1R - 43

REPORTS

DATE:

1998

ANNUAL REPORT OF 1997 GROUND-WATER SAMPLING EVENTS

Baker Oil Tools
2800 West Marland
Hobbs, New Mexico

Prepared for:

BAKER OIL TOOLS
Hobbs, New Mexico

Prepared by:
BAKER OIL TOOLS
ENVIRONMENTAL DEPARTMENT
Houston, Texas

PROJECT NO. 60260-7-1267
JANUARY 1998

BAKER
OIL TOOLS
A Baker Hughes company

January 21, 1997

Mr. William Olson, Hydrogeologist
State of New Mexico
Energy, Mineral and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

REPORT OF 1997
GROUND-WATER SAMPLING EVENTS
Former Baker Oil Tools Facility
2800 West Marland
Hobbs, New Mexico
Project No. 60260-7-1267

Dear Mr. Olson:

Baker Oil Tools is submitting the 1997 ground-water monitoring report in response to the NMOCD request of June 20, 1995 to provide quarterly monitoring data for groundwater contamination in the direct vicinity of the former disposal pit on the property located at 2800 W. Marland in Hobbs, New Mexico. The NMOCD requested this report discuss relevant background information, execution of services, laboratory analytical results, and a summary of our findings for the subject property.

1. BOT performed quarterly monitoring events in January, May, October and December 1997. During each quarterly monitoring event, the wells were gauged for depth, bailed and sampled. Each well was bailed of three volumes and allowed to equalize prior to sampling except for WW-1 which is a 125 feet deep water well (only 1 volume was removed). Samples were collected from each well and shipped to a laboratory for analysis. The Hobbs district office of the NMOCD was notified prior to each sampling event as required.

2. A summary of the laboratory analytical results of water quality sampling of the monitoring wells is provided in the attached Table 1A through 1E. This data is presented in tabular form showing each quarterly sampling results.

3. Water level and well depth measurements were measured using an electronic water level indicator capable of determining water levels to within 0.01 foot. Table 2 provides cumulative ground-water level measurements for the 1997 monitoring events. An updated ground water elevation map using the recent water table elevations of the ground water in all monitoring wells is presented as Figure 1.

If you have any questions or require additional information, please do not hesitate in contacting me at (713)466-2520.

Sincerely,
For Baker Oil Tools

Jon Bancroft for
Tom Stenbeck

Thomas V. Stenbeck
Manager of Health, Safety and Environment

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TABLE 1A
1997 CUMULATIVE GROUND-WATER ANALYTICAL RESULTS FOR MW-1
BAKER OIL TOOLS
HOBBS, NEW MEXICO

	SAMPLING EVENT DATES			
	1/20/97	5/15/97	10/28/97	12/22/97
EPA 8020 COMPOUNDS (ppm)				
Benzene	< 0.002	< 0.002	< 0.002	< 0.002
Ethylbenzene	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	< 0.002	< 0.002	< 0.002	< 0.002
Xylenes	< 0.002	< 0.002	< 0.002	< 0.002
Total (ppm)	BDL	BDL	BDL	BDL
Methyl Tertiary Butyl Ether	< 0.005	< 0.005	< 0.02	< 0.005
EPA 8270 COMPOUNDS (ppm)				
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01
Naphthalene	<0.01	<0.01	<0.01	<0.01
pH (standard units)	7.89	7.13	7.2	N/A
Specific Conductance (µmhos/cm)	1400	1550	N/A	N/A

NOTES: (1) The designation "N/A" indicates that the sample was not analyzed for this parameter.
(2) The designation "BDL" indicates that the sum of the individual constituent concentrations is "below detection limits".

TABLE 1B
1997 CUMULATIVE GROUND-WATER ANALYTICAL RESULTS FOR MW-2
BAKER OIL TOOLS
HOBBS, NEW MEXICO

SAMPLING EVENT DATES

	1/20/97	5/15/97	10/28/97	12/22/97
EPA 8020 COMPOUNDS (ppm)				
Benzene	< 0.002	< 0.002	< 0.002	< 0.002
Ethylbenzene	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	< 0.002	< 0.002	< 0.002	< 0.002
Xylenes	< 0.002	< 0.002	< 0.002	< 0.002
Total (ppm)	BDL	BDL	BDL	BDL
Methyl Tertiary Butyl Ether	< 0.005	< 0.005	< 0.02	< 0.005
EPA 8270 COMPOUNDS (ppm)				
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01
Naphthalene	<0.01	<0.01	<0.01	<0.01
pH (standard units)	7.72	7.06	7.1	N/A
Specific Conductance (µmhos/cm)	4120	4120	N/A	N/A

NOTES: (1) The designation "N/A" indicates that the sample was not analyzed for this parameter.

(2) The designation "BDL" indicates that the sum of the individual constituent concentrations is "below detection limits".

TABLE 1C
1997 CUMULATIVE GROUND-WATER ANALYTICAL RESULTS FOR MW-3
BAKER OIL TOOLS
HOBBS NEW MEXICO

	SAMPLING EVENT DATES			
	1/20/97	5/15/97	10/28/97	12/22/97
EPA 8020 COMPOUNDS (ppm)				
Benzene	< 0.002	< 0.002	< 0.002	< 0.002
Ethylbenzene	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	< 0.002	< 0.002	< 0.002	< 0.002
Xylenes	< 0.002	< 0.002	< 0.002	< 0.002
Total (ppm)	BDL	BDL	BDL	BDL
Methyl Tertiary Butyl Ether(ppm)	< 0.005	< 0.005	**0.041**	< 0.005
EPA 8270 COMPOUNDS (ppm)				
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01
Naphthalene	<0.01	<0.01	<0.01	<0.01
pH (standard units)	7.72	7.11	7.1	N/A
Specific Conductance (µmhos/cm)	2250	2230	N/A	N/A

NOTES: (1) The designation "N/A" indicates that the sample was not analyzed for this parameter.

(2) The designation "BDL" indicates that the sum of the individual constituent concentrations is "below detection limits".

TABLE 1D
1997 CUMULATIVE GROUND-WATER ANALYTICAL RESULTS FOR WW-1
BAKER OIL TOOLS
HOBBS, NEW MEXICO

SAMPLING EVENT DATES

	1/20/97	5/15/97	10/28/97	12/22/97
EPA 8020 COMPOUNDS (ppm)				
Benzene	**0.003**	**0.011**	**0.003**	< 0.002
Ethylbenzene	**0.0024**	**0.0058**	< 0.002	< 0.002
Toluene	< 0.002	< 0.002	< 0.002	< 0.002
Xylenes	**0.0036**	< 0.002	< 0.002	< 0.002
Total (ppm)	**0.009**	**0.0168**	**0.003**	BDL
Methyl Tertiary Butyl Ether(ppm)	**0.017**	**0.045**	**0.077**	< 0.005
EPA 8270 COMPOUNDS (ppm)				
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01
Naphthalene	<0.01	<0.01	<0.01	<0.01
pH (standard units)	7.81	7.28	7.5	N/A
Specific Conductance (µmhos/cm)	2000	2140	N/A	N/A

NOTES: (1) The designation "N/A" indicates that the sample was not analyzed for this parameter.

(2) The designation "BDL" indicates that the sum of the individual constituent concentrations is "below detection limits".

TABLE 1E
1997 CUMULATIVE GROUND-WATER ANALYTICAL RESULTS FOR R-1
BAKER OIL TOOLS
HOBBS, NEW MEXICO

	SAMPLING EVENT DATES			
	1/20/97	5/15/97	10/28/97	12/22/97
EPA 8020 COMPOUNDS (ppm)				
Benzene	< 0.002	< 0.002	N/A	N/A
Ethylbenzene	**0.03**	**0.052**	N/A	N/A
Toluene	< 0.002	< 0.002	N/A	N/A
Xylenes	**0.048**	**0.14**	N/A	N/A
Total (ppm)	**0.078**	**0.192**	BDL	N/A
Methyl Tertiary Butyl Ether(ppm)	< 0.005	< 0.005	N/A	N/A
EPA 8270 COMPOUNDS (ppm)				
2-Methylnaphthalene	**0.21**	**0.12**	N/A	N/A
Naphthalene	**0.18**	**0.21**	N/A	N/A
pH (standard units)	7.37	7.06	N/A	N/A
Specific Conductance (µmhos/cm)	2170	2170	N/A	N/A

NOTES: (1) The designation "N/A" indicates that the sample was not analyzed for this parameter.
(2) The designation "BDL" indicates that the sum of the individual constituent concentrations is "below detection limits".

TABLE 2
1997 CUMULATIVE GROUND-WATER ELEVATION MEASUREMENTS
BAKER OIL TOOLS
HOBBS, NEW MEXICO

Monitoring Well No.	Well Depth (ft)	Top of PVC Casing Elevation (ft MSL)	Ground-water Level Elevation (ft MSL)			
			1/20/97	5/15/97	10/28/97	12/22/97
MW-1	45.7	100.19	68.19	66.69	66.39	66.34
MW-2	45.0	99.56	67.06	65.66	66.21	66.10
MW-3	38.5	99.15	66.70	65.45	66.18	66.04
WW-1	125.0	99.52	66.62	66.77	66.37	66.26
R-1	48.0	100.03	66.93	*	*	*

* - Measurement not taken

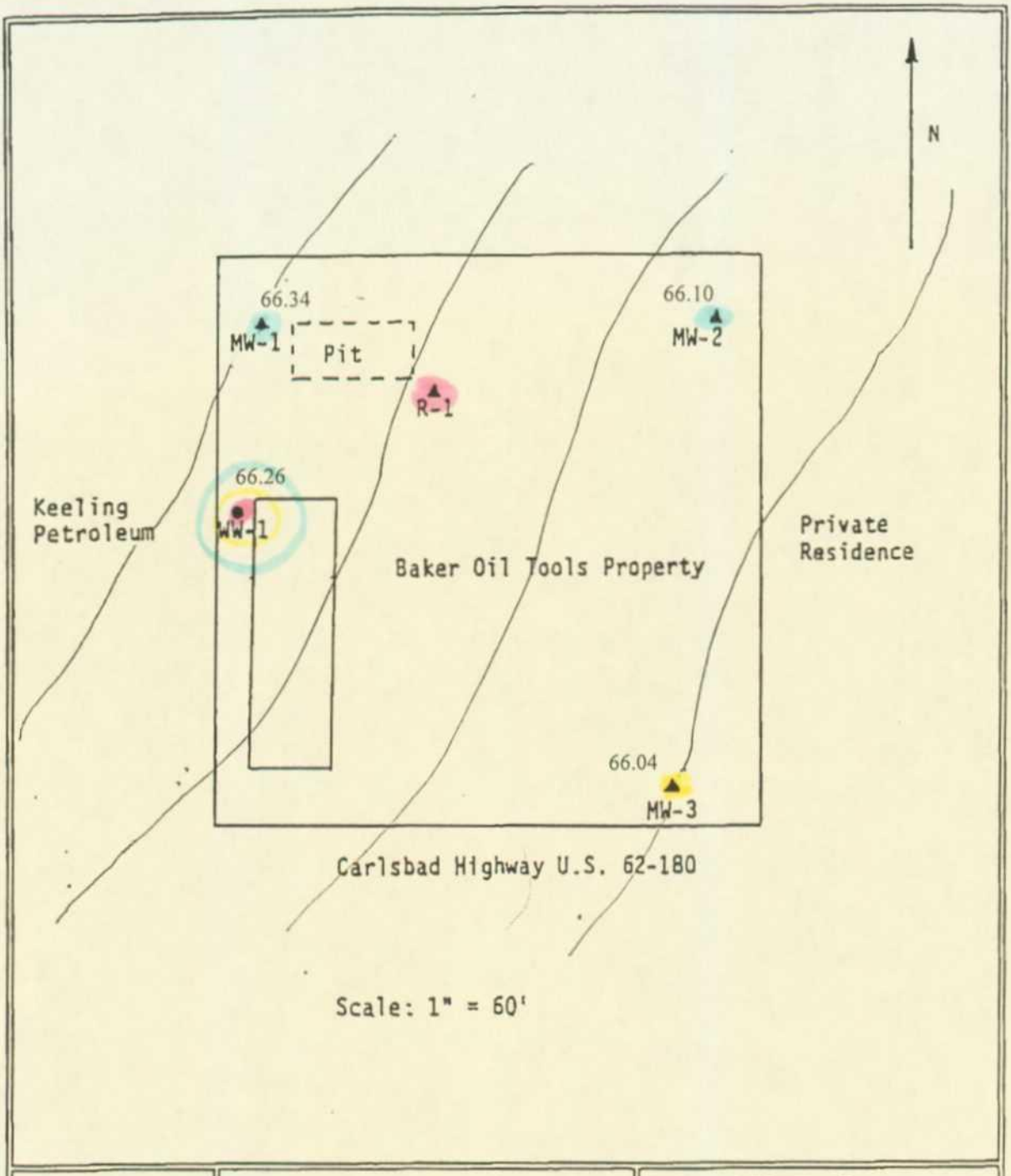

Figure No. 1	Site Map	Baker Oil Tools 2800 W. Marland Hobbs, NM

STATE OF NEW MEXICO

DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

OCT 1996

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

RECEIVED
DEC 11 1996
SLD COPY
Environmental Bureau
Oil Conservation Division

SLD No.: OR- 9602623
REQUEST ID No.: 154590
RECEIVED AT SLD: 7/31/96
USER 55321

SAMPLE COLLECTION: DATE: 7/29/96 TIME: na BY: Pin
SAMPLING LOCATION: Baker Oil R-1
Water
REPORTING UNITS: ug/L

Remarks: Hydrochloric acid was used as a preservative in this sample.

EPA METHOD 8021 VOLATILES BY GAS CHROMATOGRAHY (PID/ELCD)

DATE EXTRACTED: N/A
DATE ANALYZED: 8/2/96 4 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 5

ANALYSIS No.: OR- 9602623
SLD BATCH No.: 400
DILUTION FACTOR: 1.00
REQUEST ID No.: 154590

SAMPLE PRESERVATION: Sample Temperature when received: 18 Degrees C.; pH = 7

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
				uG/L
71-43-2	Benzene	1.3		1.0
108-86-1	Bromobenzene		U	1.0
74-97-5	Bromochloromethane		U	1.0
75-27-4	Bromodichloromethane*		U	1.0
75-25-2	Bromoform*		U	1.0
24-83-9	Bromomethane		U	1.0
78-93-3	2-Butanone (MEK)		U	10.0
104-51-8	n-Butylbenzene	73		1.0
135-98-8	sec-Butylbenzene	48		1.0
98-06-6	tert-Butylbenzene		U	1.0
1634-04-4	tert-Butyl methyl ether (MTBE)		U	10.0
56-23-5	Carbon tetrachloride		U	1.0
108-90-7	Chlorobenzene (monochlorobenzene)		U	1.0
75-00-3	Chloroethane		U	1.0
67-66-3	Chloroform*		U	1.0
74-87-3	Chloromethane		U	1.0
95-49-8	2-Chlorotoluene		U	1.0
106-43-4	4-Chlorotoluene		U	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		U	1.0
124-48-1	Dibromochloromethane*		U	1.0
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))		U	1.0
74-95-3	Dibromomethane		U	1.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)		U	1.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)		U	1.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)		U	1.0
75-71-8	Dichlorodifluoromethane		U	1.0
75-34-3	1,1-Dichloroethane		U	1.0
107-06-2	1,2-Dichloroethane		U	1.0
75-35-4	1,1-Dichloroethene		U	1.0
156-59-2	cis-1,2-Dichloroethene		U	1.0
156-60-5	trans-1,2-Dichloroethene		U	1.0
78-87-5	1,2-Dichloropropane		U	1.0
142-28-9	1,3-Dichloropropane		U	1.0
590-20-7	2,2-Dichloropropane		U	1.0
563-58-6	1,1-Dichloropropene		U	1.0
1006-01-5	cis-1,3-Dichloropropene		U	1.0
1006-02-6	trans-1,3-Dichloropropene		U	1.0
100-41-4	Ethylbenzene	45		1.0
87-68-3	Hexachlorobutadiene		U	1.0
98-82-8	Isopropylbenzene	9.8		1.0
99-87-6	4-Isopropyltoluene		U	2.0
75-09-2	Methylene chloride (Dichloromethane)		U	2.0
91-20-3	Naphthalene	200		10
103-65-1	Propylbenzene	45		1.0
100-42-5	Styrene		U	1.0

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630-20-6	1,1,1,2-Tetrachloroethane		U	1.0
79-34-5	1,1,2,2-Tetrachloroethane		U	1.0
127-18-4	Tetrachloroethene		U	1.0
109-99-9	Tetrahydrofuran (THF)		U	10.0
108-88-3	Toluene	1.6		1.0
87-61-5	1,2,3-Trichlorobenzene		U	1.0
120-82-1	1,2,4-Trichlorobenzene		U	1.0
71-55-6	1,1,1-Trichloroethane		U	1.0
79-00-5	1,1,2-Trichloroethane		U	1.0
79-01-6	Trichloroethene		U	1.0
75-69-4	Trichlorofluoromethane		U	1.0
96-18-4	1,2,3-Trichloropropane		U	1.0
95-63-6	1,2,4-Trimethylbenzene	110		10
108-67-8	1,3,5-Trimethylbenzene	12		1.0
75-01-4	Vinyl chloride		U	1.0
95-47-6	o-Xylene*	28		1.0
N/A	p- & m-Xylene*	12		1.0
N/A	*Total Xylenes*	41		1.0
N/A	*Total Trihalomethanes*		U	1.0

Laboratory Remarks: This sample was diluted and re-analyzed on 8/21/96 to quantitate Naphthalene and 1,2,4-Trimethyl Benzene. The ELCD surrogate recovery was extremely high due to co-eluting peaks, however, the internal standard area was at 94.5% of the expected area . There were 80 compounds observed on the photoionization detector at approximately 10-40 ppb, but not identified.

LABORATORY BATCH QUALITY CONTROL SUMMARY

SURROGATE RECOVERIES:	SURROGATE COMPOUNDS	CONCENTRATION	% RECOVERY
	2-Bromochlorobenzene (Photolonization Detector Surrogate)	132	528.0% High
	2-Bromochlorobenzene(Electrolytic Conductivity Detector Surrogate)	23.9	95.6%
LABORATORY FORTIFIED BLANK RECOVERIES	The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below: COMPOUND / CONCENTRATION (ug/L) / % RECOVERY: cis-1,2-Dichloroethene / 10 / 79%		
LABORATORY BLANKS	No target compounds were detected above the sample detection limit in laboratory blank with the ecxeption of the compound(s) listed below: COMPOUND / CONCENTRATION (ug/L): No Exceptions		

ANALYST: Patrick Basile

QC APPROVED BY: Ken Sherrell

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

ED FIELD OFFICE: ☐

Rob Pine
NMED/Ground Water Bureau
PO Box 26110
Santa Fe, NM 87502

SLD No.: OR- 9602628

REQUEST ID No.: 154595
RECEIVED AT SLD: 7/31/96
☐SLD COPY USER: 55321

AUG 1996 RECEIVED

SAMPLE COLLECTION: DATE: 7/29/96 TIME: 0 BY: Pin
SAMPLING LOCATION: Baker Oil R-1
WSS #: SAMPLE MATRIX: water REPORTING UNITS: ug/L

EPA METHOD 625 NEUTRAL AND BASIC SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

DATE EXTRACTED: 8/5/96 7 Days: Within EPA Holding Time
DATE ANALYZED: 8/5/96 7 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 770

ANALYSIS No.: OR- 9602628
SLD BATCH No.: 405
DILUTION FACTOR: 1.30
REQUEST ID No.: 154595

SAMPLE PRESERVATION: **Sample Temperature when received: 22 Degrees C.; pH = 7**
NOT COMPOSITED

EXTRACTION TECHNIQUE: Separatory Funnel PERCENT MOISTURE: N/A
GPC CLEANUP: Not Used

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL	SDL
83-32-9	Acenaphthene	5	J	1.21
208-96-8	Acenaphthylene		U	1.13
120-12-7	Anthracene		U	0.47
103-33-3	Azobenzene		U	1.30
92-87-5	Benzidine		U	1.30
56-55-3	Benzo(a)anthracene		U	0.16
205-99-2	Benzo(b)fluoranthene		U	0.43
207-08-9	Benzo(k)fluoroanthene		U	0.43
191-24-2	Benzo(g,h,i)perylene		U	1.29
50-32-8	Benzo(a)pyrene		U	0.03
111-91-1	Bis(2-chloroethoxy)methane		U	0.90
111-44-4	Bis(2-chloroethyl)ether		U	0.51
108-60-1	Bis(2-chloroisopropyl)ether		U	0.58
117-81-7	Bis(2-ethylhexyl)phthalate	6		0.43
101-55-3	4-Bromophenylphenyl ether		U	0.62
85-68-7	Butylbenzyl phthalate		U	0.82
106-47-8	4-Chloroaniline		U	0.74
91-58-7	2-Chloronaphthalene		U	0.66
7005-72-3	4-Chlorophenylphenyl ether		U	0.55
218-01-9	Chrysene		U	0.31
53-70-3	Dibenz(a,h)anthracene		U	12.99
132-64-9	Dibenzofuran		U	0.94
84-74-2	Di-n-butyl phthalate		U	0.62
95-50-1	1,2-Dichlorobenzene		U	0.19
541-73-1	1,3-Dichlorobenzene		U	0.31
106-46-7	1,4-Dichlorobenzene		U	0.43
91-94-1	3,3'-Dichlorobenzidine		U	0.23

84-66-2	Diethylphthalate		U	1.01
131-11-3	Dimethylphthalate		U	0.62
121-14-2	2,4-Dinitrotoluene		U	0.58
606-20-2	2,6-Dinitrotoluene		U	0.51
117-84-0	Di-n-octyl phthalate		U	0.39
206-44-0	Fluoranthene		U	0.97
86-73-7	Fluorene	6		0.97
118-74-1	Hexachlorobenzene		U	0.97
87-68-3	Hexachlorobutadiene		U	0.39
77-47-4	Hexachlorocyclopentadiene		U	12.99
67-72-1	Hexachloroethane		U	0.39
193-39-5	Indeno(1,2,3-cd)pyrene		U	12.99
78-59-1	Isophorone		U	1.17
91-57-6	2-Methylnaphthalene	113		1.29
91-20-3	Naphthalene	81		0.82
88-74-4	2-Nitroaniline		U	0.66
99-09-2	3-Nitroaniline		U	0.43
100-01-6	4-Nitroaniline		U	0.66
98-95-3	Nitrobenzene		U	0.53
86-30-6	N-nitrosodiphenylamine		U	0.62
62-75-9	N-nitrosodimethylamine		U	0.62
621-64-7	N-nitroso-di-n-propylamine		U	0.04
85-01-8	Phenanthrene	2		0.31
129-00-0	Pyrene		U	0.43
120-82-1	1,2,4-Trichlorobenzene		U	0.39

COMPOUNDS DETECTED AND TENTATIVELY IDENTIFIED BY MASS SPECTROMETRY (TIC's)

CAS #	TENTATIVE ANALYTE NAME	EST CONC. (ug/L)	LIBRARY MS MATCH	RETENTION TIME (MIN)
13151-29-6	4-Methyl-1-Decene	300	815	19.90
17301-28-9	3,6-Dimethyl-undecane	300	793	18.12
57289-26-6	2-Methyl-1-Dodecanol	200	853	18.30
2217-43-8	5,6,7,8-Tetrahydro-2-Napthalenamine	200	790	19.53
247183-2	1-Ethylidene-1H-Indene	200	881	20.95
54833-48-6	2,6,10,15-Tetramethyl-Heptadecane	200	797	20.73
56292-65-0	2,5-Dimethyl-Dodecane	200	765	16.50
589-90-2	1,4-Dimethyl-Cyclohexane	200	850	20.34
7058-01-7	1-Methyl-2-(1-Methylethyl)-Benzene	100	869	13.85
934-74-7	1-Ethyl-3,5-Dimethyl-Benzene	100	793	18.87
Comment:	Numerous hydrocarbons were observed by GC/MS in the C11 to C 15 range			
	with an approximate total concentration of 20 ug/ml.			

* "Library MS Match" is a number showing the approximate percentage agreement with our 60,000 compound, NIST mass spectral library.
"Retention Time" is the time required for the specific compound to pass through the chromatographic column.

QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS ADDED TO SAMPLE BEFORE EXTRACTION	Surrogate Recovered	% RECOVERY	QC Eval.
Surrogate compounds are added to samples to determine extraction efficiency and QC	Nitrobenzene-d5 (Neutral Surrogate added at 50 ug/L)	30.0	60%	Normal
	2-Fluorobiphenyl (Neutral Surrogate added at 50 ug/L)	32.0	64%	Normal
	Terphenyl-d14 (Neutral Surrogate added at 50 ug/L)	41.0	82%	Normal
LABORATORY FORTIFIED	The % recoveries of target analytes in the batch spike(s) were within the expected range with the following exceptions:			

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de S[illegible], NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9602619
REQUEST ID No.: 154586
RECEIVED AT SLD: 7/31/96
SLD COPY
USER 55321

SAMPLE COLLECTION: DATE: 7/29/96 TIME: na BY: Pin
SAMPLING LOCATION: Baker Oil WW-1
0 Water
REPORTING UNITS: ug/L

Remarks: Hydrocloric acid was used as a preservative in this sample.

EPA METHOD 8021 VOLATILES BY GAS CHROMATOGRAHY (PID/ELCD)

DATE EXTRACTED: N/A
DATE ANALYZED: 8/2/96 4 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 5
0

ANALYSIS No.: OR- 9602619
SLD BATCH No.: 400
DILUTION FACTOR: 1.00
REQUEST ID No.: 154586

SAMPLE PRESERVATION: Sample Temperature when received: 19 Degrees C.; pH = 2

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
				uG/L
71-43-2	Benzene	6.7		1.0
108-86-1	Bromobenzene		U	1.0
74-97-5	Bromochloromethane		U	1.0
75-27-4	Bromodichloromethane*		U	1.0
75-25-2	Bromoform*		U	1.0
24-83-9	Bromomethane		U	1.0
78-93-3	2-Butanone (MEK)		U	10.0
104-51-8	n-Butylbenzene		U	1.0
135-98-8	sec-Butylbenzene		U	1.0
98-06-6	tert-Butylbenzene		U	1.0
1634-04-4	tert-Butyl methyl ether (MTBE)		U	10.0
56-23-5	Carbon tetrachloride		U	1.0
108-90-7	Chlorobenzene (monochlorobenzene)		U	1.0
75-00-3	Chloroethane		U	1.0
67-66-3	Chloroform*		U	1.0
74-87-3	Chloromethane		U	1.0
95-49-8	2-Chlorotoluene		U	1.0
106-43-4	4-Chlorotoluene		U	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		U	1.0
124-48-1	Dibromochloromethane*		U	1.0
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))		U	1.0
74-95-3	Dibromomethane		U	1.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)		U	1.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)		U	1.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)		U	1.0
75-71-8	Dichlorodifluoromethane		U	1.0
75-34-3	1,1-Dichloroethane		U	1.0
107-06-2	1,2-Dichloroethane		U	1.0
75-35-4	1,1-Dichloroethene		U	1.0
156-59-2	cis-1,2-Dichloroethene		U	1.0
156-60-5	trans-1,2-Dichloroethene		U	1.0
78-87-5	1,2-Dichloropropane		U	1.0
142-28-9	1,3-Dichloropropane		U	1.0
590-20-7	2,2-Dichloropropane		U	1.0
563-58-6	1,1-Dichloropropene		U	1.0
1006-01-5	cis-1,3-Dichloropropene		U	1.0
1006-02-6	trans-1,3-Dichloropropene		U	1.0
100-41-4	Ethylbenzene		U	1.0
87-68-3	Hexachlorobutadiene		U	1.0
98-82-8	Isopropylbenzene		U	1.0
99-87-6	4-Isopropyltoluene		U	2.0
75-09-2	Methylene chloride (Dichloromethane)		U	2.0

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91-20-3	Naphthalene	0.7	J	1.0
103-65-1	Propylbenzene		U	1.0
100-42-5	Styrene		U	1.0
630-20-6	1,1,1,2-Tetrachloroethane		U	1.0
79-34-5	1,1,2,2-Tetrachloroethane		U	1.0
127-18-4	Tetrachloroethene		U	1.0
109-99-9	Tetrahydrofuran (THF)		U	10.0
108-88-3	Toluene		U	1.0
87-61-5	1,2,3-Trichlorobenzene		U	1.0
120-82-1	1,2,4-Trichlorobenzene		U	1.0
71-55-6	1,1,1-Trichloroethane		U	1.0
79-00-5	1,1,2-Trichloroethane		U	1.0
79-01-6	Trichloroethene		U	1.0
75-69-4	Trichlorofluoromethane		U	1.0
96-18-4	1,2,3-Trichloropropane		U	1.0
95-63-6	1,2,4-Trimethylbenzene	0.7	J	1.0
108-67-8	1,3,5-Trimethylbenzene		U	1.0
75-01-4	Vinyl chloride		U	1.0
95-47-6	o-Xylene#	0.8	J	1.0
N/A	p- & m-Xylene#	1.0		1.0
N/A	#Total Xylenes#	1.8		1.0
N/A	*Total Trihalomethanes*		U	1.0

LABORATORY BATCH QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS	CONCENTRATION	% RECOVERY
SURROGATE RECOVERIES:	2-Bromochlorobenzene (PhotoIonization Detector Surrogate)	23.51	94.0%
	2-Bromochlorobenzene(Electrolytic Conductivity Detector Surrogate)	23.1	92.4%

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below:

COMPOUND	CONCENTRATION (ug/L)	% RECOVERY
cis-1,2-Dichloroethene	10	79%

LABORATORY BLANKS

No target compounds were detected above the sample detection limit in laboratory blank with the ecxeption of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: Patrick Basile

QC APPROVED BY: Ken Sherrell

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

ED FIELD OFFICE: ☐

Rob Pine
NMED/Ground Water Bureau
PO Box 26110
Santa Fe, NM 87502

SLD No.: OR- 9602624

REQUEST ID No.: 154591

RECEIVED AT SLD: 7/31/96

☐ SLD COPY

USER: 55321

AUG 1996 RECEIVED

SAMPLE COLLECTION: DATE: 7/29/96 TIME: 0 BY: Pin

SAMPLING LOCATION: Baker Oil WW-1

WSS #: _____ SAMPLE MATRIX: water REPORTING UNITS: ug/L

EPA METHOD 625 NEUTRAL AND BASIC SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

DATE EXTRACTED: 8/5/96 7 Days: Within EPA Holding Time

DATE ANALYZED: 8/5/96 7 Days: Within EPA Analysis Time

SAMPLE VOL (ml): 980

ANALYSIS No.: OR- 9602624

SLD BATCH No.: 405

DILUTION FACTOR: 1.02

REQUEST ID No.: 154591

SAMPLE PRESERVATION: **Sample Temperature when received: 23 Degrees C.; pH = 2**
NOT COMPOSITED

EXTRACTION TECHNIQUE: Separatory Funnel PERCENT MOISTURE: N/A

GPC CLEANUP: Not Used

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
83-32-9	Acenaphthene		U	0.95
208-96-8	Acenaphthylene		U	0.89
120-12-7	Anthracene		U	0.37
103-33-3	Azobenzene		U	1.02
92-87-5	Benzidine		U	1.02
56-55-3	Benzo(a)anthracene		U	0.12
205-99-2	Benzo(b)fluoranthene		U	0.34
207-08-9	Benzo(k)fluoroanthene		U	0.34
191-24-2	Benzo(g,h,i)perylene		U	1.01
50-32-8	Benzo(a)pyrene		U	0.02
111-91-1	Bis(2-chloroethoxy)methane		U	0.70
111-44-4	Bis(2-chloroethyl)ether		U	0.40
108-60-1	Bis(2-chloroisopropyl)ether		U	0.46
117-81-7	Bis(2-ethylhexyl)phthalate	9		0.34
101-55-3	4-Bromophenylphenyl ether		U	0.49
85-68-7	Butylbenzyl phthalate		U	0.64
106-47-8	4-Chloroaniline		U	0.58
91-58-7	2-Chloronaphthalene		U	0.52
7005-72-3	4-Chlorophenylphenyl ether		U	0.43
218-01-9	Chrysene		U	0.24
53-70-3	Dibenz(a,h)anthracene		U	10.20
132-64-9	Dibenzofuran		U	0.73
84-74-2	Di-n-butyl phthalate	1	J	0.49
95-50-1	1,2-Dichlorobenzene		U	0.15
541-73-1	1,3-Dichlorobenzene		U	0.24
106-46-7	1,4-Dichlorobenzene		U	0.34
91-94-1	3,3'-Dichlorobenzidine		U	0.18

84-66-2	Diethylphthalate		U	0.80
131-11-3	Dimethylphthal[illegible]		U	0.49
121-14-2	2,4-Dinitrotoluene		U	0.46
606-20-2	2,6-Dinitrotoluene		U	0.40
117-84-0	Di-n-octyl phthalate		U	0.31
206-44-0	Fluoranthene		U	0.77
86-73-7	Fluorene		U	0.77
118-74-1	Hexachlorobenzene		U	0.77
87-68-3	Hexachlorobutadiene		U	0.31
77-47-4	Hexachlorocyclopentadiene		U	10.20
67-72-1	Hexachloroethane		U	0.31
193-39-5	Indeno(1,2,3-cd)pyrene		U	10.20
78-59-1	Isophorone		U	0.92
91-57-6	2-Methylnaphthalene		U	1.01
91-20-3	Naphthalene		U	0.64
88-74-4	2-Nitroaniline		U	0.52
99-09-2	3-Nitroaniline		U	0.34
100-01-6	4-Nitroaniline		U	0.52
98-95-3	Nitrobenzene		U	0.42
86-30-6	N-nitrosodiphenylamine		U	0.49
62-75-9	N-nitrosodimethylamine		U	0.49
621-64-7	N-nitroso-di-n-propylamine		U	0.03
85-01-8	Phenanthrene		U	0.24
129-00-0	Pyrene		U	0.34
120-82-1	1,2,4-Trichlorobenzene		U	0.31

QUALITY CONTROL SUMMARY

Surrogate compounds are added	SURROGATE COMPOUNDS ADDED TO SAMPLE BEFORE EXTRACTION	Surrogate Recovered	% RECOVERY	QC Eval.
to samples to determine extraction efficiency and QC	Nitrobenzene-d5 (Neutral Surrogate added at 50 ug/L)	26.0	52%	Normal
	2-Fluorobiphenyl (Neutral Surrogate added at 50 ug/L)	25.0	50%	Normal
	Terphenyl-d14 (Neutral Surrogate added at 50 ug/L)	34.0	68%	Normal

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries of target analytes in the batch spike(s) were within the expected range with the following exceptions:

COMPOUND	CONCENTRATION	% RECOVERY
No Exceptions		

LABORATORY BLANKS

No target analytes were detected above the sample detection limit in laboratory blank with the exception of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: **Tim Chapman** QC APPROVED BY: **Roberta Hine**

DEFINITIONS

**	**Concentration Exceeds EPA's allowable Maximum Contamination Level**
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows: B Analyte was detected in laboratory blank J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL) U No analyte was detected above the Sample Detection Limit.
MCL	Maximum Contamination Level Allowed by EPA for regulated analytes
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO
DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9602620
REQUEST ID No.: 154587
RECEIVED AT SLD: 7/31/96
SLD COPY
USER 55321

SAMPLE COLLECTION: DATE: 7/29/96 TIME: na BY: Pin
SAMPLING LOCATION: Baker Oil MW-1
0 Water
REPORTING UNITS: ug/L

Remarks: Hydrocloric acid was used as a preservative in this sample.
No Targeted Compounds were detected in this sample.

EPA METHOD 8021 VOLATILES BY GAS CHROMATOGRAHY (PID/ELCD)

DATE EXTRACTED: N/A
DATE ANALYZED: 8/2/96 4 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 5
0

ANALYSIS No.: OR- 9602620
SLD BATCH No.: 400
DILUTION FACTOR: 1.00
REQUEST ID No.: 154587

SAMPLE PRESERVATION: **Sample Temperature when received: 18 Degrees C.; pH = 4**

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
				uG/L
71-43-2	Benzene		U	1.0
108-86-1	Bromobenzene		U	1.0
74-97-5	Bromochloromethane		U	1.0
75-27-4	Bromodichloromethane*		U	1.0
75-25-2	Bromoform*		U	1.0
24-83-9	Bromomethane		U	1.0
78-93-3	2-Butanone (MEK)		U	10.0
104-51-8	n-Butylbenzene		U	1.0
135-98-8	sec-Butylbenzene		U	1.0
98-06-6	tert-Butylbenzene		U	1.0
1634-04-4	tert-Butyl methyl ether (MTBE)		U	10.0
56-23-5	Carbon tetrachloride		U	1.0
108-90-7	Chlorobenzene (monochlorobenzene)		U	1.0
75-00-3	Chloroethane		U	1.0
67-66-3	Chloroform*		U	1.0
74-87-3	Chloromethane		U	1.0
95-49-8	2-Chlorotoluene		U	1.0
106-43-4	4-Chlorotoluene		U	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		U	1.0
124-48-1	Dibromochloromethane*		U	1.0
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))		U	1.0
74-95-3	Dibromomethane		U	1.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)		U	1.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)		U	1.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)		U	1.0
75-71-8	Dichlorodifluoromethane		U	1.0
75-34-3	1,1-Dichloroethane		U	1.0
107-06-2	1,2-Dichloroethane		U	1.0
75-35-4	1,1-Dichloroethene		U	1.0
156-59-2	cis-1,2-Dichloroethene		U	1.0
156-60-5	trans-1,2-Dichloroethene		U	1.0
78-87-5	1,2-Dichloropropane		U	1.0
142-28-9	1,3-Dichloropropane		U	1.0
590-20-7	2,2-Dichloropropane		U	1.0
563-58-6	1,1-Dichloropropene		U	1.0
1006-01-5	cis-1,3-Dichloropropene		U	1.0
1006-02-6	trans-1,3-Dichloropropene		U	1.0
100-41-4	Ethylbenzene		U	1.0
87-68-3	Hexachlorobutadiene		U	1.0
98-82-8	Isopropylbenzene		U	1.0
99-87-6	4-Isopropyltoluene		U	2.0
75-09-2	Methylene chloride (Dichloromethane)		U	2.0

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91-20-3	Naphthalene		U	1.0
103-65-1	Propylbenzene		U	1.0
100-42-5	Styrene		U	1.0
630-20-6	1,1,1,2-Tetrachloroethane		U	1.0
79-34-5	1,1,2,2-Tetrachloroethane		U	1.0
127-18-4	Tetrachloroethene		U	1.0
109-99-9	Tetrahydrofuran (THF)		U	10.0
108-88-3	Toluene		U	1.0
87-61-5	1,2,3-Trichlorobenzene		U	1.0
120-82-1	1,2,4-Trichlorobenzene		U	1.0
71-55-6	1,1,1-Trichloroethane		U	1.0
79-00-5	1,1,2-Trichloroethane		U	1.0
79-01-6	Trichloroethene		U	1.0
75-69-4	Trichlorofluoromethane		U	1.0
96-18-4	1,2,3-Trichloropropane		U	1.0
95-63-6	1,2,4-Trimethylbenzene		U	1.0
108-67-8	1,3,5-Trimethylbenzene		U	1.0
75-01-4	Vinyl chloride		U	1.0
95-47-6	o-Xylene#		U	1.0
N/A	p- & m-Xylene#		U	1.0
N/A	#Total Xylenes#	0.0	U	1.0
N/A	*Total Trihalomethanes*		U	1.0

LABORATORY BATCH QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS	CONCENTRATION	% RECOVERY
SURROGATE RECOVERIES:	2-Bromochlorobenzene (Photolonization Detector Surrogate)	23.85	95.4%
	2-Bromochlorobenzene(Electrolytic Conductivity Detector Surrogate)	26.58	106.3%

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below:

COMPOUND	CONCENTRATION (ug/L)	% RECOVERY
cis-1,2-Dichloroethene	10	79%

LABORATORY BLANKS

No target compounds were detected above the sample detection limit in laboratory blank with the ecxeption of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: Patrick Basile

QC APPROVED BY: Ken Sherrell

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO — DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

ED FIELD OFFICE: ☐

Rob Pine
NMED/Ground Water Quality Bureau
PO Box 26110
Santa Fe, NM 87502

SLD No.: OR- 9602625

REQUEST ID No.: 154592
RECEIVED AT SLD: 7/31/96
☐SLD COPY USER: 55321

AUG 1996 RECEIVED

SAMPLE COLLECTION: DATE: 7/29/96 TIME: 0 BY: Pin
SAMPLING LOCATION: Baker Oil MW-1
WSS #: _____ SAMPLE MATRIX: water REPORTING UNITS: ug/L

EPA METHOD 625 NEUTRAL AND BASIC SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

DATE EXTRACTED: 8/5/96 7 Days: Within EPA Holding Time
DATE ANALYZED: 8/5/96 7 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 910

ANALYSIS No.: OR- 9602625
SLD BATCH No.: 405
DILUTION FACTOR: 1.10
REQUEST ID No.: 154592

SAMPLE PRESERVATION: Sample Temperature when received: 21 Degrees C.; pH = 7
NOT COMPOSITED

EXTRACTION TECHNIQUE: Separatory Funnel PERCENT MOISTURE: N/A
GPC CLEANUP: Not Used

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
83-32-9	Acenaphthene		U	1.02
208-96-8	Acenaphthylene		U	0.96
120-12-7	Anthracene		U	0.40
103-33-3	Azobenzene		U	1.10
92-87-5	Benzidine		U	1.10
56-55-3	Benzo(a)anthracene		U	0.13
205-99-2	Benzo(b)fluoranthene		U	0.36
207-08-9	Benzo(k)fluoroanthene		U	0.36
191-24-2	Benzo(g,h,i)perylene		U	1.09
50-32-8	Benzo(a)pyrene		U	0.02
111-91-1	Bis(2-chloroethoxy)methane		U	0.76
111-44-4	Bis(2-chloroethyl)ether		U	0.43
108-60-1	Bis(2-chloroisopropyl)ether		U	0.49
117-81-7	Bis(2-ethylhexyl)phthalate	4		0.36
101-55-3	4-Bromophenylphenyl ether		U	0.53
85-68-7	Butylbenzyl phthalate		U	0.69
106-47-8	4-Chloroaniline		U	0.63
91-58-7	2-Chloronaphthalene		U	0.56
7005-72-3	4-Chlorophenylphenyl ether		U	0.46
218-01-9	Chrysene		U	0.26
53-70-3	Dibenz(a,h)anthracene		U	10.99
132-64-9	Dibenzofuran		U	0.79
84-74-2	Di-n-butyl phthalate		U	0.53
95-50-1	1,2-Dichlorobenzene		U	0.16
541-73-1	1,3-Dichlorobenzene		U	0.26
106-46-7	1,4-Dichlorobenzene		U	0.36
91-94-1	3,3'-Dichlorobenzidine		U	0.20

84-66-2	Diethylphthalat		U	0.86
131-11-3	Dimethylphthal		U	0.53
121-14-2	2,4-Dinitrotoluene		U	0.49
606-20-2	2,6-Dinitrotoluene		U	0.43
117-84-0	Di-n-octyl phthalate		U	0.33
206-44-0	Fluoranthene		U	0.82
86-73-7	Fluorene		U	0.82
118-74-1	Hexachlorobenzene		U	0.82
87-68-3	Hexachlorobutadiene		U	0.33
77-47-4	Hexachlorocyclopentadiene		U	10.99
67-72-1	Hexachloroethane		U	0.33
193-39-5	Indeno(1,2,3-cd)pyrene		U	10.99
78-59-1	Isophorone		U	0.99
91-57-6	2-Methylnaphthalene		U	1.09
91-20-3	Naphthalene		U	0.69
88-74-4	2-Nitroaniline		U	0.56
99-09-2	3-Nitroaniline		U	0.36
100-01-6	4-Nitroaniline		U	0.56
98-95-3	Nitrobenzene		U	0.45
86-30-6	N-nitrosodiphenylamine		U	0.53
62-75-9	N-nitrosodimethylamine		U	0.53
621-64-7	N-nitroso-di-n-propylamine		U	0.03
85-01-8	Phenanthrene		U	0.26
129-00-0	Pyrene		U	0.36
120-82-1	1,2,4-Trichlorobenzene		U	0.33

QUALITY CONTROL SUMMARY

Surrogate compounds are added	SURROGATE COMPOUNDS ADDED TO SAMPLE BEFORE EXTRACTION	Surrogate Recovered	% RECOVERY	QC Eval.
to samples to determine extraction efficiency and QC	Nitrobenzene-d5 (Neutral Surrogate added at 50 ug/L)	29.0	58%	Normal
	2-Fluorobiphenyl (Neutral Surrogate added at 50 ug/L)	27.0	54%	Normal
	Terphenyl-d14 (Neutral Surrogate added at 50 ug/L)	40.0	80%	Normal

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries of target analytes in the batch spike(s) were within the expected range with the following exceptions:

COMPOUND	CONCENTRATION	% RECOVERY
No Exceptions		

LABORATORY BLANKS

No target analytes were detected above the sample detection limit in laboratory blank with the exception of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: Tim Chapman QC APPROVED BY: Roberta Hine

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows: B Analyte was detected in laboratory blank J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL) U No analyte was detected above the Sample Detection Limit.
MCL	Maximum Contamination Level Allowed by EPA for regulated analytes
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

SCIENTIFIC LABORATORY DIVISION

P.O. Box 470
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9602621
REQUEST ID No.: 154588
RECEIVED AT SLD: 7/31/96
SLD COPY
USER 55321

SAMPLE COLLECTION: DATE: 7/29/96 TIME: na BY: Pin
SAMPLING LOCATION: Baker Oil MW-2
0 Water
REPORTING UNITS: ug/L

Remarks: Hydrocloric acid was used as a preservative in this sample.
No Targeted Compounds were detected in this sample.

EPA METHOD 8021 VOLATILES BY GAS CHROMATOGRAHY (PID/ELCD)

DATE EXTRACTED: N/A
DATE ANALYZED: 8/2/96 4 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 5
0

ANALYSIS No.: OR- 9602621
SLD BATCH No.: 400
DILUTION FACTOR: 1.00
REQUEST ID No.: 154588

SAMPLE PRESERVATION: Sample Temperature when received: 18 Degrees C.; pH = 4

SEP 1996 RECEIVED

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
				uG/L
71-43-2	Benzene		U	1.0
108-86-1	Bromobenzene		U	1.0
74-97-5	Bromochloromethane		U	1.0
75-27-4	Bromodichloromethane*		U	1.0
75-25-2	Bromoform*		U	1.0
24-83-9	Bromomethane		U	1.0
78-93-3	2-Butanone (MEK)		U	10.0
104-51-8	n-Butylbenzene		U	1.0
135-98-8	sec-Butylbenzene		U	1.0
98-06-6	tert-Butylbenzene		U	1.0
1634-04-4	tert-Butyl methyl ether (MTBE)		U	10.0
56-23-5	Carbon tetrachloride		U	1.0
108-90-7	Chlorobenzene (monochlorobenzene)		U	1.0
75-00-3	Chloroethane		U	1.0
67-66-3	Chloroform*		U	1.0
74-87-3	Chloromethane		U	1.0
95-49-8	2-Chlorotoluene		U	1.0
106-43-4	4-Chlorotoluene		U	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		U	1.0
124-48-1	Dibromochloromethane*		U	1.0
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))		U	1.0
74-95-3	Dibromomethane		U	1.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)		U	1.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)		U	1.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)		U	1.0
75-71-8	Dichlorodifluoromethane		U	1.0
75-34-3	1,1-Dichloroethane		U	1.0
107-06-2	1,2-Dichloroethane		U	1.0
75-35-4	1,1-Dichloroethene		U	1.0
156-59-2	cis-1,2-Dichloroethene		U	1.0
156-60-5	trans-1,2-Dichloroethene		U	1.0
78-87-5	1,2-Dichloropropane		U	1.0
142-28-9	1,3-Dichloropropane		U	1.0
590-20-7	2,2-Dichloropropane		U	1.0
563-58-6	1,1-Dichloropropene		U	1.0
1006-01-5	cis-1,3-Dichloropropene		U	1.0
1006-02-6	trans-1,3-Dichloropropene		U	1.0
100-41-4	Ethylbenzene		U	1.0
87-68-3	Hexachlorobutadiene		U	1.0
98-82-8	Isopropylbenzene		U	1.0
99-87-6	4-Isopropyltoluene		U	2.0
75-09-2	Methylene chloride (Dichloromethane)		U	2.0

91-20-3	Naphthalene		U	1.0
103-65-1	Propylbenzene		U	1.0
100-42-5	Styrene		U	1.0
630-20-6	1,1,1,2-Tetrachloroethane		U	1.0
79-34-5	1,1,2,2-Tetrachloroethane		U	1.0
127-18-4	Tetrachloroethene		U	1.0
109-99-9	Tetrahydrofuran (THF)		U	10.0
108-88-3	Toluene		U	1.0
87-61-5	1,2,3-Trichlorobenzene		U	1.0
120-82-1	1,2,4-Trichlorobenzene		U	1.0
71-55-6	1,1,1-Trichloroethane		U	1.0
79-00-5	1,1,2-Trichloroethane		U	1.0
79-01-6	Trichloroethene		U	1.0
75-69-4	Trichlorofluoromethane		U	1.0
96-18-4	1,2,3-Trichloropropane		U	1.0
95-63-6	1,2,4-Trimethylbenzene		U	1.0
108-67-8	1,3,5-Trimethylbenzene		U	1.0
75-01-4	Vinyl chloride		U	1.0
95-47-6	o-Xylene*		U	1.0
N/A	p- & m-Xylene#		U	1.0
N/A	#Total Xylenes#	0.0	U	1.0
N/A	*Total Trihalomethanes*		U	1.0

Laboratory Remarks: **Acetone was observed in this sample at 35 ppb.**

LABORATORY BATCH QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS	CONCENTRATION	% RECOVERY
SURROGATE RECOVERIES:	2-Bromochlorobenzene (Photolonization Detector Surrogate)	24.14	96.6%
	2-Bromochlorobenzene(Electrolytic Conductivity Detector Surrogate)	26.18	104.7%

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below:

COMPOUND	CONCENTRATION (ug/L)	% RECOVERY
cis-1,2-Dichloroethene	10	79%

LABORATORY BLANKS

No target compounds were detected above the sample detection limit in laboratory blank with the ecxeption of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: **Patrick Basile** QC APPROVED BY: **Ken Sherrell** KS

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	*Sample Detection Limit - The lowest concentration which can be differentiated from Zero with* 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

ED FIELD OFFICE: ☐

Rob Pine
NMED/Ground Water Quality Bureau
PO Box 26111
Santa Fe, NM 87502

SLD No.: OR- 9602626

REQUEST ID No.: 154593
RECEIVED AT SLD: 7/31/96
☐SLD COPY USER: 55321

SAMPLE COLLECTION: DATE: 7/29/96 TIME: 0 BY: Pin
SAMPLING LOCATION: Baker Oil MW-2
WSS #: _____ SAMPLE MATRIX: water REPORTING UNITS: ug/L

EPA METHOD 625 NEUTRAL AND BASIC SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

DATE EXTRACTED: 8/5/96 7 Days: Within EPA Holding Time
DATE ANALYZED: 8/5/96 7 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 900

ANALYSIS No.: OR- 9602626
SLD BATCH No.: 405
DILUTION FACTOR: 1.11
REQUEST ID No.: 154593

SAMPLE PRESERVATION: Sample Temperature when received: 23 Degrees C.; pH = 7
NOT COMPOSITED

EXTRACTION TECHNIQUE: Separatory Funnel PERCENT MOISTURE: N/A
GPC CLEANUP: Not Used

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL	SDL
83-32-9	Acenaphthene		U	1.03
208-96-8	Acenaphthylene		U	0.97
120-12-7	Anthracene		U	0.40
103-33-3	Azobenzene		U	1.11
92-87-5	Benzidine		U	1.11
56-55-3	Benzo(a)anthracene		U	0.13
205-99-2	Benzo(b)fluoranthene		U	0.37
207-08-9	Benzo(k)fluoroanthene		U	0.37
191-24-2	Benzo(g,h,i)perylene		U	1.10
50-32-8	Benzo(a)pyrene		U	0.02
111-91-1	Bis(2-chloroethoxy)methane		U	0.77
111-44-4	Bis(2-chloroethyl)ether		U	0.43
108-60-1	Bis(2-chloroisopropyl)ether		U	0.50
117-81-7	Bis(2-ethylhexyl)phthalate	3		0.37
101-55-3	4-Bromophenylphenyl ether		U	0.53
85-68-7	Butylbenzyl phthalate		U	0.70
106-47-8	4-Chloroaniline		U	0.63
91-58-7	2-Chloronaphthalene		U	0.57
7005-72-3	4-Chlorophenylphenyl ether		U	0.47
218-01-9	Chrysene		U	0.27
53-70-3	Dibenz(a,h)anthracene		U	11.11
132-64-9	Dibenzofuran		U	0.80
84-74-2	Di-n-butyl phthalate		U	0.53
95-50-1	1,2-Dichlorobenzene		U	0.17
541-73-1	1,3-Dichlorobenzene		U	0.27
106-46-7	1,4-Dichlorobenzene		U	0.37
91-94-1	3,3'-Dichlorobenzidine		U	0.20

84-66-2	Diethylphthalate		U	0.87
131-11-3	Dimethylphthalate		U	0.53
121-14-2	2,4-Dinitrotoluene		U	0.50
606-20-2	2,6-Dinitrotoluene		U	0.43
117-84-0	Di-n-octyl phthalate		U	0.33
206-44-0	Fluoranthene		U	0.83
86-73-7	Fluorene		U	0.83
118-74-1	Hexachlorobenzene		U	0.83
87-68-3	Hexachlorobutadiene		U	0.33
77-47-4	Hexachlorocyclopentadiene		U	11.11
67-72-1	Hexachloroethane		U	0.33
193-39-5	Indeno(1,2,3-cd)pyrene		U	11.11
78-59-1	Isophorone		U	1.00
91-57-6	2-Methylnaphthalene		U	1.10
91-20-3	Naphthalene		U	0.70
88-74-4	2-Nitroaniline		U	0.57
99-09-2	3-Nitroaniline		U	0.37
100-01-6	4-Nitroaniline		U	0.57
98-95-3	Nitrobenzene		U	0.46
86-30-6	N-nitrosodiphenylamine		U	0.53
62-75-9	N-nitrosodimethylamine		U	0.53
621-64-7	N-nitroso-di-n-propylamine		U	0.03
85-01-8	Phenanthrene		U	0.27
129-00-0	Pyrene		U	0.37
120-82-1	1,2,4-Trichlorobenzene		U	0.33

QUALITY CONTROL SUMMARY

Surrogate compounds are added to samples to determine extraction efficiency and QC	SURROGATE COMPOUNDS ADDED TO SAMPLE BEFORE EXTRACTION	Surrogate Recovered	% RECOVERY	QC Eval.
	Nitrobenzene-d5 (Neutral Surrogate added at 50 ug/L)	31.0	62%	Normal
	2-Fluorobiphenyl (Neutral Surrogate added at 50 ug/L)	29.3	59%	Normal
	Terphenyl-d14 (Neutral Surrogate added at 50 ug/L)	65.7	131%	Normal

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries of target analytes in the batch spike(s) were within the expected range with the following exceptions:

COMPOUND	CONCENTRATION	% RECOVERY
No Exceptions		

LABORATORY BLANKS

No target analytes were detected above the sample detection limit in laboratory blank with the exception of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: **Tim Chapman** QC APPROVED BY: **Roberta Hine**

DEFINITIONS

**	**Concentration Exceeds EPA's allowable Maximum Contamination Level**
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows: B Analyte was detected in laboratory blank J Analyte was detected at a level below which an accurate quantitation can be given (~5 * SDL) U No analyte was detected above the Sample Detection Limit.
MCL	Maximum Contamination Level Allowed by EPA for regulated analytes
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de [illegible]d, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

REPORT TO CLIENT:

Attn: Rob Pine
Ground Water Quality Bureau
P.O. Box 26110
Santa Fe, New Mexico 87502

SLD No.: OR- 9602622
REQUEST ID No.: 154589
RECEIVED AT SLD: 7/31/96
SLD COPY
USER 55321

OCT 1996 RECEIVED

SAMPLE COLLECTION: DATE: 7/29/96 TIME: na BY: Pin
SAMPLING LOCATION: Baker Oil MW-3
Water
REPORTING UNITS: ug/L

Remarks: Hydrocloric acid was used as a preservative in this sample.
No Targeted Compounds were detected in this sample.

EPA METHOD 8021 VOLATILES BY GAS CHROMATOGRAHY (PID/ELCD)

DATE EXTRACTED: N/A
DATE ANALYZED: 8/2/96 4 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 5
0

ANALYSIS No.: OR- 9602622
SLD BATCH No.: 400
DILUTION FACTOR: 1.00
REQUEST ID No.: 154589

SAMPLE PRESERVATION: Sample Temperature when received: 17 Degrees C.; pH = 3

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
				uG/L
71-43-2	Benzene		U	1.0
108-86-1	Bromobenzene		U	1.0
74-97-5	Bromochloromethane		U	1.0
75-27-4	Bromodichloromethane*		U	1.0
75-25-2	Bromoform*		U	1.0
24-83-9	Bromomethane		U	1.0
78-93-3	2-Butanone (MEK)		U	10.0
104-51-8	n-Butylbenzene		U	1.0
135-98-8	sec-Butylbenzene		U	1.0
98-06-6	tert-Butylbenzene		U	1.0
1634-04-4	tert-Butyl methyl ether (MTBE)		U	10.0
56-23-5	Carbon tetrachloride		U	1.0
108-90-7	Chlorobenzene (monochlorobenzene)		U	1.0
75-00-3	Chloroethane		U	1.0
67-66-3	Chloroform*		U	1.0
74-87-3	Chloromethane		U	1.0
95-49-8	2-Chlorotoluene		U	1.0
106-43-4	4-Chlorotoluene		U	1.0
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)		U	1.0
124-48-1	Dibromochloromethane*		U	1.0
106-93-4	1,2-Dibromoethane (Ethylene dibromide (EDB))		U	1.0
74-95-3	Dibromomethane		U	1.0
95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)		U	1.0
541-73-1	1,3-Dichlorobenzene (m-Dichlorobenzene)		U	1.0
106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)		U	1.0
75-71-8	Dichlorodifluoromethane		U	1.0
75-34-3	1,1-Dichloroethane		U	1.0
107-06-2	1,2-Dichloroethane		U	1.0
75-35-4	1,1-Dichloroethene		U	1.0
156-59-2	cis-1,2-Dichloroethene		U	1.0
156-60-5	trans-1,2-Dichloroethene		U	1.0
78-87-5	1,2-Dichloropropane		U	1.0
142-28-9	1,3-Dichloropropane		U	1.0
590-20-7	2,2-Dichloropropane		U	1.0
563-58-6	1,1-Dichloropropene		U	1.0
1006-01-5	cis-1,3-Dichloropropene		U	1.0
1006-02-6	trans-1,3-Dichloropropene		U	1.0
100-41-4	Ethylbenzene		U	1.0
87-68-3	Hexachlorobutadiene		U	1.0
98-82-8	Isopropylbenzene		U	1.0
99-87-6	4-Isopropyltoluene		U	2.0
75-09-2	Methylene chloride (Dichloromethane)		U	2.0
91-20-3	Naphthalene		U	1.0
103-65-1	Propylbenzene		U	1.0
100-42-5	Styrene		U	1.0

[illegible]	1,1,1,2-Tetrachloroethane		U	1.0
79-34-5	1,1,2,2-Tetrachloroethane		U	1.0
127-18-4	Tetrachloroethene		U	1.0
109-99-9	Tetrahydrofuran (THF)		U	10.0
108-88-3	Toluene		U	1.0
87-61-5	1,2,3-Trichlorobenzene		U	1.0
120-82-1	1,2,4-Trichlorobenzene		U	1.0
71-55-6	1,1,1-Trichloroethane		U	1.0
79-00-5	1,1,2-Trichloroethane		U	1.0
79-01-6	Trichloroethene		U	1.0
75-69-4	Trichlorofluoromethane		U	1.0
96-18-4	1,2,3-Trichloropropane		U	1.0
95-63-6	1,2,4-Trimethylbenzene		U	1.0
108-67-8	1,3,5-Trimethylbenzene		U	1.0
75-01-4	Vinyl chloride		U	1.0
95-47-6	o-Xylene*		U	1.0
N/A	p- & m-Xylene*		U	1.0
N/A	*Total Xylenes*	0.0	U	1.0
N/A	*Total Trihalomethanes*		U	1.0

Laboratory Remarks: Acetone was observed in this sample at 22 ppb. There were 28 compounds observed at approximately 1-10 ppb on the photoionization detector, but not identified.

The Following Compound(s) Were Tentatively (by Library Match of Mass Spectrum) Identified by GC/MS Sample Reanalysis

CAS #	Tentatively Identified Compound Name	GC/MS Match %	R.T.	Approx. Conc.	
611-14-3	1-Ethyl-2-Methyl-Benzene	97.9%	31.82	50.00	ug/L
2870-04-4	2-Ethyl-1,3-Dimethyl-Benzene	98.0%	37.12	5.00	ug/L
27133-93-3	2,3-Dihydro-1-Methyl-Indene	98.2%	37.54	5.00	ug/L
488-23-3	1,2,3,4-Tetramethyl-Benzene	99.2%	38.8	5.00	ug/L

LABORATORY BATCH QUALITY CONTROL SUMMARY

	SURROGATE COMPOUNDS	CONCENTRATION	% RECOVERY
SURROGATE RECOVERIES:	2-Bromochlorobenzene (Photolonization Detector Surrogate)	26.18	104.7%
	2-Bromochlorobenzene(Electrolytic Conductivity Detector Surrogate)	28.34	113.4%

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries for compounds in the batch spike were from 80% to 120% with the exception of the compounds listed below:

COMPOUND	CONCENTRATION (ug/L)	% RECOVERY
cis-1,2-Dichloroethene	10	79%

LABORATORY BLANKS

No target compounds were detected above the sample detection limit in laboratory blank with the ecxeption of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: Patrick Basile

QC APPROVED BY: Ken Sherrell

DEFINITIONS

**	Concentration Exceeds EPA's allowable Maximum Contamination Level
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows:
	B Analyte was detected in laboratory blank
	J Analyte was detected at a level below which an accurate quantitation can be given (~5 * SDL)
	U No analyte was detected above the Sample Detection Limit.
SDL	Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)

STATE OF NEW MEXICO

DEPARTMENT OF HEALTH

SCIENTIFIC LABORATORY DIVISION

P.O. Box 4700
Albuquerque, NM 87196-4700

700 Camino de Salud, NE
[505] 841-2500

ORGANIC CHEMISTRY SECTION [505] 841-2570

ED FIELD OFFICE: ☐

Rob Pine
NMED/Ground Water Quality Bur.
PO Box 26110
Santa Fe, NM 87502

SLD No.: OR- 9602627

REQUEST ID No.: 154594
RECEIVED AT SLD: 7/31/96
☐SLD COPY USER: 55321

AUG 1996 RECEIVED

SAMPLE COLLECTION: DATE: 7/29/96 TIME: 0 BY: Pin
SAMPLING LOCATION: Baker Oil MW-3
WSS #: _____ SAMPLE MATRIX: water REPORTING UNITS: ug/L

EPA METHOD 625 NEUTRAL AND BASIC SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

DATE EXTRACTED: 8/5/96 7 Days: Within EPA Holding Time
DATE ANALYZED: 8/5/96 7 Days: Within EPA Analysis Time
SAMPLE VOL (ml): 1000

ANALYSIS No.: OR- 9602627
SLD BATCH No.: 405
DILUTION FACTOR: 1.00
REQUEST ID No.: 154594

SAMPLE PRESERVATION: Sample Temperature when received: 23 Degrees C.; pH = 7
NOT COMPOSITED

EXTRACTION TECHNIQUE: Separatory Funnel PERCENT MOISTURE: N/A
GPC CLEANUP: Not Used

CAS #	ANALYTE NAME	CONC. (ug/L)	QUAL.	SDL
83-32-9	Acenaphthene		U	0.93
208-96-8	Acenaphthylene		U	0.87
120-12-7	Anthracene		U	0.36
103-33-3	Azobenzene		U	1.00
92-87-5	Benzidine		U	1.00
56-55-3	Benzo(a)anthracene		U	0.12
205-99-2	Benzo(b)fluoranthene		U	0.33
207-08-9	Benzo(k)fluoroanthene		U	0.33
191-24-2	Benzo(g,h,i)perylene		U	0.99
50-32-8	Benzo(a)pyrene		U	0.02
111-91-1	Bis(2-chloroethoxy)methane		U	0.69
111-44-4	Bis(2-chloroethyl)ether		U	0.39
108-60-1	Bis(2-chloroisopropyl)ether		U	0.45
117-81-7	Bis(2-ethylhexyl)phthalate	1	J	0.33
101-55-3	4-Bromophenylphenyl ether		U	0.48
85-68-7	Butylbenzyl phthalate		U	0.63
106-47-8	4-Chloroaniline		U	0.57
91-58-7	2-Chloronaphthalene		U	0.51
7005-72-3	4-Chlorophenylphenyl ether		U	0.42
218-01-9	Chrysene		U	0.24
53-70-3	Dibenz(a,h)anthracene		U	10.00
132-64-9	Dibenzofuran		U	0.72
84-74-2	Di-n-butyl phthalate		U	0.48
95-50-1	1,2-Dichlorobenzene		U	0.15
541-73-1	1,3-Dichlorobenzene		U	0.24
106-46-7	1,4-Dichlorobenzene		U	0.33
91-94-1	3,3'-Dichlorobenzidine		U	0.18

84-66-2	Diethylphthalate		U	0.78
131-11-3	Dimethylphthalate		U	0.48
121-14-2	2,4-Dinitrotoluene		U	0.45
606-20-2	2,6-Dinitrotoluene		U	0.39
117-84-0	Di-n-octyl phthalate		U	0.30
206-44-0	Fluoranthene		U	0.75
86-73-7	Fluorene		U	0.75
118-74-1	Hexachlorobenzene		U	0.75
87-68-3	Hexachlorobutadiene		U	0.30
77-47-4	Hexachlorocyclopentadiene		U	10.00
67-72-1	Hexachloroethane		U	0.30
193-39-5	Indeno(1,2,3-cd)pyrene		U	10.00
78-59-1	Isophorone		U	0.90
91-57-6	2-Methylnaphthalene		U	0.99
91-20-3	Naphthalene		U	0.63
88-74-4	2-Nitroaniline		U	0.51
99-09-2	3-Nitroaniline		U	0.33
100-01-6	4-Nitroaniline		U	0.51
98-95-3	Nitrobenzene		U	0.41
86-30-6	N-nitrosodiphenylamine		U	0.48
62-75-9	N-nitrosodimethylamine		U	0.48
621-64-7	N-nitroso-di-n-propylamine		U	0.03
85-01-8	Phenanthrene		U	0.24
129-00-0	Pyrene		U	0.33
120-82-1	1,2,4-Trichlorobenzene		U	0.30

QUALITY CONTROL SUMMARY

Surrogate compounds are added	SURROGATE COMPOUNDS ADDED TO SAMPLE BEFORE EXTRACTION	Surrogate Recovered	% RECOVERY	QC Eval.
to samples to determine extraction efficiency and QC	Nitrobenzene-d5 (Neutral Surrogate added at 50 ug/L)	28.0	56%	Normal
	2-Fluorobiphenyl (Neutral Surrogate added at 50 ug/L)	28.0	56%	Normal
	Terphenyl-d14 (Neutral Surrogate added at 50 ug/L)	37.0	74%	Normal

LABORATORY FORTIFIED BLANK RECOVERIES

The % recoveries of target analytes in the batch spike(s) were within the expected range with the following exceptions:

COMPOUND	CONCENTRATION	% RECOVERY
No Exceptions		

LABORATORY BLANKS

No target analytes were detected above the sample detection limit in laboratory blank with the exception of the compound(s) listed below:

COMPOUND	CONCENTRATION (ug/L)
No Exceptions	

ANALYST: **Tim Chapman** QC APPROVED BY: **Roberta Hine**

DEFINITIONS

**	**Concentration Exceeds EPA's allowable Maximum Contamination Level**
CAS#	Chemical Abstract Services Number - Unique number to help identify analytes listed by different names
CONC.	Concentration (ug/L) of analyte actually detected in the sample
QUAL	Qualifier of analytical results as follows: B Analyte was detected in laboratory blank J *Analyte was detected at a level below which an accurate quanitation can be given (~5 * SDL)* U No analyte was detected above the Sample Detection Limit.
MCL	Maximum Contamination Level Allowed by EPA for regulated analytes
SDL	*Sample Detection Limit - The lowest concentration which can be differentiated from Zero with 99% confidence taking sample size (compositing) into account.*
ug/L	Concentration Units - micrograms per liter which is approximately equivalent to Parts Per Billion (ppb)