

3R - 326

REPORTS

DATE:

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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Annual Groundwater Report 2000

San Juan Basin, New Mexico
Lined Surface Impoundments

Site Summary Report

Site Name: Kaufman 1

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

Location: Unit H, Sec 23, Twn 31N, Rng 13W

Canyon: La Plata River

Operator: Snyder

Vulnerable Class: original

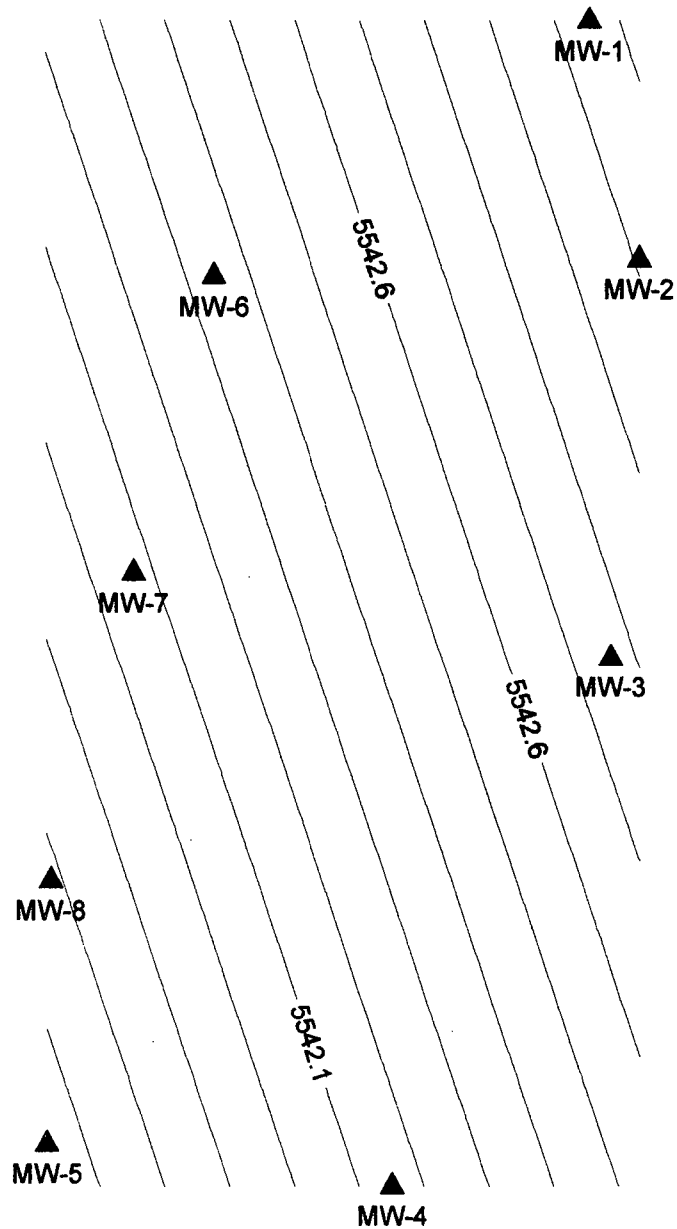
OCD Ranking: 40

Lead Agency: NMOCD / BLM

Status Narrative

This site has eight monitoring wells, with three quarters of ground water monitoring completed to date. The site was approved for closure by OCD on February 19, 1998. However, during fence installation work by BLM personnel in February 2000, additional soil contamination was discovered at a shallow depth west of PNM's former dehydrator pit. This prompted PNM to conduct additional investigation/remediation at the site. Approximately 2500 cubic yards of impacted soil was removed and monitoring wells MW-6, MW-7, and MW-8 were installed along the western edge of the contaminant plume.

Kaufman 1
Potentiometric Surface Map
(May 22, 2000)



Kaufman 1
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
open pit	0002211445	21-Feb-00	N		460	700	730	9600
MW-1	0005220908	22-May-00	N		<0.5	<0.5	<0.5	<1.5
MW-2	0005221030	22-May-00	N		<0.5	<0.5	<0.5	<1.5
MW-3	0002291300	29-Feb-00	N		<0.5	<0.5	1.2	1.8
	0003090910	9-Mar-00	N		0.8	1.1	1.4	19.6
	0005220927	22-May-00	N		3.2	<0.5	0.6	<1.5
MW-4	0005220939	22-May-00	N		<0.5	<0.5	<0.5	<1.5
MW-5	0005220949	22-May-00	N		<0.5	<0.5	<0.5	<1.5
MW-6	0003090929	9-Mar-00	N		<0.5	0.6	<0.5	5.6
	0005221001	22-May-00	N		140	<0.5	26	55
MW-7	0003090947	9-Mar-00	N		2.2	15	3.7	54
	0005221010	22-May-00	N		51	<0.5	15	44
MW-8	0003091006	9-Mar-00	N		17	100	17	253
	0005221022	22-May-00	N		180	<0.5	8.4	9.1

NS = well not sampled for specified analytes

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ANALYTICAL REPORT

Date: 14-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0002045	Client Sample ID:	0002211445; Open Pit
Lab ID:	0002045-02A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	2/21/2000 2:45:00 PM
		COC Record:	7876

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	460	50		µg/L	100	2/22/2000
Toluene	700	50		µg/L	100	2/22/2000
Ethylbenzene	730	50		µg/L	100	2/22/2000
m,p-Xylene	7800	100		µg/L	100	2/22/2000
o-Xylene	1800	50		µg/L	100	2/22/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

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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: 02-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0002063	Client Sample ID:	0002291300; MW-3
Lab ID:	0002063-01A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	2/29/2000 1:00:00 PM
		COC Record:	8525

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	2/29/2000
Toluene	ND	0.5		µg/L	1	2/29/2000
Ethylbenzene	1.2	0.5		µg/L	1	2/29/2000
m,p-Xylene	1.3	1		µg/L	1	2/29/2000
o-Xylene	0.5	0.5		µg/L	1	2/29/2000

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ANALYTICAL REPORT

Date: 23-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0003012	Client Sample ID:	0003090910; MW-3
Lab ID:	0003012-02A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	3/9/2000 9:10:00 AM
		COC Record:	8513

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	0.8	0.5		µg/L	1	3/15/2000
Toluene	1.1	0.5		µg/L	1	3/15/2000
Ethylbenzene	1.4	0.5		µg/L	1	3/15/2000
m,p-Xylene	15	1		µg/L	1	3/15/2000
o-Xylene	4.6	0.5		µg/L	1	3/15/2000

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ANALYTICAL REPORT

Date: 23-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0003012	Client Sample ID:	0003090929; MW-6
Lab ID:	0003012-03A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	3/9/2000 9:29:00 AM
		COC Record:	8513

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	0.6	0.5		µg/L	1	3/14/2000
Ethylbenzene	ND	0.5		µg/L	1	3/14/2000
m,p-Xylene	4.4	1		µg/L	1	3/14/2000
o-Xylene	1.2	0.5		µg/L	1	3/14/2000

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Sum: - Surrogate

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ANALYTICAL REPORT

Date: 23-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0003012	Client Sample ID:	0003090947; MW-7
Lab ID:	0003012-04A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	3/9/2000 9:47:00 AM
		COC Record:	8513

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	2.2	0.5		µg/L	1	3/14/2000
Toluene	15	0.5		µg/L	1	3/14/2000
Ethylbenzene	3.7	0.5		µg/L	1	3/14/2000
m,p-Xylene	44	1		µg/L	1	3/14/2000
o-Xylene	10	0.5		µg/L	1	3/14/2000

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Surr: - Surrogate

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ANALYTICAL REPORT

Date: 23-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0003012	Client Sample ID:	0003091006; MW-8
Lab ID:	0003012-05A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	3/9/2000 10:06:00 AM
		COC Record:	8513

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	17	0.5		µg/L	1	3/14/2000
Toluene	100	0.5		µg/L	1	3/14/2000
Ethylbenzene	17	0.5		µg/L	1	3/14/2000
m,p-Xylene	210	1		µg/L	1	3/14/2000
o-Xylene	43	0.5		µg/L	1	3/14/2000

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005220908; MW 1
Lab ID:	0005052-01A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 9:08:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	ND	0.5		µg/L	1	5/26/2000
m,p-Xylene	ND	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005221030; MW 2
Lab ID:	0005052-02A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 10:30:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	ND	0.5		µg/L	1	5/26/2000
m,p-Xylene	ND	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

Qualifiers:

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005220927; MW 3
Lab ID:	0005052-03A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 9:27:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	3.2	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	0.6	0.5		µg/L	1	5/26/2000
m,p-Xylene	ND	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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Surr: - Surrogate

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005220939; MW 4
Lab ID:	0005052-04A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 9:39:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	ND	0.5		µg/L	1	5/26/2000
m,p-Xylene	ND	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005220949; MW 5
Lab ID:	0005052-05A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 9:49:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	ND	0.5		µg/L	1	5/26/2000
m,p-Xylene	ND	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005221001; MW 6
Lab ID:	0005052-06A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 10:01:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	140	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	26	0.5		µg/L	1	5/26/2000
m,p-Xylene	55	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005221010; MW 7
Lab ID:	0005052-07A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 10:10:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	51	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	15	0.5		µg/L	1	5/26/2000
m,p-Xylene	44	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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ANALYTICAL REPORT

Date: 31-May-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Kaufman 1
Work Order:	0005052	Client Sample ID:	0005221022; MW 8
Lab ID:	0005052-08A	Matrix:	AQUEOUS
Project:	Kaufman 1	Collection Date:	5/22/2000 10:22:00 AM
		COC Record:	7883

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	180	0.5		µg/L	1	5/26/2000
Toluene	ND	0.5		µg/L	1	5/26/2000
Ethylbenzene	8.4	0.5		µg/L	1	5/26/2000
m,p-Xylene	9.1	1		µg/L	1	5/26/2000
o-Xylene	ND	0.5		µg/L	1	5/26/2000

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