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REPORTS

DATE:

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BAKER OIL TOOLS
A Baker Hughes company

February 2, 1999

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

FOURTH QUARTER REPORT OF 1998
GROUND-WATER SAMPLING EVENT
Former Baker Oil Tools Facility
2800 West Marland
Hobbs, New Mexico
Project No. 60260-8-1332-04

Dear Mr. Olson:

Baker Oil Tools is submitting the fourth quarter of 1999 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 fourth quarter monitoring event on December 29, 1999. 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. Monitoring well R-1 and water well WW-1 were sampled but not purged. One foot of product was observed in the bailer during the sampling of monitoring well R-1. Samples collected from each well were shipped to Core Laboratories for analysis.

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 previous four monitoring events 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 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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TABLE 1A
MW-1

EPA 8020A	1st Quarter 2/19/98	2nd Quarter 4/23/98	3rd Quarter 8/4/98	4th Quarter 12/29/98
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	BDL	BDL
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)	6.8	7.1	7.3	7.2
Specific Conductance (µmhos/cm)	1308	1301	1320	1320

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
MW-2

EPA 8020A	1st Quarter 2/19/98	2nd Quarter 4/23/98	3rd Quarter 8/4/98	4th Quarter 12/29/98
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	BDL	BDL
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)	7.0	7.1	7.5	7.2
Specific Conductance (µmhos/cm)	4150	3970	3570	3630

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
MW-3

EPA 8020A	1st Quarter 2/19/98	2nd Quarter 4/23/98	3rd Quarter 8/4/98	4th Quarter 12/29/98
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	BDL	BDL
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)	7.0	7.1	7.9	7.1
Specific Conductance (µmhos/cm)	1959	1841	1960	1870

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
WW-1

EPA 8020A	1st Quarter 2/19/98	2nd Quarter 4/23/98	3rd Quarter 8/4/98	4th Quarter 12/29/98
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	BDL	BDL
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)	7.0	7.1	7.9	7.7
Specific Conductance (µmhos/cm)	1959	1841	1960	196

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
R-1

EPA 8020A	1st Quarter 2/19/98	2nd Quarter 4/23/98	3rd Quarter 8/4/98	4th Quarter 12/29/98
Benzene	N/A	N/A	N/A	< 0.002 ppm
Ethylbenzene	N/A	N/A	N/A	**0.041 ppm**
Toluene	N/A	N/A	N/A	< 0.002 ppm
Xylenes	N/A	N/A	N/A	**0.035 ppm**
Total BETX	N/A	N/A	N/A	**0.076 ppm**
EPA 8020				
Methyl Tertiary Butyl Ether	N/A	N/A	N/A	< 0.005 ppm
EPA 8270B				
2-Methylnaphthalene	N/A	N/A	N/A	**2.0 ppm**
Naphthalene	N/A	N/A	N/A	**1.2 ppm**
EPA 120.1 & 150.1				
pH (standard units)	N/A	N/A	N/A	N/A
Specific Conductance (µmhos/cm)	N/A	N/A	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".

QUARTERLY CUMLATIVE GROUND-WATER ELEVATIONS

Monitoring Well No.	Well Depth (ft)	Top of PVC Casing Elevation (ft MSL)	Ground-water Level Elevation (ft MSL)			
			2/19/98	4/23/98	8/4/98	12/29/98
MW-1	45.7	100.19	66.61	66.06	65.70	66.14
MW-2	45.0	99.56	65.97	65.71	65.32	65.21
MW-3	38.5	99.15	66.05	65.56	65.20	65.15
WW-1	125.0	99.52	66.19	65.98	65.62	65.37
R-1	48.0	100.03	*	*	*	63.93

* - Measurement not taken

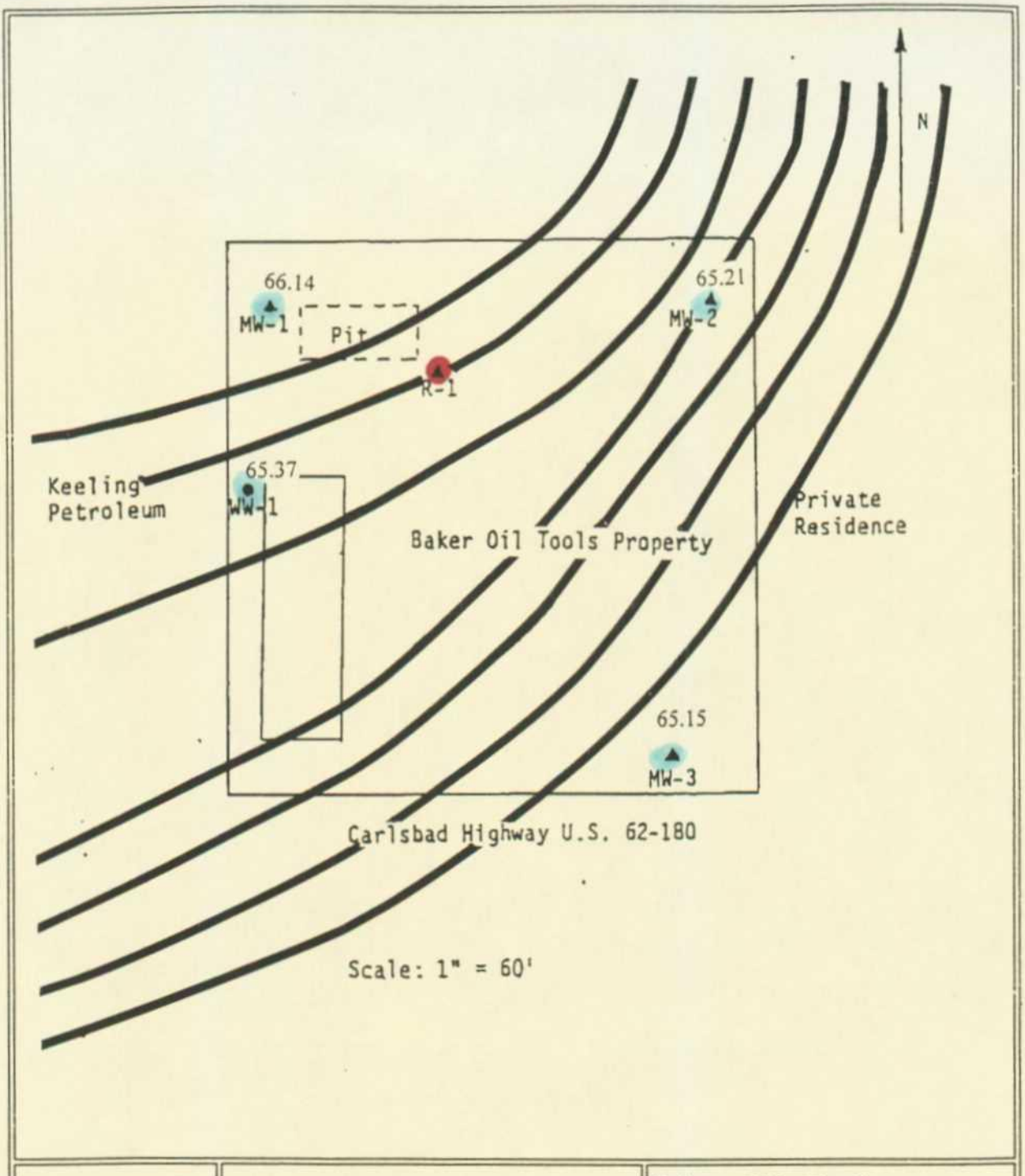

Figure No. 1	Groundwater Gradient Map	Baker Oil Tools 2800 W. Marland Hobbs, NM