

3R - 304

REPORTS

DATE:

July 2, 2001



Environmental Services
187 County Road 4980
Bloomfield, NM 87413
505-632-4409 Phone
505-632-4405 Fax

July 2, 2001

Mr. Bill Olson
Hydrogeologist
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: ALBRIGHT #4 DRIP PIT REMEDIATION AND CLOSURE REPORT

Dear Mr. Olson:

Enclosed please find information on remediation and closure activities associated with the unlined surface impoundment located at the Albright #4 Drip site. Public Service Company of New Mexico (PNM) formerly owned the site and initiated closure activities on June 17, 1999. The site later became an asset of Williams upon purchase of Gas Company of New Mexico (GCNM) from PNM. Upon expiration of PNM's retained environmental liabilities associated with the site, Williams agreed to complete necessary closure work. As such, the enclosed documentation reflects activities of both PNM and Williams.

Site History

Excavation of petroleum hydrocarbon impacted soil beneath the unlined surface impoundment began on June 17, 1999. A total of 2,040 cubic yards of contaminated soil were removed and disposed of at an approved off-site waste management facility. The excavation was reportedly terminated at a depth of 15-feet, where ground water was encountered. A sample of the ground water collected from the pit contained benzene and total xylene at concentrations in excess of Water Quality Control Commission (WQCC) standards. A letter notifying the Oil Conservation Division (OCD) of ground water contamination at the site was submitted on July 20, 1999.

To evaluate the magnitude and extent of ground water contamination, four monitoring wells were installed on July 27-28, 1999. An additional well was added to the network on April 12, 2000. Quarterly ground water samples were collected from the wells through May of 2001.

Site Hydrogeology

The Albright # 4 Drip is located in Unit F, Section 22, Township 29N, Range 10W of San Juan County, New Mexico (Figure 1). Approximately 100 feet southwest of the site is the Wright Canyon Arroyo, which flows south approximately 1 mile to the San Juan River. The site is underlain by approximately 15-feet of unconsolidated material consisting primarily of light brown, fine to coarse sand and silty sand. Below 15-feet an unknown thickness of gray, moderately to well indurated sandstone with appreciable clay content exists.

Groundwater in the unconsolidated sediments is unconfined and water level elevations vary seasonally. Depths to ground water range from approximately 8 to 15-feet below ground level. A hydrograph for the entire monitoring period is included as Figure 2. Ground water flows to the south consistent with the regional hydraulic gradient toward the San Juan River. A potentiometric surface map is included as Figure 3. Hydraulic conductivities of the sediments are likely on the order of 10^{-3} to 10^{-1} cm/sec.

Monitoring Results

Concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) were analyzed in water samples collected quarterly from August 1999 through May 2001. Of the five wells in the monitoring network, only well MW-2, located in the former source area, contained concentrations in excess of WQCC standards. Table 1 summarizes the analytical results from monitoring the wells.

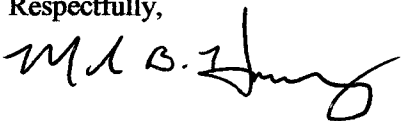
Natural attenuation processes active at the site resulted in a steady decrease in BTEX over the two-year monitoring period. The initial concentration of total BTEX in well MW-2 was 1030 ug/L. Less than one-year later, in June 2000, the total BTEX concentration was reduced to 43.6 ug/L. For the last four consecutive quarters of monitoring the concentrations of the BTEX compounds have remained below the WQCC standards.

Summary

The unlined surface impoundment at the Albright #4 Drip was addressed consistent with OCD Order 7940-C and with the guidelines pertaining to the remediation of unlined surface impoundments. The work included the removal of hydrocarbon impacted soils and an evaluation of groundwater impacted by the historical operation of the impoundment. A network of ground water monitoring wells was installed and ground water analyses showed that a small BTEX plume existed in the vicinity of the former pit location. Natural attenuation of the BTEX compounds resulted in contaminant degradation to concentrations less than WQCC MCLs. The monitoring results show that WQCC standards for BTEX in ground water have been met for four consecutive quarterly monitoring periods.

Based on current site conditions, Williams requests approval for closure of the Albright #4 Drip site. Following receipt of your closure approval we will plug and abandon the monitoring wells in accordance with applicable regulations. Williams appreciates your time in reviewing this site closure request. If you have any questions or require any additional information, please contact me at 505-632-4409 or Jim Struhs, Project Hydrogeologist at 505-632-4457.

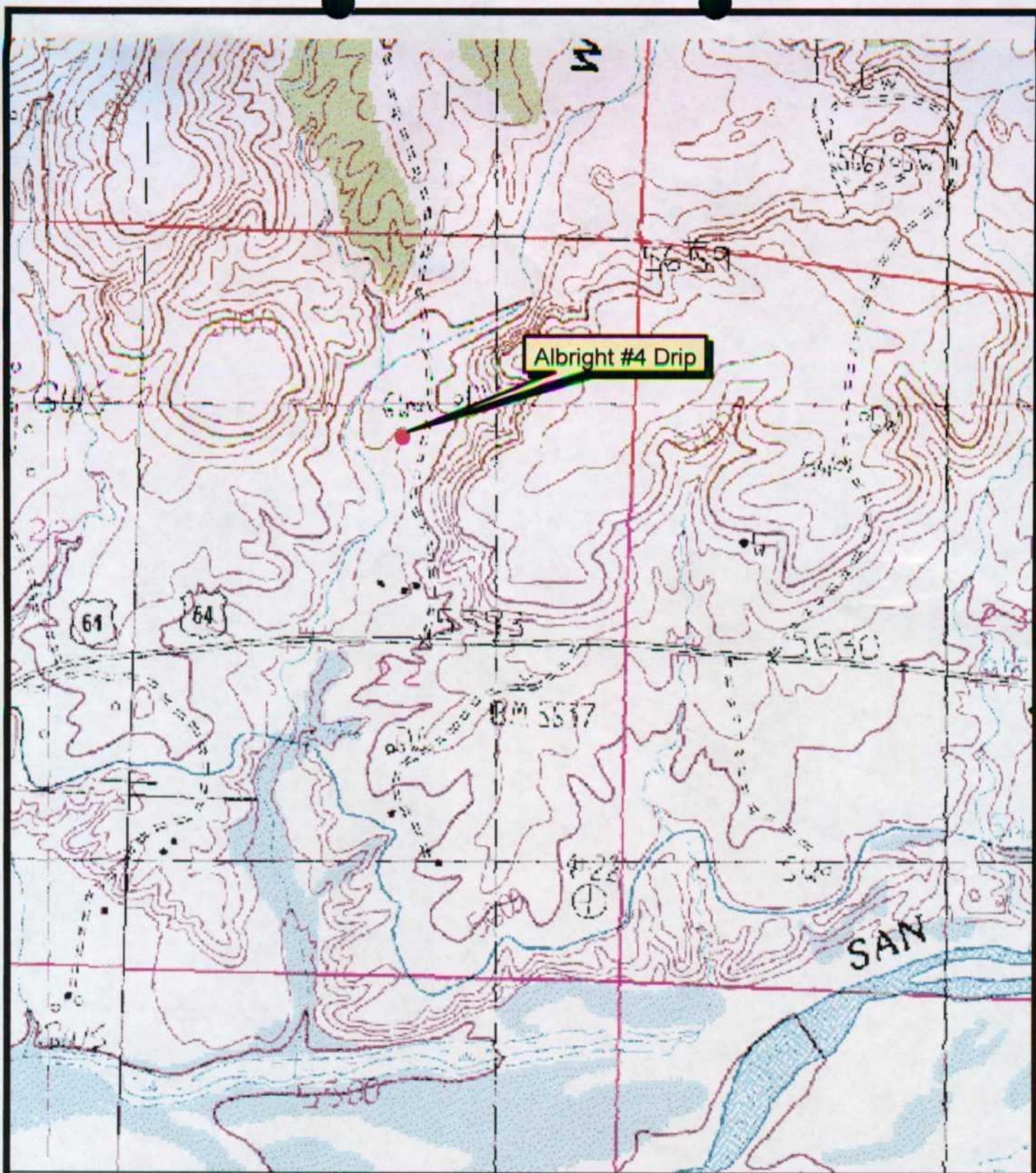
Respectfully,



Mark B. Harvey
Project Coordinator

enclosures

C: Denny Foust, OCD AZTEC DISTRICT OFFICE
Bill Liess, BLM FARMINGTON DISTRICT OFFICE



Williams

Figure 1
Site Location Map
Albright #4 Drip

1000 0 1000 2000 Feet



Figure 2. Albright #4 Drip
Hydrograph for Period Q3/1999 - Q2/2001
(Elevation vs. Time)

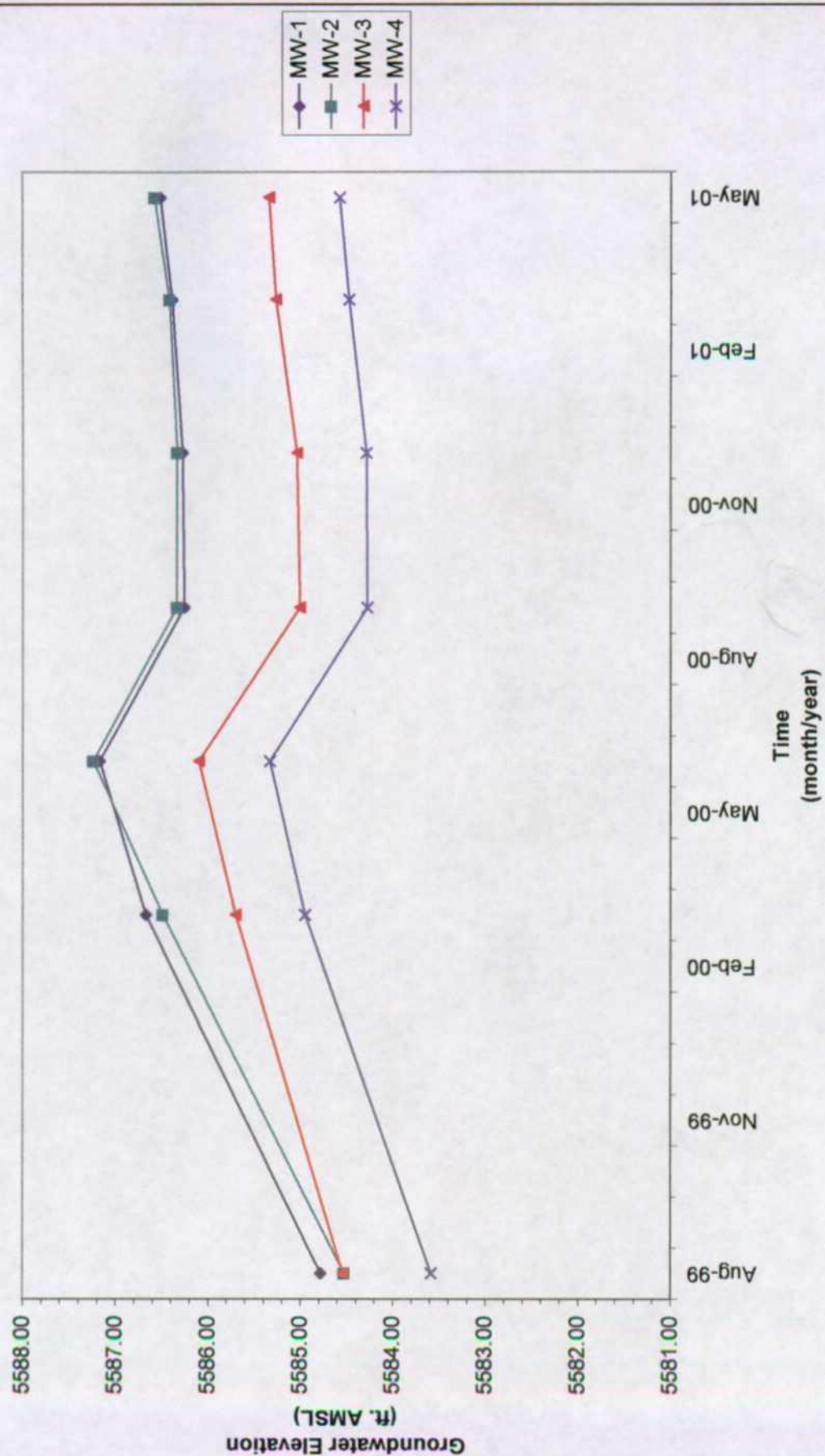
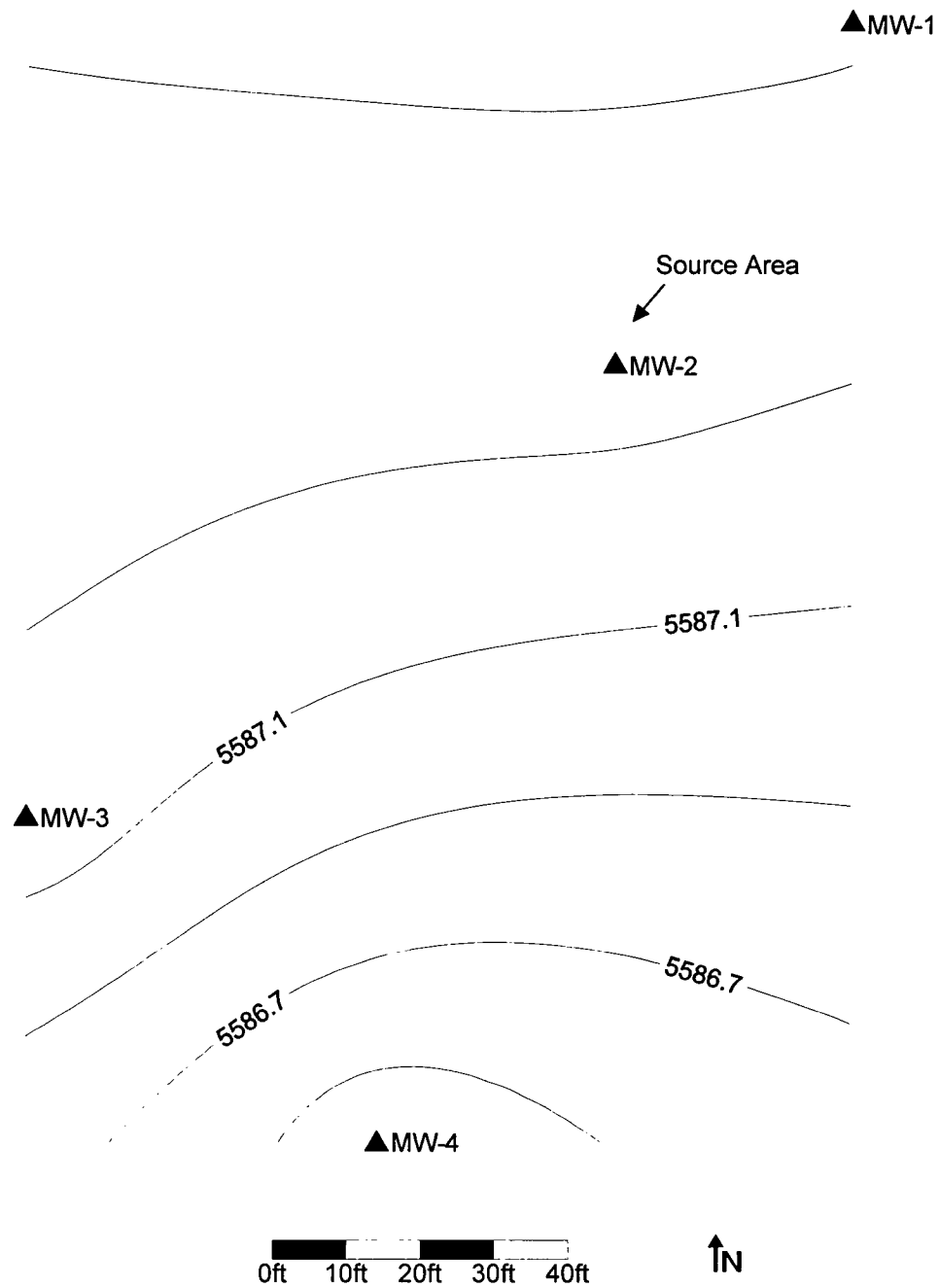


Figure 3. Potentiometric Surface Map
Albright #4 Drip
(August 5, 1999)



**Table 1. Summary of Groundwater Analytical Data
Albright #4 Drip**

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	9908051320	5-Aug-99	N		<0.5	<0.5	<0.5	<1.5
	9912061257	6-Dec-99	N		<0.5	1	<0.5	<1.5
	0003051332	5-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006071157	7-Jun-00	N		<0.5	<0.5	<0.5	<1.5
	NS	28-Sep-00	N					
	NS	7-Dec-00	N					
	ALB4-UG-MW1	15-Mar-01	N		<1	<1	<1	<1
	ALB4-UG-MW1	4-May-01	N		<1	<1	<1	<1
MW-2	9908051400	5-Aug-99	N		230	8	52	740
	9912061322	6-Dec-99	N		170	3	39	68
	0003051355	5-Mar-00	N		26	<0.5	23	65
	0006071212	7-Jun-00	N		10.0	<0.5	9.3	23.8
	ALB4-SA-MW2	28-Sep-00	N		6.1	26.2	8.3	17.6
	ALB4-SA-MW2	7-Dec-00	N		4.16	1.56	5.94	2.24
	ALB4-SA-MW2	15-Mar-01	N		3.29	21.70	3.47	8.90
	ALB4-SA-MW2	4-May-01	N		<1	17.00	1.57	5.50
MW-3	9908051430	5-Aug-99	N		<0.5	<0.5	<0.5	<1.5
	9912061340	6-Dec-99	N		<0.5	1	<0.5	<1.5
	0003051410	5-Mar-00	N		<0.5	<0.5	<0.5	<1.5
	0006071226	7-Jun-00	N		<0.5	<0.5	<0.5	<1.5
	NS	28-Sep-00	N					
	NS	7-Dec-00	N					
	ALB4-DG-MW3	15-Mar-01	N		<1	<1	<1	<1
	ALB4-DG-MW3	4-May-01	N		<1	<1	<1	<1
MW-4	9908051520	5-Aug-99	N		<0.5	<0.5	<0.5	<1.5
	9912061353	6-Dec-99	N		<0.5	0.8	<0.5	<1.5
	0003051426	5-Mar-00	N		<0.5	<0.5	1	<1.5
	0006071237	7-Jun-00	N		<0.5	<0.5	1	<1.5
	NS	28-Sep-00	N					
	NS	7-Dec-00	N					
	ALB4-DG-MW4	15-Mar-01	N		<1	<1	<1	<1
	ALB4-DG-MW4	4-May-01	N		1.27	5.08	<1	4.63
MW-5	0006071248	7-Jun-00	N		<0.5	1.5	0.8	<1.5
	ALB4-DG-MW5	28-Sep-00	N		<1.0	13.8	2.33	3.54
	ALB4-DG-MW5	7-Dec-00	N		1.27	<1	<1	2.01
	ALB4-DG-MW5	15-Mar-01	N		<1	19.4	5.28	3.58
	ALB4-DG-MW5	4-May-01	N		<1	29.1	3.92	3.92

NS=Not Sampled

[illegible]

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051320; MW-1
Lab ID:	9908012-01A	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	08/05/1999 1:20:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	08/12/1999
Toluene	ND	0.5		µg/L	1	08/12/1999
Ethylbenzene	ND	0.5		µg/L	1	08/12/1999
m,p-Xylene	ND	1		µg/L	1	08/12/1999
o-Xylene	ND	0.5		µg/L	1	08/12/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Sep-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051320; MW-1
Lab ID:	9908012-01B	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	8/5/99 1:20:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM, DISSOLVED	E215.1					Analyst: HR
Calcium	210	25		mg/L	100	8/10/99
POTASSIUM, DISSOLVED	E258.1					Analyst: HR
Potassium	4.8	0.5		mg/L	2	8/10/99
MAGNESIUM, DISSOLVED	E242.1					Analyst: HR
Magnesium	50	5		mg/L	20	8/10/99
SODIUM, DISSOLVED	E273.1					Analyst: HR
Sodium	1440	120		mg/L	500	8/10/99
ALKALINITY, TOTAL	M2320 B					Analyst: HR
Alkalinity, Bicarbonate (As CaCO ₃)	350	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Carbonate (As CaCO ₃)	ND	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Hydroxide	ND	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Total (As CaCO ₃)	350	5		mg/L CaCO ₃	1	8/9/99
CHLORIDE	E325.3					Analyst: HR
Chloride	31	1		mg/L	1	8/9/99
CONDUCTIVITY @ 25C	E120.1					Analyst: HR
Specific Conductance	6690	2		uS/cm	1	8/9/99
HARDNESS, TOTAL	M2340 B					Analyst: HR
Hardness (As CaCO ₃)	740	1		mg/L	1	8/10/99
PH	E150.1					Analyst: HR
pH	7.51	2		pH units	1	8/6/99
SULFATE	M4500-SO4 D					Analyst: HR
Sulfate	3560	8		mg/L	1	8/9/99
TOTAL DISSOLVED SOLIDS	E160.1					Analyst: HR
Total Dissolved Solids (Residue, Filterable)	5580	40		mg/L	1	8/9/99
TOTAL DISSOLVED SOLIDS	CALC					Analyst: HR
Total Dissolved Solids (Calculated)	5650	40		mg/L	1	8/10/99

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Albright #4 Drip 9908051320; MW-1 ACZ Report ID: RG99733

Lab Sample ID: L24239-01
Client Sample ID: 9908012-01C
Client Project ID:
ACZ Report ID: RG99733

On Site Technologies, LTD.
612 E Murray Dr
Farmington, NM 87499
David Cox

Date Sampled: 8/5/99 01:20
Date Received: 8/10/99
Date Reported: 8/25/99

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved	M206.2 GFAA		U	mg/L	0.001	0.005	8/18/99	jl
Barium, dissolved	M200.7 ICP	0.022		mg/L	0.003	0.01	8/20/99	kr
Cadmium, dissolved	M213.2 GFAA		U	mg/L	0.0005	0.003	8/17/99	jl
Chromium, dissolved	M200.7 ICP		U	mg/L	0.01	0.05	8/20/99	kr
Iron, dissolved	M200.7 ICP	0.02	B	mg/L	0.01	0.05	8/20/99	kr
Lead, dissolved	M239.2 GFAA		U	mg/L	0.001	0.005	8/16/99	jl
Manganese, dissolved	M200.7 ICP	0.050		mg/L	0.005	0.03	8/20/99	kr
Mercury, dissolved	M245.1 CVAA		U	mg/L	0.0002	0.001	8/20/99	ms
Selenium, dissolved	SM 3500-Se C, AA-Hydride	0.003	B	mg/L	0.001	0.005	8/18/99	ms
Silver, dissolved	M200.7 ICP		U	mg/L	0.005	0.03	8/20/99	kr

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Lab Filtration & Acidification	***						8/11/99	ss/tr

Inorganic Qualifiers (based on EPA CLP 3/90)

U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S. Harnisch for
Vice President of Operations: Ralph Poulsen

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051400; MW-2
Lab ID:	9908012-02A	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	08/05/1999 2:00:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	230	2.5		µg/L	5	08/16/1999
Toluene	7.7	2.5		µg/L	5	08/16/1999
Ethylbenzene	52	2.5		µg/L	5	08/16/1999
m,p-Xylene	740	5		µg/L	5	08/16/1999
o-Xylene	ND	2.5		µg/L	5	08/16/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Sep-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051400; MW-2
Lab ID:	9908012-02B	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	8/5/99 2:00:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM, DISSOLVED	E215.1					Analyst: HR
Calcium	340	25		mg/L	100	8/10/99
POTASSIUM, DISSOLVED	E258.1					Analyst: HR
Potassium	8	1.2		mg/L	5	8/10/99
MAGNESIUM, DISSOLVED	E242.1					Analyst: HR
Magnesium	57	5		mg/L	20	8/10/99
SODIUM, DISSOLVED	E273.1					Analyst: HR
Sodium	1560	120		mg/L	500	8/10/99
ALKALINITY, TOTAL	M2320 B					Analyst: HR
Alkalinity, Bicarbonate (As CaCO ₃)	780	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Carbonate (As CaCO ₃)	ND	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Hydroxide	ND	5		mg/L CaCO ₃	1	8/9/99
Alkalinity, Total (As CaCO ₃)	780	5		mg/L CaCO ₃	1	8/9/99
CHLORIDE	E325.3					Analyst: HR
Chloride	38	1		mg/L	1	8/9/99
CONDUCTIVITY @ 25C	E120.1					Analyst: HR
Specific Conductance	7510	2		uS/cm	1	8/9/99
HARDNESS, TOTAL	M2340 B					Analyst: HR
Hardness (As CaCO ₃)	1090	1		mg/L	1	8/10/99
PH	E150.1					Analyst: HR
pH	6.96	2		pH units	1	8/6/99
SULFATE	M4500-SO4 D					Analyst: HR
Sulfate	3960	8		mg/L	1	8/9/99
TOTAL DISSOLVED SOLIDS	E160.1					Analyst: HR
Total Dissolved Solids (Residue, Filterable)	6660	40		mg/L	1	8/9/99
TOTAL DISSOLVED SOLIDS	CALC					Analyst: HR
Total Dissolved Solids (Calculated)	6740	40		mg/L	1	8/10/99

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ACZ Laboratories, Inc.
2773 Downhill Drive
Steamboat Springs, CO 80487
(800) 334-5493

Albright #4 Drip 9908051400; MW-2 ACZ Report ID: RG99734

On Site Technologies, LTD.
612 E Murray Dr
Farmington, NM 87499
David Cox

Lab Sample ID: L24239-02
Client Sample ID: 9908012-02C
Client Project ID:
ACZ Report ID: RG99734

Date Sampled: 8/5/99 02:00
Date Received: 8/10/99
Date Reported: 8/25/99

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved	M206.2 GFAA	0.003	B	mg/L	0.001	0.005	8/18/99	jl
Barium, dissolved	M200.7 ICP	0.038		mg/L	0.006	0.02	8/20/99	kr
Cadmium, dissolved	M213.2 GFAA		U	mg/L	0.0005	0.003	8/17/99	jl
Chromium, dissolved	M200.7 ICP		U	mg/L	0.02	0.1	8/20/99	kr
Iron, dissolved	M200.7 ICP	0.13		mg/L	0.02	0.1	8/20/99	kr
Lead, dissolved	M239.2 GFAA		U	mg/L	0.001	0.005	8/16/99	jl
Manganese, dissolved	M200.7 ICP	9.96		mg/L	0.01	0.05	8/20/99	kr
Mercury, dissolved	M245.1 CVAA		U	mg/L	0.0002	0.001	8/20/99	ms
Selenium, dissolved	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	8/18/99	ms
Silver, dissolved	M200.7 ICP		U	mg/L	0.01	0.05	8/20/99	kr

Wet Chemistry

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Lab Filtration & Acidification	***						8/11/99	ss/tr

Inorganic Qualifiers (based on EPA CLP 3/90)

U = Analyte was analyzed for but not detected at the indicated MDL
B = Analyte concentration detected at a value between MDL and PQL
PQL = Practical Quantitation Limit

S. Hosenmehl for
Vice President of Operations: Ralph Poulsen

**HOUSTON LABORATORY**8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9908282-01

On Site Technologies
612 East Murray
Farmington, NM 87401
ATTN: David Cox

Albright #4 Drip 9908051400; MW-2

08/16/99

PROJECT: 8310 Analysis

PROJECT NO: 9908012

SITE:

MATRIX: WATER

SAMPLED BY: On Site Technologies, LTD.

DATE SAMPLED: 08/05/99 14:00:00

SAMPLE ID: 9908012-02D

DATE RECEIVED: 08/10/99

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	18	2.0	ug/L
Acenaphthylene	ND	0.1	ug/L
Acenaphthene	0.3	0.1	ug/L
Fluorene	ND	2.0	ug/L
Phenanthrene	ND	0.1	ug/L
Anthracene	ND	0.1	ug/L
Fluoranthene	0.7	0.1	ug/L
Pyrene	ND	0.1	ug/L
Chrysene	ND	0.1	ug/L
Benzo (a) anthracene	ND	0.1	ug/L
Benzo (b) fluoranthene	ND	0.1	ug/L
Benzo (k) fluoranthene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
Dibenzo (a,h) anthracene	ND	0.1	ug/L
Benzo (g,h,i) perylene	ND	0.1	ug/L
Indeno (1,2,3-cd) pyrene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	74	50	150
Phenanthrene d-10	0.50 ug/L	90	50	150

ANALYZED BY: KA

DATE/TIME: 08/13/99 06:04:32

EXTRACTED BY: KL

DATE/TIME: 08/10/99 12:00:00

METHOD: 8310 Polynuclear Aromatic Hydrocarbons

NOTES: * - Practical Quantitation Limit

ND - Not Detected

NA - Not Analyzed

COMMENTS:**QUALITY ASSURANCE:** These analyses are performed in accordance with EPA guidelines for quality assurance.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051430; MW-3
Lab ID:	9908012-03A	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	08/05/1999 2:30:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	08/12/1999
Toluene	ND	0.5		µg/L	1	08/12/1999
Ethylbenzene	ND	0.5		µg/L	1	08/12/1999
m,p-Xylene	ND	1		µg/L	1	08/12/1999
o-Xylene	ND	0.5		µg/L	1	08/12/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9908012	Client Sample ID:	9908051520; MW-4
Lab ID:	9908012-04A	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	08/05/1999 3:20:00 PM
		COC Record:	7820

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	08/12/1999
Toluene	ND	0.5		µg/L	1	08/12/1999
Ethylbenzene	ND	0.5		µg/L	1	08/12/1999
m,p-Xylene	ND	1		µg/L	1	08/12/1999
o-Xylene	ND	0.5		µg/L	1	08/12/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	9912008	Client Sample ID:	9912061257; MW-1
Lab ID:	9912008-01A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	12/6/1999 12:57:00 PM
		COC Record:	7033

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	12/15/1999
Toluene	0.5	0.5		µg/L	1	12/15/1999
Ethylbenzene	ND	0.5		µg/L	1	12/15/1999
m,p-Xylene	ND	1		µg/L	1	12/15/1999
o-Xylene	ND	0.5		µg/L	1	12/15/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	9912008	Client Sample ID:	9912061322; MW-2
Lab ID:	9912008-02A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	12/6/1999 1:22:00 PM
		COC Record:	7033

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	170	0.5		µg/L	1	12/16/1999
Toluene	2.8	2.5		µg/L	5	12/15/1999
Ethylbenzene	39	0.5		µg/L	1	12/16/1999
m,p-Xylene	66	1		µg/L	1	12/16/1999
o-Xylene	1.5	0.5		µg/L	1	12/16/1999

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	9912008	Client Sample ID:	9912061340; MW-3
Lab ID:	9912008-03A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	12/6/1999 1:40:00 PM
		COC Record:	7033

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	12/15/1999
Toluene	0.6	0.5		µg/L	1	12/15/1999
Ethylbenzene	ND	0.5		µg/L	1	12/15/1999
m,p-Xylene	ND	1		µg/L	1	12/15/1999
o-Xylene	ND	0.5		µg/L	1	12/15/1999

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	9912008	Client Sample ID:	9912061353; MW-4
Lab ID:	9912008-04A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	12/6/1999 1:53:00 PM
		COC Record:	7033

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	12/15/1999
Toluene	0.8	0.5		µg/L	1	12/15/1999
Ethylbenzene	ND	0.5		µg/L	1	12/15/1999
m,p-Xylene	1.1	1		µg/L	1	12/15/1999
o-Xylene	ND	0.5		µg/L	1	12/15/1999

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

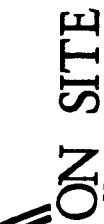
B - Analyte detected in the associated Method Blank

SUR - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



一、
 二、
 三、
 四、

Page: 1 of 1

612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

[illegible]

Distribution:	White - On Site	Yellow - LAB	Pink - Sampler	Goldenrod - Client
---------------	-----------------	--------------	----------------	--------------------

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0003006	Client Sample ID:	0003051332; MW-1
Lab ID:	0003006-01A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	3/5/2000 1:32:00 PM
		COC Record:	8501

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	3/7/2000
Toluene	ND	0.5		µg/L	1	3/7/2000
Ethylbenzene	ND	0.5		µg/L	1	3/7/2000
m,p-Xylene	ND	1		µg/L	1	3/7/2000
o-Xylene	ND	0.5		µg/L	1	3/7/2000

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0003006	Client Sample ID:	0003051355; MW-2
Lab ID:	0003006-02A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	3/5/2000 1:55:00 PM
		COC Record:	8501

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	26	0.5		µg/L	1	3/7/2000
Toluene	ND	0.5		µg/L	1	3/7/2000
Ethylbenzene	23	0.5		µg/L	1	3/7/2000
m,p-Xylene	63	1		µg/L	1	3/7/2000
o-Xylene	1.8	0.5		µg/L	1	3/7/2000

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

Surrogate - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0003006	Client Sample ID:	0003051410; MW-3
Lab ID:	0003006-03A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	3/5/2000 2:10:00 PM
		COC Record:	8501

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	3/7/2000
Toluene	ND	0.5		µg/L	1	3/7/2000
Ethylbenzene	ND	0.5		µg/L	1	3/7/2000
m,p-Xylene	ND	1		µg/L	1	3/7/2000
o-Xylene	ND	0.5		µg/L	1	3/7/2000

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

Surrogate - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 08-Mar-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0003006	Client Sample ID:	0003051426; MW-4
Lab ID:	0003006-04A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	3/5/2000 2:26:00 PM
		COC Record:	8501

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	3/7/2000
Toluene	ND	0.5		µg/L	1	3/7/2000
Ethylbenzene	1	0.5		µg/L	1	3/7/2000
m,p-Xylene	1.2	1		µg/L	1	3/7/2000
o-Xylene	ND	0.5		µg/L	1	3/7/2000

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

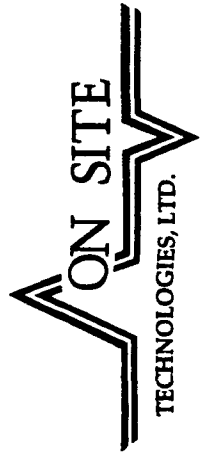
E - Value above quantitation range

Surr: - Surrogate

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



CHAIN OF CUSTODY RECORD

612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

7388

Date: _____ Page: _____ of _____

Purchase Order No.:		Job No.	
Name: Denver Bearden		Title: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Sampling Location:		Telephone No.: 505-848-2974	
Telefax No.:		Telefax No.:	
REPORT TO		RESULTS TO	
Number of Containers		ANALYSIS REQUESTED	
Sample Identification		LAB ID	
Sample Date		Date/Time	
Sample Matrix		Date/Time	
Sample Pres.		Date/Time	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Method of Shipment:		Rush	
Authorized by:		Date	
(Client Signature Must Accompany Request)		Results to be sent to both parties.	

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



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

ANALYTICAL REPORT

Date: 20-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0006020	Client Sample ID:	0006071157; MW-1
Lab ID:	0006020-01A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	6/7/2000 11:57:00 AM
		COC Record:	7888

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/16/2000
Toluene	ND	0.5		µg/L	1	6/16/2000
Ethylbenzene	ND	0.5		µg/L	1	6/16/2000
m,p-Xylene	ND	1		µg/L	1	6/16/2000
o-Xylene	ND	0.5		µg/L	1	6/16/2000

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

Sur: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

ANALYTICAL REPORT

Date: 20-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0006020	Client Sample ID:	0006071212; MW-2
Lab ID:	0006020-02A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	6/7/2000 12:12:00 PM
		COC Record:	7888

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	10	0.5		µg/L	1	6/13/2000
Toluene	ND	0.5		µg/L	1	6/13/2000
Ethylbenzene	9.3	0.5		µg/L	1	6/13/2000
m,p-Xylene	23	1		µg/L	1	6/13/2000
o-Xylene	0.8	0.5		µg/L	1	6/13/2000

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

P.O. BOX 2606 • FARMINGTON, NM 87499

2 of 6

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

ANALYTICAL REPORT

Date: 20-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0006020	Client Sample ID:	0006071226; MW-3
Lab ID:	0006020-03A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	6/7/2000 12:26:00 PM
		COC Record:	7888

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/16/2000
Toluene	ND	0.5		µg/L	1	6/16/2000
Ethylbenzene	ND	0.5		µg/L	1	6/16/2000
m,p-Xylene	ND	1		µg/L	1	6/16/2000
o-Xylene	ND	0.5		µg/L	1	6/16/2000

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

ANALYTICAL REPORT

Date: 20-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0006020	Client Sample ID:	0006071237; MW-4
Lab ID:	0006020-04A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	6/7/2000 12:37:00 PM
		COC Record:	7888

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
-----------	--------	-----	------	-------	----	---------------

AROMATIC VOLATILES BY GC/PID

SW8021B

Analyst: DC

Benzene	ND	0.5		µg/L	1	6/16/2000
Toluene	ND	0.5		µg/L	1	6/16/2000
Ethylbenzene	ND	0.5		µg/L	1	6/16/2000
m,p-Xylene	ND	1		µg/L	1	6/16/2000
o-Xylene	ND	0.5		µg/L	1	6/16/2000

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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



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

ANALYTICAL REPORT

Date: 20-Jun-00

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright 4 Drip
Work Order:	0006020	Client Sample ID:	0006071248; MW-5
Lab ID:	0006020-05A	Matrix:	AQUEOUS
Project:	Albright 4 Drip	Collection Date:	6/7/2000 12:48:00 PM
		COC Record:	7888

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	6/16/2000
Toluene	1.5	0.5		µg/L	1	6/16/2000
Ethylbenzene	0.8	0.5		µg/L	1	6/16/2000
m,p-Xylene	ND	1		µg/L	1	6/16/2000
o-Xylene	ND	0.5		µg/L	1	6/16/2000

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Q.W.A.L. LABORATORIES, INC.

0010036

Established 1976
2911 Rotary Terrace • Pittsburg, Kansas 66762
TO ORDER: FAX 1-316-232-7730 OR PHONE 1-316-232-1970

AS PER CONTRACT

① Company Name: <u>Williams</u> Attention: <u>Jim Struhs</u> Address: <u>187 C.R. 4980</u> <u>Bloomfield, NM 87413</u> City, State, Zip Code		④ Phone #: <u>505-632-4457</u> ④ Fax #: <u>505-632-4405</u>		⑬ TURNAROUND TIME REQUESTED (Additional Charges May Apply) ☒ Standard ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ Same Day Note - Please contact lab for availability of priority service.	
② Project Name or Number <u>SJA-GW SITES</u>		⑤ Purchase Order #:		⑫ ANALYSIS REQUEST (Write Tests Here)	
③ Sampling Personnel Signature(s) <u>James P. Struhs</u>		Sampling Personnel (print name) <u>James P. Struhs</u>		REMARK (If special detection limits are required please note below.)	
⑥ Sample I.D.	⑦ Date	⑧ Time	⑨ # of Containers	⑩ Method Preserved	⑪ Sample Matrix
RAN-UG-MW-1	9/27	1521	3	H2SO4	Water
RAN-SA-MW-2	9/27	1633	3	HNO3	Soil
RAN-DG-MW-3	9/27	1750	3	None	Air
ALB4-DG-MW-5	9/28	1325	3	HCL	Sludge
ALB4-SA-MW-2	9/28	1358	3	None	Other
ZAC-SA-MW-4	9/29	1601	3	None	
TRIP BLANK	9/21	-	1	None	

⑭ Relinquished By: <u>James P. Struhs</u> Received By:		⑮ PLEASE RETURN CORREL + FOAM Send Report to:		⑯ Send Invoice to: (if different form report address) Company Attn: Address: City/State: Phone: Fax:	
Relinquished By:		Company: <u>Williams</u> Attn: <u>Jim Struhs</u> Address: <u>187 C.R. 4980</u> City/State: <u>Bloomfield, NM 87413</u> Phone: <u>505-632-4457</u> Fax: <u>505-632-4405</u>			
Received By:					
Relinquished By:					
Received By:					

*FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATORY RESULTS.

Sample ID: ALB4-DG-MW-5

Sample Matrix: WATER

Collection Date: 09/28/00 13:25:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	ND	UG/L	1.0	10/05/00MB	
TOLUENE	108-88-3	13.80	UG/L	1.0	10/05/00MB	
ETHYLBENZENE	100-41-4	2.33	UG/L	1.0	10/05/00MB	
TOTAL XYLENES	1330-20-7	3.54	UG/L	1.0	10/05/00MB	
BFB (SURROGATE)	-	90.5	125	75		

Sample ID: ALB4-SA-MW-2

Sample Matrix: WATER

Collection Date: 09/28/00 13:58:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	6.14	UG/L	1.0	10/06/00MB	
TOLUENE	108-88-3	26.20	UG/L	1.0	10/06/00MB	
ETHYLBENZENE	100-41-4	8.33	UG/L	1.0	10/06/00MB	
TOTAL XYLENES	1330-20-7	17.60	UG/L	1.0	10/06/00MB	
BFB (SURROGATE)	-	105	125	75		

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0012301

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD # 4980
BLOOMFIELD, NM 87413
JIM STRUHS
PROJECT: WES/ALBRIGHT #4 DRIP

DATE REPORTED: 12/15/00
DATE COLLECTED: 12/07/00
DATE RECEIVED: 12/09/00

Reference Fraction: 0012301-01A

Sample ID: ALB4-SAMW2

Sample Matrix: WATER

Sample Date Collected: 12/07/00 15:22:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		4.16	UG/L	1.0	12/16/00	TK
TOLUENE		1.56	UG/L	1.0	12/16/00	TK
ETHYLBENZENE		5.94	UG/L	1.0	12/16/00	TK
TOTAL XYLENES		2.24	UG/L	1.0	12/16/00	TK
BFB (SURROGATE)		115	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0012301

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD # 4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 12/15/00
DATE COLLECTED: 12/07/00
DATE RECEIVED: 12/09/00

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction: 0012301-02A

Sample ID: ALB4-DGMW5

Sample Matrix: WATER

Sample Date Collected: 12/07/00 15:39:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		1.27	UG/L	1.0	12/12/00	TK
TOLUENE		ND	UG/L	1.0	12/12/00	TK
ETHYLBENZENE		ND	UG/L	1.0	12/12/00	TK
TOTAL XYLENES		2.01	UG/L	1.0	12/12/00	TK
BFB (SURROGATE)		89.9	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103421

SENT **WILLIAMS GAS PIPELINE**
TO: **187 COUNTY ROAD #4980**
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 03/21/01
DATE COLLECTED: 03/15/01
DATE RECEIVED: 03/16/01

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction: 0103421-01A

Sample ID: ALB4-DG-MW3

Sample Matrix: WATER

Sample Date Collected: 03/15/01 12:35:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	03/19/01	MB
TOLUENE		ND	UG/L	1.0	03/19/01	MB
ETHYLBENZENE		ND	UG/L	1.0	03/19/01	MB
TOTAL XYLENES		ND	UG/L	1.0	03/19/01	MB
BFB (SURROGATE)		101	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
LABORATORY DIRECTOR

QK

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103421

SENT **WILLIAMS GAS PIPELINE**
 TO: **187 COUNTY ROAD #4980**
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 03/21/01
 DATE COLLECTED: 03/15/01
 DATE RECEIVED: 03/16/01

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction: 0103421-02A

Sample ID: ALB4-UG-MW1

Sample Matrix: WATER

Sample Date Collected: 03/15/01 12:09:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	03/19/01	MB
TOLUENE		ND	UG/L	1.0	03/19/01	MB
ETHYLBENZENE		ND	UG/L	1.0	03/19/01	MB
TOTAL XYLENES		ND	UG/L	1.0	03/19/01	MB
BFB (SURROGATE)		96	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
 LABORATORY DIRECTOR

TK

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103421

SENT **WILLIAMS GAS PIPELINE**
 TO: **187 COUNTY ROAD #4980**
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 03/21/01
 DATE COLLECTED: 03/15/01
 DATE RECEIVED: 03/16/01

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction:0103421-03A

Sample ID: ALB4-SA-MW2

Sample Matrix: WATER

Sample Date Collected: 03/15/0112:14:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		3.29	UG/L	1.0	03/19/01	MB
TOLUENE		21.7	UG/L	1.0	03/19/01	MB
ETHYLBENZENE		3.47	UG/L	1.0	03/19/01	MB
TOTAL XYLENES		8.90	UG/L	1.0	03/19/01	MB
BFB (SURROGATE)		117	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
 LABORATORY DIRECTOR

Q

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103421

SENT **WILLIAMS GAS PIPELINE**
TO: **187 COUNTY ROAD #4980**
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 03/21/01
DATE COLLECTED: 03/15/01
DATE RECEIVED: 03/16/01

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction: 0103421-04A

Sample ID: ALB4-DG-MW5

Sample Matrix: WATER

Sample Date Collected: 03/15/01 12:24:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	03/19/01	MB
TOLUENE		19.4	UG/L	1.0	03/19/01	MB
ETHYLBENZENE		5.28	UG/L	1.0	03/19/01	MB
TOTAL XYLENES		3.58	UG/L	1.0	03/19/01	MB
BFB (SURROGATE)		115	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
LABORATORY DIRECTOR

PK

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103421

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD #4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 03/21/01
DATE COLLECTED: 03/15/01
DATE RECEIVED: 03/16/01

PROJECT: WES/ALBRIGHT #4 DRIP

Reference Fraction: 0103421-05A

Sample ID: ALB4-DG-MW4

Sample Matrix: WATER

Sample Date Collected: 03/15/01 12:29:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	03/19/01	MB
TOLUENE		ND	UG/L	1.0	03/19/01	MB
ETHYLBENZENE		ND	UG/L	1.0	03/19/01	MB
TOTAL XYLENES		ND	UG/L	1.0	03/19/01	MB
BFB (SURROGATE)		108	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105207

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD #4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 05/15/01
DATE COLLECTED: 05/04/01
DATE RECEIVED: 05/08/01

PROJECT: WES/ALBRIGHT 4 DRIP

Reference Fraction: 0105207-01A

Sample ID: ALB4-SA-MW2

Sample Matrix: WATER

Sample Date Collected: 05/04/01 14:43:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	05/09/01	MB
TOLUENE		17.0	UG/L	1.0	05/09/01	MB
ETHYLBENZENE		1.57	UG/L	1.0	05/09/01	MB
TOTAL XYLENES		5.50	UG/L	1.0	05/09/01	MB
BFB (SURROGATE)		112	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:

TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105207

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD #4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 05/15/01
DATE COLLECTED: 05/04/01
DATE RECEIVED: 05/08/01

PROJECT: WES/ALBRIGHT 4 DRIP

Reference Fraction: 0105207-02A

Sample ID: ALB4-UG-MW1

Sample Matrix: WATER

Sample Date Collected: 05/04/01 14:38:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	05/09/01	MB
TOLUENE		ND	UG/L	1.0	05/09/01	MB
ETHYLBENZENE		ND	UG/L	1.0	05/09/01	MB
TOTAL XYLENES		ND	UG/L	1.0	05/09/01	MB
BFB (SURROGATE)		102	125	75		

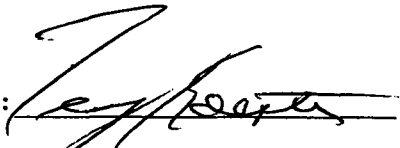
ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:


TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105207

SENT **WILLIAMS GAS PIPELINE**
 TO: **187 COUNTY ROAD #4980**
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 05/15/01
 DATE COLLECTED: 05/04/01
 DATE RECEIVED: 05/08/01

PROJECT: WES/ALBRIGHT 4 DRIP

Reference Fraction: 0105207-03A

Sample ID: ALB4-DG-MW3

Sample Matrix: WATER

Sample Date Collected: 05/04/01 14:55:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	05/09/01	MB
TOLUENE		ND	UG/L	1.0	05/09/01	MB
ETHYLBENZENE		ND	UG/L	1.0	05/09/01	MB
TOTAL XYLENES		ND	UG/L	1.0	05/09/01	MB
BFB (SURROGATE)		97	125	75		

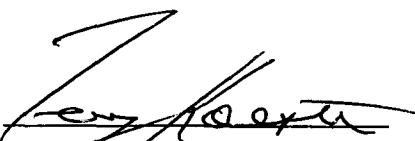
ND=NONE DETECTED

PQL=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER
 LABORATORY DIRECTOR



Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105207

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD #4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 05/15/01
DATE COLLECTED: 05/04/01
DATE RECEIVED: 05/08/01

PROJECT: WES/ALBRIGHT 4 DRIP

Reference Fraction: 0105207-04A

Sample ID: ALB4-DG-MW4

Sample Matrix: WATER

Sample Date Collected: 05/04/01 14:54:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		1.27	UG/L	1.0	05/09/01	MB
TOLUENE		5.08	UG/L	1.0	05/09/01	MB
ETHYLBENZENE		ND	UG/L	1.0	05/09/01	MB
TOTAL XYLENES		4.63	UG/L	1.0	05/09/01	MB
BFB (SURROGATE)		108	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:

TERRY KOESTER
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105207

SENT WILLIAMS GAS PIPELINE
TO: 187 COUNTY ROAD #4980
BLOOMFIELD, NM 87413
JIM STRUHS

DATE REPORTED: 05/15/01
DATE COLLECTED: 05/04/01
DATE RECEIVED: 05/08/01

PROJECT: WES/ALBRIGHT 4 DRIP

Reference Fraction:0105207-05A

Sample ID: ALB4-CG-MW5

Sample Matrix: WATER

Sample Date Collected: 05/04/0114:47:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	05/09/01	MB
TOLUENE		29.1	UG/L	1.0	05/09/01	MB
ETHYLBENZENE		3.92	UG/L	1.0	05/09/01	MB
TOTAL XYLENES		3.92	UG/L	1.0	05/09/01	MB
BFB (SURROGATE)		107	125	75		

ND=NONE DETECTED

PQL=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:

TERRY KOESTER
LABORATORY DIRECTOR

District I
P O Box 1980, Hobbs, NM

District II
Drawer DD, Artesa, NM 88221

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (WFS) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Albright #4 Drip

Location: Unit: F Sec. 22 T. 29 N R. 10 W County SAN JUAN

Pit Type: Separator Dehydrator Other Drip

Land Type: BLM X State Fee Other

Pit Location: Pit dimensions: length 15' width 15' depth 3'

(Attach diagram) Reference: wellhead X other

Footage from reference: 270'

Direction from reference: 20° Degrees East North X
of
X West South

Depth to Ground Water:

(Vertical distance from contaminant to
seasonal high water elevation of ground
water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points)

20

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or, less than 1,000
feet from all other water sources)

Yes (20 points)
No (0 points)

0

Distance to Surface Water:

(Horizontal distance to perennial lakes,
ponds, rivers, streams, creeks, irrigation
canals and ditches)

Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points)

0

RANKING SCORE (TOTAL POINTS):

20

Date Remediation Started: 6-17-99 Date Completed: 6-23-99

Remediation Method: Excavation X Approx. Cubic Yard 5300

(Check all appropriate sections)

Landfarmed _____ Amount Landfarmed (cubic yds) _____

Other Tierce Environmental

Remediation Location: Onsite _____ Offsite Tierce Environmental
(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location: _____

General Description of Remedial Action:

Excavated pit 90' x 106' x 15'

Ground Water Encountered: No II Yes X Depth 15'

Final Pit Closure Sampling:

Sample Location middle of pit

(if multiple samples, attach sample result and diagram of sample locations and depths)

Sample depth 15'

Sample date 6/18/99 Sample time 0700

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) _____

TPH _____ Method _____

Vertical Extent (ft) _____ Risk Assessment form attached Yes II No I

Ground Water Sample: Yes X No II (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE 6/23/99
SIGNATURE D. Bearden

PRINTED NAME AND TITLE
Denver Bearden
Administrator III

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jul-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Albright #4 Drip
Work Order:	9906065	Client Sample ID:	9906180700
Lab ID:	9906065-01A	Matrix:	AQUEOUS
Project:	Albright #4 Drip	Collection Date:	6/18/99 7:00:00 AM
		COC Record:	7608

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	610	10		µg/L	20	6/28/99
Toluene	410	10		µg/L	20	6/28/99
Ethylbenzene	200	10		µg/L	20	6/28/99
m,p-Xylene	1700	20		µg/L	20	6/28/99
o-Xylene	350	10		µg/L	20	6/28/99

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

Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Date 6-17-99		Name Gary Cook			
Well Name Albright #4 Drip	Operator WFS	S 22	T 29 N	R 10 W	UI F
Pit Dimensions at Start 15x15x3		Excavation Dimensions at End 90x106x15			
Excavated Cu. Yds. 5300	Overburden Cu. Yds. 3260		Spoil Cu. Yds. 2040		

PIT PID READINGS		
Feet	Center	Soil Type
5'	687	B14 / GRAY SAND
10'	540	GRAY SAND
15'		Water
20'		
25'		

hauled
1700 yds
back 11 back
from Turner
Mc.

Composite Sample # (Walls): 990617		
Composite Sample # (Bottom): 990617 990618 07W H2O		
Location	Depth	PID Reading
North Wall		
South Wall		
East Wall		
West Wall		
Pit Bottom		

Land Farm Location: Albright #4

Field Notes: At 15' depth have clean sand & water. Started seeping into pit. Notified Murren about with location. Contacted Tom McMullen (WFS) requested switch on location to blowdown drip line. Will need to dig south of line. 1030 hrs WFS switch (Dink) here to make dig. Contacted El Rva to mark these lines on right of way. Called BR Jose Chavez to mark them line on right of way.

Land owner: Raymond Stiffles. No water well, on city H2O

1400 called Phil Noblis (Ticoma Engine.)
gave him legal & name & advised we would
start hauling tomorrow morning from Albright #40 to
him & request clean backfill to be
hauled back on trucks from him.

6/18/99 Digging on West wall. Hit water line (city)
to Stiffen house. Repairing water line
Water line was not marked. Line was put in
by landlord.
Line repaired by Blano Water Dept. (Al Sanchez)

Meridian came out & spotted line in right of way
Requested they be present Monday 6/21/99 when we
dig south

N, E & W wells all clear
Have 5 trucks hauling spoil to Ticoma & clean backfill
back

6/21/99 Trucks still hauling to Ticoma
Backfilling pit as possible and building beds
to hold up drop line and water line to
keep them from falling in.
Called Jose Chavez (BR) need pipeline respotting.
Exposed BR 2" gas line & they marked 6" in
in pipeline right of way. (Dick Dickson, CA)

6-22-99 1400 has finished excavation, all wells clear



Unlined Surface Impoundment Assessment Form

Site Information:

Well Name:	Albright #4 Drip			Vulnerable Area:	☐ Original	☐ Expanded	☒ Extended	☐ Other
Operator:	WFS			Date:	6/17/99		Well Pad Dimensions:	Date Sheet #:
				Time:	0700 AM		L	W
Legal Description:	Sec.	Twn.	Rng.	Unit	Canyon:	Slane Canyon		
	22	29N	10W	F	County:	San Juan		
					Quad Map (#):	Run #: 10-72		

Pit Information:

PNM Pit:	☒ Yes	☐ No	PNM Equipment:	☒ Yes	☐ No	Ref. WH:	☒ Other	
☒ Active	☐ SAT		Tank Set:	☐ Yes	☒ No	Distance from Ref.	270'	
☐ Abandoned	☐ Inaccessible		Discharges to Pit:			Degrees:	20° W & N	
L 15	W 15	D 3	☐ SEP	☐ DH	☒ DR	☐ None		
Lab Sample:	☐ Yes	☐ No	Sample #(s):					COC#:

Geographical:

Geology:	☐ SS	☐ Clay	Terrain:	☐ Mesa Top	Land Use:	☒ Grazing	Land Type:	☒ BLM	Vegetation:
☒ Sand	☐ Outcrop	☐ Rock	☒ Trailing Slope	☒ Residential	☒ Recreation	☐ State	☐ Fee	Well Pad	Area
☐ Gravel	☐ Cliffs	☐ Silt	☐ River Bottom	☐ Other	☐ Other	☐ Other	☐ Other	☒ Normal	☒ Stressed
☐ Other								☐ None	☐ None

Ranking:

Depth to Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet (20 points)	50 feet to 99 feet (10 points)	Greater than 100 feet (0 points)	20
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or less than 1,000 feet from all other water sources)	Yes (20 points)	No (0 points)		0
Distance to Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals, and ditches)	Less than 200 feet (20 points)	200 feet to 1,000 feet (10 points)	Greater than 1,000 feet (0 points)	0
Distance to Ephemeral Stream (dry wash): (Horizontal distance to all downgradient streams having a width of at least 10 feet) Jicarilla only	Less than or equal to 100 feet (10 points)	Greater than 100 feet (0 points)		
Distance to Nearest Lake, Playa, or Watering Pond: (Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds) Jicarilla only	Less than or equal to 100 feet (10 points)	Greater than 100 feet (0 points)		

General Comments:

Assessor's Signature:

[Signature]

Date:

6/17/99

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 328-2262 FAX (505) 328-2388

Borehole #

Well #

Page

1
MW1
1 of 2

Project Name

Project Number

Project Location

PNM WELL INSTALLATION

21300 Phase 10001

ALBRIGHT #4 DRIP

Elevation

Borehole Location ALBRIGHT #4 DRIP S22, T29N, R10W, F

GWL Depth 13.35' 10:10am

Logged By C. CULLICOTT

Drilled By B. PADILLA & D. PADILLA

Date/Time Started 7/27/99 7:50am

Date/Time Completed 7/27/99 9:20am

Well Logged By

Personnel On-Site

Contractors On-Site

Client Personnel On-Site

C. CULLICOTT

B. PADILLA, D. PADILLA

GARY LOOK

Drilling Method

Air Monitoring Method

AUGER

PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ BH S			Drilling Conditions & Blow Counts
0			SURFACE: SAND						
5	1		① SILTY SAND, MODERATE CONSOLIDATION, GRAY, DAMP			Ø			SS = Ø 13 BLOWS
10	2		② SILTY SAND, Consolidated, damp, giving way to loose sand @ 11'. Fine to coarse sand, angular to sub-angular			Ø			SS = Ø 17 BLOWS
15	3		③ WET SAND, GRAY with ~1" of HC stain @ ~15', right @ TOP OF WATER TABLE			Ø			
20			DRILLER SAYS HE HIT SANDSTONE AT 20' & WAS ABLE TO DRILL THROUGH IT TO 25'. SS CUTTINGS - GRAY w/ MEDIUM CLAY CONTENT, STICKY						
25			DRILLER SAYS HE HIT SANDSTONE AT 20' & WAS ABLE TO DRILL THROUGH IT TO 25'. SS CUTTINGS - GRAY w/ MEDIUM CLAY CONTENT, STICKY						
30									
35									
40			TD 25'						

Comments:

MOSTLY OVERCAST, COOL. SITE IS IN OUTWASH AREA OF A SMALL SIDE DRAINAGE TO SLANE CANYON.

Geologist Signature

Cathy Cullcott

Phillip Environmental Services Corp.
1000 Monroe Road
Farmington, New Mexico 87401
5061 326-2262 FAX (506) 326-2388

Borehole # 1
Well # mw 1
Page 2 of 2

Project Number 21300 Phase 6001
Project Location ALBRIGHT #4 DRIP

On-Site Geologist C. CULLICOTT
 Personnel On-Site R. PADILLA, D. PADILLA
 Contractors On-Site _____
 Client Personnel On-Site GARY COOK

Elevation _____
Well Location S 22 T 29 N R 10 W 1 F
GWL Depth ~~7.5~~ 13.35'
Installed By K. PADILLA
D. PADILLA
Date/Time Started 7/27/99 7:50am
Date/Time Completed 7/27/99 4:20am

[illegible]

Comments: _____

Geologist Signature

Cathy Culbert

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2282 FAX (505) 326-2388

Borehole # 2

Well # MW 2

Page 1 of 2

Project Name PNM WELL INSTALLATION
Project Number 21300 Phase 0001
Project Location ALBRIGHT #4 DRIP

Elevation _____
Borehole Location S22 T29 N R10 W, F
GWL Depth 18.25 TOC + 2.86 from G.C. = 15.39'
Logged By C. CULLICOTT
Drilled By K. PADILLA, D. PADILLA
Date/Time Started 7/27/99 9:20am
Date/Time Completed 7/27/99 10:40am

Well Logged By C. CULLICOTT
Personnel On-Site K. PADILLA, D. PADILLA
Contractors On-Site _____
Client Personnel On-Site GARY COOK
Drilling Method AUGER
Air Monitoring Method PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ BH S			Drilling Conditions & Blow Counts
0			SURFACE: SAND						
5			0-15' BACKFILL, CLEAN						
10									
15			@ ~15' 1/2 - 16'						
20			6" of strongly HC CONTAMINATED SAND + GRAVEL, DAMP BELOW INTO ORANGEISH CLEAN SILTY SAND, SLIGHTLY DAMP, WITH SMALL PATCHES OF CLEAN QUARTZ SAND. CONSOLIDATED, STIFF						
25									
30									
35			@ 17 1/2' INTO BEDROCK, FINE SANDSTONE, GRAY, SOLID. NOTHING THIS HARD IN						
40			BOREHOLE #1 TD 18' 4"						

Comments: CLEARING, LIGHT BREEZE, COOL. THIS SITE IS ALSO IN
THE SLANE CANYON

Geologist Signature Cathy Cullicott

MONITORING WELL INSTALLATION RECORD

Lulip Environmental Services Corp.
 300 Monroe Road
 Armington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Borehole # 2
 Well # MW2
 Page 2 of 2

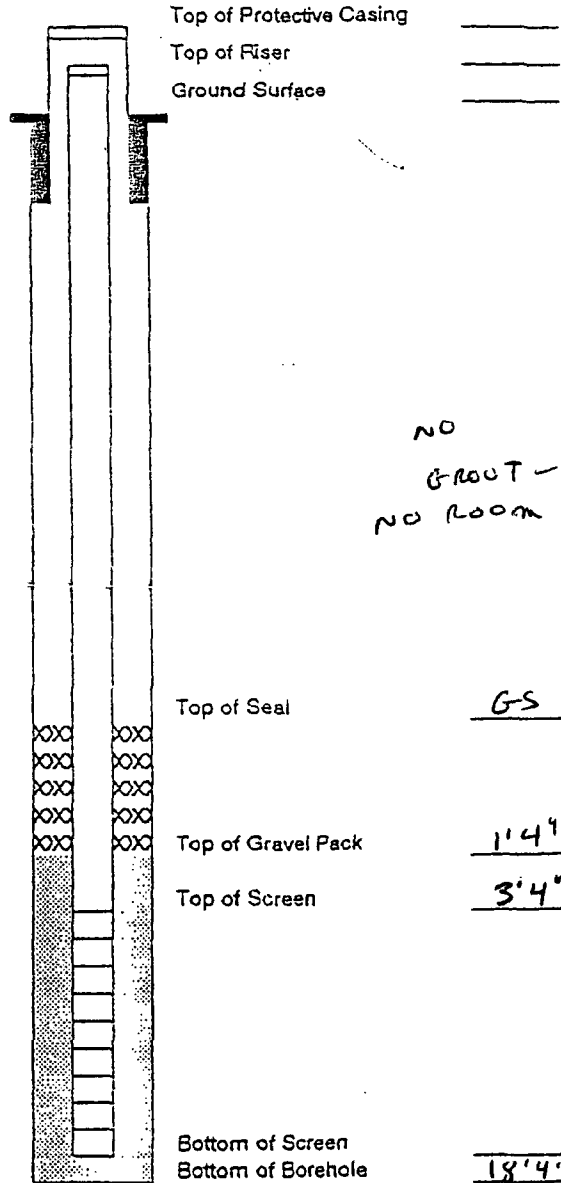
Project Name PNM MONITOR WELL INSTALLATION
 Project Number 21300 Phase 6001
 Project Location ALBRIGHT #4 DRIP

On-Site Geologist C. CULLICOTT
 Personnel On-Site K. PADILLA, D. PADILLA
 Contractors On-Site _____
 Client Personnel On-Site GARY COOK

Elevation _____
 Well Location 322 T29N R10W, F
 SWL Depth 18.25 TOC 2.86 = 15.37'
 Installed By D. PADILLA
K. PADILLA
 Date/Time Started 7/27/99 9:20am
 Date/Time Completed 7/27/99 10:40am

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser		
Bottom of Well Riser		
Top of Well Screen		
Bottom of Well Screen		
Top of Peltonite Seal		65
Bottom of Peltonite Seal		1'4"
Top of Gravel Pack		1'4"
Bottom of Gravel Pack		11'4"
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		
Total Depth of Borehole		18'4"



Comments: _____

Geologist Signature

Cathy Cullicott

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

1

Well #

MW-3

Page

1 of 2

Project Name

PNM WELL INSTALLATION

Project Number

21300 Phase 6001

Project Location

ALBRIGHT #4 DRIP

Elevation

Borehole Location ON YESTERDAY'S LOG

GWL Depth 9.87-TOC 2.7 = 7.17'

Logged By P. CULLICOTT

Drilled By K. PADILLA, D. PADILLA

Date/Time Started 7/28/99 10:50am

Date/Time Completed 7/28/99 11:45am

Well Logged By

C. CULLICOTT

Personnel On-Site

K. PADILLA, D. PADILLA

Contractors On-Site

Client Personnel On-Site

GARY COOK,

PAUL JANKOWSKI -

Drilling Method

AUGER ECOSPHERE

Air Monitoring Method

PID

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			SURFACE: SAND						
5			① CLEAN SAND, UNCONSOLIDATED, MIXTURE FINE-MEDIUM LIGHT BROWN.						SS = 8 6 BLOW S
10			② WET SAND STARTING ~10 1/2. COARSE TO MEDIUM WITH SCATTERED GRAVEL, ANGULAR TO SUB-ROUNDED.						15 BLOW S
15			HIT SANDSTONE 15'						
20			TD 15'						
25									
30									
35									
40									

Comments:

TODAY'S WORK IS COVERED BY YESTERDAY'S ITA
FOR THIS ~~WELL~~ SITE.
SUNNY, WARM

Geologist Signature

Cathy Cullcott

MONITORING WELL INSTALLATION RECORD

Slip Environmental Services Corp.
 90 Monroe Road
 Wilmington, New Mexico 87401
 505 326-2262 FAX (505) 326-2388

Borehole # 1
 Well # MW 3
 Page 2 of 2

Project Name PNM WELL INSTALLATION

Project Number 21300 Phase GCCI

Project Location ALBRIGHT #4 DRIP

On-Site Geologist C. CULLICOTT

Personnel On-Site D. PADILLA, K. PADILLA

Contractors On-Site

Client Personnel On-Site GARY COFFE

PAUL JANKOWSKI,
ECOSPHERE

Elevation _____

Well Location _____

Well Depth 9.87' TOC 2.7 = 7.17'

Installed By K. PADILLA

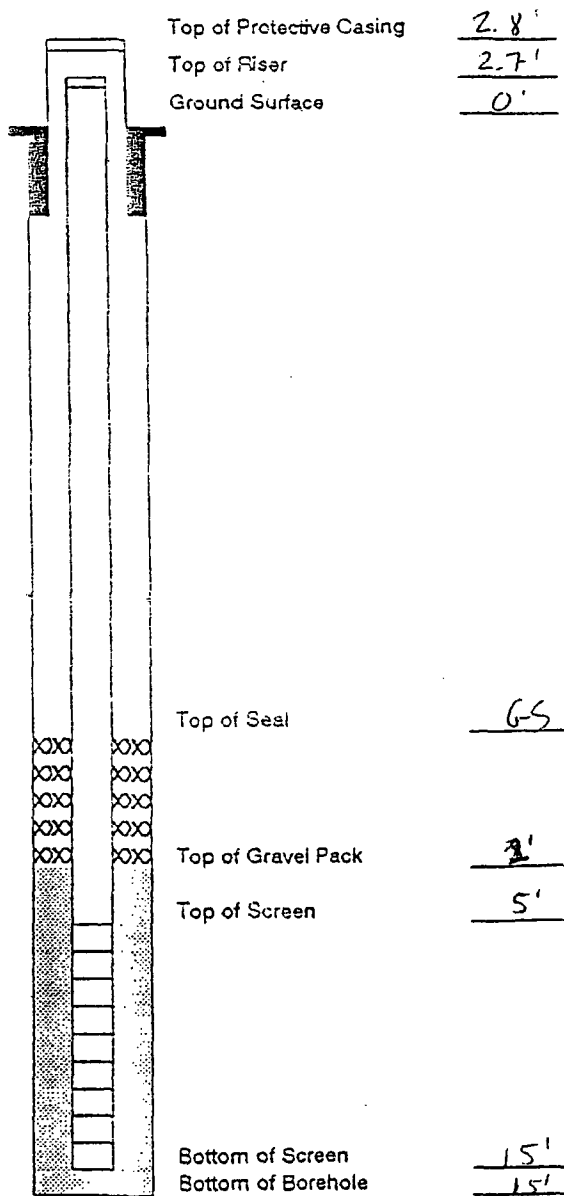
D. PADILLA

Date/Time Started 7/28/99 10:50am

Date/Time Completed 7/28/99 11:45am

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		2.8'
Bottom of Protective Casing		6.5'
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser		6.5'
Bottom of Well Riser		5'
Top of Well Screen		5'
Bottom of Well Screen		15'
Top of Peltonite Seal		6.5'
Bottom of Peltonite Seal		3'
Top of Gravel Pack		3'
Bottom of Gravel Pack		15'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		7.17'
Total Depth of Borehole		15'



Comments: MW 1 & MW 2 ON THIS SITE: MW 1 Top of Protective casing: 3.1'
MW 2 " 12.8'

Geologist Signature

Cathy Cullcott

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

2

Well #

MW 21

Page

1 of

Project Name

PNM WELL INSTALLATION

Project Number

21300 Phase 6001

Project Location

ALBRIGHT #4 DRIP

Well Logged By

C. CULLICOTT

Personnel On-Site

K. PADILLA & D. PADILLA

Contractors On-Site

Client Personnel On-Site

GARY COOK,

PAUL JANKOWSKI,

Drilling Method

AUGER

ECOSPHERE

Air Monitoring Method

PID

Elevation

Borehole Location

GWL Depth

11.39 - TOC 3.0 = 8.39'

Logged By

C. CULLICOTT

Drilled By

K. PADILLA, D. PADILLA

Date/Time Started

7/28/99 1:55pm

Date/Time Completed

7/28/99 2pm

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0									
5	1		① CLEAN TAN SAND, DRY, LOOSE, FINE- MEDIUM, ANGULAR.						SSX 10 BLOWS
10	2		② SATURATED SAND, CLEAN @ TOP OF SPLIT SPOON COARSE SAND, FINER @ BOTTOM OF SPLIT SPOON. ~1' @ 4' OF MORE CLAY-RICH SAND & PEBBLES						15 BLOWS
15			@ 15' HIT SANDSTONE.						
20			TD 15'						
25									
30									
35									
40									

Comments:

SUNNY, WARM, LIGHT BREEZE

Geologist Signature

Cathy Cullcott

MONITORING WELL INSTALLATION RECORD

Tulip Environmental Services Corp.

600 Monroe Road

Armington, New Mexico 87401

5061 326-2262 FAX (506) 326-2388

Borehole # 2
Well # MW4
Page 2 of 2

Project Name PNM WELL INSTALLATION

Project Number 21300 Phase GC01

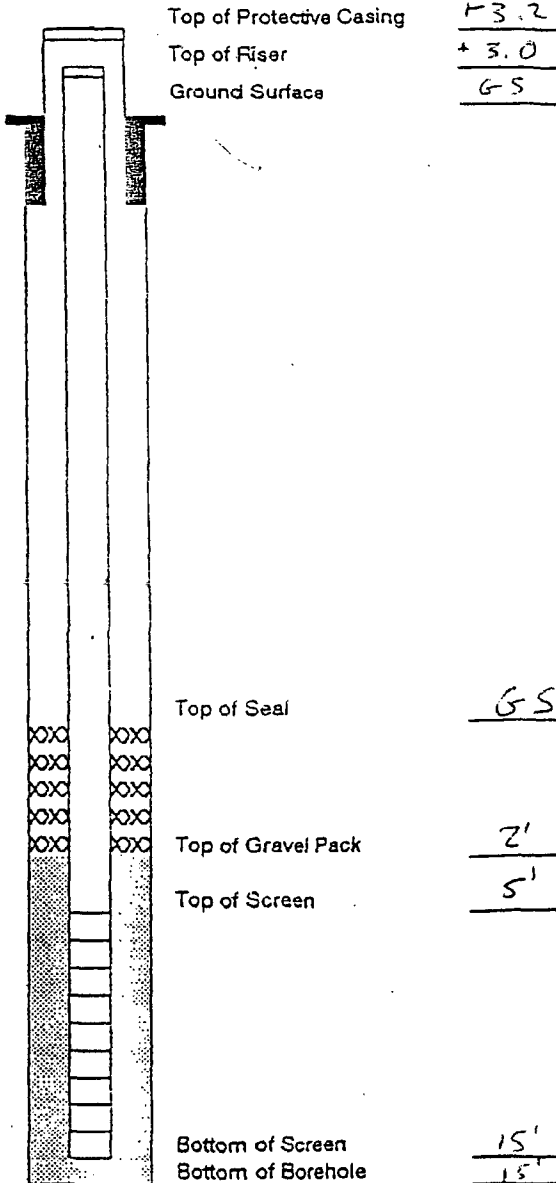
Project Location ALBRIGHT #4 DRIP

On-Site Geologist C. CULLICOTT
Personnel On-Site E. PADILLA, D. PADILLA
Contractors On-Site
Client Personnel On-Site GARY COOTE

PAUL JANKOWSKY,
ELOSHERE

Elevation _____
Well Location _____
GWL Depth 11.39 - 3 TOC = 8.39'
Installed By E. PADILLA,
D. PADILLA
Date/Time Started 7/28/99 1pm
Date/Time Completed 7/28/99 2pm

Depths in Reference to Ground Surface				
Item	Material	Depth		
Top of Protective Casing			Top of Protective Casing	<u>13.2</u>
Bottom of Protective Casing			Top of Riser	<u>+ 3.0</u>
Top of Permanent Borehole Casing			Ground Surface	<u>GS</u>
Bottom of Permanent Borehole Casing				
Top of Concrete				
Bottom of Concrete				
Top of Grout				
Bottom of Grout				
Top of Well Riser		<u>GS</u>		
Bottom of Well Riser		<u>5'</u>		
Top of Well Screen		<u>5'</u>		
Bottom of Well Screen		<u>15'</u>	Top of Seal	<u>GS</u>
Top of Peltonite Seal		<u>GS</u>		
Bottom of Peltonite Seal		<u>2'</u>	Top of Gravel Pack	<u>2'</u>
Top of Gravel Pack		<u>2'</u>	Top of Screen	<u>5'</u>
Bottom of Gravel Pack		<u>15'</u>		
Top of Natural Cave-In				
Bottom of Natural Cave-In				
Top of Groundwater		<u>8.39'</u>	Bottom of Screen	<u>15'</u>
Total Depth of Borehole		<u>15'</u>	Bottom of Borehole	<u>15'</u>



Comments: _____

Geologist Signature

Cathy Cullicott

RECORD OF SUBSURFACE EXPLORATION

HILIP SERVICES CORP.

300 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Borehole #

Well #

MW-5

Page 1

of 2

Project Number 62800161 Phase

Project Name PNM Drilling + Investigation

Project Location SAN JUAN County, NM

S: 22 T: 29 N, R: 10 W

Weather: SUNNY, cool, dry, ~ 50°F ↑

Client Personnel: Roy Burnham

Drilling Method 4 1/4 ID HSA

Air Monitoring Method PID

Elevation 5597' GL

Borehole Location ALBRIGHT #4 DRIP

SWL Depth -10.15' BGS

Drilled By R. PADILLA

Well Logged By S. STELLAVATO

Date Started 4/12/00 0815

Date Completed 4/12/00 0845

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ BH S			Drilling Conditions & Blow Counts
0				Light-brown (+) Silt and (-) Clay, Some Lithics, dry.						
5				CORING:						
	1	5'-7'	18"	Light-brown (+) Silt and Some (-) Clay, Minor Lithics. Competent core.						16 - COUNTS 8.6 PPM
10										
	2	10'-12'	18"	Light-brown fine (+) SAND and (-) Silt, Large Lithics. Wet at 11' BGS.						6 - COUNTS 8.4 PPM
15										
	3	15'-17'	24"	Light-brown Medium (+) Sand and coarse (-) Lithics. Wet. GWL = 10.15' BGS. Solid Clay at 17' BGS. TOTAL Depth of Well is 15 feet BGS.						14 - COUNTS 6.5 PPM
20										
25										
30										
35										
40										

Comments:

Collected samples for head-space analysis by splitting core and placing in ziplock, and heating them using PID.

(+) = larger %

(-) = smaller %

Geologist Signature

Stephen Stellavato

MONITOR WELL INSTALLATION FORM

Philip Services Corp.

4000 Monroe Rd.

Farmington, NM 87401

(505) 326-2262 FAX (505) 326-2388

Borehole #

Well #

Page

100-5

2 of 2

Project Name PNM Drilling + Investigation

Project Number 62800161 Phase

Site Location SAN JUAN COUNTY, NM

S: 22 T29N, R10W

On-Site Geologist STEPH S. STELLAVATO

Personnel On-Site RYAN Lafebre (Philip)

Contractors On-Site None

Client Personnel On-Site Roy Burham

Elevation 5597' GL

Well Location ALBRIGHT #4 DMP

GWL Depth -10.15' BGS

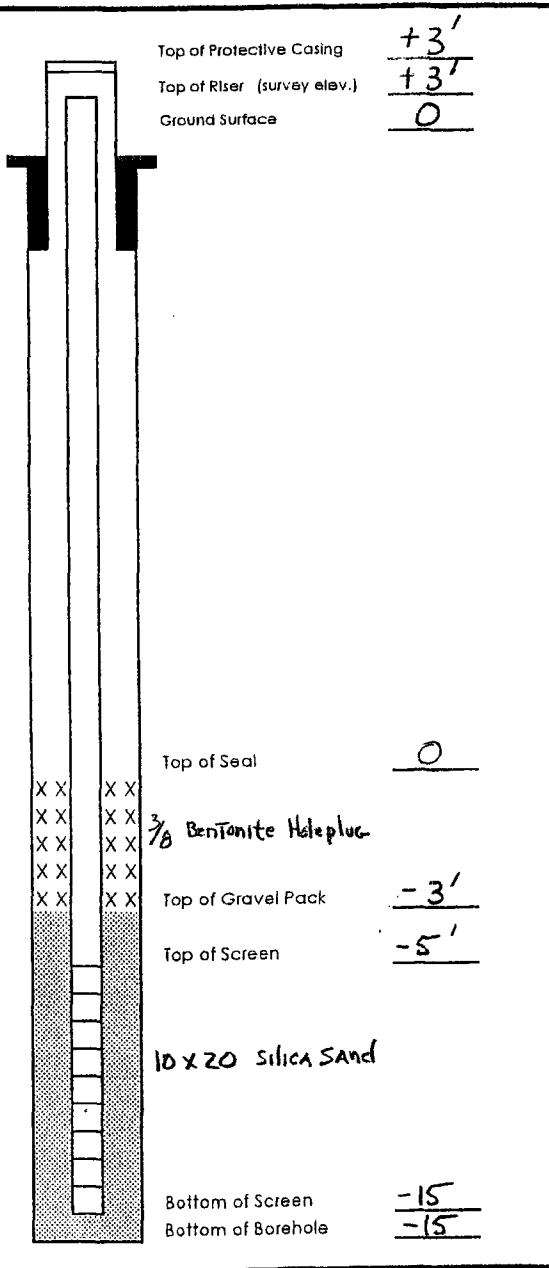
Installed By K PADILLA

Date/Time Started 4/12/00 0845

Date/Time Complete 4/12/00 0930

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	Steel	+3'
Bottom of Protective Casing	Steel	-2'
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser	SCH 40 PVC	+3'
Bottom of Well Riser	SCH 40 PVC	-5'
Top of Well Screen	SCH 40 PVC	-5'
Bottom of Well Screen	SCH 40 PVC	-15'
Top of Bentonite Seal	Bentonite Holeplug 3/8	0
Bottom of Bentonite Seal	Bentonite Holeplug 3/8	-3'
Top of Gravel Pack	Colorado Silica Sand	-3'
Bottom of Gravel Pack	Colorado Silica Sand 10x20	-15'
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater	H ₂ O	-10.15'
Total Depth of Borehole		-15'



Comments No comments.

Geologist Signature

Steph Stellavato