

3RP-325

Reports

Date: 2002

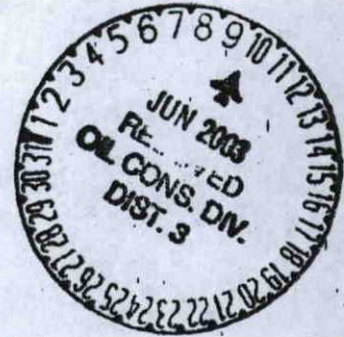


Environmental Services
188 County Road 4900
Bloomfield, New Mexico 87413
(505) 634-4956 (office)
(505) 632-4781 (fax)

June 6, 2003

Mr. William Olson
Hydrologist
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

District Copy
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Has NOT been processed.



RE: 2002 GROUND WATER SUMMARY REPORT

Dear Mr. Olson:

Enclosed for your review is the 2002 Ground Water Summary Report. The report presents monitoring data for eleven sites having petroleum hydrocarbon impacted ground water, which resulted from the past use of unlined surface impoundments. The sites included in the report are listed in Table 1.

In 2002, seven sites achieved four or more consecutive quarters of water quality data meeting NMWQCC standards for BTEX. Williams submitted final closure reports for four of these sites and has received OCD closure approval on three of the sites. At your request, Williams has submitted a revised potentiometric surface map for the fourth site to allow completion of the OCD review. Final closure reports for the remaining three sites are currently being prepared and will be submitted soon. Table 2 lists the sites that have met the cleanup objectives in 2002.

Of the eleven active sites, seven have accumulations of LNAPL in one or more monitoring well. In 2002, passive collection devices were deployed in all wells containing measurable accumulations of LNAPL. Periodic emptying of the collection devices along with active bailing of LNAPL during the quarterly sampling events continues.

The remaining four active sites consist of three sites with concentrations of dissolved BTEX in excess of cleanup standards. At each of these sites, only the source area well exceeds the standards. The fourth site, Wilmerding 1M, has had dry wells since May 2001. The samples collected at that time contained no detectable BTEX. The hay field surrounding this site is being irrigated this season and it is anticipated that ground water levels will rise sufficiently to allow sample collection.

Thank you for your time to review this submittal. If you have any questions regarding the report, you may call me at (505) 634-4956.

Respectfully,

James P. Struhs 6/6/03
JAMES P. STRUHS
(FOR MARK B. HARVEY)

Mark B. Harvey
Project Manager

Attachments
Enclosure

c: Denny Foust, OCD Aztec District Office
Bill Liess, BLM Farmington District Office

Table 1. List of Active Sites for 2002 Report

Count	Site Name	Unit Letter	Section	Township	Range	Longitude	Latitude	OCD Initial Notification
1	Chamberlain 1	F	14	32N	12W	-108.068853	36.990549	30-Sep-99
2	Davis 1	E	11	31N	12W	-108.068919	36.916257	2-Mar-99
3	Dogie East Pit	D	4	25N	6W	-107.478874	36.434196	7-Jul-97
4	Florance 40	G	21	30N	8W	-107.67775	36.800088	27-Jan-97
5	Florance M 47X	G	5	30N	9W	-107.799823	36.843166	27-Jan-97
6	Honolulu Drip	B	15	26N	4W	-107.238469	36.492341	18-Jun-96
7	Ice Canyon Drip	J	13	26N	7W	-107.52226	36.484972	1-Dec-97
8	Jicarilla Contract 147-6	C	6	25N	5W	-107.402363	36.433963	13-Aug-98
9	Patterson A Com A1	G	2	31N	12W	-108.061165	36.930755	2-Mar-99
10	Pritchard 2	J	6	30N	8W	-107.712068	36.837817	22-Feb-99
11	Wilmerding 1M	C	10	31N	13W	-108.193158	36.91846	5-Jun-98

Table 2. List of Sites Closed in 2002

Count	Site Name	Unit Letter	Section	Township	Range	Longitude	Latitude	OCD Initial Notification	Status
1	Blanco Wash Drip	J	31	27N	8W	-107.721574	36.530995	19-Feb-99	Approved
2	Dogie North Pit	D	4	25N	6W	-107.479158	36.435784	7-Jul-97	Report Pending
3	Florance 124	C	27	29N	9W	-107.76698	36.70209	12-Aug-96	Pending Approval
4	Grenier 4A	M	7	31N	11W	-108.036001	36.910167	18-Oct-99	Report Pending
5	Kaufman 1	H	33	31N	13W	-108.202128	36.860121	9-Mar-00	Approved
6	O' Shea 1M	F	3	31N	13W	-108.193596	36.932228	6-Jun-98	Report Pending
7	Zachry 18E	O	11	28N	10W	-107.860007	36.670885	6-Sep-96	Approved

Site Summary Report

Site Name: Jicarilla Contract 147-6

Reporting Period: 2002

Location: Unit C, Sec 6, Twn 25N, Rng 5W

Canyon: Tapicito

Operator: Amoco

Vulnerable Class: expanded

OCD Ranking: 40

Lead Agency: NMOCD / JAEPO

Status Narrative

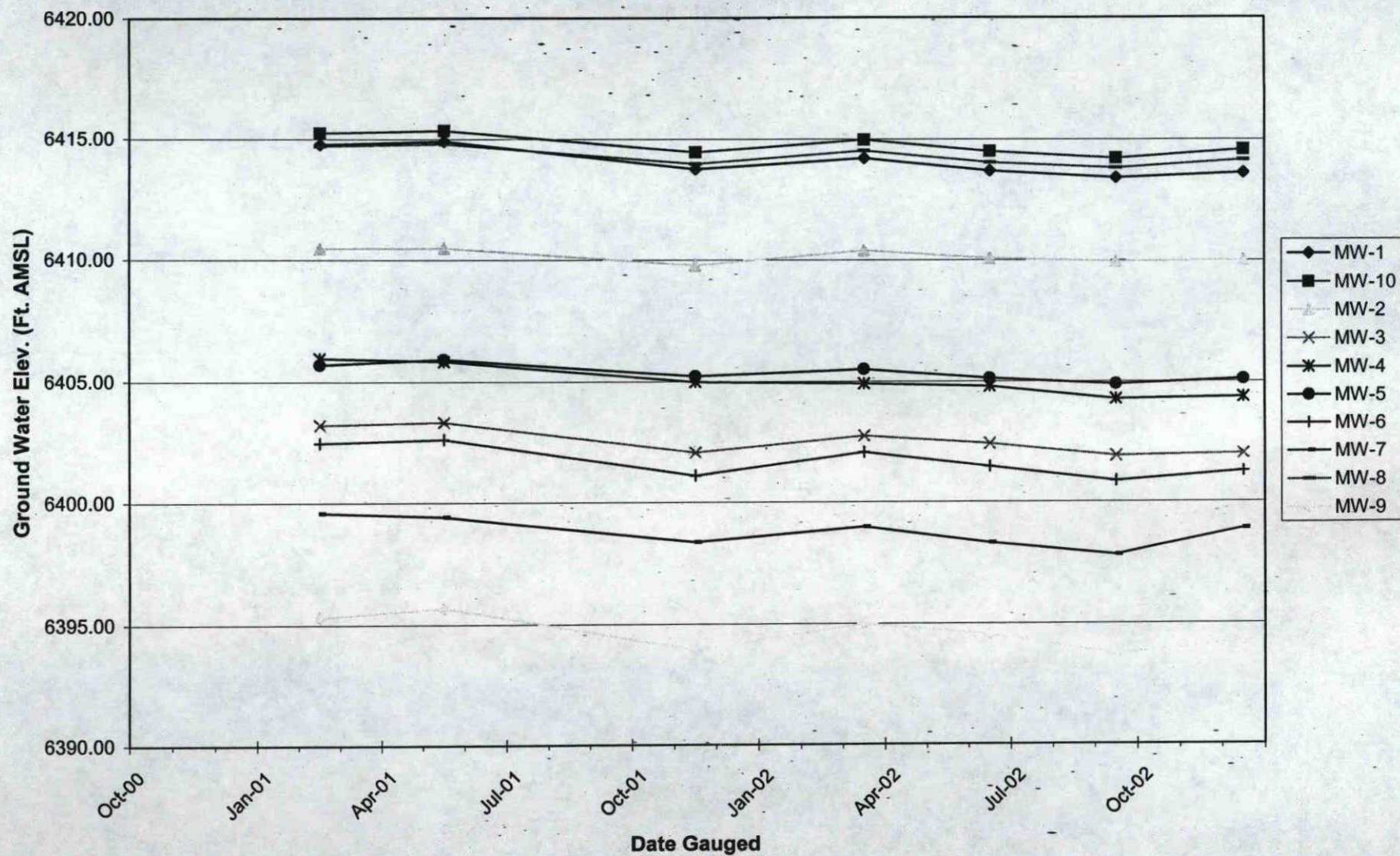
Thirteen quarters of water quality data have been collected from the ten monitoring wells located at this site. Concentrations of benzene in MW-2, the source area well, exceeded WQCC cleanup standards in the first and fourth quarters. Benzene was below the cleanup standard at 3.8 ppb and 6.7 ppb in the second and third quarters, respectively. A former drip pit that was located to the southeast near the current pipeline riser and meter has apparently impacted water quality in the vicinity of well MW-8. The contaminant plume or plumes have moved northwest to the downgradient extent of the monitoring network.

Concentrations of dissolved BTEX in downgradient wells MW-3, MW-4 and MW-6 have consistently exceeded cleanup standards. In the first and second quarters, BTEX levels in the sentinel wells, MW-7 and MW-9, were below the cleanup standards. The concentration of total BTEX in MW-7 increased to 7,020 ppb in the third quarter and 10,450ppb in the fourth quarter. Well MW-9, which is located approximately 13-meters downgradient of MW-7 contained no detectable BTEX constituents in the second and fourth quarters. In the third quarter, benzene was measured at 66 ppb in this well. Installation of additional monitoring points to redefine the downgradient extent of the plume is planned for 2003.

Potentiometric surface maps (Figure 2) depict a northwest by north ground water flow direction at an average hydraulic gradient of 0.025. No significant seasonal variations in flow direction or gradient are evident. Seasonal fluctuations in water-table elevation at the site are illustrated in the enclosed hydrograph.



Jicarilla 147-6 Hydrograph



Analytical Data Summary

Site Name:

Jicarilla Contract 147-6

Reporting Period:

1/1/02 To 12/31/02

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-1						
	3/29/02	125429MAR02	ND	ND	ND	ND
	6/18/02	100518JUN02	ND	ND	ND	ND
MW-10						
	3/29/02	124629MAR02	ND	ND	ND	ND
	6/18/02	095718JUN02	ND	ND	ND	ND
MW-2						
	3/29/02	142729MAR02	41.	8.0	75.	810
	6/18/02	105118JUN02	3.8	ND	4.5	8.1
	9/27/02	155927SEP02	6.7	ND	3.1	ND
	12/12/02	125612DEC02	22.	ND	14.	100
MW-3						
	3/29/02	140029MAR02	5300	3000	240	5800
	6/18/02	113118JUN02	4800	4300	260	5800
	9/27/02	153827SEP02	6100	6400	320	6600
	12/12/02	130812DEC02	5800	8100	380	5100
MW-4						
	3/29/02	135629MAR02	100	ND	22.	ND
	6/18/02	111918JUN02	95.	ND	19.	ND
	9/27/02	153227SEP02	91.	ND	19.	ND
	12/12/02	125912DEC02	150	72.	35.	55.
MW-5						
	3/29/02	135129MAR02	7.5	ND	150	22.
	6/18/02	111118JUN02	6.5	ND	150	28.
	9/27/02	152327SEP02	6.2	ND	170	24.
	12/12/02	125012DEC02	10.	4.6	170	29.
MW-6						
	3/29/02	140629MAR02	28000	650	400	2200
	6/18/02	120618JUN02	23000	ND	410	2300
	9/27/02	150627SEP02	20000	3300	390	2900
	12/12/02	131012DEC02	17000	ND	290	1700
MW-7						
	3/29/02	141129MAR02	ND	ND	ND	ND
	6/18/02	115518JUN02	ND	ND	ND	ND
	9/27/02	145527SEP02	800	3600	120	2500
	12/12/02	121112DEC02	1600	6000	250	2600

Site Name:

Jicarilla Contract 147-6

Reporting Period:

1/1/02 To 12/31/02

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-8						
	3/29/02	134229MAR02	470	2.5	8.2	5.7
	6/18/02	110018JUN02	180	ND	4.5	ND
	9/27/02	154827SEP02	110	ND	3.9	ND
	12/12/02	132112DEC02	210	ND	5.1	ND
MW-9						
	3/29/02	141629MAR02	6.4	ND	ND	ND
	6/18/02	114518JUN02	ND	ND	ND	ND
	9/27/02	144727SEP02	66.	ND	ND	ND
	12/12/02	132312DEC02	ND	ND	ND	ND

December 31, 2002

Mr. Jim Struhs
MILE HIGH ENVIRONMENTAL
187 C.R. 4980
Bloomfield, NM 87413

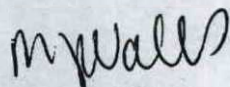
RE: Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Dear Mr. Struhs:

Enclosed are the analytical results for sample(s) received by the laboratory on December 17, 2002. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,



Mary Jane Walls
mjwalls@pacelabs.com
Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Lab Project Number: 6065819

Client Project ID: SJB-GW J.C. 147.6

Project	Sample				
<u>Sample Number</u>	<u>Number</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
6065819-001	605680628	121112DEC02	Water	12/12/02 12:11	12/17/02 08:00
6065819-002	605680636	125912DEC02	Water	12/12/02 12:59	12/17/02 08:00
6065819-003	605680644	130812DEC02	Water	12/12/02 13:08	12/17/02 08:00
6065819-004	605680651	125012DEC02	Water	12/12/02 12:50	12/17/02 08:00
6065819-006	605680677	132312DEC02	Water	12/12/02 13:23	12/17/02 08:00
6065819-007	605680685	132112DEC02	Water	12/12/02 13:21	12/17/02 08:00
6065819-008	605680693	125612DEC02	Water	12/12/02 12:56	12/17/02 08:00
6065819-009	605680701	131012DEC02	Water	12/12/02 13:10	12/17/02 08:00
6065819-010	605700897	121312DEC02	Soil	12/12/02 12:13	12/17/02 08:00

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Solid results are reported on a wet weight basis

Lab Sample No: 605680628 Project Sample Number: 6065819-001 Date Collected: 12/12/02 12:11
Client Sample ID: 121112DEC02 Matrix: Water Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	1600	ug/l	100	50.0	12/20/02 09:09 SHF		71-43-2		
Ethylbenzene	250	ug/l	10.	5.0	12/19/02 12:43 SHF		100-41-4		
Toluene	6000	ug/l	100	50.0	12/20/02 09:09 SHF		108-88-3		
Xylene (Total)	2600	ug/l	25.	5.0	12/19/02 12:43 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	98	%		1.0	12/19/02 12:43 SHF		98-08-8		

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680636
Client Sample ID: 125912DEC02

Project Sample Number: 6065819-002
Matrix: Water
Date Collected: 12/12/02 12:59
Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics		Method: EPA 8021							
Benzene	150	ug/l	5.0		2.5 12/19/02 13:12 SHF		71-43-2		
Ethylbenzene	35.	ug/l	5.0		2.5 12/19/02 13:12 SHF		100-41-4		
Toluene	72.	ug/l	5.0		2.5 12/19/02 13:12 SHF		108-88-3		
Xylene (Total)	55.	ug/l	12.		2.5 12/19/02 13:12 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	96	%			1.0 12/19/02 13:12 SHF		98-08-8		

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6065819

Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680644

Project Sample Number: 6065819-003

Date Collected: 12/12/02 13:08

Client Sample ID: 130812DEC02

Matrix: Water

Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	5800	ug/l	100	50.0	12/19/02 13:40 SHF		71-43-2		
Ethylbenzene	380	ug/l	20.	10.0	12/19/02 05:05 SHF		100-41-4		
Toluene	8100	ug/l	100	50.0	12/19/02 13:40 SHF		108-88-3		
Xylene (Total)	5100	ug/l	50.	10.0	12/19/02 05:05 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	96	%		1.0	12/19/02 05:05 SHF		98-08-8		

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6065819

Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680651

Project Sample Number: 6065819-004

Date Collected: 12/12/02 12:50

Client Sample ID: 125012DEC02

Matrix: Water

Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
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GC Volatiles**Aromatic Volatile Organics**

Method: EPA 8021

Benzene	10.	ug/l	2.0	1.0	12/19/02 14:09 SHF	71-43-2
Ethylbenzene	170	ug/l	2.0	1.0	12/19/02 14:09 SHF	100-41-4
Toluene	4.6	ug/l	2.0	1.0	12/19/02 14:09 SHF	108-88-3
Xylene (Total)	29.	ug/l	5.0	1.0	12/19/02 14:09 SHF	1330-20-7
a,a,a-Trifluorotoluene (S)	95	%		1.0	12/19/02 14:09 SHF	98-08-8

Date: 12/31/02

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680677
Client Sample ID: 132312DEC02

Project Sample Number: 6065819-006
Matrix: Water

Date Collected: 12/12/02 13:23
Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	ND	ug/l	2.0	1.0	12/20/02 02:29 SHF		71-43-2		
Ethylbenzene	ND	ug/l	2.0	1.0	12/20/02 02:29 SHF		100-41-4		
Toluene	ND	ug/l	2.0	1.0	12/20/02 02:29 SHF		108-88-3		
Xylene (Total)	ND	ug/l	5.0	1.0	12/20/02 02:29 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	96	%		1.0	12/20/02 02:29 SHF		98-08-8	1	

Date: 12/31/02

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680685
Client Sample ID: 132112DEC02

Project Sample Number: 6065819-007
Matrix: Water
Date Collected: 12/12/02 13:21
Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles									
Aromatic Volatile Organics		Method: EPA 8021							
Benzene	210	ug/l	2.0		1.0 12/20/02 02:58 SHF		71-43-2		
Ethylbenzene	5.1	ug/l	2.0		1.0 12/20/02 02:58 SHF		100-41-4		
Toluene	ND	ug/l	2.0		1.0 12/20/02 02:58 SHF		108-88-3		
Xylene (Total)	ND	ug/l	5.0		1.0 12/20/02 02:58 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	96	%			1.0 12/20/02 02:58 SHF		98-08-8		

Date: 12/31/02

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605680693
Client Sample ID: 125612DEC02

Project Sample Number: 6065819-008
Matrix: Water
Date Collected: 12/12/02 12:56
Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	22.	ug/l	2.0	1.0	12/20/02 04:23 SHF	71-43-2			
Ethylbenzene	14.	ug/l	2.0	1.0	12/20/02 04:23 SHF	100-41-4			
Toluene	ND	ug/l	2.0	1.0	12/20/02 04:23 SHF	108-88-3			
Xylene (Total)	100	ug/l	5.0	1.0	12/20/02 04:23 SHF	1330-20-7			
a,a,a-Trifluorotoluene (S)	95	%		1.0	12/20/02 04:23 SHF	98-08-8			

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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Lab Sample No: 605680701

Project Sample Number: 6065819-009

Date Collected: 12/12/02 13:10

Client Sample ID: 131012DEC02

Matrix: Water

Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	17000	ug/l	200	100	12/21/02 00:21 SHF		71-43-2		
Ethylbenzene	290	ug/l	20.	10.0	12/20/02 04:52 SHF		100-41-4		
Toluene	ND	ug/l	20.	10.0	12/20/02 04:52 SHF		108-88-3		
Xylene (Total)	1700	ug/l	50.	10.0	12/20/02 04:52 SHF		1330-20-7		
a,a,a-Trifluorotoluene (S)	97	%		1.0	12/20/02 04:52 SHF		98-08-8	1,2	

Date: 12/31/02

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

Lab Sample No: 605700897
Client Sample ID: 121312DEC02

Project Sample Number: 6065819-010
Matrix: Soil

Date Collected: 12/12/02 12:13
Date Received: 12/17/02 08:00

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
TPH Gas/BTEX	Prep/Method: TPH GRO/BTEX / EPA 8021/OA1								
Gasoline Range Hydrocarbons	1400000000	ug/kg	25000000	5000	12/26/02 16:48	DCKI			
Benzene	6400000	ug/kg	250000	5000	12/26/02 16:48	DCKI	71-43-2		
Toluene	ND	ug/kg	250000	5000	12/26/02 16:48	DCKI	108-88-3		
Ethylbenzene	4900000	ug/kg	250000	5000	12/26/02 16:48	DCKI	100-41-4		
Xylene (Total)	65000000	ug/kg	650000	5000	12/26/02 16:48	DCKI	1330-20-7		
a,a,a-Trifluorotoluene (S)	133	%		1.0	12/26/02 16:48	DCKI	98-08-8	3,4	
4-Bromofluorobenzene (S)	92	%		1.0	12/26/02 16:48	DCKI	460-00-4		

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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PARAMETER FOOTNOTES

Dilution factor shown represents the factor applied to the reported result and reporting limit due to changes in sample preparation, dilution of the extract, or moisture content

- ND Not detected at or above adjusted reporting limit
- NC Not Calculable
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- MDL Adjusted Method Detection Limit
- (S) Surrogate
- [1] The sample pH was checked and found to be greater than 2.
- [2] The sample was diluted due to the presence of high levels of target analytes.
- [3] Surrogate recovery outside of acceptance window confirmed as a matrix effect by the analysis of a duplicate or MS/MSD on this sample.
- [4] Elevated quantitation limits resulting from a dilution.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

QC Batch: 135852 Analysis Method: EPA 8021
QC Batch Method: EPA 8021 Analysis Description: Aromatic Volatile Organics
Associated Lab Samples: 605680628 605680636 605680644 605680651

METHOD BLANK: 605685213
Associated Lab Samples: 605680628 605680636 605680644 605680651

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	
Toluene	ug/l	ND	2.0	
Xylene (Total)	ug/l	ND	5.0	
a,a,a-Trifluorotoluene (S)	%	93		

LABORATORY CONTROL SAMPLE: 605685221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Benzene	ug/l	20.00	19.35	97	84-122	
Ethylbenzene	ug/l	20.00	20.86	104	85-117	
Toluene	ug/l	20.00	19.99	100	87-117	
Xylene (Total)	ug/l	60.00	67.17	112	85-119	
a,a,a-Trifluorotoluene (S)				90	83-115	1

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

QC Batch: 135909 Analysis Method: EPA 8021
QC Batch Method: EPA 8021 Analysis Description: Aromatic Volatile Organics
Associated Lab Samples: 605680677 605680685 605680693 605680701

METHOD BLANK: 605687649
Associated Lab Samples: 605680677 605680685 605680693 605680701

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	
Toluene	ug/l	ND	2.0	
Xylene (Total)	ug/l	ND	5.0	
a,a,a-Trifluorotoluene (S)	%	96		

LABORATORY CONTROL SAMPLE: 605687656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Benzene	ug/l	20.00	19.84	99	84-122	
Ethylbenzene	ug/l	20.00	20.44	102	85-117	
Toluene	ug/l	20.00	23.03	115	87-117	
Xylene (Total)	ug/l	60.00	65.34	109	85-119	
a,a,a-Trifluorotoluene (S)				94	83-115	

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

QC Batch: 136325
QC Batch Method: TPH GRO/BTEX
Associated Lab Samples: 605700897

Analysis Method: EPA 8021/0A1
Analysis Description: TPH Gas/BTEX

METHOD BLANK: 605710003
Associated Lab Samples: 605700897

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Gasoline Range Hydrocarbons	ug/kg	ND	5000	
Benzene	ug/kg	ND	50.	
Toluene	ug/kg	ND	50.	
Ethylbenzene	ug/kg	ND	50.	
Xylene (Total)	ug/kg	ND	130	
a,a,a-Trifluorotoluene (S)	%	106		
4-Bromofluorobenzene (S)	%	90		

LABORATORY CONTROL SAMPLE: 605710011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Gasoline Range Hydrocarbons	ug/kg	100000	101600	102	69-127	
Benzene	ug/kg	1000.00	994.6	100	82-122	
Toluene	ug/kg	1000.00	1011	101	85-116	
Ethylbenzene	ug/kg	1000.00	1040	104	85-116	
Xylene (Total)	ug/kg	3000.00	3099	103	85-123	
a,a,a-Trifluorotoluene (S)				101	80-112	
4-Bromofluorobenzene (S)				103	75-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 605710623 605710631

Parameter	Units	605689199 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Footnotes
Gasoline Range Hydrocarbons	ug/kg		126600	107300	114400	82	88	64-123	6	20	
Benzene	ug/kg		1266.00	1360	1335	107	106	78-121	2	15	
Toluene	ug/kg		1266.00	1320	1321	104	105	85-114	0	15	
Ethylbenzene	ug/kg		1266.00	1327	1337	105	106	85-116	1	15	
Xylene (Total)	ug/kg		3799.00	4068	4004	106	105	83-126	2	13	

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9608 Lolret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

Lab Project Number: 6065819
Client Project ID: SJB-GW J.C. 147.6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 605710623 605710631

Parameter	Units	605689199 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Footnotes
a,a,a-Trifluorotoluene (S)						103	105	80-112			
4-Bromofluorobenzene (S)						90	88	75-127			

Date: 12/31/02

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

- LCS(D) Laboratory Control Sample (Duplicate)
- MS(D) Matrix Spike (Duplicate)
- DUP Sample Duplicate
- ND Not detected at or above adjusted reporting limit
- NC Not Calculable
- J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
- MDL Adjusted Method Detection Limit
- RPD Relative Percent Difference
- (S) Surrogate
- [1] Insufficient number of sample containers, there is no MS/MSD. Acceptable recovery of the LCS demonstrates the analytical system was in control.

REPORT OF LABORATORY ANALYSIS

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October 18, 2002

Mr. Jim Struhs
MILE HIGH ENVIRONMENTAL
187 C.R. 4980
Bloomfield, NM 87413

RE: Lab Project Number: 6063376
Client Project ID: JIC

Dear Mr. Struhs:

Enclosed are the analytical results for sample(s) received by the laboratory on October 2, 2002. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Mary Jane Walls
mjwalls@pacelabs.com
Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

Lab Project Number: 6063376
Client Project ID: JIC

Project Sample Number	Sample Number	Client Sample ID	Matrix	Date Collected	Date Received
6063376-001	605485747	144727SEP02	Water	09/27/02 14:47	10/02/02 10:15
6063376-002	605485754	145527SEP02	Water	09/27/02 14:55	10/02/02 10:15
6063376-003	605485762	150627SEP02	Water	09/27/02 15:06	10/02/02 10:15
6063376-004	605485770	152327SEP02	Water	09/27/02 15:23	10/02/02 10:15
6063376-005	605485788	153227SEP02	Water	09/27/02 15:32	10/02/02 10:15
6063376-006	605485796	153827SEP02	Water	09/27/02 15:38	10/02/02 10:15
6063376-007	605485804	154827SEP02	Water	09/27/02 15:48	10/02/02 10:15
6063376-008	605485812	155927SEP02	Water	09/27/02 15:59	10/02/02 10:15

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Project			Analysis		Analysis Description	Analytes Reported
Sample Number	Sample No	Client Sample ID	Code			
6063376-001	605485747	144727SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-002	605485754	145527SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-003	605485762	150627SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-004	605485770	152327SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-005	605485788	153227SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-006	605485796	153827SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-007	605485804	154827SEP02	8020	WPAC	Aromatic Volatile Organics	5
6063376-008	605485812	155927SEP02	8020	WPAC	Aromatic Volatile Organics	5

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Lab Sample No: 605485747
Client Sample ID: 144727SEP02

Project Sample Number: 6063376-001
Matrix: Water

Date Collected: 09/27/02 14:47
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	66.	ug/l	2.0	1.0	10/08/02 03:00		71-43-2		
Ethylbenzene	ND	ug/l	2.0	1.0	10/08/02 03:00		100-41-4		
Toluene	ND	ug/l	2.0	1.0	10/08/02 03:00		108-88-3		
Xylene (Total)	ND	ug/l	5.0	1.0	10/08/02 03:00		1330-20-7		
a,a,a-Trifluorotoluene (S)	103	%		1.0	10/08/02 03:00		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Lab Sample No: 605485754
Client Sample ID: 145527SEP02

Project Sample Number: 6063376-002
Matrix: Water

Date Collected: 09/27/02 14:55
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	800	ug/l	20.	10.0	10/08/02		71-43-2		
Ethylbenzene	120	ug/l	2.0	1.0	10/08/02 04:53		100-41-4		
Toluene	3600	ug/l	100	50.0	10/08/02		108-88-3		
Xylene (Total)	2500	ug/l	50.	10.0	10/08/02		1330-20-7		
a,a,a-Trifluorotoluene (S)	98	%		1.0	10/08/02 04:53		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Lab Sample No: 605485762
Client Sample ID: 150627SEP02

Project Sample Number: 6063376-003
Matrix: Water

Date Collected: 09/27/02 15:06
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	20000	ug/l	200	100	10/08/02		71-43-2		
Ethylbenzene	390	ug/l	100	50.0	10/08/02 05:22		100-41-4		
Toluene	3300	ug/l	100	50.0	10/08/02 05:22		108-88-3		
Xylene (Total)	2900	ug/l	250	50.0	10/08/02 05:22		1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		1.0	10/08/02 05:22		98-08-8	1,2	

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Lab Sample No: 605485770
Client Sample ID: 152327SEP02

Project Sample Number: 6063376-004
Matrix: Water

Date Collected: 09/27/02 15:23
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	6.2	ug/l	2.0	1.0	10/08/02 05:50		71-43-2		
Ethylbenzene	170	ug/l	2.0	1.0	10/08/02 05:50		100-41-4		
Toluene	ND	ug/l	2.0	1.0	10/08/02 05:50		108-88-3		
Xylene (Total)	24.	ug/l	5.0	1.0	10/08/02 05:50		1330-20-7		
a,a,a-Trifluorotoluene (S)	102	%		1.0	10/08/02 05:50		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376

Client Project ID: JIC

Lab Sample No: 605485788

Project Sample Number: 6063376-005

Date Collected: 09/27/02 15:32

Client Sample ID: 153227SEP02

Matrix: Water

Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	91.	ug/l	2.0	1.0	10/08/02 06:18		71-43-2		
Ethylbenzene	19.	ug/l	2.0	1.0	10/08/02 06:18		100-41-4		
Toluene	ND	ug/l	2.0	1.0	10/08/02 06:18		108-88-3		
Xylene (Total)	ND	ug/l	5.0	1.0	10/08/02 06:18		1330-20-7		
a,a,a-Trifluorotoluene (S)	102	%		1.0	10/08/02 06:18		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376

Client Project ID: JIC

Lab Sample No: 605485796

Project Sample Number: 6063376-006

Date Collected: 09/27/02 15:38

Client Sample ID: 153827SEP02

Matrix: Water

Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	6100	ug/l	100	50.0	10/08/02 06:47		71-43-2		
Ethylbenzene	320	ug/l	100	50.0	10/08/02 06:47		100-41-4		
Toluene	6400	ug/l	100	50.0	10/08/02 06:47		108-88-3		
Xylene (Total)	6600	ug/l	250	50.0	10/08/02 06:47		1330-20-7		
a,a,a-Trifluorotoluene (S)	103	%		1.0	10/08/02 06:47		98-08-8	1	

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376

Client Project ID: JIC

Lab Sample No: 605485804
Client Sample ID: 154827SEP02

Project Sample Number: 6063376-007
Matrix: Water

Date Collected: 09/27/02 15:48
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics	Method: EPA 8021								
Benzene	110	ug/l	2.0	1.0	10/08/02 12:24		71-43-2		
Ethylbenzene	3.9	ug/l	2.0	1.0	10/08/02 12:24		100-41-4		
Toluene	ND	ug/l	2.0	1.0	10/08/02 12:24		108-88-3		
Xylene (Total)	ND	ug/l	5.0	1.0	10/08/02 12:24		1330-20-7		
a,a,a-Trifluorotoluene (S)	104	%		1.0	10/08/02 12:24		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6063376
Client Project ID: JIC

Lab Sample No: 605485812
Client Sample ID: 155927SEP02

Project Sample Number: 6063376-008
Matrix: Water

Date Collected: 09/27/02 15:59
Date Received: 10/02/02 10:15

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles									
Aromatic Volatile Organics		Method: EPA 8021							
Benzene	6.7	ug/l	2.0	1.0	10/08/02 16:00		71-43-2		
Ethylbenzene	3.1	ug/l	2.0	1.0	10/08/02 16:00		100-41-4		
Toluene	ND	ug/l	2.0	1.0	10/08/02 16:00		108-88-3		
Xylene (Total)	ND	ug/l	5.0	1.0	10/08/02 16:00		1330-20-7		
a,a,a-Trifluorotoluene (S)	100	%		1.0	10/08/02 16:00		98-08-8		

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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PARAMETER FOOTNOTES

Dilution factor shown represents the factor applied to the reported result and reporting limit due to changes in sample preparation, dilution of the extract, or moisture content

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate
[1]	Elevated quantitation limits resulting from a dilution.
[2]	The sample pH was checked and found to be greater than 2.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

Lab Project Number: 6063376
Client Project ID: JIC

QC Batch: 131179
QC Batch Method: EPA 8021
Analysis Method: EPA 8021
Analysis Description: Aromatic Volatile Organics
Associated Lab Samples: 605485747 605485754 605485762 605485770 605485788
605485796 605485804 605485812

METHOD BLANK: 605496066
Associated Lab Samples: 605485747 605485754 605485762 605485770 605485788 605485796 605485804
605485812

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	
Toluene	ug/l	ND	2.0	
Xylene (Total)	ug/l	ND	5.0	
a,a,a-Trifluorotoluene (S)	%	100		

LABORATORY CONTROL SAMPLE: 605496074

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Benzene	ug/l	20.00	22.39	112	84-122	
Ethylbenzene	ug/l	20.00	19.77	99	85-117	
Toluene	ug/l	20.00	20.16	101	87-117	
Xylene (Total)	ug/l	60.00	61.69	103	85-119	
a,a,a-Trifluorotoluene (S)				103	83-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 605499128 605499136

Parameter	Units	605485689 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Footnotes
Benzene	ug/l	0	20.00	20.58	22.34	103	112	82-123	8	10	
Ethylbenzene	ug/l	0	20.00	19.12	19.23	96	96	84-118	1	10	
Toluene	ug/l	0	20.00	19.50	20.08	98	100	82-117	3	10	
Xylene (Total)	ug/l	0	60.00	58.88	55.99	98	93	84-121	5	13	
a,a,a-Trifluorotoluene (S)						102	100	83-115			

Date: 10/18/02

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
(S)	Surrogate

REPORT OF LABORATORY ANALYSIS

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July 02, 2002

Mr. Jim Struhs
MILE HIGH ENVIRONMENTAL
187 C.R. 4980
Bloomfield, NM 87413

RE: Lab Project Number: 6059943
Client Project ID: JLC 147-6

Dear Mr. Struhs:

Enclosed are the analytical results for sample(s) received by the laboratory on June 20, 2002. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,

Mary Jane Walls
mjwalls@pacelabs.com
Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Lab Project Number: 6059943

Client Project ID: JLC 147-6

Project	Sample				
Sample Number	Number	Client Sample ID	Matrix	Date Collected	Date Received
6059943-001	605212265	111118JUN02	Water	06/18/02 11:11	06/20/02 09:20
6059943-002	605212273	113118JUN02	Water	06/18/02 11:31	06/20/02 09:20
6059943-003	605212281	120618JUN02	Water	06/18/02 12:06	06/20/02 09:20
6059943-004	605212299	111918JUN02	Water	06/18/02 11:19	06/20/02 09:20
6059943-005	605212307	082418JUN02	Water	06/18/02 08:24	06/20/02 09:20
6059943-006	605212315	110018JUN02	Water	06/18/02 11:00	06/20/02 09:20
6059943-007	605212323	115518JUN02	Water	06/18/02 11:55	06/20/02 09:20
6059943-008	605212331	105118JUN02	Water	06/18/02 10:51	06/20/02 09:20
6059943-009	605212349	100518JUN02	Water	06/18/02 10:05	06/20/02 09:20
6059943-010	605212356	114518JUN02	Water	06/18/02 11:45	06/20/02 09:20
6059943-011	605212364	095718JUN02	Water	06/18/02 09:57	06/20/02 09:20

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6059943

Client Project ID: JLC 147-6

Project			Analysis		Analysis Description	Analytes Reported
Sample Number	Sample No	Client Sample ID	Code			
6059943-001	605212265	111118JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-002	605212273	113118JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-003	605212281	120618JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-004	605212299	111918JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-005	605212307	082418JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-006	605212315	110018JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-007	605212323	115518JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-008	605212331	105118JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-009	605212349	100518JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-010	605212356	114518JUN02	8020	WPAC	Aromatic Volatile Organics	5
6059943-011	605212364	095718JUN02	8020	WPAC	Aromatic Volatile Organics	5

REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212265
Client Sample ID: 111118JUN02

Project Sample Number: 6059943-001
Matrix: Water

Date Collected: 06/18/02 11:11
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	6.5	ug/l	2.0	06/24/02 13:55		71-43-2		
Ethylbenzene	150	ug/l	2.0	06/24/02 13:55		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 13:55		108-88-3		
Xylene (Total)	28.	ug/l	5.0	06/24/02 13:55		1330-20-7		
a,a,a-Trifluorotoluene (S)	98	%		06/24/02 13:55		98-08-8		

Date: 07/02/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212273
Client Sample ID: 113118JUN02

Project Sample Number: 6059943-002
Matrix: Water

Date Collected: 06/18/02 11:31
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics	Method: EPA 8021							
Benzene	4800	ug/l	100	06/24/02 14:27		71-43-2	1	
Ethylbenzene	260	ug/l	20.	06/24/02 14:27		100-41-4		
Toluene	4300	ug/l	100	06/24/02 14:27		108-88-3	1	
Xylene (Total)	5800	ug/l	250	06/24/02 14:27		1330-20-7	1	
a,a,a-Trifluorotoluene (S)	103	%		06/24/02 14:27		98-08-8	2	

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212281
Client Sample ID: 120618JUN02

Project Sample Number: 6059943-003
Matrix: Water

Date Collected: 06/18/02 12:06
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	23000	ug/l	400	06/24/02 14:58		71-43-2	3	
Ethylbenzene	410	ug/l	100	06/24/02 14:58		100-41-4		
Toluene	ND	ug/l	100	06/24/02 14:58		108-88-3		
Xylene (Total)	2300	ug/l	250	06/24/02 14:58		1330-20-7		
a,a,a-Trifluorotoluene (S)	104	%		06/24/02 14:58		98-08-8	2	

Date: 07/02/02

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REPORT OF LABORATORY ANALYSIS

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212299
Client Sample ID: 111918JUN02

Project Sample Number: 6059943-004
Matrix: Water
Date Collected: 06/18/02 11:19
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	95.	ug/l	2.0	06/24/02 16:01		71-43-2		
Ethylbenzene	19.	ug/l	2.0	06/24/02 16:01		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 16:01		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 16:01		1330-20-7		
a,a,a-Trifluorotoluene (S)	103	%		06/24/02 16:01		98-08-8		

Date: 07/02/02

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212307
Client Sample ID: 082418JUN02

Project Sample Number: 6059943-005
Matrix: Water

Date Collected: 06/18/02 08:24
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	92.	ug/l	2.0	06/24/02 16:33		71-43-2		
Ethylbenzene	3.3	ug/l	2.0	06/24/02 16:33		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 16:33		108-88-3		
Xylene (Total)	20.	ug/l	5.0	06/24/02 16:33		1330-20-7		
a,a,a-Trifluorotoluene (S)	104	%		06/24/02 16:33		98-08-8		

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212315
Client Sample ID: 110018JUN02

Project Sample Number: 6059943-006
Matrix: Water

Date Collected: 06/18/02 11:00
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics	Method: EPA 8021							
Benzene	180	ug/l	2.0	06/24/02 17:03		71-43-2		
Ethylbenzene	4.5	ug/l	2.0	06/24/02 17:03		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 17:03		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 17:03		1330-20-7		
a,a,a-Trifluorotoluene (S)	105	%		06/24/02 17:03		98-08-8		

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212323
Client Sample ID: 115518JUN02

Project Sample Number: 6059943-007
Matrix: Water

Date Collected: 06/18/02 11:55
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	ND	ug/l	2.0	06/24/02 17:32		71-43-2		
Ethylbenzene	ND	ug/l	2.0	06/24/02 17:32		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 17:32		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 17:32		1330-20-7		
a,a,a-Trifluorotoluene (S)	104	%		06/24/02 17:32		98-08-8		

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212331
Client Sample ID: 105118JUN02

Project Sample Number: 6059943-008
Matrix: Water

Date Collected: 06/18/02 10:51
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics	Method: EPA 8021							
Benzene	3.8	ug/l	2.0	06/24/02 18:01		71-43-2		
Ethylbenzene	4.5	ug/l	2.0	06/24/02 18:01		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 18:01		108-88-3		
Xylene (Total)	8.1	ug/l	5.0	06/24/02 18:01		1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		06/24/02 18:01		98-08-8		

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212349
Client Sample ID: 100518JUN02

Project Sample Number: 6059943-009
Matrix: Water

Date Collected: 06/18/02 10:05
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC Volatiles								
Aromatic Volatile Organics		Method: EPA 8021						
Benzene	ND	ug/l	2.0	06/24/02 18:30		71-43-2		
Ethylbenzene	ND	ug/l	2.0	06/24/02 18:30		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 18:30		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 18:30		1330-20-7		
a,a,a-Trifluorotoluene (S)	104	%		06/24/02 18:30		98-08-8		

Date: 07/02/02

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212356
Client Sample ID: 114518JUN02

Project Sample Number: 6059943-010
Matrix: Water

Date Collected: 06/18/02 11:45
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles								
Aromatic Volatile Organics	Method: EPA 8021							
Benzene	ND	ug/l	2.0	06/24/02 18:58		71-43-2		
Ethylbenzene	ND	ug/l	2.0	06/24/02 18:58		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 18:58		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 18:58		1330-20-7		
a,a,a-Trifluorotoluene (S)	106	%		06/24/02 18:58		98-08-8		

Date: 07/02/02

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Lab Project Number: 6059943
Client Project ID: JLC 147-6

Lab Sample No: 605212364
Client Sample ID: 095718JUN02

Project Sample Number: 6059943-011
Matrix: Water

Date Collected: 06/18/02 09:57
Date Received: 06/20/02 09:20

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
GC Volatiles								
Aromatic Volatile Organics	Method: EPA 8021							
Benzene	ND	ug/l	2.0	06/24/02 19:27		71-43-2		
Ethylbenzene	ND	ug/l	2.0	06/24/02 19:27		100-41-4		
Toluene	ND	ug/l	2.0	06/24/02 19:27		108-88-3		
Xylene (Total)	ND	ug/l	5.0	06/24/02 19:27		1330-20-7		
a,a,a-Trifluorotoluene (S)	106	%		06/24/02 19:27		98-08-8		

Date: 07/02/02

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PARAMETER FOOTNOTES

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate
[1]	Result of a 1:50 dilution on 06/25/02.
[2]	Elevated quantitation limits resulting from a dilution.
[3]	Result of a 1:200 dilution on 06/25/02.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Project Number: 6059943
Client Project ID: JLC 147-6

QC Batch: 124843
QC Batch Method: EPA 8021
Associated Lab Samples: 605212265 605212273 605212281 605212299 605212307
605212315 605212323 605212331 605212349 605212356
605212364

Analysis Method: EPA 8021

Analysis Description: Aromatic Volatile Organics

METHOD BLANK: 605217652

Associated Lab Samples: 605212265 605212273 605212281 605212299 605212307 605212315 605212323
605212331 605212349 605212356 605212364

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	
Toluene	ug/l	ND	2.0	
Xylene (Total)	ug/l	ND	5.0	
a,a,a-Trifluorotoluene (S)	%	108		

LABORATORY CONTROL SAMPLE: 605217660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Benzene	ug/l	20.00	21.32	107	84-122	
Ethylbenzene	ug/l	20.00	19.90	100	85-117	
Toluene	ug/l	20.00	21.44	107	87-117	
Xylene (Total)	ug/l	60.00	62.25	104	85-119	
a,a,a-Trifluorotoluene (S)				107	83-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 605218668 605218676

Parameter	Units	605212265 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Footnotes
Benzene	ug/l	6.520	20.00	25.43	25.82	94	96	82-123	2	10	
Ethylbenzene	ug/l	151.2	20.00	173.1	171.4	110	101	84-118	1	10	
Toluene	ug/l	0.7522	20.00	20.01	20.23	96	97	82-117	1	10	
Xylene (Total)	ug/l	28.35	60.00	84.44	85.16	94	95	84-121	1	13	
a,a,a-Trifluorotoluene (S)						98	97	83-115			

Date: 07/02/02

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QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D) Laboratory Control Sample (Duplicate)
MS(D) Matrix Spike (Duplicate)
DUP Sample Duplicate
ND Not detected at or above adjusted reporting limit
NC Not Calculable
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL Adjusted Method Detection Limit
RPD Relative Percent Difference
(S) Surrogate

REPORT OF LABORATORY ANALYSIS

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April 10, 2002

Mr. Jim Struhs
MILE HIGH ENVIRONMENTAL
187 C.R. 4980
Bloomfield, NM 87413

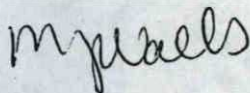
RE: Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

Dear Mr. Struhs:

Enclosed are the analytical results for sample(s) received by the laboratory on April 2, 2002. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,



Mary Jane Walls
mjwalls@pacelabs.com
Project Manager

Kansas/NELAP Certification Number E-10116

Enclosures

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

Phone: 913.599.5665

Fax: 913.599.1759

Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

<u>Project</u>	<u>Sample</u>				<u>Date Collected</u>	<u>Date Received</u>
<u>Sample Number</u>	<u>Number</u>	<u>Client Sample ID</u>	<u>Matrix</u>			
6057622-001	605018647	140629MAR02	Water		03/29/02 14:06	04/02/02 09:00
6057622-002	605018654	141129MAR02	Water		03/29/02 14:11	04/02/02 09:00
6057622-003	605018662	141629MAR02	Water		03/29/02 14:16	04/02/02 09:00
6057622-004	605018670	142729MAR02	Water		03/29/02 14:27	04/02/02 09:00
6057622-005	605018688	140029MAR02	Water		03/29/02 14:00	04/02/02 09:00
6057622-006	605018696	135629MAR02	Water		03/29/02 13:56	04/02/02 09:00
6057622-007	605018704	135129MAR02	Water		03/29/02 13:51	04/02/02 09:00
6057622-008	605018720	134229MAR02	Water		03/29/02 13:42	04/02/02 09:00
6057622-009	605018738	125429MAR02	Water		03/29/02 12:54	04/02/02 09:00
6057622-010	605018753	124629MAR02	Water		03/29/02 12:46	04/02/02 09:00

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Project			Analysis		Analysis Description	Analytes Reported
Sample Number	Sample No	Client Sample ID	Code			
6057622-001	605018647	140629MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-002	605018654	141129MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-003	605018662	141629MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-004	605018670	142729MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-005	605018688	140029MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-006	605018696	135629MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-007	605018704	135129MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-008	605018720	134229MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-009	605018738	125429MAR02	8020	WPAC	Aromatic Volatile Organics	5
6057622-010	605018753	124629MAR02	8020	WPAC	Aromatic Volatile Organics	5

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MILE HIGH ENVIRONMENTAL

187 C.R. 4980

Bloomfield, NM 87413

Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Attn: Mr. Jim Struhs

Phone: (505)632-4457

Lab Sample No: 605018647

Project Sample Number: 6057622-001

Date Collected: 03/29/02 14:06

Client Sample ID: 140629MAR02

Matrix: Water

Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	28000	ug/l	400	04/08/02 14:12	71-43-2	1	
Ethylbenzene	400	ug/l	40.	04/08/02 14:12	100-41-4		
Toluene	650	ug/l	40.	04/08/02 14:12	108-88-3		
Xylene (Total)	2200	ug/l	100	04/08/02 14:12	1330-20-7		
a,a,a-Trifluorotoluene (S)	109	%		04/08/02 14:12	2164-17-2	2	

Date: 04/10/02

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Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018654
Client Sample ID: 141129MAR02

Project Sample Number: 6057622-002
Matrix: Water

Date Collected: 03/29/02 14:11
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Req Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	ND	ug/l	2.0	04/08/02 19:08	71-43-2		
Ethylbenzene	ND	ug/l	2.0	04/08/02 19:08	100-41-4		
Toluene	ND	ug/l	2.0	04/08/02 19:08	108-88-3		
Xylene (Total)	ND	ug/l	5.0	04/08/02 19:08	1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		04/08/02 19:08	2164-17-2		

Date: 04/10/02

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018662
Client Sample ID: 141629MAR02

Project Sample Number: 6057622-003
Matrix: Water

Date Collected: 03/29/02 14:16
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	6.4	ug/l	2.0	04/03/02 23:47	71-43-2		
Ethylbenzene	ND	ug/l	2.0	04/03/02 23:47	100-41-4		
Toluene	ND	ug/l	2.0	04/03/02 23:47	108-88-3		
Xylene (Total)	ND	ug/l	5.0	04/03/02 23:47	1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		04/03/02 23:47	2164-17-2		

Date: 04/10/02

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018670
Client Sample ID: 142729MAR02

Project Sample Number: 6057622-004
Matrix: Water

Date Collected: 03/29/02 14:27
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed	by	CAS No.	Ftnote	Reg Limit
GC Volatiles								
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021							
Benzene	41.	ug/l	4.0	04/04/02 11:43	SHF	71-43-2		
Ethylbenzene	75.	ug/l	4.0	04/04/02 11:43	SHF	100-41-4		
Toluene	8.0	ug/l	4.0	04/04/02 11:43	SHF	108-88-3		
Xylene (Total)	810	ug/l	10.	04/04/02 11:43	SHF	1330-20-7		
a,a,a-Trifluorotoluene (S)	85	%		04/04/02 11:43	SHF	2164-17-2	2	

Date: 04/10/02

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Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018688
Client Sample ID: 140029MAR02

Project Sample Number: 6057622-005
Matrix: Water

Date Collected: 03/29/02 14:00
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed	by	CAS No.	Ftnote	Reg Limit
GC Volatiles								
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021							
Benzene	5300	ug/l	500	04/04/02 12:12	SHF	71-43-2	3	
Ethylbenzene	240	ug/l	20.	04/04/02 12:12	SHF	100-41-4		
Toluene	3000	ug/l	500	04/04/02 12:12	SHF	108-88-3	3	
Xylene (Total)	5800	ug/l	1200	04/04/02 12:12	SHF	1330-20-7	4	
a,a,a-Trifluorotoluene (S)	100	%		04/04/02 12:12	SHF	2164-17-2	2	

Date: 04/10/02

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Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018696 Project Sample Number: 6057622-006 Date Collected: 03/29/02 13:56
Client Sample ID: 135629MAR02 Matrix: Water Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	100	ug/l	2.0	04/04/02 12:40	71-43-2		
Ethylbenzene	22.	ug/l	2.0	04/04/02 12:40	100-41-4		
Toluene	ND	ug/l	2.0	04/04/02 12:40	108-88-3		
Xylene (Total)	ND	ug/l	5.0	04/04/02 12:40	1330-20-7		
a,a,a-Trifluorotoluene (S)	100	%		04/04/02 12:40	2164-17-2		

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018704

Project Sample Number: 6057622-007

Date Collected: 03/29/02 13:51

Client Sample ID: 135129MAR02

Matrix: Water

Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	7.5	ug/l	2.0	04/04/02 13:09	71-43-2		
Ethylbenzene	150	ug/l	2.0	04/04/02 13:09	100-41-4		
Toluene	ND	ug/l	2.0	04/04/02 13:09	108-88-3		
Xylene (Total)	22.	ug/l	5.0	04/04/02 13:09	1330-20-7		
a,a,a-Trifluorotoluene (S)	97	%		04/04/02 13:09	2164-17-2		

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018720
Client Sample ID: 134229MAR02Project Sample Number: 6057622-008
Matrix: WaterDate Collected: 03/29/02 13:42
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed	by	CAS No.	Ftnote	Reg Limit
GC Volatiles								
Aromatic Volatile Organics		Prep/Method: EPA 8021 / EPA 8021						
Benzene	470	ug/l	20.	04/04/02 13:37	SHF	71-43-2	5	
Ethylbenzene	8.2	ug/l	2.0	04/04/02 13:37	SHF	100-41-4		
Toluene	2.5	ug/l	2.0	04/04/02 13:37	SHF	108-88-3		
Xylene (Total)	5.7	ug/l	5.0	04/04/02 13:37	SHF	1330-20-7		
a,a,a-Trifluorotoluene (S)	102	%		04/04/02 13:37	SHF	2164-17-2		

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Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018738 Project Sample Number: 6057622-009 Date Collected: 03/29/02 12:54
Client Sample ID: 125429MAR02 Matrix: Water Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Footnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method: EPA 8021 / EPA 8021						
Benzene	ND	ug/l	2.0	04/04/02 14:06	71-43-2		
Ethylbenzene	ND	ug/l	2.0	04/04/02 14:06	100-41-4		
Toluene	ND	ug/l	2.0	04/04/02 14:06	108-88-3		
Xylene (Total)	ND	ug/l	5.0	04/04/02 14:06	1330-20-7		
a,a,a-Trifluorotoluene (S)	99	%		04/04/02 14:06	2164-17-2		

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

Lab Sample No: 605018753
Client Sample ID: 124629MAR02

Project Sample Number: 6057622-010
Matrix: Water

Date Collected: 03/29/02 12:46
Date Received: 04/02/02 09:00

Parameters	Results	Units	Report Limit	Analyzed by	CAS No.	Ftnote	Reg Limit
GC Volatiles							
Aromatic Volatile Organics		Prep/Method: EPA 8021 / EPA 8021					
Benzene	ND	ug/l	2.0	04/04/02 14:35	71-43-2		
Ethylbenzene	ND	ug/l	2.0	04/04/02 14:35	100-41-4		
Toluene	ND	ug/l	2.0	04/04/02 14:35	108-88-3		
Xylene (Total)	ND	ug/l	5.0	04/04/02 14:35	1330-20-7		
a,a,a-Trifluorotoluene (S)	100	%		04/04/02 14:35	2164-17-2		

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

PARAMETER FOOTNOTES

- ND Not detected at or above adjusted reporting limit
NC Not Calculable
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
(S) Surrogate
[1] Result from a 1:200 dilution on 4-9-02.
[2] Elevated quantitation limits resulting from a dilution.
[3] Result from a 1:250 dilution on 4-8-02.
[4] Result from a 1:250 dilution on 4-8-02.
[5] Result from a 1:10 dilution on 4-9-02.

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Lab Project Number: 6057622

Client Project ID: SJB-GW/ JIC147-6

QC Batch: 120300

Analysis Method: EPA 8021

QC Batch Method: EPA 8021

Analysis Description: Aromatic Volatile Organics

Associated Lab Samples:	605018647	605018654	605018662	605018670	605018688
	605018696	605018704	605018720	605018738	605018753

METHOD BLANK: 605022995

Associated Lab Samples:	605018647	605018654	605018662	605018670	605018688	605018696	605018704
	605018720	605018738	605018753				

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	
Toluene	ug/l	ND	2.0	
Xylene (Total)	ug/l	ND	5.0	
a,a,a-Trifluorotoluene (S)	%	101		

LABORATORY CONTROL SAMPLE: 605023027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Footnotes
Benzene	ug/l	20	20.14	101	84-122	
Ethylbenzene	ug/l	20	19.50	98	85-117	
Toluene	ug/l	20	20.31	102	87-117	
Xylene (Total)	ug/l	60	62.20	104	85-119	
a,a,a-Trifluorotoluene (S)				100	83-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 605023134 605023142

Parameter	Units	605018654 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Footnotes
Benzene	ug/l	0	20.00	19.42	19.96	97	100	82-123	3	10	
Ethylbenzene	ug/l	0.8044	20.00	19.21	19.46	92	93	84-118	1	10	
Toluene	ug/l	0.1659	20.00	19.83	20.20	98	100	82-117	2	10	
Xylene (Total)	ug/l	0.7264	60.00	60.46	61.97	100	102	84-121	2	13	
a,a,a-Trifluorotoluene (S)						99	99	83-115			

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Lab Project Number: 6057622
Client Project ID: SJB-GW/ JIC147-6

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines, unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

LCS(D) Laboratory Control Sample (Duplicate)
MS(D) Matrix Spike (Duplicate)
DUP Sample Duplicate
ND Not detected at or above adjusted reporting limit
NC Not Calculable
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
RPD Relative Percent Difference
(S) Surrogate

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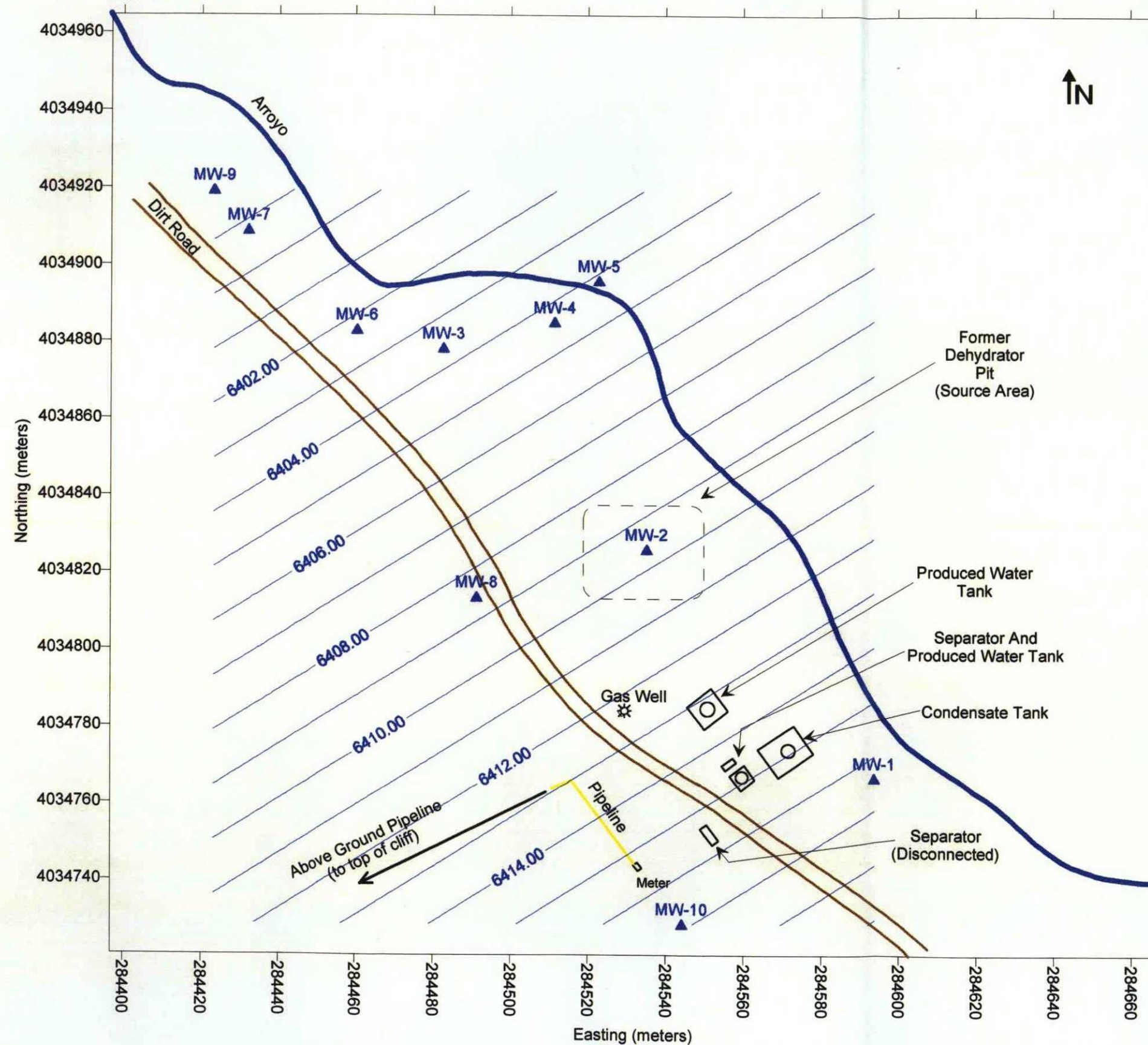


Figure 2
Potentiometric
Surface Map
Jicarilla Contract 147-6
(March 29, 2002)

LEGEND

- | | |
|-------------|-----------------------------------|
| MW-2 | Monitoring Well |
| — 5585.20 — | Ground Water Elevation (ft. AMSL) |

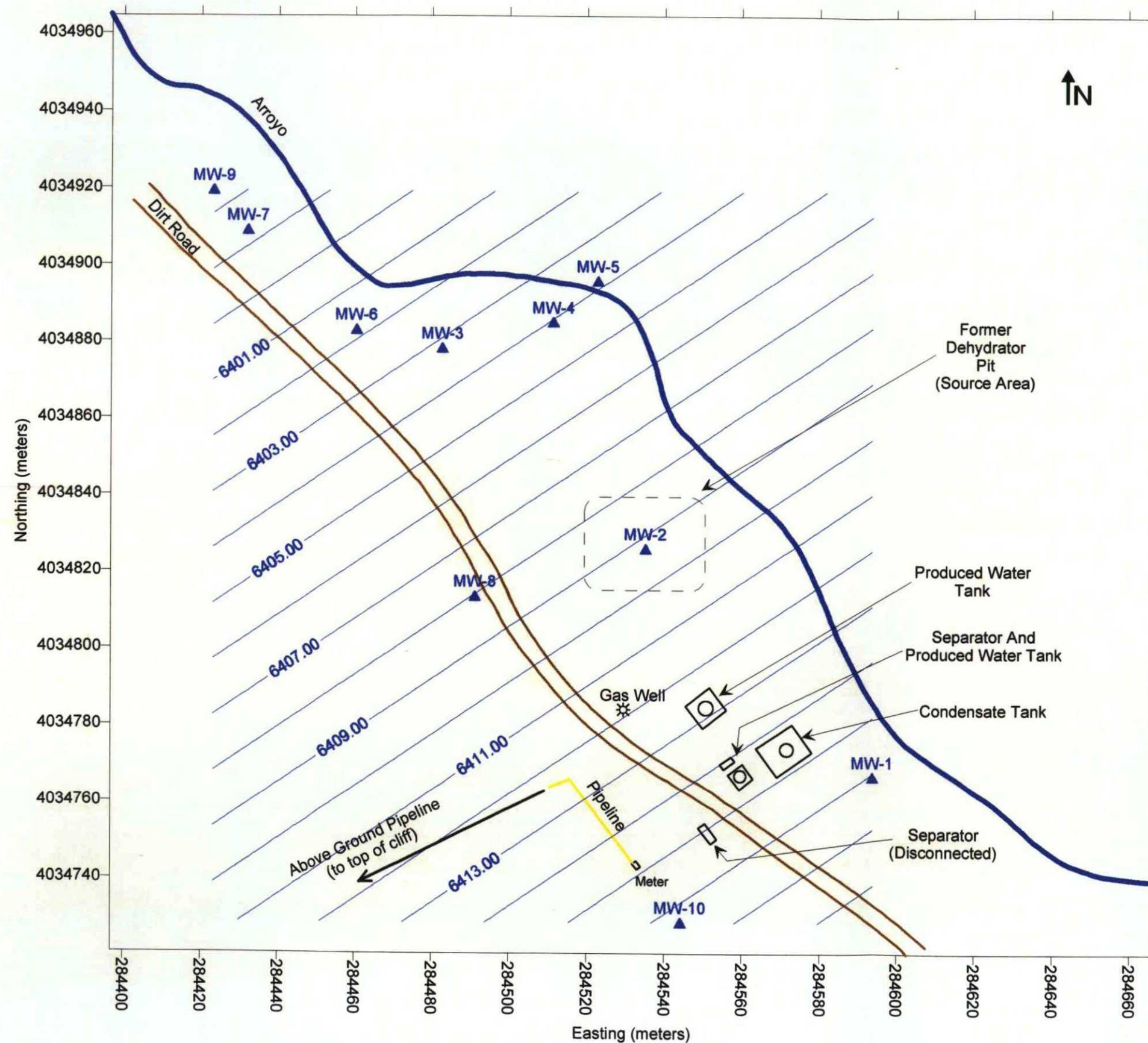


Figure 2
Potentiometric
Surface Map
Jicarilla Contract 147-6
(June 18, 2002)

LEGEND

- | | |
|-------------|-----------------------------------|
| MW-2 | Monitoring Well |
| — 5585.20 — | Ground Water Elevation (ft. AMSL) |

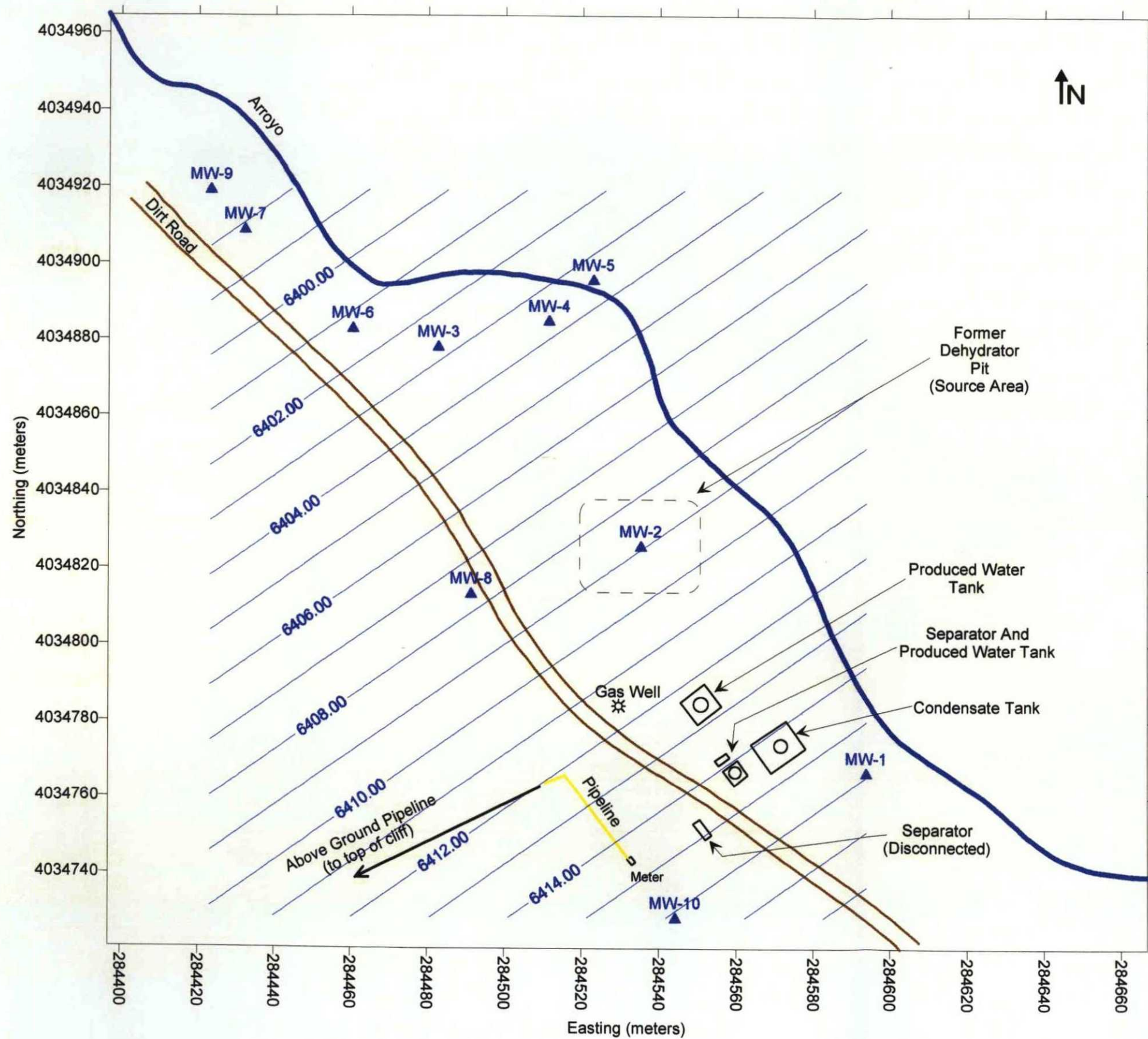


Figure 2
Potentiometric
Surface Map
Jicarilla Contract 147-6
(September 27, 2002)

LEGEND

MW-2



Monitoring Well

5585.20

Ground Water Elevation (ft. AMSL)

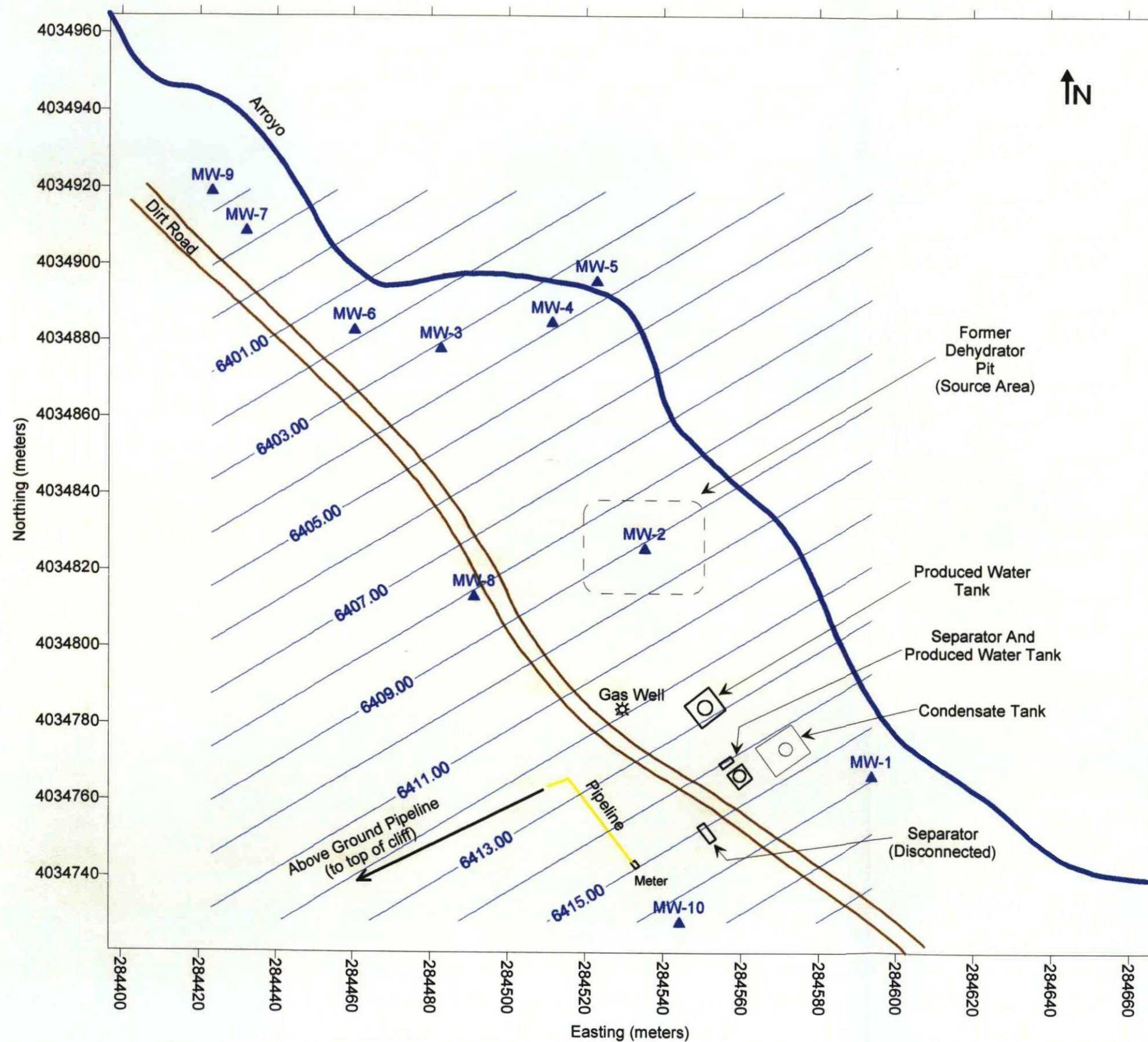


Figure 2
Potentiometric
Surface Map
Jicarilla Contract 147-6
(December 12, 2002)

LEGEND

- | | |
|---------|-----------------------------------|
| MW-2 | Monitoring Well |
| 5585.20 | Ground Water Elevation (ft. AMSL) |