.62	0.43		
Disolved Oxygen (milligrams/liter)	—	—	—	—	—	—		
Depth to Water during purge (feet)	6.07	6.10	6.12	6.08	6.14	6.09		
Number of Casing Volumes removed	0.49	1.02	1.58	2.07	2.49	3.05		
Purge Rate (gallons/minute)	0.25	0.27	0.26	0.25	0.28	0.21		

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: **Simeon** DATE: 4 August 04

PROJECT NUMBER: **990016.05** WELL NUMBER: SMW-3 PERSONNEL: R.D. Lion

WELL VOLUME CALCULATION:

Depth of Well (ft.)	Depth to Water (ft.)		Water Column (ft.)	Multiplier (below)		Casing Vol. (gallons)
15.21	- 6.36	=	8.85	* 0.64	=	5.664

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

PURGE METHOD:

Submersible pump ___ Dedicated Bailer ___

Peristaltic pump X Other _____

PURGE DEPTH: —

START TIME: 10:53 END TIME: 12:02

TOTAL GALLONS PURGED: 17.3

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (micromhos/cm @ 25C)		
pH		
pH		
Turbidity, NTU	(SEE SMW-1)	
D. O., mg/L		
Temperature		
Depth Probe#		

SAMPLES: Field I.D. SMW-3 Time Collected 12:03 Containers & Preservation 3 VOAs + HCl, 1-1 l. AMBER

SAMPLE METHOD: Dedicated Bailer ___ Peristaltic Pump X other ___

COMMENTS:

Time	11:04	11:18	11:29	11:42	11:56	12:02		
Volume Purged (gallons)	3.1	6.8	9.4	12.3	15.4	17.3		
Temperature (degrees C)	22.8	22.7	22.6	22.5	2.25	2.25		
pH	7.03	7.03	6.68	6.73	6.81	6.81		
Specific Conductivity @ 25 C (micromhos/cm)	802.	763.	519.	604.	687.	6.85		
Turbidity (NTU) /Appearance	1.68	0.86	0.40	0.39	0.46	0.43		
Disolved Oxygen (milligrams/liter)	—	—	—	—	—	—		
Depth to Water during purge (feet)	7.70	8.50	8.90	9.14	9.24	9.40		
Number of Casing Volumes removed	0.55	1.20	1.66	2.17	2.72	3.05		
Purge Rate (gallons/minute)	0.28	0.26	0.24	0.22	0.22	0.32		

GROUNDWATER PURGE SAMPLE FORM

PROJECT NAME: **Simeon** DATE: 4 August 2004

PROJECT NUMBER: **990016.05** WELL NUMBER: SMW-4 PERSONNEL: RD Lion

WELL VOLUME CALCULATION:

Depth of Well (ft.)		Depth to Water (ft.)		Water Column (ft.)		Multiplier (below)		Casing Vol. (gallons)
15.0	-	2.54	=	12.46	*	0.64	=	7.97

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

PURGE METHOD: BOTH

Submersible pump ___ Dedicated Bailer X

Peristaltic pump X Other ___

FIRST SWABBED CASING WITH OIL ABSORBENT PADS.

PURGE DEPTH: VARIABLE, TO BOTTOM, THEN AT SURFACE

START TIME: 13:03 END TIME: 14:04

TOTAL GALLONS PURGED: 22.

INSTRUMENT CALIBRATION

Instrument	Field measure	Standard measure
Conductivity, (micromhos/cm @ 25C)		
pH		
pH		
Turbidity, NTU	(SEE SMW-1)	
D. O., mg/L		
Temperature		
Depth Probe#		

SAMPLES:

Field I.D.	Time Collected	Containers & Preservation
SMW-4	14:10	3 VOAs + HCL; 1-1 L. AMBER

SAMPLE METHOD: NEW Dedicated Bailer X Peristaltic Pump ___ other ___

COMMENTS: SAMPLED THROUGH STILLING TUBE CAPPED WITH ALUMINUM FOIL

Time	15:35	15:54	1404					
Volume Purged (gallons)	14	19	22					
Temperature (degrees C)	20.4	21.0	21.1					
pH	7.03	7.03	7.01					
Specific Conductivity @ 25 C (micromhos/cm)	1087.	1092.	1096.					
Turbidity (NTU) /Appearance	>200.	178.	93.					
Disolved Oxygen (milligrams/liter)	—	—	—					
Depth to Water during purge (feet)	—	—	—					
Number of Casing Volumes removed	1.76	2.38	2.76					
Purge Rate (gallons/minute)	0.44	0.26	0.30					

NOTED SHEEN

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

CONSULTING ENGINEERS AND SCIENTISTS 1870 Ogden Drive Burlingame, CA 94010 PHONE: 650-292-9100 FAX: 650-552-9012

Project Name	Project No.	ANALYSES REQUESTED	EKI COC No.
Simeon	9900016.05		
Project Location: Emeryville, CA	Laboratory: Curtis & Tompkins		
Report Results to: ~~Derby Davidsen~~ HAE WON LEE	Sampled By: ROGER LION		

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8260 VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	~~MS / MSD~~						EXPECTED TURNAROUND	Remarks
SMW-1		4AUG04	09:04	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
SMW-2		4August4	10:38	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
SMW-3		4Aug 4	12:03	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
SMW-4		4 Aug 4	14:10	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	

Special Instructions:

Relinquished by: (Signature) Roger D. Lion	Date 4 Aug 04	Time 15:40	Received by: (Signature) Lavanna Curtis 8-4-04 15:40
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 4 August 2004

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: 17-AUG-04
Lab Job Number: 173831
Project ID: 9900016.05
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

Erler & Kalinowski, Inc.

CHAIN OF CUSTODY RECORD

CONSULTING ENGINEERS AND SCIENTISTS
1870 Ogden Drive Burlingame, CA 94010 PHONE: 650-292-9100 FAX: 650-552-9012

Project Name	Project No.	ANALYSES REQUESTED	EKI COC No.
Simeon	9900016.05		
Project Location: Emeryville, CA	Laboratory: Curtis & Tompkins		
Report Results to: ~~Derby Davidson~~ HAE WON LEE	Sampled By: ROVER LION		

Field Sample Identification	Lab Sample No.	Date	Time	Type of Sample	No. of Containers / Preservative	EPA 8260 VOCs	EPA 3630-Silica Gel Cleanup	EPA 8015M TPH diesel	~~MS / MSD~~						EXPECTED TURNAROUND	Remarks
-1 SMW-1		4 Aug 04	09:04	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
-2 SMW-2		4 August 04	10:38	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
-3 SMW-3		4 Aug 4	12:03	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	
-4 SMW-4		4 Aug 4	14:10	WATER	3 VOAs + HCl, 1 / - 1-L amber	X	X	X							10 day	

Special Instructions:

	Date	Time	
Relinquished by: (Signature) Roger D. Lion	4 Aug 04	15:40	Received by: (Signature) Lavanna Curtis 8-4-04 15:40
Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Received ☐ On Ice ☑ Cold ☐ Ambient ☑ Intact

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520
Project#:	9900016.05	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/04/04
Units:	ug/L	Received:	08/04/04
Diln Fac:	1.000	Prepared:	08/06/04
Batch#:	93564		

Field ID:	SMW-1	Analyzed:	08/10/04
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	173831-001		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	75	53-142

Field ID:	SMW-2	Analyzed:	08/09/04
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	173831-002		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	67	53-142

Field ID:	SMW-3	Analyzed:	08/09/04
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	173831-003		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	75	53-142

H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520
Project#:	9900016.05	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/04/04
Units:	ug/L	Received:	08/04/04
Diln Fac:	1.000	Prepared:	08/06/04
Batch#:	93564		

Field ID:	SMW-4	Analyzed:	08/09/04
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	173831-004		

Analyte	Result	RL
Diesel C10-C24	1,600 H	50

Surrogate	%REC	Limits
Hexacosane	87	53-142

Type:	BLANK	Analyzed:	08/09/04
Lab ID:	QC260465	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	86	53-142

H= Heavier hydrocarbons contributed to the quantitation
D= Not Detected
L= Reporting Limit

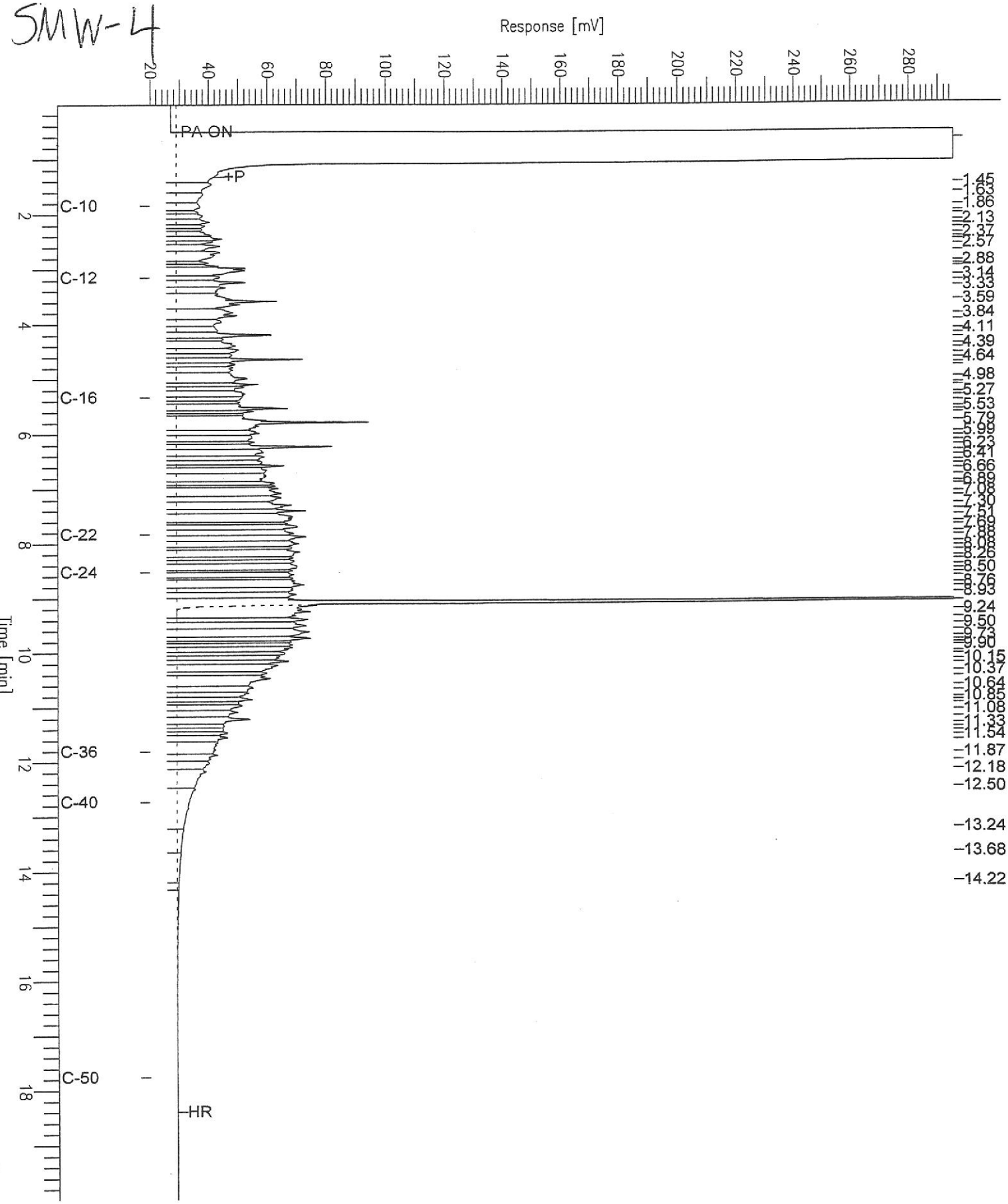
10.0

Chromatogram

Sample Name : 173831-004sg,93564
FileName : G:\GC17\CHA\222A016.RAW
Method : ATEH212.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 20 mV

Sample #: 93564 Page 1 of 1
Date : 8/10/04 08:51 AM
Time of Injection: 8/9/04 09:24 PM
Low Point : 19.77 mV High Point : 295.36 mV
Plot Scale: 275.6 mV

SMW-4

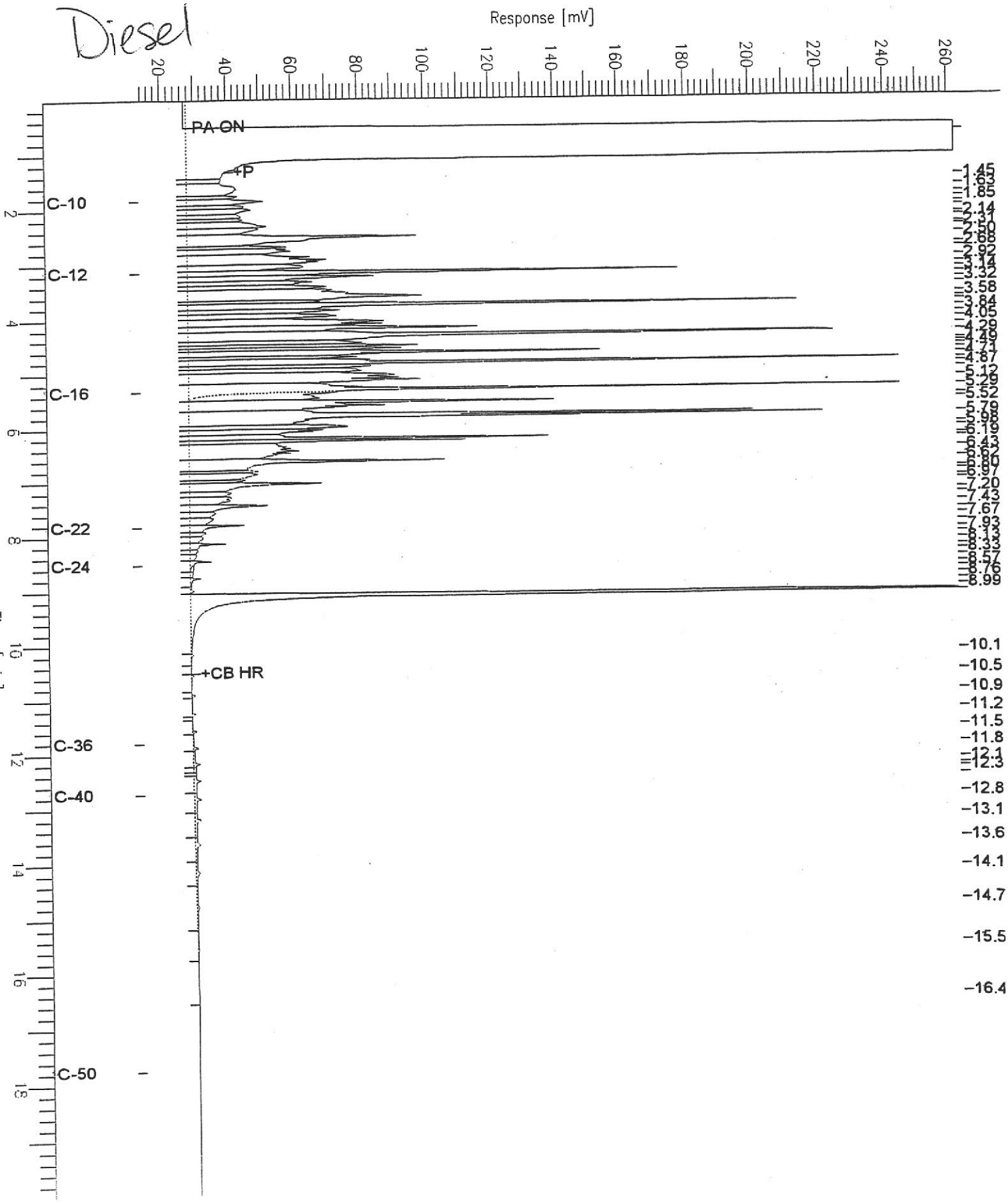


Chromatogram

Sample Name : ccv,04wsl410,dsl
FileName : G:\GC17\CHA\222A008.RAW
Method : ATEH212.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 13 mV

Sample #: 500mg/L
Date : 8/9/04 03:47 PM
Time of Injection: 8/9/04 02:48 PM
Low Point : 13.48 mV High Point : 261.95 mV
Plot Scale: 248.5 mV

Diesel



Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 3520
Project#:	9900016.05	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	93564
Units:	ug/L	Prepared:	08/06/04
Diln Fac:	1.000	Analyzed:	08/10/04

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC260466

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,860	74	57-128

Surrogate	%REC	Limits
Hexacosane	88	53-142

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC260467

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,121	85	57-128	13	38

Surrogate	%REC	Limits
Hexacosane	100	53-142

PD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-1	Batch#:	93502
Lab ID:	173831-001	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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 #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-1	Batch#:	93502
Lab ID:	173831-001	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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	92	80-120
1,2-Dichloroethane-d4	83	80-124
Toluene-d8	86	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-2	Batch#:	93502
Lab ID:	173831-002	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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 #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-2	Batch#:	93502
Lab ID:	173831-002	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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	91	80-120
1,2-Dichloroethane-d4	85	80-124
Toluene-d8	91	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-3	Batch#:	93502
Lab ID:	173831-003	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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	5.9	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 #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-3	Batch#:	93502
Lab ID:	173831-003	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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	97	80-120
1,2-Dichloroethane-d4	86	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-4	Batch#:	93502
Lab ID:	173831-004	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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

D= Not Detected
L= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	SMW-4	Batch#:	93502
Lab ID:	173831-004	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
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	96	80-120
1,2-Dichloroethane-d4	84	80-124
Toluene-d8	94	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

5.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC260233	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
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

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC260233	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

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	93	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	91	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC260234	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
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

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC260234	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

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	96	80-120
1,2-Dichloroethane-d4	87	80-124
Toluene-d8	96	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC260232	Batch#:	93502
Matrix:	Water	Analyzed:	08/05/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	44.15	88	76-120
Benzene	50.00	48.49	97	80-120
Trichloroethene	50.00	44.37	89	80-120
Toluene	50.00	49.63	99	80-120
Chlorobenzene	50.00	52.92	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	85	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	95	80-120

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	173831	Location:	Simeon
Client:	Erler & Kalinowski, Inc.	Prep:	EPA 5030B
Project#:	9900016.05	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	93502
MSS Lab ID:	173834-007	Sampled:	08/04/04
Matrix:	Water	Received:	08/04/04
Units:	ug/L	Analyzed:	08/05/04
Diln Fac:	1.000		

Type: MS Lab ID: QC260235

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.08000	50.00	43.10	86	77-120
Benzene	<0.09700	50.00	49.97	100	80-120
Trichloroethene	1.162	50.00	48.19	94	74-121
Toluene	<0.1100	50.00	54.04	108	80-120
Chlorobenzene	<0.1400	50.00	52.79	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	87	80-124
Toluene-d8	98	80-120
Bromofluorobenzene	83	80-120

Type: MSD Lab ID: QC260236

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	43.06	86	77-120	0	20
Benzene	50.00	45.21	90	80-120	10	20
Trichloroethene	50.00	43.67	85	74-121	10	20
Toluene	50.00	48.49	97	80-120	11	20
Chlorobenzene	50.00	50.31	101	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	81	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

APPENDIX C

Photographs Taken for the Cap Status Assessment on 4 August 2004

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

Photo 10

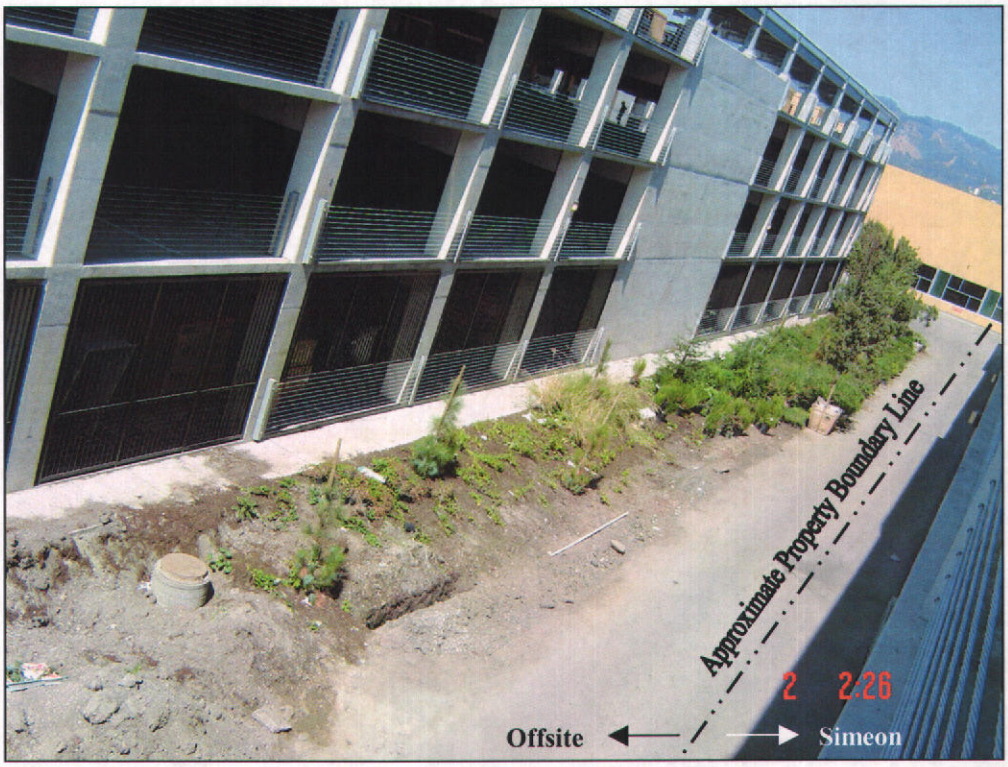


Photo 11

Photo 12

Photo 13

Photo 14 (Left-most leader in photo repaired)

Photo 15