

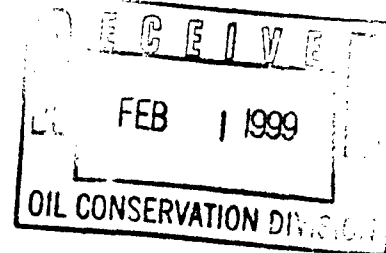
3R - 345

REPORTS

DATE:

1998

Public Service Company
of New Mexico
603 W. Elm - P.O. Box 4750
Farmington, NM 87499
505 950-1997
Fax 505 325-7365



January 28, 1999

Oil Conservation Division
Attention: Bill Olson
2040 South Pacheco
Santa Fe, NM 87505



Subject: OCD Closure Reports – Groundwater Sites
4th Reporting Quarter, 1998

Dear Mr. Olson:

PNM Environmental Services is submitting closure reports to the Oil Conservation Division for the following groundwater sites:

Miles Federal #1E
Turner #3

In addition, I will be sending you copies of closure reports for OCD/BLM and Jicarilla soil sites via regular US mail.

If you have any questions, please call me at 324-3764.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Juckes".

Kathy Juckes
Staff Assistant III

cc: Denny Foust
BLM - Farmington
Williams Field Services

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

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

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: Turner #3

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

Pit Type: Separator ☒ Dehydrator ☐ Other

Land Type: BLM ☐ State ☐ Fee ☒ Other No

Pit Location: Pit dimensions: length 20 ' width 20 ' depth 3 '

(Attach diagram) Reference: wellhead ☒ other

Footage from reference: 60'

Direction from reference: 70 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)	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)	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)	20

RANKING SCORE (TOTAL POINTS) : 60

Turner #3

Date Remediation Started: 5/19/97Date Completed: 5/21/97

Remediation Method:

Excavation XApprox. Cubic Yard 328(Check all
appropriate
sections)Landfarmed XAmount Landfarmed (cubic yds) 328

Other _____

Remediation Location:

Onsite _____

Offsite _____

Hauled to Tierra Environmental.(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 12' X 41' X 18' 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.*** See attached groundwater report.

Ground Water Encountered:

No ☐Yes ☒

Depth

18'Final Pit Closure
Sampling:(if multiple samples, attach
sample result and diagram of
sample locations and depths.)

Sample Location

Middle of pit.

Sample depth

18'

Sample date

5/20/97

Sample time

8:00:00 AM

Sample Results

Benzene (ppm)

0.0790

Total BTEX (ppm)

2.8250

Field headspace (ppm) _____

TPH (ppm)

Method

8020

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 BELIEFDATE January 26, 1999

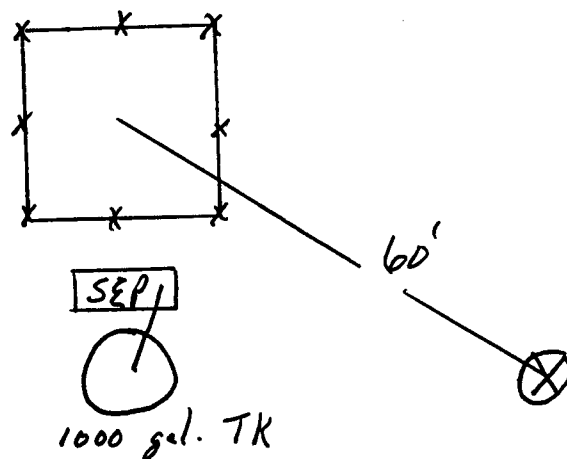
SIGNATURE

Maureen GannonPRINTED NAME **Maureen Gannon**
AND TITLE **Project Manager**

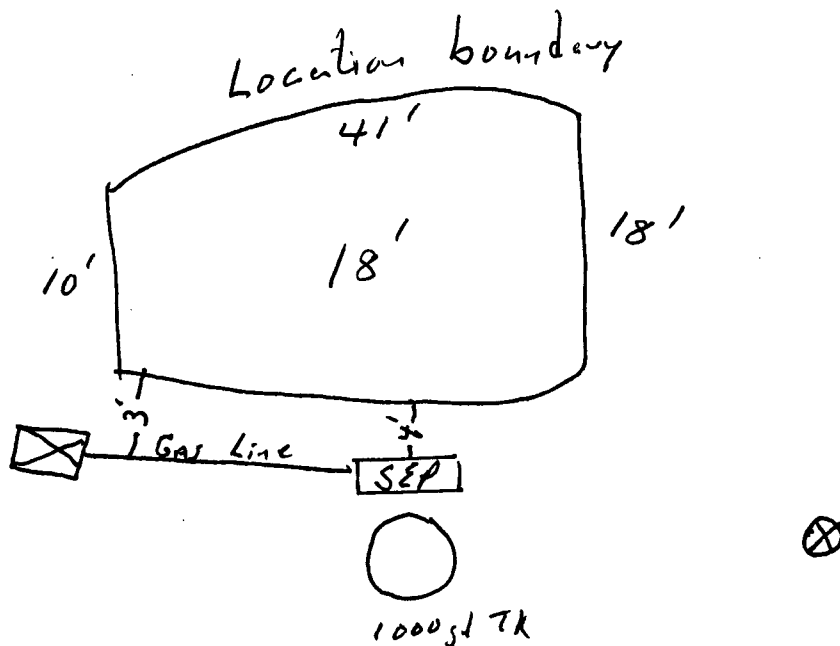
Turner #3
Burlington Resources
Sec. 24, 31 N, 11 W

5/19/97

Start of excavation:



End of excavation: $12' \times 41' \times 18' = 328 \text{ yds}$



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: *28-May-97*
COC No.: *5883*
Sample No.: *14655*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Turner #3*
Project Location: *9705200800; 18' depth*
Sampled by: *GC* Date: *20-May-97* Time: *8:00*
Analyzed by: *DC* Date: *27-May-97*
Sample Matrix: *Liquid*

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	<i>79</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>61</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>295</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>2331</i>	<i>ug/L</i>	<i>20</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>59</i>	<i>ug/L</i>	<i>2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>2825</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: *DC*

Date: *5-28/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Groundwater Site Summary Report

Quarter/Year: 2nd/98, 3rd/98, & 4th/98

Copies: WFS(1)
Operator (1)
NMOCD District Office (1)
NMOCD Santa Fe (1)

Operator: Burlington Resources
Sec: 24 **Twn:** 31N **Rng:** 11W **Unit:** F
Canyon: Animas

Vulnerable Class: Original
OCD Ranking: 60
Lead Agency: NMOCD

Topo Map: Figure 1

Well Completion Diagram: Previously Submitted

Site Map with Analytical Results: Figure 2

Groundwater Contour Map: Figure 3 (February 1998), Figure 4 (May 1998), Figure 5 (August 1998), and Figure 6 (November 1998)

Hydrograph: Figure 7

Full Suite- Groundwater Results: previously submitted

Analytical Results: attached

Site Hydrology:

The Turner 3 well site sits upon coarse, alluvial floodplain deposits of the Animas River valley. Near Aztec, the valley-fill alluvium does not exceed 100 feet in thickness (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" which are similar to the bedload of the modern river.

Excavation and monitor well installation in mid-1997 confirmed the presence of cobbles in the subsurface. The site lies about 75 feet east of, and about 10 to 15 feet higher than the river's waterline. Topographic gradient is west-northwest, towards the Animas River. Depth to water varies from 8 to 15 feet.

Groundwater elevations are sensitive to groundwater recharge from irrigation of the valley floor. The highest elevations are observed in the summer and fall, and the lowest in the winter and spring. The hydrograph (Figure 7) shows that the water table elevations for all wells shift in unison, indicating no change in groundwater flow direction with time. This is confirmed by other nearby sites along the left bank of the Animas River (the Turner 1A and McCoy Gas Com A1 sites) where hydrograph patterns are similar and where there are no seasonal variations in flow direction.

The apparent groundwater gradient at the Turner 3 site is westward, towards the Animas River. This pattern is consistent with the topographic gradient, and is also consistent with data from other sites nearby. The Turner 1A and McCoy Gas Com A1 sites are also located on the left bank of the Animas River, about one-quarter mile and two miles respectively from the Turner 3 site. Groundwater flows west-northwest at each of these sites, directly towards the Animas River.

Activities for Previous Year:

PNM performed groundwater monitoring at the well site during the second, third and fourth quarter of 1998 on May 11, 1998, August 7, 1998 and November 3, 1998, respectively. Previous activities at the site were reported in PNM's 1998 Annual Groundwater Report. Laboratory results and groundwater contour maps for the previous four quarters are provided for reference. During the 1998 sampling events, water level measurements were taken in each of the three monitoring wells. PNM conducted groundwater sampling in the appropriate well(s) for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX). All sampling was performed in strict compliance with EPA protocol.

PNM delivered the samples to OnSite Technologies, Farmington, New Mexico. The samples were analyzed using EPA Method 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX)

Public Service Company of New Mexico - Gas Services

Environmental Services Division - Alvarado Square, MS-0408
Albuquerque, NM 87158

Contact: Maureen Gannon

Telephone: 505-241-2974

January 27, 1999
4th Qtr Report

Results:

Figure 1 is an updated topographic map showing the location of the Turner 3. Figure 2 presents a site map showing BTEX for each monitoring well since groundwater contamination was discovered. BTEX concentrations in all wells are now non-detectable or below WQCC standards after four quarters of monitoring. Figures 3, 4, 5 and 6 provide groundwater contour maps for February, May, August and November 1998, respectively. No seasonal change in flow direction is evident, which agrees with other sites in Animas River alluvial settings. Figure 7 is a hydrograph of the site, which shows water level trends high in summer and low in winter, in response to deep percolation of irrigation water.

Future Actions:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Turner 3. This request is based upon the analytical data collected over the last two years at the site. BTEX concentrations have been consistently below WQCC standards for four consecutive quarters. The remediation approach at the site was effective. The monitoring well network appears to provide representative data, sufficient to discriminate seasonal trends. The data collected show that groundwater beneath the site cleaned up quickly once excavation was complete and has remained clean through seasonal variations in flow direction. There does not appear to be upgradient source(s) affecting the site, nor evidence that any contamination escapes the site undetected. Based on these considerations, PNM requests OCD approve closure of PNM's former pit at the Turner 3 well site.

Upon approval of the this groundwater closure report, PNM will plug and abandon the three groundwater monitoring wells at the Turner 3. The concrete pad and metal vault surrounding each well will be removed. The well casing will be cut to ground surface and each well will be plugged to the surface with cement containing 5% betonite.

Public Service Company of New Mexico - Gas Services

Environmental Services Division - Alvarado Square, MS-0408
Albuquerque, NM 87158

Contact: Maureen Gannon

Telephone: 505-241-2974

January 27, 1999
4th Qtr Report

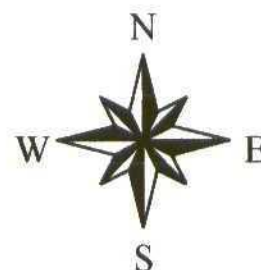


Figure 1.
Turner 3 Groundwater Site
Twn. 31N Rng. 11W Sec. 24 Unit F



Cedar Hill, NM-Colo Quadrangle

0 0.5 1 Miles

A horizontal scale bar is located at the bottom left, below the text "0 0.5 1 Miles". It consists of a black line with tick marks at 0, 0.5, and 1 mile.

**Figure 2. Turner 3 Site Map & Analytical Results
(Concentrations in ppb)**

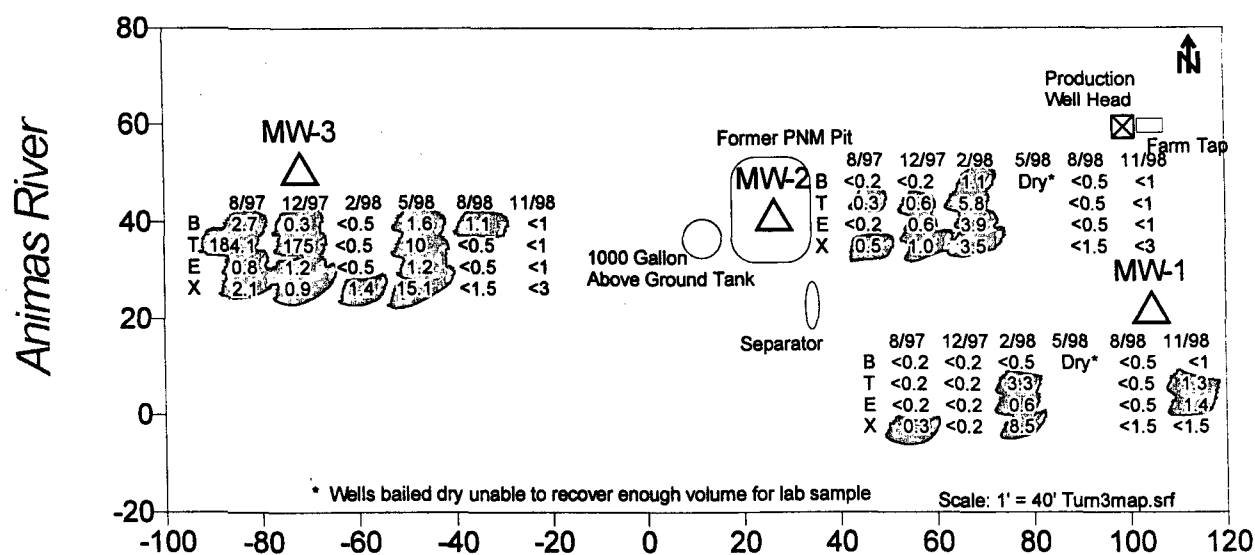


Figure 3. Turner 3 Groundwater Contour Map (February 11, 1998)

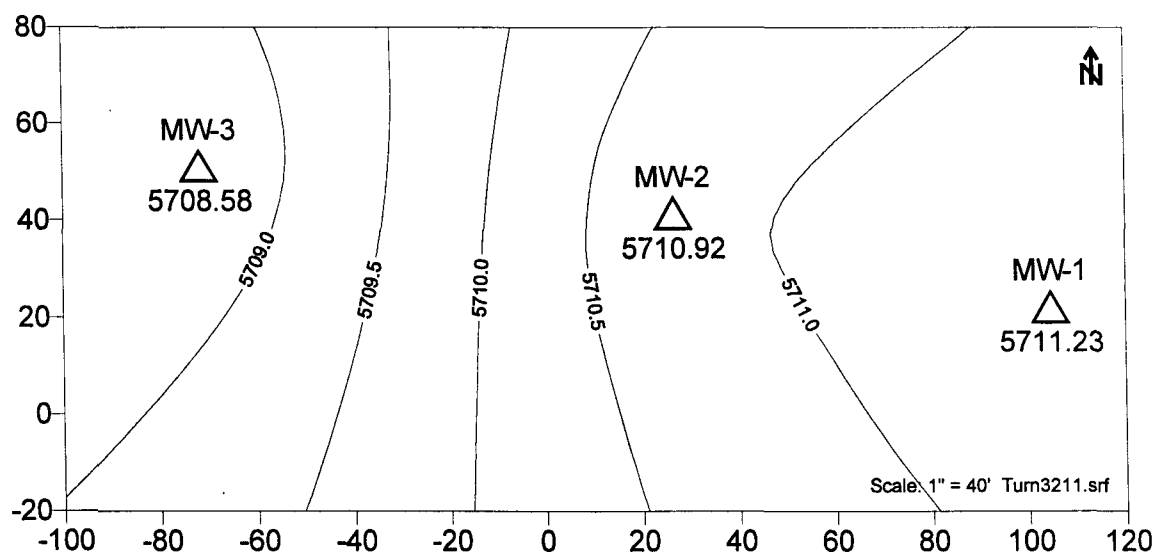


Figure 4. Turner 3 Groundwater Contour Map (May 11, 1998)

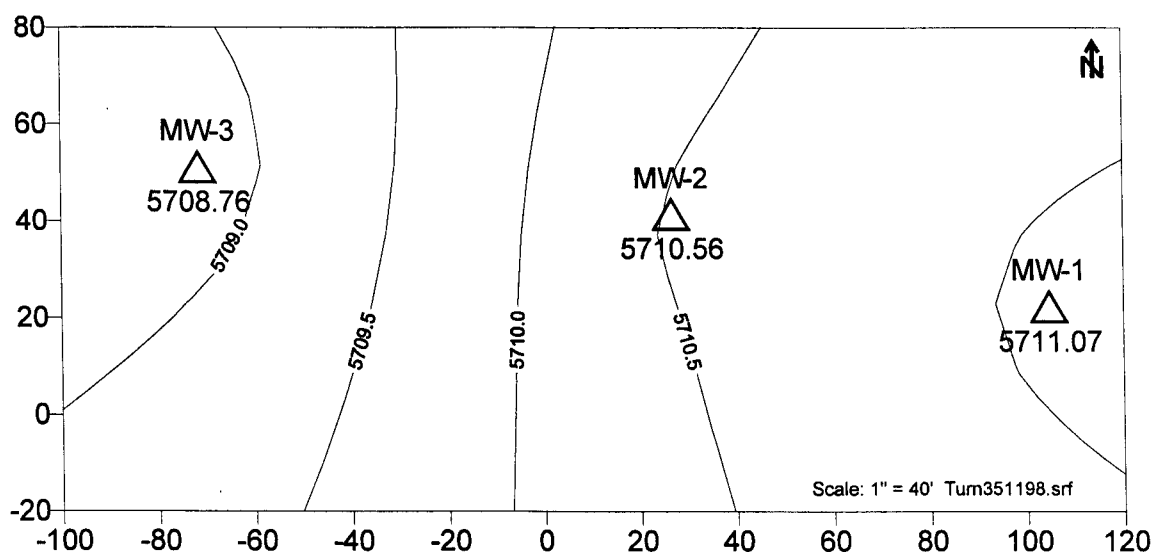


Figure 5. Turner 3 Groundwater Contour Map (August 7, 1998)

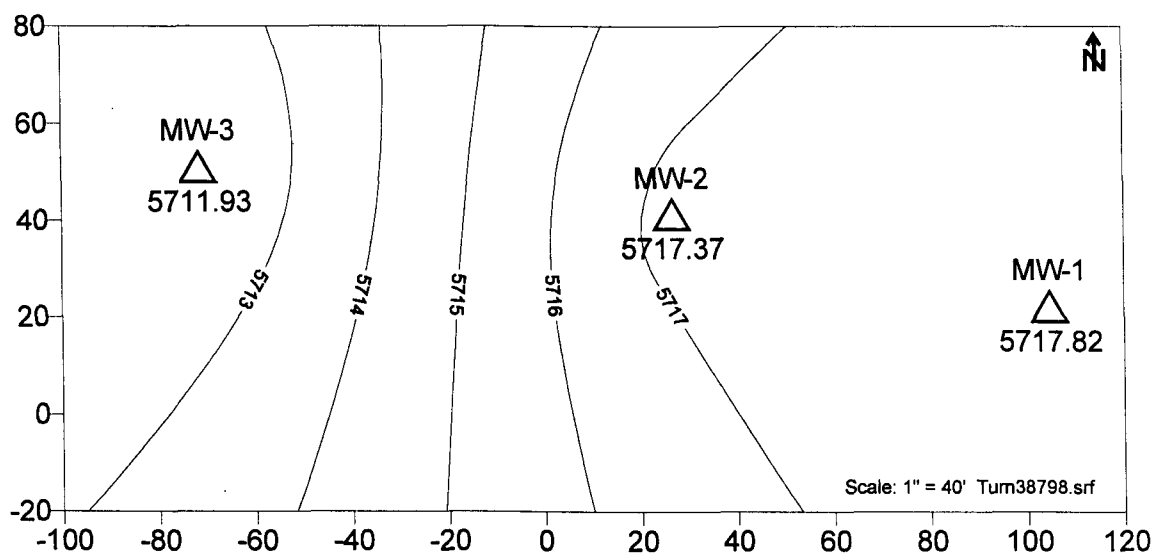


Figure 6. Turner 3 Groundwater Contour Map (November 3, 1998)

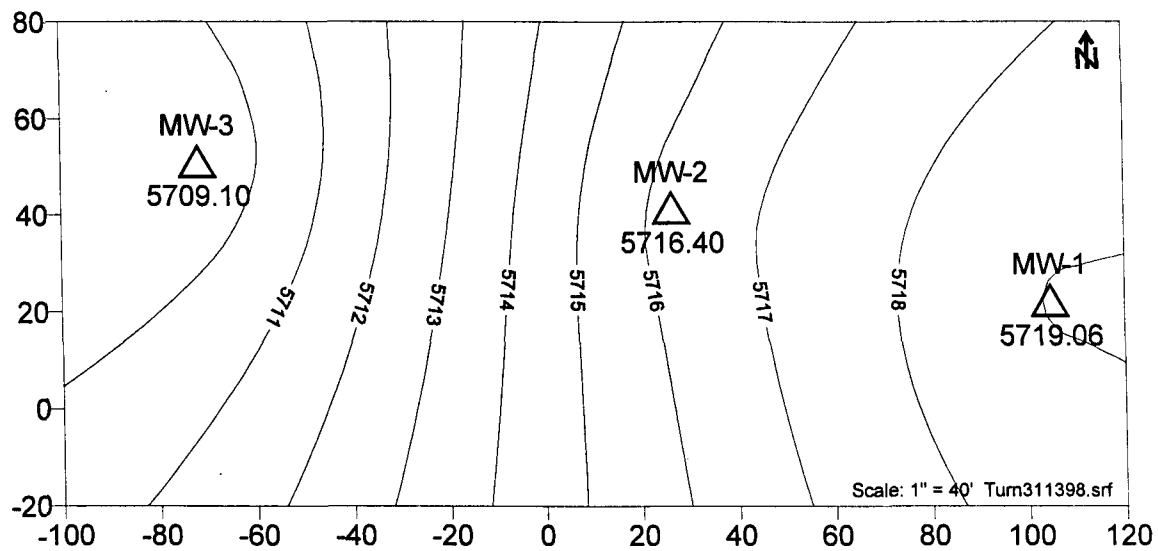
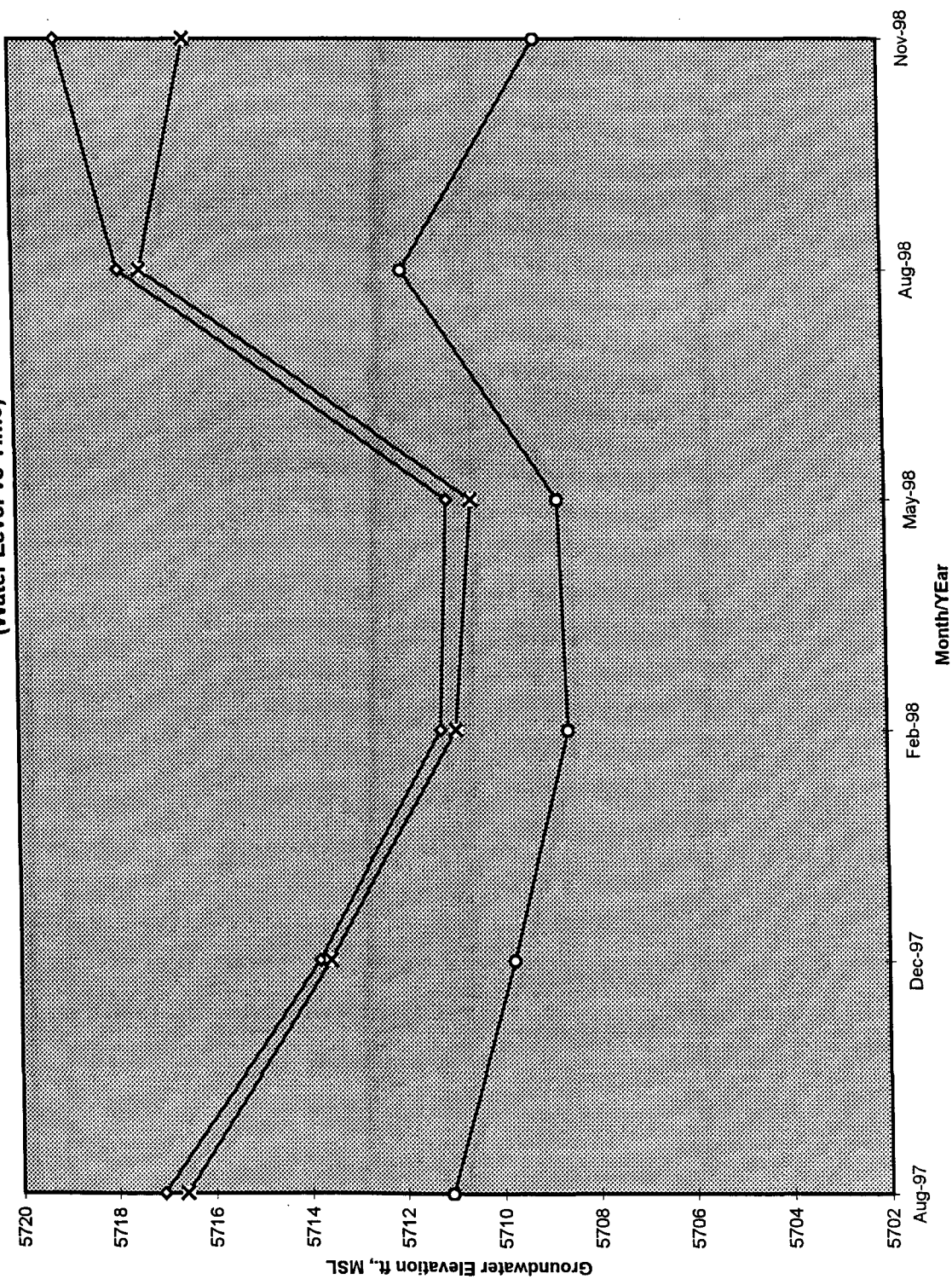


Figure 7. Turner 3 Hydrograph
(Water Level vs Time)



OFF: (505) 325-5667



LAB: (505) 325-1556

February 24, 1998

Maureen Gannon
PNM Gas Services
Alevardo Square, Mail Stop 0408
Albuquerque, NM 87401
TEL: (505) 241-2974
FAX (505) 241-2340

1st Quarter 1998

RE: Turner 3

Order No.: 9802005

Dear Maureen Gannon,

On Site Technologies, LTD. received 4 samples on 2/11/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC-PID (SW8021A)

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



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Feb-98

Client:	PNM Gas Services	Client Sample Info:	Turner 3
Work Order:	9802005	Client Sample ID:	9802111140; MW-1
Lab ID:	9802005-01A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	2/11/98 11:40:00 AM
		COC#:	7172

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A		Analyst: DC		
Benzene	ND	0.5		µg/L	1	2/19/98
Toluene	3.3	0.5		µg/L	1	2/19/98
Ethylbenzene	0.6	0.5		µg/L	1	2/19/98
m,p-Xylene	6.6	1		µg/L	1	2/19/98
o-Xylene	1.9	0.5		µg/L	1	2/19/98
Surr: Fluorobenzene	99.5	70-130		%REC	1	2/19/98
Surr: 1,4-Difluorobenzene	101.0	70-130		%REC	1	2/19/98
Surr: 4-Bromochlorobenzene	96.3	70-130		%REC	1	2/19/98

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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: 24-Feb-98

Client:	PNM Gas Services	Client Sample Info:	Turner 3
Work Order:	9802005	Client Sample ID:	9802111125; MW-2
Lab ID:	9802005-02A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	2/11/98 11:25:00 AM
		COC#:	7172

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A		Analyst: DC		
Benzene	1.1	0.5		µg/L	1	2/18/98
Toluene	5.8	0.5		µg/L	1	2/18/98
Ethylbenzene	3.9	0.5		µg/L	1	2/18/98
m,p-Xylene	3.0	1		µg/L	1	2/18/98
o-Xylene	0.5	0.5		µg/L	1	2/18/98
Surr: Fluorobenzene	101.8	70-130		%REC	1	2/18/98
Surr: 1,4-Difluorobenzene	99.3	70-130		%REC	1	2/18/98
Surr: 4-Bromochlorobenzene	95.8	70-130		%REC	1	2/18/98

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level

- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

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: 24-Feb-98

Client:	PNM Gas Services	Client Sample Info:	Turner 3
Work Order:	9802005	Client Sample ID:	9802111200; MW-3
Lab ID:	9802005-03A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	2/11/98 12:00:00 PM
		COC#:	7172

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A		Analyst: DC		
Benzene	ND	0.5		µg/L	1	2/18/98
Toluene	ND	0.5		µg/L	1	2/18/98
Ethylbenzene	ND	0.5		µg/L	1	2/18/98
m,p-Xylene	1.4	1		µg/L	1	2/18/98
o-Xylene	ND	0.5		µg/L	1	2/18/98
Surr: Fluorobenzene	99.8	70-130		%REC	1	2/18/98
Surr: 1,4-Difluorobenzene	101.4	70-130		%REC	1	2/18/98
Surr: 4-Bromochlorobenzene	97.3	70-130		%REC	1	2/18/98

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level

- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

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: 24-Feb-98

Client: PNM Gas Services **Client Sample Info:** Turner 3
Work Order: 9802005 **Client Sample ID:** 9802111150; MW-4
Lab ID: 9802005-04A **Matrix:** AQUEOUS **Collection Date:** 2/11/98 11:50:00 AM
Project: Turner 3 **COC#:** 7172

Parameter	Result	Limit	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC-PID		SW8021A		Analyst: DC		
Benzene	1.0	0.5		µg/L	1	2/18/98
Toluene	5.5	0.5		µg/L	1	2/18/98
Ethylbenzene	4.4	0.5		µg/L	1	2/18/98
m,p-Xylene	3.2	1		µg/L	1	2/18/98
o-Xylene	0.6	0.5		µg/L	1	2/18/98
Surr: Fluorobenzene	101.8	70-130		%REC	1	2/18/98
Surr: 1,4-Difluorobenzene	99.0	70-130		%REC	1	2/18/98
Surr: 4-Bromochlorobenzene	96.4	70-130		%REC	1	2/18/98

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services

Work Order: 9802005

Project: Turner 3

QC SUMMARY REPORT

Method Blank

Sample ID: MB1 W	Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980218A	PQL	SPK value	SeqNo: 257	
Analyte	Result	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	.1623		0.5		
Ethylbenzene	ND		0.5		
m,p-Xylene	ND		1		
o-Xylene	ND		0.5		
Toluene	.0581		0.5		

J

J

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

1 of 1

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services

Work Order: 9802005

Project: Turner 3

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9802002-03AMS	Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980218A	SeqNo: 276			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	3055	10	800	2193	107.8% 57 128
Ethylbenzene	915	10	800	73.53	105.2% 78 107
m,p-Xylene	2035	20	1600	425.1	100.6% 67 118
o-Xylene	898.6	10	800	38.59	107.5% 78 107
Toluene	856	10	800	3.18	106.6% 74 116

✓
S
2/18/98

Sample ID: 9802002-03AMSD	Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980218A	SeqNo: 277			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	2927	10	800	2193	91.8% 57 128 3055 4.3% 12
Ethylbenzene	899	10	800	73.53	103.2% 78 107 915 1.8% 11
m,p-Xylene	1984	20	1600	425.1	97.4% 67 118 2035 2.5% 10
o-Xylene	842.4	10	800	38.59	100.5% 78 107 898.6 6.5% 14
Toluene	808	10	800	3.18	100.6% 74 116 856 5.8% 14

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services

Work Order: 9802005

Project: Turner 3

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98		Prep Date:				
Client ID:		9802005	Run ID: GC-1_980218A		SeqNo: 259						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.54	0.5	40	0.1623	103.4%	84	114				
Ethylbenzene	44.37	0.5	40	0	110.9%	86	118				
m,p-Xylene	84.33	1	80	0	105.4%	50	150				
o-Xylene	43.43	0.5	40	0	108.6%	49	147				
Toluene	42.69	0.5	40	0.0581	106.6%	87	120				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0529/30	Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980218A	PQL	SPK value	SPK Ref Val	SeqNo: 258
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	21.28	0.5	20	0	106.4% 85 115
Ethylbenzene	22.72	0.5	20	0	113.6% 85 115
m,p-Xylene	42.78	1	40	0	107.0% 85 115
o-Xylene	22.12	0.5	20	0	110.6% 85 115
Toluene	21.7	0.5	20	0	108.5% 85 115
1,4-Difluorobenzene	105.5	0	100	0	105.5% 70 130
4-Bromochlorobenzene	95.89	0	100	0	95.9% 70 130
Fluorobenzene	99.12	0	100	0	99.1% 70 130

Sample ID: CCV2 QC0529/30	Batch ID: GC-1_980218	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/18/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980218A	PQL	SPK value	SPK Ref Val	SeqNo: 267
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	21.01	0.5	20	0	105.0% 85 115
Ethylbenzene	22.35	0.5	20	0	111.7% 85 115
m,p-Xylene	42	1	40	0	105.0% 85 115
o-Xylene	21.71	0.5	20	0	108.5% 85 115
Toluene	21.42	0.5	20	0	107.1% 85 115
1,4-Difluorobenzene	100.8	0	100	0	100.8% 70 130
4-Bromochlorobenzene	97.87	0	100	0	97.9% 70 130
Fluorobenzene	99.21	0	100	0	99.2% 70 130

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 QC0529/30		Batch ID: GC-1_980218		Test Code: SW8021A		Units: µg/L		Analysis Date: 2/18/98		Prep Date:	
Client ID: 9802005		Run ID: GC-1_980218A		PQL		SPK value		SeqNo: 279			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.04	0.5	20	0	105.2%	85	115				
Ethylbenzene	22.47	0.5	20	0	112.4%	85	115				
m,p-Xylene	42.3	1	40	0	105.8%	85	115				
o-Xylene	22.07	0.5	20	0	110.3%	85	115				
Toluene	21.51	0.5	20	0	107.5%	85	115				
1,4-Difluorobenzene	100.6	0	100	0	100.6%	70	130				
4-Bromochlorobenzene	95.78	0	100	0	95.8%	70	130				
Fluorobenzene	99.07	0	100	0	99.1%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT
Method Blank

Sample ID: MB1 W	Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98	Prep Date:
Client ID: 9802005	Run ID: GC-1_980219A	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit SeqNo: 280
Analyte	Result	PQL	SPK value	SPK Ref Val	%RPD RPDLimit Qual
Benzene	.1628	0.5			J
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
o-Xylene	ND	0.5			J
Toluene	.0594	0.5			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

1 of 1

Date: 24-Feb-98

On Site Technologies, LTD.

CLIENT: PNM Gas Services

Work Order: 9802005

Project: Turner 3

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9802009-04AMS	Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98	Prep Date:					
Client ID: 9802005	Run ID: GC-1_980219A	PQL	SPK value	SPK Ref Val	SeqNo: 297					
Analyte	Result			%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	251.8	2.5	200	44.9	103.5%	57	128			S
Ethylbenzene	391	2.5	200	176.4	107.3%	78	107			2/24/98
m,p-Xylene	420	5	400	4.002	104.0%	67	118			S
o-Xylene	221.7	2.5	200	3.372	109.2%	78	107			✓
Toluene	216.8	2.5	200	5.65	105.6%	74	116			✓

Sample ID: 9802009-04AMSD		Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98		Prep Date:		
Client ID: 9802005		Run ID: GC-1_980219A	PQL	SPK value	SPK Ref Val	SeqNo: 298	%RPD	RPDLimit	Qual
Analyte	Result					LowLimit	HighLimit	RPD Ref Val	
Benzene	240.2	2.5	200	44.9	97.6%	57	128	251.8	12
Ethylbenzene	368.8	2.5	200	176.4	96.2%	78	107	391	11
m,p-Xylene	396.8	5	400	4.002	98.2%	67	118	420	10
o-Xylene	210.4	2.5	200	3.372	103.5%	78	107	221.7	14
Toluene	206.8	2.5	200	5.65	100.6%	74	116	216.8	14

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Feb-98

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98				Prep Date:			
Client ID:	9802005	Run ID: GC-1_980219A		SeqNo: 282							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.94	0.5	40	0.1628	104.4%	84	114				
Ethylbenzene	44.9	0.5	40	0	112.2%	86	118				
m,p-Xylene	85.5	1	80	0	106.9%	50	150				
o-Xylene	44.06	0.5	40	0	110.1%	49	147				
Toluene	43.16	0.5	40	0.0594	107.8%	87	120				

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 24-Feb-98

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0529/30		Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L		Analysis Date: 2/19/98		Prep Date:						
Client ID:		9802005	Run ID:	GC-1_980219A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte		Result												
Benzene		20.6			0.5	20	0	103.0%	85	115				
Ethylbenzene		22.11			0.5	20	0	110.6%	85	115				
m,p-Xylene		41.68			1	40	0	104.2%	85	115				
o-Xylene		21.6			0.5	20	0	108.0%	85	115				
Toluene		21.04			0.5	20	0	105.2%	85	115				
1,4-Difluorobenzene		101.1			0	100	0	101.1%	70	130				
4-Bromochlorobenzene		95.58			0	100	0	95.6%	70	130				
Fluorobenzene		99.14			0	100	0	99.1%	70	130				

Sample ID: CCV2 QC0529/30	Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98				Prep Date:					
Client ID:	9802005	Run ID:	GC-1_980219A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	20.71			0.5	20	0	103.5%	85	115				
Ethylbenzene	22.06			0.5	20	0	110.3%	85	115				
m,p-Xylene	41.51			1	40	0	103.8%	85	115				
o-Xylene	21.67			0.5	20	0	108.4%	85	115				
Toluene	21.09			0.5	20	0	105.5%	85	115				
1,4-Difluorobenzene	101.4			0	100	0	101.4%	70	130				
4-Bromochlorobenzene	98.06			0	100	0	98.1%	70	130				
Fluorobenzene	99.28			0	100	0	99.3%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM Gas Services
Work Order: 9802005
Project: Turner 3

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 QC0529/30		Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98		Prep Date:	
Client ID: 9802005		Run ID: GC-1_980219A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	20.94		0.5	20	0	104.7%	85	115
Ethylbenzene	22.56		0.5	20	0	112.8%	85	115
m,p-Xylene	42.19		1	40	0	105.5%	85	115
o-Xylene	22.05		0.5	20	0	110.3%	85	115
Toluene	21.48		0.5	20	0	107.4%	85	115
1,4-Difluorobenzene	101.3		0	100	0	101.3%	70	130
4-Bromochlorobenzene	96.31		0	100	0	96.3%	70	130
Fluorobenzene	98.88		0	100	0	98.9%	70	130

Sample ID: CCV4 QC0529/30		Batch ID: GC-1_980219	Test Code: SW8021A	Units: µg/L	Analysis Date: 2/19/98		Prep Date:	
Client ID: 9802005		Run ID: GC-1_980219A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	20.16		0.5	20	0	100.8%	85	115
Ethylbenzene	20.93		0.5	20	0	104.7%	85	115
m,p-Xylene	39.5		1	40	0	98.7%	85	115
Methyl tert-Butyl Ether	19.42		1	20	0	97.1%	85	115
o-Xylene	21.14		0.5	20	0	105.7%	85	115
Toluene	20.81		0.5	20	0	104.1%	85	115
1,4-Difluorobenzene	101.1		0	100	0	101.1%	70	130
4-Bromochlorobenzene	96.32		0	100	0	96.3%	70	130
Fluorobenzene	98.63		0	100	0	98.6%	70	130

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

OFF: (505) 325-5667



LAB: (505) 325-1556

May 15, 1998

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 #3

Order No.: 9805034

Dear Maureen Gannon,

2nd Quarter 98

On Site Technologies, LTD. received 1 sample on 5/12/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8020A)

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 dark ink, appearing to read "D. Cox", is written over the name David Cox.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 15-May-98

CLIENT: PNM - Public Service Company of NM

Project: Turner #3

Lab Order: 9805034

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: 15-May-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner #3
Work Order:	9805034	Client Sample ID:	9805111600; MW-3
Lab ID:	9805034-01A	Matrix:	AQUEOUS
Project:	Turner #3	Collection Date:	5/11/98 4:00:00 PM
		COC Record:	7252

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	1.6	0.5		µg/L	1	5/13/98
Toluene	10	0.5		µg/L	1	5/13/98
Ethylbenzene	1.2	0.5		µg/L	1	5/13/98
m,p-Xylene	12	1		µg/L	1	5/13/98
o-Xylene	3.1	0.5		µg/L	1	5/13/98

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

Date: 15-May-98

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM

Work Order: 9805034

Project: Turner #3

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980513	Test Code: SW8020A	Units: µg/L	Analysis Date 5/13/98	Prep Date:						
Client ID:	9805034	Run ID: GC-1_980513B		SeqNo: 1853							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0367										J
Ethylbenzene	ND										J
m,p-Xylene	.1311										J
Methyl tert-Butyl Ether	.0434										J
o-Xylene	.0743										J
Toluene	.1502										J

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 15-May-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805034
 Project: Turner #3

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9805022-01AMS		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID: 9805034		Run ID: GC-1_980513B		PQL		SPK value		SeqNo: 1854			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	353.1	2.5	200	160	96.6%	56	128				
Ethylbenzene	442.1	2.5	200	250	96.1%	78	107				
m,p-Xylene	1047	5	400	660	96.7%	67	118				
Methyl tert-Butyl Ether	157.9	5	200	2	78.0%	70	130				
o-Xylene	221	2.5	200	18	101.5%	78	107				
Toluene	216.5	2.5	200	14	101.3%	74	116				

Sample ID: 9805022-01AMSD		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID: 9805034		Run ID: GC-1_980513B		PQL		SPK value		SeqNo: 1855			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	348.7	2.5	200	160	94.4%	56	128	353.1	1.3%	12	
Ethylbenzene	437.8	2.5	200	250	93.9%	78	107	442.1	1.0%	11	
m,p-Xylene	1036	5	400	660	94.0%	67	118	1047	1.0%	10	
Methyl tert-Butyl Ether	158	5	200	2	78.0%	70	130	157.9	0.1%	15	
o-Xylene	219	2.5	200	18	100.5%	78	107	221	0.9%	14	
Toluene	214.4	2.5	200	14	100.2%	74	116	216.5	1.0%	14	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 15-May-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805034
 Project: Turner #3

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS	Batch ID: GC-1_980513	Test Code: SW8020A	Units: µg/L	Analysis Date 5/13/98	Prep Date:						
Client ID:	9805034	Run ID:	GC-1_980513B	SeqNo: 1852							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	42.67	0.5	40	0.0367		56	128				
Ethylbenzene	42.8	0.5	40	0		78	107				
m,p-Xylene	82.02	1	80	0.1311		67	118				
Methyl tert-Butyl Ether	35.92	1	40	0.0434		70	130				
o-Xylene	42.66	0.5	40	0.0743		78	107				
Toluene	43.1	0.5	40	0.1502		74	116				

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 4/25/98

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 15-May-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9805034

Project: Turner #3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0529/30		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID: 9805034		Run ID: GC-1_980513B		SeqNo: 1847							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.59	0.5	20	0	108.0%	85	115				
Ethylbenzene	21.88	0.5	20	0	109.4%	85	115				
m,p-Xylene	41.63	1	40	0	104.1%	85	115				
Methyl tert-Butyl Ether	18.44	1	20	0	92.2%	85	115				
o-Xylene	22.13	0.5	20	0	110.7%	85	115				
Toluene	22.96	0.5	20	0	114.8%	85	115				
1,4-Difluorobenzene	93.01	0	100	0	93.0%	70	130				
4-Bromochlorobenzene	92.5	0	100	0	92.5%	70	130				
Fluorobenzene	93.45	0	100	0	93.5%	70	130				

Sample ID: CCV2 QC0529/30		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID: 9805034		Run ID: GC-1_980513B		SeqNo: 1848							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.63	0.5	20	0	108.2%	85	115				
Ethylbenzene	21.96	0.5	20	0	109.8%	85	115				
m,p-Xylene	41.77	1	40	0	104.4%	85	115				
Methyl tert-Butyl Ether	17.1	1	20	0	85.5%	85	115				
o-Xylene	22.2	0.5	20	0	111.0%	85	115				
Toluene	22.87	0.5	20	0	114.4%	85	115				
1,4-Difluorobenzene	92.77	0	100	0	92.8%	70	130				
4-Bromochlorobenzene	90.26	0	100	0	90.3%	70	130				
Fluorobenzene	93.11	0	100	0	93.1%	70	130				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM - Public Service Company of NM

Work Order: 9805034

Project: Turner #3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0529/30		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID: 9805034		Run ID: GC-1_980513B		SeqNo: 1849							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.08	0.5	20	0	100.4%	85	115				
Ethylbenzene	20.57	0.5	20	0	102.8%	85	115				
m,p-Xylene	39.18	1	40	0	98.0%	85	115				
o-Xylene	20.47	0.5	20	0	102.3%	85	115				
Toluene	20.47	0.5	20	0	102.4%	85	115				
1,4-Difluorobenzene	92.76	0	100	0	92.8%	70	130				
4-Bromochlorobenzene	89.53	0	100	0	89.5%	70	130				
Fluorobenzene	93.2	0	100	0	93.2%	70	130				

Sample ID: CCV4 QC0529/30		Batch ID: GC-1_980513		Test Code: SW8020A		Units: µg/L		Analysis Date 5/13/98		Prep Date:	
Client ID:		9805034		Run ID: GC-1_980513B				SeqNo: 1850			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.65	0.5	20	0	98.2%	85	115				
Ethylbenzene	20	0.5	20	0	100.0%	85	115				
m,p-Xylene	38.15	1	40	0	95.4%	85	115				
o-Xylene	19.89	0.5	20	0	99.4%	85	115				
Toluene	19.9	0.5	20	0	99.5%	85	115				
1,4-Difluorobenzene	93.12	0	100	0	93.1%	70	130				
4-Bromochlorobenzene	88.92	0	100	0	88.9%	70	130				
Fluorobenzene	93.42	0	100	0	93.4%	70	130				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM - Public Service Company of NM

Work Order: 9805034

Project: Turner #3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV5 QC0529/30 Batch ID: GC-1_980513 Test Code: SW8020A Units: µg/L

Prep Date:

Analysis Date 5/13/98

Client ID: 9805034 Run ID: GC-1_980513B

SeqNo: 1851

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.76	0.5	20	0	108.8%	85	115				
Ethylbenzene	22.06	0.5	20	0	110.3%	85	115				
m,p-Xylene	41.96	1	40	0	104.9%	85	115				
o-Xylene	22.01	0.5	20	0	110.0%	85	115				
Toluene	22.51	0.5	20	0	112.5%	85	115				
1,4-Difluorobenzene	93	0	100	0	93.0%	70	130				
4-Bromochlorobenzene	90.2	0	100	0	90.2%	70	130				
Fluorobenzene	93.48	0	100	0	93.5%	70	130				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 15-May-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805034
 Project: Turner #3
 Test No: SW8020A

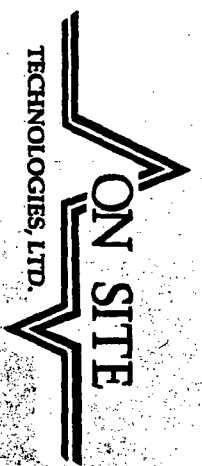
QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9805022-01A	97.3	90.3	94.7					
9805022-01AMS	93.7	91.8	91.8					
9805022-01AMSD	93.7	92.1	91.8					
9805022-02A	93.8	93.2	94					
9805022-03A	94.2	92.5	93.8					
9805022-04A	93.2	92.8	94					
9805022-05A	93.5	92.6	94					
9805022-06A	93.4	92.6	93.8					
9805022-07A	93.2	91	93.6					
9805024-01A	91.8	91.2	92.2					
9805024-02A	93.4	92.9	93.9					
9805033-01A	93	91.5	94					
9805033-02A	93.4	90.9	93.5					
9805033-03A	93.4	89.6	93.7					
9805033-04A	87.7	88.8	89.9					
9805033-05A	88.4	87.4	90.1					
9805034-01A	93.1	89.4	93.6					
CCV1 QC0529/30	93	92.5	93.4					
CCV2 QC0529/30	92.8	90.2	93.1					
CCV3 QC0529/30	92.8	89.5	93.2					
CCV4 QC0529/30	93.1	88.9	93.4					
CCV5 QC0529/30	93	90.2	93.5					
LCS	92.4	92.6	93.1					
MB1	93.4	92.6	93.8					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	70-130
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits



612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87439
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

7252

Date: 5/11/98

Page: 1 of 1

Purchase Order No.:

Job No.

SEND INVOICE TO

Name: Denver Bearden
Company: PNM Gas Services
Address: 603 W. Elm Street
City, State, ZIP: Farmington, NM 87401

Dept: 324-3763

Sampling Location:

1 liner #3

Sampler:

11.5

SAMPLE IDENTIFICATION

980511600 MW-3

DATE: 5/11/98 TIME: 16:00 MATRIX: H2O PRES: REL: 2

Number of Containers

2

REPORT RESULTS TO

Name: Maureen Gannon Title:
Company: PNM Gas Services
Mailing Address: Alverado Square, Mail Stop 0408
City, State, ZIP: Albuquerque, NM 87158
Telephone No.: 505-848-2974 Telefax No.:

ANALYSIS REQUESTED

ANALYSIS REQUESTED

LAB ID

165231-01A

Relinquished by: Kenneth A. DeLud
Relinquished by:
Method of Shipment:

Date/Time: 5/11/98

Received by: JC

Date/Time: 5/11/98

Authorized by:

Handwritten signature and date 5/11/98

Received by:

24.48 Hours

10 Working Days

Special Instructions:

Results to be sent to both parties.

OFF: (505) 325-5667



LAB: (505) 325-1556

August 18, 1998

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 3

Order No.: 9808015

Dear Maureen Gannon,

3rd Quarter 98

On Site Technologies, LTD. received 4 samples on 8/7/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8020A)

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 dark ink, appearing to read "David Cox", written in a cursive style.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 18-Aug-98

CLIENT: PNM - Public Service Company of NM
Project: Turner 3
Lab Order: 9808015

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: 18-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner 3
Work Order:	9808015	Client Sample ID:	9808071100; MW-1
Lab ID:	9808015-01A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	8/7/98 11:00:00 AM
		COC Record:	7285

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	ND	0.5		µg/L	1	8/15/98
Toluene	ND	0.5		µg/L	1	8/15/98
Ethylbenzene	ND	0.5		µg/L	1	8/15/98
m,p-Xylene	ND	1		µg/L	1	8/15/98
o-Xylene	ND	0.5		µg/L	1	8/15/98

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

- THIS REPORT IS THE PROPERTY OF ON SITE TECHNOLOGIES, LTD. -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 18-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner 3
Work Order:	9808015	Client Sample ID:	9808071130; MW-2
Lab ID:	9808015-02A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	8/7/98 11:30:00 AM
		COC Record:	7285

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A		Analyst: DC		
Benzene	ND	0.5		µg/L	1	8/15/98
Toluene	ND	0.5		µg/L	1	8/15/98
Ethylbenzene	ND	0.5		µg/L	1	8/15/98
m,p-Xylene	ND	1		µg/L	1	8/15/98
o-Xylene	ND	0.5		µg/L	1	8/15/98

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: 18-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner 3
Work Order:	9808015	Client Sample ID:	9808071200; MW-3
Lab ID:	9808015-03A	Matrix:	AQUEOUS
Project:	Turner 3	Collection Date:	8/7/98 12:00:00 PM
		COC Record:	7285

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	1.1	0.5		µg/L	1	8/15/98
Toluene	ND	0.5		µg/L	1	8/15/98
Ethylbenzene	ND	0.5		µg/L	1	8/15/98
m,p-Xylene	ND	1		µg/L	1	8/15/98
o-Xylene	ND	0.5		µg/L	1	8/15/98

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

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

*Duplicate
OF MW-3*

Date: 18-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info: Turner 3
Work Order:	9808015	Client Sample ID: 9808071230; MW-4
Lab ID:	9808015-04A	Matrix: AQUEOUS
Project:	Turner 3	Collection Date: 8/7/98 12:30:00 PM
		COC Record: 7285

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A		Analyst: DC		
Benzene	1.1	0.5		µg/L	1	8/15/98
Toluene	ND	0.5		µg/L	1	8/15/98
Ethylbenzene	ND	0.5		µg/L	1	8/15/98
m,p-Xylene	ND	1		µg/L	1	8/15/98
o-Xylene	ND	0.5		µg/L	1	8/15/98

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 -

On Site Technologies, LTD.

Date: 18-Aug-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9808015
 Project: Turner 3

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980815	Test Code: SW8020A	Units: µg/L	Analysis Date 8/15/98	Prep Date:						
Client ID:	9808015	Run ID: GC-1_980815A		SeqNo: 5509							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0541	0.5									J
Ethylbenzene	.0909	0.5									J
m,p-Xylene	.2062	1									J
Methyl tert-Butyl Ether	ND	1									J
o-Xylene	.1945	0.5									J
Toluene	.1879	0.5									J

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM
 Work Order: 9808015
 Project: Turner 3

Date: 18-Aug-98

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9808014-01AMS		Batch ID: GC-1_980815		Test Code: SW8020A		Units: µg/L		Analysis Date 8/15/98		Prep Date:	
Client ID: 9808015		Run ID: GC-1_980815A		PQL		SPK value		SeqNo: 5510			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	7147	50	4000	3566	89.5%	56	128				
Ethylbenzene	4629	50	4000	970.6	91.5%	78	107				
m,p-Xylene	19620	100	8000	12540	88.5%	67	118				
Methyl tert-Butyl Ether	3512	100	4000	15.95	87.4%	70	130				
o-Xylene	6971	50	4000	3355	90.4%	78	107				
Toluene	14820	50	4000	11270	88.9%	74	116				

Sample ID: 9808014-01AMSD		Batch ID: GC-1_980815		Test Code: SW8020A		Units: µg/L		Analysis Date 8/15/98		Prep Date:	
Client ID: 9808015		Run ID: GC-1_980815A		PQL		SPK value		SeqNo: 5511			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6980	50	4000	3566	85.4%	56	128	7147	2.4%	12	
Ethylbenzene	4502	50	4000	970.6	88.3%	78	107	4629	2.8%	11	
m,p-Xylene	19120	100	8000	12540	82.2%	67	118	19620	2.6%	10	
Methyl tert-Butyl Ether	3530	100	4000	15.95	87.8%	70	130	3512	0.5%	15	
o-Xylene	6840	50	4000	3355	87.1%	78	107	6971	1.9%	14	
Toluene	14440	50	4000	11270	79.4%	74	116	14820	2.6%	14	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM
 Work Order: 9808015
 Project: Turner 3

Date: 18-Aug-98

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_980815	Test Code: SW8020A	Units: µg/L	Analysis Date 8/15/98		Prep Date:	
Client ID: 9808015		Run ID: GC-1_980815A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	38.72	0.5	40	0.0541	96.7%	56	128	
Ethylbenzene	38.44	0.5	40	0.0909	95.9%	78	107	
m,p-Xylene	73.37	1	80	0.2062	91.5%	67	118	
Methyl tert-Butyl Ether	45.59	1	40	0	114.0%	70	130	
o-Xylene	38.61	0.5	40	0.1945	96.0%	78	107	
Toluene	38.26	0.5	40	0.1879	95.2%	74	116	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Date: 18-Aug-98

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM

Work Order: 9808015

Project: Turner 3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_980815		Test Code: SW8020A		Units: µg/L		Analysis Date 8/15/98		Prep Date:	
Client ID:		9808015		Run ID:		GC-1_980815A		SeqNo: 5505			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.31	0.5	20	0	101.5%	85	115				S
Ethylbenzene	20.3	0.5	20	0	101.5%	85	115				
m,p-Xylene	38.57	1	40	0	96.4%	85	115				
Methyl tert-Butyl Ether	23.28	1	20	0	116.4%	85	115				
o-Xylene	20.24	0.5	20	0	101.2%	85	115				
Toluene	20.32	0.5	20	0	101.6%	85	115				
1,4-Difluorobenzene	86.44	0	100	0	86.4%	70	130				
4-Bromochlorobenzene	94.3	0	100	0	94.3%	70	130				
Fluorobenzene	82.86	0	100	0	82.9%	70	130				

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_980815		Test Code: SW8020A		Units: µg/L		Analysis Date 8/15/98		Prep Date:	
Client ID: 9808015		Run ID: GC-1_980815A						SeqNo: 5506			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.94	0.5	20	0	99.7%	85	115				
Ethylbenzene	20.15	0.5	20	0	100.8%	85	115				
m,p-Xylene	38.21	1	40	0	95.5%	85	115				
Methyl tert-Butyl Ether	21.47	1	20	0	107.4%	85	115				
o-Xylene	20.07	0.5	20	0	100.3%	85	115				
Toluene	20.18	0.5	20	0	100.9%	85	115				
1,4-Difluorobenzene	86.16	0	100	0	86.2%	70	130				
4-Bromochlorobenzene	88.01	0	100	0	88.0%	70	130				
fluorobenzene	82.37	0	100	0	82.4%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM - Public Service Company of NM
Work Order: 9808015
Project: Turner 3

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07		Batch ID: GC-1_980815	Test Code: SW8020A	Units: µg/L	Analysis Date 8/15/98		Prep Date:	
Client ID: 9808015		Run ID: GC-1_980815A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	38.5	0.5	40	0	96.2%	85	115	
Ethylbenzene	38.74	0.5	40	0	96.9%	85	115	
m,p-Xylene	73.86	1	80	0	92.3%	85	115	
Methyl tert-Butyl Ether	36.95	1	40	0	92.4%	85	115	
o-Xylene	38.49	0.5	40	0	96.2%	85	115	
Toluene	38.67	0.5	40	0	96.7%	85	115	
1,4-Difluorobenzene	85.82	0	100	0	85.8%	70	130	
4-Bromochlorobenzene	82.98	0	100	0	83.0%	70	130	
Fluorobenzene	82.15	0	100	0	82.2%	70	130	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 18-Aug-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9808015
Project: Turner 3
Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9808008-02A	87.3	95.1	83.7					
9808008-03A	87.9	91	84					
9808008-04A	85.4	74.5	83.7					
9808008-05A	85.7	88.8	83.3					
9808008-06A	82.6	76	87.6					
9808008-07A	89.5	85.7	83.3					
9808008-08A	86.1	85.4	83.2					
9808008-09A	87.1	85.6	83.3					
9808008-10A	87	83.9	83					
9808008-11A	87.3	85.3	83.6					
9808008-12A	86.5	94	83.8					
9808013-01A	83.3	77.3	79.8					
9808013-02A	83.8	78.9	80.7					
9808014-01A	85	77.8	82					
9808014-01AMS	84.6	79.4	81.8					
9808014-01AMSD	84.6	80.6	81.7					
9808015-01A	87	87.1	83.3					
9808015-02A	87.1	89.3	83.4					
9808015-03A	87.2	87.4	83.6					
9808015-04A	87.3	86.8	83.4					
CCV1 QC0606/07	86.4	94.3	82.9					
CCV2 QC0606/07	86.2	88	82.4					
CCV3 QC0606/07	85.8	83	82.2					
LCS WATER	86.1	94.3	82.7					
MB1	87.1	93.2	83.6					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	70-130
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits



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

**SEND
INVOICE
TO**

Name	Denver Bearden
Company	PNM Gas Services
Address	603 W. Elm Street
City State Zip	Farmington, NM

Dept. 324-3763

City State Zip Farmington, NM 87401

Sampling Location:

Turner 3

Sampler:

Mark Sikelianos

SAMPLE IDENTIFICATION

9308071100	MW-1
9808071130	MW-2
9308071200	MW-3
9808071230	MW-4

Belonged to:

Relinquished by:

Relinquished by:

Method of Shipment: Hand Delivered

Authorized by:

(Client Signature Must Accompany Request)

Date _____

(Client Signature Must Accompany Request)

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

100

OFF: (505) 325-5667



LAB: (505) 325-1556

November 06, 1998

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

4th Quarter 1998

RE: Turner #3

Order No.: 9811011

Dear Maureen Gannon,

On Site Technologies, LTD. received 3 samples on 11/3/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8020A)

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 dark ink, appearing to read "D Cox", is written over the signature line.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 06-Nov-98

CLIENT: PNM - Public Service Company of NM

Project: Turner #3

Lab Order: 9811011

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: 06-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner #3
Work Order:	9811011	Client Sample ID:	9811030953; MW-3
Lab ID:	9811011-01A	Matrix:	AQUEOUS
Project:	Turner #3	Collection Date:	11/3/98 9:53:00 PM
		COC Record:	7514

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	1		µg/L	1	11/3/98
Toluene	ND	1		µg/L	1	11/3/98
Ethylbenzene	ND	1		µg/L	1	11/3/98
m,p-Xylene	ND	2		µg/L	1	11/3/98
o-Xylene	ND	1		µg/L	1	11/3/98

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: 06-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner #3
Work Order:	9811011	Client Sample ID:	9811031023; MW-2
Lab ID:	9811011-02A	Matrix:	AQUEOUS
Project:	Turner #3	Collection Date:	11/3/98 10:23:00 AM
		COC Record:	7514

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	1		µg/L	1	11/3/98
Toluene	ND	1		µg/L	1	11/3/98
Ethylbenzene	ND	1		µg/L	1	11/3/98
m,p-Xylene	ND	2		µg/L	1	11/3/98
o-Xylene	ND	1		µg/L	1	11/3/98

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: 06-Nov-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Turner #3
Work Order:	9811011	Client Sample ID:	9811031050; MW-1
Lab ID:	9811011-03A	Matrix:	AQUEOUS
Project:	Turner #3	Collection Date:	11/3/98 10:50:00 AM
		COC Record:	7514

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	1		µg/L	1	11/3/98
Toluene	1.3	1		µg/L	1	11/3/98
Ethylbenzene	1.4	1		µg/L	1	11/3/98
m,p-Xylene	ND	2		µg/L	1	11/3/98
o-Xylene	ND	1		µg/L	1	11/3/98

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 -

On Site Technologies, LTD.

Date: 06-Nov-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9811011

Project: Turner #3

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_981103	Test Code: SW8020A	Units: µg/L	Analysis Date 11/3/98	Prep Date:
Client ID:	9811011	Run ID: GC-1_981103B		SeqNo: 8447	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.1591	1			J
Ethylbenzene	.2016	1			J
m,p-Xylene	.4253	2			J
Methyl tert-Butyl Ether	ND	1			J
o-Xylene	.2751	1			J
Toluene	.41	1			J

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Nov-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9811011
 Project: Turner #3

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9811008-01AMS		Batch ID: GC-1_981103		Test Code: SW8020A		Units: µg/L		Analysis Date 11/3/98		Prep Date:	
Client ID: 9811011		Run ID: GC-1_981103B		SeqNo: 8448							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	218.4	5	200	27.71	95.3%	56	128				
Ethylbenzene	264.2	5	200	74.98	94.6%	78	107				
m,p-Xylene	387.1	10	400	4.079	95.7%	67	118				
Methyl tert-Butyl Ether	209.9	5	200	9.908	100.0%	70	130				
o-Xylene	203	5	200	5.099	98.9%	78	107				
Toluene	205.9	5	200	12.09	96.9%	74	116				

Sample ID: 9811008-01AMSD		Batch ID: GC-1_981103		Test Code: SW8020A		Units: µg/L		Analysis Date 11/3/98		Prep Date:	
Client ID: 9811011		Run ID: GC-1_981103B		SeqNo: 8449							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	217.5	5	200	27.71	94.9%	56	128	218.4	0.4%	12	
Ethylbenzene	259.4	5	200	74.98	92.2%	78	107	264.2	1.8%	11	
m,p-Xylene	380.5	10	400	4.079	94.1%	67	118	387.1	1.7%	10	
Methyl tert-Butyl Ether	209.9	5	200	9.908	100.0%	70	130	209.9	0.0%	15	
o-Xylene	200.3	5	200	5.099	97.6%	78	107	203	1.3%	14	
Toluene	200.2	5	200	12.09	94.1%	74	116	205.9	2.8%	14	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Date: 06-Nov-98

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM

Work Order: 9811011

Project: Turner #3

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_981103	Test Code: SW8020A	Units: µg/L	Analysis Date 11/3/98		Prep Date:				
Client ID:		9811011	Run ID:	GC-1_981103B	SeqNo:	8446					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.98	1	40	0.1591	94.6%	56	128				
Ethylbenzene	38.3	1	40	0.2016	95.3%	78	107				
m,p-Xylene	75.65	2	80	0.4253	94.0%	67	118				
Methyl tert-Butyl Ether	39.24	1	40	0	98.1%	70	130				
o-Xylene	38.88	1	40	0.2751	96.5%	78	107				
Toluene	38.34	1	40	0.41	94.8%	74	116				

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Nov-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9811011
 Project: Turner #3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_981103		Test Code: SW8020A		Units: µg/L		Analysis Date 11/3/98		Prep Date:	
Client ID: 9811011		Run ID: 981103B		GC-1_981103B				SeqNo: 8443			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20	1	20	0	100.0%	85	115				
Ethylbenzene	20.25	1	20	0	101.3%	85	115				
m,p-Xylene	40	2	40	0	100.0%	85	115				
Methyl tert-Butyl Ether	20.28	1	20	0	101.4%	85	115				
o-Xylene	20.51	1	20	0	102.6%	85	115				
Toluene	20.37	1	20	0	101.9%	85	115				
1,4-Difluorobenzene	89.67	0	100	0	89.7%	70	130				
4-Bromochlorobenzene	101.4	0	100	0	101.4%	70	130				
Fluorobenzene	87.8	0	100	0	87.8%	70	130				

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_981103		Test Code: SW8020A		Units: µg/L		Analysis Date 11/3/98		Prep Date:	
Client ID: 9811011		Run ID: GC-1_981103B						SeqNo: 8444			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.51	1	20	0	97.6%	85	115				
Ethylbenzene	19.82	1	20	0	99.1%	85	115				
m,p-Xylene	38.91	2	40	0	97.3%	85	115				
Methyl tert-Butyl Ether	20.31	1	20	0	101.6%	85	115				
o-Xylene	20.2	1	20	0	101.0%	85	115				
Toluene	19.88	1	20	0	99.4%	85	115				
1,4-Difluorobenzene	89.84	0	100	0	89.8%	70	130				
4-Bromochlorobenzene	102.3	0	100	0	102.3%	70	130				
Fluorobenzene	87.66	0	100	0	87.7%	70	130				

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: PNM - Public Service Company of NM

Work Order: 9811011

Project: Turner #3

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07			Batch ID: GC-1_981103		Test Code: SW8020A		Units: µg/L		Analysis Date 11/3/98		Prep Date:													
Client ID: 9811011			Run ID: GC-1_981103B		PQL		SPK value		SPK Ref Val		%REC		LowLimit		HighLimit		RPD Ref Val		%RPD		RPDLimit		Qual	
Analyte			Result																					
Benzene			39.32		1		40		0		98.3%		85		115									
Ethylbenzene			39.46		1		40		0		98.6%		85		115									
m,p-Xylene			77.48		2		80		0		96.9%		85		115									
Methyl tert-Butyl Ether			38.93		1		40		0		97.3%		85		115									
o-Xylene			39.8		1		40		0		99.5%		85		115									
Toluene			39.51		1		40		0		98.8%		85		115									
1,4-Difluorobenzene			89.53		0		100		0		89.5%		70		130									
4-Bromochlorobenzene			112.5		0		100		0		112.5%		70		130									
Fluorobenzene			87.47		0		100		0		87.5%		70		130									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

On Site Technologies, LTD.

Date: 06-Nov-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9811011
 Project: Turner #3
 Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9810079-01A	90	104	87.9					
9810083-01A	84.3	116	82.8					
9810083-02A	89.7	102	88					
9811008-01AMS	86.6	101	89					
9811008-01AMSD	90.2	101	90.4					
9811008-02A	89.4	101	88					
9811008-03A	89.6	102	88					
9811008-04A	86.6	98.4	88.6					
9811008-05A	89.7	102	87.4					
9811008-06A	84.7	101	98.2					
9811008-07A	89.2	101	87.8					
9811008-08A	89.5	102	87.8					
9811008-09A	90.1	102	88.4					
9811008-10A	89.6	103	87.9					
9811008-11A	90	102	87.7					
9811008-12A	89.9	101	87.6					
9811011-01A	90	102	87.6					
9811011-02A	89.6	103	87.8					
9811011-03A	89.5	102	87					
CCV1 QC0606/07	89.7	101	87.8					
CCV2 QC0606/07	89.8	102	87.7					
CCV3 QC0606/07	89.5	112	87.5					
LCS WATER	89.5	103	87.5					
MBI	89.9	102	87.8					

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	70-130
4BCBZ	= 4-Bromochlorobenzene	70-130
FLBZ	= Fluorobenzene	70-130

* Surrogate recovery outside acceptance limits



CHAIN OF CUSTODY RECORD

7514

Page: 1 of 1

Date: 11/23/91

612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-8256

Purchase Order No.:		Job No. 41-1302	
Name: Denyer 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	
Telephone No.:		Telephone No. 505-848-2974	
Telefax No.:		Telefax No.:	
Sampling Location: Turner # 3		ANALYSIS REQUESTED	
Sampler: Larry Turner		LAB ID	
SEND INVOICE TO		RESULTS TO	
SAMPLE IDENTIFICATION		Number of Containers	
DATE	SAMPLE TIME	MATRIX	PRES
11/23/91	0753	120	101
11/23/91	1023	101	101
11/23/91	1050	101	101
481103 0953 MW-3		181101 - CIA	
481103 1033 - MW-2		1 - CCA	
481103 1050 - MW-1		1 - CCA	
Relinquished by: [Signature]		Received by: [Signature]	
Date/Time: 11/23/91		Date/Time: 11/23/91	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Method of Shipment:		10 Working Days	
Special Instructions:		Results to be sent to both parties.	
Authorized by: [Signature]		Date:	
(Client Signature Must Accompany Request)		Distribution: When On Site, Follow LAB 1711 (Sampler) Goldenrod - Client	