

3R - 319

REPORTS

DATE:

2000



Environmental Services
187 County Road 4980
Bloomfield, New Mexico 87413
(505) 632-4409
(505) 632-4405

September 18, 2000

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SEP 28 2000

Mr. William Olson
Hydrologist
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2000 SAN JUAN BASIN ANNUAL GROUNDWATER REPORT

Dear Mr. Olson:

Enclosed for your review is the 2000 San Juan Basin Annual Groundwater Report prepared by Williams for work conducted by Public Service New Mexico (PNM). The report presents monitoring data for twenty-two sites having petroleum hydrocarbon impacted groundwater, which resulted from the past use of unlined surface impoundments. The reporting period begins in the second quarter of 1999 and ends in the second quarter of 2000. The sites included in the report are listed in Table 1, attached.

The natural gas production and gathering facilities at which the impacted groundwater sites are located were formerly owned and operated by PNM. The facilities became assets of Williams upon purchase of the Gas Company of New Mexico (GCNM) from PNM. PNM had retained certain environmental liabilities associated with the assets including obligations for unlined surface impoundment impacts to soil and groundwater. Subsequent negotiations between PNM and Williams resulted in an agreement whereby Williams would complete further investigations and remediation at sites not previously closed by PNM. The agreement also states that Williams will complete work at sites where PNM has identified soil or groundwater contamination or otherwise initiated remedial actions.

During PNM's tenure, management of sites with hydrocarbon impacted groundwater was directed by their Ground Water Management Plan. This plan specified general procedures for site investigation, remediation, and reporting. The plan called for PNM to prepare an annual report summarizing the results of groundwater monitoring at each site. The report was to be submitted each April 1st and include data collected during the second, third and fourth quarters of the previous year and data from the first quarter of the reporting year.

Anticipating termination of their environmental obligations, PNM requested on March 4, 2000 an extension for submittal of the 2000 annual report so that they could also include data collected during the second quarter of 2000. Although PNM completed collection of monitoring data for the second quarter of 2000, they did not prepare and submit an annual report. Williams has prepared the 2000 annual report in an effort to maintain project continuity and to provide closure to PNM's management of the project.

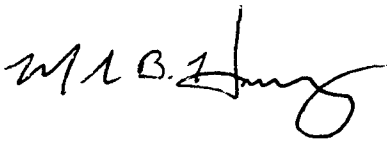
As with most projects of this magnitude, first hand knowledge is paramount to prepare a thorough summary of site activities. Given the limited firsthand knowledge of project workings, Williams is in the unenviable position of trying to glean information from only the paper record. As such, the 2000 report simply transmits the PNM-collected data to OCD in what we hope is a concise and useable format. Initially, it was Williams' goal to provide more comprehensive reporting on the status of each site, however, preliminary evaluation of the data soon revealed that accurate interpretations could not be formulated in a timely manner.

Williams is continuing to review and evaluate the data provided by PNM to determine the best course for future actions at the sites. Preliminary review has revealed several high priority needs. For the majority of sites, accurate surveys are needed along with development of site base maps and a comprehensive database to facilitate project management. Moreover, sites with free product should be evaluated to determine the efficacy of free-product recovery and whether or not all source contributions are known.

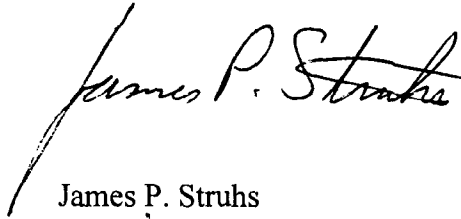
Organization of the report follows the same format used by PNM. Data for each site is contained in a separate tabbed section labeled with the site name. Each section contains a data summary table listing each monitoring well. The absence or presence of free product is indicated on the table and the concentrations of the BTEX compounds for the reporting period are noted. Following the data summary table are the actual laboratory analytical reports. In an effort to make this document more manageable, the laboratory quality control reports have not been included. These reports will of course remain a part of the project file and be made available for review upon request. In addition to the analytical data, a contour map depicting the elevation of the water table as interpolated from water-level data is also included. When possible, hydrographs illustrating the seasonal fluctuations in water-table elevations are presented.

Thank you for your understanding of the Williams position and the time to review this submittal. Mr. Jim Struhs has been assigned the role of Project Hydrogeologist and as such will be involved in many of the day to day project operations. If you have any questions regarding the report, you may call me at (505) 632-4409 or Jim at (505) 632-4457.

Best regards,



Mark B. Harvey
Project Manager
Mark.Harvey@Williams.com



James P. Struhs
Project Hydrogeologist
Jim.Struhs@Williams.com

Attachment
Enclosure

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

Table 1. List of Sites for Period Q2/1999 to Q2/2000

Site Name	Section	Township	Range	Unit Letter	OCD Notified	Installed Wells	2nd QTR 1999	3rd QTR 1999	4th QTR 1999	1st QTR 2000	2nd QTR 2000
Albright #4 Drip	22	29N	10W	F	9-Jul-99	28-Jul-99		5-Aug-99	6-Dec-99	5-Mar-00	7-Jun-00
Blanco Wash Drip	31	27N	8W	J	19-Feb-99	6-Apr-99	28-Apr-99	28-Sep-99	6-Dec-99	17-Mar-00	7-Jun-00
Chamberlain 1	14	32N	12W	F	30-Sep-99	13-Sep-99			11-Nov-99	1-Feb-00	2-May-00
Davis 1	11	31N	12W	E	2-Mar-99	2-Aug-99	25-May-99	20-Sep-99	8-Dec-99	14-Mar-00	8-Jun-00
Dogie East Pit	4	25N	6W	D	7-Jul-97	20-May-98	27-Apr-99	21-Sep-99	16-Nov-99	15-Feb-00	11-May-00
Dogie North Pit	4	25N	6W	D	7-Jul-97	6-Jul-97	27-Apr-99	21-Sep-99	16-Nov-99	15-Feb-00	11-May-00
Florance 124	27	29N	9W	C	12-Aug-96	28-Aug-96	7-Apr-99	28-Jul-99	14-Oct-99	1-Feb-00	26-Apr-00
Florance 40	21	30N	8W	G	27-Jan-97	29-Jan-97	21-Apr-99	28-Jul-99	1-Nov-99	21-Mar-00	14-Jun-00
Florance M 47X	5	30N	9W	G	27-Jan-97	6-Feb-97	21-Apr-99	28-Jul-99	3-Nov-99	23-Mar-00	14-Jun-00
Grenier 4A	7	31N	11W	M	18-Oct-99	28-Sep-99			3-Nov-99	7-Mar-00	12-Jun-00
Hampton 4M	13	30N	11W	N	7-Jan-97	31-Jan-97	5-May-99	12-Jul-99	21-Oct-99	27-Jan-00	13-Jun-00
Honolulu Drip	15	26N	4W	B	18-Jun-96	13-Jun-96	14-Apr-99	21-Sep-99	23-Nov-99	9-Feb-00	23-May-00
Ice Canyon Drip	15	26N	6W	B	1-Dec-97	13-May-98	27-Apr-99	20-Sep-99	16-Nov-99	7-Feb-00	18-May-00
Jicarilla Contract 147-6	6	25N	5W	C	13-Aug-98	27-Jan-99	14-Apr-99	27-Sep-99	15-Nov-99	20-Mar-00	7-Jun-00
Kaufman 1	33	31N	13W	H	9-Mar-00					9-Mar-00	22-May-00
Miles Federal 1E Drip	5	26N	7W	N	23-Jun-97	7-Jul-97	1-Jun-99	3-Aug-99	23-Nov-99	7-Feb-00	18-May-00
O' Shea 1M	3	31N	13W	F	6-Jun-98	9-Jul-98	24-May-99	6-Aug-99	12-Nov-99	3-Feb-00	9-May-00
Patterson A Com A1	2	31N	12W	G	2-Mar-99	15-Mar-99	2-Jun-99	6-Aug-99	22-Nov-99	15-Mar-00	8-Jun-00
Pritchard 2	6	30N	8W	J	22-Feb-99	1-Apr-99	26-May-99	17-Aug-99	20-Oct-99	26-Jan-00	17-Apr-00
Randleman 1	13	31N	11W	K	9-May-97	14-May-97	19-Apr-99	17-Aug-99	27-Oct-99	25-Jan-00	10-Apr-00
Wilmerding 1M	10	31N	13W	C	5-Jun-98	1-Jul-98	1-Jun-99	10-Aug-99	12-Oct-99	1-Feb-00	1-May-00
Zachry 18E	11	28N	10W	O	6-Sep-96	19-Nov-96	20-Apr-99	2-Aug-99	1-Nov-99	31-Jan-00	26-Apr-00



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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Annual Groundwater Report 2000

San Juan Basin, New Mexico
Unlined Surface Impoundments

Site Summary Report

Site Name: Grenier 4A

Reporting Period: 2nd Qtr 1999 - 2nd Qtr 2000

Location: Unit M, Sec 7, Twn 31N, Rng 11W

Canyon: Estes Arroyo

Operator: Burlington

Vulnerable Class:

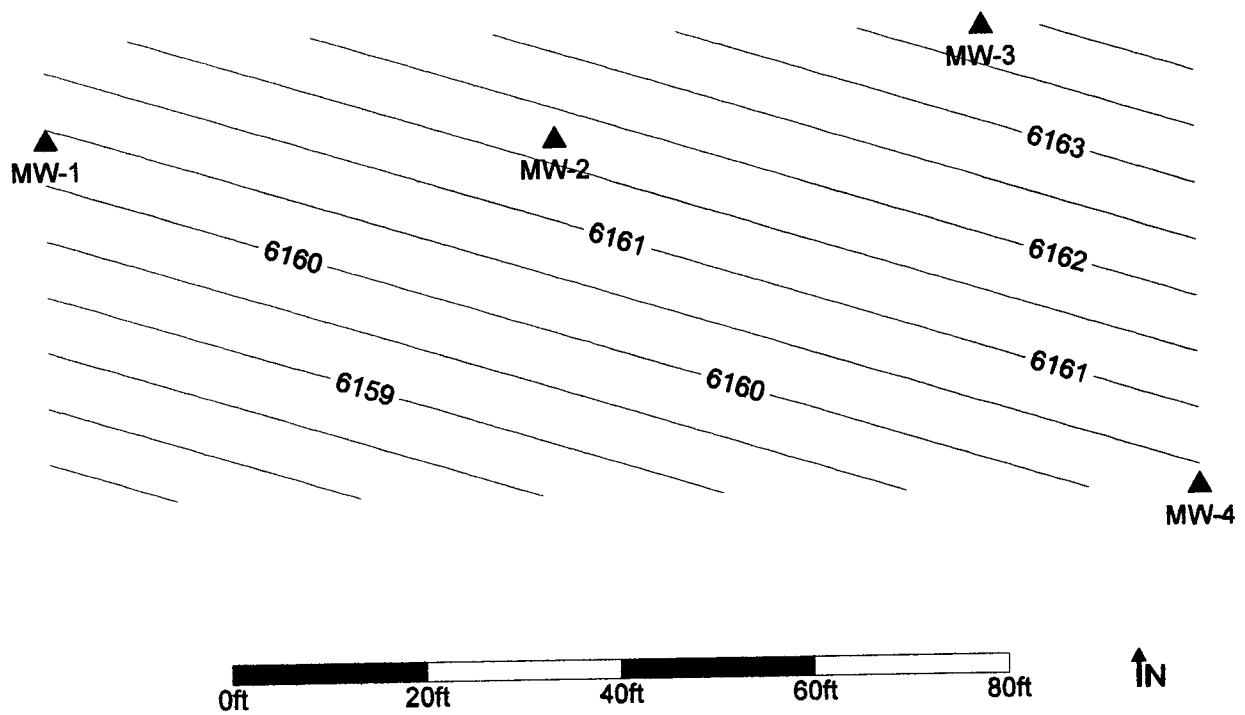
OCD Ranking: 0

Lead Agency: NMOCD

Status Narrative

This site has five monitoring wells, with two quarters of ground water monitoring completed to date. In January 2000, extensive secondary soil remediation was conducted in the area of PNM's former dehydrator pit, which resulted in removal of monitoring wells MW-2 and MW-4. Three new wells (MW-5,-6,-7) were also installed at this time. MW-5 replaced the source area well MW-2, and MW-6 and MW-7 serve as downgradient sentinel wells.

Grenier 4A
Potentiometric Surface Map
(November 3, 1999)



Grenier 4A
Summary of Groundwater Analytical Data
(Q2/1999 - Q2/2000)

Well ID	Sample ID	Sample Date	Free Product		Analytes (values in ug/L)			
			Present Yes/No	Thickness (ft.)	benzene	toluene	ethylbenzene	total xylenes
MW-1	9911031534	3-Nov-99	N		<0.5	1	<0.5	<1.5
	0003071355	7-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006120802	12-Jun-00	N		<0.5	<0.5	<0.5	<1.5
MW-2	9911031416	3-Nov-99	N		3400	4200	170	1300
	well removed (see MW-5)							
MW-3	9911031448	3-Nov-99	N		3	4	<0.5	<1.5
	0003071458	7-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006120845	12-Jun-00	N		<0.5	<0.5	<0.5	<1.5
MW-4	9911031520	3-Nov-99	N		490	290	85	660
	well removed (see MW-7)							
MW-5	0003071325	7-Mar-00	N		390	620	23	214
	0006120755	12-Jun-00	N		280	69	6.8	91
MW-6	0003071426	7-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006120825	12-Jun-00	N		<0.5	<0.5	<0.5	<1.5
MW-7	0003071519	7-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006120903	12-Jun-00	N		<0.5	<0.5	<0.5	<1.5

ND = analyte not detected above method detection limit

NS = well not sampled for specified analytes

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 16-Nov-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A DH
Work Order:	9911015	Client Sample ID:	9911031534; MW-1
Lab ID:	9911015-04A	Matrix:	AQUEOUS
Project:	Grenier 4A DH	Collection Date:	11/3/99 3:34:00 PM
		COC Record:	7792

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	11/8/99
Toluene	0.7	0.5		µg/L	1	11/8/99
Ethylbenzene	ND	0.5		µg/L	1	11/8/99
m,p-Xylene	ND	1		µg/L	1	11/8/99
o-Xylene	ND	0.5		µg/L	1	11/8/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	SUR - Surrogate

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 16-Nov-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A DH
Work Order:	9911015	Client Sample ID:	9911031416; MW-2
Lab ID:	9911015-01A	Matrix:	AQUEOUS
Project:	Grenier 4A DH	Collection Date:	11/3/99 2:16:00 PM
		COC Record:	7792

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	3400	25		µg/L	50	11/8/99
Toluene	4200	25		µg/L	50	11/8/99
Ethylbenzene	170	25		µg/L	50	11/8/99
m,p-Xylene	980	50		µg/L	50	11/8/99
o-Xylene	320	25		µg/L	50	11/8/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Sur: - Surrogate

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ANALYTICAL REPORT

Date: 16-Nov-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A DH
Work Order:	9911015	Client Sample ID:	9911031448; MW-3
Lab ID:	9911015-02A	Matrix:	AQUEOUS
Project:	Grenier 4A DH	Collection Date:	11/3/99 2:48:00 PM
		COC Record:	7792

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	2.7	0.5		µg/L	1	11/8/99
Toluene	3.5	0.5		µg/L	1	11/8/99
Ethylbenzene	ND	0.5		µg/L	1	11/8/99
m,p-Xylene	1	1		µg/L	1	11/8/99
o-Xylene	ND	0.5		µg/L	1	11/8/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 16-Nov-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A DH
Work Order:	9911015	Client Sample ID:	9911031520; MW-4
Lab ID:	9911015-03A	Matrix:	AQUEOUS
Project:	Grenier 4A DH	Collection Date:	11/3/99 3:20:00 PM
		COC Record:	7792

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	490	2.5		µg/L	5	11/8/99
Toluene	290	2.5		µg/L	5	11/8/99
Ethylbenzene	85	2.5		µg/L	5	11/8/99
m,p-Xylene	500	5		µg/L	5	11/8/99
o-Xylene	160	2.5		µg/L	5	11/8/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

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OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 05-Apr-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0003009	Client Sample ID:	0003071355; MW-1
Lab ID:	0003009-01A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	3/7/2000 1:55:00 PM
		COC Record:	8512

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	ND	0.5		µg/L	1	3/14/2000
Toluene	ND	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	ND	1		µg/L	1	3/14/2000
o-Xylene	ND	0.5		µg/L	1	3/14/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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OFF: (505) 325-5667



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ANALYTICAL REPORT

Date: 05-Apr-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0003009	Client Sample ID:	0003071458; MW-3
Lab ID:	0003009-04A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	3/7/2000 2:58:00 PM
		COC Record:	8512

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	3/14/2000
Toluene	ND	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	ND	1		µg/L	1	3/14/2000
o-Xylene	ND	0.5		µg/L	1	3/14/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

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R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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ANALYTICAL REPORT

Date: 05-Apr-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0003009	Client Sample ID:	0003071325; MW-5
Lab ID:	0003009-02A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	3/7/2000 1:25:00 PM
		COC Record:	8512

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Ethylbenzene	23	0.5		µg/L	1	3/14/2000
m,p-Xylene	160	1		µg/L	1	3/14/2000
o-Xylene	54	0.5		µg/L	1	3/14/2000
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	390	5		µg/L	10	3/15/2000
Toluene	620	5		µg/L	10	3/15/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

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R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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ANALYTICAL REPORT

Date: 05-Apr-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0003009	Client Sample ID:	0003071426; MW-6
Lab ID:	0003009-03A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	3/7/2000 2:26:00 PM
		COC Record:	8512

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	3/14/2000
Toluene	ND	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	ND	1		µg/L	1	3/14/2000
o-Xylene	ND	0.5		µg/L	1	3/14/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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OFF: (505) 325-5667



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ANALYTICAL REPORT

Date: 05-Apr-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0003009	Client Sample ID:	0003071519; MW-7
Lab ID:	0003009-05A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	3/7/2000 3:19:00 PM
		COC Record:	8512

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	3/14/2000
Toluene	ND	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	ND	1		µg/L	1	3/14/2000
o-Xylene	ND	0.5		µg/L	1	3/14/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

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Surr: - Surrogate

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OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 28-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0006030	Client Sample ID:	0006120802; MW-1
Lab ID:	0006030-01A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	6/12/2000 8:02:00 AM
		COC Record:	7893

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/18/2000
Toluene	ND	0.5		µg/L	1	6/18/2000
Ethylbenzene	ND	0.5		µg/L	1	6/18/2000
m,p-Xylene	ND	1		µg/L	1	6/18/2000
o-Xylene	ND	0.5		µg/L	1	6/18/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Sun: - Surrogate

1 of 1

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ANALYTICAL REPORT

Date: 28-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0006030	Client Sample ID:	0006120845; MW-3
Lab ID:	0006030-04A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	6/12/2000 8:45:00 AM
		COC Record:	7893

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/18/2000
Toluene	ND	0.5		µg/L	1	6/18/2000
Ethylbenzene	ND	0.5		µg/L	1	6/18/2000
m,p-Xylene	ND	1		µg/L	1	6/18/2000
o-Xylene	ND	0.5		µg/L	1	6/18/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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OFF: (505) 325-5667
FAX: (505) 327-1496



LAB: (505) 325-1556
FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 28-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0006030	Client Sample ID:	0006120755; MW-5
Lab ID:	0006030-02A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	6/12/2000 7:55:00 AM
		COC Record:	7893

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	280	2.5		µg/L	5	6/18/2000
Toluene	69	2.5		µg/L	5	6/18/2000
Ethylbenzene	6.8	2.5		µg/L	5	6/18/2000
m,p-Xylene	67	5		µg/L	5	6/18/2000
o-Xylene	24	2.5		µg/L	5	6/18/2000

Qualifiers:
PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr - Surrogate

1 of 1

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ANALYTICAL REPORT

Date: 28-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0006030	Client Sample ID:	0006120825; MW-6
Lab ID:	0006030-03A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	6/12/2000 8:25:00 AM
		COC Record:	7893

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/18/2000
Toluene	ND	0.5		µg/L	1	6/18/2000
Ethylbenzene	ND	0.5		µg/L	1	6/18/2000
m,p-Xylene	ND	1		µg/L	1	6/18/2000
o-Xylene	ND	0.5		µg/L	1	6/18/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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ANALYTICAL REPORT

Date: 28-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Grenier 4A
Work Order:	0006030	Client Sample ID:	0006120903; MW-7
Lab ID:	0006030-05A	Matrix:	AQUEOUS
Project:	Grenier 4A	Collection Date:	6/12/2000 9:03:00 AM
		COC Record:	7893

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/18/2000
Toluene	ND	0.5		µg/L	1	6/18/2000
Ethylbenzene	ND	0.5		µg/L	1	6/18/2000
m,p-Xylene	ND	1		µg/L	1	6/18/2000
o-Xylene	ND	0.5		µg/L	1	6/18/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

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