AEI CONSULTANTS
ENVIRONMENTAL & CIVIL ENGINEERING SERVICES

3210 Old Tunnel Road, Suite B, Lafayette, CA 94549-4157
Phone: (925) 283-6000 Fax: (925) 283-6121

June 6, 2002

JUN 07 2002

Mr. Barney Chan
ACHCSA
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: 245 8th Street
Oakland, California
AEI Project No. 4332

Dear Mr. Chan:

Enclosed are Figures 2 & 3 for the quarterly report submitted to your office earlier this week. Please let me know if you would like a new bound copy of the report. I apologize for any inconvenience this has caused.

Please call me at (925) 283-6000 if you have any questions.

Sincerely,

Peter McIntyre
Project Geologist

AEI CONSULTANTS
ENVIRONMENTAL & CIVIL ENGINEERING SERVICES

3210 Old Tunnel Road, Suite B, Lafayette, CA 94549-4157
Phone: (925) 283-6000 Fax: (925) 283-6121

June 3, 2002

Mr. Barney Chan
ACHCSA
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: 245 8th Street
Oakland, California
AEI Project No. 4332

Dear Mr. Chan:

Enclosed is a copy of our recent quarterly report for the above referenced property.

We look forward to working with you to develop and implement the most effective interim corrective action. Please call me at (925) 283-6000 if you have any questions or would like to discuss the proposed work at the site.

Sincerely,

Peter McIntyre
Project Geologist

June 3, 2002

QUARTERLY GROUNDWATER MONITORING REPORT

245 8th Street
Oakland, California

AEI Project No. 4332

Prepared For

Mr. Victor Lum
Vic's Automotive
245 8th Street
Oakland, CA 94607

Prepared By

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(925) 283-6000

AEI

AEI CONSULTANTS
Environmental & Civil Engineering Services

3210 Old Tunnel Road, Suite B, Lafayette, CA 94549-4157
Phone: (925) 283-6000 Fax: (925) 283-6121

June 3, 2002

Mr. Vic Lum
Vic's Automotive
245 8th Street
Oakland, CA 94607

RE: Quarterly Groundwater Monitoring Report
Fourth Episode
245 8th Street
Oakland, California
AEI Project No. 4332

Dear Mr. Lum:

AEI Consultants (AEI) has prepared this report on your behalf to document the continued groundwater investigation at the above referenced site (Figure 1: Site Location Map). This work is being performed in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA) to document the groundwater quality and free product recovery associated with the release of fuel hydrocarbons from the former underground storage tank system. This report presents the findings of the third episode of groundwater monitoring and sampling for the four onsite wells conducted on April 24, 2002.

Site Description and Background

The subject property (hereafter referred to as the "site" or "property") is located in a commercial and residential area of Oakland. The site is a lot on the south corner of Alice Street and 8th Street and is currently developed with a gasoline station and auto repair facility. Refer to Figure 2 for a visual description of the site.

Between June 1993 and August 1994, AEI removed a total of seven (7) underground storage tanks (UST) from the property. The tanks consisted of four (4) 1,000 gallon and two (2) 6,000 gallon gasoline tanks and one (1) 250 gallon waste oil tank. The former locations of the tanks are shown on Figure 2. Impacted soil was removed from beneath the former tank area. Groundwater was encountered beneath the former 6,000 gallon tanks. Non-aqueous phase liquid (NAPL) was observed on the water table beneath the southern tank. The excavated soil was transported to an appropriate disposal facility and the excavation was backfilled with clean fill material. A new tank system was installed just west of the dispenser island.

Two groundwater monitoring wells (MW-1 and MW-2) were installed in July 1995. The first two episodes of monitoring revealed total petroleum hydrocarbons (TPH) as gasoline and benzene up to

210,000 µg/l and 720 µg/l, respectively, in MW-2. Floating gasoline product, a NAPL, was discovered in MW-1, which ranged from 1.20 to 4.39 feet thick between December 1995 and March 1996.

Three soil borings (SB-1 through SB-3) were advanced in August 1996. Groundwater samples collected from each of the borings contained TPH as gasoline and benzene ranging from 120,000 to 140,000 µg/l and from 12,000 to 19,000 µg/l, respectively. Methyl tertiary butyl ether (MTBE) was also present in all three samples, up to 27,000 µg/l. Although NAPL was not observed in the field, qualitative laboratory observations indicated immiscible sheen. Manual bailing and pumping of NAPL from MW-1 and monitoring of MW-2 occurred intermittently through 1997.

Two additional groundwater monitoring wells (MW-3 and MW-4) were installed in May 2001. Refer to Tables 1 and 2 for data collected from these wells. A NAPL recovery pump was installed in MW-1 in June 2001.

This report documents the results of the fourth episode of groundwater monitoring and sample collection of the four wells performed at the site.

Summary of Monitoring Activities

Monitoring of water and product levels and sample collection occurred on April 24, 2002. The well locations are shown in Figure 2. The depth to static groundwater from the top of the well casings was measured prior to sampling with an electric water level indicator. A floating product interface meter was used in MW-1 and MW-2. The three wells with no measurable thickness of floating product (MW-3 through MW-4) were purged using a battery powered submersible pump and groundwater samples were collected from the wells using clean, disposable Teflon bailers.

Temperature, pH, and specific conductivity were measured during the purging of the wells. At least three well volumes of water were purged from each well prior to sample collection. Once the above parameters had stabilized, and the wells were allowed to recharge to a minimum of 90% of their original water volume, a water sample was collected.

Water was poured from the bailers into 40 ml VOA vials and capped so no head space or air bubbles were visible within the sample containers. Samples were shipped on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (DOHS Certification #1644).

The three groundwater samples were analyzed for TPH as gasoline and BTEX with MTBE by EPA methods 5030/8015 & 8020.

Field Results

No measurable thickness of NAPL was measured in MW-1 or the other wells. Groundwater levels for the current monitoring episode ranged from 13.64 to 14.14 feet above mean sea level (msl) in the three wells (MW-2 through MW-4). These groundwater elevations were an average of 0.83 feet lower than the previous monitoring episode. The groundwater flow direction at the time of measurement was to the south/southwest, representing a shift from a flow direction to the southeast during the previous episode. The water table's hydraulic gradient was 0.005 foot per foot, similar to those of the previous episodes.

Groundwater elevation data are summarized in Table 1. The water table contours and the groundwater flow direction are depicted in Figure 2. Refer to Appendix A for the Groundwater Monitoring Well Field Sampling Forms.

Groundwater Quality

Hydrocarbon concentrations were highest in MW-2, which has been the case during recent episodes. TPH as gasoline, benzene, and MTBE were detected at 210.000 µg/l, 32,000 µg/l, and 38,000 µg/l in this well. No hydrocarbons were detected in MW-4 and only minor concentrations of TPH as gasoline and BTEX were detected in MW-3. A summary of groundwater quality data is presented in Table 2. Laboratory results and chain of custody documents are included in Appendix B.

Product Recovery

Pump operation has continued over the last 3 months. On the date of monitoring, no measurable thickness of product was found and a bailer was used to verify the absence of recoverable NAPL. The pump remains in the well and is currently operational.

Conclusions and Recommendations

The NAPL lens and dissolved hydrocarbon plume have likely migrated beneath the adjacent properties to the south and west. As requested by the ACHCSA, further investigation and active groundwater remediation will be necessary to assess whether the volatile organics present represent a human health risk for residents of the area and to mitigate the hydrocarbon plume.

Report Limitations and Signatures

This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices in the environmental engineering and construction field that existed at the time and location of the work.

Sincerely,
AEI Consultants

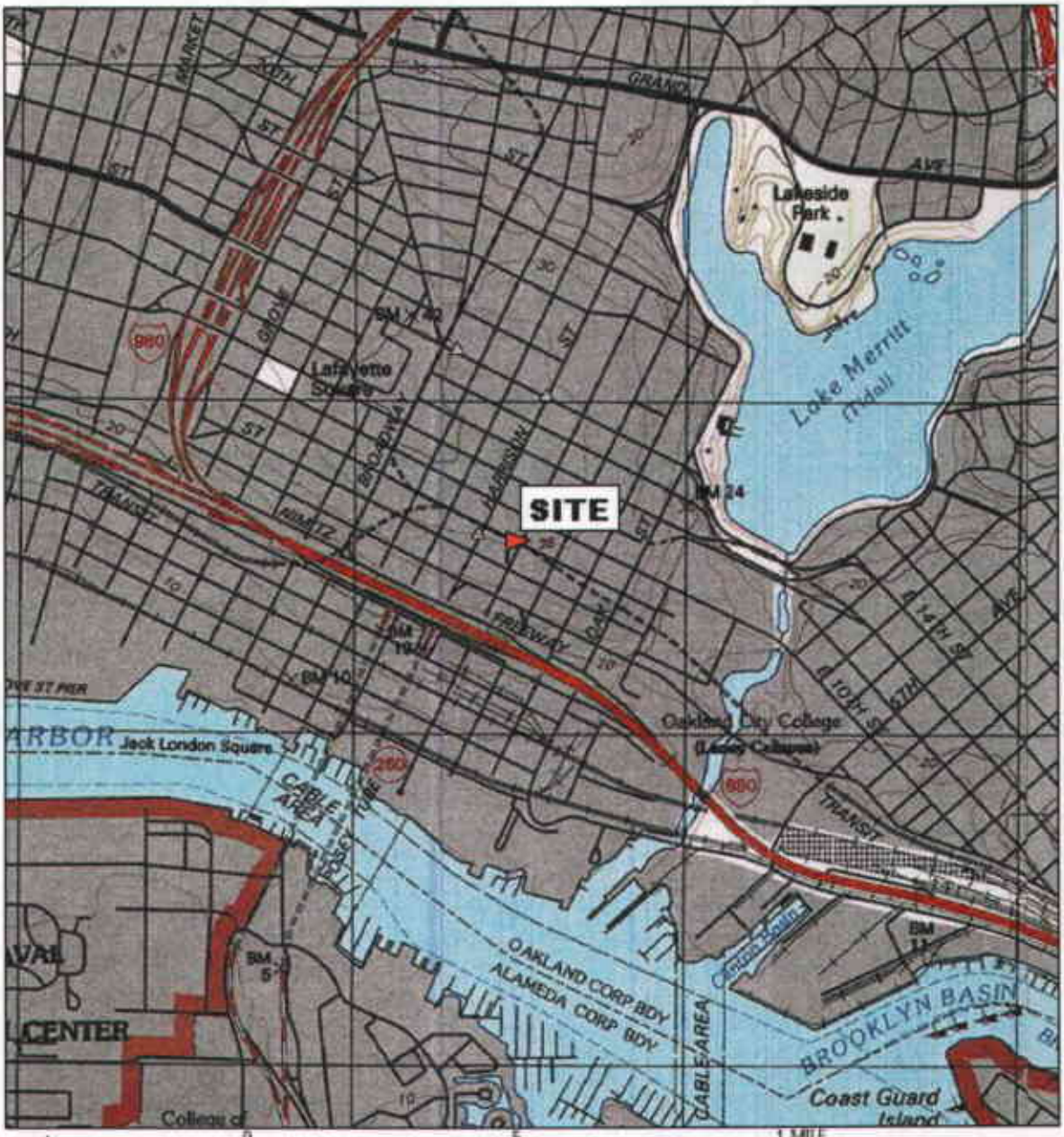
Peter McIntyre
Project Geologist

Joseph Derhake, PE
Principal

Figure 1 Site Location Map
Figure 2 Site Plan with Water Table Contours
Figure 3 Site Plan with Dissolved Hydrocarbons

Appendix A Well Field Sampling Forms
Appendix B Laboratory Reports

cc: Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94501



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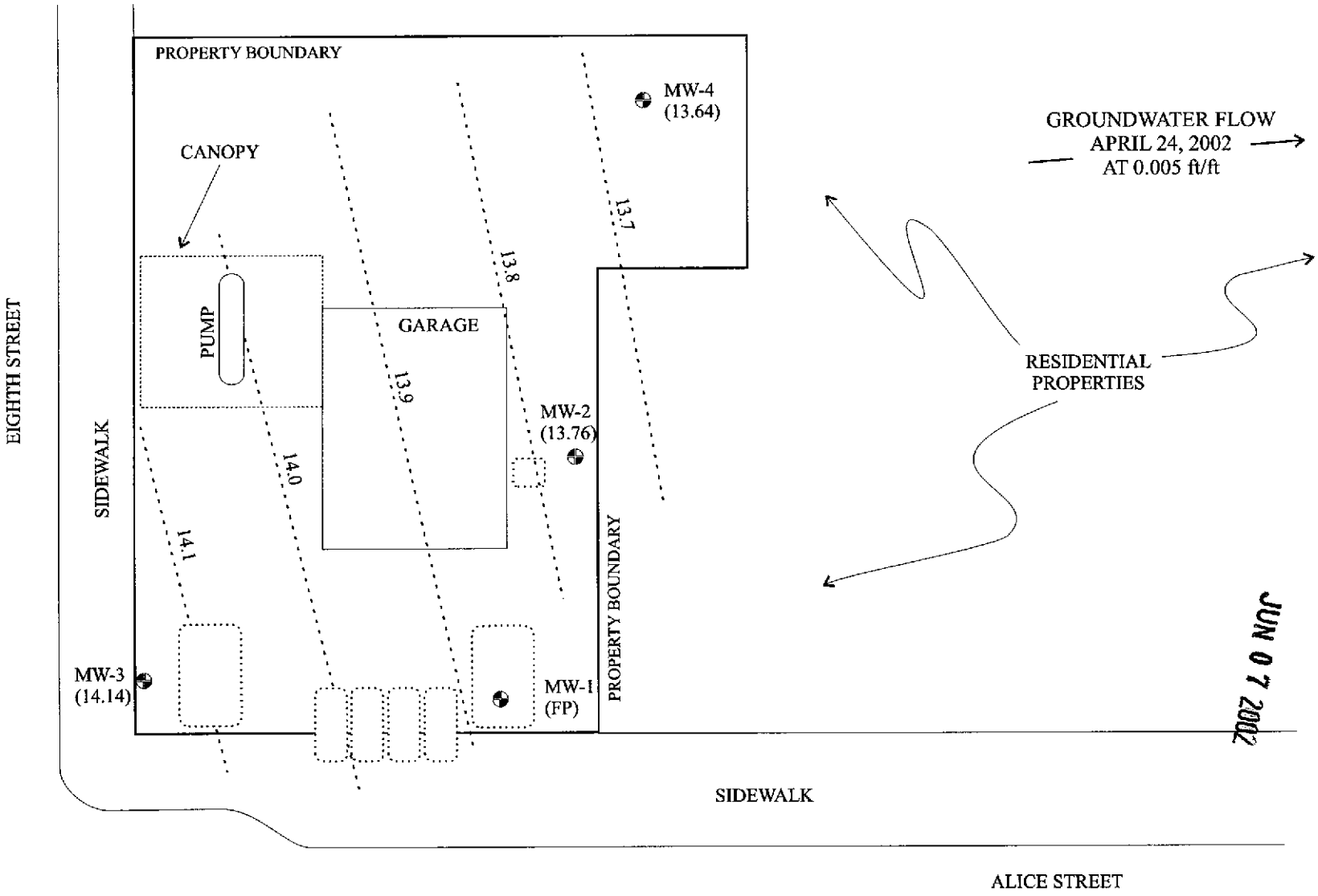
AEI CONSULTANTS 3210 OLD TUNNEL RD, STE B, LAFAYETTE, CA	
SITE LOCATION MAP	
245 8th STREET OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 4332



AEI CONSULTANTS

3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

WATER TABLE CONTOURS

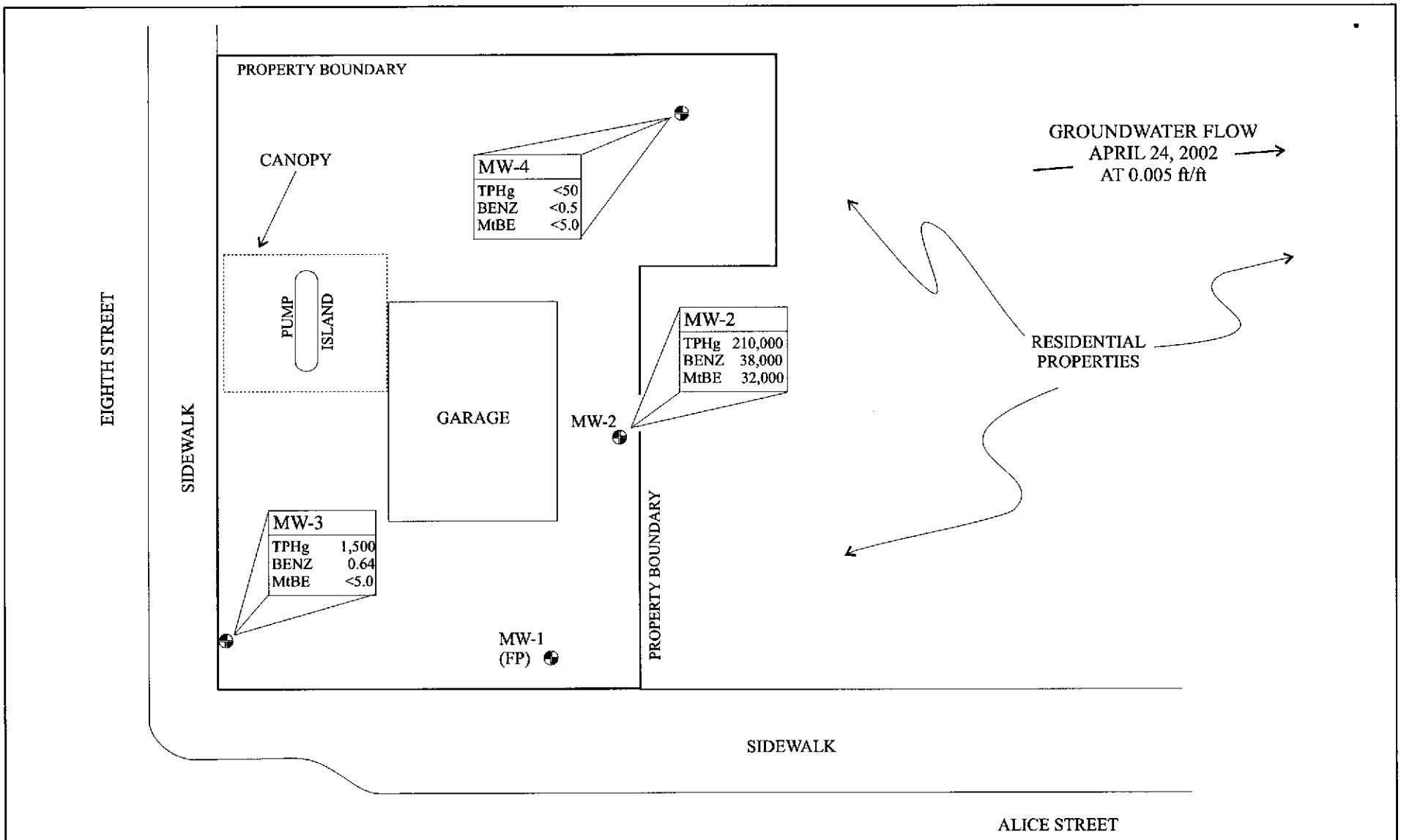
245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 4332

N

MONITORING WELLS WITH WATER TABLE ELEVATIONS EXPRESSED IN FEET ABOVE MEAN SEA LEVEL
(FP = Floating Product)

SCALE: 1 in = 25 ft



AEI CONSULTANTS

3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

DISSOLVED HYDROCARBONS

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 4332

N

MONITORING WELLS:
HYDROCARBON CONCENTRATION
EXPRESSED IN ug/l IN WATER

SCALE: 1 in = 25 ft

TPHg = Total Petroleum Hydrocarbons as gasoline
BENZ = Benzene
MtBE = Methyl tert-Butyl Ether
FP = Floating Product (NAPL)

Table 1
Groundwater Elevation Data

Well ID	Date Collected	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
MW-1	6/29/01	27.73	16.52	*	14.89	1.63
	10/10/01	27.73	15.45	*	15.37	0.08
	1/9/02	27.73	12.61	15.12*	-	<0.01
	4/24/02	**27.73**	**13.35**	**14.38***	-	**<0.01**
MW-2	6/29/01	28.16	16.14	12.02	-	-
	10/10/01	28.16	16.43	11.73	-	-
	1/9/02	28.16	13.50	14.66	-	-
	4/24/02	**28.16**	**14.40**	**13.76**	-	-
MW-3	6/29/01	29.21	16.60	12.61	-	-
	10/10/01	29.21	16.92	12.29	-	-
	1/9/02	29.21	14.20	15.01	-	-
	4/24/02	**29.21**	**15.07**	**14.14**	-	-
MW-4	6/29/01	29.38	17.71	11.67	-	-
	10/10/01	29.38	18.00	11.38	-	-
	1/9/02	29.38	15.02	14.36	-	-
	4/24/02	**29.38**	**15.74**	**13.64**	-	-

* = Measured groundwater level affected by LNAPL and/or pump presence, not used to calculate water table elevation

All well elevations are measured from the top of the casing

- = not applicable

ft msl = feet above mean sea level

LNAPL = light non-aqueous phase liquid (floating free product)

Note = Historical groundwater elevation and quality data for wells MW-1 and MW-2 was not available

Episode #	Date	Average Water Table Elevation**	Change from Previous Episode	Flow direction (gradient)
1	6/29/01	12.10	-	SSE (0.0074)
2	10/10/01	11.80	-0.30	SSE (0.0071)
3	1/9/02	14.68	2.88	SE (0.0054)
4	**4/24/02**	**13.85**	**-0.83**	**SSW (0.005)**

** MW-2 through MW-4 only

Table 2
Groundwater Sample Analytical Data

Well/Sample ID	Date Collected	NAPL thichness (ft)	TPHg µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L
MW-1	6/29/01	1.63	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	10/10/01	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	1/9/02	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	4/24/02	**<0.01**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
MW-2	6/29/01	0.0	69,000	4100/4400*	7,200	6,100	1,500	7,000
	10/10/01	0.0	87,000	14,000	22,000	12,000	2,700	9,100
	1/9/02	0.0	130,000	11,000	30,000	19,000	3,800	14,000
	4/24/02	**Sheen**	**210,000**	**32,000**	**38,000**	**23,000**	**4,600**	**19,000**
MW-3	6/29/01	0.0	550	<5.0	<0.5	3.1	3.2	1.2
	10/10/01	0.0	470	<5.0	0.77	5.3	3.3	5.9
	1/9/02	0.0	1,000	<5.0	0.90	7.6	7.8	25
	4/24/02	**0.0**	**1,500**	**<5.0**	**0.64**	**7.2**	**12**	**14**
MW-4	6/29/01	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	10/10/01	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	1/9/02	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	4/24/02	**0.0**	**<50**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MDL			50	5.0	0.5	0.5	0.5	0.5

µg/L micrograms per liter

TPHg total petroleum hydrocarbons as gasoline

MTBE methyl tertiary butyl ether

* samples re-analyzed by EPA Method 8260 (expressed as EPA 8020 / EPA 8260)

MDL = method detection limit

ns/fp = not sampled / free product

Note = Historical Groundwater elevation and quality data for wells MW-1 and MW-2 was not available

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-1	
Project Name: LUM	Date of Sampling: 4/24/02
Job Number: 4332	Name of Sampler: OA & DP
Project Address: 245 8th Street, Oakland	
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	4"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock – OK/Replace	OK
Elevation of Top of Casing	27.63
Depth of Well	25
Depth to LNAPL	Not Present
Depth to water	13.35
LNAPL thickness <0.01 ft (sheen present)	
Appearance of Purge Water	Well not purged
GROUNDWATER SAMPLES	
Number of Samples/Container Size	

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)
No measurable product thickness upon removal of pump.

LNAPL – light non-aqueous phase liquid (floating product)
TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name: LUM	Date of Sampling: 4/24/02
Job Number: 4332	Name of Sampler: OA & DP
Project Address: 245 8th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock – OK/Replace	OK
Elevation of Top of Casing	28.16
Depth of Well	25
Depth to Water	14.40
Water Elevation	13.76
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	5.09
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	5
Appearance of Purge Water	Greyish (murky)

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2)-40 ml VOAs

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (µs/cm)	Comments
	1	19.4	6.74	1327	
	3	18.3	6.79	1071	
	5	18.0	6.56	1022	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Strong hydrocarbon odor, heavy sheen present (no measurable NAPL thickness)

TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name: LUM	Date of Sampling: 4/24/02
Job Number: 4332	Name of Sampler: OA & DP
Project Address: 245 8th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	29.21
Depth of Well	25
Depth to Water	15.07
Water Elevation	14.14
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	19.36
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	20
Appearance of Purge Water	clears quickly

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2)-40 ml VOAs

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (µs/cm)	Comments
	5	23.1	7.27	426	
	10	21.0	7.00	331	
	15	19.4	6.71	313	
	20	18.8	7.33	299	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

No sheen, slight HC odor

TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name: LUM	Date of Sampling: 4/24/02
Job Number: 4332	Name of Sampler: OA & DP
Project Address: 245 8th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"
Seal at Grade -- Type and Condition	Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	29.38
Depth of Well	25
Depth to Water	15.74
Water Elevation	13.64
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	
4" casing: (TD - DTW)(0.65)(3)	18.06
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	18
Appearance of Purge Water	Clears quickly

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2)-40 ml VOAs

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (µs/cm)	Comments
	4	20.8	6.94	518	Initially slightly turbid
	8	19.2	6.76	490	
	12	18.9	6.84	535	Very clear
	16	19.6	6.60	600	
	18	19.7	6.62	642	

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

No sheen or odor present

TD - Total Depth of Well
DTW - Depth To Water

McCampbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc. 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157	Client Project ID: #4332; LUM	Date Sampled: 04/24/02
		Date Received: 04/24/02
	Client Contact: Orion Alcalay	Date Reported: 04/29/02
	Client P.O.:	Date Completed: 04/29/02

April 29, 2002

Dear Orion:

Enclosed are:

1). the results of **3** samples from your **#4332; LUM project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical Inc.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc.	Client Project ID: #4332; LUM	Date Sampled: 04/24/02
3210 Old Tunnel Rd., Ste. B		Date Received: 04/24/02
Lafayette, CA 94549-4157	Client Contact: Orion Alcalay	Date Extracted: 04/26/02
	Client P.O.:	Date Analyzed: 04/26/02

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0204395

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-2	W	210000,a,h,j	32000	38000	23000	4600	19000	250	---#
002A	MW-3	W	1500,b,j	ND	0.64	7.2	12	14	1	---#
003A	MW-4	W	ND	ND	ND	ND	ND	ND	1	109
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5	0.5	0.5	0.5	0.5	ug/L		
	S	1	0.05	0.005	0.005	0.005	0.005	mg/Kg		

*water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, and TCLP extracts in ug/L.

DF = dilution factor.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCampbell Analytical Inc.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

BatchID: 1473 Matrix: W WorkOrder: 0204395

EPA Method: SW8021B/8015Cm Extraction: SW5030B Ext. Date: 4/24/02 Spiked Sample ID: 0204389-003A

Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(gas)	ND	60	115	108	5.72	110	101	8.3	70	130
MTBE	ND	10	86.4	86.5	0.0648	91.6	81.2	12	70	130
Benzene	ND	10	94.1	88.4	6.21	95.1	86.1	9.9	70	130
Toluene	ND	10	99.4	93.2	6.53	100	90.3	10	70	130
Ethylbenzene	ND	10	102	96.2	6.15	104	93.4	10	70	130
Xylenes	ND	30	103	94.7	8.75	103	93.7	9.8	70	130
%SS	101	10	102	103	0.607	100	100	0.054	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS – MSD) / (MS + MSD) * 2.

* MS and / or MSD spike recoveries may not be near 100% or their RPDs near 0% if: a) the sample is inhomogeneous AND contains significant concentrations of analyze relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

McCampbell Analytical Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0204395

Client:
All Environmental, Inc.
3210 Old Tunnel Rd., Ste. B
Lafayette, CA 94549-4157

TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #4332; LUM
PO:

24-Apr-02

Sample ID	ClientSampID	Matrix	Collection Date	Bottle	Requested Tests						
					8021B/8015						
0204395-001	MW-2	Water	4/24/02		A						
0204395-002	MW-3	Water	4/24/02		A						
0204395-003	MW-4	Water	4/24/02		A						

Comments:

	Date/Time		Date/Time
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: Orion Alcalay Bill To:
Company: All Environmental
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549-4157
Tele: (925) 283-6000 Fax: (925) 283-6121
Project #: 4332 Project Name: LUM
Project Location: 295 8TH ST. / OAKLAND
Sampler Signature: David R Rio

SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015)/ MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Comments
MW-2		4/24/02		2		X					X	X			X																
MW-3		↓		↓		↓					↓	↓			↓																
MW-4		↓		↓		↓					↓	↓			↓																

Relinquished By:	Date:	Time:	Received By:
David Rio	4/24/02	2:38	U. Miller 4-24-02 2:35
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

VOAS | O&G | METALS | OTHER

PRESERVATION ✓
(COC) CONDITION ✓
HEAD SPACE ABSENT ✓
APPROPRIATE CONTAINERS