# 3R - <u>3/5</u>

# REPORTS

# DATE: 2000



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

September 18, 2000

Mr. William Olson

2040 South Pacheco

Oil Conservation Division

Santa Fe, New Mexico 87505

Hydrologist

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SEP 2 8 2000

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 1<sup>st</sup> 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.





MR. WILLIAM OLSON SEPTEMBER 18, 2000 PAGE 2 OF 3

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.



MR. WILLIAM OLSON SEPTEMBER 18, 2000 PAGE 3 OF 3

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,

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MAB.Z

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

				Unit '	OCD	Installed	2nd QTR	3rd QTR	4th QTR	1st QTR	2nd QTR
Site Name	Section	Township	Range	Letter	Notified	Wells	1999	1999	1999	2000	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	С	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	М	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	В	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	В	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	С	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	Н	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	К	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	С	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	0	6-Sep-96	19-Nov-96	20-Apr-99	2-Aug-99	1-Nov-99	31-Jan-00	26-Apr-00

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



# RECEIVED

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ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

# Annual Groundwater Report 2000

San Juan Basin, New Mexico Inined Surface Impoundments Site Summary Report

## Site Name: Florance 40

Reporting Period: 2<sup>nd</sup> Qtr 1999 - 2<sup>nd</sup> Qtr 2000

Location: Unit G, Sec 21, Twn 30N, Rng 8W Canyon: Gobernador Operator: Amoco Vulnerable Class: original OCD Ranking: 20 Lead Agency: NMOCD

### Status Narrative

This site has six monitoring wells, with thirteen quarters of ground water monitoring completed to date. Two of these monitoring wells (MW-1 and -3) have contained free-phase hydrocarbon at various times. Monitoring well MW-1, upgradient of PNM's former dehydrator pit and downgradient of Amoco's equipment, confirms the presence of upgradient contamination. This source is most likely related to activities associated with Amoco's separator pit/equipment. Recent activities at this site include the installation of three additional monitoring wells. These include: well MW-5 located up-and cross-gradient of PNM's former dehydrator pit; well MW-6 located just below PNM's former source area well (MW-2); and well MW-7 located downgradient of monitor well MW-3.







# Florance 40 Summary of Groundwater Analytical Data (Q2/1999 - Q2/2000)

			Free	Product	Ana	lytes (va	lues in u	g/L)
Well ID	Sample ID	Sample Date	Present Yes/No	Thickness (ft.)	benzene	toluene .	ethylbenzene	total xylenes
	9904210815	21-Apr-99	N		3500	3500	810	16500
	9907280950	28-Jul-99	N		2700	1800	220	15300
MW-1	9911011155	1-Nov-99	N		3200	1100	910	17600
	NS	21-Mar-00	Y	0.02				
	NS	14-Jun-00	Y	0.02				
MW-2	NS-dry	21-Apr-99		collapsed we	Il casing -	replaced	by MW-6	
	NS	21-Apr-99	Y	0.45				
	NS	28-Jul-99	Y	0.40				
MW-3	9911011221	1-Nov-99	N		1600	820	640	6400
	NS	21-Mar-00	Y	0.05				
	NS	14-Jun-00	Y	0.03				
	0003210849	21-Mar-00	N		730	220	1200	11600
	0006140739	14-Jun-00	N		800	33	980	5890
MAG	0003210945	21-Mar-00	N		4200	12000	1300	15200
10100-0	0006140755	14-Jun-00	N		4400	11000	1200	15200
NAM 7	0003211006	21-Mar-00	N		<0.5	<0.5	<0.5	5.9
10100-7	0006140821	14-Jun-00	N		<0.5	<0.5	<0.5	<1.5

NS = well not sampled for specified analytes



LAB: (505) 325-1556

# ANALYTICAL REPORT

Date: 28-Apr-99

Client: Work Order: Lab ID: Project:	PNM - Public Ser 9904051 9904051-01A Florance 40	vice Company of N Matrix: AQUEC	IM DUS	Client Sample Client Sampl Collection I COC Red	Info: Florance e ID: 99042103 Date: 4/21/99 & cord: 7041	40 815; MW 1 8:15:00 AM
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B			Analyst: HR
Benzene		3500	50	µg/L	100	4/23/99
Toluene		3500	50	µg/L	100	4/23/99
Ethylbenzene		810	50	µg/L	100	4/23/99
m,p-Xylene		13000	100	µg/L	100	4/23/99
o-Xylene		<b>3500</b>	50	µg/L	100	4/23/99
<b>,</b> '						

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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LAB: (505) 325-1556

# ANALYTICAL REPORT

Date: 09-Aug-99

West Orders	PNM - Public Se	rvice Company of NM		Clien	t Sample In	ifo: Florance	40 050- MW 1
Lab ID:	9907067 9907067-01A	Matrix: AQUEOUS	5	Che	ollection Da	nte: 07/28/19	999 9:50:00 AM
Project:	Florance 40					iu. 7497	

AROMATIC VOLATILES BY GC/PID	S	W8021B			Analyst:	DM
Benzene	2700	50	µg/L	100	07/30/1999	
Toluene	1800	50	µg/L	100	07/30/1999	
Ethylbenzene	220	50	µg/L	100	07/30/1999	1 A
m,p-Xylene	12000	100	µg/L	100	07/30/1999	11 A
o-Xylene	3300	50	µg/L	100	07/30/1999	

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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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1



LAB: (505) 325-1556

# ANALYTICAL REPORT

Date: 16-Nov-99

Client: Work Order: Lab ID: Project:	PNM - Public Ser 9911005 9911005-01A Florance 40	vice Company of N Matrix: AQUEC	NM DUS	Client S Client Coll C	ample In Sample I ection Da OC Reco	fo: Florance D: 9911011 te: 11/1/99 1 rd: 7664	40 155; MW-1 1:55:00 AM
Parameter		Result	PQL	Qual U	nits	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B				Analyst: DM
Benzene		3200	50	μ	g/L	100	11/8/99
Toluene		1100	50	ц	g/L	100	11/8/99
Ethylbenzene		910	50	μ	g/L	100	11/8/99
m,p-Xylene		14000	100	μ	g/L	100	11/8/99
o-Xylene		3600	50	· µ	g/L	100	11/8/99

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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LAB: (505) 325-1556

# ANALYTICAL REPORT

Date: 16-Nov-99

Client: Work Order: Lab ID:	PNM - Public Ser 9911005 9911005-02A	vice Company of N Matrix: AQUEC	Client Sample Info: Florar Client Sample ID: 99110 Matrix: AQUEOUS Collection Date: 11/1/9			
Project:	Florance 40		-	COC Rec	ord: 7664	
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
	ATILES BY GC/PID	SV	V8021B			Analyst: DM
Benzene		1600	50	µg/L	100	11/8/99
Toluene		820	. 50	µg/L	100	11/8/99
Ethylbenzene		640	50	μg/L	100	11/8/99
m,p-Xylene		4700	100	μg/L	100	11/8/99
o-Xylene		1700	50	μg/L	100	11/8/9 <del>9</del>



Qualifiers:

PQL - Practical Quantitation Limit

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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
- Suit: Suitogate

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- TECHNOLOGY REENDING INDUSTRY WITH THE ENVIRONMENT -



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

# ANALYTICAL REPORT

Date: 27-Apr-00

Client: Work Order:	PNM - Public Serv 0003033	vice Company o	of NM	Clier Cli	nt Sample Info: ent Sample ID:	Florance 00032108	40 349; MW-5
Lab ID:	0003033-01A	Matrix: AQU	JEOUS	C	Collection Date:	3/21/200	0 8:49:00 AM
Project:	Florance 40		·		COC Record:	8505	· · · · · · · · · · · · · · · · · · ·
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
	ATILES BY GC/PID		SW8021B				Analyst: DM
Benzene		730	10		µg/L	20	3/24/2000
Toluene		220	10		µg/L	20	3/24/2000
Ethylbenzene		1200	· 10		µg/L	20	3/24/2000
m,p-Xylene		9000	100		µg/L	100	3/29/2000
o-Xylene		2600	10		µg/L	20	3/24/2000
CALCIUM, DISS	OLVED		E215.1				Analyst: HR
Calcium		190	12		mg/L	50	3/31/2000
POTASSIUM, DI	SSOLVED		E258.1				Analyst: HR
Potassium		9.4	1.2		mg/L	5	3/30/2000
MAGNESIUM, D	ISSOLVED		E242.1				Analyst: HR
Magnesium		34	5		mg/L	20	3/30/2000
SODIUM, DISSO	LVED		E273.1				Analyst: HR
Sodium		1050	100		mg/L	40 <b>0</b>	3/30/2000
ALKALINITY, TO	DTAL		M2320 B				Analyst: HR
Alkalinity, Bicarbo	onate (As CaCO3)	1360	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Carbon	nate (As CaCO3)	ND	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Hydrox	ide	ND	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Total (/	As CaCO3)	1360	5		mg/L CaCO3	1	3/22/2000
CHLORIDE			E325.3				Analyst: HR
Chloride		75	1		mg/L	1	3/23/2000
CONDUCTIVITY	@ 25C		E120.1				Analyst: HR
Specific Conduct	ance	4750	2		uS/cm	1	3/22/2000
HARDNESS, TO	TAL		M2340 B				Analyst: HR
Hardness (As Ca	CO3)	620	1		mg/L	1	3/31/2000
PH			E150.1				Analyst: HR
pН		7.32	2		pH units	1	3/22/2000
SULFATE			M4500-SO4	D			Analyst: HR
Sulfate		1400	8		mg/L	1	3/23/2000
TOTAL DISSOL	VED SOLIDS		E160.1				Analyst: HR
Total Dissolved S Filterable)	Solids (Residue,	3610	40		mg/L	1	3/22/2000
OTAL DISSOL	VED SOLIDS		CALC				Analyst: <b>HR</b>
Total Dissolved S	olids (Calculated)	3570	40		mg/L	1	3/31/2000



PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

J - Analyte detected below Practical Quantitation Limit B - Analyte detected in the associated Method Blank

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



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

# ANALYTICAL REPORT

Date: 27-Apr-00

Client: Work Order:	ht:PNM - Public Service Company of NMk Order:0003033			Clier Cli	it Sample Info: ent Sample ID:	Florance 00032109	40 945; MW-6
Lab ID:	0003033-02A	Matrix: AOU	JEOUS	C	ollection Date:	3/21/200	0 9:45:00 AM
Project:	Florance 40				COC Record:	8505	
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID		SW8021B				Analyst: DN
Benzene		.4200	50		µg/L	100	3/24/2000
Toluene		12000	50		µg/L	100	3/24/2000
Ethylbenzene		1300	50		µg/L	100	3/24/2000
m,p-Xylene		12000	100		µg/L	100	3/24/2000
o-Xylene		3200	50		µg/L	100	3/24/2000
CALCIUM, DISS	OLVED		E215.1				Analyst: HR
Calcium		1040	100		mg/L	400	3/31/2000
POTASSIUM, DI	SSOLVED		E258.1				Analyst: HR
Potassium		3.3	0.25		mg/L	1	3/30/2000
MAGNESIUM, D	ISSOLVED		E242.1				Analyst: HR
Magnesium		340	50		mg/L	200	3/30/2000
SODIUM, DISSO	LVED		E273.1				Analyst: HR
Sodium		510	100		mg/L	400	3/30/2000
ALKALINITY, TO	DTAL		M2320 B				Analyst: HR
Alkalinity, Bicarbo	onate (As CaCO3)	2780	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Carbon	ate (As CaCO3)	ND	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Hydrox	ide	ND	5		mg/L CaCO3	1	3/22/2000
Alkalinity, Total (A	As CaCO3)	2780	5		mg/L CaCO3	1	3/22/2000
CHLORIDE			E325.3				Analyst: HR
Chloride		92	1		mg/L	1	3/23/2000
CONDUCTIVITY	@ 25C		E120.1				Analyst: HR
Specific Conducta	ance	5860	2		uS/cm	1	3/22/2000
HARDNESS, TO	TAL		M2340 B				Analyst: HR
Hardness (As Ca	CO3)	4000	1		mg/L	1	3/31/2000
ън			E150.1				Analyst: HR
рН		6.64	2		pH units	1	3/22/2000
SULFATE			M4500-SO4	D			Analyst: HR
Sulfate		270	8		mg/L	1	3/23/2000
TOTAL DISSOL	VED SOLIDS		E160.1				Analyst: HR
Total Dissolved S Filterable)	olids (Residue,	7430	40		mg/L	1	3/22/2000
TOTAL DISSOL	VED SOLIDS		CALC				Analyst: HF
Total Dissolved S	olids (Calculated)	3930	40		mg/L	1	3/31/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below Practical Quantitation Limit B - Analyte detected in the associated Method Blank

the associated Method Blank Surr: - Surrogate P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



Ethylbenzene

m,p-Xylene

o-Xylene



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

# ANALYTICAL REPORT

Date: 27-Apr-00

3/24/2000

3/24/2000

3/24/2000

1

1

1

Client: Work Order:	PNM - Public Ser 0003033	vice Company of N	M	Client S Client	Sample Ir Sample	fo: Florance ID: 000321	Florance 40 0003211006; MW-7		
Lab ID:	0003033-03A	Matrix: AQUE	Col	ection Da	ate: 3/21/20	3/21/2000 10:06:00 AM			
Project:	Florance 40			C	OC Reco	rd: 8505			
Parameter		Result	PQL	Qual U	nits	DF	Date Analyzed		
	ATILES BY GC/PID	SV	V8021B				Analyst: DM		
Benzene		ND	0.5	ŀ	ig/L	1	3/24/2000		
Toluene		ND	0.5	L	ia/L	1	3/24/2000		

0.5

1

0.5

µg/L

µg/L

µg/L

ND

4.7

1.2





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

1 of 1

- R RPD outside accepted recovery limits
- E Value above quantitation range
- Surr: Surrogate

# P.O. BOX 2606 • FARMINGTON, NM 87499

- Technology Blending Industry with the Environment -

o-Xylene



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

# ANALYTICAL REPORT

Date: 21-Jul-00

Client: Work Order: Lab ID: Project:	PNM - Public Ser 0006036 0006036-01A Florance 40	vice Company of I Matrix: AQUE	NM OUS	Client Sample Info: Florance 40 Client Sample ID: 0006140739; MW-5 Collection Date: 6/14/2000 7:39:00 AM COC Record: 7894			
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
	ATILES BY GC/PID	SV	N8021B				Analyst: DC
Benzene		800	25		µg/L	50	6/18/2000
Toluene		33	25		μg/L	50	6/18/2000
Ethylbenzene		980	25		µg/L	50	6/18/2000
m,p-Xylene 5400					µg/L	50	6/18/2000

25

µg/L

50

6/18/2000

490

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

# ANALYTICAL REPORT

Date: 21-Jul-00

Client:	PNM - Public S	ervice Company of NM		Clien	t Sample I	nfo: Floranc	e 40
Work Order:	0006036	Matrix: AOUFOUS	2	Che	ent Sample ollection D	<b>ID:</b> 000614 ate: 6/14/20	0755; MW-6 00 7:55:00 AM
Lab ID: Project:	Florance 40	Mailla. AQUEUU	,	Ũ	COC Reco	ord: 7894	00 7.33.00 ANI
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed

AROMATIC VOLATILES BY GC/PID	SW8021B				Analyst: DC
Benzene	4400	50	µg/L	100	6/24/2000
Toluene	11000	50	µg/L	100	6/24/2000
Ethylbenzene	1200	50	µg/L	100	6/24/2000
m,p-Xylene	12000	100	µg/L	100	6/24/2000
o-Xylene	3200	50	µg/L	100	6/24/2000

#### 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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Паренисцор и Видновно Пириями и Аректер Ентиконнивите



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

# ANALYTICAL REPORT

Date: 21-Jul-00

Client: Work Order: Lab ID: Project:	lient:PNM - Public Service Company of NM'ork Order:0006036ab ID:.0006036-03AMatrix: AQUEOUSroject:Florance 40			Client Sample Info: Florance 40 Client Sample ID: 0006140821; MW-7 Collection Date: 6/14/2000 8:21:00 AM COC Record: 7894			
Parameter		Result	PQL	Qual Units	DF	Date Analyzed	
AROMATIC VOLATILES BY GC/PID SW8021B				Analyst: DC			
Benzene		ND	0.5	µg/L	1	6/24/2000	
Toluene		ND	0.5	µg/L	1	6/24/2000	
Ethylbenzene		ND	0.5	µg/L	1	6/24/200 <b>0</b>	
m,p-Xylene		ND	1	µg/L	1	6/24/2000	
o-Xvlene		ND	0.5	µg/L	1	6/24/2000	





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

Suit: - Suitogate

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