REPORT OF QUARTERLY GROUND WATER MONITORING

51 3959

ALAMEDA COUNTY ALCOPARK FACILITY

165 13TH STREET

OAKLAND, CALIFORNIA

Prepared For:

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Prepared By:

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Project No. 6-92-5394

January 21, 1993

This report has been prepared by Environmental Science & Engineering, Inc. for the exclusive use of Alameda County General Services Agency as it pertains to their site located at 165 13th Street, Oakland, Alameda County, California. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists and engineers practicing in this field. No other warranty, expressed or implied, is made as to professional advice in this report.

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1.0 INTRODUCTION

This report presents the results of the September 1992 ground water monitoring activities performed by Environmental Science & Engineering, Inc. (ESE) at the Alameda County ALCOPARK facility. The subject ALCOPARK facility is located at 165 13th Street, Oakland, California (Figure 1 - Location Map). The subject site is an Alameda County operated fueling station located adjacent to the northwest corner of the parking facility at the corner of 13th and Jackson Streets, Oakland, California. The fueling station facility's layout, illustrated in Figure 2 - Site Plan, consists of a single pump island for dispensing unleaded gasoline, and two 10,000 gallon underground storage tanks. Leaded gasoline had previously been stored and dispensed at this facility.

This quarterly ground water monitoring report contains documentation of ESE's field activities and analytical results for ground water samples collected on September 10, 1992 and a discussion of the results.

1.1 Scope of Work

The scope of work performed during this monitoring event was the following:

- Measured the depth to water in monitoring wells MW-1, MW-4 and MW-5;
- Collected ground water samples from monitoring wells MW-1, MW-4 and MW-5;
- Analyzed the ground water samples for Total Petroleum Hydrocarbons as Gasoline (TPH-G) and the aromatic compounds Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) (wells MW-1, MW-4 and MW-5), and Total Petroleum Hydrocarbons as Diesel (TPH-D) (well MW-4); and
- Reviewed the field and laboratory data and prepared a technical report of the investigation.

2.0 BACKGROUND

During a fuel line integrity test performed by Scott Company of Oakland on January 24, 1989 a leak was found in the vapor recovery line below the unleaded gasoline dispenser. Hunter/Gregg, Inc. (Hunter), now ESE, completed a hand auger boring directly beneath the location of the piping leak. Soil samples obtained from the boring showed elevated levels of Total Petroleum Hydrocarbons (TPH) and BTEX. Alameda County General Services Agency (ACGSA) authorized Hunter (now ESE) to perform a Phase I site characterization to assess the lateral and vertical extent of the petroleum hydrocarbons in the soil and ground water on site. This site characterization was performed in March 1989, and the results were presented in a report dated May 1989.

For the Phase I Site Characterization, Hunter drilled and sampled five soil borings, and installed three ground water monitoring wells (MW-1, MW-4 and MW-5) and two vapor monitoring wells (MW-2 and MW-3) in those borings. Analysis of soil and ground water samples from that phase of the investigation showed nondetectable concentrations of TPH, and elevated concentrations of BTEX in soil and ground water. Only Benzene was found at concentrations above the State of California drinking water action levels, with concentrations of 21 ug/L (micrograms per liter or parts per billion) in MW-1, 13 ug/L in MW-4, and nondetectable in MW-5. Soil and ground water analytical results for the initial hand auger sampling, and site characterization investigation are presented in Hunter's Phase I Site Characterization report (Hunter, 1989). In the conclusion of that report, Hunter (now ESE) recommended quarterly monitoring of ground water, and no further action concerning the soil at the site.

Since the completion of the Phase I Site Investigation, ESE (formerly Hunter) has conducted ground water monitoring activities at the site on a quarterly basis.

3.0 GROUND WATER MONITORING

On September 10, 1992, ESE performed quarterly ground water monitoring at the site. ESE obtained depth to water information, and purged and sampled three onsite ground water monitoring wells. The objective of the ground water level survey is to estimate the direction and gradient of ground water flow at the site. The objective of the sampling program is to monitor the extent and concentrations of hydrocarbon constituents, if any, in onsite ground water.

Ground water samples were collected from monitoring wells MW-1, MW-4 and MW-5 on September 10, 1992. Ground water sampling data forms are included as Appendix A. The samples were collected from the wells subsequent to the removal of approximately three well-casing volumes of ground water from each well. The wells were purged using an electric submersible pump. The pump was cleaned prior to use in each well using an Alconox® soap and tap water solution followed by a tap water rinse. The temperature, pH, and conductivity of the ground water removed from each well during the purging process was monitored periodically for stabilization to ensure the collection of samples representative of the aquifer surrounding each well. Ground water samples were collected from each well using a new disposable polyethylene bailer lowered into the well using new nylon cord. The ground water was decanted from the bailers into appropriately preserved 40 milliliter and one liter amberglass bottles. The sample bottles were immediately labeled and placed on ice under chain of custody form for transport to Curtis and Tompkins Analytical Laboratory, Ltd. (C&T) of Berkeley, California, a State-Certified laboratory.

A duplicate sample was collected from monitoring well MW-5 for Quality Assurance/Quality Control (QA/QC) purposes. The duplicate sample provides a check on ESE sample collection and laboratory sample handling procedures. A laboratory supplied

trip blank, consisting of deionized water, was placed in the cooler with the ground water samples transported to the laboratory, also for QA/QC purposes. The trip blank is to ensure that no transfer of volatile compounds occurred between samples on the trip to the laboratory.

The purged ground water and the cleaning solutions were contained in Department of Transportation (DOT) approved 55-gallon drums and stored on site pending laboratory analysis and proper disposal.

4.0 RESULTS

4.1 Ground Water Flow

The average depth to ground water at the site on September 10, 1992 was approximately 20.5 feet below ground surface. Ground water elevations are presented in Table 1. Ground water elevations were calculated utilizing the depth to water measurements and the surveyed top of casing elevations. The estimated direction of ground water flow beneath the site on September 10, 1992 was towards the east (Figure 3 - Ground Water Elevations).

4.2 Ground Water Sample Analysis

The ground water samples from wells MW-1 and MW-5 and the duplicate sample were analyzed for TPH-G and BTEX. The ground water sample from well MW-4 was analyzed for TPH-D, TPH-G and BTEX. TPH-D, TPH-G and the BTEX analyses were performed by Modified EPA Method 8015, EPA Method 8015 and EPA Method 8020, respectively. The laboratory analytical results are presented in Table 2. The laboratory analytical reports and chain of custody documentation are presented as Appendix B.

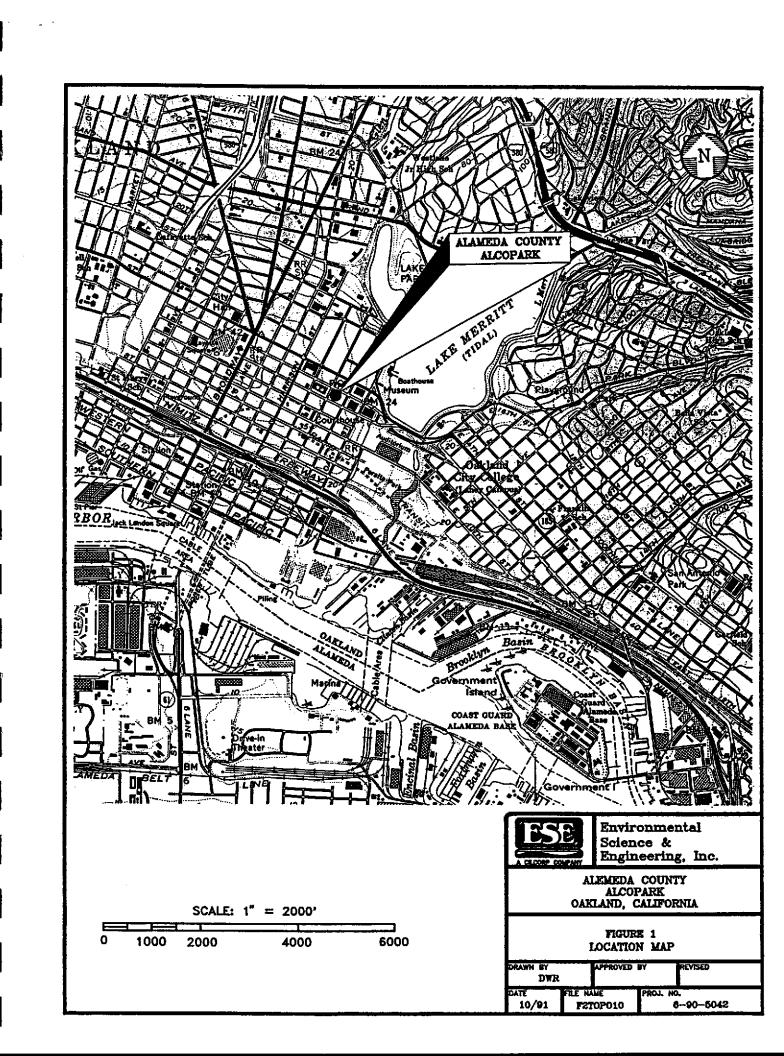
TPH-D was not detected in the ground water sample from well MW-4. TPH-G was detected in ground water samples from wells MW-1, MW-4 and MW-5 at concentrations of 1,800 ug/L, 410 ug/L and 90 ug/L, respectively. Benzene was detected in ground water samples from wells MW-1, MW-4 and MW-5 at concentrations of 410 ug/L 110 ug/L and 12 ug/L, respectively.

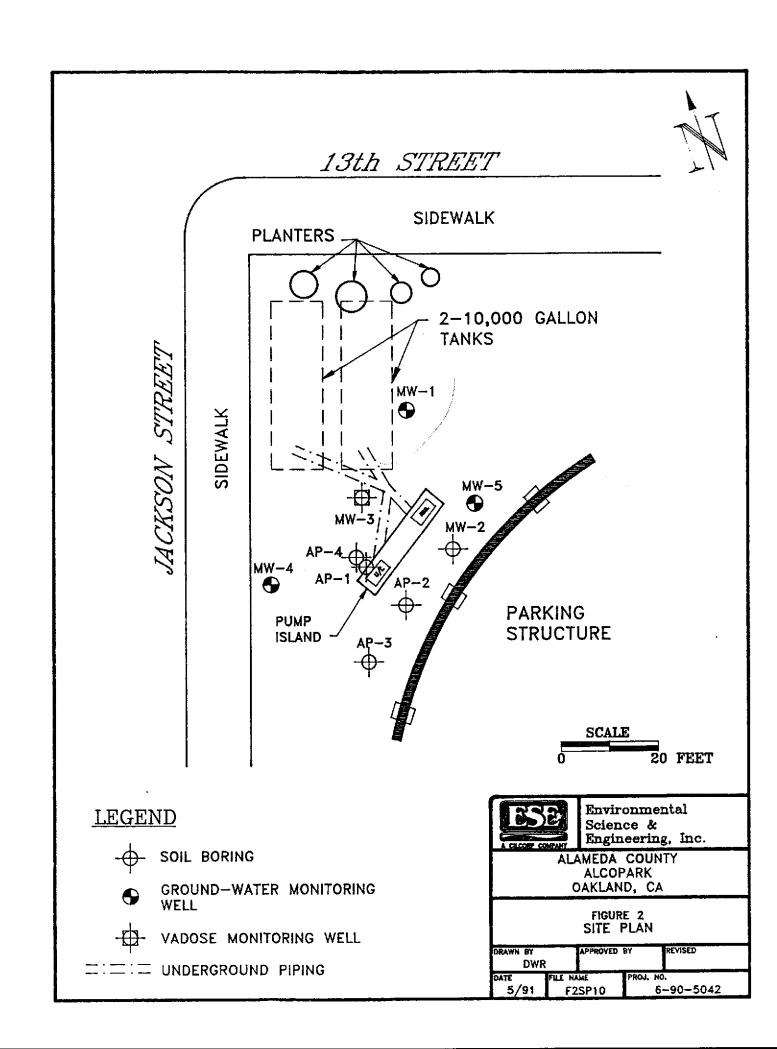
4.3 Trends

Table 3 - Ground Water Trends, lists concentrations of petroleum hydrocarbons detected in ground water samples and relative ground water elevations for the wells at the site. Concentrations of benzene found in wells MW-1, MW-4 and MW-5 exceed State of California Drinking Water Standards, as defined by the State of California Department of

Health Services (DHS). Due to fluctuations over time (observed since March 1989) in the ground water flow direction and concentrations of TPH-G, TPH-D and BTEX in ground water samples from the wells, no trends can be identified. However, concentrations of TPH-G and Benzene decreased in samples collected from wells MW-1, MW-4, and MW-5 relative to the previous monitoring period. The highest concentrations of Benzene were detected in samples from wells MW-1 and MW-5 in June 1992.

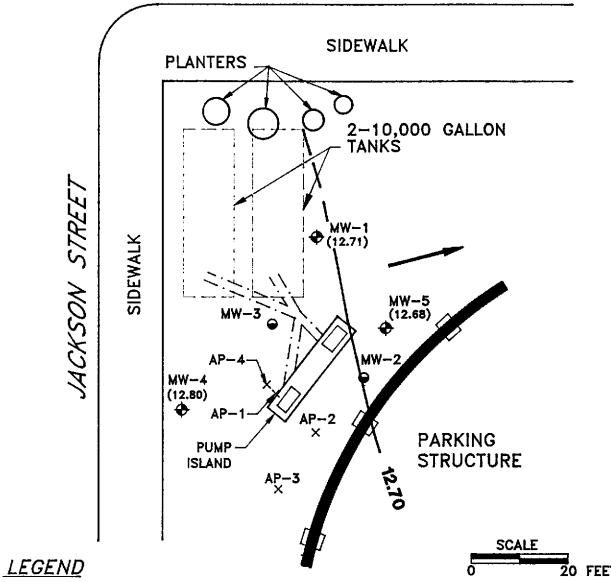
The ground water flow direction fluctuates, as observed during site monitoring, from a northerly flow direction to a southeasterly flow direction. The cause of the fluctuations of the direction of ground water flow is probably due to seasonal conditions or related to nearby (offsite) conditions. However, these fluctuations in the direction of ground water flow may account for the fluctuations in concentrations of petroleum hydrocarbons observed in ground water samples from the on site monitoring wells.







13th STREET



- × SOIL BORING
- GROUND WATER MONITORING WELL
- VADOSE MONITORING WELL
- 二: 二: 二 UNDERGROUND PIPING
 - (12.80) GROUND WATER ELEVATION (ft)
 - .12.70 GROUND WATER ELEVATION CONTOUR (ft)

APPROXIMATE GROUND WATER FLOW DIRECTION



Environmental Science & Engineering, Inc.

ALAMEDA COUNTY **ALCOPARK** OAKLAND, CA

FIGURE 3 GROUND WATER ELEVATIONS SEPTEMBER 10, 1992

DWR 5/91 53941003 6-92-5394

TABLE 1

GROUND WATER ELEVATIONS ALAMEDA COUNTY, ALCOPARK SITE

Well Number	Reference Elevation (feet)	Depth to Ground Water (feet)	Ground Water Elevation (feet)
MW-1	33.00	20.29	12.71
MW-4	33.63	20.83	12.80
MW-5	33.01	20.33	12.68

Notes:

Depth to ground water measured by Environmental Science & Engineering, Inc. (ESE) on September 10, 1992.

TABLE 2

ANALYTICAL RESULTS: GROUND WATER ALAMEDA COUNTY, ALCOPARK SITE

Well Number	Date Sampled	TPH-G (ug/L)	TPH-D (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
MW-1	09/10/92	1,800		410	87	32	110
MW-4	09/10/92	410	< 50	110	<3	<3	<3
MW-5	09/10/92	90	•	12	< 0.5	< 0.5	< 0.5
DUP	09/10/92			14	< 0.5	< 0.5	< 0.5
TRIP	09/10/92		-	< 0.5	<0.5	< 0.5	<0.5

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-D = Total Petroleum Hydrocarbons as Diesel

ug/L = Micrograms per liter or parts per billion

-- = Not analyzed

< = Less than listed detection limit

DUP = Duplicate collected from well MW-5

TRIP = Trip Blank

TABLE 3

GROUND WATER TRENDS
ALAMEDA COUNTY, ALCOPARK SITE

Well Number	Date	Ground Water Elevation (feet)	TPH-G (ug/L)	TPH-D (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
MW-1	March 1989	12.2	ND	ND	21	3.9	0.4	4.5
. <u>-</u> ,	July 1990	12.3	1,400	••	200	45	ND	53
	October 1990	12.1	1,200		ND	7.3	2.2	46
	January 1991	11.9	270		23	1.5	ND	3.1
	April 1991	11.8	230	••	ND	ND	ND	ND
	August 1991	11.8	8,300		370	64	ND	120
	November 1991	11.7	810		9.3	ND	7.8	32
	June 1992	12.85	2,600		810	16	21	42
	September 1992	12.71	1,800 🔩		410	87	32	110
MW-4	March 1989	12.4	ND	ND	13	1.4	1.0	ND
	July 1990	12.5		ND	0.8	ND	ND	ND
	October 1990	12.2		ND	120	1.2	1.1	0.9
	January 1991	12.0		ND	230	2.8	1.2	2.0
	April 1991	13.0	170	ND	12	ND	ND	2.3
	August 1991	11.8	ND	ND	87	1.3	0.8	0.8
	November 1991	11.8	1,400	ND	ND	1.7	8.6	3.6
	June 1992	12.93	560	ND	150	1.8	1.8	1.1
	September 1992	12.80	410	<50	110	ND	ND	ND

TABLE 3 (Continued...)

GROUND WATER TRENDS ALAMEDA COUNTY, ALCOPARK SITE

Well Number	Date	Ground Water Elevation (feet)	TPH-G (ug/L)	TPH-D (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- benzene (ug/L)	Total Xylenes (ug/L)
MW-5	March 1989	12.2	ND		ND	ND	ND	ND
	July 1990	12.4	670		0.8	ND	ND	ND
	October 1990	12.1	120		13	ND	ND	ND
	January 1991	11.9	120		3.2	ND	ND	ND
	April 1991	12.3	ND		ND	ND	ND	ND
	August 1991	11.5	ND		20	ND	0.5	ND
	November 1991	11.7	190		2.7	ND	0.8	2.5
	June 1992	12.85	150		37	ND	ND	ND
	September 1992	12.68	90	***	12	ND	ND	ND

NOTES:

Ground Water Elevation = Elevation of ground water in feet relative to a common datum.

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-D = Total Petroleum Hydrocarbons as Diesel

ug/L = Micrograms per liter or parts per billion (ppb)
ND = Not detected at laboratory method detection limit

-- = Not analyzed for listed compound

APPENDIX A GROUND WATER SAMPLING DATA FORMS

WELL PURGING AND SAMPLING DATA

Date: 4/10/92 Proje	ect Number: 6	92-5394	Project Na	me: ALCOPARK
Well Number: MW-1	Boring Diamet	er: 8 11/4	Casing Dia	meter: H INCH
Column of Fluid in W	Vell	Volume to be	e Removed	
depth to product depth to water total depth of well column of product column of water method of measuring method of purging we method of decon	20.29 11 33.92 8 13.63 fluid _ Elec 11 _ Bailer Uconox: Water	column of volume of gal per for column of volume of total volumber of total volumber. Tape	water annular sp t of casing water casing ume vol to rem to remove	= 0.65 X 13.63 = 8.86 = 11.52 tove X 3 = 34.56
Initial Transluce	it brown, sa	ndy, no odo		
During"	"	<u>" " </u>		
Final Transpace	at an autic	ulates minor	dissolved t	ruel odor
	· · · · · · · · · · · · · · · · · · ·			
Field Analysis	Initial			Final
r	•	Duri	ng	
Field Analysis	Initial 12:44	Duri:	ng	13:07
Field Analysis '	Initial 12:44	Duri:	ng	13:07
Field Analysis time conductivity	12:44 609	Duri 12:55 596	13:00 608	<u>13:07</u> 599
Field Analysis time conductivity pH	Initial 12:44 609 6.88 66.2	Duri: 12:55 596 6,70 65.7	13:00 608 6.69	13:07 599 6.69
Field Analysis time conductivity pH temperature	Initial 12:44 609 6.88 66.2 urement Hy	Duri: 12:55 596 6,70	13:00 608 6.69	13:07 599 6.69
Field Analysis time conductivity pH temperature method of measure	Initial 12:44 609 6.88 66.2 urement Hy	Duri: 12:55 596 6.70 65.7 dac 9 Comments	13:00 608 6.69 65.8	13:07 599 6.69
Field Analysis time conductivity pH temperature method of measure	Initial 12:44 609 6.88 66.2 urement Hy 30 gallons sealing caps	Duri: 12:55 596 6.70 65.7 dac 9 Comments	13:00 608 6.69 65.8	13:07 599 6.69 65.9
Field Analysis time conductivity pH temperature method of measure Total volume purged	Initial 12:44 609 6.88 66.2 urement Hy 30 gallons sealing caps	Duri: 12:55 596 6.70 65.7 dac 9 comments	13:00 608 6.69 65.8	13:07 599 6.69 65.9

WELL PURGING AND SAMPLING DATA

Date: 9/10/92 Proj				
Well Number: <u>Mw-4</u>	Boring Diamet	:er: 8124	Casing Diame	ter: Z INCH
Column of Fluid in	Well	Volume to be	Removed	
depth to product		gal per ft	: Annular Spa	ce = <u>0.16</u> X 14.17
depth to water	20.83	volume of	annular space	e = <u>0.68</u>
total depth of we	11 35.0	column of	of casing water	X <u>14.17</u>
column of product		total volu number of	vol to remov	= <u>2.95</u> e X <u>3</u>
column of water			to remove	= 8.85
method of measuring		/ IX		
method of purging w			ra	te
method of decon	Alconox: Wate	· <u>.C</u>		
Physical appearance				1
Initial Transluce	14			
During"	" .			
Final	brown	minor po	aticulates, d	issolved fuel abor
Field Analysis	Initial	Duri	ng	Final
time	13:32	1211	a	
		15:41	13:50	14:03
conductivity				
conductivity pH				
	647	611	596	602
рН	647 6.73 67.4	6.56	<u>596</u> 6.53	<u>602</u> 6.56
pH temperature	647 6.73 67.4 surement	611 6.56 67.1 1ydac 9	<u>596</u> 6.53	<u>602</u> 6.56
pH temperature method of meas	647 6.73 67.4 surement	611 6.56 67.1 1ydac 9	<u>596</u> <u>6.53</u> <u>65.7</u>	<u>602</u> 6.56
pH temperature method of meas Total volume purged	647 6.73 67.4 surement h	611 6.56 67.1 11dac 9 Comments	596 6.53 65.7 Well did not	<u>602</u> 6.56
pH temperature method of meas Total volume purged No lock on sealing	647 6.73 67.4 surement h	611 6.56 67.1 11dac 9 Comments	596 6.53 65.7 Well did not 1e 3x40mlambe	602 6.56 65.9 puge dy.

WELL PURGING AND SAMPLING DATA

Date: 9/10/92 Proj	ject Number: <u></u>	6-92-5394	Project Nam	e: ALCOPARK
Well Number: MW-5	Boring Diame	eter: 8 MCH	Casing Diam	eter: 4 INCH
Column of Fluid in	Well	Volume to h	e Removed	
depth to product				ace = 0.65
depth to water	20.33		annular spa	
total depth of we	<u> 34.68</u>	column of	t of casing water	
column of product	=	total vol	casing tume vol to remo	= 12.13
column of water	14.35		to remove	= 36.39
method of measuring	g fluid <u>Ele</u>	ctric. Tape		
method of purging w	vell Binler	(Hand)	r	ate
method of decon	-			
Physical appearance			r, particulat	es, odor)
Initial Transluc	est brown.	sandy dissol	red fuel abor	
		1 '		
During	u .	, / a	f1 f1	
During" FinalTranspare	ent, na parti		olved fuel od	oC
Final Transpare	initial	culates, disso	olved fuel od	o(
Final Transpare	est, no parti	culates, disso	ing	
Final	Initial 11:46	culates, disse	ing	Final
Final Transpare Field Analysis time	Initial 11:46	culates, disse Duri	ing 	Final (2:12
Final	Initial	nlates, disse Dur: 	12:05 652	Final 12:12 651
Final	Initial	Dur: 11:53 661 6.91	12:05 652 6.96	Final (2:12 651 6.94
Final	Initial	Dur:	12:05 652 6.96	Final (2:12 651 6.94
FinalField Analysis time conductivity pH temperature method of meas	Initial	Dur:	12:05 652 65.4 Well did a	Final 12:12 651 6.94 65.3
Field Analysis time conductivity pH temperature method of meas	Initial	Dur:	12:05 652 652 65.4 Well did a	Final (2:12 651 6.94
Final	Initial	Dur:	12:05 652 65.4 65.4 Well did a	Final [2:12 651 6.94 65.3 2t parge dry. mber vials plus

APPENDIX B LABORATORY ANALYTICAL REPORTS: GROUND WATER SAMPLES



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

DATE RECEIVED: 09/10/92 DATE REPORTED: 09/18/92

LABORATORY NUMBER: 108606

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING

PROJECT ID: 6-92-5394

LOCATION: ALCO-PARK

RESULTS: SEE ATTACHED

Reviewed by



LABORATORY NUMBER: 108606 DATE SAMPLED: 09/10/92

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING DATE RECEIVED: 09/10/92

PROJECT ID: 6-92-5394

LOCATION: ALCO-PARK

DATE ANALYZED: 09/16/92

DATE REPORTED: 09/18/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions TVH by California DOHS Method/LUFT Manual October 1989 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
108606-1	MW-1	1,800	410	87	32	110
108606-3	MW-5	90	12	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit
 indicated in parentheses.

QA/QC SUMMARY

RPD, % 13
RECOVERY, % 91



LABORATORY NUMBER: 108606 DATE SAMPLED: 09/10/92

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING DATE RECEIVED: 09/10/92

PROJECT ID: 6-92-5394 DATE ANALYZED: 09/16/92

LOCATION: ALCO-PARK DATE REPORTED: 09/18/92

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions TVH by California DOHS Method/LUFT Manual October 1989 BTXE by EPA 5030/8020

LAB ID	SAMPLE	ID TVH AS GASOLINE (ug/L)	BENZENE	TOLUENE	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
108606-2	MW-4	410	110	ND(3)	ND(3)	ND(3)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %
RECOVERY, %
93



LABORATORY NUMBER: 108606

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING DATE RECEIVED: 09/10/92

PROJECT ID: 6-92-5394

LCCATION: ALCO-PARK

DATE SAMPLED: 09/10/92

DATE ANALYZED: 09/12/92

DATE REPORTED: 09/18/92

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020 Extraction by EPA 5030 Purge and Trap

LA3 ID	CLIENT ID	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	REPORTING LIMIT *
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
108606-4 108606-5	DUP TRIP	14 ND	ND ND	ND ND	ND ND	0.5 0.5

ND = Not detected at or above reporting limit.

* Reporting Limit applies to all analytes.

QA QC SUMMARY

RP⊃, % 4 RECOVERY, %

94





LABORATORY NUMBER: 108606

CLIENT: ENVIRONMENTAL SCIENCE & ENGINEERING

PROJECT ID: 6-92-5394 LOCATION: ALCO-PARK

DATE SAMPLED: 09/10/92 DATE RECEIVED: 09/10/92 DATE EXTRACTED: 09/14/92 DATE ANALYZED: 09/16/92 DATE REPORTED: 09/18/92

Extractable Petroleum Hydrocarbons in Aqueous Solutions California DOHS Method LUFT Manual October 1989

LAB ID	CLIENT I	D	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
108606-2	MW-4		ND	ND	50

ND = Not detected at or above reporting limit.

* Reporting limit applies to all analytes.

QA/QC SUMMARY

DATE 4/10	CHAIN OF CUSTODY RECORD												ನವನ	Environn	ł t				
PROJECT NAME ALCOPARK					ANALYSES TO BE PERFORMED MATRIX											Science &			
ADDRESS 165 13TH ST													М		N C		A CHECKE Depart	Engineer	ing, Inc.
CAKLAND, CA					BTEX (8029)	1-d (8015)		-					M A T R I		NUMBER OF	4090 1	Nelson Avenue	(415) 685-4053
PROJECT NO. 6-42-6394													R			Saite Conce	J ord, CA 94520	Fax	(415) 685-5323
SAMPLED BY TO WILL BART MILLOR								•			, <u> </u>			İ	o E			REMARKS NTAINER, SIZE, ETC.)	
LAB NAME CURTS : TOMPHE 45														İ	F R	(0	A ENIATNO:		ETC.)
SAMPLE #	DATE	TIME	LOCATION	h-Md-1	8	E				_			MAT	KTX		· · · · · · · · · · · · · · · · · · ·	· · ·	, 1	
MW-1	4/10/92	15:00		/					_			<u> </u>	WAT	EL	3	3⊀		mber vials	
MW-4	.,	14:50		/		1				\bot		<u> </u>	11		4		" + 1 x 1 liter amber		
3 MW-5	0	14:45							_			 	/,		3		40ml mber vials		
DUP	rt.	14:45			~		_		_ _		_	-	- 11		3		40 al whel vials		
TRIP					1		-	_	_	-		-	- 10		<u>Z</u>	2x4	10ml m	bu Vials	
							_		+	+		-				· · · · · · · · · · · · · · · · · · · 			
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	1 /	l										+ 0	time		سسوا	ጥር፣	DAT. NIIMI	BER OF CON	TAINERS
					RECEIVED BY: (signature)								3:45				SPECIAL SHIPMENT TO: REQUIREMENTS		
2.												7.			4 4		REQUIR	EMENTS	
3.														MINE EDMONSON			Coro	TRANSPORT	
4.													•	_					
5.											<u> </u>		·	<u>.l</u>				SAMPLE REC	
	IONS TO	LABORA	TORY (han	idiling, analyses, seelage, elev,												CHAIN OF CUSTODY SEALS			
NORMAL																	REC'D GOOD CONDTN/COLD		
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