

3R - 330

REPORTS

DATE:

1999

Public Service Company
of New Mexico
Alvarado Square MS 0408
Albuquerque, NM 87158

RECEIVED

April 5, 1999

APR 07 1999

Mr. William Olson
Hydrogeologist
Oil Conservation Division
2040 So. Pacheco
Santa Fe, New Mexico 87505

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



RE: 1999 SAN JUAN BASIN ANNUAL GROUNDWATER REPORT

Dear Bill:

PNM is pleased to submit the 1999 Annual Groundwater Report on Unlined Surface Impoundments in the San Juan Basin. Pursuant to PNM's Groundwater Management Program for Unlined Surface Impoundment Closures, the report details the ongoing investigation/remedial activities at unlined surface impoundments having groundwater contamination as identified by PNM. A list of groundwater sites reported in this document is provided below.

Blanco Wash Drip	Mangum 1E
Davis 1	McClanahan 22
Dogie East Pit	McClanahan A 2E
Dogie North Pit	McCoy Gas Com A1
Florance 124	Miles Federal 1E Drip
Florance 32A	O' Shea 1M
Florance 40	Patterson A Com A1
Florance 44	Pritchard 2
Florance M 47X	Randleman 1
Hampton 4M	Reid 16 Drip
Honolulu Drip	Turner 1A
Ice Canyon Drip	Wilmerding 1M
Jacques 2A	Zachry 18E
Jicarilla Contract 147-6	
Linda 1A	

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM will request closure of four of the above sites, the Florance 32A, Jacques 2A, Mangum 1E and the McClanahan A2E, with the submittal of the 1st Quarter 1999 Pit Closures Report. This request is based upon the analytical data collected over the last two years at each of the sites. BTEX concentrations have been consistently below WQCC standards for four consecutive quarters.

Upon approval of the groundwater closure report, PNM will plug and abandon all of the groundwater monitoring wells at each of the locations. 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

Bill Olson

04/05/99

Page 2

with cement containing 5% bentonite. If you have any questions regarding the contents of the report, please contact me at (505) 241-2974.

Sincerely,

A handwritten signature in cursive script, appearing to read "Maureen Gannon", with a long horizontal flourish extending to the right.

Maureen Gannon

Project Manager

Enclosure

cc: Colin Adams, Esq.
Ingrid Deklau, WFS
Denny Foust, OCD-Aztec Office
Ron Johnson
Mark Sikelianos
Bill VonDrehle, WFS



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APR 07 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Annual

Groundwater Report

1999

Volume II

***Unlined Surface Impoundments
San Juan Basin***



Groundwater Site Summary Report

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

Quarter/Year: 2nd/98, 3rd/98, 4th/98 & 1st/99

Operator: Burlington Resources
Sec: 23 Twn: 28 Rng: 10 Unit: 0
Canyon: Armenta

Vulnerable Class: Original
OCD Ranking: 30
Lead Agency: NMOCD

Topo Map: previously submitted

Well Completion Diagram: previously submitted

Site Map with Analytical Results: Figure 1

Groundwater Contour Map: Figure 2a (June 1998), Figure 2b (August 1998), Figure 2c (December 1998) & Figure 2d (February 1999)

Hydrograph: Figure 3

Analytical Results: attached

Site Hydrology:

The McClanahan A2E site lies within Armenta Canyon, a north-draining tributary to the San Juan River located about 8 miles southeast of Bloomfield, New Mexico. The canyon's confluence with the San Juan River lies about 3-½ miles north of the site. The site lies at an elevation of about 5745 feet amsl, which is about ten feet higher than the streambed in the broad canyon floor. The canyon floor spans about 2000 feet and the site is located on the west-central flank of the alluvium-filled valley.

Subsurface materials beneath the site are composed of silty sands, as determined from the four monitoring wells installed (see Figure 1). The thickness of alluvium is typically less than 50 feet in many of the area drainages (Stone et al., 1983). Total depths of the wells were 30 feet or less, and no apparent bedrock units were encountered in the monitor well borings. Materials encountered in the well borings were silty and clayey sands.

Depth to water has ranged from 14 to 20 feet beneath the site. No appreciable seasonal changes in flow direction are apparent, as evidenced by the groundwater flow maps spanning the year in Figures 2a through 2d. Well MW-2 was reinstalled in June, 1998, and subsequently the water levels in well MW-2 are slightly higher than in well MW-1, imparting an apparent slight southward gradient. However, groundwater flow direction is predominantly towards the northeast, which follows the surface topography and the direction of streamflow in Armenta Canyon.

The site hydrograph (Figure 3) shows that in general water levels are higher in winter and spring, and lower in summertime. About one foot or more of water level fluctuations are observed seasonally. The apparent rise in water levels in well MW-2 is more likely due to its reinstallation and resurveying, and probably represents an upward shift of about one foot.

Activities for Previous Year:

PNM performed groundwater monitoring at the site on June 25, August 26 and December 2, 1998 and again on February 12, 1999. Water level measurements were taken in each of the four monitoring wells. PNM conducted the quarterly groundwater sampling in wells MW-2 and MW-4 for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX); wells MW-1 and MW-3 were excluded because they have never detected appreciable concentrations of BTEX compounds. All wells were sampled for BTEX in February, 1999. Sampling was conducted 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 8020.

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

Results:

Figure 1 presents the site map with analytical results to date. MW-1 and MW-3 have shown BTEX concentrations to be non-detectable or below WQCC standards since monitoring began. MW-2 and MW-4 (the source and downgradient wells, respectively) have shown consistent attenuation of all BTEX constituents over time, which was dramatically accelerated after the secondary source material excavation was performed in April, 1998. MW-2, the source well, has now remained below standards for four consecutive quarters, indicating that no appreciable amount of hydrocarbon-contaminated soil remains in place.

Future Actions:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM will request closure of the McClanahan A2E. with the submittal of the 1st Quarter 1999 Pit Closures Report. This request is based upon the analytical data collected over the last two years at the site. The primary and secondary excavations of source materials appear to have been successful in achieving clean-up at the site over the two-year monitoring period, since the BTEX concentrations in downgradient well, MW-4, and source well, MW-2, have been below standards for four consecutive quarters. The consistently downward concentration trends were greatly enhanced by the secondary source excavation in April, 1998. Resampling of all monitor wells also shows that BTEX compounds are below standards in the other wells.

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 well casing will be cut to ground surface and each well will be plugged o the surface with cement containing 5% bentonite.

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

Figure 1. McClanahan A2E Site Map with Analytical Results
(Concentrations in ppb)

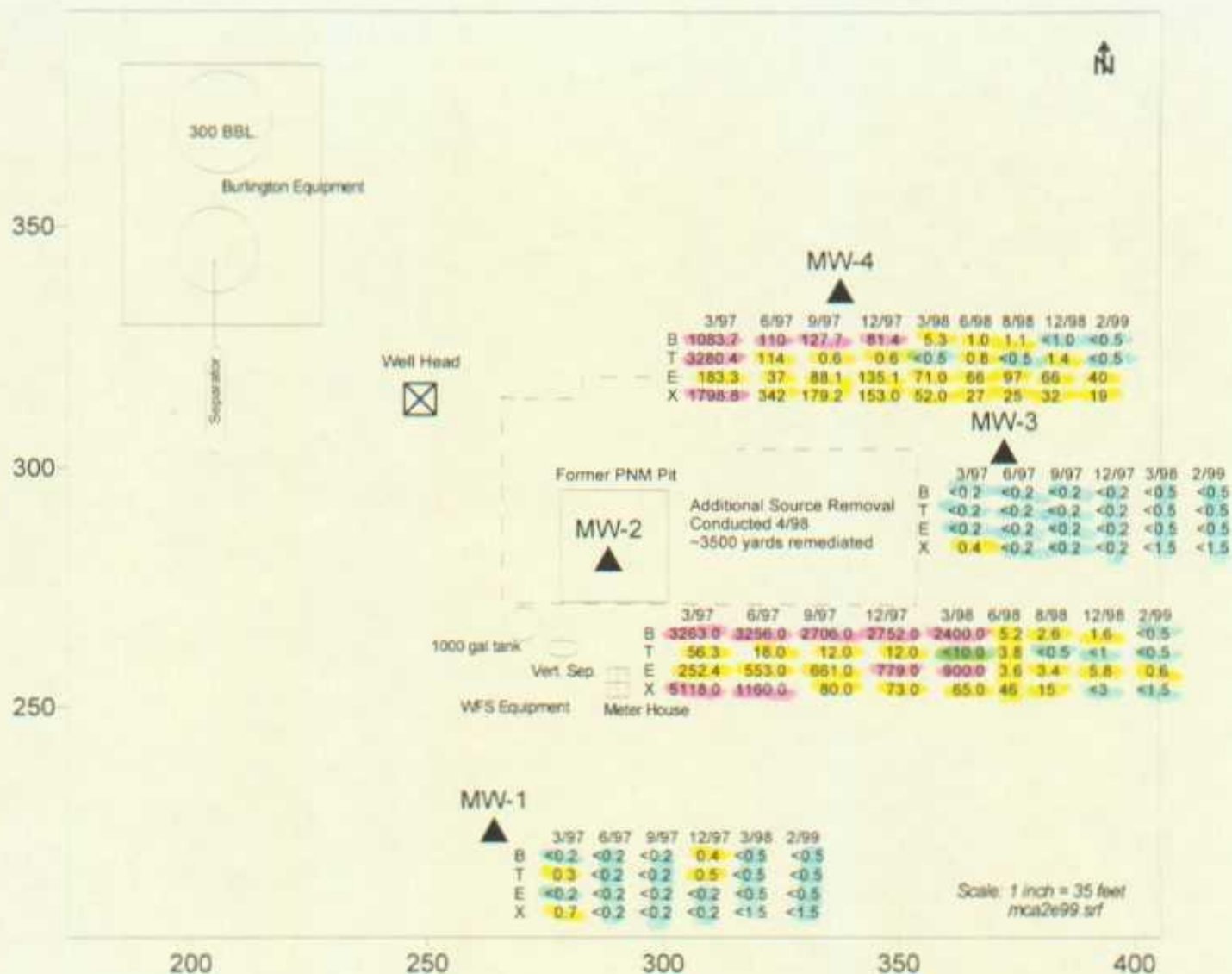
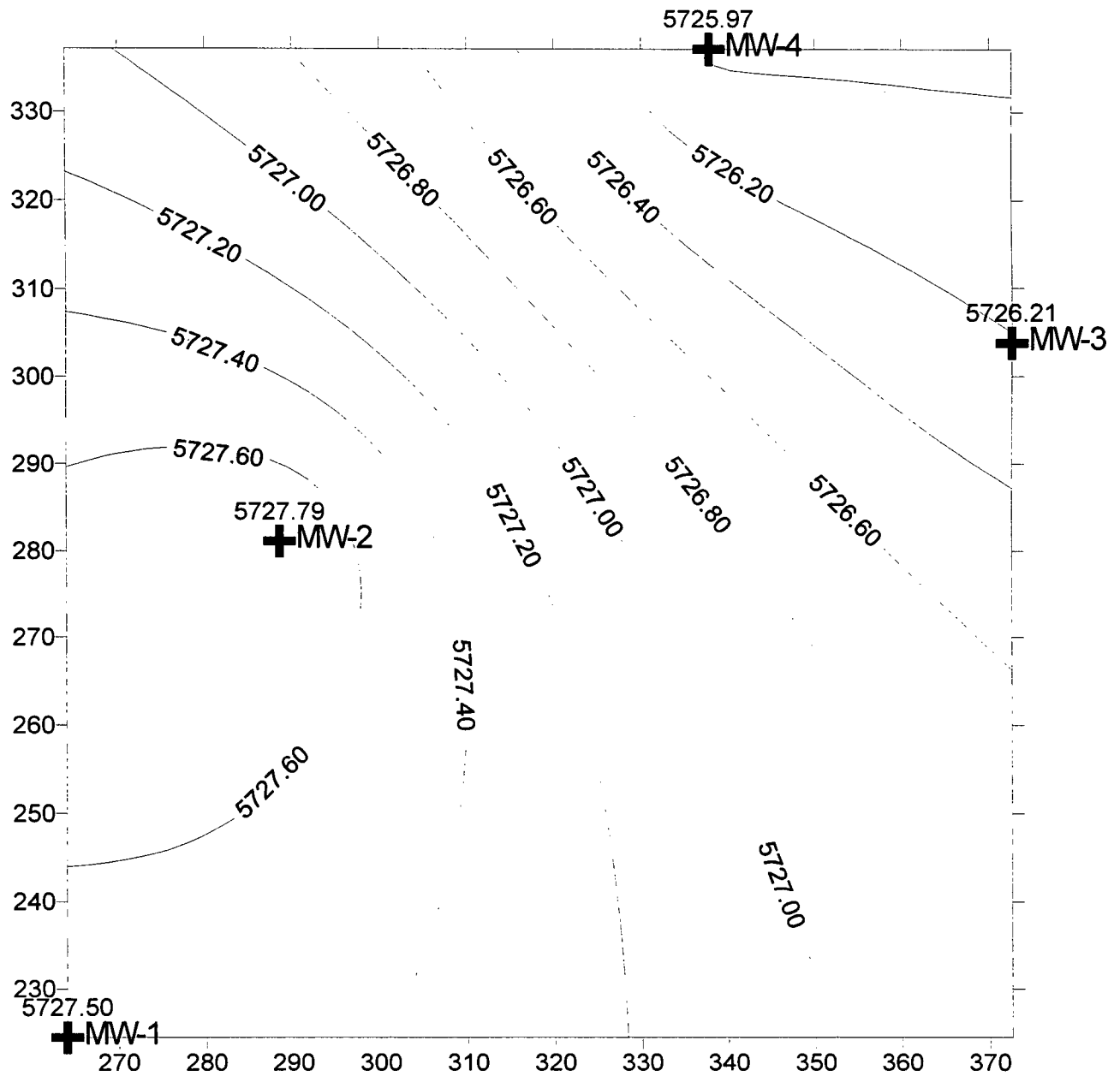
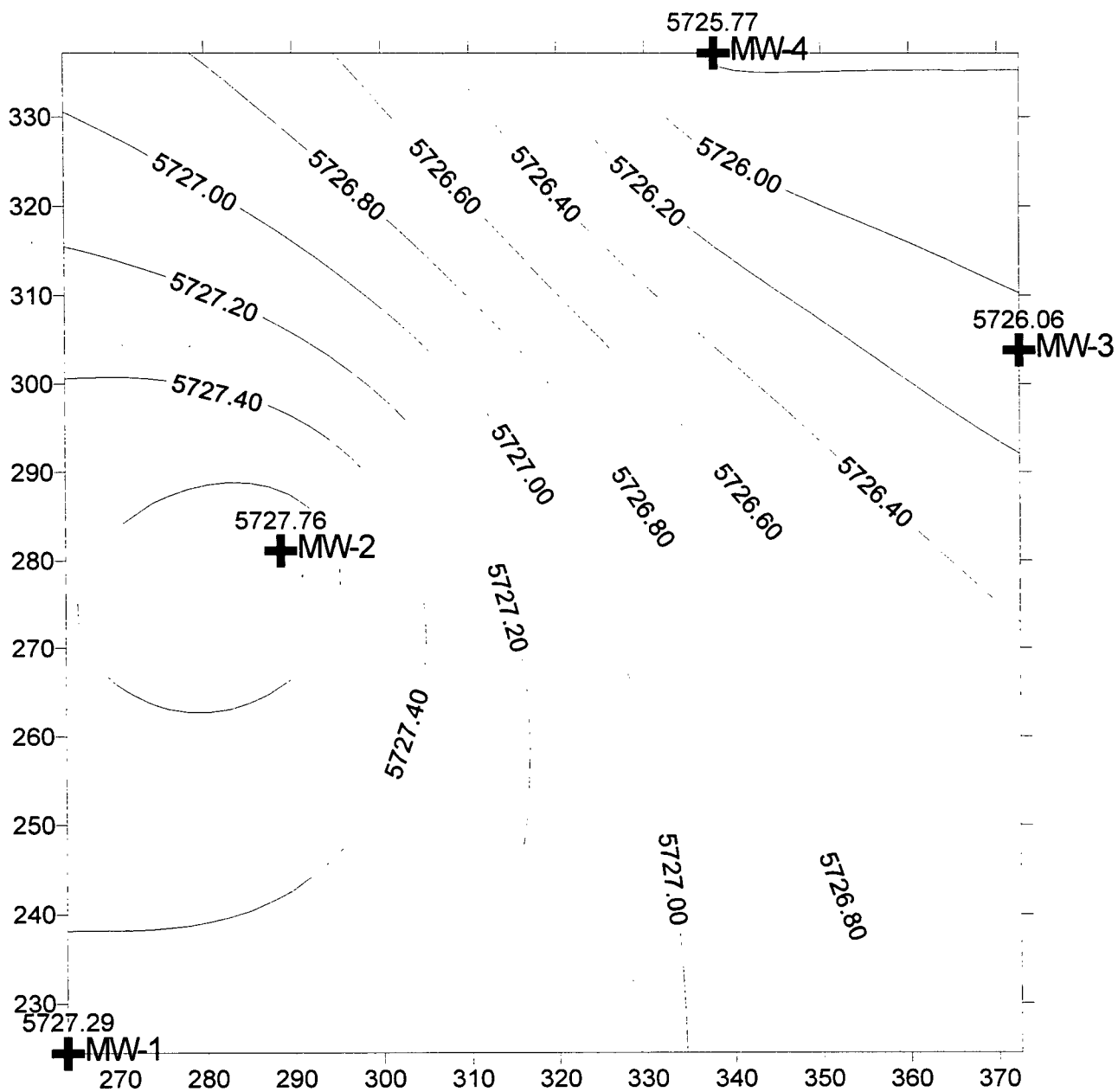


Figure 2a. McClanahan A2E Groundwater Contour Map
(June 25, 1998)



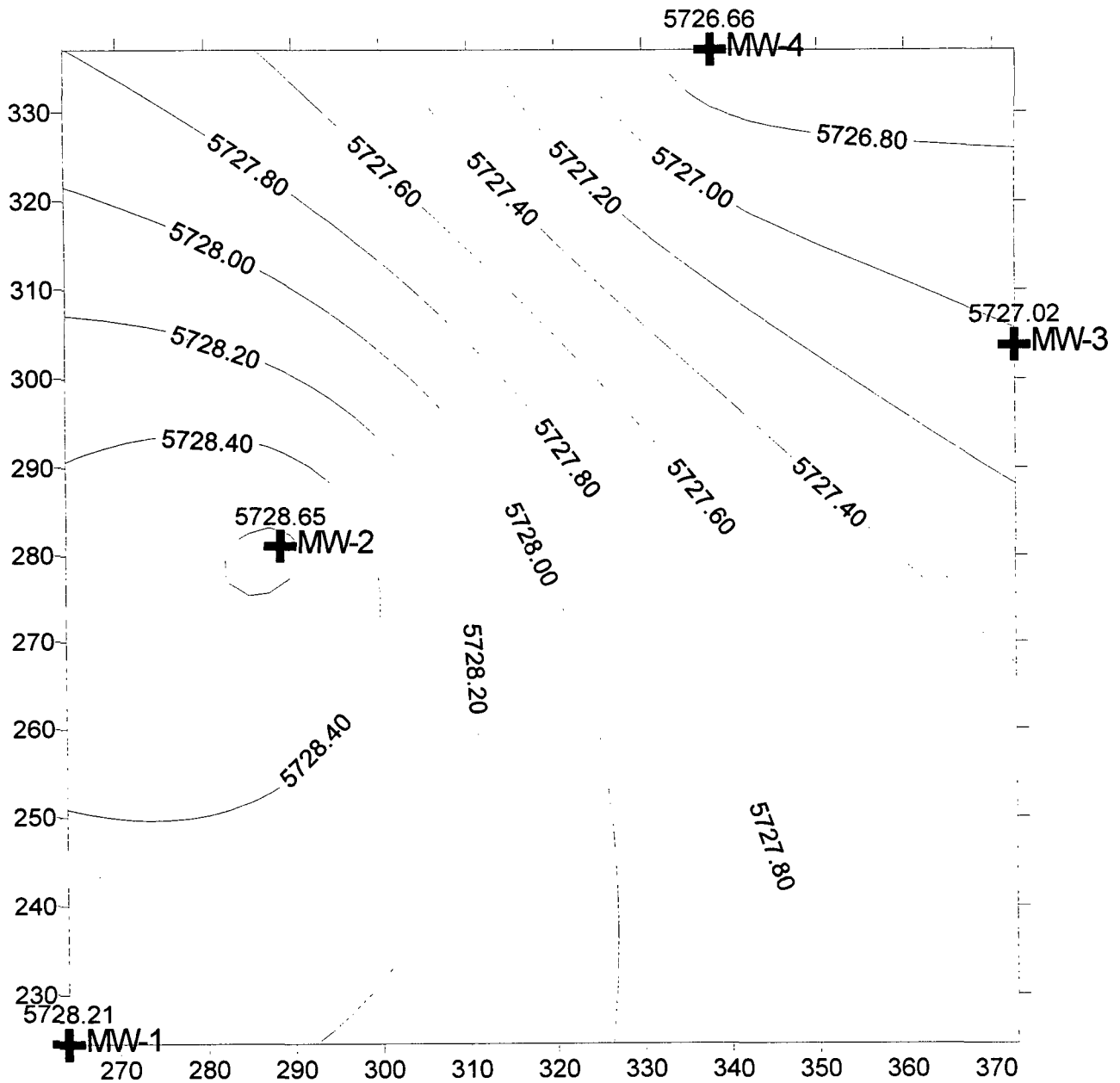
SCALE IN FEET
(X-axis = Easting,
Y-axis = Northing)

Figure 2b. McClanahan A2E Groundwater Contour Map
(August 26, 1998)



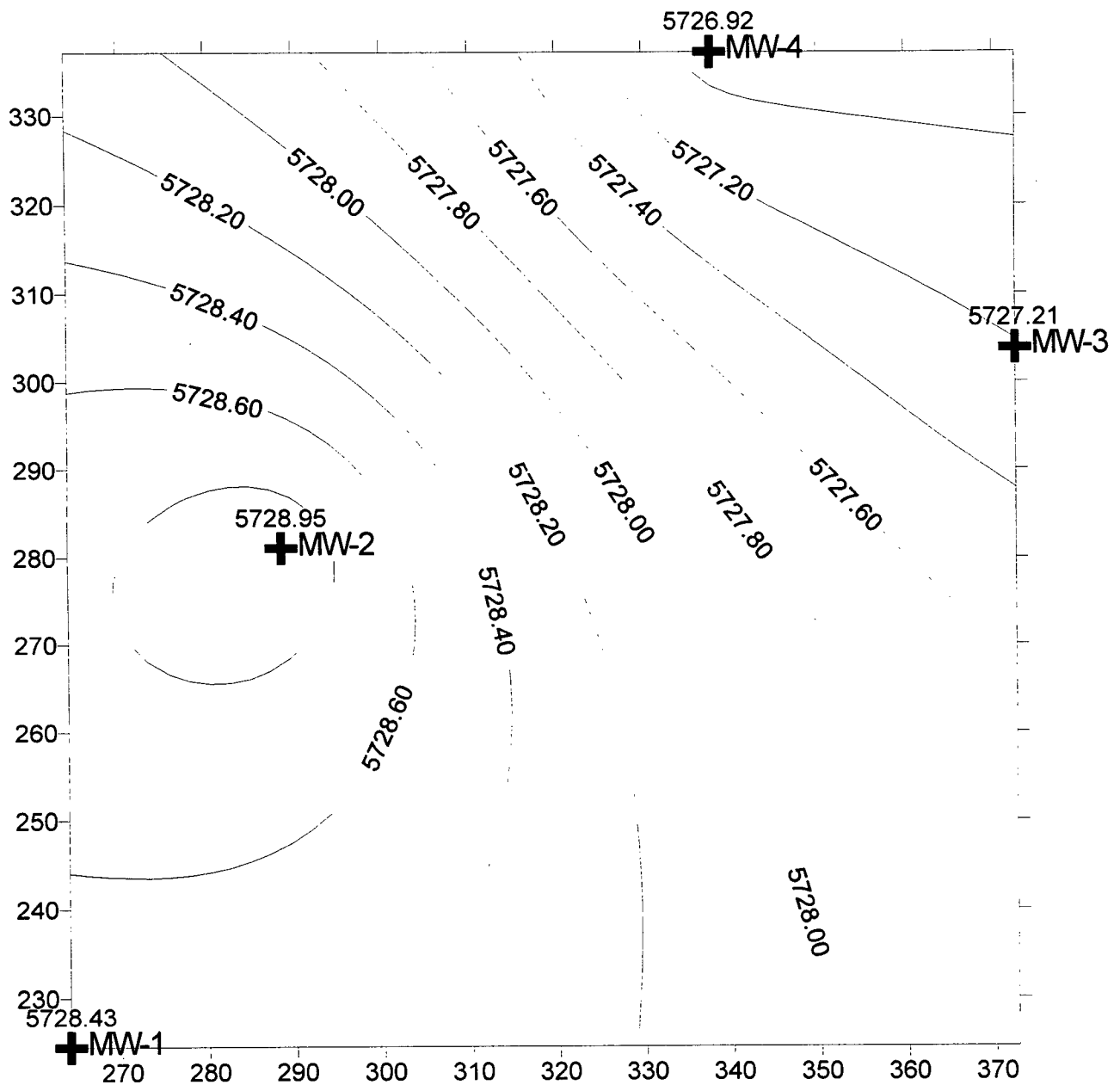
SCALE IN FEET
(X-axis = Easting,
Y-axis = Northing)

Figure 2c. McClanahan A2E Groundwater Contour Map
(December 2, 1998)



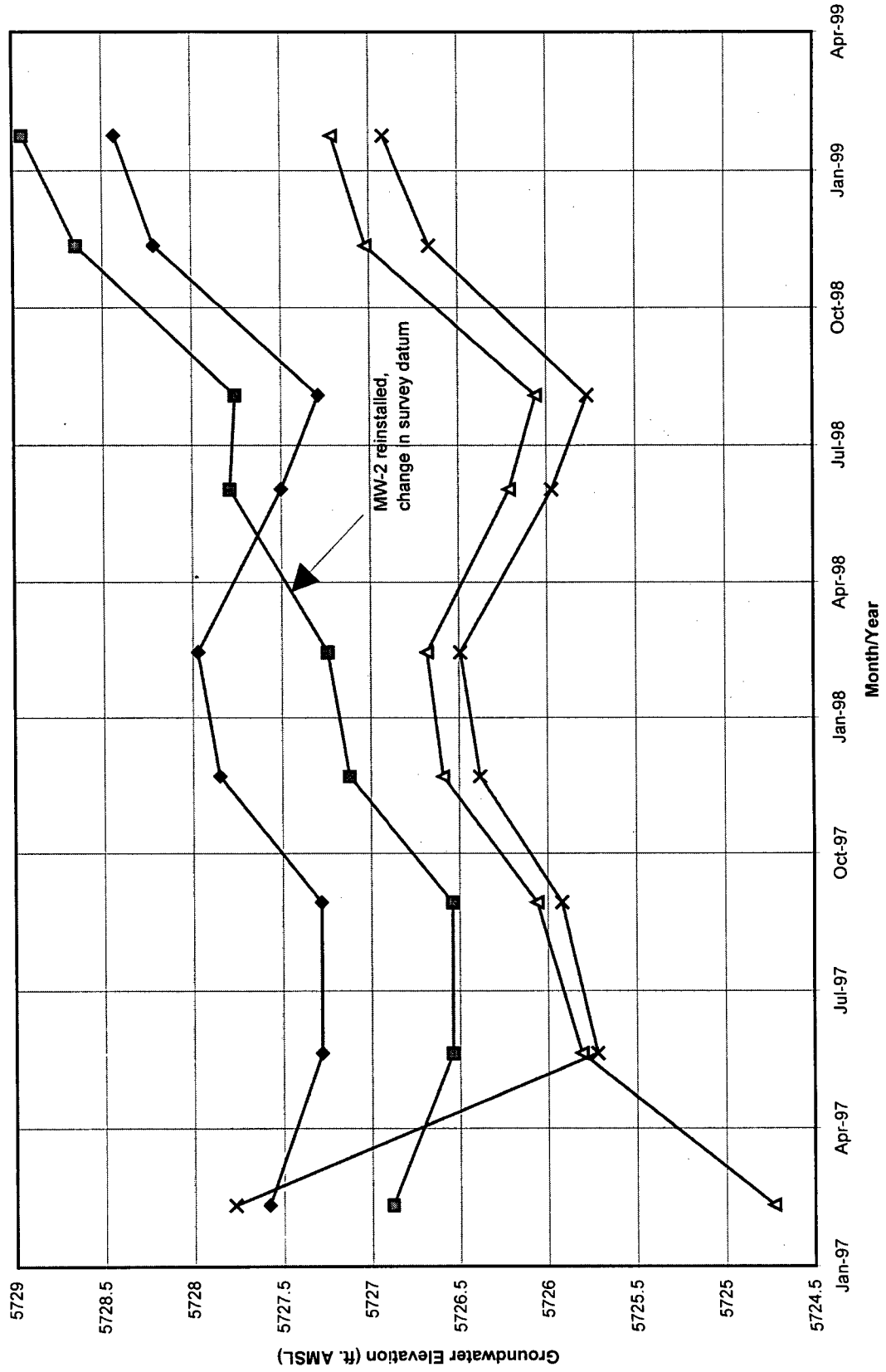
SCALE IN FEET
(X-axis = Easting,
Y-axis = Northing)

Figure 2d. McClanahan A2E Groundwater Contour Map
February 12, 1999)



SCALE IN FEET
(X-axis = Easting,
Y-axis = Northing)

Figure 3. McClanahan A2E Hydrograph
(Water Level vs. Time)



OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

July 01, 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

2nd Quarter 98

RE: McClanahan A2E

Order No.: 9806108

Dear Maureen Gannon,

On Site Technologies, LTD. received 3 samples on 6/26/98 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,



David Cox



OFF: (505) 325-5667

LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 01-Jul-98

CLIENT: PNM - Public Service Company of NM

Project: McClanahan A2E

Lab Order: 9806108

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

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9806108	Client Sample ID:	9806251400; MW-2
Lab ID:	9806108-01A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	6/25/98 2:00:00 PM
		COC Record:	7271

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	5.2	0.5		µg/L	1	6/29/98
Toluene	3.8	0.5		µg/L	1	6/29/98
Ethylbenzene	3.6	0.5		µg/L	1	6/29/98
m,p-Xylene	38	1		µg/L	1	6/29/98
o-Xylene	8.4	0.5		µg/L	1	6/29/98

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: 01-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9806108	Client Sample ID:	9806251430; MW-4
Lab ID:	9806108-02A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	6/25/98 2:30:00 PM
		COC Record:	7271

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	1	0.5		µg/L	1	6/29/98
Toluene	0.8	0.5		µg/L	1	6/29/98
Ethylbenzene	66	0.5		µg/L	1	6/29/98
m,p-Xylene	27	1		µg/L	1	6/29/98
o-Xylene	ND	0.5		µg/L	1	6/29/98

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

- TECHNOLOGICAL SERVICES, INC. -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9806108	Client Sample ID:	9806251500; MW-5
Lab ID:	9806108-03A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	6/25/98 3:00:00 PM
		COC Record:	7271

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	4.7	0.5		µg/L	1	6/29/98
Toluene	3.1	0.5		µg/L	1	6/29/98
Ethylbenzene	3	0.5		µg/L	1	6/29/98
m,p-Xylene	31	1		µg/L	1	6/29/98
o-Xylene	6.6	0.5		µg/L	1	6/29/98

Qualifiers:

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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 PROVIDED IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION ACT

On Site Technologies, LTD.

Date: 01-Jul-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9806108

Project: McClanahan A2E

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date 6/29/98	Prep Date:
Client ID:	9806108	Run ID: GC-1_980629A		SeqNo: 3789	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0605	0.5			J
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	ND	1			
o-Xylene	ND	0.5			
Toluene	.0959	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.

Date: 01-Jul-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9806108
 Project: McClanahan A2E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9806108-01AMS		Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date 6/29/98		Prep Date:	
Client ID: 9806251400; MW-		Run ID: 9806108	GC-1_980629A		SeqNo: 3790			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	804	10	800	9.574	99.3%	56	128	
Ethylbenzene	799.9	10	800	5.584	99.3%	78	107	
m,p-Xylene	1558	20	1600	35.42	95.2%	67	118	
Methyl tert-Butyl Ether	815.6	20	800	1.918	101.7%	70	130	
o-Xylene	811.5	10	800	30.23	97.7%	78	107	
Toluene	806.7	10	800	7.356	99.9%	74	116	
								%RPD RPDLimit Qual

Sample ID: 9806108-01AMSD		Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date 6/29/98		Prep Date:	
Client ID: 9806251400; MW-		Run ID: 9806108	GC-1_980629A		SeqNo: 3791			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Benzene	801.9	10	800	9.574	99.0%	56	128	804
Ethylbenzene	828.2	10	800	5.584	102.8%	78	107	799.9
m,p-Xylene	1599	20	1600	35.42	97.7%	67	118	1558
Methyl tert-Butyl Ether	793.5	20	800	1.918	99.0%	70	130	815.6
o-Xylene	810	10	800	30.23	97.5%	78	107	811.5
Toluene	805.6	10	800	7.356	99.8%	74	116	806.7
								%RPD RPDLimit Qual

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: 01-Jul-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9806108

Project: McClanahan A2E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date 6/29/98	Prep Date:				
Client ID: 9806108	Run ID: GC-1_980629A	PQL	SPK value	SeqNo: 3788					
Analyte	Result	PQL	SPK Ref Val	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.9	0.5	0.0605	56	128		102.1%		
Ethylbenzene	41.34	0.5	0	78	107		103.4%		
m,p-Xylene	79.94	1	0	67	118		99.9%		
Methyl tert-Butyl Ether	39.65	1	0	70	130		99.1%		
o-Xylene	41.28	0.5	0	78	107		103.2%		
Toluene	41.14	0.5	0.0959	74	116		102.6%		

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: 01-Jul-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9806108
Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0529/30		Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date 6/29/98		Prep Date:				
Client ID: 9806108		Run ID: GC-1_980629A	SeqNo: 3783								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.81	0.5	20	0	109.0%	85	115				
Ethylbenzene	22.74	0.5	20	0	113.7%	85	115				
m,p-Xylene	43.02	1	40	0	107.6%	85	115				
Methyl tert-Butyl Ether	21.12	1	20	0	105.6%	85	115				
o-Xylene	21.94	0.5	20	0	109.7%	85	115				
Toluene	21.92	0.5	20	0	109.6%	85	115				
1,4-Difluorobenzene	92.74	0	100	0	92.7%	70	130				
4-Bromochlorobenzene	78.19	0	100	0	78.2%	70	130				
Fluorobenzene	92.95	0	100	0	93.0%	70	130				

Sample ID: CCV2 QC0529/30		Batch ID: GC-1_980629		Test Code: SW8020A		Units: µg/L		Analysis Date 6/29/98		Prep Date:	
Client ID: 9806108		Run ID: GC-1_980629A		SeqNo: 3784							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.8	0.5	20	0	104.0%	85	115				
Ethylbenzene	20.86	0.5	20	0	104.3%	85	115				
m,p-Xylene	39.92	1	40	0	99.8%	85	115				
Methyl tert-Butyl Ether	21.44	1	20	0	107.2%	85	115				
o-Xylene	21.96	0.5	20	0	109.8%	85	115				
Toluene	20.91	0.5	20	0	104.6%	85	115				
1,4-Difluorobenzene	93.16	0	100	0	93.2%	70	130				
4-Bromochlorobenzene	82.4	0	100	0	82.4%	70	130				
Fluorobenzene	92.45	0	100	0	92.5%	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

CLIENT: PNM - Public Service Company of NM
Work Order: 9806108
Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0529/30		Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date: 6/29/98		Prep Date:	
Client ID: 9806108		Run ID: GC-1_980629A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	40.4		0.5	40	0	101.0%	85	115
Ethylbenzene	41.74		0.5	40	0	104.3%	85	115
m,p-Xylene	79.6		1	80	0	99.5%	85	115
Methyl tert-Butyl Ether	38.21		1	40	0	95.5%	85	115
o-Xylene	40.66		0.5	40	0	101.7%	85	115
Toluene	40.64		0.5	40	0	101.6%	85	115
1,4-Difluorobenzene	91.47		0	100	0	91.5%	70	130
4-Bromochlorobenzene	76.37		0	100	0	76.4%	70	130
Fluorobenzene	92.11		0	100	0	92.1%	70	130

Sample ID: CCV4 QC0529/30		Batch ID: GC-1_980629	Test Code: SW8020A	Units: µg/L	Analysis Date: 6/29/98		Prep Date:	
Client ID: 9806108		Run ID: GC-1_980629A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	20.71		0.5	20	0	103.5%	85	115
Ethylbenzene	21.81		0.5	20	0	109.1%	85	115
m,p-Xylene	41.38		1	40	0	103.4%	85	115
o-Xylene	20.98		0.5	20	0	104.9%	85	115
Toluene	20.99		0.5	20	0	105.0%	85	115
1,4-Difluorobenzene	91.74		0	100	0	91.7%	70	130
4-Bromochlorobenzene	69.12		0	100	0	69.1%	70	130
Fluorobenzene	92.31		0	100	0	92.3%	70	130

S

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: 9806108
Project: McClanahan A2E
Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ					
9806097-01A	90.6	60 *	90.8					
9806097-06A	91.5	54.3 *	90.3					
9806097-07A	92.5	77.5	92.7					
9806097-08A	90.2	55.1 *	90.5					
9806097-09A	89.3	81.5	90.4					
9806097-12A	90.8	83.3	91.3					
9806097-13A	90.8	82.6	91.5					
9806097-15A	92.6	81.8	91.9					
9806108-01A	91.3	70.4	91.7					
9806108-01AMS	92.2	84.3	92.7					
9806108-01AMSD	92.1	80	92.5					
9806108-02A	91.1	60 *	91.1					
9806108-03A	91	54.8 *	90.3					
9806109-01A	91.5	68.4 *	92.7					
9806115-01A	87	76.1	89.4					
CCV1 QC0529/30	92.7	78.2	93					
CCV2 QC0529/30	93.2	82.4	92.4					
CCV3 QC0529/30	91.5	76.4	92.1					
CCV4 QC0529/30	91.7	69.1 *	92.3					
CCV5 QC0529/30	91.6	67.6 *	91.9					
LCS WATER	92.4	78.2	92.3					
MB1	93.2	72.5	93					

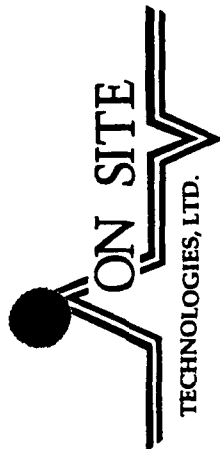
Acronym

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

Date: 6/26/98 Page: 1 of 1

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

Purchase Order No.:		Job No.	
Name: Denver Bearden		Title: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Telephone No.:		Telephone No.:	
Telefax No.:		Telefax No.:	
Sampling Location: Mcclanahan A2 E		ANALYSIS REQUESTED	
Sampler: MS. MG		RESULTS TO	
SEND INVOICE TO		Number of Containers	
SAMPLE IDENTIFICATION		LAB ID	
DATE	TIME	MATRIX	PRES.
980625 1400	MW-2	H ₂ O	ACI
980625 1430	MW-4	↓	↓
980625 1500	MW-5	↓	↓
Relinquished by: <u>Paul D. Hill</u>		Received by: <u>Maureen Gannon</u>	
Date/Time: <u>6/26/98 1443</u>		Date/Time: <u>6/26/98 1443</u>	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Method of Shipment: <u>HAND DELIVERED</u>		Rush	
Authorized by: <u>Paul D. Hill</u>		Date: <u>6/26/98</u>	
(Client Signature Must Accompany Request)		Results to be sent to both parties.	

CHAIN OF CUSTODY RECORD

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

OFF: (505) 325-5667



LAB: (505) 325-1556

August 31, 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

3rd Quarter 98

RE: McClanahan A-2E

Order No.: 9808053

Dear Maureen Gannon,

On Site Technologies, LTD. received 2 samples on 8/27/98 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,

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 31-Aug-98

CLIENT: PNM - Public Service Company of NM
Project: McClanahan A-2E
Lab Order: 9808053

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: 31-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A-2E
Work Order:	9808053	Client Sample ID:	9808261707; MW-4
Lab ID:	9808053-01A	Matrix:	AQUEOUS
Project:	McClanahan A-2E	Collection Date:	8/26/98 5:07:00 PM
		COC Record:	7433

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	1.1	0.5		µg/L	1	8/27/98
Toluene	ND	0.5		µg/L	1	8/27/98
Ethylbenzene	97	0.5		µg/L	1	8/27/98
m,p-Xylene	25	1		µg/L	1	8/27/98
o-Xylene	ND	0.5		µg/L	1	8/27/98

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BRIDGING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 31-Aug-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A-2E
Work Order:	9808053	Client Sample ID:	9808261715; MW-2
Lab ID:	9808053-02A	Matrix:	AQUEOUS
Project:	McClanahan A-2E	Collection Date:	8/26/98 5:15:00 PM
		COC Record:	7433

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	2.6	0.5		µg/L	1	8/27/98
Toluene	ND	0.5		µg/L	1	8/27/98
Ethylbenzene	3.4	0.5		µg/L	1	8/27/98
m,p-Xylene	15	1		µg/L	1	8/27/98
o-Xylene	ND	0.5		µg/L	1	8/27/98

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: 31-Aug-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9808053

Project: McClanahan A-2E

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98	Prep Date:
Client ID:	9808053	Run ID: GC-1_980827A		SeqNo: 5917	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0346	0.5			J
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
o-Xylene	ND	0.5			J
Toluene	.0769	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

On Site Technologies, LTD.

Date: 31-Aug-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9808053

Project: McClanahan A-2E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9808046-02AMS	Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98	Prep Date:						
Client ID: 9808053	Run ID: GC-1_980827A			SeqNo: 5918							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	878.2	10	800	161.8	89.5%	56	128				
Ethylbenzene	784.7	10	800	16.73	96.0%	78	107				
m,p-Xylene	2573	20	1600	1184	86.8%	67	118				
o-Xylene	1058	10	800	325.4	91.6%	78	107				
Toluene	2438	10	800	1751	85.9%	74	116				

Sample ID: 9808046-02AMSD	Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98	Prep Date:						
Client ID: 9808053	Run ID: GC-1_980827A			SeqNo: 5919							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	858	10	800	161.8	87.0%	56	128	878.2	2.3%	12	
Ethylbenzene	764	10	800	16.73	93.4%	78	107	784.7	2.7%	11	
m,p-Xylene	2505	20	1600	1184	82.6%	67	118	2573	2.7%	10	
o-Xylene	1038	10	800	325.4	89.1%	78	107	1058	1.9%	14	
Toluene	2370	10	800	1751	77.4%	74	116	2438	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

On Site Technologies, LTD.

Date: 31-Aug-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9808053

Project: McClanahan A-2E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98	Prep Date:
Client ID: 9808053	Run ID: GC-1_980827A	PQL	SPK value	SeqNo: 5916	
Analyte	Result	PQL	SPK value	LowLimit	HighLimit
Benzene	36.42	0.5	40	56	128
Ethylbenzene	38.22	0.5	40	78	107
m,p-Xylene	71.74	1	80	67	118
o-Xylene	36.96	0.5	40	78	107
Toluene	36.36	0.5	40	74	116
		%REC			
		91.0%			
		95.5%			
		89.7%			
		92.4%			
		90.7%			
		%RPD			
		RPD Limit			
		Qual			

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: 31-Aug-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9808053

Project: McClanahan A-2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98		Prep Date:	
Client ID: 9808053		Run ID: GC-1_980827A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	19.68		0.5	20	0	98.4%	85	115
Ethylbenzene	20.62		0.5	20	0	103.1%	85	115
m,p-Xylene	38.57		1	40	0	96.4%	85	115
o-Xylene	19.75		0.5	20	0	98.7%	85	115
Toluene	19.58		0.5	20	0	97.9%	85	115
1,4-Difluorobenzene	86.6		0	100	0	86.6%	70	130
4-Bromochlorobenzene	88.17		0	100	0	88.2%	70	130
Fluorobenzene	83.79		0	100	0	83.8%	70	130

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_980827	Test Code: SW8020A	Units: µg/L	Analysis Date 8/27/98		Prep Date:	
Client ID: 9808053		Run ID: GC-1_980827A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit
Analyte	Result							
Benzene	19.44		0.5	20	0	97.2%	85	115
Ethylbenzene	20.35		0.5	20	0	101.7%	85	115
m,p-Xylene	38.02		1	40	0	95.1%	85	115
o-Xylene	19.62		0.5	20	0	98.1%	85	115
Toluene	19.4		0.5	20	0	97.0%	85	115
1,4-Difluorobenzene	86.61		0	100	0	86.6%	70	130
4-Bromochlorobenzene	87		0	100	0	87.0%	70	130
Fluorobenzene	83.39		0	100	0	83.4%	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

On Site Technologies, LTD.

Date: 31-Aug-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9808053
Project: McClanahan A-2E
Test No: SW8020A

**QC SUMMARY REPORT
SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9808046-02A	85.4	75.6	82.1
9808046-02AMS	85.3	84.3	82.4
9808046-02AMSD	85.7	86.8	82.4
9808049-01A	85.4	88.3	82.9
9808052-01A	84.6	85.9	80.8
9808052-02A	84.9	84.6	81
9808053-01A	87.4	83.2	83.2
9808053-02A	86.2	74.8	83
9808054-01A	86.3	73.3	83.4
CCV1 QC0606/07	86.6	88.2	83.8
CCV2 QC0606/07	86.6	87	83.4
LCS WATER	86.2	87.1	83.4
MB1	87.2	86.1	84.3

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
LAB: (505) 325-5667 • FAX: (505) 325-6256

[illegible]

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

OFF: (505) 325-5667



LAB: (505) 325-1556

December 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: McClanahan A2E

Order No.: 9812008

Dear Maureen Gannon,

On Site Technologies, LTD. received 3 samples on 12/2/98 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,

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM
Project: McClanahan A2E
Lab Order: 9812008

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-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9812008	Client Sample ID:	9812021145; MW-2
Lab ID:	9812008-01A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	12/2/98 11:45:00 AM
		COC Record:	7521

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX						Analyst: HR
Benzene	1.6	1		µg/L	1	12/10/98
Toluene	ND	1		µg/L	1	12/10/98
Ethylbenzene	5.8	1		µg/L	1	12/10/98
m,p-Xylene	ND	2		µg/L	1	12/10/98
o-Xylene	ND	1		µg/L	1	12/10/98

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: 15-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9812008	Client Sample ID:	9812021155; MW-4
Lab ID:	9812008-02A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	12/2/98 11:55:00 AM
		COC Record:	7521

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX						Analyst: HR
		SW8020A				
Benzene	ND	1		µg/L	1	12/10/98
Toluene	1.4	1		µg/L	1	12/10/98
Ethylbenzene	66	1		µg/L	1	12/10/98
m,p-Xylene	32	2		µg/L	1	12/10/98
o-Xylene	ND	1		µg/L	1	12/10/98

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

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 15-Dec-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9812008	Client Sample ID:	9812021207; MW-5
Lab ID:	9812008-03A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	12/2/98 12:07:00 PM
		COC Record:	7521

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	1		µg/L	1	12/10/98
Toluene	1.2	1		µg/L	1	12/10/98
Ethylbenzene	62	1		µg/L	1	12/10/98
m,p-Xylene	29	2		µg/L	1	12/10/98
o-Xylene	ND	1		µg/L	1	12/10/98

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: 15-Dec-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9812008

Project: McClanahan A2E

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_981210	Test Code: SW8020A	Units: µg/L	Analysis Date 12/10/98	Prep Date:
Client ID:	9812008	Run ID: GC-1_981210A		SeqNo: 9432	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Benzene	.0828	1			
Ethylbenzene	.1496	1			
m,p-Xylene	.2857	2			
o-Xylene	.1375	1			
Toluene	.1456	1			
				LowLimit	HighLimit
				RPD Ref Val	RPD Limit
				%RPD	Qual
					J
					J
					J
					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

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9812008

Project: McClanahan A2E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9812007-01AMS		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID: GC-1_981210A				SeqNo: 9437			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	177.9	5	200	0	89.0%	56	128				
Ethylbenzene	524.3	5	200	343.4	90.4%	78	107				
m,p-Xylene	880	10	400	522.1	89.5%	67	118				
o-Xylene	258.5	5	200	75.14	91.7%	78	107				
Toluene	218.9	5	200	0	109.5%	74	116				

Sample ID: 9812007-01AMS		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID: GC-1_981210A				SeqNo: 9439			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	177.8	5	200	0	88.9%	56	128	177.9	0.1%	12	
Ethylbenzene	523.6	5	200	343.4	90.1%	78	107	524.3	0.1%	11	
m,p-Xylene	880.5	10	400	522.1	89.6%	67	118	880	0.1%	10	
o-Xylene	255.6	5	200	75.14	90.2%	78	107	258.5	1.1%	14	
Toluene	219.3	5	200	0	109.7%	74	116	218.9	0.2%	14	

Sample ID: 9812021-02AMS		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID: GC-1_981210A				SeqNo: 9438			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1963	50	2000	110.6	92.6%	56	128				
Ethylbenzene	2410	50	2000	573.1	91.8%	78	107				
m,p-Xylene	7339	100	4000	3782	88.9%	67	118				
o-Xylene	2537	50	2000	675.1	93.1%	78	107				
Toluene	2267	50	2000	374.8	94.6%	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

CLIENT: PNM - Public Service Company of NM
Work Order: 9812008
Project: McClanahan A2E

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID: 9812021-02AMSD Batch ID: GC-1_981210 Test Code: SW8020A Units: µg/L Analysis Date 12/10/98 Prep Date:

Client ID: 9812008 Run ID: GC-1_981210A SeqNo: 9440

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1984	50	2000	110.6	93.7%	56	128	1963	1.1%	12	
Ethylbenzene	2434	50	2000	573.1	93.1%	78	107	2410	1.0%	11	
m,p-Xylene	7417	100	4000	3782	90.9%	67	118	7339	1.1%	10	
o-Xylene	2574	50	2000	675.1	95.0%	78	107	2537	1.5%	14	
Toluene	2292	50	2000	374.8	95.9%	74	116	2267	1.1%	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-Dec-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9812008
Project: McClanahan A2E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER			Batch ID: GC-1_981210	Test Code: SW8020A	Units: µg/L	Analysis Date 12/10/98		Prep Date:			
Client ID:	9812008	Run ID:	GC-1_981210A			SeqNo:	9436				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.64	1	40	0.0828	93.9%	56	128				
Ethylbenzene	37.95	1	40	0.1496	94.5%	78	107				
m,p-Xylene	74.54	2	80	0.2857	92.8%	67	118				
o-Xylene	38.56	1	40	0.1375	96.0%	78	107				
Toluene	37.79	1	40	0.1456	94.1%	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: 15-Dec-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9812008
 Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID: GC-1_981210A				SeqNo: 9433			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.57	1	20	0	97.9%	85	115				
Ethylbenzene	19.86	1	20	0	99.3%	85	115				
m,p-Xylene	38.68	2	40	0	96.7%	85	115				
o-Xylene	20.19	1	20	0	100.9%	85	115				
Toluene	19.7	1	20	0	98.5%	85	115				
1,4-Difluorobenzene	90.06	0	100	0	90.1%	70	130				
4-Bromochlorobenzene	96.84	0	100	0	96.8%	70	130				
Fluorobenzene	88.7	0	100	0	88.7%	70	130				

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID:		GC-1_981210A		SeqNo: 9434			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.58	1	20	0	97.9%	85	115				
Ethylbenzene	19.78	1	20	0	98.9%	85	115				
m,p-Xylene	38.52	2	40	0	96.3%	85	115				
o-Xylene	20.04	1	20	0	100.2%	85	115				
Toluene	19.63	1	20	0	98.2%	85	115				
1,4-Difluorobenzene	90.13	0	100	0	90.1%	70	130				
4-Bromochlorobenzene	95.97	0	100	0	96.0%	70	130				
Fluorobenzene	89.03	0	100	0	89.0%	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: 9812008

Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07		Batch ID: GC-1_981210		Test Code: SW8020A		Units: µg/L		Analysis Date 12/10/98		Prep Date:	
Client ID:		9812008		Run ID: GC-1_981210A				SeqNo: 9435			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.69	1	40	0	96.7%	85	115				
Ethylbenzene	39.06	1	40	0	97.6%	85	115				
m,p-Xylene	76.76	2	80	0	95.9%	85	115				
o-Xylene	39.63	1	40	0	99.1%	85	115				
Toluene	39.05	1	40	0	97.6%	85	115				
1,4-Difluorobenzene	90.34	0	100	0	90.3%	70	130				
4-Bromochlorobenzene	97.62	0	100	0	97.6%	70	130				
Fluorobenzene	89.28	0	100	0	89.3%	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

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9812008
Project: McClanahan A2E
Test No: SW8020A

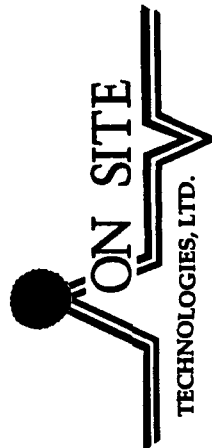
QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9812007-01A	87.6	92.4	90.6
9812007-01AMS	83.9	92.9	84.5
9812007-01AMSD	83.9	93.2	84.8
9812008-01A	89.7	96.8	88.6
9812008-02A	90.9	97	90.1
9812008-03A	89.2	95.3	88.2
9812009-01A	88	97	88
9812009-02A	93.9	89.8	87.4
9812020-01A	90.2	97.4	89.2
9812020-02A	90.2	95.7	185 *
9812021-02AMS	89.8	96.7	89.2
9812021-02AMSD	90.2	96.6	89.1
9812021-03A	93.4	98	93.3
9812021-04A	89.2	97.2	88.7
9812021-05A	89.9	96.2	89
9812022-01A	89.4	95.6	88
9812023-01A	89.2	97	88.6
CCV1 QC0606/07	90.1	96.8	88.7
CCV2 QC0606/07	90.1	96	89
CCV3 QC0606/07	90.3	97.6	89.3
LCS WATER	89.7	96.8	88.7
MBI	90.4	95.9	89.1

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

Date: 12/2/1998 Page: 1 of 1

612 E. Murphy Dr. • P.O. Box 2806 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No. <u>4-125</u>	
Name <u>Denver Bearden</u>		Title	
Company <u>PNM Gas Services</u>		Company <u>PNM Gas Services</u>	
Address <u>603 W. Elm Street</u>		Mailing Address <u>Alverado Square, Mail Stop 0408</u>	
City, State, Zip <u>Farmington, NM 87401</u>		City, State, Zip <u>Albuquerque, NM 87158</u>	
Sampling Location: <u>McCluney Ave</u>		Telephone No. <u>505-848-2974</u> Telefax No.	
SEND INVOICE TO		REPORT RESULTS TO	
Sampler: <u>Large Trawl</u>		Number of Containers	
SAMPLE IDENTIFICATION		LAB ID	
DATE	SAMPLE TIME	MATRIX	PRES.
<u>12/2/98</u>	<u>11:25</u>	<u>1125</u>	<u>1125</u>
<u>12/2/98</u>	<u>11:35</u>	<u>1135</u>	<u>1135</u>
<u>12/2/98</u>	<u>12:07</u>	<u>1207</u>	<u>1207</u>
Relinquished by: <u>[Signature]</u>		Date/Time <u>12/2/98 12:01</u>	
Relinquished by:		Date/Time	
Relinquished by:		Date/Time	
Method of Shipment:		Rush	
Authorized by: _____		Date _____	
(Client Signature Must Accompany Request)		Special Instructions:	
24-48 Hours		10 Working Days	
Results to be sent to both parties.			

OFF: (505) 325-5667



LAB: (505) 325-1556

March 04, 1999

RECEIVED

MAR 15 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: McClanahan A2E

Order No.: 9902085

Dear Maureen Gannon,

On Site Technologies, LTD. received 4 samples on 2/23/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
BTEX (SW8021B)

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

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

Sincerely,

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 04-Mar-99

CLIENT: PNM - Public Service Company of NM
Project: McClanahan A2E
Lab Order: 9902085

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: 04-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9902085	Client Sample ID:	9902221045; MW-1
Lab ID:	9902085-01A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	2/22/99 10:45:00 AM
		COC Record:	7378

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	ND	0.5		µg/L	1	2/28/99
Toluene	ND	0.5		µg/L	1	2/28/99
Ethylbenzene	ND	0.5		µg/L	1	2/28/99
m,p-Xylene	ND	1		µg/L	1	2/28/99
o-Xylene	ND	0.5		µg/L	1	2/28/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 04-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9902085	Client Sample ID:	9902221100; MW-2
Lab ID:	9902085-02A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	2/22/99 11:00:00 AM
		COC Record:	7378

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	ND	0.5		µg/L	1	2/28/99
Toluene	ND	0.5		µg/L	1	2/28/99
Ethylbenzene	0.6	0.5		µg/L	1	2/28/99
m,p-Xylene	ND	1		µg/L	1	2/28/99
o-Xylene	ND	0.5		µg/L	1	2/28/99

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
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: 04-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9902085	Client Sample ID:	9902221115; MW-3
Lab ID:	9902085-03A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	2/22/99 11:15:00 AM
		COC Record:	7378

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	ND	0.5		µg/L	1	2/28/99
Toluene	ND	0.5		µg/L	1	2/28/99
Ethylbenzene	ND	0.5		µg/L	1	2/28/99
m,p-Xylene	ND	1		µg/L	1	2/28/99
o-Xylene	ND	0.5		µg/L	1	2/28/99

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY - BLENDING INDUSTRY WITH THE ENVIRONMENT -

1 of 1

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 04-Mar-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	McClanahan A2E
Work Order:	9902085	Client Sample ID:	9902221130; MW-4
Lab ID:	9902085-04A	Matrix:	AQUEOUS
Project:	McClanahan A2E	Collection Date:	2/22/99 11:30:00 AM
		COC Record:	7378

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	ND	0.5		µg/L	1	2/28/99
Toluene	ND	0.5		µg/L	1	2/28/99
Ethylbenzene	40	0.5		µg/L	1	2/28/99
m,p-Xylene	19	1		µg/L	1	2/28/99
o-Xylene	ND	0.5		µg/L	1	2/28/99

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

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

1 of 1

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 04-Mar-99

CLIENT: PNM - Public Service Company of NM

Work Order: 9902085

Project: McClanahan A2E

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L	Analysis Date: 2/28/99	Prep Date:
Client ID:	9902085	Run ID: GC-1_990228A		SeqNo: 11597	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Benzene	.0645	0.5			
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	1			
Methyl tert-Butyl Ether	ND	1			
o-Xylene	.0443	0.5			J
Toluene	.1322	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.

Date: 04-Mar-99

CLIENT: PNM - Public Service Company of NM

Work Order: 9902085

Project: McClanahan A2E

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9902083-02AMS	Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L	Analysis Date 2/28/99	Prep Date:						
Client ID: 9902085	Run ID: GC-1_990228A	PQL	SPK value	SeqNo: 11598							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	210.5	2.5	200	0.4105	105.1%	73	115				
Ethylbenzene	210.5	2.5	200	0.7455	104.9%	74	117				
m,p-Xylene	402.3	5	400	1.028	100.3%	76	112				
Methyl tert-Butyl Ether	213.8	5	200	0	106.9%	62	122				
o-Xylene	208	2.5	200	0.2425	103.9%	83	112				
Toluene	209.3	2.5	200	0.73	104.3%	71	120				

Sample ID: 9902083-02AMSD		Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L	Analysis Date 2/28/99		Prep Date:					
Client ID: 9902085		Run ID: GC-1_990228A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result											
Benzene	199.7		2.5	200	0.4105	99.7%	73	115	210.5	5.3%	8	
Ethylbenzene	199.9		2.5	200	0.7455	99.6%	74	117	210.5	5.2%	9	
m,p-Xylene	381.9		5	400	1.028	95.2%	76	112	402.3	5.2%	9	
Methyl tert-Butyl Ether	205.3		5	200	0	102.7%	62	122	213.8	4.0%	7	
o-Xylene	197.8		2.5	200	0.2425	98.8%	83	112	208	5.0%	9	
Toluene	198.9		2.5	200	0.73	99.1%	71	120	209.3	5.1%	9	

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: 04-Mar-99

CLIENT: PNM - Public Service Company of NM

Work Order: 9902085

Project: McClanahan A2E

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS WATER		Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L	Analysis Date 2/28/99		Prep Date:				
Client ID:		9902085	Run ID: GC-1_990228A		SeqNo: 11596						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	41.3	0.5	40	0.0645	103.1%	84	110				
Ethylbenzene	41.59	0.5	40	0	104.0%	86	113				
m,p-Xylene	79.78	1	80	0	99.7%	81	114				
Methyl tert-Butyl Ether	41.82	1	40	0	104.5%	69	129				
o-Xylene	41.2	0.5	40	0.0443	102.9%	86	112				
Toluene	41.19	0.5	40	0.1322	102.7%	85	111				

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: 04-Mar-99

CLIENT: PNM - Public Service Company of NM

Work Order: 9902085

Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07		Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L		Analysis Date 2/28/99			Prep Date:					
Client ID:		9902085	Run ID:	GC-1_990228A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result													
Benzene	20.49			0.5		20	0	102.5%	85	115				
Ethylbenzene	20.66			0.5		20	0	103.3%	85	115				
m,p-Xylene	39.66			1		40	0	99.2%	85	115				
Methyl tert-Butyl Ether	20.84			1		20	0	104.2%	85	115				
o-Xylene	20.5			0.5		20	0	102.5%	85	115				
Toluene	20.38			0.5		20	0	101.9%	85	115				
1,4-Difluorobenzene	93.45			0		100	0	93.4%	84	100				
4-Bromochlorobenzene	94.35			0		100	0	94.4%	87	105				
Fluorobenzene	93.8			0		100	0	93.8%	87	99				

Sample ID: CCV2 QC0606/07		Batch ID: GC-1_990228		Test Code: SW8021B		Units: µg/L		Analysis Date 2/28/99		Prep Date:	
Client ID:		9902085		Run ID:		GC-1_990228A		SeqNo:		11594	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.41	0.5	20	0	107.0%	85	115				
Ethylbenzene	21.45	0.5	20	0	107.3%	85	115				
m,p-Xylene	40.97	1	40	0	102.4%	85	115				
Methyl tert-Butyl Ether	21.78	1	20	0	108.9%	85	115				
o-Xylene	21.19	0.5	20	0	105.9%	85	115				
Toluene	21.17	0.5	20	0	105.9%	85	115				
1,4-Difluorobenzene	93.49	0	100	0	93.5%	84	100				
4-Bromochlorobenzene	95.82	0	100	0	95.8%	87	105				
Fluorobenzene	94.72	0	100	0	94.7%	87	99				

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: 9902085
Project: McClanahan A2E

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07		Batch ID: GC-1_990228	Test Code: SW8021B	Units: µg/L	Analysis Date 2/28/99		Prep Date:				
Client ID:		9902085	Run ID:	GC-1_990228A	SeqNo:	11595					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.63	0.5	40	0	101.6%	85	115				
Ethylbenzene	40.87	0.5	40	0	102.2%	85	115				
m,p-Xylene	78.27	1	80	0	97.8%	85	115				
Methyl tert-Butyl Ether	39.55	1	40	0	98.9%	85	115				
o-Xylene	40.69	0.5	40	0	101.7%	85	115				
Toluene	40.57	0.5	40	0	101.4%	85	115				
1,4-Difluorobenzene	92.8	0	100	0	92.8%	84	100				
4-Bromochlorobenzene	95.12	0	100	0	95.1%	87	105				
Fluorobenzene	94.01	0	100	0	94.0%	87	99				

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: 9902085
Project: McClanahan A2E
Test No: SW8021B

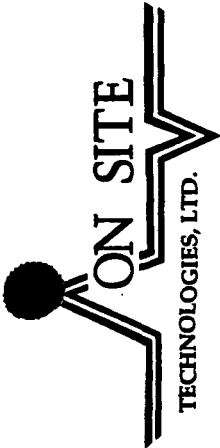
QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9902082-01A	93.9	94.5	95
9902082-02A	94	94	95.8
9902083-02AMS	92.8	94.8	93.6
9902083-02AMSD	92.5	95.7	93.6
9902084-02A	93.5	94.8	94.5
9902084-03A	93.5	94.2	94.7
9902084-04A	93.1	94.1	95.2
9902085-01A	94.6	95.6	95.8
9902085-02A	94.3	95.7	95.4
9902085-03A	94.2	95.8	95.8
9902085-04A	92.9	92.9	93.4
9902094-01A	93.8	94.5	95.2
9902094-02A	94.2	93.8	95.4
9902094-03A	93.5	94.9	95.2
9902094-04A	95	93.5	95.8
9902094-05A	94.7	96.1	95.5
9902094-06A	92.4	95	94.4
9902094-07A	93.9	95.8	95.2
CCV1 QC0606/07	93.4	94.4	93.8
CCV2 QC0606/07	93.5	95.8	94.7
CCV3 QC0606/07	92.8	95.1	94
LCS WATER	92.7	95.4	93.5
MB1	93.4	93	93.8

Acronym	Surrogate	QC Limits
14FBZ	= 1,4-Difluorobenzene	84-100
4BCBZ	= 4-Bromochlorobenzene	87-105
FLBZ	= Fluorobenzene	87-99

* Surrogate recovery outside acceptance limits



CHAIN OF CUSTODY RECORD

Date: 2/22/99 Page: 1 of 1

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

Purchase Order No.:		Job No.	
Name: Denver Bearden		Title: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Sampling Location: Mcclanahan A2E		Telephone No.: 505-848-2974	
Telefax No.:		Telefax No.:	
Sampler: Mark Sibelianos		ANALYSIS REQUESTED	
SEND INVOICE TO		RESULTS TO	
SAMPLE IDENTIFICATION		Number of Containers	
DATE		DATE	
TIME		TIME	
MATRIX		PRES.	
MW-1 9902221045		X	
MW-2 9902221100		X	
MW-3 9902221115		X	
MW-4 9902221130		X	
Date/Time		Date/Time	
Date/Time		Date/Time	
Date/Time		Date/Time	
Relinquished by: [Signature]		Received by: [Signature]	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Method of Shipment: Hand Delivered		Rush	
Authorized by: [Signature]		Date: 2/22/99	
Date: 2/22/99		Date: 2/22/99	
Client Signature Must Accompany Request		Special Instructions:	
Results to be sent to both parties.		Results to be sent to both parties.	