District I P.O. Box 1980, Hobbs, NM

District II P.O. Drawer DD, Artesia, NM 88221

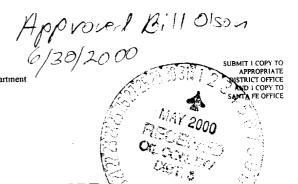
District III 1000 Rio Brazos Rd, Aztec, NM 87410 (Your water

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT



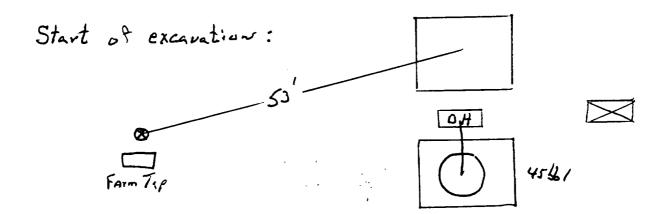
Operator: WES PNM Gas Services (Burlington) Telephone: 324-3764
Address: 603 W. Elm Street Farmington, NM 87-	401
Facility or Well Name:	
Location: Unit M Sec	24 T 31N R 11W County San Juan
Pit Type: Separator Dehydrat	tor Other
Land Type: BLM State	Fee Other
Pit Location: Pit dimensions: length	15 width 15 depth 4
(Attach diagram) Reference: wellhead	other
Footage from reference:	53'
Direction from reference: 75	Degrees East North
	of West South
Depth to Ground Water: (Vertical distance from contaminants 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)
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) 20
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)
	RANKING SCORE (TOTAL POINTS): 60

urner #1A	05/14/	1997	Date Completed:	05/14/1997
Date Remediation Started:	Excavation		Annroy Cubic Vard	1016
Remediation Method:	EXCAVATION	X	Approx. Cubic Yard	
(Check all appropriate sections)	Landfarmed	X	Amount Landfarmed (c	nubic yds) 1016
ections)	Other			
Remediation Location: (i.e., landfarmed onsite, name and location of offsite facility)	Onsite	X	Offsite	
Backfill Material Location:				
General Description of Ren	nedial Action:			
Excavated contaminated so to 12". Soil was aerated by	il to a pit size of a disking/plowing u	45' X 61' X 10' and la	andfarmed soil onsite within a be ory levels.	ermed area at a depth of 6"
Secondary source removal	conducted on 3/3	31/98; approximately	980 cu yds of contaminated soi	I removed.
		<u></u>		
Ground Water Encountered	ed: No		Yes [Depth 10'
Final Pit Closure Sampling:	Sample Locat	ion <u>Middle of p</u>	oit.	
(if multiple samples, attach sample result and diagram of	Sample depth	10'		
sample locations and depths.)	Sample date	05/15/1997	Sample time	8:00:00 AM
	Sample Resul	ts	•	
	Benz	ene (ppm)	0.359	
	Total	BTEX (ppm)	3.412	
	Field	headspace (ppm)		
	TPH (ppm)		Method	8020A
Vertical Extent (ft)			Risk Analysis form attached Y	es No
Ground Water Sample:	Yes	No No	(If yes, see attach Summary Report)	ed Groundwater Site
I HEREBY CERTIFY TH KNOWLEDGE AND MY		MATION ABOVE	IS TRUE AND COMPLETE T	O THE BEST OF MY
DATE April 24, 200 0 SIGNATURE Mau	o irandano	v.	PRINTED NAME Mand TITLE Pr	aureen Gannon oject Manager

/ell Name:	Tu	voca	#//	1	Data Shee					W E
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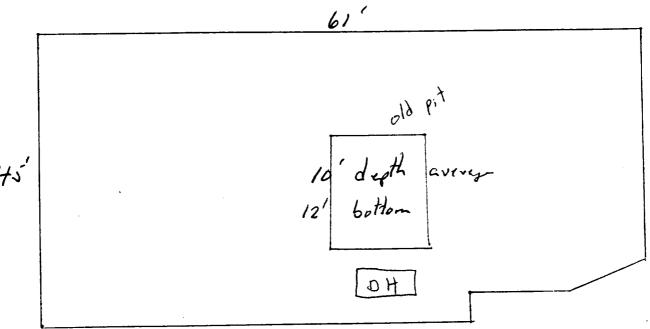
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Turner # 1A Burlington Resources Sec. 24,31N,11W 5-14-97



End of exception:

Water at 10'

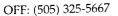


Turner # 1A	3-30-98
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Burlington Resources Sec. 24,31N,10W,	
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mw #4	
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LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:

Denver Bearden

Date:

20-May-97

Company: PNM Gas Services

COC No.:

5879

Address:

Sample No.:

14624

603 W. Elm

City, State: Farmington, NM 87401

Job No.:

2-1000

Project Name:

PNM Gas Services - Turner #1A

Project Location:

9705150800; 10' depth GC

Date:

15-May-97 Time:

8:00

Sampled by: Analyzed by:

DC

Date:

17-May-97

Sample Matrix:

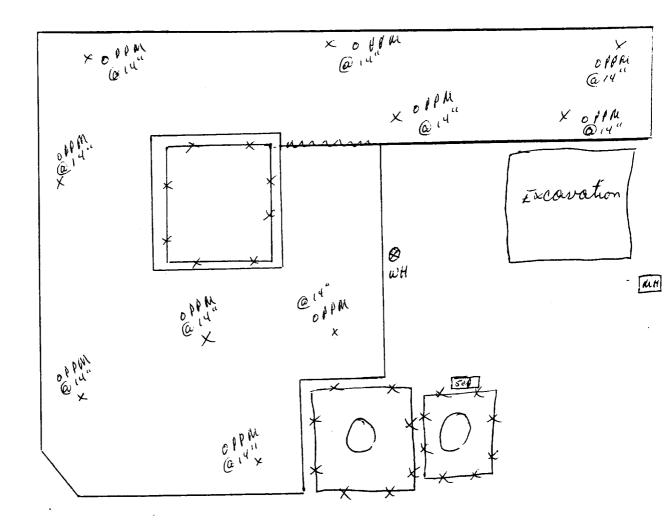
Liquid

Parameter		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene		359	ug/L	2	ug/L
Toluene		1311	ug/L	2	ug/L
Ethylbenzene		145	ug/L	2	ug/L_
m,p-Xylene		1321	ug/L	2	ug/L
o-Xylene		276	ug/L	2	ug/L
	TOTAL	3412	ug/L		

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

Approved By:



Turner #1 A @ 1300 hrs. 6-23-97



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:

Denver Bearden

Date:

8-Jul-97

Company: PNM Gas Services

COC No.:

5170

Address:

603 W. Elm

Sample No.:

15060

City, State: Farmington, NM 87401

Job No.:

2-1000

Project Name:

PNM Gas Services - Turner #1A Landfarm

Project Location:

9706231300; 10pt. Composite

Date:

23-Jun-97 Time:

13:00

Sampled by: Analyzed by: RH DC/HR

Date:

7-Jul-97

Sample Matrix:

Soil

Laboratory Analysis

Parameter	Results as	Unit of	Limit of	Unit of
	Received	Measure	Quantitation	Measure
Diesel Range Organics (C10 - C28)	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0548-STD

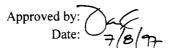
Continuing Calibration Verification

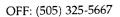
Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
Diesel Range (C10 - C28)	ND	ppm	200	190	5.1	15%

Matrix Spike

THE OF THE					
	1- Percent	2 - Percent			RPD
Parameter	Recovered	Recovered	Limit	RPD	Limit
Diesel Range (C10-C28)	84	89	(70-130)	5	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography







LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:

Denver Bearden

Date:

1-Jul-97

Company: PNM Gas Services

COC No.:

5170

Address: 603 W. Elm

Sample No.:

15060

City, State Farmington, NM 87401

Job No.:

2-1000

PNM Gas Services - Turner #1A Landfarm

Project Name: Project Location:

RH

9706231300; 10pt. Composite Date:

23-Jun-97 Time:

13:00

Sampled by: Analyzed by:

DC

Date:

28-Jun-97

Sample Matrix:

Soil

Laboratory Analysis

D		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Parameter		as Received	Measure	quantitation	Medadic
Benzene		ND	ug/kg	1	ug/kg
Toluene		1	ug/kg	1	ug/kg
Ethylbenzene		2	ug/kg	1	ug/kg
m,p-Xylene		7	ug/kg	1	ug/kg
o-Xylene		1	ug/kg	1	ug/kg
	TOTAL	11	ug/kg		

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

PNMGS Well Site: Turner 1A

Groundwater Site Summary Report

Copies: WFS(1)

Operator (1) NMOCD Santa Fe NMOCD District Office

Quarter/Year: 2nd/99, 3rd/99, 4th/99 & 1st/00

Operator: Burlington Resources Vulnerable Class: Original

Sec: 24 Twn: 31N Rng: 11W Unit: M

Canyon: Animas

OCD Ranking: 40

Lead Agency: NMOCD

Topo Map: Figure 1

Well Completion Diagram: previously submitted. Site Map with Analytical Results: Figure 2

Groundwater Contour Map: Figure 3 (April 1999), Figure 4 (August 1999), Figure 5 (October 1999) &

Figure 6 (January 2000) Hydrograph: Figure 7

Full suite-Groundwater Sampling Results: Previously submitted

Analytical Results: attached

Site Hydrology:

The Turner 1A site as presented in Figure 1 is located in the floodplain of the Animas River, about 1000 feet southeast of the waterline, and lies perhaps 20 feet higher in elevation than the river waters. Materials beneath the site are essentially the same as the modern river's bedload, spanning the broad alluvial plains along the major river systems of the San Juan Basin (Stone et al., 1983). The valley floor of the Animas is about one mile wide near the Turner 1A site. Hydraulic conductivity of these materials is expected to be very high, as they are described as "cobbles" in site excavations and monitor wells.

An irrigation ditch (not shown on topographic maps) skirts the north and east sides of the site. Recharge to groundwater is likely from drainage of these irrigated lands. Depth to water is roughly ten feet.

Four monitor wells installed at the Turner 1A site show that groundwater flow is west-northwest, following the topographic gradient precisely towards the river (Figures 3 through 6). Groundwater elevations are strongly influenced by the operation of the irrigation ditch in spring and summer months; hydrographs at the site show lowest elevations in the wintertime (Figure 7). Flow direction does not vary appreciably from season to season (see Figures 3 through 6).

Activities for Previous Year:

Quarterly sampling took place on April 21, August 3, and October 27, 1999 and again on January 19, 1999. Water level measurements were taken in the four monitoring wells. PNM conducted groundwater sampling in each well for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX) during the January 2000 sampling event, and only in well MW-2 during the previous three quarters. All sampling was performed in strict compliance with EPA protocol. PNM delivered the samples to OnSite Technologies, Farmington, New Mexico. The samples were analyzed for BTEX using EPA Method 8021B.

PNM conducted additional source removal at this site in March, 1998 in order to address the elevated benzene levels in MW-2. Approximately 980 cubic yards of contaminated soil were remediated.

Results:

Figure 2 presents a site map showing BTEX for each monitoring well since groundwater contamination was discovered. MW-1, -3 and -4 have been below standards since installation, and as of the May 1998 sampling event, each of these wells has shown BTEX concentrations below standards for four consecutive quarters. MW-2 has demonstrated a strong downward trend in benzene concentrations since secondary remediation. Benzene levels have been below standards now for four consecutive quarters.

Toluene, ethylbenzene and xylenes concentrations in this well have been below standards since project inception.

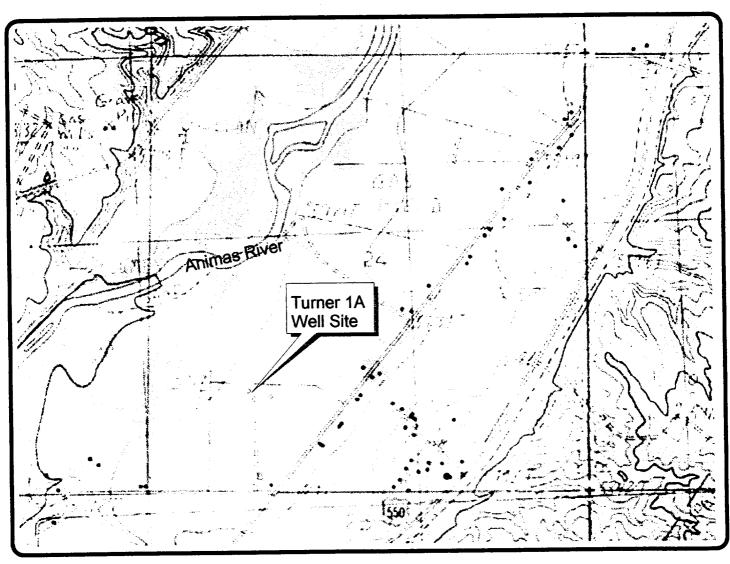
Future Actions:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Turner 1A. This request is based upon the analytical data collected over the last three years at the site. The secondary excavation of additional source materials was successful in achieving clean-up at the Turner 1A; the BTEX concentrations in all of the wells have been below standards for four consecutive quarters.

Upon approval of the groundwater closure report, PNM will plug and abandon the four groundwater monitoring wells at the site. The concrete pad and metal vault surrounding each well will be removed. The PVC well casing will be removed or cut below ground surface and each well will be plugged to surface with cement containing 5% bentonite.



Figure 1. Turner 1A Topographic Map

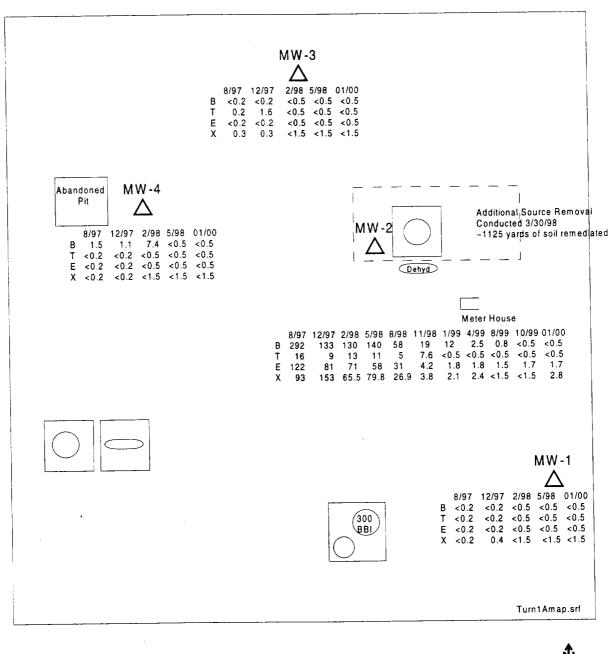


Cedar Hill, Quadrangle





Figure 2. Turner 1A Site Map & Analytical Results (Concentrations in ppb)





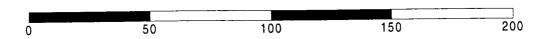
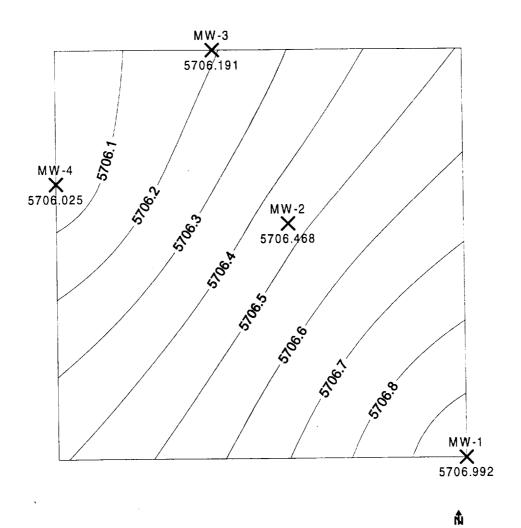


Figure 3.
Turner 1A Groundwater Contour Map
(April 21, 1999)



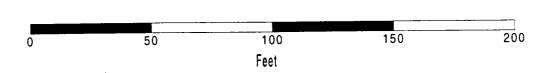


Figure 4.
Turner 1A Groundwater Contour Map
(August 3, 1999)

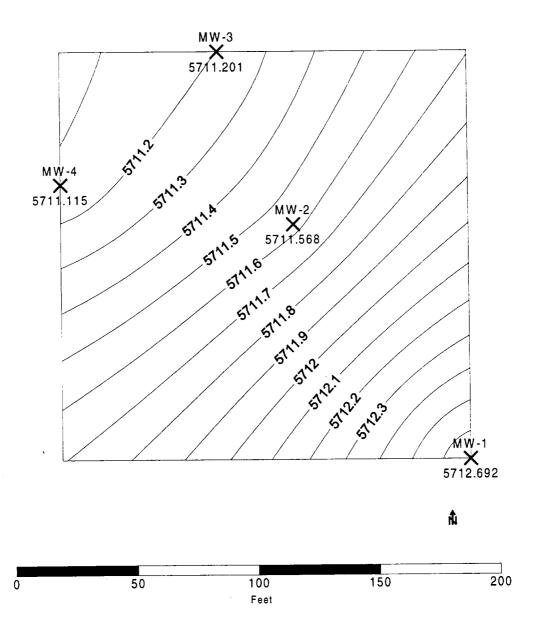
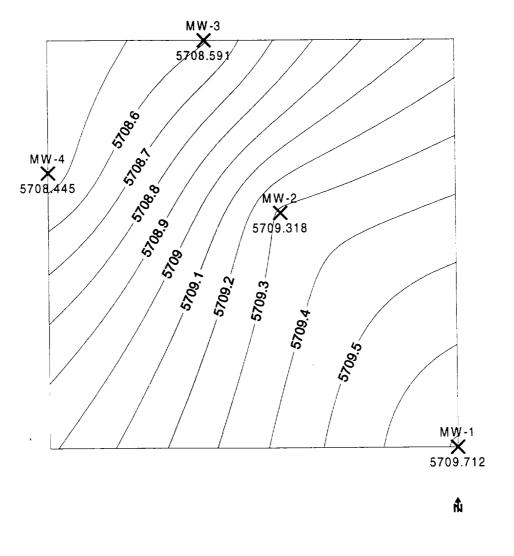


Figure 5.
Turner 1A Groundwater Contour Map
(October 27, 1999)



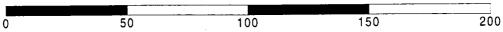
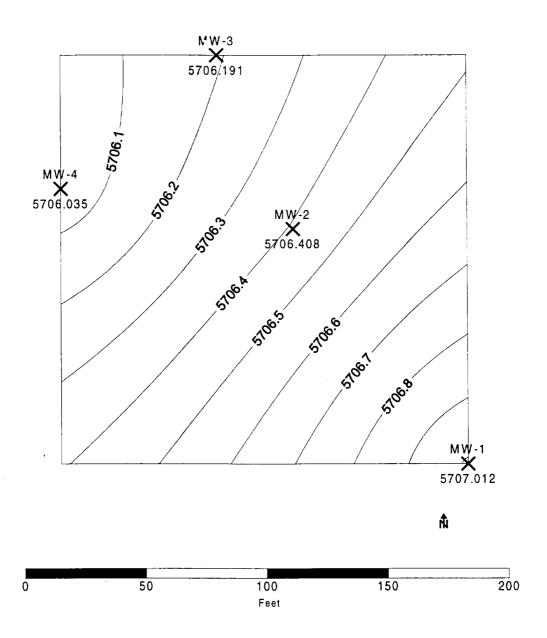


Figure 6.
Turner 1A Groundwater Contour Map
(January 19, 2000)



-- MW-2 --- MW-3 *- MW-4 **→** MW-1 40r-9> 441.9> Oct.9> 49n-98 40r.98 441.98 Oct.98 40r.99 441.99 Oct.99 40r.00 Figure 7. Turner 1A Hydrograph **Month/Year** Groundwater Elevation Ft. AMSL

Attachments



LAB: (505) 325-1556

RECEIVED
MAY 0 3 1999

April 28, 1999

Maureen Gannon PNM - Public Service Company of NM Alvarado Square Mail Stop 0408 Albuquerque, NM 87158 TEL: (505) 241-2974 FAX (505) 241-2340

RE: Turner 1A

Dear Maureen Gannon,

Order No.: 9904050

On Site Technologies, LTD. received 1 sample on 4/21/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests: Aromatic Volatiles by GC/PID (SW8021B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox



LAB: (505) 325-1556

On Site Technologies, LTD.

PNM - Public Service Company of NM

Project: Turner 1A

CLIENT:

Lab Order:

9904050

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Apr-99

Client:

Lab ID:

Project:

PNM - Public Service Company of NM

Work Order:

9904050

Turner 1A

9904050-01A

Matrix: AQUEOUS

Client Sample Info: Turner 1A

Client Sample ID: 9904211330; MW 2

Collection Date: 4/21/99 1:30:00 PM

COC Record: 7176

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SI	W8021B				Analyst: HR
Benzene	2.5	0.5		μg/L	1	4/26/99
Toluene	ND	0.5		μg/L	1	4/26/99
·	1.8	0.5		μg/L	1	4/26/99
Ethylbenzene	1.2	1		μg/L	1	4/26/99
m,p-Xylene o-Xylene	1.2	0.5		μg/L	1	4/26/99

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

CHAIN OF CUSTODY RECORD

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

ON SITE TECHNOLOGIES, LTD.

LAB ID Results to be sent to both parties. Date/Time 1/11/ 10 Working Days Special Instructions: Date/Time Date/Time Alverado Square, Mail Stop 0408 Telefax No. **ANALYSIS REQUESTED** Albuquerque, NM 87158 PNM Gas Services Maureen Gannon 505-848-2974 24-48 Hours Mailing Address City, State, Zip Telephone No. Company Name Received by: Rush 17/0 Received by: Received by: Distribution: White - On Ske Yellow - LAB Pink - Sampler OT STJUSER ТЯОЧЭЯ Number of MATRIX PRES. Date/Time 4/7,1/75 324-3763 E E SAMPLE Date/Time Date/Time DATE Dept. Job No. (Client Signature Must Accompany Request) Farmington, NM 87401 PNM Gas Services 603 W. Elm Street Denver Bearden 05511×409P & SAMPLE IDENTIFICATION Mark Sikelians 10.00F 1A City, State, Zip Purchase Order No.: Aethod of Shipment: Company Address Sampling Location: Relinquished by: Name Authorized by: Relinquished by: Relinquished by: LO INAOICE SEND



LAB: (505) 325-1556

August 09, 1999

RECEIVED
AUG 1 2 1999

Maureen Gannon
PNM - Public Service Company of NM
Alvarado Square Mail Stop 0408
Albuquerque, NM 87158
TEL: (505) 241-2974
FAX (505) 241-2340

RE: Turner 1A

Order No.: 9908006

Dear Maureen Gannon,

On Site Technologies, LTD. received 1 sample on 08/04/1999 for the analyses presented in the following report.

The Samples were analyzed for the following tests: Aromatic Volatiles by GC/PID (SW8021B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox

LAB: (505) 325-1556

On Site Technologies, LTD.

CLIENT:

PNM - Public Service Company of NM

Project:

Turner 1A

Lab Order:

9908006

CASE NARRATIVE

Date: 09-Aug-99

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 09-Aug-99

Client:

Lab ID:

Project:

PNM - Public Service Company of NM

Work Order:

9908006

Turner 1A

9908006-01A

1A Matrix: AQUEOUS

Client Sample Info: Turner 1A

Client Sample ID: 9908031600; MW-2

Collection Date: 08/03/1999 4:00:00 PM

COC Record: 7782

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	sv	V8021B			Analyst: DC
Benzene	0.8	0.5	μg/L	1	08/04/1999
Toluene	ND	0.5	μg/L	1	08/04/1999
Ethylbenzene	1.5	0.5	μ g /L	1	08/04/1999
m,p-Xylene	ND	1	μg/L	1	08/04/1999
o-Xylene	0.8	0.5	µg/L	1	08/04/1999

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

E - Value above qualification range

Surr: - Surrogate

1 of 1

CHAIN OF CUSTODY RECORD

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Purchase	Purchase Order No.:		LAB: (505) 3 Job No.	125-5667 • FA)	(: (505) 325 (: (505) 325	-6256	0	Name	Maure	Maureen Gannon	Title			
:	Name	Denver Bearden					TA T S	Company	PNM	PNM Gas Services	-			
ICE ND	Company	PNM Gas Services		Dept. 324	324-3763	*	09 111	Mailing Address	Alvera	Alverado Square, Mail Stop 0408	Mail Stop	0408		
SEI TO	Address	603 W. Elm Street					18: 38	City, State, Zip	Albuq	Albuquerque, NM 87158	87158			
NI S	City, State, Zip	Farmington, NM 87401	401	K. K 4 :	450		18	Telephone No.	505-8	505-848-2974	Telefax No.	× No.		
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Method of	Method of Shipment: $\mathcal{H}_{H^{\perp,C}}$	1 ck luera				3 1 1	Rush	24-48 Hours	Hours	10 Working Days Special Instructions:	ays Spec	ial Instruc	tions:	
Authorized by:	ed by: Korest	Karth De Mark Accompany Request)	Date Date	10/18								Results to bot	Results to be sent to both parties.	
				Dietribution: White . Or			Dink Samole	ar Goldenard - Clent			-			



LAB: (505) 325-1556

RECEIVED NOV 0 5 1999

November 01, 1999

Maureen Gannon
PNM - Public Service Company of NM
Alvarado Square Mail Stop 0408
Albuquerque, NM 87158
TEL: (505) 241-2974

TEL: (505) 241-2974 FAX (505) 241-2340

RE: Turner 1A

Dear Maureen Gannon,

Order No.: 9910041

On Site Technologies, LTD. received 1 sample on 10/27/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests: Aromatic Volatiles by GC/PID (SW8021B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox

OFF: (505) 325-5667 TECHNOLOGIES, LTD

LAB: (505) 325-1556

On Site Technologies, LTD. Date: 01-Nov-99

CLIENT:

PNM - Public Service Company of NM

Project:

Turner 1A

Lab Order:

9910041

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Nov-99

Client:

PNM - Public Service Company of NM

Work Order:

9910041

Lab ID:

Project:

9910041-01A

Turner 1A

Matrix: AQUEOUS

Client Sample Info: Turner 1A

Client Sample ID: 9910271055; MW-2

Collection Date: 10/27/99 10:55:00 AM

COC Record: 7828

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	sv	V8021B				Analyst: DM
Benzene	ND	0.5		μg/L	1	10/29/99
Toluene	ND	0.5		μg/L	1	10/29/99
Ethylbenzene	1.7	0.5		μg/L	1	10/29/99
m,p-Xylene	ND	1		µg/L	1	10/29/99
o-Xylene	8.0	0.5		μg/L	1	10/29/99

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

7828

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

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

						-						ſ
Purchase	Purchase Order No.:	Job No.				Name	JB	Maureen Gannon	Gannon	Title		
=	Name	Denver Bearden				_	Company	PNM Gas	Services			
ICE 1D	Company	PNM Gas Services	Dept. 324	24-3763	Od	TJ(Mailing Address	Alverado	Alverado Square, Mail Stop 0408	Stop 0	408	
SEN TC	Address	603 W. Elm Street					City, State, Zip	Albuquer	Albuquerque, NM 87158	58		
NI S	City, State, Zip	Farmington, NM 87401					Telephone No.	505-848-2974	2974	Telefax No.	No.	
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Method o	Method of Shipment:		31		Rush	ے	24-48 Hours		Working Day	s Specia	10 Working Days Special Instructions:	-
Authorized by:		Client Slondture Must Accompany Beauest)	2-01	100 mg							Results to be sent to both partles.	
				- 1		1				\dashv		
			Distribution: White - On Site	On Site Yellow - LAB	LAB Pink · Sampler		Goldenrod - Client					



LAB: (505) 325-1556

RECEIVED MAR 0 2 2000

February 28, 2000

Maureen Gannon PNM - Public Service Company of NM Alvarado Square Mail Stop 0408 Albuquerque, NM 87158 TEL: (505) 241-2974 FAX (505) 241-2340

RE: Turner 1A

Order No.: 0001023

Dear Maureen Gannon,

On Site Technologies, LTD. received 5 samples on 1/20/2000 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

Aromatic Volatiles by GC/PID (SW8021B)

Arsenic, Dissolved (SW6010A)

Selenium, Dissolved (SW7742)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Cox



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 28-Feb-00

CLIENT:

PNM - Public Service Company of NM

Project:

Turner 1A

Lab Order:

0001023

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



LAB: (505) 325-1556

Date: 28-Feb-00

ANALYTICAL REPORT

Client:

PNM - Public Service Company of NM

Work Order:

0001023

Lab ID: Project:

Turner 1A

0001023-01A

Matrix: AQUEOUS

Collection Date: 1/19/2000 1:23:00 PM

Client Sample Info: Turner 1A

Client Sample ID: 0001191323; MW-1

COC Record: 7797

Parameter	Result	PQL	Qual U	nits	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SI	V8021B				Analyst: DM
Benzene	ND	0.5	μ	Jg/L	1	1/24/2000
Toluene	ND	0.5	ļ.	ug/L	1	1/24/2000
Ethylbenzene	ND	0.5	,	ig/L	1	1/24/2000
m,p-Xylene	ND	1		μg/L	1	1/24/2000
o-Xylene	ND	0.5		μg/L	1	1/24/2000

Qualifiers:

POL - 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



LAB: (505) 325-1556

Date: 28-Feb-00

ANALYTICAL REPORT

Client:

PNM - Public Service Company of NM

Work Order:

0001023

Lab ID:

Project:

0001023-02A

Matrix: AQUEOUS

Turner 1A

Client Sample Info: Turner 1A

Client Sample ID: 0001191337; MW-2

Collection Date: 1/19/2000 1:37:00 PM

COC Record: 7797

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SV	V8021B			Analyst: DM
Benzene	ND	0.5	μg/L	1	1/24/2000
Toluene	ND	0.5	μg/L	1	1/24/2000
Ethylbenzene	1.7	0.5	μg/L	1	1/24/2000
m,p-Xylene	2.1	1	μg/L	1	1/24/2000
o-Xylene	0.7	0.5	μg/L	1	1/24/2000

Qualifiers:

POL - 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

I of I



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Feb-00

Client:

PNM - Public Service Company of NM

Matrix: AQUEOUS

Work Order:

0001023

Lab ID: Project: 0001025

0001023-03A

Turner 1A

Client Sample Info: Turner 1A

Client Sample ID: 0001191347; MW-3 Collection Date: 1/19/2000 1:47:00 PM

COC Record: 7797

Parameter	Result	PQL	Qual (Jnits	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SV	V8021B				Analyst: DM
Benzene	ND	0.5		μg/L	1	1/24/2000
Toluene	ND	0.5		μg/L	1	1/24/2000
Ethylbenzene	ND	0.5		μg/L	1	1/24/2000
m,p-Xylene	ND	1		μg/L	1	1/24/2000
o-Xylene	ND	0.5		μg/L	1	1/24/2000

Qualitiers:

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



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Feb-00

Client:

PNM - Public Service Company of NM

Matrix: AQUEOUS

Work Order:

0001023

Lab ID: Project: 0001023

0001023-04A

Turner 1A

Client Sample Info: Turner 1A

Client Sample ID: 0001191356; MW-4

Collection Date: 1/19/2000 1:56:00 PM

COC Record: 7797

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SV	V8021B			Analyst: DM
Benzene	ND	0.5	μg/L	1	1/24/2000
Toluene	ND	0.5	μg/L	1	1/24/2000
Ethylbenzene	ND	0.5	μg/L	1	1/24/2000
m,p-Xylene	ND	1	μg/L	1	1/24/2000
o-Xylene	ND	0.5	μg/L	1	1/24/2000

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

I of I

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Feb-00

Client:

PNM - Public Service Company of NM

Client Sample Info: Turner 1A

Work Order:

0001023

Client Sample ID: 0001191415; MW-5

Lab ID:

0001023-05A

Matrix: AQUEOUS

Collection Date: 1/19/2000 2:15:00 PM

Project:

Turner 1A

COC Record: 7797

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	sv	V8021B			Analyst: DM
Benzene	ND	0.5	μ g /L	1	1/24/2000
Toluene	ND	0.5	µg/L ⊨	1	1/24/2000
Ethylbenzene	1.7	0.5	μg/L	1	1/24/2000
m,p-Xylene	2.1	1	μg/L	1	1/24/2000
o-Xylene	0.7	0.5	μg/L	1	1/24/2000

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

1 of 1



CASE NARRATIVE February 18, 2000

Client:

On-Site Technologies, LTD.

Date Rec'd:

1/21/00

Matrix:

Groundwater

SDG#:

L26197

Lab Nos.:

L26197-01 through L26197-02

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received two groundwater samples from On-Site Technologies, LTD. on January 21, 2000. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Sample Analysis:

The sample was analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomalies were noted during analysis:

1. None.

Holding Times:

All analysis was performed within the applicable EPA recommended holding times.

If you have any questions please do not hesitate to call me at (800) 334-5493.

Scott Gustin, Project Manager



ACZ Laboratories, Inc. 2773 Downhill Drive

Steamboat Springs, CO 80487

On Site Technologies, LTD.

Farmington, NM 87499

(800) 334-5493

Lab Sample ID: L26197-01

Client Sample ID: 0001023-01B

Client Project ID:

ACZ Report ID: RG111459

Date Sampled: 01/19/2000 1:23:00 PM

Date Received: 01/21/2000

Date Reported: 02/03/2000

David Cox

Turner 1A; 0001191323 MW-1

#

Sample Matrix: Ground Water

Metals Analysis

612 E Murray Dr

Parameter	1.4	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Arsenic, dissolved		M206.2 GFAA		U	mg/L	0.001	0.005	2/2/2000	ms
Selenium, dissolved		SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	1/29/2000	ms

Wet Chemistry

Parameter	EPA Method	Result Qual Units MDI PQL	Date: Analyst
Lab Filtration & Acidification	***		1/25/2000 laa

Inorganic Qualitiers (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

Vice President of Operations: Ralph Poulsen

ACZ Laboratories, Inc.

2773 Downhill Drive

612 E Murray Dr

Steamboat Springs, CO 80487

Farmington, NM 87499

On Site Technologies, LTD.

(800) 334-5493

Lab Sample ID: L26197-02 Client Sample ID: 0001023-02B

Client Project ID:

ACZ Report ID: RG111460

Date Received: 01/21/2000

Date Reported: 02/03/2000

Date Sampled: 01/19/2000 1:37:00 PM

David Cox

Turner 1A; 0001191337 MW-2

Sample Matrix: Ground Water

Metals Analysis

Parameter	EPA Method	Result*	Qual	Units	MDU.	PQL	· Date	Analyst
Arsenic, dissolved	M206.2 GFAA	 0.003	В	mg/L	0.001	0.005	2/2/2000	ms
Selenium, dissolved	SM 3500-Se C, AA-Hydride		U	mg/L	0.001	0.005	1/29/2000	ms

Wet Chemistry

Parameter	EPA Method	Result	Qual Units	MÐL	PQL Date	Analyst
Lab Filtration & Acidification	***				1/25/200	00 laa

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

Vice President of Operations: Ralph Poulsen

8514

CHAIN OF CUSTODY RECORD

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

ON SITE

Purchase Order No.:		0	Name	Maureen Gannon	Title
Denver Bearden		ТЯ Т 2	Company	PNM Gas Services	
Company PNM Gas Services	Dept. 324-3763	09. דבונ	Mailing Address	Alverado Square, Mail Stop 0408	Stop 0408
Address 603 W. Elm Street			City, State, Zip	Albuquerque, NM 87158	89
City, State, Zip Farmington, NM 87401		IH	Telephone No.	505-848-2974	Telefax No.
Sampling Location:				ANALYSIS REQUESTED	STED
FlorAnce 40			0)	////	
Samplering & Mark S		dmu Sontai	Best		
	SAMPLE MATRIX PRES.		100	////	LAB ID
200328 1/20 MW-S	3/24/6 1120 11.00 M.C.	13	ト		DD03044-014
41W.6	7	19	X		-02A
		_			
Relinquished by: Kanall A Debra	Date/Time 26/20 1523	Receiv	Received by Agol	Reser	Date/Time 3 755 CO 1305
Relinquished by:		Receiv	Received by:		Date/Time
Relinquished by:	Date/Time	Receiv	Received by:		Date/Time
Method of Shipment:		Rush	24-48 Hours		10 Working Days Special Instructions:
Authorized by: Aman Aust Accompany Request)	18 3/28/00				Results to be sent to both parties.
	Distribution: White - On Site Yellow - LAB F	Pink - Sample	Ner Goldenrod - Client		