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REPORTS

DATE:



OCT | 6 1998

September 30, 1998

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

THIRD QUARTER REPORT OF 1998 GROUND-WATER SAMPLING EVENT

Former Baker Oil Tools Facility 2800 West Marland Hobbs, New Mexico Project No. 60260-8-1332-03

Dear Mr. Olson:

Baker Oil Tools is submitting the third quarter of 1998 ground-water monitoring report in response to the NMOCD request of June 20, 1995 to provide quarterly monitoring data for ground water contamination in the direct vicinity of the former disposal pit on the property located at 2800 West 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 the second quarterly monitoring event on August 3, 1998. During this quarterly monitoring event, the wells were gauged for depth, bailed and sampled. Monitoring Wells MW-1, MW-2 and MW-3 were bailed of three volumes and allowed to equalize prior to sampling. The Water Well (WW-1) which is a 125 feet deep was only bailed one volume. Monitoring Well R-1 was not sampled because product was observed during bailing. Samples collected from each well were shipped to Core Laboratories for analysis.

Baker Oil Tools - Hobbs, New Mexico Law Project No. 60260-8-1332-03

- 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 the 1998 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 groundwater level measurements for the previous four 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) 625-4200.

Sincerely,

For Baker Hughes INTEQ

Myk Thornton Health, Safety and

Environmental Coordinator

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THIRD QUARTER **REPORT OF** 1998 **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. 60260-8-1332-03 **AUGUST 1998**

	TA	TABLE 1A		
	2	MW-1		
EPA 8020A	4 th Quarter 12/22/97	1 st Quarter 2/19/98	2 nd Quarter 4/23/98	3 ^ਜ Quarter 8/4/98
Benzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Ethylbenzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Toluene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Xylenes	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Total BETX	BDL	TOB	BDL	BDL
EPA 8020		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
Methyl Tertiary Butyl Ether	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm
EPA 8270B			1.1	
2-Methylnaphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
Naphthalene	mdd 10.0>	<0.01 ppm	<0.01 ppm	<0.01 ppm
EPA 120.1 & 150.1			18	
pH (standard units)	N/A	6.8	7.1	7.3
Specific Conductance	N/A	1308	1301	1320
(μmhos/cm)				

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".

	TA M	TABLE 1B MW-2		
EPA 8020A	4 ^a Quarter 12/22/97	1 st Quarter 2/19/98	2 nd Quarrer 4/23/98	3 rd Quarter 8/4/98
Benzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Ethylbenzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Toluene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Xylenes	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Total BETX	BDL	BDL	TOB	BDL
EPA 8020			F - 3 - 4	
Methyl Tertiary Butyl Ether	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm
EPA 8270B				
2-Methylnaphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
Naphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
EPA 120.1 & 150.1				
pH (standard units)	N/A	7.0	7.1	7.5
Specific Conductance	N/A	4150	3970	3570
(mmhos/cm)				

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".

	/I	TABLE 1C MW-3		
EPA-8020A	4th Quarter 12/02/97	1s. Quarter 2/19/98	2 nd Quarter 4/23/98	3 rd Quarter 8/4/98
Benzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Ethylbenzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Toluene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Xylenes	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Total BETX	BDL	BDL	TOB	TOB
EPA 8020				
Methyl Tertiary Butyl Ether	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm	< 0.005 ppm
EPA 8270B				
2-Methylnaphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
Naphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
EPA 120.1 & 150.1				
pH (standard units)	N/A	7.0	7.1	7.9
Specific Conductance	N/A	1959	1841	1960
(µmhos/cm)				

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".

	TA V	TABLE 1D WW-1		
EPA'8020A	4 [®] Quarter 12/22/97	1st Quarter 2/19/98	2 nd Quarter 4/23/98	3 rd Quarter 8/4/98
Benzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Ethylbenzene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Toluene	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Xylenes	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm	< 0.002 ppm
Total BETX	BDL	TOB	TOS	BDL
EPA 8020				
Methyl Tertiary Butyl Ether	< 0.005 ppm	0.015 ppm	< 0.005 ppm	< 0.005 ppm
EPA 8270B				
2-Methylnaphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
Naphthalene	<0.01 ppm	<0.01 ppm	<0.01 ppm	<0.01 ppm
EPA 120.1 & 150.1				
pH (standard units)	N/A	7.3	7.5	7.8
Specific Conductance	N/A	742	836	842
(himios) cini)				

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".

	TA	TABLE 1E R-1		
EPA 8020A	4 th Quarter 12/22/97	1 st Quarter 2/19/98	2 nd Quarter 4/23/98	3 rd Quarter : 8/4/98
Benzene	N/A	N/A	N/A	N/A
Ethylbenzene	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A
Xylenes	N/A	N/A	N/A	N/A
Total BETX	N/A	N/A	N/A	N/A
EPA.8020				
Methyl Tertiary Butyl Ether	N/A	N/A	N/A	N/A
EPA 8270B			V V 4 W	
2-Methylnaphthalene	N/A	N/A	N/A	N/A
Naphthalene	N/A	N/A	N/A	N/A
EPA 120.1 & 150.1				
pH (standard units)	N/A	N/A	N/A	N/A
Specific Conductance	N/A	N/A	N/A	N/A
(mmhos/cm)				

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

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Baker Oil Tools - Hobbs, New Mexico Law Project No. 60260-8-1332-03

QUARTERLY CUMLATIVE GROUND-WATER ELEVATIONS

	levation		8/4/98	65.70	65.32	65.20	65.62	*
	Ground-water Level Elevation	(ft MSL)	4/23/98	90.99	65.71	65.56	65.98	*
	Ground-		2/19/98	66.61	65.97	66.05	66.19	*
			12/22/97	66.34	66.10	66.04	66.26	*
Top of PVC	Casing Elevation	(ft MSL)		100.19	99.56	99.15	99.52	100.03
	Well	Depth (ft)	;	45.7	45.0	38.5	125.0	48.0
	Monitoring	Well No.		MW-1	MW-2	MW-3	WW-1	R-1

* - Measurement not taken

