

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

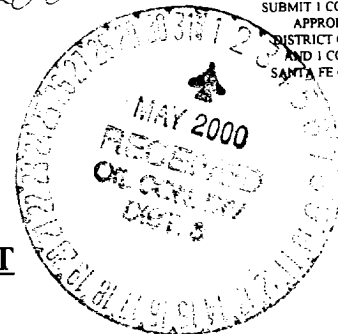
State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Approved Bill Olson
6/30/2000



Operator: WES [PNM Gas Services] (Burlington) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Turner #1A

Location: Unit M Sec 24 T 31 N R 11 W County San Juan

Pit Type: Separator ☐ Dehydrator ☒ 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 ☐ West of North ☒ 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) | <u>20</u> |

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) | <u>20</u> |

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) | <u>20</u> |

RANKING SCORE (TOTAL POINTS): 60

Turner #1A

Date Remediation Started: 05/14/1997

Date Completed: 05/14/1997

Remediation Method:

Excavation ☒

Approx. Cubic Yard 1016

(Check all appropriate sections)

Landfarmed ☒

Amount Landfarmed (cubic yds) 1016

Other _____

Remediation Location:

Onsite ☒

Offsite _____

(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location: _____

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 45' X 61' X 10' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

Secondary source removal conducted on 3/31/98; approximately 980 cu yds of contaminated soil removed.

Ground Water Encountered:

No ☐Yes ☒

Depth

10'

Final Pit Closure Sampling:

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

Sample Location

Middle of pit.

Sample depth

10'

Sample date

05/15/1997

Sample time

8:00:00 AM

Sample Results

Benzene (ppm)

0.359

Total BTEX (ppm)

3.412

Field headspace (ppm)

TPH (ppm)

Method

8020A

Vertical Extent (ft)

Risk Analysis form attached Yes ☐No ☐

Ground Water Sample:

Yes ☒No ☐

(If yes, see attached Groundwater Site Summary Report)

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

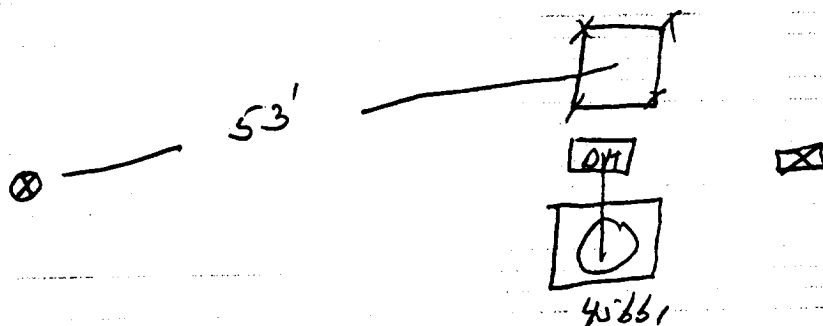
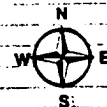
DATE April 24, 2000

SIGNATURE

PRINTED NAME Maureen Gannon
AND TITLE Project Manager

| | | | | |
|--------------------|------------|-----|-----|------|
| Well Name: | Thruex #1A | | | |
| Legal Description: | Sec | Twn | Rng | Unit |
| | 24 | 31N | 11W | |

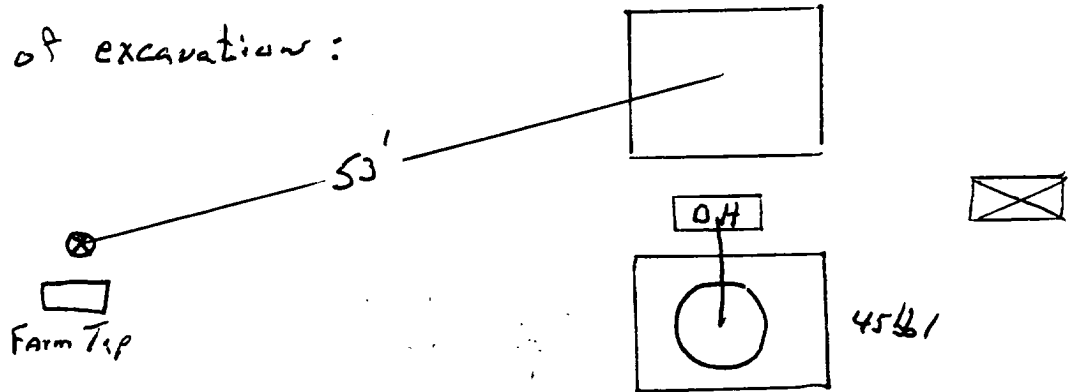
| |
|---------------|
| Data Sheet #: |
| 3092 |



Turner # 1A
Burlington Resources
Sec. 24, 31N, 11W

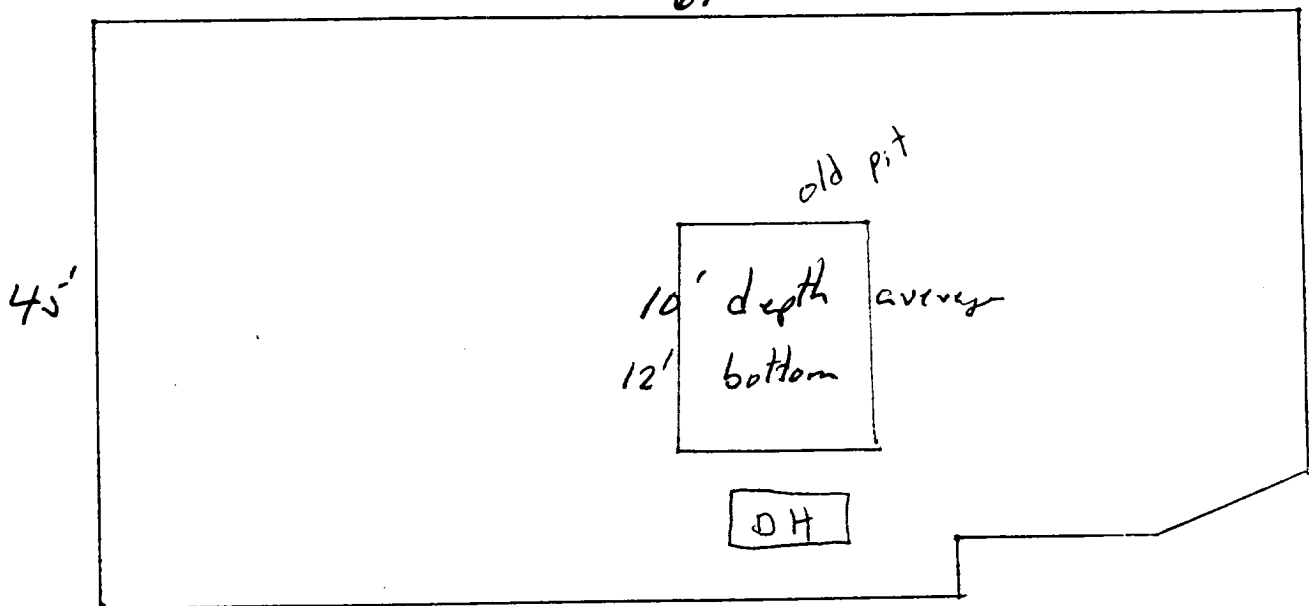
5-14-97

Start of excavation:



End of excavation: Water at 10'

61'

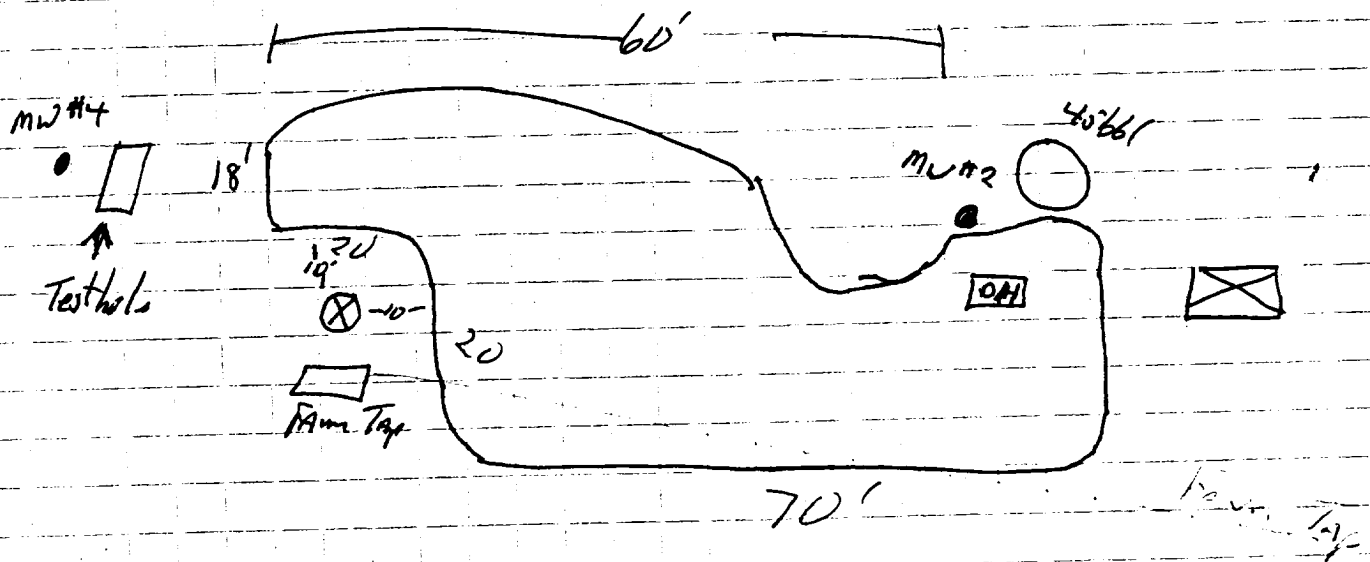


Turner # 1A

3-30-98

Burlington Resources

Sec. 24, 31N, 10W,



OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *20-May-97*
COC No.: *5879*
Sample No.: *14624*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Turner #1A*
Project Location: *9705150800; 10' depth*
Sampled by: *GC* Date: *15-May-97* Time: *8:00*
Analyzed by: *DC* Date: *17-May-97*
Sample Matrix: *Liquid*

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

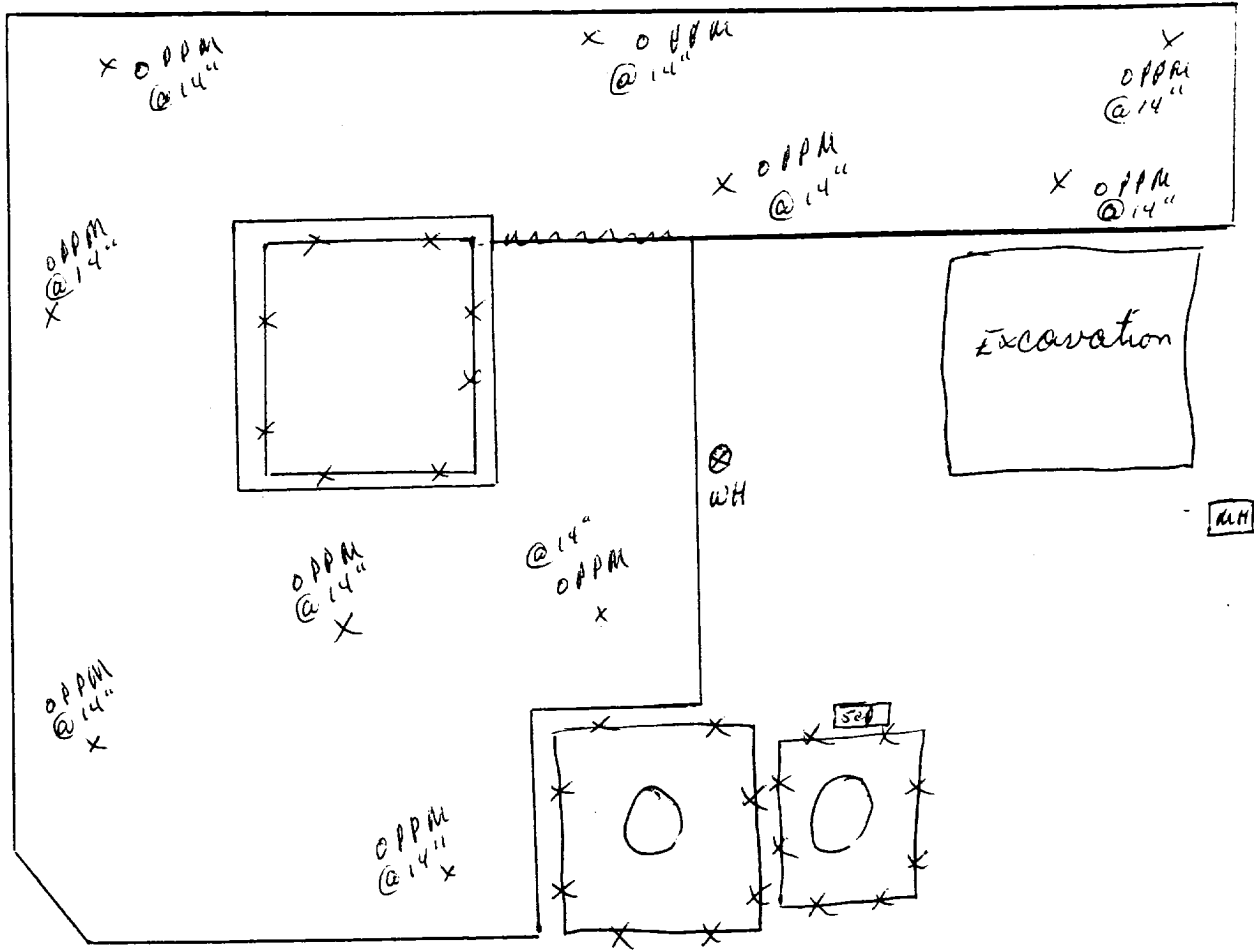
ND - Not Detected at Limit of Quantitation

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

Approved By: *[Signature]*

Date: *5/20/97*

N



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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *8-Jul-97*
COC No.: *5170*
Sample No.: *15060*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Turner #1A Landfarm*
Project Location: *9706231300; 10pt. Composite*
Sampled by: *RH* Date: *23-Jun-97* Time: *13:00*
Analyzed by: *DC/HR* Date: *7-Jul-97*
Sample Matrix: *Soil*

Laboratory Analysis

| Parameter | Results as Received | Unit of Measure | Limit of Quantitation | Unit of Measure |
|--|---------------------|-----------------|-----------------------|-----------------|
| <i>Diesel Range Organics (C10 - C28)</i> | 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 |
|---------------------------------|--------------|-----------------|------------|----------------|-----|-----------|
| <i>Diesel Range (C10 - C28)</i> | ND | ppm | 200 | 190 | 5.1 | 15% |

Matrix Spike

| Parameter | 1 - Percent Recovered | 2 - Percent Recovered | Limit | RPD | RPD Limit |
|-------------------------------|-----------------------|-----------------------|----------|-----|-----------|
| <i>Diesel Range (C10-C28)</i> | 84 | 89 | (70-130) | 5 | 20% |

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

Approved by: *[Signature]*
Date: *7/8/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: **Denver Bearden**
Company: **PNM Gas Services**
Address: **603 W. Elm**
City, State **Farmington, NM 87401**

Date: **1-Jul-97**
COC No.: **5170**
Sample No.: **15060**
Job No.: **2-1000**


Project Name: **PNM Gas Services - Turner #1A Landfarm**
Project Location: **9706231300; 10pt. Composite**
Sampled by: **RH** Date: **23-Jun-97** Time: **13:00**
Analyzed by: **DC** Date: **28-Jun-97**
Sample Matrix: **Soil**

Laboratory Analysis

| Parameter | Results as Received | Unit of Measure | Limit of Quantitation | Unit of Measure |
|---------------------|------------------------|--------------------|--------------------------|--------------------|
| <i>Benzene</i> | ND | ug/kg | 1 | ug/kg |
| <i>Toluene</i> | 1 | ug/kg | 1 | ug/kg |
| <i>Ethylbenzene</i> | 2 | ug/kg | 1 | ug/kg |
| <i>m,p-Xylene</i> | 7 | ug/kg | 1 | ug/kg |
| <i>o-Xylene</i> | 1 | ug/kg | 1 | ug/kg |
| <i>TOTAL</i> | | 11 | | ug/kg |

ND - Not Detected at Limit of Quantitation

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

Approved by: 
Date: **7/1/97**

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

Vulnerable Class: Original
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.

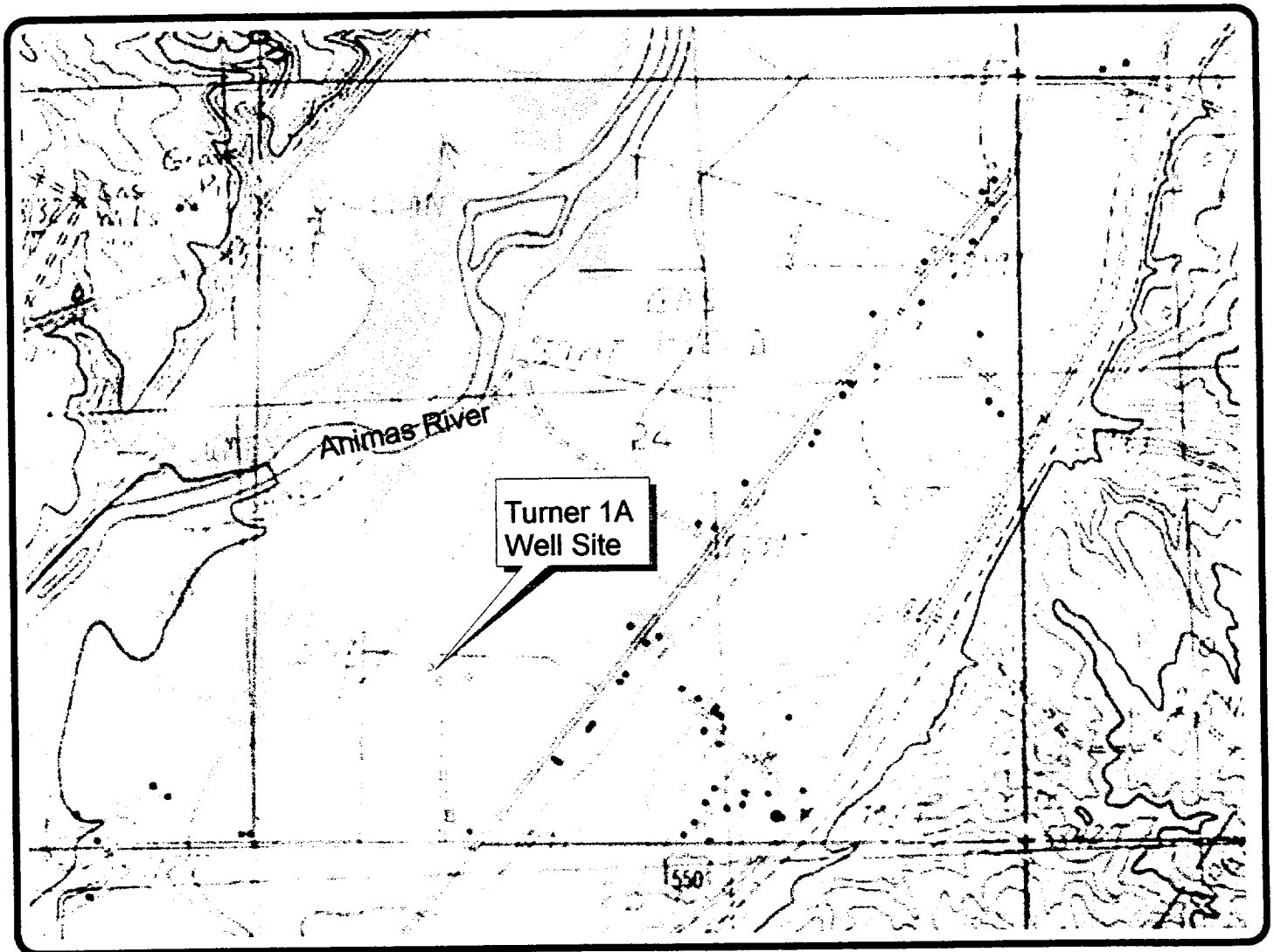
Future Actions:

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)

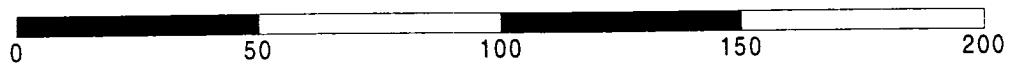
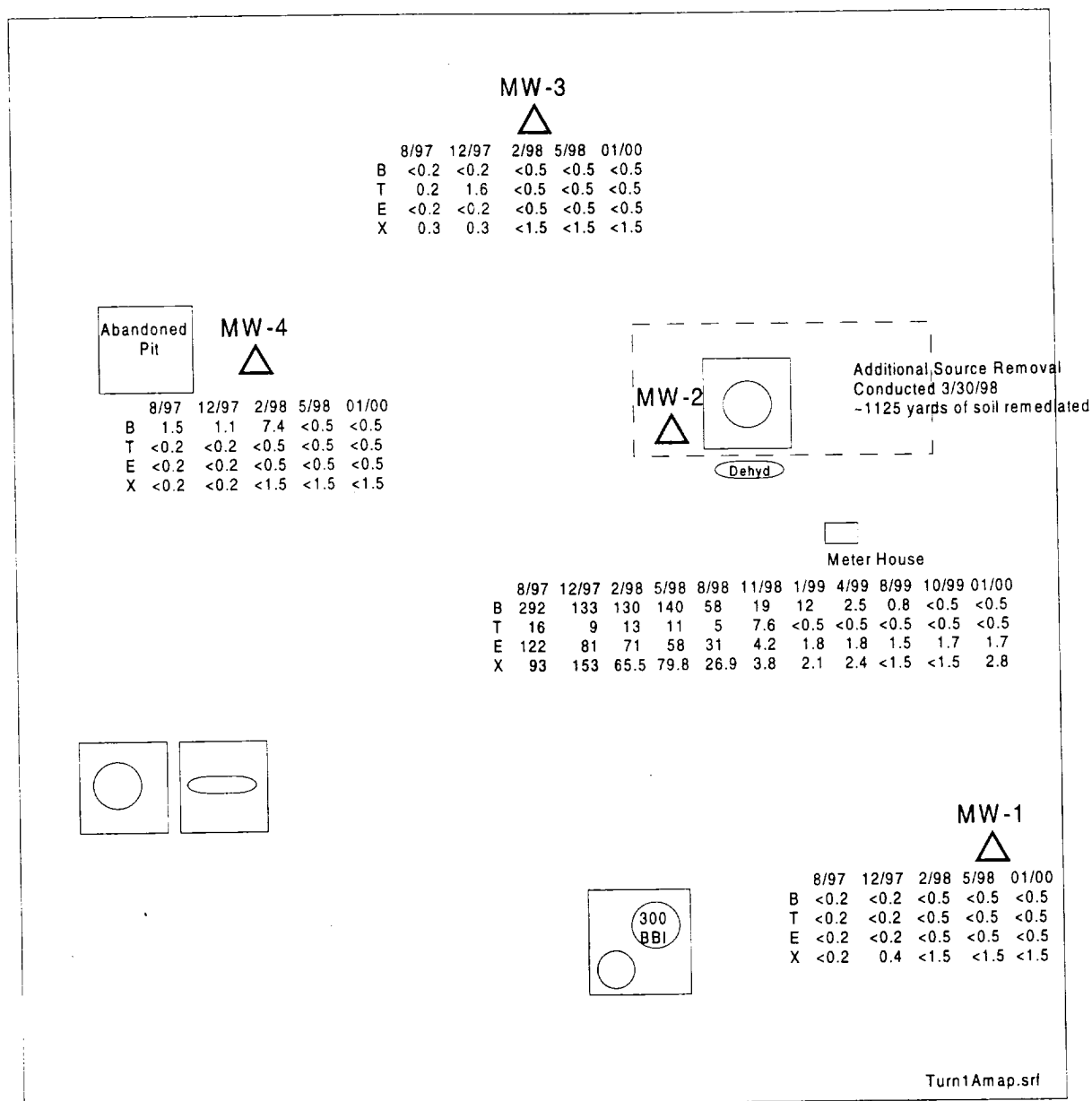


Figure 3.
Turner 1A Groundwater Contour Map
(April 21, 1999)

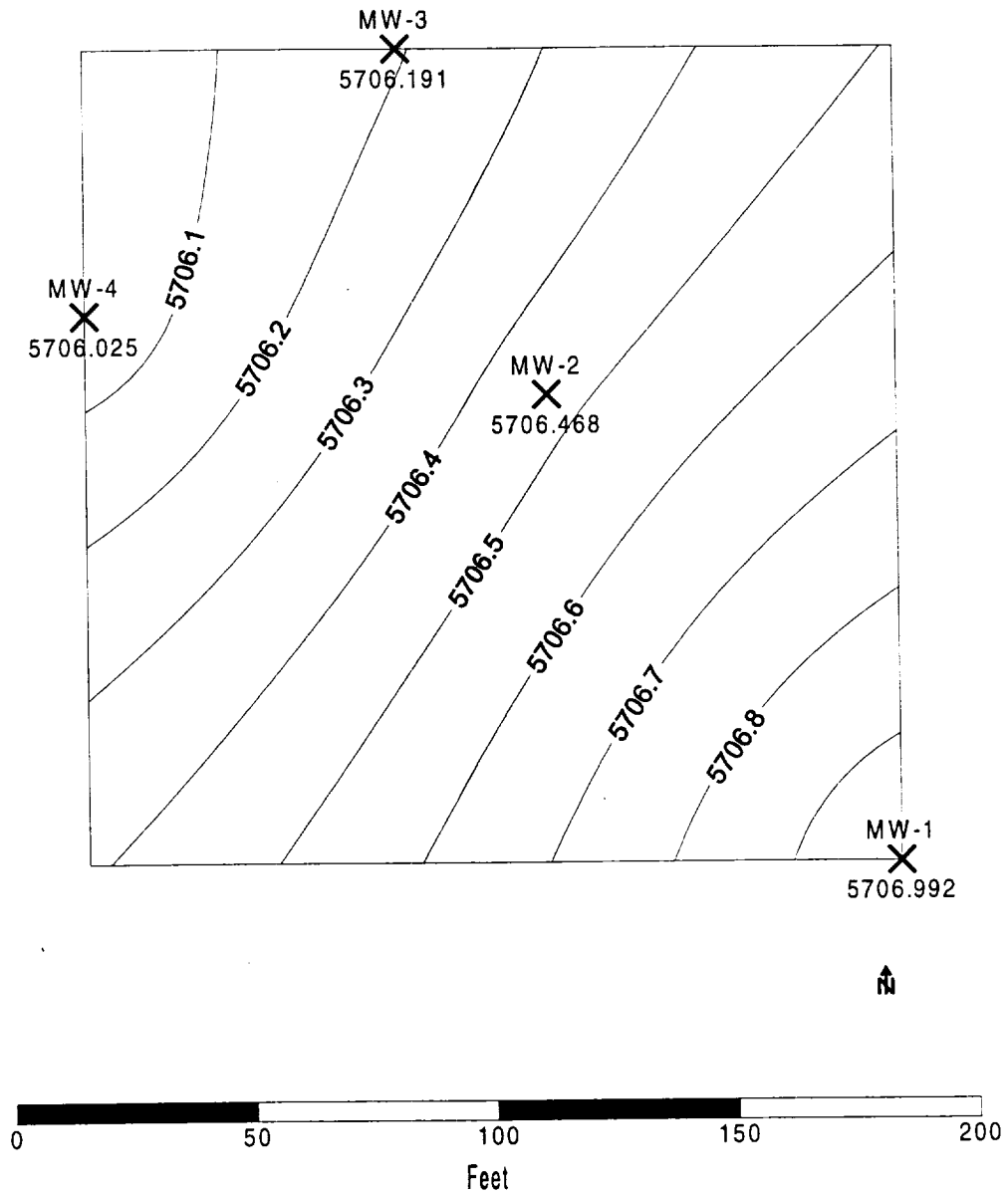


Figure 4.
Turner 1A Groundwater Contour Map
(August 3, 1999)

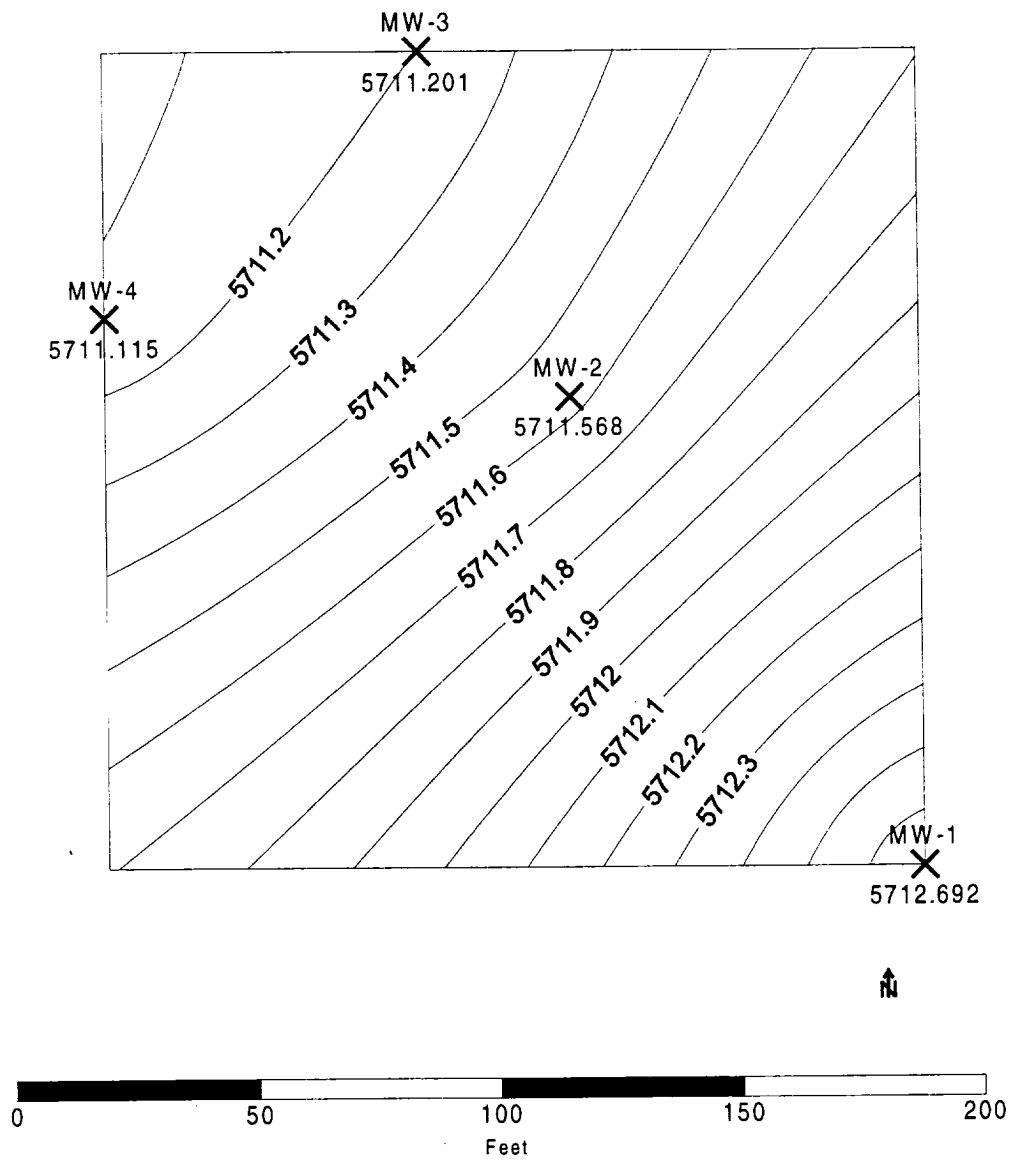


Figure 5.
Turner 1A Groundwater Contour Map
(October 27, 1999)

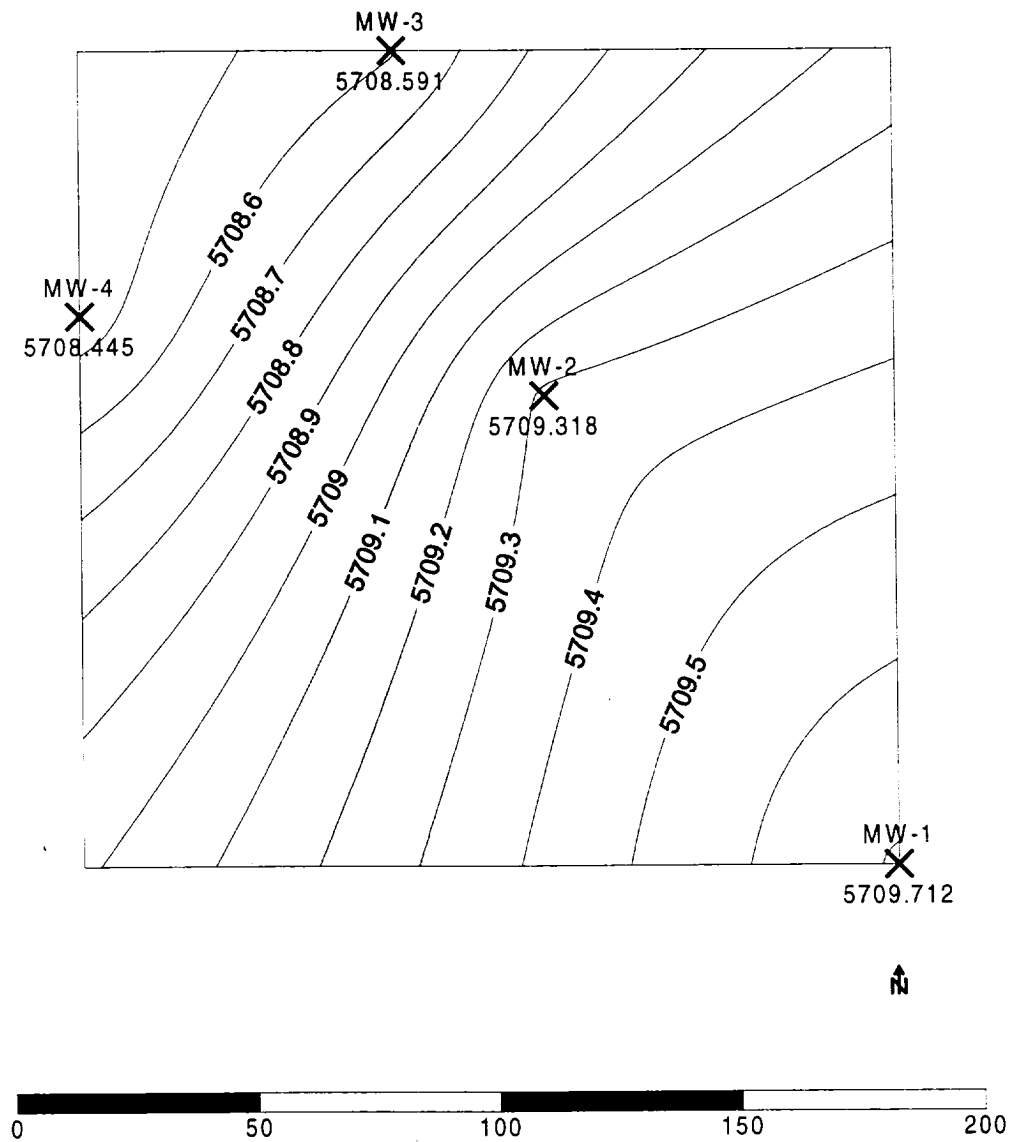


Figure 6.
Turner 1A Groundwater Contour Map
(January 19, 2000)

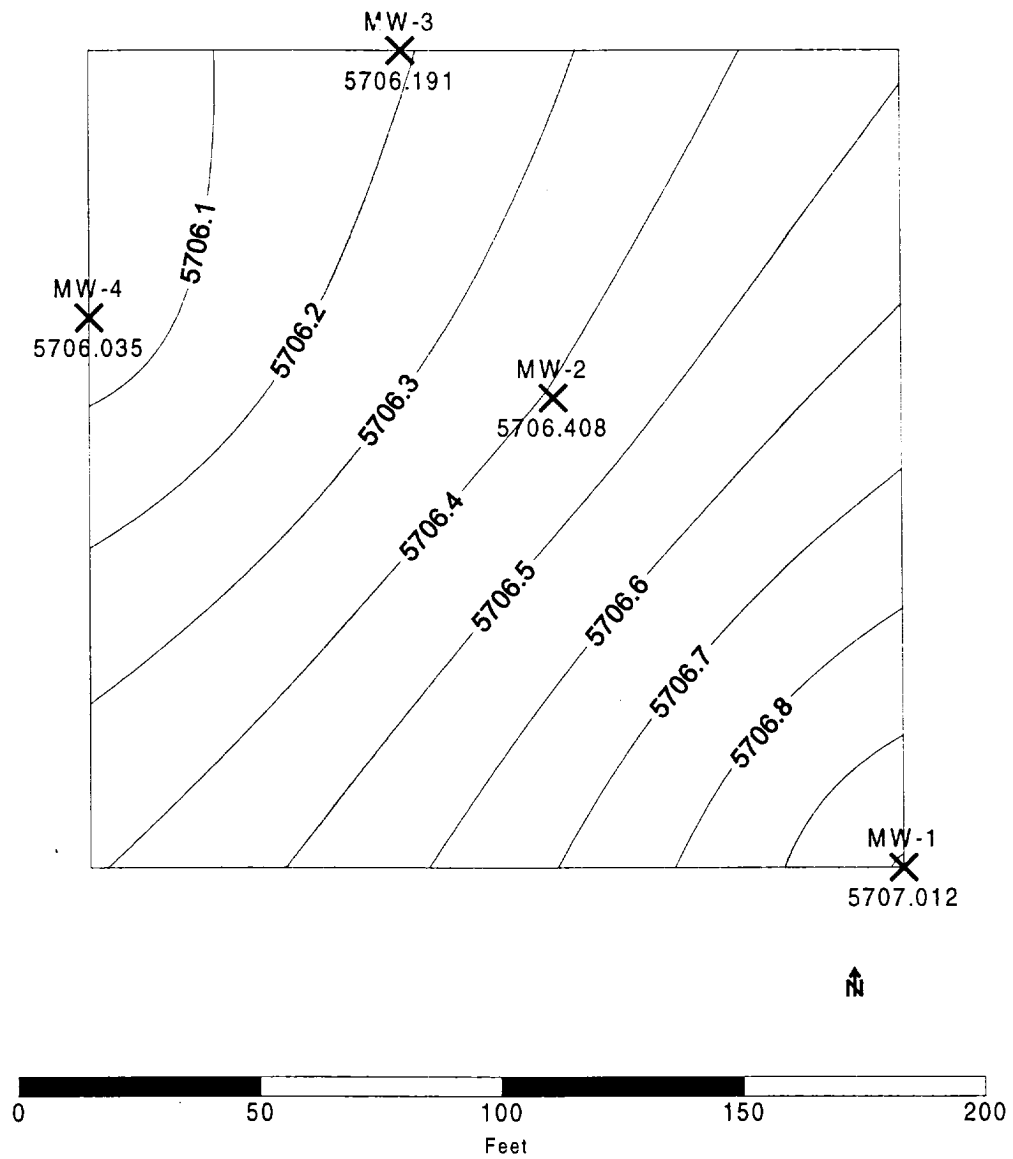
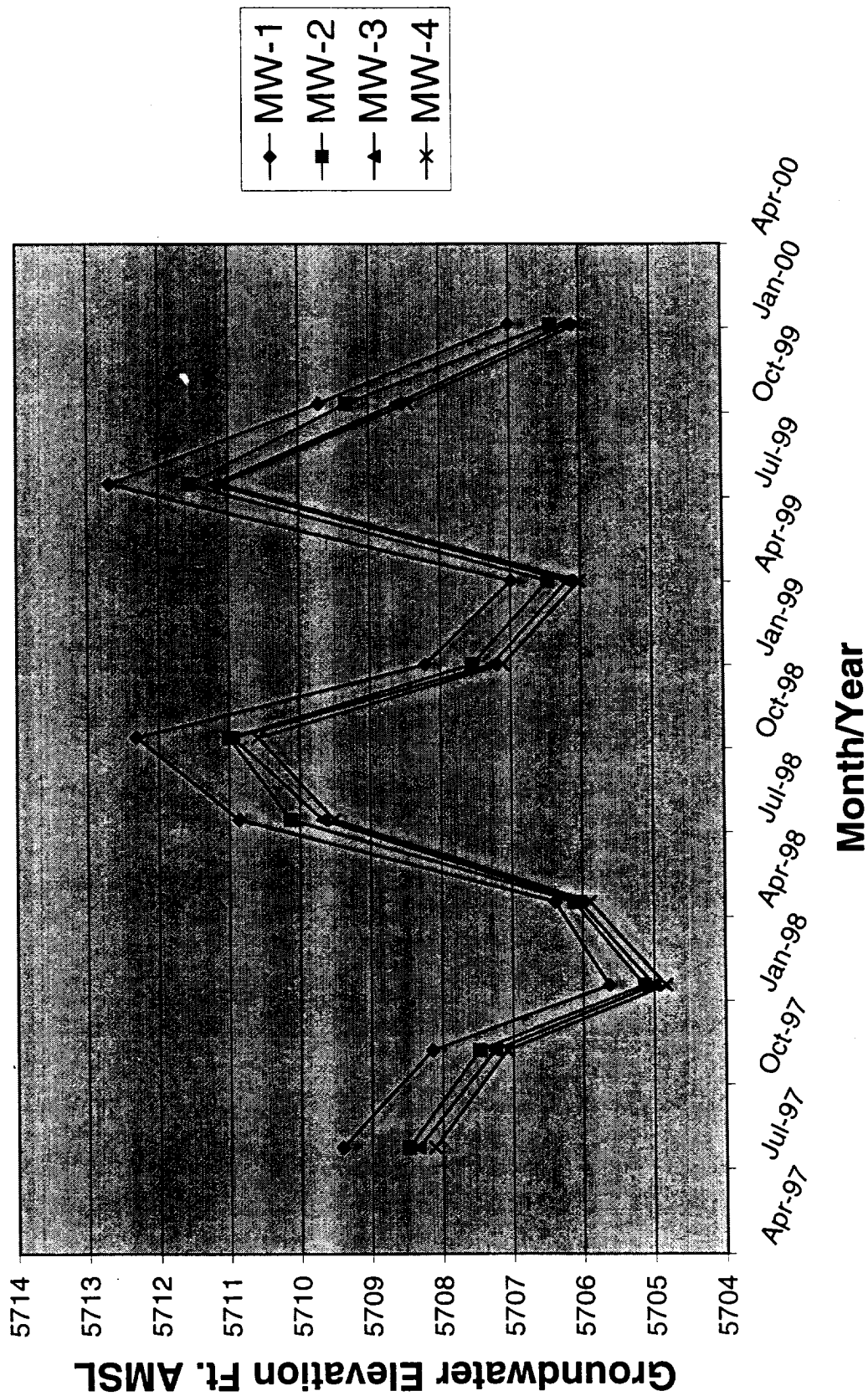


Figure 7. Turner 1A Hydrograph



Attachments

OFF: (505) 325-5667



LAB: (505) 325-1556

April 28, 1999

RECEIVED
MAY 03 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.: 9904050

Dear Maureen Gannon,

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,

A handwritten signature in black ink, appearing to read "David Cox", with a stylized flourish at the end.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 28-Apr-99

CLIENT: PNM - Public Service Company of NM

Project: Turner 1A

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.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Apr-99

| | | | |
|--------------------|------------------------------------|----------------------------|--------------------|
| Client: | PNM - Public Service Company of NM | Client Sample Info: | Turner 1A |
| Work Order: | 9904050 | Client Sample ID: | 9904211330; MW 2 |
| Lab ID: | 9904050-01A | Matrix: | AQUEOUS |
| Project: | Turner 1A | 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 | | | | | | Analyst: HR |
| | | SW8021B | | | | |
| Benzene | 2.5 | 0.5 | | µg/L | 1 | 4/26/99 |
| Toluene | ND | 0.5 | | µg/L | 1 | 4/26/99 |
| Ethylbenzene | 1.8 | 0.5 | | µg/L | 1 | 4/26/99 |
| m,p-Xylene | 1.2 | 1 | | µg/L | 1 | 4/26/99 |
| 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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



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

OFF: (505) 325-5667



LAB: (505) 325-1556

August 09, 1999

RECEIVED

AUG 12 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,

A handwritten signature in black ink, appearing to read "David Cox", with a stylized flourish at the end.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 09-Aug-99

CLIENT: PNM - Public Service Company of NM

Project: Turner 1A

Lab Order: 9908006

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.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 09-Aug-99

| | | | |
|--------------------|------------------------------------|----------------------------|-----------------------|
| Client: | PNM - Public Service Company of NM | Client Sample Info: | Turner 1A |
| Work Order: | 9908006 | Client Sample ID: | 9908031600; MW-2 |
| Lab ID: | 9908006-01A | Matrix: | AQUEOUS |
| Project: | Turner 1A | 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 | | SW8021B | | 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 | | µg/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

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

November 01, 1999

RECEIVED

NOV 05 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.: 9910041

Dear Maureen Gannon,

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,

A handwritten signature in black ink, appearing to be "David Cox", with a stylized flourish at the end.

David Cox

OFF: (505) 325-5667



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.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Nov-99

| | | | |
|--------------------|------------------------------------|----------------------------|----------------------|
| Client: | PNM - Public Service Company of NM | Client Sample Info: | Turner 1A |
| Work Order: | 9910041 | Client Sample ID: | 9910271055; MW-2 |
| Lab ID: | 9910041-01A | Matrix: | AQUEOUS |
| Project: | Turner 1A | 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 | | SW8021B | | 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 | 0.8 | 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

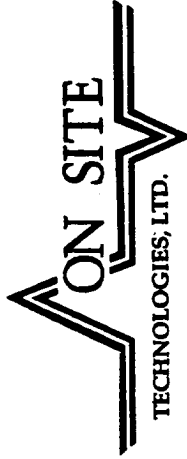
P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

CHAIN OF CUSTODY RECORD

Date: 10-27-99

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

[illegible]

OFF: (505) 325-5667



LAB: (505) 325-1556

February 28, 2000

RECEIVED
MAR 02 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,

A handwritten signature in black ink, appearing to read "David Cox".

David Cox

OFF: (505) 325-5667



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.

OFF: (505) 325-5667



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: | 0001191323; MW-1 |
| Lab ID: | 0001023-01A | Matrix: | AQUEOUS |
| Project: | Turner 1A | Collection Date: | 1/19/2000 1:23:00 PM |
| | | COC Record: | 7797 |

| Parameter | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------|--------|---------|------|-------------|----|---------------|
| AROMATIC VOLATILES BY GC/PID | | SW8021B | | 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

OFF: (505) 325-5667



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: | 0001191337; MW-2 |
| Lab ID: | 0001023-02A | Matrix: | AQUEOUS |
| Project: | Turner 1A | 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 | | SW8021B | | 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:

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

OFF: (505) 325-5667



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: | 0001191347; MW-3 |
| Lab ID: | 0001023-03A | Matrix: | AQUEOUS |
| Project: | Turner 1A | Collection Date: | 1/19/2000 1:47:00 PM |
| | | COC Record: | 7797 |

| Parameter | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------|--------|---------|------|-------------|----|---------------|
| AROMATIC VOLATILES BY GC/PID | | SW8021B | | 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

OFF: (505) 325-5667



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: | 0001191356; MW-4 |
| Lab ID: | 0001023-04A | Matrix: | AQUEOUS |
| Project: | Turner 1A | 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 | | SW8021B | | 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

OFF: (505) 325-5667



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 |
| Project: | Turner 1A | Collection Date: | 1/19/2000 2:15:00 PM |
| | | COC Record: | 7797 |

| Parameter | Result | PQL | Qual | Units | DF | Date Analyzed |
|------------------------------|--------|---------|------|-------------|----|---------------|
| AROMATIC VOLATILES BY GC/PID | | SW8021B | | 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:
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

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:

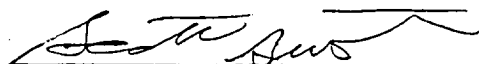
The sample was analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomalies were noted during analysis:

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
(800) 334-5493

Lab Sample ID: **L26197-01**
Client Sample ID: **0001023-01B**
Client Project ID:
ACZ Report ID: **RG111459**

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

Date Sampled: **01/19/2000 1:23:00 PM**
Date Received: **01/21/2000**
Date Reported: **02/03/2000**

Turner 1A; 0001191323 MW-1

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 | 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 | MDL | PQL | Date | Analyst |
|--------------------------------|------------|--------|------|-------|-----|-----|-----------|---------|
| Lab Filtration & Acidification | *** | | | | | | 1/25/2000 | 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

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

Lab Sample ID: **L26197-02**
Client Sample ID: **0001023-02B**
Client Project ID:
ACZ Report ID: **RG111460**

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

Date Sampled: **01/19/2000 1:37:00 PM**
Date Received: **01/21/2000**
Date Reported: **02/03/2000**

Turner 1A; 0001191337 MW-2

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 | 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 | MDL | PQL | Date | Analyst |
|--------------------------------|------------|--------|------|-------|-----|-----|-----------|---------|
| Lab Filtration & Acidification | *** | | | | | | 1/25/2000 | 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

SL
Vice President of Operations: Ralph Poulsen

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 |
|---------------|-----------------|--------------|----------------|--------------------|
|---------------|-----------------|--------------|----------------|--------------------|