1828 TRIBUTE ROAD, SUITE A
SACRAMENTO, CA 95815-4310
916-649-3570
800-395-3570
FAX: (916) 649-3819

5814

Wednesday, April 28, 1999
Via US Mail

99 APR 29 PM 1:39

Patrick Murray
McMorgan & Company
One Bush Street
Suite 800
San Francisco, CA 94104

Re: Quarterly Groundwater Monitoring, First Quarter - March 1999, 444 Hegenberger Road, Oakland, CA.; NWE Project No. 05-001594-1

Dear Mr. Murray:

Northwest Envirocon, Inc., (NWE) is pleased to present our findings, conclusions and recommendations from the quarterly groundwater monitoring event - first quarter conducted at 444 Hegenberger Road, Oakland, California (Site) on March 8, 1999. Plate 1 in Appendix A illustrates the location of the Site. The work was performed in accordance with the Alameda County Health Care Services approved Groundwater Monitoring Work Plan for the Site prepared by NWE, dated February 19, 1999.

Groundwater Elevations and Flow Directions

Five monitoring wells are situated on the Site. Plate 2 in Appendix A illustrates the locations of the monitoring wells (MW-1, MW-2, MW-3, MW-4 and MW-5). Prior to the collection of groundwater samples, the depths to groundwater in each monitoring well were measured using a Solinst water level meter. Groundwater elevations were evaluated using the measured depths to groundwater and the elevations of the well casing rims (Top of Casing - TOC). **The depth to groundwater in the wells ranged from 2.80 to 5.20 feet below TOC.** Groundwater elevations measured on March 8, 1999 decreased an average of 0.59 feet relative to groundwater elevations measured in the same wells during the conduct of the supplementary site assessment on December 2, 1998. The highest and lowest decrease in groundwater elevations were measured in Well MW3 (0.66 feet) and Well MW1 (0.53 feet) respectively. Quarterly groundwater elevation data for the Site is presented in Table 1 in Appendix B. Field data sheets for the March 8, 1999, quarterly monitoring event are included in Appendix C. Based on the March 8, 1999, groundwater elevation data, groundwater flow direction beneath the Site is generally southwest at a very gentle gradient of approximately 0.00086 ft/ft. Plate 2 illustrates groundwater contours and flow direction for the March 8, 1999, quarterly monitoring event.

Well Purging and Groundwater Sample Collection

On March 8, 1999, NWE collected one groundwater sample from each monitoring well. Prior to sampling each well was purged of approximately three well casing

volumes of water using an ABS submersible purge pump. The pH, conductivity, turbidity, temperature and dissolved oxygen of groundwater purged from each monitoring well were measured and recorded during the purging process. Table 2 in Appendix B summarizes the well purge data. Dissolved oxygen concentrations were generally elevated prior to purging, increased during purging, and decreased to pre-purging levels at the time of sampling. Field data sheets for the March 8, 1999, quarterly monitoring event are included in Appendix C. Water removed during monitoring well purging was placed in DOT-approved, 55-gallon drums. The drums remain on-site pending analytical results and transport to an appropriate disposal facility.

Groundwater samples were obtained after the pH, conductivity and temperature in each well had stabilized. Groundwater samples were collected from each monitoring well using a separate, disposable HDPE bailer. The groundwater samples collected from each well were transferred from the bailer via a bottom-emptying device into laboratory prepared, HCL preserved, 40-milliliter glass vials with Teflon-lined septa. Each groundwater sample was labeled with sample identification number, date and time of sample collection, and samplers initials; recorded on a chain-of-custody; and placed on ice in a insulated chest and transported to a California State-certified laboratory for analyses.

Laboratory Analyses

NWE submitted the groundwater samples to California Laboratory Services, Inc., Rancho Cordova, California (DHS ELAP Certification #1233). Each groundwater sample was analyzed for total petroleum hydrocarbons as gasoline (TPHg); total petroleum hydrocarbons as diesel (TPHd); and for volatile organic compounds, including benzene, toluene, ethylbenzene, and total xylenes (BTEX). The results of the analyses are summarized in Table 3 in Appendix B. The laboratory reports and chain-of-custody record are included in Appendix D.

Findings

Notable observations from this monitoring event include:

- Groundwater elevations measured on March 8, 1999 decreased an average of 0.59 feet than the measurements collected on December 2, 1998.
- The flow direction and gradient of groundwater beneath the Site for the March 8, 1999, monitoring event is to the southwest at 0.00086 ft/ft. Both the flow direction and gradient are generally consistent with the December 2, 1998 groundwater monitoring event.
- Concentrations of TPHd detected in the groundwater samples collected for the March 8, 1999 monitoring event were elevated in Wells MW-1, MW2 and MW3, and not detected at or above the analytical detection limit for TPHd in Wells MW4 and MW5, relative to TPHd concentrations detected in groundwater samples collected from the same wells for the December 2, 1998 monitoring event. For the March 8, 1999 monitoring event, the highest and lowest detected TPHd concentrations were detected in Well MW3, and Wells MW1 and MW2, respectively.
- Concentrations of TPHg detected in the groundwater samples collected for the March 8, 1999

monitoring event were elevated in Wells MW2, MW3, MW4 and MW5 relative to TPHg concentrations detected in groundwater samples collected from the same wells for the December 2, 1998 monitoring event. Concentrations of TPHg were not detected at or above the analytical detection limit for TPHd in Well MW1 for the March 8, 1999 monitoring event, or the December 2, 1998 monitoring event. For the March 8, 1999 monitoring event, the highest and lowest detected TPHg concentrations were detected in Wells MW3 and MW5, respectively.

- Concentrations of toluene, ethylbenzene and total xylenes (TEX) detected in the groundwater samples collected for the March 8, 1999 monitoring event were elevated in Wells MW3 and MW4, and lower in Wells MW2 and MW5, relative to TEX concentrations detected in groundwater samples collected from the same wells for the December 2, 1998 monitoring event. Concentrations of TEX were not detected at or above the analytical detection limit for TEX in Well MW1 for the March 8, 1999 monitoring event, or the December 2, 1998 monitoring event. For the March 8, 1999 monitoring event, the highest and lowest detected TEX concentrations were detected in Wells MW3 and MW4, and Wells MW2 and MW5, respectively.

- Concentrations of benzene detected in the groundwater samples collected for the March 8, 1999 monitoring event were elevated in Wells MW2, MW3, MW4 and MW5 relative to benzene concentrations detected in groundwater samples collected from the same wells for the December 2, 1998 monitoring event. Concentrations of benzene were not detected at or above the analytical detection limit for benzene in Well MW1 for the March 8, 1999 monitoring event, or the December 2, 1998 monitoring event. For the March 8, 1999 monitoring event, the highest and lowest detected benzene concentrations were detected in Wells MW3 and MW4, and Wells MW2 and MW5, respectively.

- Dissolved oxygen measurements collected prior to and after well purging indicate dissolved oxygen levels in groundwater are low.

Discussion and Recommendation

- The slight change in groundwater elevations represent low, consistent seasonal groundwater elevation fluctuations.

- Groundwater impact at the Site extends downgradient of the known prior sources, i.e. the northwest portion of the Site where a UST cluster was formerly located, and the west-central portion of the Site where an oil/water separator was formerly located.

- Groundwater monitoring should be conducted on a quarterly basis to establish a baseline of information over one annual monitoring period. The next groundwater monitoring event for the annual period should be conducted in June 1999.

This report has been prepared under the professional supervision and review of the individual whose name appear below. If you have any questions, please feel free to contact Walter Kim at (916) 649-3570.

Sincerely,

Matthew H. Spielmann
Project Geologist

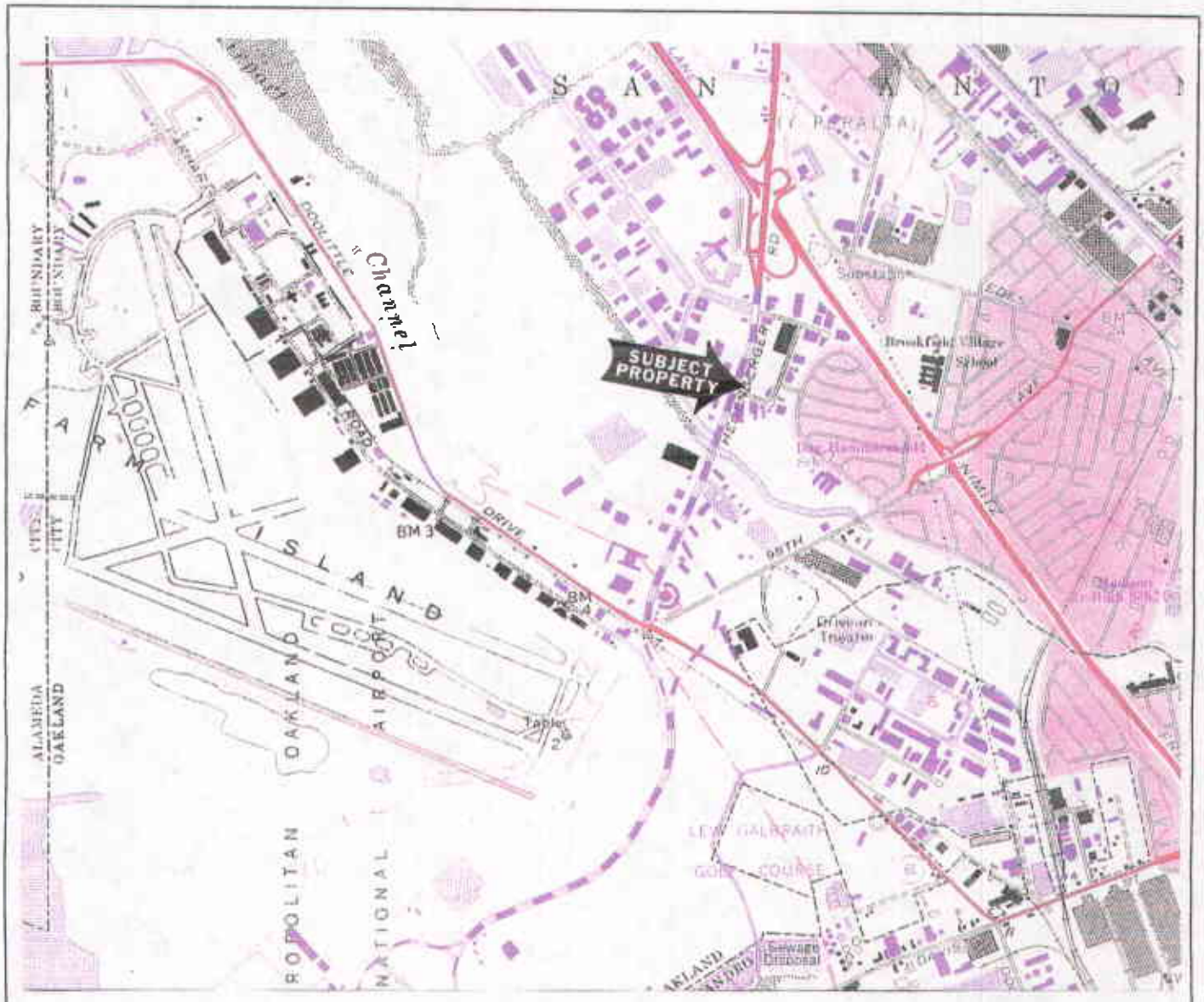
Lewis Leonard, P.E.
Senior Project Engineer
Registered Civil Engineer No. C16565, Expiration June 30, 2001

REGISTERED PROFESSIONAL ENGINEER
Lewis Benjamin Leonard
No. 16565
Exp. 6-30-01
CIVIL
STATE OF CALIFORNIA

MHS:mys\5-1594\GW Monitoring\GW Monitoring 3_8_99

Enclosures: Appendices A – D

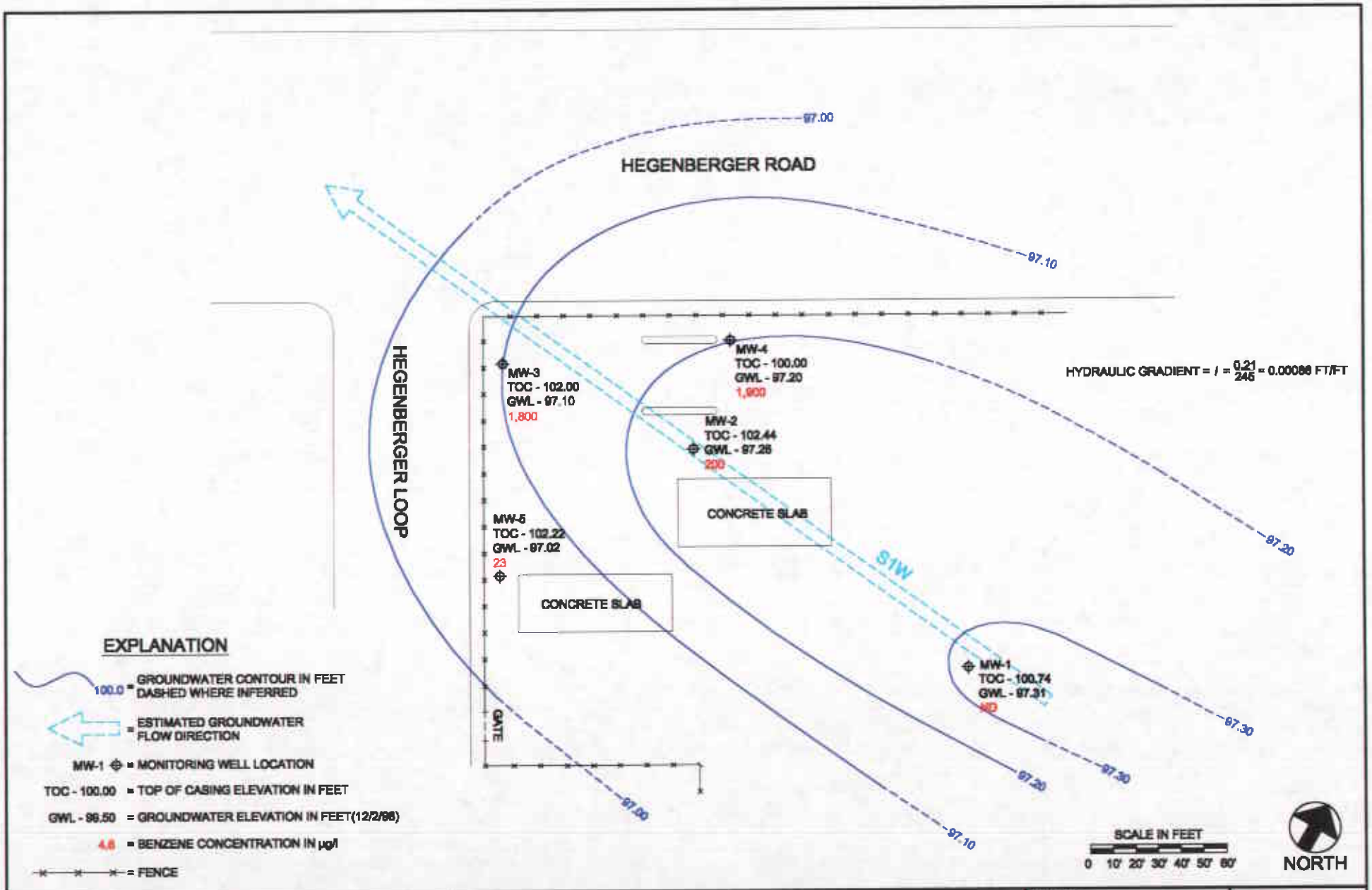
cc: Barney Chan/Alameda County Health Care Services
Walter Kim/NWE



Northwest Envirocon, Inc.
Environmental Consulting

USGS 7.5 Minute Topographic Map
San Leandro Quadrangle
444 Hegenberger
Oakland, California

JOB NUMBER:	DATE:	TITLE:	Plate:
05-001594	December, 1998	Site Vicinity Map	1



NORTHWEST ENVIROCON, INC. 1828 TRIBUTE ROAD, SUITE A, SACRAMENTO, CA 95815 (916) 649-3570 FAX: (916) 649-3819	SITE: QUARTERLY MONITORING -1ST QUARTER EVENT 444 HEGENBURGER LOOP OAKLAND, CALIFORNIA			PROJECT#: 05-001594-2	REVISIONS
				DATE: MARCH 1999	
DRAWN: CEB	APPROVED: MHS	CLIENT: McMORGAN AND COMPANY	TITLE: GW ELEVATIONS 3/8/99	PLATE: 2	SCALE: 1"=60'

TABLE 1

GROUNDWATER ELEVATIONS

QUARTERLY GROUNDWATER MONITORING
444 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

WELL	DATE	MONITORING EVENT	TOC	DTW	GWE
			(feet)	(feet)	(feet)
MW1	12/2/98	(a)	100.74	2.90	97.84
	3/8/99	1		3.43	97.31
MW2	12/2/98	(a)	102.44	4.61	97.83
	3/8/99	1		5.16	97.28
MW3	12/2/98	(a)	102.00	4.24	97.76
	3/8/99	1		4.90	97.10
MW4	12/2/98	(a)	100.00	2.20	97.80
	3/8/99	1		2.80	97.20
MW5	12/2/98	(a)	102.22	4.59	97.63
	3/8/99	1		5.20	97.02

NOTES:

(a) Measured Decmber 2, 1998 during Supplementary Contamination Assessment.
TOC Top of monitoring well casing
DTW Depth to groundwater in well below TOC
GWE Groundwater elevation in well relative to TOC

TABLE 2

WELL PURGE DATA

QUARTERLY GROUNDWATER MONITORING
444 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

DTW above. 12/98 GW

WELL	DATE	TIME	TOC	DTW	GW ELEVATION	TD	WATER COLUMN	GALLONS PURGED	TEMP	CONDUCTIVITY	DO Start	DO End	Ph	TURBIDITY
		24 hour	feet	feet	feet	feet	Feet		°F	µmhos/cm	mg/l	mg/l		NTU
2.9 MW1	3/8/99	1155	100.74	3.43	97.31	19.35	15.92	9	65.3	646	1.82	1.07	6.02	4
4.6 MW2	3/8/99	1253	102.44	5.16	97.28	19.32	14.16	9	64.9	1,130	1.62	1.50	6.01	21
4.2 MW3	3/8/99	1325	102.00	4.90	97.10	19.24	14.34	9	64.2	700	1.52	1.40	6.30	11
2.2 MW4	3/8/99	1307	100.00	2.80	97.20	19.44	16.64	9	66	730	1.80	1.85	6.16	20
4.6 MW5	3/8/99	1425	102.22	5.20	97.02	19.72	14.52	9	62.9	840	2.14	2.05	6.38	24

NOTES:

TOC	Top of monitoring well casing
GW	Groundwater
TD	Well total depth
°F	Degrees Fahrenheit
µmhos/cm	Micromhos/centimeter
DO Start	Dissolved oxygen measured in well prior to purging
DO End	Dissolved oxygen measured in well after purging and prior to sample collection

TABLE 3

GROUNDWATER ANALYTICAL RESULTS

QUARTERLY GROUNDWATER MONITORING
444 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

WELL	DATE	MONITORING EVENT	TPHd	TPHg	B	T	E	X
			mg/l	mg/l	µg/l	µg/l	µg/l	µg/l
MW1	12/2/98	(a)	<0.050	<0.050	<0.5	<0.5	<0.5	<0.5
	3/8/99	1	0.19	<0.050	<0.3	<0.3	<0.3	<0.3
MW2	12/2/98	(a)	0.099	<0.050	4.6	0.85	0.57	5
	3/8/99	1	0.21	0.18	200(a)	0.74	1.3	2.3
MW3	12/2/98	(a)	0.30	0.97	160	6.5	16	9
	3/8/99	1	1.4	2.6	1,800(b)	30(c)	67(c)	26(c)
MW4	12/2/98	(a)	0.15	0.15	29	0.78	0.38	1.1
	3/8/99	1	<0.050	1.3	1,900(b)	9.4	1.2	11
MW5	12/2/98	(a)	0.62	<0.050	1.1	0.37	<0.30	2
	3/8/99	1	<0.050	0.058	23	0.31	<0.30	1.8
REPORTING LIMITS			0.05	0.05	0.5/0.3(d)	0.5/0.3(d)	0.5/0.3(d)	1.0/0.6(d)

NOTES:

TPHd Total petroleum hydrocarbons as diesel
TPHg Total petroleum hydrocarbons as gasoline
B Benzene
T Toluene
E Ethylbenzene
X Total xylenes
mg/l Milligrams/liter
µg/l Micrograms/liter
(a) Reporting limit is elevated 10 times due to matrix interference
(b) Reporting limit is elevated 100 times due to matrix interference
(c) Reporting limit is elevated 5 times due to matrix interference
(d) Reporting limits for March 3, 1999 monitoring event

NORTHWEST ENVIROCON, INC.

GEOHYDROLOGIC DATA SHEET

Sheet 1 of 1

PROJECT NAME	DATE
444 Hegenberger; 1/4ly Monitoring; 1st 1/4	3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spiekerman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	TIME (24 hr)	TOC (famsl) (fadp)	DTP (feet)	DTW (feet)	TD (feet)	GW ELEVATION (famsl) (fadp)	PRODUCT ELEVATION (famsl) (fadp)	
MW1	1155	100.74	—	3.43	19.35	97.31	—	sqft
MW2	1253	102.44	—	5.16	19.32	97.28	—	sqft
MW3	1325	102.00	—	4.90	19.24	97.10	—	sqft
MW4	1307	100.00	—	2.80	19.44	97.20	—	hand
MW5	1425	102.22	—	5.20	19.72	97.02	—	hand

TOC	Top of Casing	DTP	Depth to Product
DTW	Depth to Water	TD	Total Depth
famsl	Feet Above Mean Sea Level	fadp	Feet Above Datum Point

NORTHWEST ENVIROCON, INC.

WELL VOLUME PURGING DATA SHEET

Sheet 1 of 1

PROJECT NAME 444 Hegenberger; 1/4 ly Monitoring, 1st 1/4	DATE 3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spielman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	MW1
WELL TD (feet)	19.35
DTW (feet)	3.43
COLUMN HEIGHT (feet)	15.92
CONVERSION FACTOR (gallons/feet of column height)	0.163
TOTAL WELL VOLUME (gallons)	2.6
THREE WELL VOLUMES (gallons)	9

TD Total Well Depth
DTW Depth to Water

CONVERSION FACTORS

2-inch diameter well 0.163 gallons/foot
4-inch diameter well 0.653 gallons/foot

TIME (24 hr)	DTW (feet)	GALLONS PURGED	TEMPERATURE (^{0}F)	CONDUCTIVITY (micromohs/cm)	pH	TURBIDITY	DO (mg/l)
1222							1.82
pump on 1222	4.38	1	63	705	5.96	975	1.71
1223	4.38	1	63	705	5.96	975	1.71
1225	4.39	3	60.4	666	6.01	50	1.04
1227	4.39	5	64.9	653	6.01	15	1.05
1229	4.39	7	62.4	650	6.02	7	1.11
1230	4.39	8	65.3	647	5.99	5	1.14
1231	4.39	9	65.3	646	6.02	4	1.06
sample 1231							1.07
Bailer							

NORTHWEST ENVIROCON, INC.

WELL VOLUME PURGING DATA SHEET

PROJECT NAME 444 Hegenberger; 1/4ly Monitoring, 1st 1/4	DATE 3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spielman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	MW2
WELL TD (feet)	19.32
DTW (feet)	5.16
COLUMN HEIGHT (feet)	14.16
CONVERSION FACTOR (gallons/feet of column height)	0.163
TOTAL WELL VOLUME (gallons)	2.3
THREE WELL VOLUMES (gallons)	9

TD Total Well Depth
DTW Depth to Water

CONVERSION FACTORS

2-inch diameter well 0.163 gallons/foot
4-inch diameter well 0.653 gallons/foot

	TIME (24 hr)	DTW (feet)	GALLONS PURGED	TEMPERATURE (^0F)	CONDUCTIVITY (micromohs/cm)	pH	TURBIDITY	D.O. mg/l
	1257							
Pump on	1257			59.6	1,540	6.25	499	1.6
	1259		2	62.9	1,290	6.04	331	1.58
	1300	6.12	3					1.53
	1301		4	65.1	1,230	6.03	85	1.96
	1302	6.10	5	65.7	1,190	6.02	52	1.65
	1303		6	64.9	1,180	6.04	34	2.18
	1305	6.10	8	63.1	1,150	6.04	25	1.25
	1306		9	64.9	1,130	6.01	21	1.99

Sample 1306
Bailer

1.50

NORTHWEST ENVIROCON, INC.

WELL VOLUME PURGING DATA SHEET

Sheet 1 of 1

PROJECT NAME 444 Hegenberger; 1/4ly Monitoring, 1st 1/4	DATE 3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spielman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	MW3
WELL TD (feet)	19.24
DTW (feet)	4.90
COLUMN HEIGHT (feet)	14.34
CONVERSION FACTOR (gallons/feet of column height)	0.163
TOTAL WELL VOLUME (gallons)	2.3
THREE WELL VOLUMES (gallons)	9

TD Total Well Depth
DTW Depth to Water

CONVERSION FACTORS

2-inch diameter well 0.163 gallons/foot
4-inch diameter well 0.653 gallons/foot

	TIME (24 hr)	DTW (feet)	GALLONS PURGED	TEMPERATURE (^0F)	CONDUCTIVITY (micromohs/cm)	pH	TURBIDITY	D.O. (mg/l)
	1408							
Pump on	1408			65.2	784	6.3	999	1.52
	1409	5.51	1	65.1	715	6.3	175	1.05
	1411	5.51	3	65.7	714	6.3	48	1.74
	1413	5.51	5	64.8	710	6.3	19	2.10
	1415		7	64.6	710	6.3	13	1.23
	1416	5.51	8	64.6	710	6.3	12	1.60
	1417	5.51	9	64.2	700	6.3	11	1.42
sample bailer	1417							1.44

1.40

NORTHWEST ENVIROCON, INC.

WELL VOLUME PURGING DATA SHEET

Sheet 1 of 1

PROJECT NAME 444 Hegenberger; 1/4 4 Monitoring, 1st 1/4	DATE 3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spielman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	MW4
WELL TD (feet)	19.44
DTW (feet)	2.80
COLUMN HEIGHT (feet)	16.64
CONVERSION FACTOR (gallons/feet of column height)	0.163
TOTAL WELL VOLUME (gallons)	2.7
THREE WELL VOLUMES (gallons)	9

TD Total Well Depth
DTW Depth to Water

CONVERSION FACTORS

2-inch diameter well 0.163 gallons/foot
4-inch diameter well 0.653 gallons/foot

TIME (24 hr)	DTW (feet)	GALLONS PURGED	TEMPERATURE (^{0}F)	CONDUCTIVITY (micromohs/cm)	pH	TURBIDITY	D.O. (mg/l)
1329							
Dupon 1329							1.80
1330		1	57.7	1,210	6.31	999	
1331	5.16	2	64.9	920	6.15	702	1.55
1332	5.16	3	65.3	760	6.15	245	1.51
1334	5.16	5	65.3	750	6.15	75	1.57
1336		8	65.5	740	6.15	27	1.20
1337	5.16	9	66	730	6.16	20	1.86
Sample 1337							2.20
Bailer							1.85

NORTHWEST ENVIROCON, INC.

WELL VOLUME PURGING DATA SHEET

Sheet 1 of 1

PROJECT NAME 444 Hegenberger; 1/4 ly Monitoring, 1st 1/4	DATE 3/8/99
PROJECT ADDRESS 444 Hegenberger Road, Oakland, CA.	PROJECT NO. 05-001594-1
NWE PERSONNEL M. Spielman W. Digiorno	SIGNATURE
REGULATOR	CONTRACTOR
REGULATOR	CONTRACTOR

WELL ID	MW5
WELL TD (feet)	19.72
DTW (feet)	5.20
COLUMN HEIGHT (feet)	14.52
CONVERSION FACTOR (gallons/feet of column height)	0.163
TOTAL WELL VOLUME (gallons)	2.4
THREE WELL VOLUMES (gallons)	9

TD Total Well Depth
DTW Depth to Water

CONVERSION FACTORS

2-inch diameter well 0.163 gallons/foot
4-inch diameter well 0.653 gallons/foot

TIME (24 hr)	DTW (feet)	GALLONS PURGED	TEMPERATURE (^{0}F)	CONDUCTIVITY (micromohs/cm)	pH	TURBIDITY	
1437							B.O. (mg/l)
1437							2.14
1438	6.42	1	59.2	1,640	6.52	999	
1439		2					2.31
1440	7.05	3	64.0	1,280	6.33	331	
1441	7.45	4	64.0	1,150	6.31	175	1.79
1443		6	63.9	1,050	6.34	60	1.84
1446	8.05	9	62.9	840	6.38	24	2.14
1446							2.21

Duplicate

Sample Bailer

2.05

APPENDIX D

LABORATORY ANALYTICAL REPORTS

CLS Labs

Northwest Envirocon, Inc.
1828 Tribute Road, STE A
Sacramento, Ca 95815

03/19/99

Attention: Matt Spielmann

Reference: Analytical Results

Project Name: 444 Hegenberger 1/4ly Mon.; 1st 1/4
Project No.: 05-001594-1
Date Received: 03/09/99
Chain Of Custody: NO NUMBER

CLS ID No.: R0591
CLS Job No.: 820591

The following analyses were performed on the above referenced project:

No. of Samples	*Turnaround Time*	*Analysis Description*
5	5 Days	TPH Diesel by DHS Method - M8015 (water)
5	5 Days	TPH Gasoline and BTXE (water)

These samples were received by CLS Labs in a chilled, intact state and accompanied by a valid chain of custody document.

Calibrations for analytical testing have been performed in accordance to and pass the EPA's criteria for acceptability.

TPH/Diesel:
Although Samples MW2 and MW3 were found to contain compounds in the retention time range generally associated with Diesel, the chromatograms for these samples were not consistent with the expected chromatographic pattern or "fingedrprint." However, the reported concentrations are based on Diesel calibration.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

3249 Fitzgerald Road Rancho Cordova, CA 95742 (916) 638-7301 Fax (916) 638-4510

CLS Labs

Analysis Report: **Total Petroleum Hydrocarbons, EPA Method 8015**

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/15/99**
Date Analyzed: **03/16/99**
Date Reported: **03/17/99**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25065**
Instrument ID: **PGC06**
Analyst ID: **NGOCDUNG**
Matrix: **WATER**

ANALYTICAL RESULTS

Lab / Client ID Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
1B / MW1				
TPH as Diesel	N/A	0.19	0.050	1.0
2B / MW2				
TPH as Diesel	N/A	0.21	0.050	1.0
3B / MW3				
TPH as Diesel	N/A	1.4	0.050	1.0
4B / MW4				
TPH as Diesel	N/A	ND	0.050	1.0
5B / MW5				
TPH as Diesel	N/A	ND	0.050	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **BTEX, EPA Method 602**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/10/99**
Date Reported: **03/15/99**
Client ID No.: **MW1**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-1A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (ug/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	20.0	112

MW1

Analyte	CAS No.	Results (ug/L)	Rep. Limit (ug/L)	Dilution (factor)
Benzene	71-43-2	ND	0.30	1.0
Toluene	108-88-3	ND	0.30	1.0
Ethylbenzene	100-41-4	ND	0.30	1.0
Xylenes, total	1330-20-7	ND	0.60	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **BTEX, EPA Method 602**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/10/99**
Date Reported: **03/15/99**
Client ID No.: **MW2**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-2A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (ug/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	20.0	104

MW2

Analyte	CAS No.	Results (ug/L)	Rep. Limit (ug/L)	Dilution (factor)
Benzene	71-43-2	200	3.0	10
Toluene	108-88-3	0.74	0.30	1.0
Ethylbenzene	100-41-4	1.3	0.30	1.0
Xylenes, total	1330-20-7	2.3	0.60	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: Northwest Envirocon, Inc.
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: 444 Hegenberger 1/
4ly Mon.; 1st 1/4

Date Sampled: 03/08/99
Date Received: 03/09/99
Date Extracted: 03/10/99
Date Analyzed: 03/11/99
Date Reported: 03/15/99
Client ID No.: MW3

Project No.: 05-001594-1
Contact: Matt Spielmann
Phone: (916)649-3570

Lab Contact: Ray Oslowski
Lab ID No.: R0591-3A
Job No.: 820591
COC Log No.: NO NUMBER
Batch No.: 25021
Instrument ID: GC007
Analyst ID: SCOTTF
Matrix: WATER

SURROGATE

Analyte	CAS No.	Surr Conc. (ug/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	100	99

MW3

Analyte	CAS No.	Results (ug/L)	Rep. Limit (ug/L)	Dilution (factor)
Benzene	71-43-2	1800	30	100
Toluene	108-88-3	30	1.5	5.0
Ethylbenzene	100-41-4	67	1.5	5.0
Xylenes, total	1330-20-7	26	3.0	5.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: BTEX, EPA Method 602
Purge and Trap, EPA Method 5030

Client: Northwest Envirocon, Inc.
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: 444 Hegenberger 1/
4ly Mon.; 1st 1/4

Date Sampled: 03/08/99
Date Received: 03/09/99
Date Extracted: 03/10/99
Date Analyzed: 03/10/99
Date Reported: 03/15/99
Client ID No.: MW4

Project No.: 05-001594-1
Contact: Matt Spielmann
Phone: (916)649-3570

Lab Contact: Ray Oslowski
Lab ID No.: R0591-4A
Job No.: 820591
COC Log No.: NO NUMBER
Batch No.: 25021
Instrument ID: GC007
Analyst ID: SCOTTF
Matrix: WATER

SURROGATE

Analyte	CAS No.	Surr Conc. (ug/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	20.0	27 MA

MW4

Analyte	CAS No.	Results (ug/L)	Rep. Limit (ug/L)	Dilution (factor)
Benzene	71-43-2	1900	30	100
Toluene	108-88-3	9.4	0.30	1.0
Ethylbenzene	100-41-4	1.2	0.30	1.0
Xylenes, total	1330-20-7	11	0.60	1.0

MA = Recovery data is outside standard QC limits due to matrix interference. LCS recovery data validates methodology.w

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **BTEX, EPA Method 602**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/10/99**
Date Reported: **03/15/99**
Client ID No.: **MW5**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-5A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (ug/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	20.0	109

MW5

Analyte	CAS No.	Results (ug/L)	Rep. Limit (ug/L)	Dilution (factor)
Benzene	71-43-2	23	0.30	1.0
Toluene	108-88-3	0.31	0.30	1.0
Ethylbenzene	100-41-4	ND	0.30	1.0
Xylenes, total	1330-20-7	1.8	0.60	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **Total Petroleum Hydrocarbons, EPA Method 8015**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/10/99**
Date Reported: **03/15/99**
Client ID No.: **MW1**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-1A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (mg/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	0.0200	84

MW1

Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
TPH as Gasoline	N/A	ND	0.050	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **Total Petroleum Hydrocarbons, EPA Method 8015**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/10/99**
Date Reported: **03/15/99**
Client ID No.: **MW2**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-2A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (mg/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	0.0200	112

MW2

Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
TPH as Gasoline	N/A	0.18	0.050	1.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: **Total Petroleum Hydrocarbons, EPA Method 8015**
Purge and Trap, EPA Method 5030

Client: **Northwest Envirocon, Inc.**
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: **444 Hegenberger 1/**
4ly Mon.; 1st 1/4

Date Sampled: **03/08/99**
Date Received: **03/09/99**
Date Extracted: **03/10/99**
Date Analyzed: **03/11/99**
Date Reported: **03/15/99**
Client ID No.: **MW3**

Project No.: **05-001594-1**
Contact: **Matt Spielmann**
Phone: **(916)649-3570**

Lab Contact: **Ray Oslowski**
Lab ID No.: **R0591-3A**
Job No.: **820591**
COC Log No.: **NO NUMBER**
Batch No.: **25021**
Instrument ID: **GC007**
Analyst ID: **SCOTTF**
Matrix: **WATER**

SURROGATE

Analyte	CAS No.	Surr Conc. (mg/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	0.100	106

MW3

Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
TPH as Gasoline	N/A	2.6	0.25	5.0

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Purge and Trap, EPA Method 5030

Client: Northwest Envirocon, Inc.
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: 444 Hegenberger 1/
4ly Mon.; 1st 1/4

Date Sampled: 03/08/99
Date Received: 03/09/99
Date Extracted: 03/10/99
Date Analyzed: 03/10/99
Date Reported: 03/15/99
Client ID No.: MW4

Project No.: 05-001594-1
Contact: Matt Spielmann
Phone: (916)649-3570

Lab Contact: Ray Oslowski
Lab ID No.: R0591-4A
Job No.: 820591
COC Log No.: NO NUMBER
Batch No.: 25021
Instrument ID: GC007
Analyst ID: SCOTTF
Matrix: WATER

SURROGATE

Analyte	CAS No.	Surr Conc. (mg/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	0.0200	30 MA

MW4

Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
TPH as Gasoline	N/A	1.3	0.050	1.0

MA = Recovery data is outside standard QC limits due to matrix interference. LCS recovery data validates methodology.

ND = Not detected at or above indicated Reporting Limit

CLS Labs

Analysis Report: Total Petroleum Hydrocarbons, EPA Method 8015
Purge and Trap, EPA Method 5030

Client: Northwest Envirocon, Inc.
1828 Tribute Road, STE A
Sacramento, Ca 95815

Project: 444 Hegenberger 1/
4ly Mon.; 1st 1/4

Date Sampled: 03/08/99
Date Received: 03/09/99
Date Extracted: 03/10/99
Date Analyzed: 03/10/99
Date Reported: 03/15/99
Client ID No.: MW5

Project No.: 05-001594-1
Contact: Matt Spielmann
Phone: (916)649-3570

Lab Contact: Ray Oslowski
Lab ID No.: R0591-5A
Job No.: 820591
COC Log No.: NO NUMBER
Batch No.: 25021
Instrument ID: GC007
Analyst ID: SCOTTF
Matrix: WATER

SURROGATE

Analyte	CAS No.	Surr Conc. (mg/L)	Surrogate Recovery (percent)
o-Chlorotoluene	95-49-8	0.0200	104

MW5

Analyte	CAS No.	Results (mg/L)	Rep. Limit (mg/L)	Dilution (factor)
TPH as Gasoline	N/A	0.058	0.050	1.0

ND = Not detected at or above indicated Reporting Limit

R0591

NORTHWEST ENVIROCON, INC.
1828 TRIBUTE ROAD, SUITE A
SACRAMENTO, CA. 95815
(916) 649-3570 FAX: (916) 649-3819

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

CLS Quote #R00391

P.O. # 98050-10560

DATE: 3/9/99 PAGE 1 OF 1

PROJECT NAME 444 Hegenberger Mon.; 1st 1/4

PROJECT # 05-001594-1

SITE ADDRESS 444 Hegenberger Road
Oakland, CA.

PHONE

SAMPLERS SIGNATURE Matthew H. Spiel

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX	NUMBER OF CONTAINERS	TYPE OF CONTAINERS	TPH GAS/BTEX 8015/8020/602	TPH/8015 MODIFIED DIESEL ☒ GASOLINE ☐	BTEX 602/8020	TRPH EPA 418.1	HALOGENATED VOLATILES 601/8010	VOLATILE ORGANICS GC/MS 624/8240/8260	CAM METALS 6010/7000	MTBE				REMARKS
MW1	3/8/99	1231		water	4	1 liter 40ml	X	X										
MW2	3/8/99	1306		water	4		X	X										
MW3	3/8/99	1417		water	4		X	X										
MW4	3/8/99	1337		water	4		X	X										
MW5	3/8/99	1446		water	4	↓	X	X										

ANALYSIS REQUESTED

TURNAROUND REQUIREMENTS
- ___ 24 hr
- ___ 48 hr
- X 5 day
- ___ Standard
- ___ Other (Specify)
- ___ Provide Verbal Preliminary Results

Requested Report Date ___

REPORT REQUIREMENTS
- X I.Routine Report
- ___ II.Report (includes DUP, MS, MSD, as required, may be charged as samples)
- ___ III.Data Validation Report (includes All Raw Data)
- ___ RWOCB

RELINQUISHED BY (SIGN)	PRINT NAME/COMPANY	DATE/TIME	RECEIVED BY (SIGN)	PRINT NAME/COMPANY
Matthew H. Spiel	Matthew H. Spielman/NWE	3/9/99 1445	Elber Hallmark	E. Hallmark/CLS
Elber Hallmark	E. Hallmark/CLS	3.9.99 1635		

REC'D AT LAB BY: [signature] DATE/TIME: 3-9-99 1635 CONDITIONS/COMMENTS:

SHIPPED VIA ☐ FED X ☐ UPS ☒ OTHER CLS Courier AIR BILL #

E:\forms\CHAIN OF CUSTODY_1.dwg