#### **ARCO Products Company**

The stamedictic tack for the tack to tack to the tack to the tack to the tack to tack



92:0012 001:29

May 13, 1992

Mr. Manry 17371 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17371 Via Magdalena San Lorenzo, California 94580

Dear Mr. Manry:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on November 13, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 870 and 9 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County

service Approximation (1997)

Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC, on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 

# ORIGINAL SIGNED BY:

Chuck Carmel
Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company

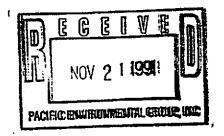
Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330-06-13 Project: 300-06-13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager

Santa Clara, CA 95050 Attention: Dan Landry

Client Project ID:

Matrix Descript: Analysis Method: First Sample #:

300-06.13, Arco 608, San Lorenzo

Water

EPA 5030/8015/8020

111-2557

Sampled:

Nov 13, 1991 Nov 13, 1991

Received: Analyzed: Nov 14-15, 1991 Reported: Nov 20, 1991

## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons  µg/L (ppb)	Benzene μg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)	
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2561	17371VM	870	9.0	1.0	2.1	4.5	
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.	
111-2563	17200VM	440	2.7	N.D.	N.D.	12	
111-2564	TB1	N.D.	N.D.	N.D.	N.D.	N.D.	_

Detection Limits:	30	0.30	0.30	0.30	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

fickie Tague Project Manager

1112557.PPP < 1>



Pacific Environmental Group

Client Project ID: 300-06.13, Arco 608, San Lorenzo

1601 Civic Center Drive, Suite 202

Santa Clara, CA 95050 Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

### **QUALITY CONTROL DATA REPORT**

ANALYTE			Ethyl-		
	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman µg/L Nov 15, 1991 GBLK111591	EPA 8020 L Laikhtman µg/L Nov 15, 1991 GBLK111591		EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	10	11	11	31	
Matrix Spike % Recovery:	100	110	110	103	
Conc. Matrix Spike Dup.:	11	. 11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	9.5	0.0	0.0	6.3	

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

. ^ \_ ^

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <2>



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

## **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl- Benzene	Xylenes	
	penzerie	toldene	Denzene	Aylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L Laikhtman µg/L Nov 14, 1991 BLK111491	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	•
Conc. Matrix Spike:	11	11	11	33	
Matrix Spike % Recovery:	110	110	<b>1</b> 10	110	oray decreas s
Conc. Matrix Spike Dup.:	11	11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	0.0	0.0	0.0	0.0	

**SEQUOIA ANALYTICAL** 

% Recovery:

Relative % Difference:

Conc. of M.S. - Conc. of Sample

x 100

Spike Conc. Added

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <3>

				Matrix		N. 670	(VALICIL	l <u> </u>		j	36	200		w			(	15		الشغاية			ė	
Sample 1.D.	Lab no.	Container no.	Soll	Water	Other	Ice	Acid	Sampling date	Sampling time	BTEX GOZEPA BG20	STEVIPH 94.50. EPA MODZEDOWOIS	TPH Modified 8015 Cas (1) Diesel (1)	Oil and Grease	TPH EPA 418.1/SW503E	EPA donacio	EPA 6246240	EPA 825/8270	TOV CHAM	THE STREET	7420 (61)				
590H		3		×			×	11/13/41			Х						[1]	25	57				Special detection Limit/reporting	İ
64214		3		X			X											<u> </u>	58					
11203V/	1	3		X			X.											_	59					
171971	1	3		<u>x</u>		ļ <u> </u>	k			<u> </u>	11	ļ							60	<u> </u>			Special QA/QC	
173714	11	3		X			×			<u> </u>								_	61					
173934	h	3		×	ļ.,,,		×	1/		<u> </u>	<del>                                     </del>	ļ						}	62	+				İ
1720VA	1	3		<u>×</u>			X.	-		ļ	1	ļ		<u> </u>	<u></u>		ļ	<del> </del>	63				Remarks	$\dashv$
TB-1		2	ļ	X	<u> </u>	<u> </u>	ス	Ψ		<del> </del>	•	<u> </u>						1	64	1				
	<u> </u>	ļ <u>.</u>				<u> </u>	<del> </del>			-			<u> </u>					-						
			<u> </u>	-		<del> </del>	<del> </del>			-	-				ļ				<del>                                     </del>	<del>                                     </del>			1	
				<del> </del>		<u> </u>		<del> </del>		<del>                                     </del>		<b> </b>	ļ	<b> </b>				T						
	<u> </u>			-	-	<del> </del>	<del> </del>	<del> </del>	1			<del> </del>	<del>                                     </del>			<u> </u>		1						
		-			<del> </del>					$\vdash$	+-	<u> </u>				-							Lab number	
	ļ	<u> </u>		-		+				<del> </del>	<b> </b>							1					Turnaround time	
	<del>                                     </del>	<del> </del>	1-	<del>-</del>		<del> </del>																	Priority Rush 1 Susiness Day	
Condition o	of sample	. <del>1</del> :	<u> </u>		<u></u>		_!			1		e receiv	ed;										Rush	
Retinquish	of by oat	mpler	151	1			Date / /1//3	41	76:45		byed by		00 ((	سروا									2 Business Days	Æ
Relinguish	ed by	}					Dáto /		Time	4:2x Received by			Expedited 5 Business Days											
Relinquish	ed by	)-est	<del>-</del> 51	<del> <u>-</u> .</del>			Date	1	Time	Rec	eved b	y labor	tec	ر ا	adro	<u>\$</u> 1	Date	-(2	3	Time,	26	· · ·	Standard 10 Business Days	

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant , APPC-3292 (2-91)

#### **ARCO Products Company**

Construction of the figure of the particle of the following and the first particle of the control of the first particle of the first



May 13, 1992

M. E. Kast 17349 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17349 Via Magdalena San Lorenzo, California 94580

Dear M. E. Kast:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on September 27, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 780 and 13 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

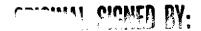
It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County

Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC, on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 



Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company

Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Santa Clara, CA 95050

Client Project ID:

#330-06.13, Arco 608, San Lorenzo

Sampled:

Sep 27, 1991

Sample Descript.: Water, 17349 Analysis Method:

EPA 5030 / 8015 / 8020

Received: Analyzed: Sep 27, 1991 Sep 30, 1991

Attention: Deb Moser

Lab Number:

109-4799

Reported:

Oct 2, 1991

# TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte

**Detection Limit**  $\mu$ g/L (ppb)

Sample Results μg/L (ppb)

Low to Medium Boiling Point Hydrocarbons	300	***********************	780
Benzene	3.0	No de de Manda de maras de Tanta de Caraca de Caraca de C	13
Toluene	3.0	*******************************	N.D.
Ethyl Benzene	3.0	***************************************	N.D.
Xylenes	3.0	48340,1490440000000000000000000000000000000	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Vickie Taque Project Manager



Client Project ID: #330-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

QC Sample Group: 1094798-99 Attention: Deb Moser

Reported: Oct 2, 1991

# QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 K. Gill µg/L Sep 30, 1991 GBLK093091	EPA 8020 Κ. Gill μg/L Sep 30, 1991 GBLK093091	EPA 8020 K. Gill µg/L Sep 30, 1991 GBLK093091	EPA 8020 Κ. Gill μg/L Sep 30, 1991 GBLK093091	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	9.4	9.4	9.3	28	
Matrix Spike % Recovery:	94	94	93	93	<b></b>
Conc. Matrix Spike Dup.:	10	10	10	30	
Matrix Spike Duplicate % Recovery:	100	100	100	100	
Relative % Difference:	6.2	6.2	7.3	6.7	

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Vickie Tague Project Manager

% Recovery:	Conc. of M.S Conc. of Sample	x 100	
	Spike Conc. Added		
Relative % Difference:	Conc. of M.S Conc. of M.S.D.	x 100	
,	(Conc. of M.S. + Conc. of M.S.D.) / 2		
L			1004709 PPP 235

1094798.PPP <3>

CLIENT NAME: REC. BY (PRINT):	aufic Ex B Stanger		MASTE Date	R LOG NO. / PAGE: OF LOG-IN:		2197		
CIRCLE THE APPROPRIAT	TE RESPONSE	LAB SAMPLE	DASH	CLIENT IDENTIFICATION	CONTAINER	SAMPLE	DATE	REMARKS;
1. Custody Seal(s):	Present / Absent	1094098	A٦	17312	DESCRIPTION	MATRIX	SAMP.	CONDITION (ETC
2. Custody Seal Nos.:	Intact / Broken*	1. 99	<u>}-</u> -C	17349	L	Ţ	9/20	
3. Chain-of-Custody Records:	Present Absent*							
Traffic Reports or Packing List:	Present Absent							
5. Alrbill:	Alrbill / Sticker							
8. Airbiii No.:	Present Absent							
7: Sample Tags:	Present / Absent							
Sample Tag Nos.:	on Chain-of-Custody							
8. Sample Condition:	Intact/Broken*/Leaking*							
9. Does information on	(Value)							
custody reports, trai		<del></del>	-					
reports and sample to		· · · · · · · · · · · · · · · · · · ·	<del>  </del>					•
					<del>                                     </del>		<b> </b>	
10. Proper Preservatives Useu:	Yes No*					ļ <u>.</u>		
1 10261A911A62 (1260)			1 1				ļ	

11. Date Rec. at Lab:

12. Time Rec. at Lab: |

Page of

<sup>\*</sup> If Circled, contact Project Manager and attach record of resolution

ARCO*	Produ	of Atlantic	Comp	any	<b>4</b> 33	0.06	. 13	Task O	rder No.	Q	508	5- 9	7 1-	al	3							Chain of Custody	1
ARCO Facili		608				ian Lo		•		Project Consul	manag tant)	101	). M	ose	_		· · · · ·		,			Laboratory name	7
ARCO engin	eer C	· Car	mel				Telephor (ARCO)	ne no.		Telepho Consul	me no.	400	984	1-65	26	Fex	t no.	n 4/7	8-2	43-3	911	- SEQUOIA	_
Consultant n	ame	CEA	IVIEA	Alda EA			10.0007	Address	int) 1601									CA	240	190	os TD	SEQUOIA- Contract number	
	3011	_ (10	V IEO	Matrix	<u> </u>	Prese	rvation	1										ū	90		7,0	Method of shipment	1
		ě		Τ	r	<u> </u>	1	- #	£		7.88 88 88	\$0 \$0	22.0	303E	_		_	35	\$U \$U	D.		Line	
Sample I.D.	Lab no.	Container n	Soil	Water	Other	lce	Acid	Sampling date	Sampling time	BTEX 602/EPA BG2D	втехлен Е	TPH Modified 8015 Gas Diesel	OH and Great	TPH EPA 418.1/SMS03E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Semi	CAN Merse B	Lead Org.fOHS		Complete you	•
17372	·	3		X			×	9/27/91	11 am		X			1 1	Įğ	1	_	· A				Special detection Limit/reporting	
								1						, ,		1 4						7	
				<u> </u>				1		<del> </del>					, <del>, , , , , , , , , , , , , , , , , , </del>								
		2	<u> </u>			-	٠	9/27/91	50		X			10	Q <sup>°</sup>	77	79	Δ	-C			Special QA/QC	_
17349		3	<del>                                     </del>	12			×	1 <del>9/27(9/</del>	10 am		1			1	Д_	71	13						
			ļ	ļ	<u>.</u>		<u> </u>									}						-	
	·				ļ				<u> </u>	ļ			<u> </u>	<u> </u>					-			$\dashv$	,
				-	ļ <u>.</u>		<u> </u>			<u> </u>										<u> </u>		Remarks	
		:				<u> </u>				ļ	<u> </u>					ļ 						_	
		·							ļ														İ
								<u> </u>			<u> </u>	<u> </u>	<u> </u>		ļ								i
				Ī																			
\																							
		:	<del> </del>		,																		
																						Lab number 1094798	
				<u> </u>							<u> </u>	<u> </u>	ļ <u>.</u>	<u> </u>			-	<u> </u>	ļ	ļ		Turnaround time	
								2	<u> </u>	<u>                                     </u>						<u> </u>	<u> </u>					Priority Rush 1 Business Day	
Condition of				, A	-		Date	1	Time	Rece	erature ved by	recelv	ed:	<u> ح</u>	٠٠	_		<del></del>				Aush 2 Business Days	'ব'
De	$\leq 1$	ila	<u> 208</u>	i			Date C)	27-91	)4.30						1							Expedited	·
Relinquishe	d by 1				/	<b>\</b>	Date		Time		ived by	٠.										5 Business Days	
Relinquishe	d by					1	Date	i.	Time	Rece	lved by	labora	tory :				Date	]: -	1 ;	Time	$= E_{\chi} \chi_{\chi}^{(0)}$	Standard 1 10 Business Days	J

#### **ARCO Products Company**

Her Hard Lange
 Her Hary Anderson Dec. Name
 Hersel California Gozgo
 Westerland 415 577 2460



92 (137 12 13 1: 29

May 13, 1992

Mr. Schrag 17197 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17197 Via Magdalena San Lorenzo, California 94580

Dear Mr. Schrag:

This letter presents the results of the sampling of the irrigation water-supply well located on your property at the above referenced property. Pacific Environmental Group, Inc. (PACIFIC), on behalf of ARCO Products Company (ARCO) performed the groundwater sampling to test for gasoline in the water. The sample was collected on November 13, 1991 and submitted to the laboratory for analysis of total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater. ARCO and PACIFIC would like to express their gratitude for your cooperation in the completion of this project.

The groundwater sample collected from your well did not contain any dissolved concentrations of TPH-g or BTEX compounds. It is ARCO's and PACIFIC's understanding that the well is used strictly for irrigation purposes. This well should not be for any other purpose other than irrigation unless advised differently by the Alameda County Department of Environmental Health.

Because gasoline compounds have been detected in the groundwater in your vicinity, ARCO would like your permission to sample your well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. ARCO or our representative will be contacting you in regards to accessing your well.

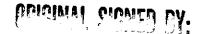
In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled at ARCO's expense.

A compared to the second of the second of

Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

Sincerely,

**ARCO Products Company** 



Chuck Carmel

Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company

Ms. Pamela Evans, Alameda County Health Care Services

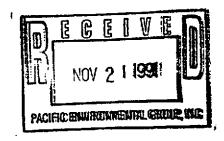
# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330-00-13

Project: 300-06.13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager



Santa Clara, CA 95050 Attention: Dan Landry Client Project ID: Matrix Descript:

Analysis Method:

First Sample #:

ient Project ID: 300-06.13, Arco 608, San Lorenzo

Water

EPA 5030/8015/8020

111-2557

Sampled:

Nov 13, 1991 Nov 13, 1991

Received: Nov 13, 1991 Analyzed: Nov 14-15, 1991

Reported: Nov 20, 1991

## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene μg/L (ppb)	Xylenes μg/L (ppb)
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2561	17371VM	870	9.0	1.0	2.1	4.5
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.
111-2563	17200VM	440	2.7	N.D.	N.D.	12
111-2564	TB1	N.D.	N.D.	N.D.	N.D.	N.D.

			<del> </del>			<del></del>
Detection Limits:	30	0.30	0.30	<b>0.3</b> 0	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

Ylckie Tague Project Manager



Pacific Environmental Group

Client Project ID: 300-06.13, Arco 608, San Lorenzo

1601 Civic Center Drive, Suite 202

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

#### QUALITY CONTROL DATA REPORT

ANALYTE			Ethyl-		
	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman µg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L Laikhtman µg/L Nov 15, 1991 GBLK111591	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	10	11	11	31	
Matrix Spike % Recovery:	100	110	110	103	
Conc. Matrix Spike Dup.:	11	· 11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	9.5	0.0	0.0	6.3	

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <2>



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	B	T-1	Ethyl-		
<u> </u>	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L Laikhtman µg/L Nov 14, 1991 BLK111491	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	. •
Conc. Matrix Spike:	11	11	11	33	
Matrix Spike % Recovery:	110	110	110	110	
Conc. Matrix Spike Dup.:	11	11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	0.0	0.0	0.0	0.0	

**SEQUOIA ANALYTICAL** 

% Recovery: Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

(Conc. of M.S. + Conc. of M.S.D.) / 2

x 100

Vickie Tague Project Manager

1112557.PPP <3>

1 1				Mallia		P1060	VAUQII		}	1	XE	ا سي ا	l n	ا سا		1	40	<b>19</b>	S Prov	Harri I		,	1.
Sample I.D.	Lab no.	Container no.	Soil	Waler	Olher	lce .	Acid	Sampling date	Sempling time	BTEK Briziepa aczo	BTEXTPH Or SOL BPA MARCHED MOTS	TPH Modified 8015 Gas C Diesel C	Of and Great	TPH EPA 418.1/54/503E	01.09/1490 Va3	EPA (24/12/40	OLENSED VAS	DvovO*	語		P		
590H		3		×			X	11/13/91			Х						111	29	57			Special detection Limit/reporting	
64214		3		X			×										,	<u> </u>	58				
11203V/		3		X			X										1		59			_	
171971	1	3		×			· k		<u></u>										60			Special QA/QC	$\dashv$
17371V	41	3		X	<u> </u>		×				Щ								61				
173934	h	3		×			×		ļ		1,							¥	6>		_		
1720V1	1	3		入			×	1 1			V						<u> </u>	<del>\ ,</del>	63			Remarks	$\dashv$
TB-1		2		X			X	V			4	ļ						V	64	1.		4	
				ļ			<u> </u>								ļ <u> </u>		<del> </del>	-	<del> </del>		_	_	
		ļ										ļ				ļ	<u> </u>	ļ	<del> </del>			-	۱
			,					<u> </u>		-	<u> </u>	-		ļ				-	<del> </del> -			_	
					<b> </b>	-	<u> </u>	-		<del> </del>	<del> </del>	-	<u> </u>		ļ				-				
						<u> </u>	<del>                                     </del>			├					<u> </u>	<del> </del>		<del> </del>	<del> </del>	<del>                                     </del>		Lab number	
		<u> </u>	<u> </u>	<u> </u>		ļ	<u> </u>	<del> </del> -		-	-	-		ļ				+-				Turnaround Ilme	_
	ļ	ļ		1	<del> </del>				<del>                                     </del>	-	1	<del>                                     </del>	<del> </del>	-		<del>                                     </del>			+	11		Priority Rush	_
Condition o	f sample	<u>                                       </u>	<u> </u>	<u></u>	<u> </u>	J	<u> </u>		<u> </u>	Temp	erature	recelv	d:	ــــــ	1		<u> I</u>		_1	.1		1	
Retinquishe							Date	٨.	Time	1 1	wed by	,	<b>7</b> .						<u> </u>		<del></del> .	Aush 2 Business Days .	K
Relinguishe	d by	uu	5.80		<u> </u>		/1//3 Date /	Time Recipived by					Expedited 5 Business Days										
1 3 1	<u>m</u> 2	بورد	<del>51</del> .				//-/2- Date	1	4:28 Time	Rece	vod by	labora	ione Lev	<del>ار</del> ا	afric	χ <sub>1</sub>	Date	-13		Time:	20	Standard 10 Business Days	<u> </u>

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant , APPC-3292 (2-91)

**ARCO Products Company** 

The Control of the Co



9227719 77 729

May 13, 1992

Mr. Hull 17393 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17393 Via Magdalena San Lorenzo, California 94580

Dear Mr. Hull:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on November 13, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 31 and <0.30 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County

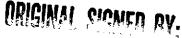
And the state of the property of the state o

Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC, on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 



Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company

Mr. John Meck, ARCO Products Company

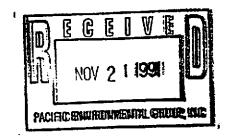
Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330 - 06・13 Project: 360-66-13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague Project Manager

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

Client Project ID: Matrix Descript: Analysis Method: First Sample #:

300-06.13, Arco 608, San Lorenzo Water

Nov 13, 1991 Nov 13, 1991

EPA 5030/8015/8020 111-2557

Analyzed: Nov 14-15, 1991 Reported:

Sampled:

Received:

Nov 20, 1991

## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)	
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.	
111-2561	17371VM	870	9.0	1.0	2.1	4.5	
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.	
111-2563	17200VM	440	2.7	N.D.	N.D.	12	
111-2564	TB1	N.D.	N.D.	N.D.	N.D.	N.D.	

Detection Limits:	30	0.30	0.30	0.30	0.30	
						ļ

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

fickie Tague (Aroject Manager



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC \$ample Group: 1112557, 61

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	<del></del>		Ethyi-	
	Benzene	Toluene	Benzene	Xylenes
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	11	11	31
Matrix Spike % Recovery:	100	110	110	103
Conc. Matrix Spike Dup.:	11	· 11	11	33
Matrix Spike Duplicate % Recovery:	110	110	110	110
Relative % Difference:	9.5	0.0	0.0	6.3

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <2>



Santa Clara, CA 95050

Attention: Dan Landry

Client Project ID: 300-06.13, Arco 608, San Lorenzo

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

## **QUALITY CONTROL DATA REPORT**

ANALYTE			Ethyl-		
	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L Laikhtman µg/L Nov 14, 1991 BLK111491	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	•
Conc. Matrix Spike:	11	11	11	33	
Matrix Spike % Recovery:	110	110	110	110	en en en en en en en en en en en en en e
Conc. Matrix Spike Dup.:	11	11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	0.0	0.0	0.0	0.0	

SEQUOIA ANALYTICAL

% Recovery:

Conc. of M.S. - Conc. of Sample

x 100

Spike Conc. Added

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2 1112557.PPP <3>

	× × × × × ×	Other	tce	Acid X X	Sampling date	Sampling time	BTEX SEDEPA 8020		Gas Dissel	08 and Grass 413.1 [] 413.2	EPA 418.1/51/503E	EPA 601/8010	EPA 624/240	D'A GESAGTO	Mess OVOA			P	<b>Y</b>
	× × ×				11/13/41								<del></del>	- D.	보호	3E 1	<b>SEE</b>		
	×			Х				X						[11]	25	57			Special detection Limit/reporting
	Χ_							1								58			
-				X										_/		59			
	V			·k												60			Special QA/QC
				×		<u></u>								$\bot$		61			
	×			×												62			
	人			<b>X</b>	Ψ			₩						ļ		63			Remarks
	×			ス	4			d							$\nu$	64			
						<u>.</u>											l_		
																			- Lab number
																			Lab Hullion
																			Turnaround time
																			Priority Rush 1 Business Day
	<u> </u>									ođ:			<del></del>		····				Rush
SN	\			Date /	b1	76:45	Rece	)		سو(	0 ب								2 Business Days .&
	<u> </u>			Date	. ch	Time	Poce			) — <del>V</del>	9	) _		<del>,</del>		<del></del>	******		Expedited 5 Business Days
<u> 51</u>				// - / / - Date		Time	Rece	ved by	labora	iev	3 6	247	<u> </u>	Date [[ -	-13	]	Time (	1	Standard 10 Business Days
	<u> </u>					Dáte / //-/// Date	11-13-41 4:28 Date Time	Date	Date Time Received by  11/13 4 1645  Date Time Received by  11-13-41 4:15  Date Time Received by	Date / Time Received by    1/13/4   1645   On    Date / Time Received by	Date Time Received by laboratory	Date / Time Received by Date / Time Received by //-//	Date Time Received by    1/13   1645   On Deorge    Date   Time Received by   1/-13-41   Children    Date   Time Received by laboratory   On Date   Date / Time Received by Jacobs   11/13/4   16:45   An Jacobs   11-12-41   4:25   Date   Time   Received by laboratory   Angli	Date / Time Received by    11/13/41   16:45   201   2019    Date / Time   Received by laboratory   Date   Date   11-12-14	Date / Time Received by Date / Time Received by   Date / Time Received by   Date / Date / Date / Date / Date / Date / Date / Date / Date / Date / Date	Date / Time Received by    1//3 / 1   16:45	Date Time Received by    11/13   16:45   An Deorge   Date   Time   Received by   Angle   Date   Time     Date   Time   Received by laboratory   Angle   U-12   Angle   Angle   U-12   Angle   Date / Time Received by Date / Time Received by Italy Date / Time Received by laboratory Date / Italy Date /		

**ARCO Products Company** 

Juli Franciu (n. 155 Falga) Milling Adoress: Bm 1805 Lui Mateo, Cottornia 94402 Telephone 415 671 2400



11.95

9210712 121:29

May 13, 1992

Mr. Joseph Pimental 17372 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17372 Via Magdalena San Lorenzo, California 94580

Dear Mr. Pimental:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on September 27, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 300 and 5.5 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC, on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 

# CRIGINAL SIGNED BY:

Chuck Carmel Environmental Engineer

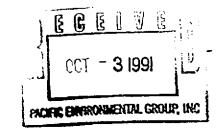
Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company
Mr. Charles Lapin, ARCO Products Company
Mr. John Meck, ARCO Products Company
Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION





Santa Clara, CA 95050 Attention: Deb Moser

Client Project ID:

Analysis Method:

Lab Number:

#330-06.13, Arco 608, San Lorenzo

Sample Descript.: Water, 17372 EPA 5030 / 8015 / 8020

109-4798

Sampled:

Sep 27, 1991

Received: Analyzed: Sep 27, 1991 Sep 30, 1991

Reported:

Oct 2, 1991

# TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte

**Detection Limit**  $\mu$ g/L (ppb)

Sample Results μg/L (ppb)

Low to Medium Boilin	ig Point Hydrocarbons	300
Benzene	0.60 ***********************************	5.5 N.D.
Toluene	0.60	1.3
Xylenes	0.60	0.72

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Project Manager



Client Project ID: #330-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Deb Moser

QC Sample Group: 1094798-99

Reported: Oct 2, 1991

# QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 K. Gill µg/L Sep 30, 1991 GBLK093091	EPA 8020 Κ. Gill μg/L Sep 30, 1991 GBLK093091	EPA 8020 Κ. Gill μg/L Sep 30, 1991 GBLK093091	EPA 8020 K. Gill μg/L Sep 30, 1991 GBLK093091	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	9.4	9.4	9.3	28	
Matrix Spike % Recovery:	94	94	93	93	 u.
Conc. Matrix Spike Dup.:	10	10	10	30	
Matrix Spike Duplicate % Recovery:	100	100	100	100	
Relative % Difference:	6.2	6.2	7.3	6.7	

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Vickie Tague Project Manager

% Recovery:	Conc. of M.S Conc. of Sample Spike Conc. Added	x 100	
Relative % Difference:	Conc. of M.S Conc. of M.S.D. (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100	
·			1004798 PPP <3>

CLIENT NAME:	B STAMPER			ER LOG NO. / PAGE: Of Log-in:	<u></u>	2/97		A STATE OF THE STA
CIRCLE THE APPROPRIATE RE	SPONSE	LAB SAMPLE	DASH	CLIENT IDENTIFICATION	CONTAINER	SAMPLE		REMARKS:
	esent / Absent	1094798		17372	DESCRIPTION	MATHIX	SAMP. 9/27	CONDITION (ETC
In 2. Custody Seal Nos.:	lact / Broken*	1.99	4-6	17349	<u> </u>	_ J	1	
3. Chain-of-Custody Pi Records:	esent Absent*							
4. Traffic Reports or Pr Packing List:	esent Absent							
1	rblll / Sticker							
6. Airbill No.:	resent / Rosent							
Sample Tag Nos.:	resem / Absent* steo / Not Listed n Chain-of-Custody							
1	ntacyBroken*/Leaking*						<b></b>	
9. Does information on custody reports, trailic reports and sample tags to	es)/ No*	-						·
	es) No							
Preservatives Used:	9/27/51			· .		•		
12. Time Rec. at Lab:	1622	-						
· If Circled, contact Project	Manager and attach red	cord of resolut	lon	<u> </u>	<u></u>	<u> </u>	<u></u>	l

Page /of /

ARCO	rodu	ICTS ( of Atlantic	Comp	any	<b>♦</b> 33	0-06	13	Task Or	der No.	Project	08	- 6	11-	2 f	}				.,,			Chain of Custody	. \
ARCO Facility	no.	608		Cit (Fa	y iclitty) S	an lo	reyzo			Project (Consul	leni)	<u> </u>	<u>), M</u>	050	<u> </u>	Fer	00	<del></del>	·····			SEQUOIA-	•
RCO engine	er C	Car	mel				Telephon (ARCO)														9//	Contract number	
Consultant na	me C I C I	C E A I	VIEN	NM EN	UTIL			Address (Consulta	nt) 1601	CIV	CCE	NT	n 1	n.A	202	51	וקדט	در	RAC	1957	<u> 772</u>	Q7- v7?,	
1-7	CITI		1	Matrix		Prese	rvation		•		卷	ξO	ם	38				Semi	50107000	۵		Method of shipment	
Sample 1.D.	ар по.	Container no.	Soil	Waler	Other	lce	Acid	Sampling date	Sampling time	STEX 602/EPA 8020	BTEXTPH GIPS EPA MEGZIBOZONBOIS	TPH Modified BC Gas Diesel	Oh and Grease	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 6248246	EPA 625/8270	TCLP Menals [] VOA[	CAN Merals EPA TTLC CC STL	Lead Org. OHS (1) Lead EPA 7420/7421 (1)		Special detection	
17372		3		X			×	9/27/91	11 24	1	X						35					Limit/reporting	
								<u> </u>			<u> </u>												
				<del> </del>	<u> </u>			9/27/91	50	-	\ \ \			10	Q	17	70	A	-C			Special OA/QC	
7349		_3_		X	- <del> </del>	<u> </u>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	9/27/9/	10 an	b	1				77	<del>                                     </del>	1-7						
		-					<del> </del>			-													
			<u> </u>	<del> </del> -		<u> </u>	<del> </del>	·		_													-
·				<del> </del>	<del> </del>		ļ <u> </u>		<del> </del>		<del> </del>	<del> </del>	<del>                                     </del>	-			1					Remarks	
!				<del> </del>	<del>                                     </del>				<del> </del>	-	-	-		<del> </del>		-			1				
		1	<del> </del>				-			-				1									
	<u> </u>	<u> </u>	<del> </del>	<u> </u>		<del> </del>																	
	ļ .	<del> </del>	<u> </u>	-	_		-												<u> </u>	ļ			
	-	;	-		<b>-</b>	1										<u> </u>	ļ		<u> </u>	<u> </u>		Lab number	4
					1					_					ļ	<u> </u>	<u> </u>	_	ļ	-		1094798	1
										_	_	_	ļ	<u> </u>	<b>-</b>	-		<del> </del>		-	1	Turnaround lime Priority Rush	
								<u> </u>						<u> </u>						<u>.</u> ]		1 Business Day	
Candition (	l sample	<del></del>		6 6	<u> </u>			!		_}_	peratur		ved:	<u>ٔ ح</u> ر	''		<b>1</b> ,			· · · · · · · · · · · · · · · · · · ·	<u></u>	Rush 2 Business Days	
Relinquish	by sa	mpler	a s	in	/		Dale C)	27-91	14.3	4					7							Expedited	
Relinquish	d by	<u>, , , , , , , , , , , , , , , , , , , </u>	<u>, ~ ~ </u>	<u> </u>	`	<u> </u>	Date		Tlm	ie Rec	elved t						· · · · · · · · · · · · · · · · · · ·			1		5 Business Days	ı
Pelinquish	ed by	<del></del> -	<u></u>			/	Date		, Tim	ne Rec	elved b	y labor	atory '		غري ۾ ن		Date	<u> ]:</u>	- I <u>;</u>	Time	( EX	Standard 10 Business Days	]
				<u> </u>		ARCO En	vironmanla	it Ennineering	; Pink copy	— Cons	ultant		-		i								

#### **ARCO Products Company**

The section of the billion of the bi



May 13, 1992

Calvary Church and School 17200 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17200 Via Magdalena San Lorenzo, California 94580

To whom it may concern:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on November 13, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 440 and 2.7 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County

Constitution of the property o

Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC. on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 

# CRIGINAL SIGNED BY:

Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

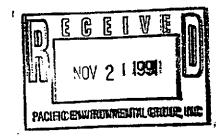
cc: Mr. Chris Winsor, ARCO Products Company
Mr. Charles Lapin, ARCO Products Company
Mr. John Meck, ARCO Products Company
Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330 - 06-13 Project: 300-06-13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
111 <b>25</b> 63	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague Project Manager



Client Project ID:

300-06.13, Arco 608, San Lorenzo

Sampled: Received:

Nov 13, 1991 Nov 13, 1991

Santa Clara, CA 95050 Attention: Dan Landry

Matrix Descript: Analysis Method: First Sample #:

Water EPA 5030/8015/8020

Analyzed: Nov 14-15, 1991 Reported:

Nov 20, 1991

### TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

111-2557

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes μg/L (ppb)
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2561	17371VM	870	9.0	1.0	2.1	4.5
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.
111-2563	17200VM	440	2.7	N.D.	N.D.	12
111-2564	ТВ1	N.D.	N.D.	N.D.	N.D.	N.D.

		<del></del>				
Detection Limits:	30	0.30	0.30	0.30	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

fickie Tague (Project Manager



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clam CA 95050

Santa Clara, CA 95050 Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

#### QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl- Benzene	Xylenes		
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L.		
Sample Conc.:	N.D.	N.D.	N.D.	N.D.		
Spike Conc. Added:	10	10	10	30		
Conc. Matrix Spike:	10	11	11	31		
Matrix Spike % Recovery:	100	110	110	103	.ca ∎en ·	
Conc. Matrix Spike Dup.:	11	11	11	33		
Matrix Spike Duplicate % Recovery:	110	110	110	110		
Relative % Difference:	9.5	0.0	0.0	6.3		

**SEQUOIA ANALYTICAL** 

Relative % Difference:

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Differen

Conc. of M.S. - Conc. of M.S.D. (Conc. of M.S. + Conc. of M.S.D.) / 2 x 100

Vickie Tague Project Manager

1112557.PPP <2>



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050 Attention: Dan Landry

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Senzene	Toluene	Ethyl- Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov. 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	•
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	11	11	11	33	
Matrix Spike % Recovery:	110	110	110	110	en en company
Conc. Matrix Spike Dup.:	11	11	11	33	·
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	0.0	0.0	0.0	0.0	

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <3>

		1		Matrix		1,10401	AWGOU	_	_		38	أصوا	ا 🗆	<u>ا</u> يو	1		40	10	L BOY	الننزل		Ì		.
Sample 1.D.	Lab no.	Container no.	Soll	Water	Other	ice	Acid	Sempling date	Sempling time	STEX SIZEPA SIZO	STEUTPH GHISOLOGOS	TPH Modified 8015 Gas   Diesel	08 and Grease 413.1 🔲 413.2 🗆	TPH EPA 418.1/SNS03E	EPA 601/8010	CPA CZARZ40	EPA CONSTR	TO DOOR	THE PARTY	Transfer Transfer			Special detection	
590H		3		×			X	11/13/91			Х						[1]	25	57				Limit/reporting	
64214		3		X			Х										Ľ,	<u> </u>	58				<u>u</u>	
11203V/		3		×			X			ļ							-/		59					
17147V/	1	3	<u></u>	X			·k				Ц_	<u> </u>							60				Special QA/QC	
173714	ν <u> </u>	3		×	<u> </u>		×					ļ							61					
173934	h	3		×			X				\ <u>.</u> ,	ļ	<u> </u>					<del> </del>	62	+				
1720V1	1	3	ļ	<u>×</u>	<u> </u>	<u> </u>	×	Y		<u> </u>	1	-				<u> </u>			63	+			Remarks	
TB-L		2		X	<u> </u>		ス	4			U	-	ļ					<del> </del>	64	<u> </u>			·	
		<u> </u>		<u> </u>	ļ <u>.</u>	<u> </u>	ļ	<u> </u>	<u> </u>		-					1	<del> </del>	-	<u> </u>	╁				
	ļ	ļ	<u> </u>		ļ	<u> </u>	ļ	ļ		<del> </del>	ļ	-				<b> </b> -		-	<u> </u>					
		ļ <u>.</u>		ļ <u>-</u>	-							-			<del>                                     </del>	-	<u> </u>	┼-	-					
			<u> </u>	<u> </u>	<del> </del>	-	<u> </u>		<u>                                     </u>		-	-	-	<u> </u>			-	┼	-	<del> </del>				
	<u> </u>	<del> </del>			-		-		<del> </del>	<del> </del>	-	-	-				<del> </del>	-	-	╁			Lab number	
			-	<u> </u>	-	<u> </u>	-		-	-	1	-		<del>                                     </del>	<del>                                     </del>	-	<del> </del>	╁		-	<del> </del>	-	Turnaround Ilme	
		<u> </u>	-			<del>                                     </del>		<del> </del>	1	┼─	+	-	-	-	<u> </u>	-	-	╫	1	-		-	Priority Rush	
		<u> </u>				<u> </u>		1		Tem	Deratur	e recelv	d:	1	1	<u></u>		<u> </u>	<u> </u>	_1	1	1	1 Business Day	
Condition of						· · · · · · · · · · · · · · · · · · ·	Date /	,	11me 16:45		lved b		_					<del> </del>					Rush 2 Business Days	.8
Relinquish	o by j			<u> </u>		<u></u>	Date / /1//3	191	Time	Reci	elverd b	y	<u>وم ( /</u> م	rage	).							<del></del>	Expedited 5 Business Days	
Relinquish	ed by	b-en	<u>-51</u>				//-/7- Date	- <del>- 1</del>	4.28 Time	Rec	a books	y labor	lierz.	بر ار	astic	<u>S'</u>	Date	-12		Time,	28	<del></del>	Standard 10 Business Days	

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant , APPC-3292 (2-81)

#### **ARCO Products Company**

to the Address Box of the Color



92/00/19 (0 1:29

May 13, 1992

Mr. and Mrs. Corregedor 642 Hacienda Avenue San Lorenzo, California 94580

Re: Groundwater Analytical Results

642 Hacienda Avenue

San Lorenzo, California 94580

production of the production of the book

Dear Mr. and Mrs. Corregedor:

This letter presents the results of the sampling of the irrigation water-supply well located on your property at the above referenced property. Pacific Environmental Group, Inc. (PACIFIC), on behalf of ARCO Products Company (ARCO) performed the groundwater sampling to test for gasoline in the water. The sample was collected on November 22, 1991 and submitted to the laboratory for analysis of total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater. ARCO and PACIFIC would like to express their gratitude for your cooperation in the completion of this project.

The groundwater sample collected from your well did not contain any dissolved concentrations of TPH-g or BTEX compounds. It is ARCO's and PACIFIC's understanding that the well is used strictly for irrigation purposes. This well should not be for any other purpose other than irrigation unless advised differently by the Alameda County Department of Environmental Health.

Because gasoline compounds have been detected in the groundwater in your vicinity, ARCO would like your permission to sample your well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. ARCO or our representative will be contacting you in regards to accessing your well.

In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled at ARCO's expense.

Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

Sincerely,

#### **ARCO Products Company**

# ORIGINAL SIGNED BY:

Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company Ms. Pamela Evans, Alameda County Health Care Services

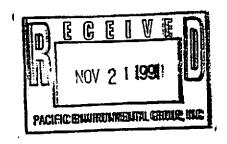
## ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330-00-13

Project: 300-06.13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague Project Manager



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050 Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE			Ethyl-		<u> </u>		
	Benzene	Toluene	Benzene	Xylenes		<del></del>	<del> </del>
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591		EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591			
Sample Conc.:	N.D.	N.D.	N.D.	N.D.			
Spike Conc. Added:	10	10	10	30			
Conc. Matrix Spike:	10	11	11	31			
Matrix Spike % Recovery:	100	110	110	103		<b>-</b>	. m² .
Conc. Matrix Spike Dup.:	11	11	11	33			
Matrix Spike Duplicate % Recovery:	110	110	110	110			
Relative % Difference:	9.5	0.0	<b>0</b> .0	6.3			

**SEQUOIA ANALYTICAL** 

Spike Conc. Added

Relative % Difference:

% Recovery:

Conc. of M.S. - Conc. of M.S.D. (Conc. of M.S. + Conc. of M.S.D.) / 2

Conc. of M.S. - Conc. of Sample

x 100

x 100

Vickie Tague Project Manager

1112557.PPP <2>



Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050

Attention: Dan Landry

Client Project ID: 300-06.13, Arco 608, San Lorenzo

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	·····		Ethyl-			
	Benzene	Toluene	Benzene	Xylenes	 	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman μg/L Nov. 14, 1991 BLK111491	EPA 8020 L Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491		
Sample Conc.:	N.D.	N.D.	N.D.	N.D.		
Spike Conc. Added:	10	10	10	30		
Conc. Matrix Spike:	11	11	11	33		
Matrix Spike % Recovery:	110	110	110	110		
Conc. Matrix Spike Dup.:	11	11	11	33		
Matrix Spike Duplicate % Recovery:	110	110	110	110		
Relative % Difference:	0.0	0.0	0.0	0.0		

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample

x 100

Spike Conc. Added

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <3>

	MAIN PRESERVATION						1	200	~_		w			4	M. O.		التنتا			,	١.			
Sample I.D.	Lab no.	Container no.	Soll	Water	Other	Ice	Acid	Sempling date	Sampling time	STEX SECENA SC20	этвитн 94. Бул масоворов	TPH Modified 8015 Gas C Dissel C	08 and Gresse 413.1 🗀 413.2 🗀	TPH EPA 418 NSAEG3E	SPA seudono	erana ka	DATE PARTY	TOUR COM	THE STREET	S CON CONT				
590H		3		×			×	11/13/91			X						111	25	57			;	Special detection .imit/reporting	
64214		3		X			Х											<u> </u>	58		_			
17203V/	1	3		X_			×											ļ	59					
171971	1	3		<u>×</u>	ļ	ļ	· <u>k</u>				Ш			 	ļ				60		_		Special QA/QC	_
17371V	4	3		X	ļ	ļ <u>.</u>	×							<u> </u>					61					
17393VA	h	3		<u>×</u>	ļ	<u> </u>	×				\ <u>\</u>	-					<u> </u>	<b>\</b>	67					-
1720V1	<u> </u>	3		<u>                                     </u>	<u> </u>	ļ	X.	<u> </u>			*	<b></b>							63			ī	Remarks	$\dashv$
TB-L	 	2		X	ļ		<u> </u>	<u> </u>			•	<u> </u>					<b> </b>	<del> </del>	64					
	-				<del> </del>					<del> </del> -		<del>                                     </del>	ļ <u>.</u>				1	-						
		<u> </u>	ļ	ļ <u>.</u>	-		<u></u> .	<u> </u>	<u> </u>	<del> </del>	-	-						<del> </del> -	-					
		<u> </u>		-	<u> </u>	<u> </u>				╁┈	-	-		<del> </del>				<del>                                     </del>	1					
				<del>                                     </del>	<u> </u>	-	-	<u> </u>	<del> </del>	<del> </del>	-		<u> </u>			1	-	╁┈	-			$\dashv$		
				<del> </del>	<del> </del>		_	<u> </u>		┼	1	-	-	<del> </del>			<del>                                     </del>	<del> </del>	-			$\dashv$	Lab number	
		-		-	<del> </del>	ļ	<del> </del>			<del> </del>		1	+	-	-	<del>                                     </del>		+	1			<b></b>	Turnaround time	
	<del>                                     </del>		<del>                                     </del>	+		<del> </del>	-			1	1	+	<del> </del>	-		1	+	1					Priority Rush	
Condition o	of sample	<u> </u> ::	<u> </u>	<u> </u>	<u> </u>	1		_i	<u> </u>	Tem	peratur	e recel	red:	1	<del></del>	<u></u>	.1	1			L		Aush	
Ratheulah							Date / 11/13	h	71me 16:45	Rece	Pon	<del>,</del>	) ) 	سروا						·			2 Business Days .	K
Relinguish	d by	u	USC	<u> </u>	<u></u>		Dáte /	,	Time	Rece	had p	· «	<del>ن مو</del> رج م	8	).								Expedited 5 Business Days	
Relinquishe	<u> </u>	b-en	<u> </u>				11-17- Date	11	4.28 Time	Rec	aved b	y labor	line	ນ ·	ation	~! ~!	Date	-12		Time,	28		Standard 10 Business Days	

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant , APPC-3292 (2-91)

the Current was a constitute was a constitute of the constitute of



May 13, 1992

Mr. and Mrs. Silva 590 Hacienda Avenue San Lorenzo, California 94580

Re: Groundwater Analytical Results 590 Hacienda Avenue San Lorenzo, California 94580

Dear Mr. and Mrs. Silva:

This letter presents the results of the sampling of the irrigation water-supply well located on your property at the above referenced property. Pacific Environmental Group, Inc. (PACIFIC), on behalf of ARCO Products Company (ARCO) performed the groundwater sampling to test for gasoline in the water. The sample was collected on November 13, 1991 and submitted to the laboratory for analysis of total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater. ARCO and PACIFIC would like to express their gratitude for your cooperation in the completion of this project.

The groundwater sample collected from your well did not contain any dissolved concentrations of TPH-g or BTEX compounds. It is ARCO's and PACIFIC's \_\_ understanding that the well is used strictly for irrigation purposes. This well should not be for any other purpose other than irrigation unless advised differently by the Alameda County Department of Environmental Health.

Because gasoline compounds have been detected in the groundwater in your vicinity, ARCO would like your permission to sample your well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. ARCO or our representative will be contacting you in regards to accessing your well.

In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled at ARCO's expense.

and the second of the

1947年10日本東京市 1 Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

Sincerely,

**ARCO Products Company** 

# ORIGINAL SIGNED BY:

Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company

Ms. Pamela Evans, Alameda County Health Care Services

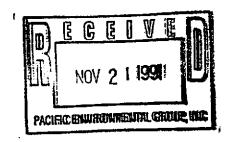
## ATTACHMENT A

# CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330-06-13

Project: 300-06.13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
11 <b>125</b> 58	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager Ţ.,..



Santa Clara, CA 95050 Attention: Dan Landry Client Project ID: Matrix Descript: 300-06.13, Arco 608, San Lorenzo

Water

Analysis Method: EPA 5030/8015/8020

First Sample #: 111-2557

Sampled: Nov 13, 1991

Received: Nov 13, 1991 Analyzed: Nov 14-15, 1991

Reported: Nov 20, 1991

#### TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene μg/L (ppb)	Toluene μg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes μg/L (ppb)
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2561	17371VM	870	9.0	1.0	2.1	4.5
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.
111-2563	17200VM	440	2.7	N.D.	N.D.	12
111-2564	TB1	N.D.	N.D.	N.D.	N.D.	N.Q.

Detection Limits:	30	0.30	0.30	0.30	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager



Pacific Environmental Group

Client Project ID: 300-06.13, Arco 608, San Lorenzo

1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE			Ethyl-			
	Benzene	Toluene	Benzene	Xylenes		
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L Laikhtman μg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591		EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591		
Sample Conc.:	N.D.	N.D.	N.D.	N.D.		
Spike Conc. Added:	10	10	10	30		
Conc. Matrix Spike:	10	11	11	31		
Matrix Spike % Recovery:	100	110	110	103	· <b>-</b>	<u>.</u> .
Conc. Matrix Spike Dup.:	11	11	11	33		
Matrix Spike Duplicate % Recovery:	110	110	110	110		
Relative % Difference:	9.5	0.0	0.0	6.3		

**SEQUOIA ANALYTICAL** 

% Recovery: Conc. of M.S. - Conc. of Sample x 100

Spike Conc. Added

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <2>



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

#### QUALITY CONTROL DATA REPORT

ANALYTE	4		Ethyl-	/**
	Benzene	Toluene	Benzene	Xylenes
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman μg/L Nov. 14, 1991 BLK111491	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	11	11	11	33
Matrix Spike % Recovery:	110	110	110	110
Conc. Matrix Spike Dup.:	11	11	11	33
Matrix Spike Duplicate % Recovery:	110	110	110	110
Relative % Difference:	0.0	0.0	0.0	0.0

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

Vickie Tague Project Manager (Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <3>

1 1				Matrix		Prese	rvation				38			<u>,,,</u>			K	¥ Š		أضغط			manua ar Solpillani
Sample 1.D.	Lab no.	Container no.	Soll	Water	Other	ice	Acid	Sampling date	Sampling time	BITEX BOZEPA BOZD	EPA MEGZISCHOROUS	TPH Modified B015 Gas (1) Diesel (1)	Of and Grease 413.1   413.2	TPM EPA 418.1/SMS03E	EPA 601/8010	EPA GZW8240	EPA (25/8270	TO DAY	THE COLUMN	Transfer		<b>&gt;</b>	Consider detection
590H		3		×			X	11/13/41			ХІ						Ш	25	57		:		Special detection Limit/reporting
64214		3		X			×											<u> </u>	58				
17207V/	t	3		×			X										-/		59				
17197W	1	3		X_			·k												60				Special QA/QC
173714	U	3		×		<u> </u>	×				Ц								61				
173934	1	3		×	<u> </u>		×			<u> </u>	ΙΙ,						1		62				
1720V1		3		人			x				V								63				Remarks
TB-L		2		×			X	4			d							V	64				
																		ļ					
																		ļ					
																							Lab number
										<u> </u>	<u> </u>	<u> </u>							<u> </u>				
										<u> </u>	ļ			<u></u>			ļ	<u> </u>				ļ	Turnsround time
							<u> </u>											<u></u>					Priority Rush 1 Business Day
Condition o						<u> </u>	la		<b>7</b> 1			receiv	ed:										Rush
Retinquishe	المعمودة (6 //سيسية/	noler Uut	SN	<u> </u>			Dale / 11/13	b1	1645	12	Med by		00 ((	<del>nel</del>			<u>., ., ., </u>					_	2 Business Days .E
Relinquish	d by 🖠						Dale /	·	4:28	Rèce	ived by	,	Λ		),								Expedited 5 Business Days
Relinquishe	d by	)-en	<del>3</del> 1				Date	1	Time	Rece	wed by	labora	iory.	5/1	atic	<u>~</u> ı.	Dale (! -	-12		Time,	28		Standard 10 Business Daya

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant , APPC-3292 (2-91)

#### **ARCO Products Company**

o de la companya de l



92/07/12 20 1/29

May 13, 1992

Mrs. Toole 17203 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results 17203 Via Magdalena San Lorenzo, California 94580

#### Dear Mrs. Toole:

This letter presents the results of the sampling of the irrigation water-supply well located on your property at the above referenced property. Pacific Environmental Group, Inc. (PACIFIC), on behalf of ARCO Products Company (ARCO) performed the groundwater sampling to test for gasoline in the water. The sample was collected on November 13, 1991 and submitted to the laboratory for analysis of total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater. ARCO and PACIFIC would like to express their gratitude for your cooperation in the completion of this project.

The groundwater sample collected from your well did not contain any dissolved concentrations of TPH-g or BTEX compounds. It is ARCO's and PACIFIC's understanding that the well is used strictly for irrigation purposes. This well should not be for any other purpose other than irrigation unless advised differently by the Alameda County Department of Environmental Health.

Because gasoline compounds have been detected in the groundwater in your vicinity, ARCO would like your permission to sample your well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. ARCO or our representative will be contacting you in regards to accessing your well.

In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled at ARCO's expense.

Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

Sincerely,

#### **ARCO Products Company**



Chuck Carmel
Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company Ms. Pamela Evans, Alameda County Health Care Services

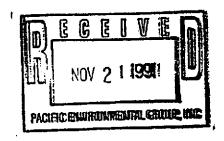
## ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Dan Landry

330-06-13

Project: 300-06.13, Arco 608, San Lorenzo



Enclosed are the results from 8 water samples received at Sequoia Analytical on November 13,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1112557	Water, 590H	11/13/91	EPA 5030/8015/8020
1112558	Water, 642H	11/13/91	EPA 5030/8015/8020
1112559	Water, 17203VM	11/13/91	EPA 5030/8015/8020
1112560	Water, 17197VM	11/13/91	EPA 5030/8015/8020
1112561	Water, 17371VM	11/13/91	EPA 5030/8015/8020
1112562	Water, 17393VM	11/13/91	EPA 5030/8015/8020
1112563	Water, 17200VM	11/13/91	EPA 5030/8015/8020
1112564	Water, TB1	11/13/91	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague Project Manager



Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA, 95050

Santa Clara, CA 95050 Attention: Dan Landry Client Project ID: Matrix Descript: 300-06.13, Arco 608, San Lorenzo

Water

Analysis Method: EPA 5030/8015/8020

First Sample #: 111-2557

Sampled:

Nov 13, 1991 Nov 13, 1991

Received: Nov 13, 1991 Analyzed: Nov 14-15, 1991

Reported: Nov 20, 1991

## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
111-2557	590H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2558	642H	N.D.	N.D.	N.D.	N.D.	N.D.
111-2559	17203VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2560	17197VM	N.D.	N.D.	N.D.	N.D.	N.D.
111-2561	17371VM	870	9.0	1.0	2.1	4.5
111-2562	17393VM	31	N.D.	N.D.	N.D.	N.D.
111-2563	17200VM	440	2.7	N.D.	N.D.	12
111-2564	TB1	N.D.	N.D.	N.D.	N.D.	N.D.

Detection Limits:	30	0.30	0.30	0.30	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112557, 61

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	D	Taluage	Ethyl-	Xylenes	
	Benzene	Toluene	Benzene	Aylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman µg/L Nov 15, 1991 GBLK111591	EPA 8020 L Laikhtman µg/L Nov 15, 1991 GBLK111591	EPA 8020 L. Laikhtman μg/L Nov 15, 1991 GBLK111591	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	10	11	11	31	
Matrix Spike % Recovery:	100	110	110	103	· · · ·
Conc. Matrix Spike Dup.:	11	· 11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	9.5	0.0	0.0	6.3	

**SEQUOIA ANALYTICAL** 

% Recovery: Conc. of M.S. - Conc. of Sample x 100

Spike Conc. Added

Relative % Difference:

Conc. of M.S. - Conc. of M.S.D. (Conc. of M.S. + Conc. of M.S.D.) / 2

x 100

Vickie Tague Project Manager

1112557.PPP <2>



Client Project ID: 300-06.13, Arco 608, San Lorenzo

Santa Clara, CA 95050

Attention: Dan Landry

QC Sample Group: 1112558-60, 62-64

Reported:

Nov 20, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	· ·		Ethyl-		
	Benzene	Toluene	Benzene	Xylenes	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman μg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	EPA 8020 L. Laikhtman µg/L Nov 14, 1991 BLK111491	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Spike Conc. Added:	10	10	10	30	
Conc. Matrix Spike:	11	11	11	33	
Matrix Spike % Recovery:	110	110	110	110	And Marine I I I I
Conc. Matrix Spike Dup.:	11	11	11	33	
Matrix Spike Duplicate % Recovery:	110	110	110	110	
Relative % Difference:	0.0	0.0	0.0	0.0	

**SEQUOIA ANALYTICAL** 

% Recovery:

Conc. of M.S. - Conc. of Sample Spike Conc. Added x 100

Vickie Tague Project Manager Relative.% Difference:

Conc. of M.S. - Conc. of M.S.D.

x 100

(Conc. of M.S. + Conc. of M.S.D.) / 2

1112557.PPP <3>

		l		MINNE	1	1 1040	7811411	1			3 1	اصرا	ا ط	<u>w</u> !		,	40	19	<b>30</b>	التعنيط		1	<u> </u>
Sample 1.D.	.00 वह	Container no.	Soll	Waler	Other	tce	Acid	Sempling date	Sampling time	BTEX GOZIEPA BOZO	ETEVTPH GLASS EPA MEGZIEDEONEOUS	TPH Modified BOYS Gee () Dissel ()	OR and Greece .	TPH EPA 418 1/SN503E	EPA (O), MOTO	DA GAGS40	EPA 625/6270	TO VOY			P	Special detection	
590H		3		×			×	11/13/91			X						111	25	57			Limit/reporting	
64214		3		×			×				Ĺ						·/	<u> </u>	58			_	
17203V/	1	3		×			X												59				
171971	1	3		<u>×</u>			· <u>k</u>				Ш								60			Special QA/QC	
17371V.	N	3		×	ļ	ļ	×				Щ						$\dashv$		61				
173934	<b>1</b>	3		<u>×</u> _			X	<del>                                     </del>		ļ	<u> </u>					ļ		<b> </b>	6>	_		4	
1720V1	1	3		人			L×_				y							<del>\ ,</del>	63	<del></del>		Remarks	
TB-L		2		X	<u> </u>		X	Ψ_			4							V	<u>64</u>			-	İ
		ļ		<u> </u>	ļ					<b> </b>	<u> </u>	ļ		<u> </u>					ļ			_	
		ļ					ļ		ļ		<u> </u>			-		<u> </u>		_	-			-	
		<b> </b>			ļ		-	<u> </u>		<u> </u>	<u> </u>			_	ļ			1				_	
				<u> </u>	<u> </u>	<u> </u>	<u> </u>	ļ			-	<del> </del>				<u> </u>	<u> </u>	-	-			_	
	ļ <u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	ļ	-			-	ļ		<b></b>	-			Lab number	
	ļ	<u> </u>			<u>  </u>	ļ	-	<u> </u>		<del> </del>		<u> </u>	ļ	-	<del> </del>	<del> </del>		-	-	-			
	1.	1				}	-					<u> </u>		<u> </u>	<u> </u>	ļ	<u> </u>					Turnaround tima	
														<u> </u>					<u> </u>			Priority Rush 1 Business Day	
Condition o												e recely	ed:									- Rush	. <b>E</b> C
Retineuish	69 py 00	mpler (11)	TSA	1			Date / /1//3	1/21	16:45		byed by	_	00 ((	rel								2 Business Days  Expedited	٠٥٧
Rollnquish	ed by	•					Date /	,	4:28	- Race	elved b		Λ		$)_{r}$							5 Business Days	
Relinquish	ed by	<u> </u>	<u>-51</u>				Dale	1	Time	Rec	bived b	y labor	ierz	IJŢ.	ash	<u>S</u>	Date	-13		Time	> {	Standard 10 Business Days	

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant ,

APPC-3292 (2-91)

#### **ARCO Products Company**

The same of the Poligies of Admir Admires to the Sent of the Police of Califfring Sent 2000 Telephone 415 571 2400



\$2707.10 10 :: 29

May 13, 1992

Terry Johansen 17302 Via Magdalena San Lorenzo, California 94580

Re: Groundwater Analytical Results

17302 Via Magdalena

San Lorenzo, California 94580

 $(s,t) = (s-s_0)T$  , where (s-t) is a sum of solutions of the second s

Dear Terry Johansen:

This letter presents the results of the sampling of the irrigation water-supply well on your property at the above address. ARCO Products Company (ARCO) and Pacific Environmental Group, Inc. (PACIFIC) would like to express their gratitude for your cooperation in the completion of this project. PACIFIC, on behalf of ARCO performed the groundwater sampling to determine the source and extent of gasoline contamination found in shallow groundwater, and whether gasoline is present in the well on your property. The groundwater sample was collected on October 21, 1991 and was submitted to a laboratory to be analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds) in groundwater.

Laboratory analysis of the groundwater sample collected from your well has detected TPH-g and benzene at concentrations of 72 and 0.64 parts per billion (ppb), respectively. These compounds are indicative of gasoline. Benzene is a known carcinogen. In accordance with the provisions of Proposition 65, a health risk assessment was performed. Based on the risk assessment, which included the assumption that 1 liter of groundwater would be consumed on a daily basis for 35 years, there is no significant increase in risk.

It is ARCO's and PACIFIC's understanding that your well is used only for irrigation purposes. This well should not be used for any other purpose, other than irrigation unless permitted or advised differently by the Alameda County

Department of Environmental Health. The risk assessment is currently being reviewed by Alameda County, and pending review of the risk assessment, your well may be recommended to be turned off. Because of the presence of gasoline compounds detected in the groundwater from the well, ARCO would like permission to sample the well on a quarterly basis through 1992. If this is agreeable with you, please sign and date the enclosed copy of this letter and return the signed copy to me as soon as possible. In the event of any changes in the characteristics of the water (color, odor, clarity, etc.), please contact ARCO, and the well will be resampled immediately at ARCO's expense. Please call me at (415)-571-2434, and/or Ms. Pamela Evans of Alameda County Health Care Services (ACHCS) at (415)-271-4320 if you have any questions regarding the contents of this letter.

ARCO or PACIFIC, on behalf of ARCO, will contact you shortly in regards to this sampling activity.

Sincerely,

**ARCO Products Company** 

# CRIGINAL SIGNED BY:

Chuck Carmel Environmental Engineer

Attachments: Attachment A - Certified Analytical Results and Chain-of-Custody Documentation

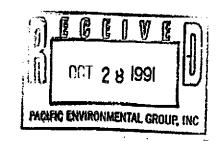
cc: Mr. Chris Winsor, ARCO Products Company Mr. Charles Lapin, ARCO Products Company Mr. John Meck, ARCO Products Company

Ms. Pamela Evans, Alameda County Health Care Services

# ATTACHMENT A

CERTIFIED ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION





Pacific Environmental Group 1601 Civic Center Drive, Suite 202 Santa Clara, CA 95050 Attention: Deb Moser

Project: 330-06.13, Arco 0608, San Lorenzo

Enclosed are the results from 2 water samples received at Sequoia Analytical on October 21,1991. The requested analyses are listed below:

1103899

Water, 17302

10/21/91

EPA 5030/8015/8020

1103900

Water, TB-1

10/21/91

EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Vickie Tague Project Manager



Santa Clara, CA 95050 Attention: Deb Moser

Client Project ID: Matrix Descript:

330-06.13, Arco 0608, San Lorenzo

Water

EPA 5030/8015/8020 Analysis Method: First Sample #: 110-3899

Sampled:

Reported:

Oct 21, 1991

Received: Oct 21, 1991 Oct 21, 1991 Analyzed:

Oct 24, 1991

## TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons μg/L (ppb)	Benzene μg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes μg/L (ppb)
110-3899	17302	72	0.64	N.D.	0.44	N.D.
110-3900	TB-1	N.D.	N.D.	N.D.	N.D.	N.D.

Detection Limits:	30	0.30	0.30	0.30	0.30	

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL** 

Vickie Taque Project Manager



Client Project ID: 330-06.13, Arco 0608, San Lorenzo

Santa Clara, CA 95050 Attention: Deb Moser

QC Sample Group: 1103899-3900

Reported: Oct 24, 1991

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	 	
Method: Analyst: Reporting Units: Date Analyzed: QC Sample #:	EPA 8020 J. Jencks μg/L Oct 21, 1991 BLK102191	EPA 8020 J. Jencks μg/L Oct 21, 1991 BLK102191	EPA 8020 J. Jencks μg/L Oct 21, 1991 BLK102191	EPA 8020 J. Jencks μg/L Oct 21, 1991 BLK102191		
Sample Conc.:	N.D.	N.D.	N.D.	N.D.		
Spike Conc. Added:	10	10	10	30		
Conc. Matrix Spike:	9.9	10	<b>9</b> .9	30		
Matrix Spike % Recovery:	99	100	99	100	· - ·	
Conc. Matrix Spike Dup.:	9.3	9.5	9.2	28		
Matrix Spike Duplicate % Recovery:	93	95	92	93		
Relative % Difference:	6.3	5.1	7.3	6.9		

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

**SEQUOIA ANALYTICAL** 

Vickie Tague Project Manager

% Recovery:	Conc. of M.S Conc. of Sample	x 100	
	Spike Conc. Added		
Relative % Difference:	Conc. of M.S Conc. of M.S.D.	x 100	
_	(Conc. of M.S. + Conc. of M.S.D.) / 2		
		1	103899.PPP <2>

# SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT):	PEG- AN		MASTE	R LOG NO. / PAGE: DF LOG-IN:	10/21/9			,
CIRCLE THE APPROPRIAT	E RESPONSE	LAB SAMPLE	DASH #	CLIENT IDENTIFICATION	CONTAINER	SAMPLE	DATE	REMARKS:
Custody Seal(s):	Present / Absent	1103899	A-C	17302	DESCRIPTION 3×U0A	MATRIX	SAMP.	CONDITION (ETC)
2. Custody Seal Nos.:	Intact / Broken*	1103900	F7-13	TR-I	2KUM	¥.	1	
3. Chain-of-Custody Records:	Present / Absent*							
Traffic Reports or Packing List:	Present / Absent				·			
5. Airbiii:	Airbill / Sticker Present / Absent							
6. Airbiil No.:								
7. Sample Tags: Sample Tag Nos.:	Present / Absent*  (Isted DNot Listed on Chain-of-Custody							
8. Sample Condition:	Intact/Broken*/Leaking*							
Does information on custody reports, traff reports and sample ta						-		
10. Proper Preservatives Used:	(es) No							
11. Date Rec. at Lab:	10/21							
12. Time Rec. at Lab:	1727							

Form SC001.

Page\_\_\_of\_\_

ARCO F	rodu	ıcts (	Comp	any e	\$30-	06.1	3	Task Or	der No.	60	28-	. 91	ı - 2	B								CI	hain of Çustod	У.
ARCO Facility	DO.	~ R		City	/ <sub>2015</sub> 2 S.	MN L	OREN	せい	1	Project (Consut	menag Isni)	er D.	M	)SE	R								aboratory name	1.
ARCO engine	<del></del>	CAR	ME	1\ <u>C#</u> ?	Cinty) >.		Telephon (ARCO) 4	no. 15-571-	2434	Telepho (Consul	ne no. lang 4	108-	9 84	~65	36	Fax (Co	no. nsullar	n405	3-20	43-	3911		SEQUOIA	
Consultan	me F	<u> </u>	20016	 2014	ENT		1////		nt) 1601									d co	ARA	9	5252	l	07-073	
	23.			Matrix			rvation											9	9000			I	Method of shipment	
Sample I.D.	Lab no.	Container no.	Soll	Water	Other	lce	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020		TPH Modified 8015 Gas Diesel U	04 and Greate 413.1 □ 413.2	TPH EPA 418.1/SMSC	EPA 601/8010	EPA 624/8240	EPA 625/8270	See Cook	CAM Mante BPA 6	Leed Organis C			Serruore (OUVI-PY	;
17302	·	3		×			x	10/21/91	1020		X			1	1-(-)(	ي د	90	<b>\</b>		ļ			Limit/reporting	
TB-1		2		T			\_	,		<u></u>	1					(	100	1		-				
				,																			Special QA/QC	
											ļ							<u> </u>						
					ļ <u>.</u>					<u> </u>								<u> </u>						
	<del></del>		<del> </del>	<u>                                     </u>																			Remarks	•
												ļ					ļ	_		ļ				
			<u> </u>					<u> </u>	<u> </u>	<del> </del>				_			-	-	<u> </u>					,
		\ <u></u>	ļ	-	<u> </u>					-	-	$\vdash$					-	<del>                                     </del>						
			-		-					1	1	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>				1					Lab number	
	· 	-	-																			···	110 3899	
	,									-	-	<del> </del>	-	-	ļ	-	<u> </u>	-	-		-		Turnaround time	_
Condition of	samole	<u> </u>		<u></u>	3000	<u> </u>		,		Tem	peratur	e tecey	red:				<u> </u>				_11		1 Business Day Aush	1.
Rélinquisba			n	(	3000			21/91	Time	r år	lved b	$\Delta'$	ΙΛ :	Wa		, <u>/\                                    </u>	35	) -1	1	• .		(	2 Business Days  Expedited	À
Relinquishe	141	a r	1/57	11-7			Date Date	1/91	4 : 5   Time			y labori	story				Date			Time			5 Business Days Standard	0
Relinquishe			9.			. !		·				ikai	ب	<del></del>			10	- 2	1	<u>\</u> \'	727		10 Business Days	, 🗆
Distribution: APPC-3292	White ( (2-91)	ору — І	aborator	y; Canan	у сору —	ARCO En	vironmental	Engineering	Pink copy -	Cons	illant	Ú									•			