



EMCON Associates

1921 Ringwood Avenue • San Jose, California 95131-1721 • (408) 453-7300, FAX (408) 437-9526

HAZMAT

94 SEP -6 PM 3: 53

Date: August 30, 1994

Project 0C75-005.24

To:

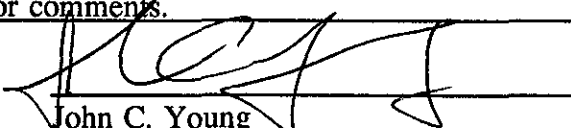
Ms. Susan Hugo
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

We are enclosing:

Copies	Description
<u>1</u>	<u>Second Quarter 1994 Groundwater Monitoring Report</u>
	<u>for ARCO Service Station 374</u>

For your:	<input checked="" type="checkbox"/> Use	Sent by:	<input type="checkbox"/> Regular Mail
	<input type="checkbox"/> Approval		<input type="checkbox"/> Standard Air
	<input type="checkbox"/> Review		<input type="checkbox"/> Courier
	<input type="checkbox"/> Information		<input checked="" type="checkbox"/> Other <u>Certified Mail</u>

Comments: Please call with any questions or comments.


John C. Young
Project Manager





August 26, 1994
Project OC75-005.24

Mr. Michael Whelan
Environmental Engineer
ARCO Products Company
Post Office Box 5811
San Mateo, California 94420

Re: Second quarter 1994 groundwater monitoring program results, ARCO service station
0374, Oakland, California

Dear Mr. Whelan:

This letter presents the results of the second quarter 1994 groundwater monitoring program at ARCO Products Company (ARCO) service station 0374, 6407 Telegraph Avenue, Oakland, California (Figure 1).

MONITORING PROGRAM RESULTS

The second quarter 1994 groundwater monitoring event was performed by Integrated Wastestream Management, Inc. (IWM) on April 29, 1994. Wells MW-1 through MW-6 are monitored quarterly. Groundwater samples collected during second quarter monitoring were analyzed for total petroleum hydrocarbons as gasoline (TPHG), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The groundwater sample collected from monitoring well MW-4 was also analyzed for total petroleum hydrocarbons as diesel (TPHD) (Table 1). Certified analytical reports, chain-of-custody documentation, and field data sheets are presented in Appendix A. Depths to groundwater and analytical data are presented in Table 1. Figure 2 presents groundwater elevation data along with TPHG and benzene concentrations from the April 29, 1994 monitoring event.

SITE STATUS UPDATE

This update reports site activities performed during the second quarter of 1994 and the anticipated site activities for the third quarter of 1994.



Mr. Michael Whelan
August 26, 1994
Page 2

Project 0C75-005.24

Second Quarter 1994 Activities

- Quarterly groundwater monitoring report for first quarter 1994 prepared and submitted by RESNA Industries Inc.
- IWM performed second quarter 1994 groundwater monitoring event.

Work Anticipated Third Quarter 1994

- Prepare and submit quarterly groundwater monitoring report for second quarter 1994.
- Perform quarterly groundwater monitoring for third quarter 1994.

Please call if you have questions.

Sincerely,

EMCON Associates


John C. Young
Project Manager



Mark Smolley, R.G. #4650
Senior Project Geologist



Attachments: Table 1 - Summary of Groundwater Sample Analyses for ARCO Facility A-374
Figure 1 - Site Location
Figure 2 - Site Plan
Appendix A - Certified Analytical Report, Chain-of-Custody Documentation and Field Data Sheets

Table 1

Summary of Ground Water Sample Analyses for ARCO Facility A-374, Oakland, California

WELL NUMBER	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
DATE SAMPLED	4/29/94	4/29/94	4/29/94	4/29/94	4/29/94	4/29/94	
DEPTH TO WATER	7.20	8.14	7.70	9.50	**	4.66	
SHEEN	NONE	NONE	NONE	NONE	**	NONE	
PRODUCT THICKNESS	NA	NA	NA	NA	**	NA	
TPHg	ND	150	830	68	**	ND	
BTEX							
BENZENE	ND	38	150	1.1	**	ND	
TOLUENE	ND	0.7	38	ND	**	ND	
ETHYLBENZENE	ND	4.3	27	ND	**	ND	
XYLENES	ND	4.8	48	1.7	**	ND	
TPHd							
DIESEL	NA	NA	NA	ND	NA	NA	

FOOTNOTES:

Concentrations reported in ug/L (ppb).

TPHg = Total Purgeable Petroleum Hydrocarbons (USEPA Method 8015 Modified)

BTEX Distinction (USEPA Method 8020)

PCE = Tetrachloroethene (USEPA Method 8010)

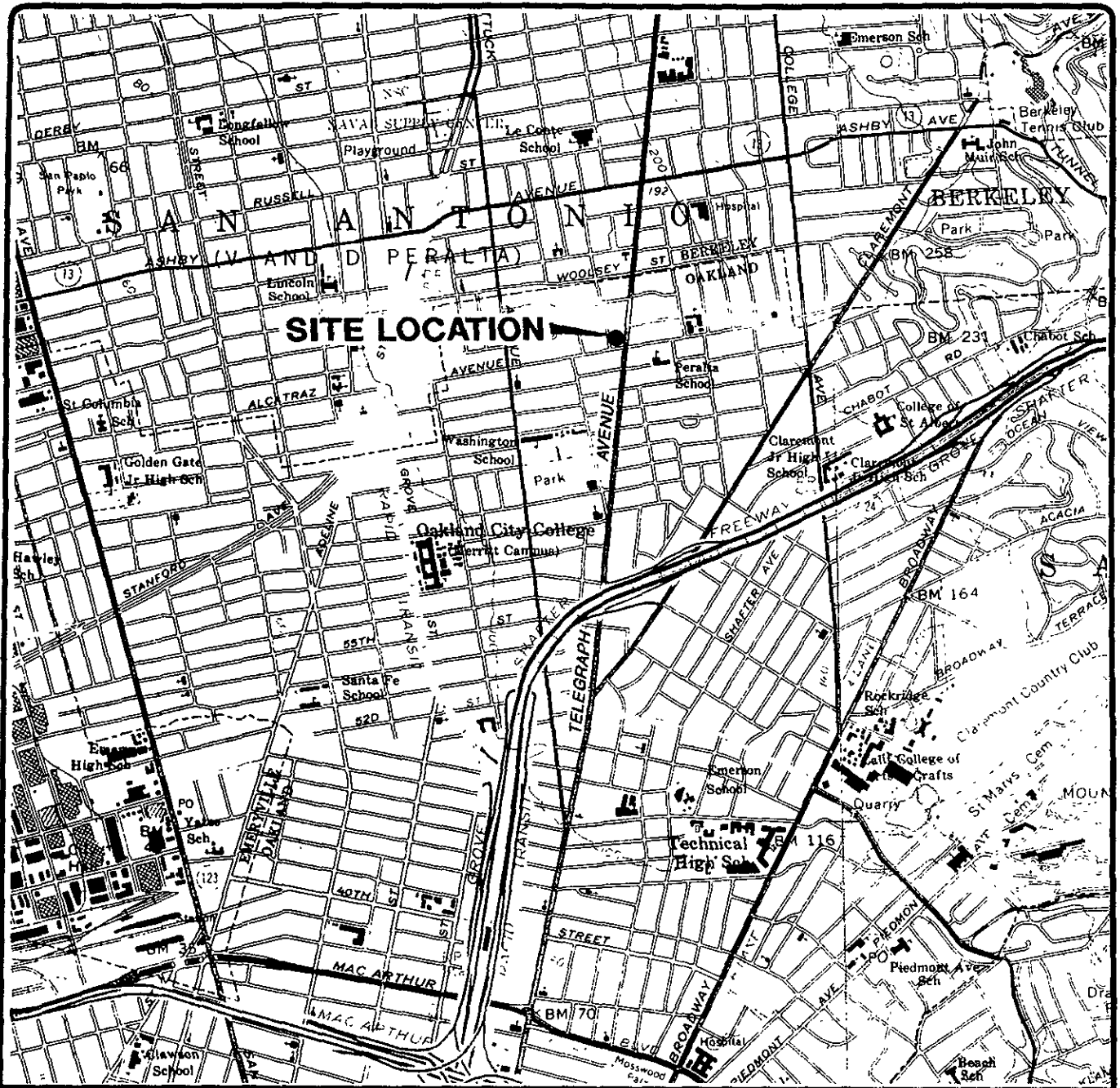
** = Not sampled, well inaccessible (car parked over well).

DCE = cis-1, 2-Dichloroethene (USEPA Method 8010)

TCE = Trichloroethene (USEAP Method 8010)

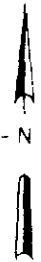
ND = Not Detected.

NA = Not applicable.



Base map from USGS 7.5' Quad. Maps:
Oakland East and Oakland West, California.
Photorevised 1980.

Scale : 0 2000 4000 Feet

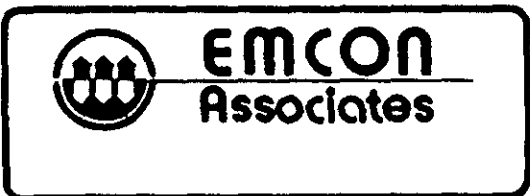
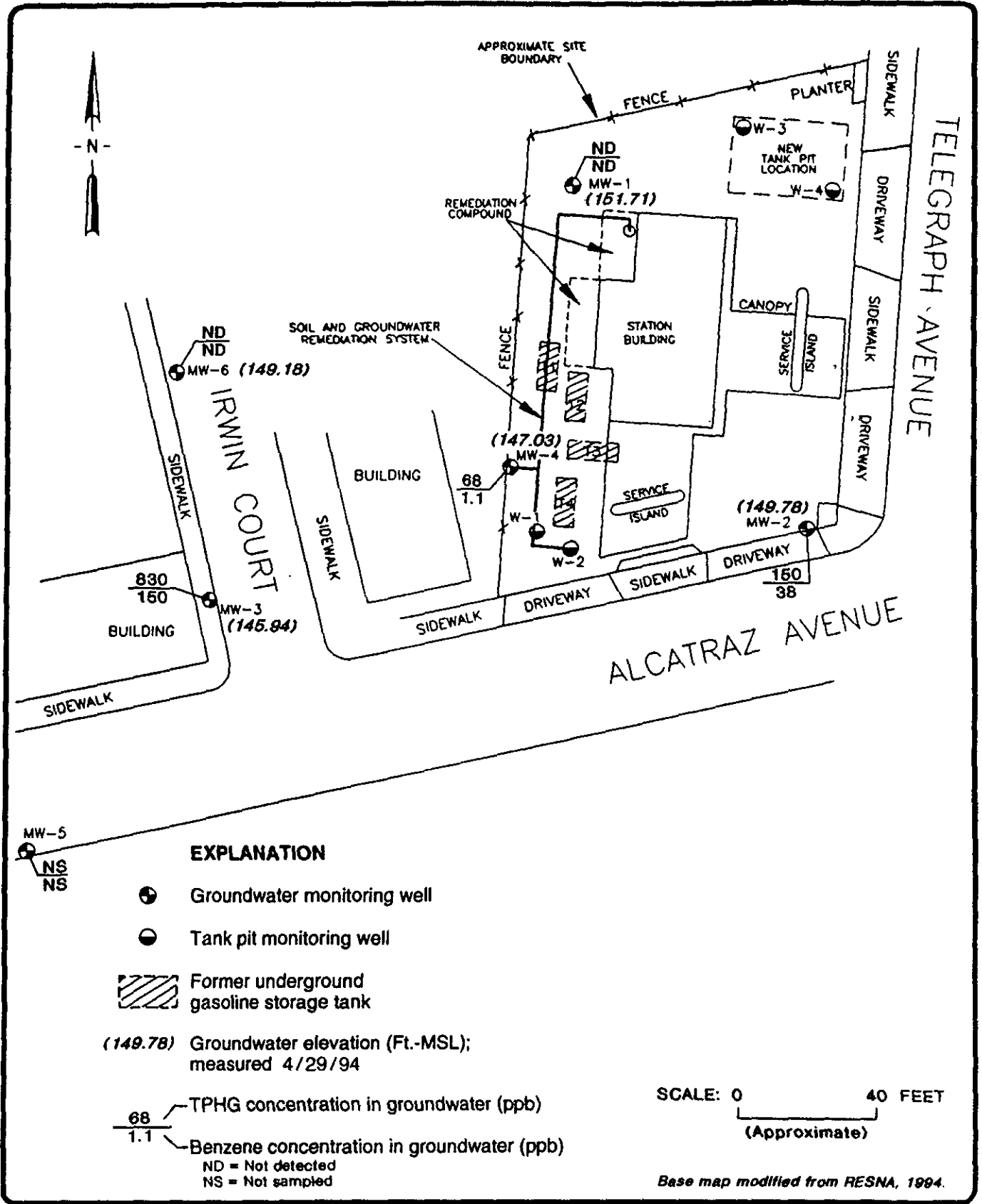


EMCON
Associates

ARCO PRODUCTS COMPANY
SERVICE STATION 374, 6407 TELEGRAPH AVENUE
QUARTERLY GROUNDWATER MONITORING
OAKLAND, CALIFORNIA

FIGURE
1
PROJECT NO.
C75-05.24

SITE LOCATION



ARCO PRODUCTS COMPANY
 SERVICE STATION 374, 6407 TELEGRAPH AVENUE
 QUARTERLY GROUNDWATER MONITORING
 OAKLAND, CALIFORNIA

SITE PLAN

FIGURE
2
 PROJECT NO.
 C75-05.24

APPENDIX A

**CERTIFIED ANALYTICAL REPORT, CHAIN-OF-CUSTODY
DOCUMENTATION AND FIELD DATA SHEETS**

RECEIVED MAY 17 1994



May 13, 1994

Service Request No. SJ940510

Gina Austin
Tom DeLon
IWM
950 Ames Avenue
Milpitas, CA 95035

Re: **ARCO Facility No. 374**

Dear Ms. Austin/Mr. DeLon:


Attached are the results of the water samples submitted to our lab on April 29, 1994. For your reference, these analyses have been assigned our service request number SJ940510.


All analyses were performed consistent with our laboratory's quality assurance program. All results are intended to be considered in their entirety, and CAS is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted:

COLUMBIA ANALYTICAL SERVICES, INC.


Keoni A. Murphy
Laboratory Manager


Annelise J. Bazar
Regional QA Coordinator

KAM/ajb

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

ASTM	American Society for Testing and Materials
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MRL	Method Reporting Limit
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected at or above the MRL
NR	Not Requested
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

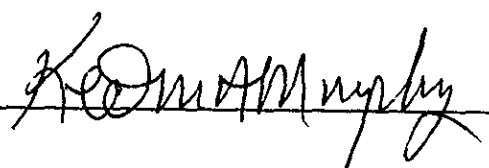
Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

Date Collected: 4/29/94
Date Received: 4/29/94
Date Extracted: 5/4/94
Date Analyzed: 5/5,6/94
Service Request: SJ940510

TPH as Diesel
EPA Method 3510/California DHS LUFT Method
Units: µg/L (ppb)

Sample Name	Lab Code	MRL	Result
MW-4(24)	SJ940510-5	50	ND
Method Blank	SJ940504-WMB	50	ND

Approved By:



Date:

May 13, 1994

IAMRL_DE/0415094

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

Date Collected: 4/29/92
Date Received: 4/29/94
Date Extracted: NA
Service Request: SJ940510

BTEX and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: µg/L(ppb)

Sample Name:	MW-1 (23)	MW-2 (18.6)	MW-3 (24)
Lab Code:	SJ940510-2	SJ940510-3	SJ940510-4
Date Analyzed:	5/3/94	5/4/94	5/4/94

Analyte	MRL			
Benzene	0.5	ND	38	150
Toluene	0.5	ND	0.7	38
Ethylbenzene	0.5	ND	4.3	27
Total Xylenes	0.5	ND	4.8	48
TPH as Gasoline	50	ND	150	830

Approved By: _____

Date: _____

3S22/041594

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

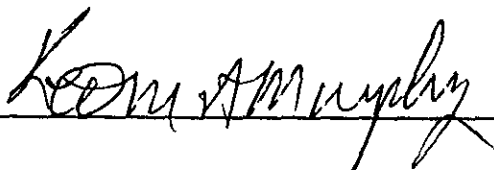
Date Collected: 4/29/92
Date Received: 4/29/94
Date Extracted: NA
Service Request: SJ940510

BTEX and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: µg/L(ppb)

Sample Name:	MW-4 (24)	MW-6 (9.5)	Method Blank
Lab Code:	SJ940510-5	SJ940510-6	SJ940503-WMB
Date Analyzed:	5/5/94	5/3/94	5/3/94

Analyte	MRL			
Benzene	0.5	1.1	ND	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	1.7	ND	ND
TPH as Gasoline	50	68	ND	ND

Approved By: _____



Date: _____

May 13, 1994

3S22/041594

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

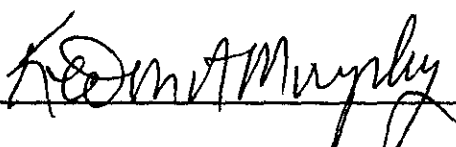
Date Collected: 4/29/92
Date Received: 4/29/94
Date Extracted: NA
Service Request: SJ940510

BTEX and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: µg/L(ppb)

Sample Name: Method Blank
Lab Code: SJ940505-WMB
Date Analyzed: 5/5/94

Analyte	MRL	
Benzene	0.5	ND
Toluene	0.5	ND
Ethylbenzene	0.5	ND
Total Xylenes	0.5	ND
TPH as Gasoline	50	ND

Approved By: _____



Date: _____

May 13, 1994

3S22/041594

APPENDIX A
LABORATORY QC RESULTS

”

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

Date Collected: 4/29/94
Date Received: 4/29/94
Date Extracted: 5/4/94
Date Analyzed: 5/5,6/94
Service Request: SJ940510

Surrogate Recovery Summary
TPH as Diesel
EPA Method 3510/California DHS LUFT Method

Sample Name	Lab Code	Percent Recovery p-Terphenyl
MW-4 (24)	SJ940510-5	115
MS	SJ940489-11MS	101
DMS	SJ940489-11DMS	92
Method Blank	SJ940504-WMB	114

CAS Acceptance Limits: 66-123

Approved By: _____

K. O'Malley

Date: _____

May 13, 1994

SUR1/041594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374

Date Analyzed: 5/5/94
Service Request: SJ940510

Initial Calibration Verification (ICV) Summary
TPH as Diesel
California DHS LUFT Method
Units: ppm

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
TPH as Diesel	500	472	94	90-110

Approved By: _____

Kenneth Murphy

Date: _____

May 13, 1994

ICV24/041394

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

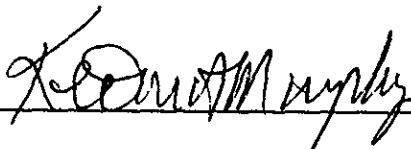
Date Collected: 4/29/94
Date Received: 4/29/94
Date Extracted: 5/4/94
Date Analyzed: 5/5/94
Service Request: SJ940510

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Diesel
EPA Method 3510/California DHS LUFT Method
Units: µg/L (ppb)

Sample Name: Batch QC
Lab Code: SJ940489-11

Analyte	Spike Level		Sample Result	Spike Result		Percent Recovery		CAS Acceptance Limits	Relative Percent Difference
	MS	DMS		MS	DMS	MS	DMS		
Diesel	4,000	4,000	ND	3,890	3,700	97	92	61-141	5

Approved By:



Date:

May 13, 1994

DMS1S/041594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

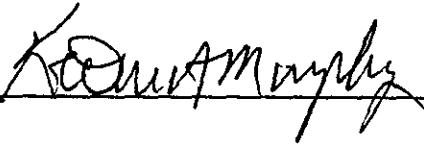
Date Collected: 4/29/94
Date Received: 4/29/94
Date Extracted: NA
Date Analyzed: 5/3-5/94
Service Request: SJ940510

Surrogate Recovery Summary
BTEX and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method

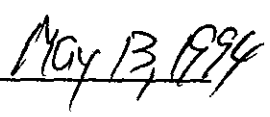
Sample Name	Lab Code	Percent Recovery α,α,α -Trifluorotoluene
MW-1 (23)	SJ940510-2	106
MW-2 (18.6)	SJ940510-3	110
MW-3 (24)	SJ940510-4	112
MW-4 (24)	SJ940510-5	108
MW-6 (9.5)	SJ940510-6	106
MW-6 (9.5)MS	SJ940510-6MS	115
MW-6 (9.5)DMS	SJ940510-6DMS	112
Method Blank	SJ940503-WMB	105
Method Blank	SJ940505-WMB	96

CAS Acceptance Limits: 69-116

Approved By: _____



Date: _____



SUR1/041594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374

Date Analyzed: 5/3/94
Service Request: SJ940510

Initial Calibration Verification (ICV) Summary
BTEX and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: ppb

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Benzene	25	25.0	100	85-115
Toluene	25	24.9	100	85-115
Ethylbenzene	25	24.6	98	85-115
Total Xylenes	75	75.3	100	85-115
TPH as Gasoline	250	247	99	90-110

Approved By: _____

Kenneth Murphy

Date: _____

May 13, 1994

ICV24041594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: IWM
Project: ARCO Facility No. 374
Sample Matrix: Water

Date Collected: 4/29/94
Date Received: 4/29/94
Date Extracted: NA
Date Analyzed: 5/3/94
Service Request: SJ940510

Matrix Spike/Duplicate Matrix Spike Summary
 TPH as Gasoline
 EPA Method 5030/California DHS LUFT Method
 Units: µg/L (ppb)

Sample Name: MW-6 (9.5)
Lab Code: SJ940510-6

Analyte	Spike Level		Sample Result	Spike Result		Percent Recovery		CAS Acceptance Limits	Relative Percent Difference
	MS	DMS		MS	DMS	MS	DMS		
	TPH as Gasoline	250		250	ND	253	244		

Approved By: _____

K. M. Murphy

Date: _____

May 13, 1994

DMS15041594

APPENDIX B
CHAIN OF CUSTODY

ARCO Facility no. **A 374** City (Facility) **OAKLAND** Project manager (Consultant) **TOM De SON**
 ARCO engineer **Kyle Christie** Telephone no. (ARCO) **415 571 2434** Telephone no. (Consultant) **408/942 8955** Fax no. (Consultant) **408/942 1499**
 Consultant name **TWM/ResNA** Address (Consultant) **950 Ames av. Milp Ca 95035**

Laboratory name **Columbia**
 Contract number **07077**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 1602/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/8460E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 601/7700 TTLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	TPND 350		
			Soil	Water	Other	Ice	Acid																
FB-1	1	2		✓		✓	✓	4-29-94	1050		✓	✓											
MW-1	2	2		✓		✓	✓	}	1311		✓	✓											
MW-2	3	2		✓		✓	✓		1305		✓	✓											
MW-3	4	2		✓		✓	✓		1238		✓	✓											
MW-4	5	4		✓		✓	✓		1338		✓	✓											
MW-6	6	2		✓		✓	✓	1210		✓	✓											✓	

Method of shipment **CAR
WEEK**

Special detection Limit/reporting

Special QA/QC

Remarks **Hold on F-3**

Lab number **5594-0510**

Turnaround time
 Priority Rush 1 Business Day
 Rush 2 Business Days
 Expedited 5 Business Days
 Standard 10 Business Days

Condition of sample: **OKAY** Temperature received: **COOL**
 Relinquished by sampler **John Saldaña** Date **4/29/94** Time **1600** Received by **John Quay** Date **4/29/94** Time **1600**
 Relinquished by _____ Date _____ Time _____ Received by _____
 Relinquished by _____ Date _____ Time _____ Received by laboratory _____ Date _____ Time _____

I NTEGRATED
W ASTESTREAM
M ANAGEMENT, INC.

MAY 12 1994
RESNA
SAN JOSE

May 20, 1994

Mr. John Young
RESNA Industries
3315 Almaden Expressway, Suite 34
San Jose, CA. 95118

Dear Mr. Young:

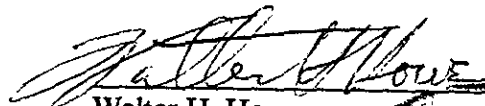
Attached are the field data sheets and analytical results for quarterly ground water sampling at ARCO Facility No. A-374 in Oakland, California. Integrated Wastestream Management measured the depth to water and collected samples from wells at this site on April 29, 1994.

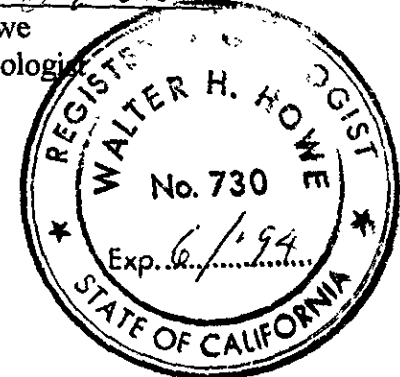
Sampling was carried out in accordance with the protocols described in the "Request for Bid for Quarterly Sampling at ARCO Facilities in Northern California".

Please call us if you have any questions.

Sincerely,
Integrated Wastestream Management


Tom DeLon
Project Manager


Walter H. Howe
Registered Geologist



Summary of Ground Water Sample Analyses for ARCO Facility A-374, Oakland, California

WELL NUMBER	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	
DATE SAMPLED	4/29/94	4/29/94	4/29/94	4/29/94	4/29/94	4/29/94	
DEPTH TO WATER	7.20	8.14	7.70	9.50	**	4.66	
SHEEN	NONE	NONE	NONE	NONE	**	NONE	
PRODUCT THICKNESS	NA	NA	NA	NA	**	NA	
TPHg	ND	150	830	68	**	ND	
BTEX							
BENZENE	ND	38	150	1.1	**	ND	
TOLUENE	ND	0.7	38	ND	**	ND	
ETHYLBENZENE	ND	4.3	27	ND	**	ND	
XYLENES	ND	4.8	48	1.7	**	ND	
TPHd							
DIESEL	NA	NA	NA	ND	NA	NA	

FOOTNOTES:

Concentrations reported in ug/L (ppb).

TPHg = Total Purgeable Petroleum Hydrocarbons (USEPA Method 8015 Modified)

BTEX Distinction (USEPA Method 8020)

PCE = Tetrachloroethene (USEPA Method 8010)

** = Not sampled, well inaccessible (car parked over well).

DCE = cis-1, 2-Dichloroethene (USEPA Method 8010)

TCE = Trichloroethene (USEAP Method 8010)

ND = Not Detected.

NA = Not applicable.

FIELD REPORT

Depth To Water / Floating Product Survey

Site Arrival Time: 10:15

Site Departure Time: 1:00

Weather Conditions: cloudy
cool

3 samples taken on 4/29/94

DTW: Well Box or Well Casing (circle one)

Project No.: _____ Location: 6407 TELEGRAPH AV OAK Date: April 29, 1994

Client / Station#: Area 374 Field Technician: Vince / Cisco Day of Week: Friday

DTW ORDER	WELL ID	SURFACE SEAL	LID SECURE	GASKET	LOCK	EXPANDING CAP	TOTAL DEPTH (Feet)	FIRST DEPTH TO WATER (Feet)	SECOND DEPTH TO WATER (Feet)	DEPTH TO FLOATING PRODUCT (Feet)	FLOATING PRODUCT THICKNESS (Feet)	SHEEN (Y=YES, N=NO)	COMMENTS	MATERIALS
2	MW-1	OK	Y	OK	OK	OK	27.00	7.20+	7.20+	N/A	N/A	N	4" Dump	Hole in box
4	MW-2	OK	Y	OK	OK	OK	26.80	8.14	8.14	N/A	N/A	N	4" PLASTER	Hole in box
5	MW-3	OK	Y	OK	OK	OK	27.00	7.70	7.70	N/A	N/A	N	4" SIDEWALK W/ IRWIN	Hole in box
6	MW-4	OK	Y	OK	OK	OK	27.80	9.50+	9.50+	N/A	N/A	N	4"	2x2 GRINDING 3/4 bits
3	MW-5		N				N/A	N/A	N/A	N/A	N/A	N/A	NO ACCESS / CAR OVER WELL	
1	MW-6	OK	Y	OK	OK	OK	15.10	4.66-	4.66-	N/A	N/A	N	4" SIDEWALK IRWIN	15/14

WELL ID: MW-1 TD 270 DTW 720 X 0.66 X 3 - 34.20
 Linear Ft. Casing Volume Purge

DATE PURGED: 4-29-94 START (2400 HR): 12:45 END (2400 HR): 1:07
 DATE SAMPLED: 4-29-94 TIME (2400 HR): 13:11 DTW: 23

TIME (2400 HR)	VOLUME (GAL)	pH (UNITS)	(E.C. X 1,000) (UMHOS/CM@25 C)	TEMP. (F)	COLOR (VISUAL)
12:50	4	7.67	1.08	62.2	clear
12:54	18	7.20	1.05	63.4	clear
12:58	28	6.87	1.07	63.2	clear
13:07	39	6.85	1.06	63.3	clear

Total purge: 39

PURGING EQUIP.: Centrifugal Pump Bailer Disp. SAMPLING EQUIP.: Bailer Disp.

REMARKS: well pumped dry at 39 gallons took last parameter reading from disp. bailer prior to pump.

WELL ID: MW-4 TD 270 DTW 750 X 0.66 X 3 - 30.23
 Linear Ft. Casing Volume Purge

DATE PURGED: 4-29-94 START (2400 HR): 13:18 END (2400 HR): 13:33
 DATE SAMPLED: 4-29-94 TIME (2400 HR): 13:38 DTW: 21

TIME (2400 HR)	VOLUME (GAL)	pH (UNITS)	(E.C. X 1,000) (UMHOS/CM@25 C)	TEMP. (F)	COLOR (VISUAL)
13:20	4	7.03	0.61	64.0	clear
13:26	20	6.92	0.58	64.8	clear
13:33	29	6.88	0.63	65.0	clear

Total purge: 29

PURGING EQUIP.: Centrifugal Pump Bailer Disp. SAMPLING EQUIP.: Bailer Disp.

REMARKS: well pumped dry at 29 gallons

WELL ID: _____ TD _____ DTW _____ X _____ Gal. X _____ Casing - _____ Calculated
 Linear Ft. Volume Purge

DATE PURGED: _____ START (2400 HR): _____ END (2400 HR): _____
 DATE SAMPLED: _____ TIME (2400 HR): _____ DTW: _____

TIME (2400 HR)	VOLUME (GAL)	pH (UNITS)	(E.C. X 1,000) (UMHOS/CM@25 C)	TEMP. (F)	COLOR (VISUAL)
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Total purge: _____

PURGING EQUIP.: Centrifugal Pump Bailer Disp. SAMPLING EQUIP.: Bailer Disp.

REMARKS: _____

WELL ID: _____ TD _____ DTW _____ X _____ Gal. X _____ Casing - _____ Calculated
 Linear Ft. Volume Purge

DATE PURGED: _____ START (2400 HR): _____ END (2400 HR): _____
 DATE SAMPLED: _____ TIME (2400 HR): _____ DTW: _____

TIME (2400 HR)	VOLUME (GAL)	pH (UNITS)	(E.C. X 1,000) (UMHOS/CM@25 C)	TEMP. (F)	COLOR (VISUAL)
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Total purge: _____

PURGING EQUIP.: Centrifugal Pump Bailer Disp. SAMPLING EQUIP.: Bailer Disp.

REMARKS: _____

PRINT NAME: Vince Valdes

SIGNATURE: Vince Valdes

CASING DIAMETER (inches): 2 3 4 6 8 12 Other: _____
 GALLON/LINEAR FOOT: 0.17 0.38 0.66 1.5 2.6 5.8 Other: _____