



February 10, 1993
Sample Log 5701

Jaff Auchterlonie
Ramcon
P.O. Box 1026
West Sacramento, CA 95691

Subject: Analytical Results for 3 Water Samples
Identified as: Project # 476003 (ANR Trucking)
Received: 01/15/93
Purchase Order: 7192

Dear Mr. Auchterlonie:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on January 20, 1993 and describes procedures used to analyze the samples.

Water samples were received in 40-mL glass bottles sealed with TFE septae, and in 1-L glass bottles sealed with TFE-lined caps. Each sample was received under documented chain of custody and stored at 4 degrees C until analysis was performed.

Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Diesel, Motor Oil, Jet/Kerosene" (Mod. 8015/Extraction)
"Volatile Organic Priority Pollutants" (EPA Method 624)

Please refer to the following table(s) for summarized analytical results and contact us at 916-757-4650 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:



Joel Kiff
Senior Chemist



The following abbreviations and qualifiers may be present in the analytical reports to follow:

- ug/L : Micrograms of target analyte in 1 Liter of sample.
- mg/kg : Milligrams of target analyte in 1 kg of sample.
- B : This data qualifier indicates that a method blank from the analytical batch contained this compound and the level found in the sample is within 5 times that level. Use data with caution.
- C : This data qualifier indicates that the presence of the compound has been confirmed by GC/MS.
- TCLP : Toxicity Characteristic Leaching Procedure
- MS : Matrix Spike
- MSD : Matrix Spike Duplicate
- RPD : Relative Percent Difference (the difference between two values divided by the mean, expressed as a percentage.
- % REC : Percent Recovery (the ratio between the measured value and the expected value for a spiked sample, expressed as a percentage.
- < : Less than
- > : Greater than



Sample Log 5701

5701-1

Sample: MW-1

From : Project # 2P3/392/88 (ANR Trucking)

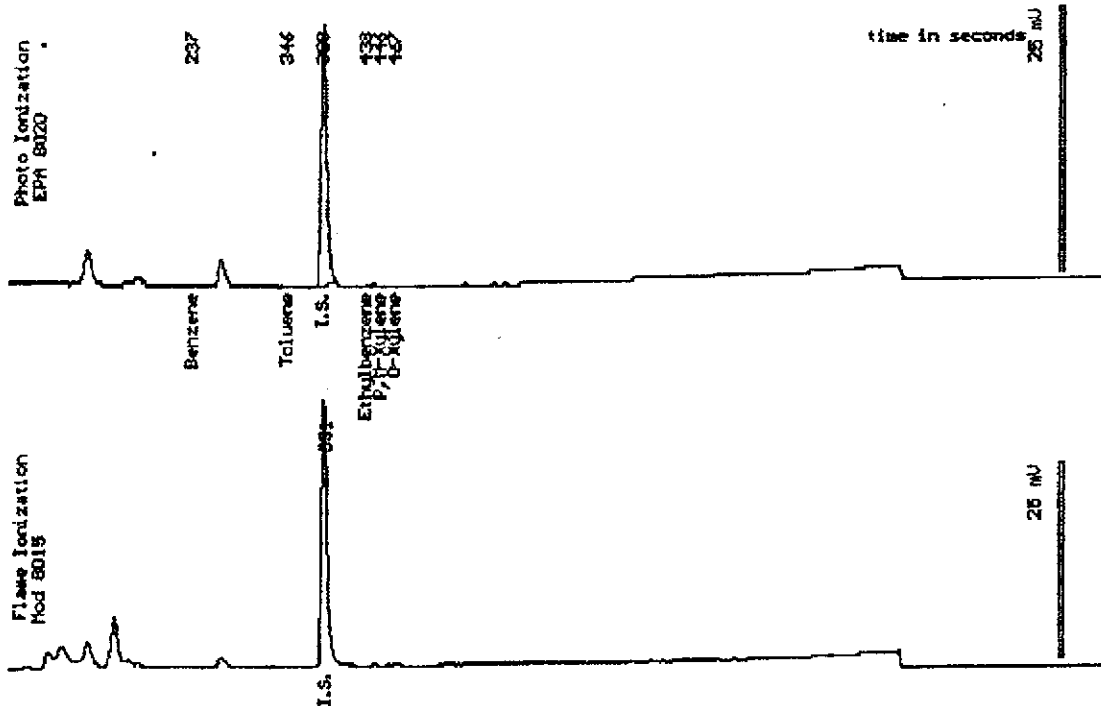
Sampled : 01/15/93

Dilution : 1:1

QC Batch : 6091A

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.30)	<.30
Toluene	(.30)	<.30
Ethylbenzene	(.30)	<.30
Total Xylenes	(.50)	<.50



Date Analyzed: 01-15-93
Column: 0.53mm ID X 30m DB5 (J&H Scientific)

Joel Kiff
Senior Chemist



Sample Log 5701

5701-1

Sample: MW-1

From : Project # 2P3/392/88 (ANR Trucking)

Sampled : 01/15/93

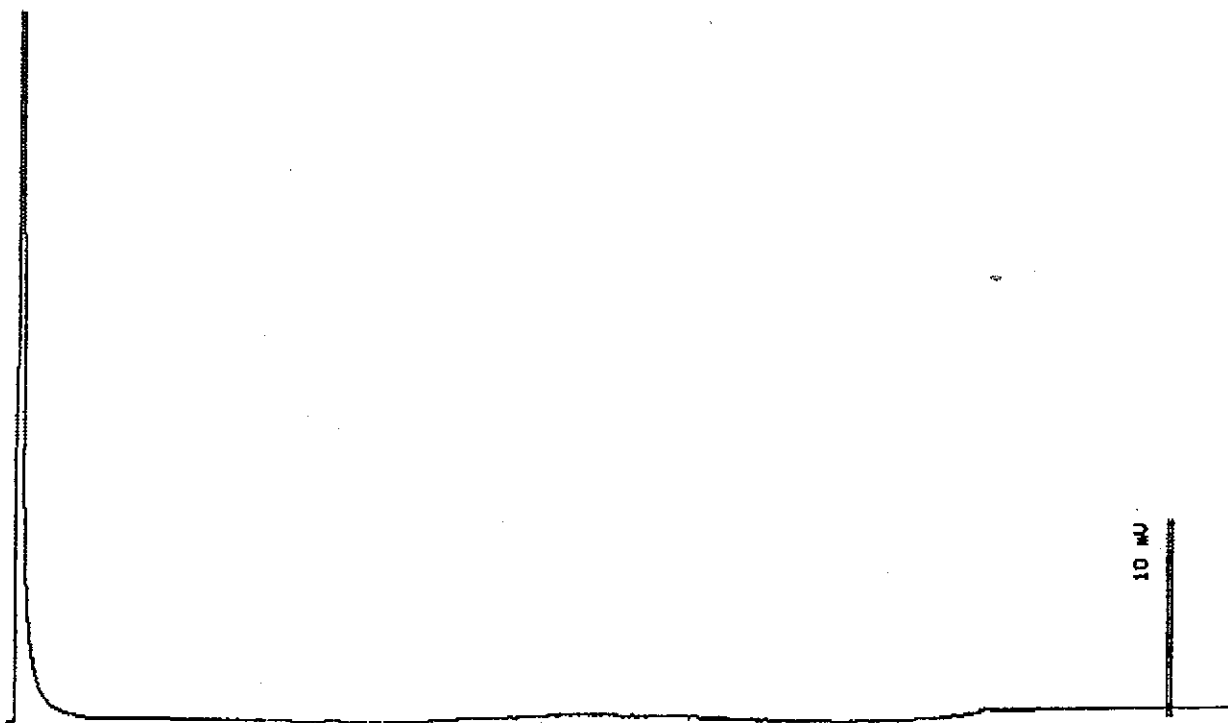
Extracted: 01/19/93

Dilution : 1:1

Matrix : Water

QC Batch : 8071D

Parameter	(MDL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
TPH as Diesel	(50)	<50
TPH as Motor Oil	(50)	<50



EPA Mod 8015

Date: 01-20-93 Time: 06:52:03
Column : 0.53mm ID X 15m DB1 (J&M Scientific)

S. Podolsky
Stewart Podolsky
Senior Chemist



Sample Log 5701

5701-2

Sample: MW-2

From : Project # 476003 (ANR Trucking)

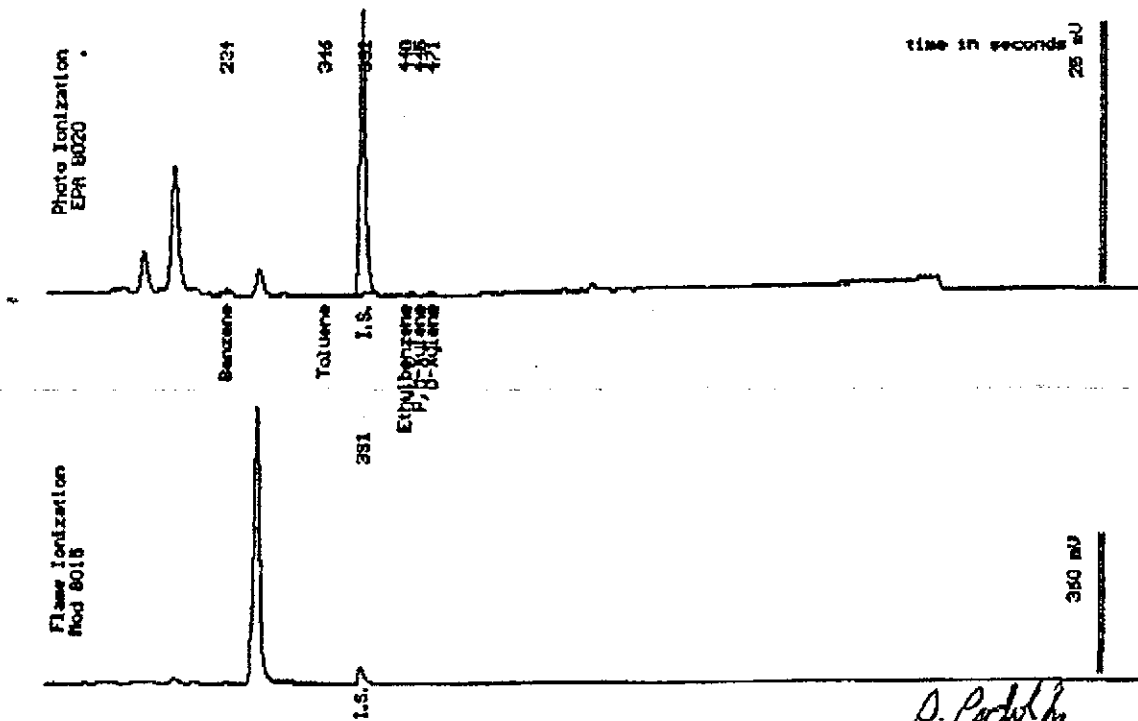
Sampled : 01/15/93

Dilution : 1:1

QC Batch : 6091B

Matrix : Water

Parameter	(MDL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.30)	<.30
Toluene	(.30)	<.30
Ethylbenzene	(.30)	<.30
Total Xylenes	(.50)	<.50



Date Analyzed: 01-20-93
Column : 0.53mm ID X 30m DB5 (J&H Scientific)

P. Padubhy
Joel Kiff
Senior Chemist



Sample Log 5701

5701-2

Sample: MW-2

From : Project # 2P3/392/88 (ANR Trucking)

Sampled : 01/15/93

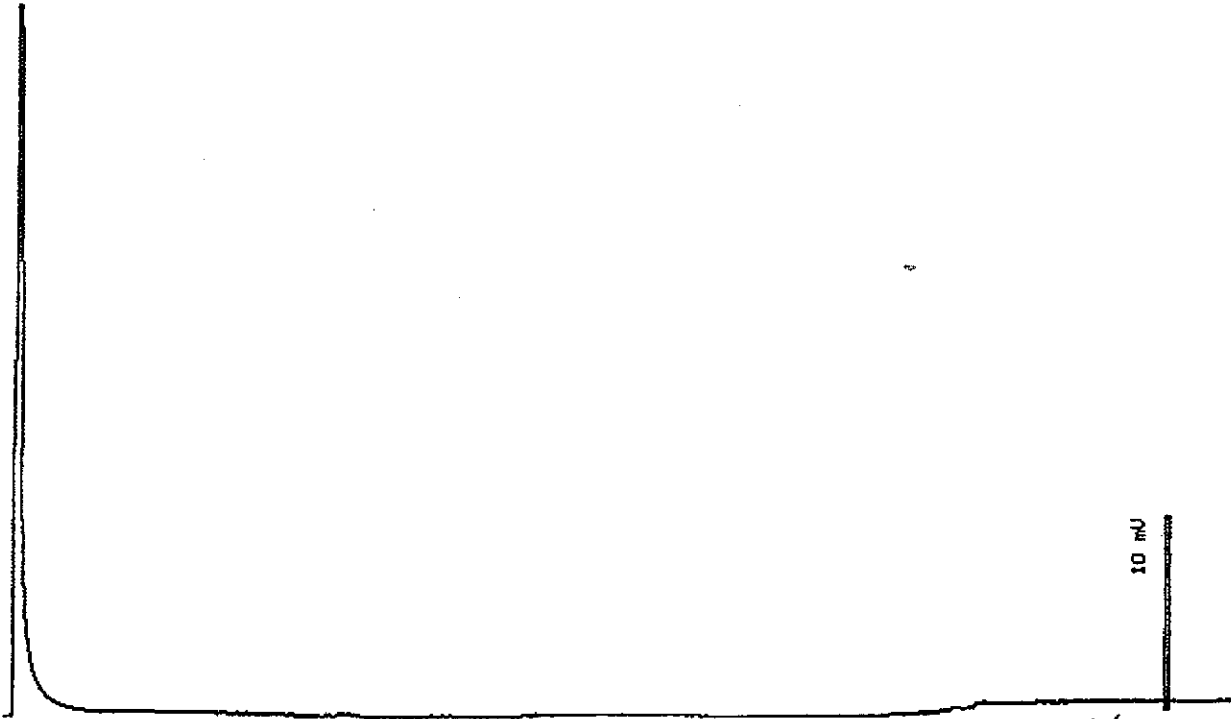
Extracted: 01/19/93

Dilution : 1:1

Matrix : Water

QC Batch : 8071D

Parameter	(MDL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
TPH as Diesel	(50)	<50
TPH as Motor Oil	(50)	<50 ✓



EPA Mod 8015

Date: 01-20-93 Time: 07:28:06
Column: 0.53mm ID X 15m DB1 (J&H Scientific)

S. Podolsky
Stuart Podolsky
Senior Chemist



Sample Log 5701

5701-3

Sample: MW-3

From : Project # 2P3/392/88 (ANR Trucking)

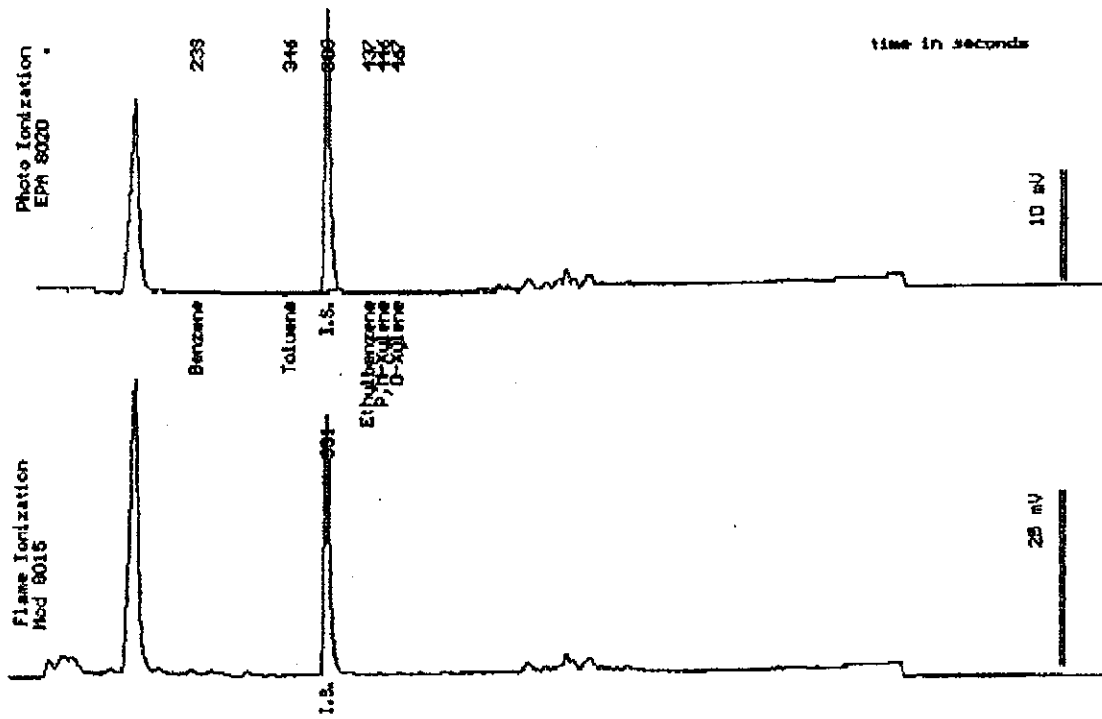
Sampled : 01/15/93

Dilution : 1:1

QC Batch : 6091B

Matrix : Water

Parameter	(MDL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.30)	<.30
Toluene	(.30)	<.30
Ethylbenzene	(.30)	<.30
Total Xylenes	(.50)	<.50



Date Analyzed: 01-20-93
Column : 0.53mm ID X 30m DB5 (J&H Scientific)

Joel Kiff
Senior Chemist



Sample Log 5701

5701-3

Sample: MW-3

From : Project # 2P3/392/88 (ANR Trucking)

Sampled : 01/15/93

Extracted: 01/19/92

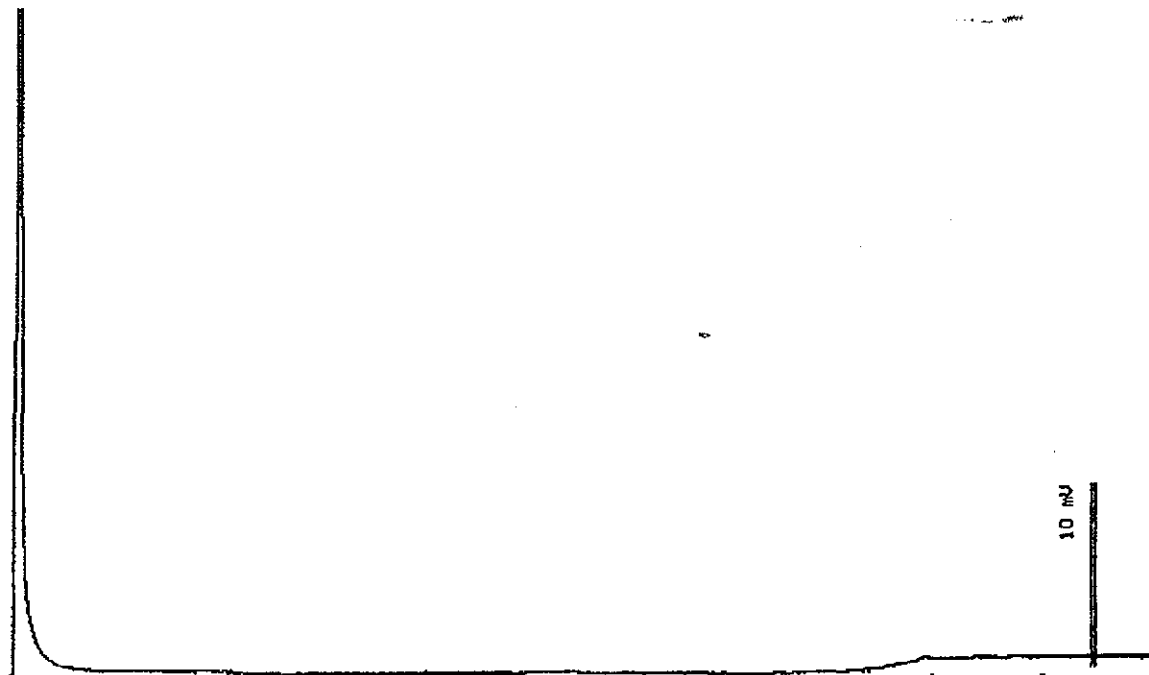
Dilution : 1:1

QC Batch : 8071E

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	<50
TPH as Motor Oil	(50)	<50

Sample was lost after only one extraction. Value represents approximately 65% extraction efficiency.



EPA Method 8015

Date: 01-20-93 Time: 11:33:30
Column : 0.53mm ID X 15m DB1 (J&H Scientific)

S. Rodolfsky
Stewart Rodolfsky
Senior Chemist



February 10, 1993
Sample Log 5701


Sample: MW-1

From : Project # 476003 (ANR Trucking)
Sampled : 01/15/93
Matrix : Water

Received : 01/15/93
Analyzed : 01/21/93

624 - Volatile Organic Priority Pollutants

Parameter	(MDL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$	Flag
Chloromethane	(10)	< 10	
Bromomethane	(10)	< 10	
cis-1,2-Dichloroethene	(1.0)	1.9 ✓	
trans-1,2-Dichloroethene	(1.0)	< 1.0	
Vinyl Chloride	(10)	< 10	
Chloroethane	(10)	< 10	
Methylene Chloride	(1.0)	< 1.0	
Acetone	(10)	< 10	
Carbon Disulfide	(1.0)	< 1.0	
1,1-Dichloroethene	(1.0)	13 ✓	
1,1-Dichloroethane	(1.0)	23 ✓	
Chloroform	(1.0)	< 1.0	
1,3-Dichloroethane	(1.0)	< 1.0	
2-Butanone	(10)	< 10	
1,1,1-Trichloroethane	(1.0)	< 1.0	
Carbon Tetrachloride	(1.0)	< 1.0	
Bromodichloromethane	(1.0)	< 1.0	
1,2-Dichloropropane	(1.0)	< 1.0	
cis-1,3-Dichloropropene	(1.0)	< 1.0	
Trichloroethene	(1.0)	7.9 ✓	
Dibromochloromethane	(1.0)	< 1.0	
1,1,2-Trichloroethane	(1.0)	< 1.0	
Benzene	(1.0)	< 1.0	
trans-1,3-Dichloropropene	(1.0)	< 1.0	
Bromoform	(1.0)	< 1.0	
4-Methyl-2-Pentanone	(10)	< 10	
2-Hexanone	(10)	< 10	
Tetrachloroethene	(1.0)	3.2 ✓	
1,1,2,2-Tetrachloroethane	(1.0)	< 1.0	
Toluene	(1.0)	< 1.0	
Chlorobenzene	(1.0)	< 1.0	
Ethylbenzene	(1.0)	< 1.0	
Styrene	(1.0)	< 1.0	
P,M-Xylene	(1.0)	< 1.0	
O-Xylene	(1.0)	< 1.0	


Joe Kitz
Senior Chemist



February 10, 1993
Sample Log 5701

EPA 624 System Monitoring Compound Recovery

Sample	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
NW-1	101	99	100		0

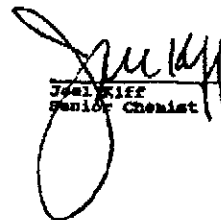
QC Limits

SMC1 (TOL) = Toluene-d8 (88-110)
SMC2 (BFB) = Bromofluorobenzene (86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

Column to be used to flag recovery values

* Values outside of QC limits

D System Monitoring Compound diluted out


Joel Riff
Senior Chemist