

3R - 336

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 horizontal line 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: Dreyfus
Sec: 5 **Twn:** 26N **Rng:** 7W **Unit:** N
Canyon: Largo

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 (May 1998), Figure 2b (September, 1998), Figure 2c (December 1998), & Figure 2d (February, 1999)

Hydrograph: Figure 3

Cation-Anion Groundwater Sampling Results: Table 1

Analytical Results: attached

Site Hydrology:

The Miles Federal 1E Drip site lies in the alluvial deposits of Largo Canyon. Largo Canyon is a perennial stream which runs from southeast to northwest across the area of the site. Alluvium lying between steep canyon walls is perhaps 1000 feet wide at the site. Regional flow in the alluvial aquifer would be towards the northwest, following the topographic gradient of Largo Canyon. Groundwater at the site should discharge as surface water flow in Largo Canyon, or follow the regional gradient northwest after joining the flow beneath Largo Canyon. This site is located adjacent to the Miles Federal 1E site (or "Well" site), which was recently closed by OCD.

The water table at the Miles Federal 1E Drip site exhibit a northwesterly flow direction. Existing data indicate a gradient of about 0.003 to 0.004 (0.3 to 0.4 ft/100 ft) to the northwest, consistent with the "Well" site. However, in February 1999, the gradient was much steeper (0.01, or 1.0 ft/100 ft) but still in the same direction (northwest).

The hydrograph (Figure 3) shows that groundwater elevations have remained fairly consistent with a maximum seasonal fluctuation of about one foot, except in the case of MW-3 which dropped over a foot in February, 1999.

Activities for Previous Year:

On May 20, September 24, December 9, 1998, and again on February 11, 1999. PNM performed quarterly sampling of groundwater monitoring wells at the Miles Federal 1E Drip site. PNM measured water levels and conducted groundwater sampling in each well 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.

On July 31, 1998, an additional monitor well (MW-5) was installed on the northwest-side of the drip location. This well was installed to provide better coverage and to better define the groundwater gradient. In our 1997 groundwater report, monitor well MW-4 was plotted incorrectly to the northeast of MW-3 giving the appearance that all of the wells were in a straight line. The site has been resurveyed incorporating MW-5 into the data. Figure 1 provides an accurate representation of the drip site.

On March 12, 1999, Additional soil remediation of approximately 1300 cubic yards of soil was remediated in the area of monitor well of MW-5. There appeared to be a small band of conminated soil approximately 1.5 to 2 feet thick north west of the existing pipe line. Of the soil removed, only 360 cubic yards showed any signs of contamination.

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

PNMGS Well Site: Miles Federal 1 E Drip (continued)

Results:

Figure 1 presents a site map showing BTEX concentrations for each monitoring well since groundwater contamination was discovered. MW-1, the upgradient well, has shown "non-detect" for BTEX since it was installed. Benzene concentrations in MW-2, -3 and -4 have decreased over time. The source well (MW-2) has been below standards for three consecutive quarters. Monitor well MW-5 appears to have increased in BTEX concentrations, thus the reason for recent secondary remediation. However, levels remain relatively low.

On September 25, 1998, PNM sampled MW-1 and MW-2 for water quality parameters to verify the previous water quality data from the September 9, 1997 sampling event. The comparative results are provided in table 1 and 2 below.

Table 1. Comparison of MW-1 Water Quality Data 9/29/97 & 9/25/98

Cations/Anions	6/25/97	9/25/98
Na	938	1100
Ca	48	50
Mg	10.9	12
K	2.68	2
Cl	17.4	11
SO4	1920	1900
CO3	<1	<10
HCO3	580	550
OH	<1	<i>not reported</i>
Total Cation-Anion	94.11 meq/L	101.42 meq/L
Difference Cation-Anion	5.83 meq/L	3.49 meq/L
%Difference	6.2	3.4
TDS	3355	3600
Hardness, total	164	176

Table 2. Comparison of MW-2 Water Quality Data 9/29/97 & 9/25/98

Cations/Anions	6/25/97	9/25/98
Na	644	1000
Ca	196	55
Mg	33.2	44
K	15.8	16
Cl	76.7	110
SO4	632	253
CO3	<1	<250
HCO3	1642	2400
OH	<1	<i>not reported</i>
Total Cation-Anion	83.16 meq/L	99.85 meq/L
Difference Cation-Anion	1.30 meq/L	4.26 meq/L
%Difference	1.6	4.3
TDS	2696	3900
Hardness, total	626	320

Water quality data from event to event in MW-1 is consistent indicating that the data collected to date is representative of site conditions. MW-2 shows some variability which may be the result of natural degradative processes occurring over time. Sulfates in MW-1 and TDS in both MW-1 and MW-2 are elevated (aesthetic standard: 600 mg/L sulfate; 1000 mg/L TDS). Since the standards are non-health based and not enforceable, no further sampling will be performed for these constituents.

Future Actions:

PNM will continue to monitor the Miles Federal 1E Drip site to determine if the additional remediation at the site was effective and whether or not natural attenuation is occurring.

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.
Miles Federal 1E Drip Site Map and Analytical Results
(Concentrations in ppb)

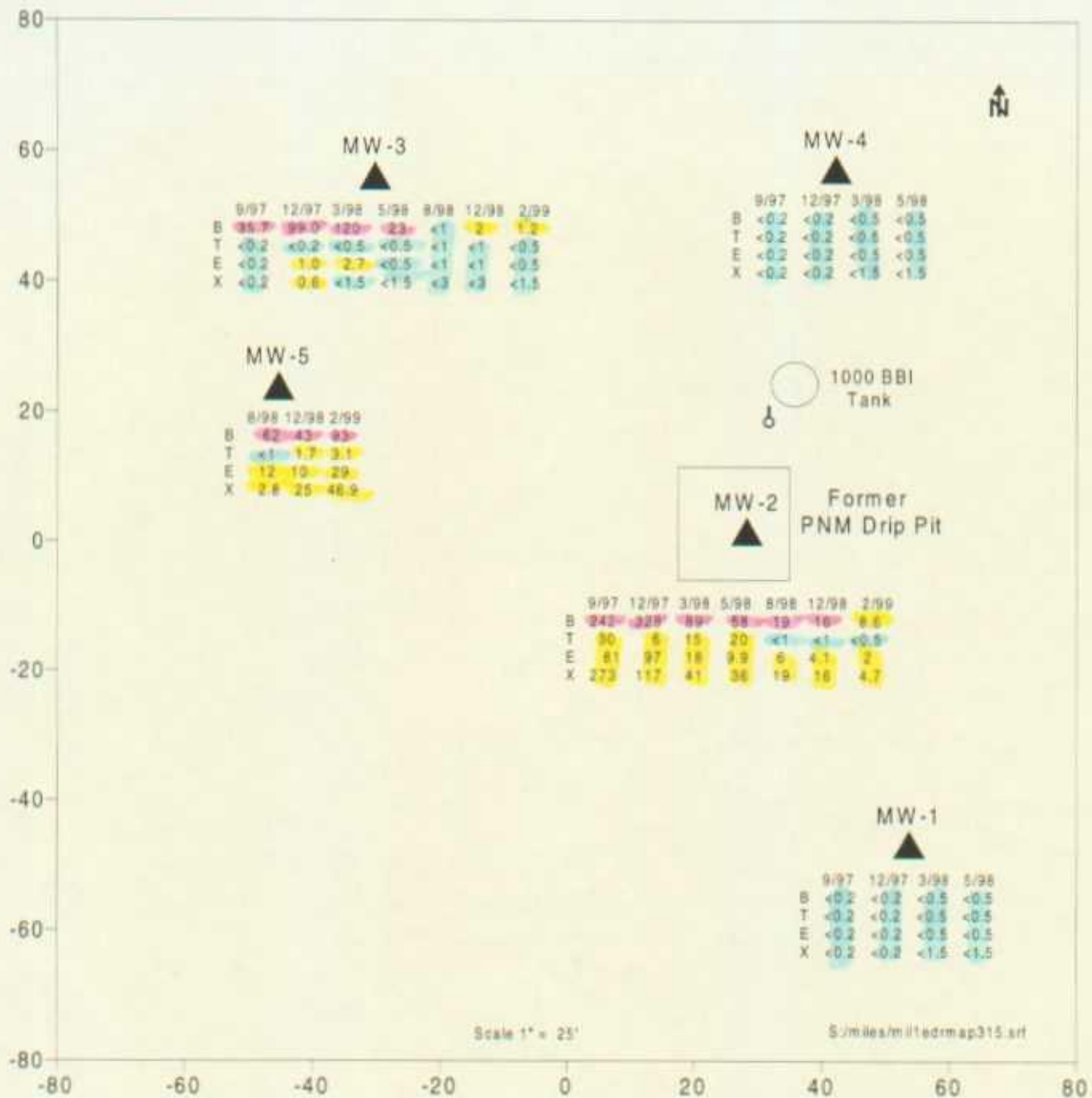
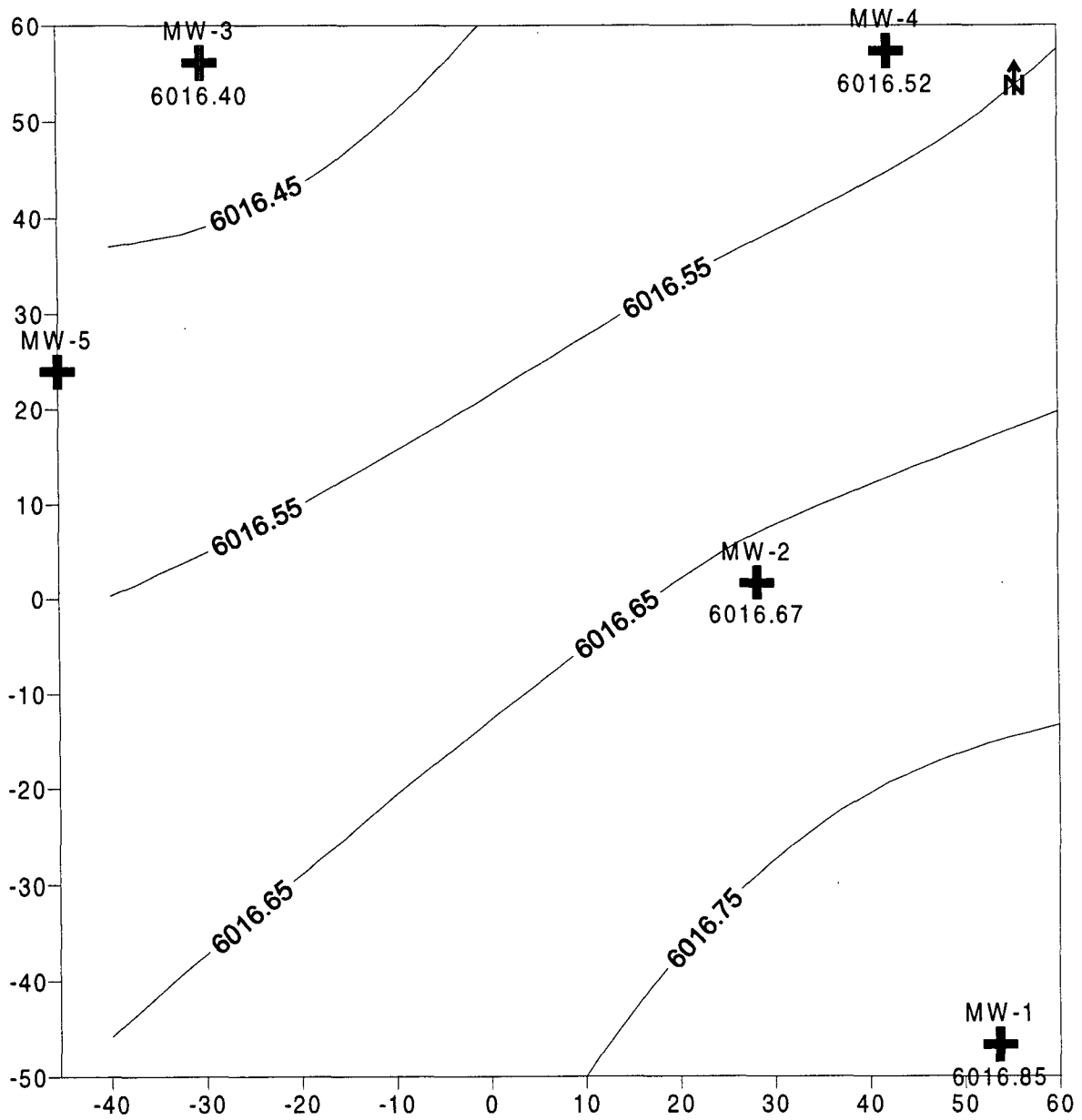


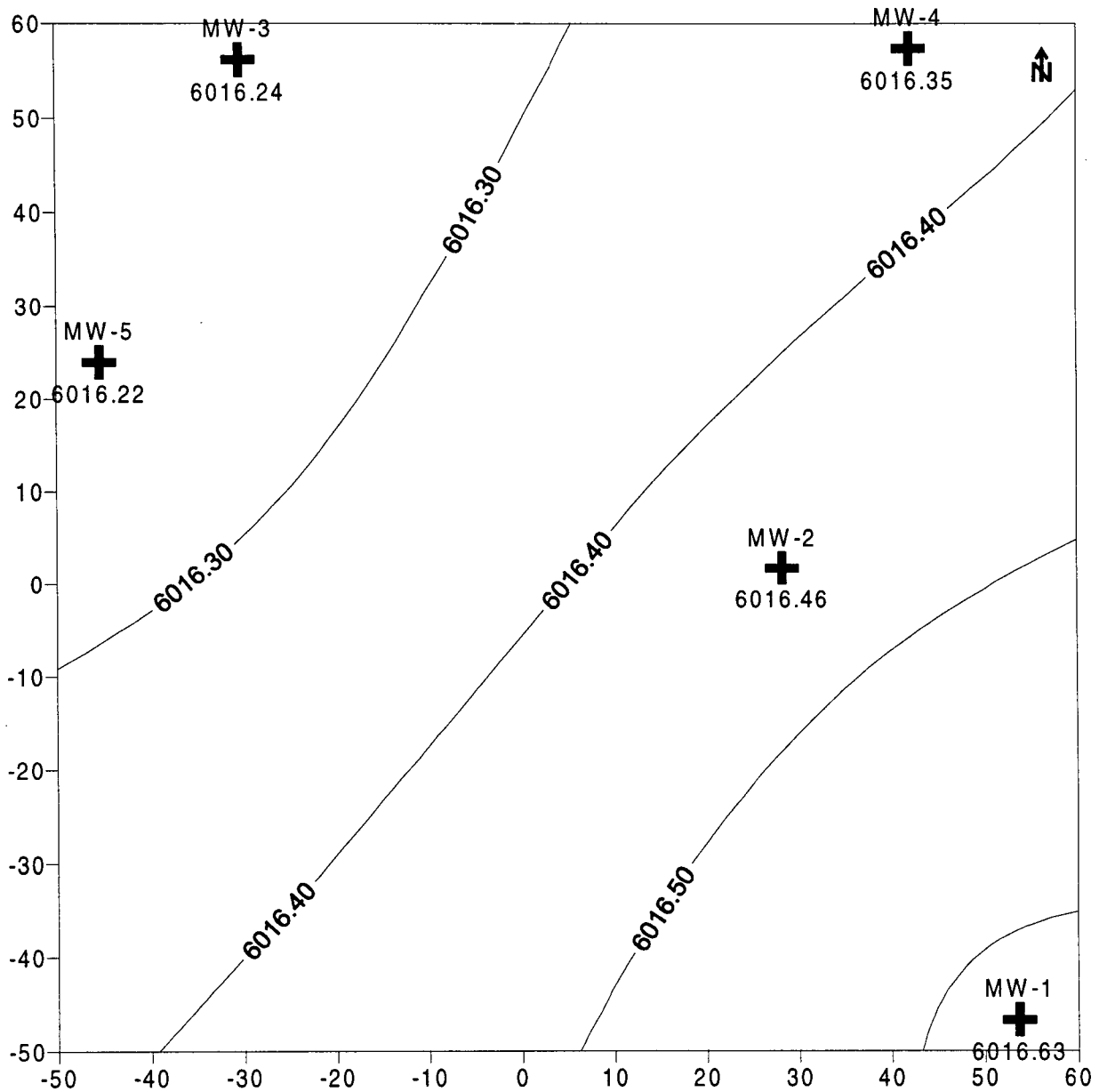
Figure 2a.
Miles Federal 1E Groundwater Contour Map
(May 20, 1998)



surfer/miles 1E drip/mil1ed52099.srf

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

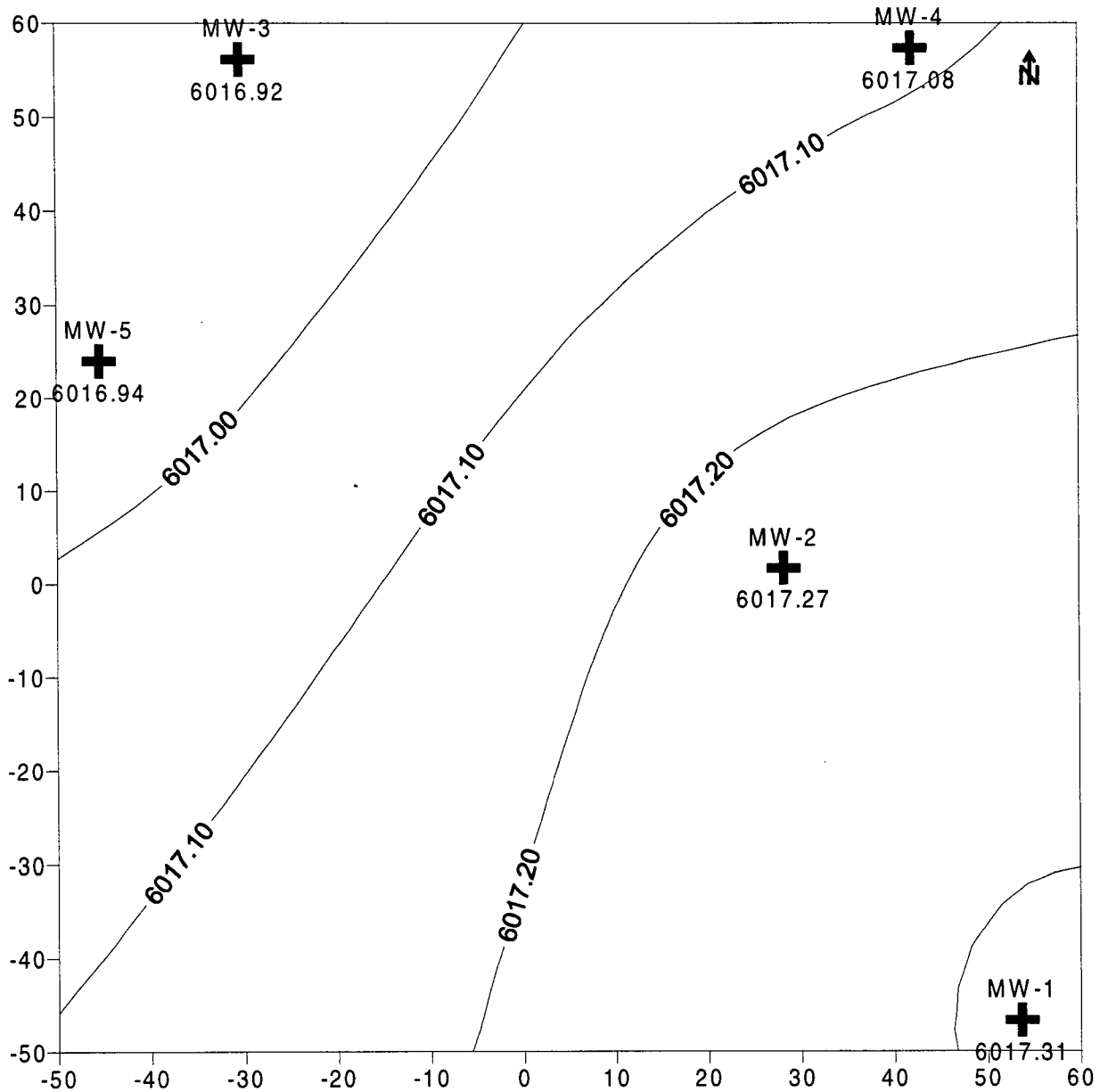
Figure 2b.
Miles Federal 1E Groundwater Contour Map
(September 24, 1998)



surfer/miles 1E drip/mil1ed92498.srf

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

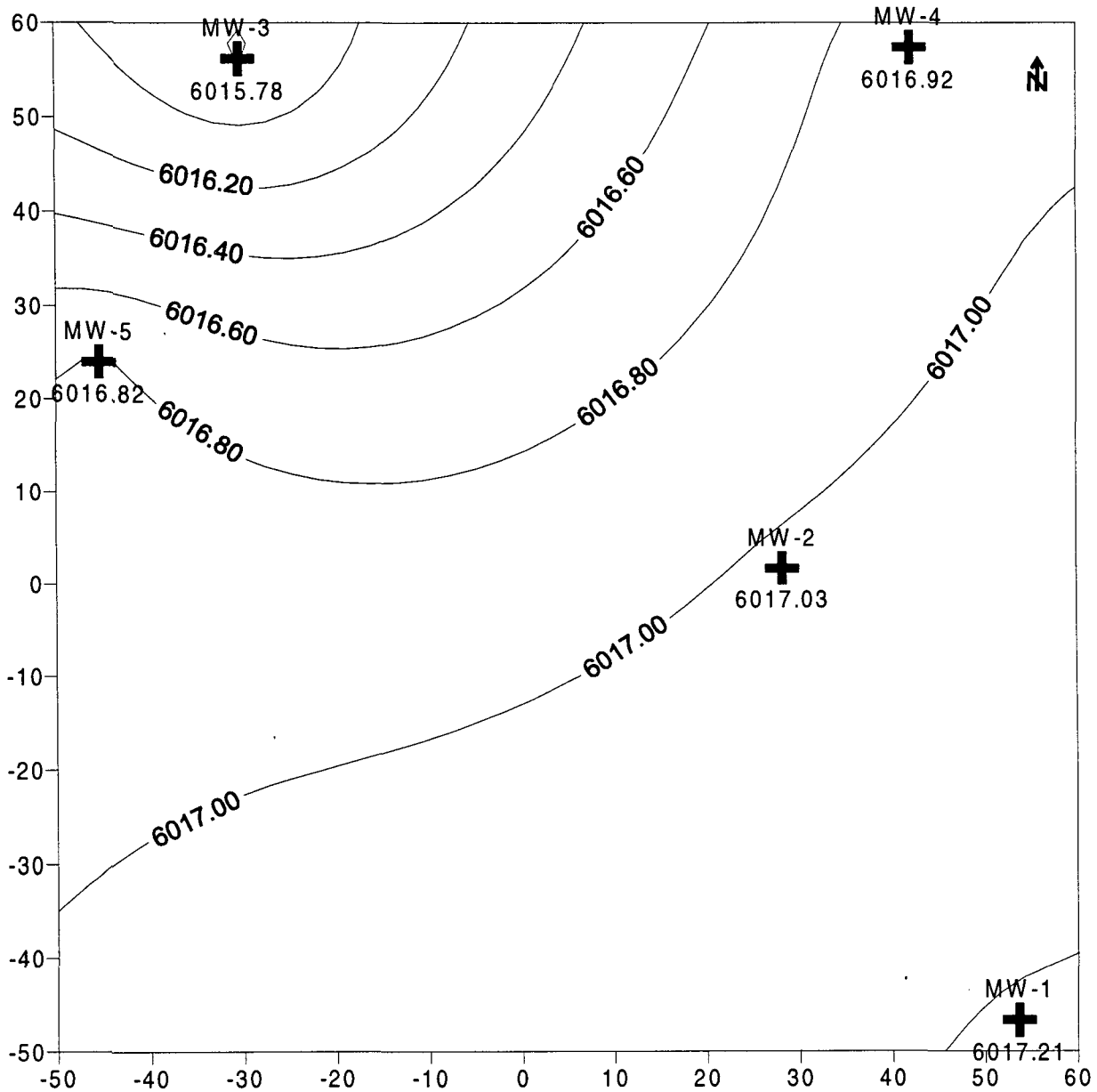
Figure 2c.
Miles Federal 1E Groundwater Contour Map
(December 14, 1998)



surfer/miles 1E drip/mil1ed121498.srf

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

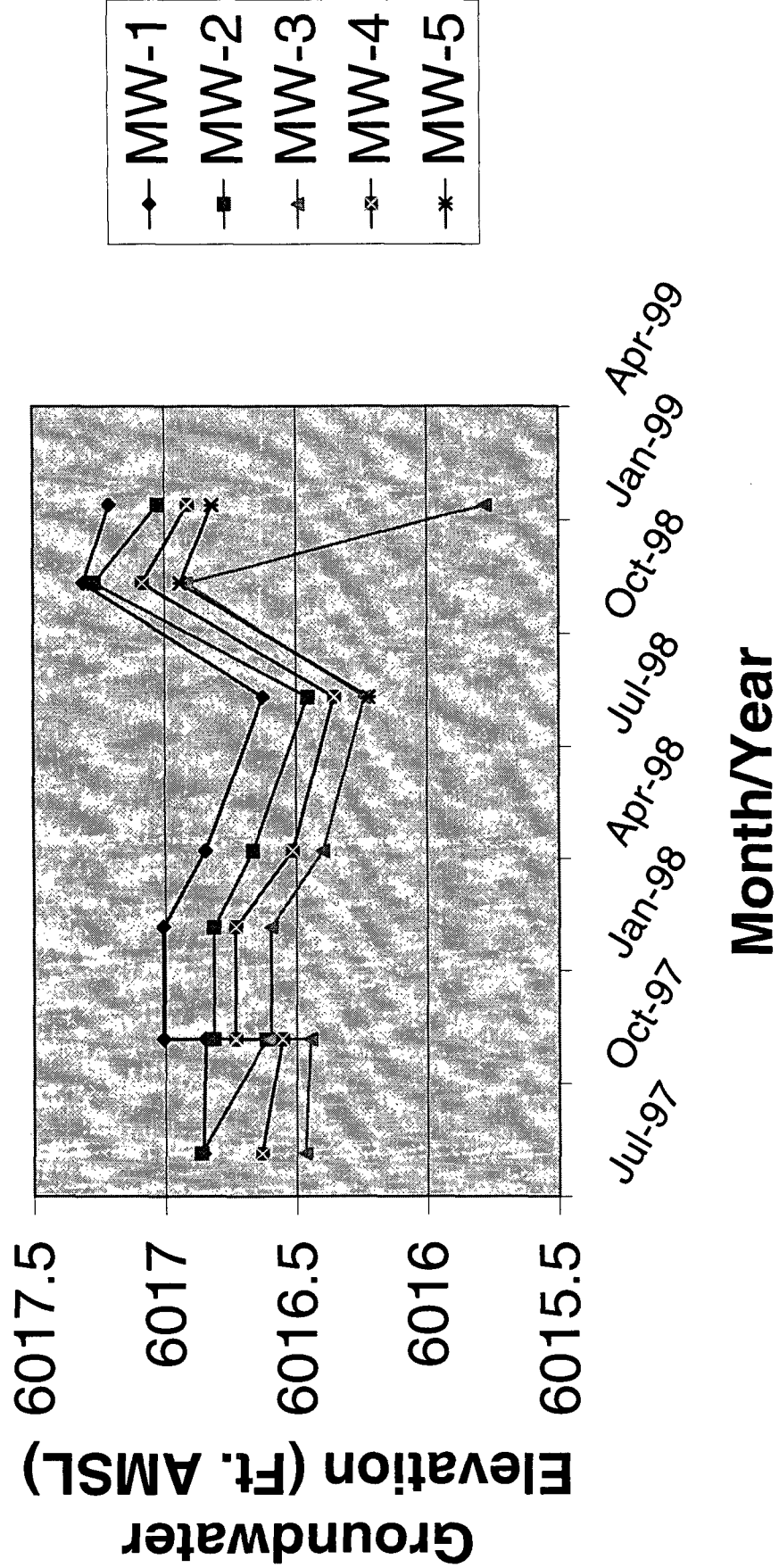
Figure 2d.
Miles Federal 1E Groundwater Contour Map
(February 11, 1999)



surfer/miles 1E drip/mil1ed21199.srf

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

Figure 3. Miles Federal 1E Drip Hydrograph



OFF: (505) 325-5667



LAB: (505) 325-1556

June 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: Miles Fed. 1E Drip

Order No.: 9805064

Dear Maureen Gannon,

On Site Technologies, LTD. received 5 samples on 5/20/98 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-Jun-98

CLIENT: PNM - Public Service Company of NM
Project: Miles Fed. 1E Drip
Lab Order: 9805064

CASE NARRATIVE

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

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

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Fed. 1E Drip
Work Order:	9805064	Client Sample ID:	9805201039; MW-1
Lab ID:	9805064-01A	Matrix:	AQUEOUS
Project:	Miles Fed. 1E Drip	Collection Date:	5/20/98 10:39:00 AM
		COC Record:	7256

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	0.5		µg/L	1	5/28/98
Toluene	ND	0.5		µg/L	1	5/28/98
Ethylbenzene	ND	0.5		µg/L	1	5/28/98
m,p-Xylene	ND	1		µg/L	1	5/28/98
o-Xylene	ND	0.5		µg/L	1	5/28/98

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jun-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Fed. 1E Drip
Work Order: 9805064	Client Sample ID: 9805201109; MW-2
Lab ID: 9805064-02A Matrix: AQUEOUS	Collection Date: 5/20/98 11:09:00 AM
Project: Miles Fed. 1E Drip	COC Record: 7256

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	58	0.5		µg/L	1	5/29/98
Toluene	20	0.5		µg/L	1	5/29/98
Ethylbenzene	9.9	0.5		µg/L	1	5/29/98
m,p-Xylene	34	1		µg/L	1	5/29/98
o-Xylene	2	0.5		µg/L	1	5/29/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Fed. 1E Drip
Work Order:	9805064	Client Sample ID:	9805201133; MW-3
Lab ID:	9805064-03A	Matrix:	AQUEOUS
Project:	Miles Fed. 1E Drip	Collection Date:	5/20/98 11:33:00 AM
		COC Record:	7256

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	23	0.5		µg/L	1	5/28/98
Toluene	ND	0.5		µg/L	1	5/28/98
Ethylbenzene	ND	0.5		µg/L	1	5/28/98
m,p-Xylene	ND	1		µg/L	1	5/28/98
o-Xylene	ND	0.5		µg/L	1	5/28/98

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Fed. 1E Drip
Work Order:	9805064	Client Sample ID:	9805201153; MW-4
Lab ID:	9805064-04A	Matrix:	AQUEOUS
Project:	Miles Fed. 1E Drip	Collection Date:	5/20/98 11:53:00 AM
		COC Record:	7256

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	ND	0.5		µg/L	1	5/28/98
Toluene	ND	0.5		µg/L	1	5/28/98
Ethylbenzene	ND	0.5		µg/L	1	5/28/98
m,p-Xylene	ND	1		µg/L	1	5/28/98
o-Xylene	ND	0.5		µg/L	1	5/28/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 01-Jun-98

Client: PNM - Public Service Company of NM
Work Order: 9805064
Lab ID: 9805064-05A **Matrix:** AQUEOUS
Project: Miles Fed. 1E Drip

Client Sample Info: Miles Fed. 1E Drip
Client Sample ID: 9805201215; MW-5
Collection Date: 5/20/98 12:15:00 PM
COC Record: 7256

MW-2
Duplicate

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	67	0.5		µg/L	1	5/28/98
Toluene	14	0.5		µg/L	1	5/28/98
Ethylbenzene	9.4	0.5		µg/L	1	5/28/98
m,p-Xylene	34	1		µg/L	1	5/28/98
o-Xylene	0.8	0.5		µg/L	1	5/28/98

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

On Site Technologies, LTD.

Date: 01-Jun-98

CLIENT: PNM - Public Service Company of NM

Work Order: 9805064

Project: Miles Fed. 1E Drip

QC SUMMARY REPORT

Method Blank

Sample ID: MB1	Batch ID: GC-1_980528	Test Code: SW8020A	Units: µg/L	Analysis Date: 5/28/98	Prep Date:						
Client ID:	9805064	Run ID: GC-1_980528A		SeqNo: 2503							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0626	0.5									J
Ethylbenzene	ND	0.5									J
m,p-Xylene	.1027	1									J
o-Xylene	ND	0.5									J
Toluene	.1758	0.5									J

Sample ID: MB1	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date: 5/29/98	Prep Date:						
Client ID:	9805064	Run ID: GC-1_980529A		SeqNo: 2517							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0801	0.5									J
Ethylbenzene	ND	0.5									J
m,p-Xylene	ND	1									J
Methyl tert-Butyl Ether	.0986	1									J
o-Xylene	ND	0.5									J
Toluene	.1744	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-Jun-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805064
 Project: Miles Fed. 1E Drip

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9805064-02AMS	Batch ID: GC-1_980528	Test Code: SW8020A	Units: µg/L	Analysis Date 5/28/98				Prep Date:
				SeqNo: 2504	LowLimit	HighLimit	RPD Ref Val	
Benzene	165.2	12	100	58.04	107.2%	56	128	
Ethylbenzene	119.5	12	100	11.2	108.3%	78	107	
m,p-Xylene	239.5	25	200	28.63	105.5%	67	118	
o-Xylene	109.9	12	100	0.8835	109.0%	78	107	
Toluene	122.2	12	100	14.79	107.4%	74	116	

SV CONFIRMED
LS
SV 6/1/98
8/2/98

Sample ID: 9805064-02AMSD	Batch ID: GC-1_980528	Test Code: SW8020A	Units: µg/L	Analysis Date 5/28/98				Prep Date:
				SeqNo: 2505	LowLimit	HighLimit	RPD Ref Val	
Benzene	161	12	100	58.04	103.0%	56	128	12
Ethylbenzene	117.7	12	100	11.2	106.5%	78	107	11
m,p-Xylene	235.8	25	200	28.63	103.6%	67	118	10
o-Xylene	109.6	12	100	0.8835	108.7%	78	107	14
Toluene	119	12	100	14.79	104.2%	74	116	14

Sample ID: 9805080-03AMS	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date 5/29/98				Prep Date:
				SeqNo: 2518	LowLimit	HighLimit	RPD Ref Val	
Benzene	1095	5	400	724.6	92.6%	56	128	
Ethylbenzene	478	5	400	82.45	98.9%	78	107	
m,p-Xylene	934.8	10	800	170.2	95.6%	67	118	
Methyl tert-Butyl Ether	930.9	10	400	563.8	91.8%	70	130	
o-Xylene	462.9	5	400	68.48	98.6%	78	107	
Toluene	1040	5	400	675.5	91.2%	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

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805004
 Project: Miles Fed. 1E Drip

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID: 9805080-03AMSD	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date 5/29/98	Prep Date:					
Client ID: 9805064	Run ID: GC-1_980529A	PQL	SPK value	SeqNo: 2520						
Analyte	Result	SPK	SPK Ref Val	LowLimit	HighLimit	RPD Ref Val	%REC	%RPD	RPDLimit	Qual
Benzene	1076	5	400	56	128	1095	87.8%	1.8%	12	
Ethylbenzene	468.9	5	400	78	107	478	96.6%	1.9%	11	
m,p-Xylene	918.3	10	800	67	118	934.8	93.5%	1.8%	10	
Methyl tert-Butyl Ether	940.8	10	400	70	130	930.9	94.2%	1.1%	15	
o-Xylene	456.6	5	400	78	107	462.9	97.0%	1.4%	14	
Toluene	1022	5	400	74	116	1040	86.5%	1.8%	14	

Sample ID: 9805080-04AMS	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date 5/29/98	Prep Date:					
Client ID: 9805064	Run ID: GC-1_980529A	PQL	SPK value	SeqNo: 2519						
Analyte	Result	SPK	SPK Ref Val	LowLimit	HighLimit	RPD Ref Val	%REC	%RPD	RPDLimit	Qual
Benzene	419.7	5	400	56	128		104.5%			
Ethylbenzene	420.2	5	400	78	107		104.7%			
m,p-Xylene	806.4	10	800	67	118		100.5%			
Methyl tert-Butyl Ether	419.7	10	400	70	130		104.7%			
o-Xylene	417.4	5	400	78	107		104.1%			
Toluene	417.8	5	400	74	116		103.6%			

Sample ID: 9805080-04AMSD	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date 5/29/98	Prep Date:					
Client ID: 9805064	Run ID: GC-1_980529A	PQL	SPK value	SeqNo: 2521						
Analyte	Result	SPK	SPK Ref Val	LowLimit	HighLimit	RPD Ref Val	%REC	%RPD	RPDLimit	Qual
Benzene	404	5	400	56	128	419.7	100.5%	3.8%	12	
Ethylbenzene	405.4	5	400	78	107	420.2	101.0%	3.6%	11	
m,p-Xylene	778.3	10	800	67	118	806.4	96.9%	3.5%	10	
Methyl tert-Butyl Ether	408	10	400	70	130	419.7	101.7%	2.8%	15	
o-Xylene	404.9	5	400	78	107	417.4	101.0%	3.1%	14	
Toluene	403.2	5	400	74	116	417.8	99.9%	3.6%	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.

Date: 01-Jun-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9805064
Project: Miles Fed. 1E Drip

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID: LCS	Batch ID: GC-1_980528	Test Code: SW8020A	Units: µg/L	Analysis Date 5/28/98	Prep Date:						
Client ID:	9805064	Run ID: GC-1_980528A		SeqNo: 2502							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	43.02	0.5	40	0.0626	107.4%	56	128				
Ethylbenzene	43.08	0.5	40	0	107.7%	78	107				
m,p-Xylene	82.61	1	80	0.1027	103.1%	67	118				
o-Xylene	42.73	0.5	40	0	106.8%	78	107				
Toluene	42.63	0.5	40	0.1758	106.1%	74	116				

S/L...
 6/1/98

Sample ID: LCS	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date 5/29/98	Prep Date:						
Client ID:	9805064	Run ID: GC-1_980529A		SeqNo: 2516							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.38	0.5	40	0.0801	100.8%	56	128				
Ethylbenzene	40.56	0.5	40	0	101.4%	78	107				
m,p-Xylene	77.94	1	80	0	97.4%	67	118				
Methyl tert-Butyl Ether	40.57	1	40	0.0986	101.2%	70	130				
o-Xylene	40.38	0.5	40	0	100.9%	78	107				
Toluene	40.28	0.5	40	0.1744	100.3%	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: 01-Jun-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9805064
 Project: Miles Fed. 1E Drip

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	Analysis Date 5/28/98		Prep Date:
												SeqNo: 2499	SeqNo:	
Benzene	21.8	0.5	20	0	109.0%	85	115							
Ethylbenzene	21.96	0.5	20	0	109.8%	85	115							
m,p-Xylene	41.88	1	40	0	104.7%	85	115							
o-Xylene	21.65	0.5	20	0	108.2%	85	115							
Toluene	21.72	0.5	20	0	108.6%	85	115							
1,4-Difluorobenzene	91.91	0	100	0	91.9%	70	130							
4-Bromochlorobenzene	88.8	0	100	0	88.8%	70	130							
Fluorobenzene	91.37	0	100	0	91.4%	70	130							

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	Analysis Date 5/28/98		Prep Date:
												SeqNo: 2500	SeqNo:	
Benzene	20.8	0.5	20	0	104.0%	85	115							
Ethylbenzene	21.06	0.5	20	0	105.3%	85	115							
m,p-Xylene	40.16	1	40	0	100.4%	85	115							
o-Xylene	20.86	0.5	20	0	104.3%	85	115							
Toluene	20.88	0.5	20	0	104.4%	85	115							
1,4-Difluorobenzene	92.07	0	100	0	92.1%	70	130							
4-Bromochlorobenzene	85.01	0	100	0	85.0%	70	130							
Fluorobenzene	90.86	0	100	0	90.9%	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
 1 of 3

CLIENT: PNM - Public Service Company of NM
Work Order: 9805064
Project: Miles Fed. 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: **CCV3 QC0529/30** Batch ID: **GC-1_980528** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **5/29/98** Prep Date:

Client ID: **9805064** Run ID: **GC-1_980528A** SeqNo: **2501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.97	0.5	20	0	104.8%	85	115				
Ethylbenzene	21.12	0.5	20	0	105.6%	85	115				
m,p-Xylene	40.36	1	40	0	100.9%	85	115				
o-Xylene	21.39	0.5	20	0	107.0%	85	115				
Toluene	21.22	0.5	20	0	106.1%	85	115				
1,4-Difluorobenzene	91.69	0	100	0	91.7%	70	130				
4-Bromochlorobenzene	73.95	0	100	0	74.0%	70	130				
Fluorobenzene	90.82	0	100	0	90.8%	70	130				

Sample ID: **CCV1 QC0529/30** Batch ID: **GC-1_980529** Test Code: **SW8020A** Units: **µg/L** Analysis Date: **5/29/98** Prep Date:

Client ID: **9805064** Run ID: **GC-1_980529A** SeqNo: **2513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.41	0.5	20	0	107.1%	85	115				
Ethylbenzene	21.63	0.5	20	0	108.2%	85	115				
m,p-Xylene	41.3	1	40	0	103.2%	85	115				
Methyl tert-Butyl Ether	20.78	1	20	0	103.9%	85	115				
o-Xylene	21.38	0.5	20	0	106.9%	85	115				
Toluene	21.53	0.5	20	0	107.6%	85	115				
1,4-Difluorobenzene	92.28	0	100	0	92.3%	70	130				
4-Bromochlorobenzene	87.76	0	100	0	87.8%	70	130				
Fluorobenzene	90.91	0	100	0	90.9%	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: 9805064
 Project: Miles Fed. 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV2 QC0529/30	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date: 5/29/98	Prep Date:						
Client ID: 9805064	Run ID: GC-1_980529A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.16	0.5	20	0	105.8%	85	115				
Ethylbenzene	21.83	0.5	20	0	109.2%	85	115				
m,p-Xylene	41.03	1	40	0	102.6%	85	115				
Methyl tert-Butyl Ether	21.78	1	20	0	108.9%	85	115				
o-Xylene	21.14	0.5	20	0	105.7%	85	115				
Toluene	21.21	0.5	20	0	106.1%	85	115				
1,4-Difluorobenzene	92.21	0	100	0	92.2%	70	130				
4-Bromochlorobenzene	90.07	0	100	0	90.1%	70	130				
Fluorobenzene	90.85	0	100	0	90.8%	70	130				

Sample ID: CCV3 QC0529/30	Batch ID: GC-1_980529	Test Code: SW8020A	Units: µg/L	Analysis Date: 5/29/98	Prep Date:						
Client ID: 9805064	Run ID: GC-1_980529A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.79	0.5	20	0	109.0%	85	115				
Ethylbenzene	22.39	0.5	20	0	111.9%	85	115				
m,p-Xylene	42.22	1	40	0	105.6%	85	115				
Methyl tert-Butyl Ether	21.28	1	20	0	106.4%	85	115				
o-Xylene	21.67	0.5	20	0	108.4%	85	115				
Toluene	21.79	0.5	20	0	108.9%	85	115				
1,4-Difluorobenzene	91.64	0	100	0	91.6%	70	130				
4-Bromochlorobenzene	88.47	0	100	0	88.5%	70	130				
Fluorobenzene	91.11	0	100	0	91.1%	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: 9805064
 Project: Miles Fed. 1E Drip
 Test No: SW8020A

**QC SUMMARY REPORT
 SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9805062-05A	91.9	89.6	90.9
9805062-10A	91.6	89.4	91.1
9805063-01A	93.2	88.1	92
9805063-02A	88.4	87.6	87.9
9805063-03A	92.5	89	91.7
9805063-04A	93.2	88.4	91.7
9805063-05A	93.1	88.6	91.6
9805063-06A	88.5	86.3	87.9
9805064-01A	92.5	87.2	91.4
9805064-02A	80.6	85.1	80.4
9805064-02AMS	89.5	84.6	89.3
9805064-02AMSD	90	83.8	89.2
9805064-03A	92.8	84.4	91.2
9805064-04A	92.3	80.9	91.2
9805064-05A	83.9	78.7	83.9
9805065-01A	92.5	90.2	91.8
9805065-02A	90.4	80.9	88.7
9805065-03A	92.7	89.1	91
9805065-04A	92	75.8	90.8
9805065-05A	91.6	75.7	90.4
9805080-03A	91.7	88.1	90.2
9805080-03AMS	90.7	89.2	89.9
9805080-03AMSD	91.1	89.8	89.8
9805080-04A	92.2	87.8	91
9805080-04AMS	91.5	89.8	90.9
9805080-04AMSD	91.7	88.6	90.6
CCV1 QC0529/30	92.3	87.8	90.9

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

* Surrogate recovery outside acceptance limits

CLIENT: PNM - Public Service Company of NM
Work Order: 9805064
Project: Miles Fed. 1E Drip
Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
CCV2 QC0529/30	92.2	90.1	90.8
CCV3 QC0529/30	91.6	88.5	91.1
LCS	91.7	89.6	91
MB1	93.3	84.2	91.5

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

* Surrogate recovery outside acceptance limits

CLIENT: PNM - Public Service Company of NM
Work Order: 9805064
Project: Miles Fed. 1E Drip
Test No: SW8020A

**QC SUMMARY REPORT
 SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9805062-05A	91.9	89.6	90.9
9805062-10A	91.6	89.4	91.1
9805063-01A	93.2	88.1	92
9805063-02A	88.4	87.6	87.9
9805063-03A	92.5	89	91.7
9805063-04A	93.2	88.4	91.7
9805063-05A	93.1	88.6	91.6
9805063-06A	88.5	86.3	87.9
9805064-01A	92.5	87.2	91.4
9805064-02A	80.6	85.1	80.4
9805064-02AMS	89.5	84.6	89.3
9805064-02AMSD	90	83.8	89.2
9805064-03A	92.8	84.4	91.2
9805064-04A	92.3	80.9	91.2
9805064-05A	83.9	78.7	83.9
9805065-01A	92.5	90.2	91.8
9805065-02A	90.4	80.9	88.7
9805065-03A	92.7	89.1	91
9805065-04A	92	75.8	90.8
9805065-05A	91.6	75.7	90.4
9805080-03A	91.7	88.1	90.2
9805080-03AMS	90.7	89.2	89.9
9805080-03AMSD	91.1	89.8	89.8
9805080-04A	92.2	87.8	91
9805080-04AMS	91.5	89.8	90.9
9805080-04AMSD	91.7	88.6	90.6
CCVI QC0529/30	92.3	87.8	90.9

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

* Surrogate recovery outside acceptance limits

CLIENT: PNM - Public Service Company of NM
Work Order: 9805064
Project: Miles Fed. 1E Drip
Test No: SW8020A

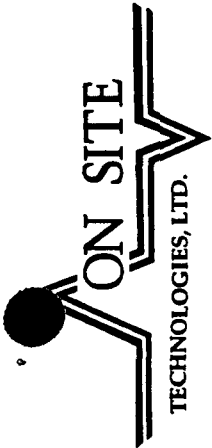
QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
CCV2 QC0529/30	92.2	90.1	90.8
CCV3 QC0529/30	91.6	88.5	91.1
LCS	91.7	89.6	91
MB1	93.3	84.2	91.5

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: 5/20/98 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.:	

Purchase Order No.	Job No.	REPORT TO RESULTS TO		Number of Containers	ANALYSIS REQUESTED	LAB ID
		DATE	TIME			
		5/20/98	1037	2		9805201037
		5/20/98	1109	2		9805201109
		5/20/98	1133	2		9805201133
		5/20/98	1153	2		9805201153
		5/20/98	1215	2		9805201215

Sampling Location: Miles Fed. LE Drip

Sampler: K. Dedrick

SAMPLE IDENTIFICATION	SAMPLE		MATRIX	PRES.
	DATE	TIME		
9805201037 MW-1	5/20/98	1037	H ₂ O	HL
9805201109 MW-2 Hot	5/20/98	1109	H ₂ O	Ice
9805201133 MW-3	5/20/98	1133	H ₂ O	HL
9805201153 MW-4	5/20/98	1153	H ₂ O	HL
9805201215 MW-5 Hot	5/20/98	1215	H ₂ O	Ice

Relinquished by: Renee A. Debeak Date: 5/20/98 1606 Received by: Maureen Gannon Date/Time: 5/20/98 1606

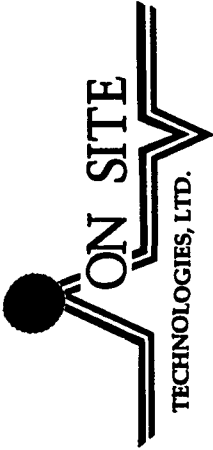
Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Method of Shipment: _____ Rush: _____ 24-48 Hours: _____ 10 Working Days: _____ Special Instructions: _____

Authorized by: Renee A. Debeak Date: 5/20/98
(Client Signature Must Accompany Request)

Results to be sent to both parties.



CHAIN OF CUSTODY RECORD

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

Date: 5/10/98

Purchase Order No.:		Job No.		Name: Maureen Gannon Title: 		
Name: Denver Bearden		Company: PNM Gas Services		Company: PNM Gas Services		
Company: PNM Gas Services		Dept.: 324-3763		Mailing Address: Alverado Square, Mail Stop 0408		
Address: 603 W. Elm Street		City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158		
City, State, Zip: Farmington, NM 87401		Telephone No.: 		Telephone No.: 505-848-2974		
Sampling Location: Miles Fed 1E Drip		ANALYSIS REQUESTED				
Sampler: R. Dadrick		RESULTS TO		REPORT Containers		
		Number of				
INVOICE TO SEND	SAMPLE IDENTIFICATION	SAMPLE		MATRIX	PRES.	LAB ID
		DATE	TIME			
7803201139	UO 1	7/98	11:57	H2O	60	
9803201137	UO 2	7/98	11:57	H2O	60	
9803201133	UO 3	7/98	11:58	H2O	60	
9803201133	UO 4	7/98	11:58	H2O	60	
9803201215	UO 5	7/98	11:59	H2O	60	
Relinquished by: 	Date/Time: 7/10/98 11:56	Received by: Maureen Gannon		Date/Time: 	Date/Time: 	
Relinquished by: 	Date/Time: 	Received by: 		Date/Time: 	Date/Time: 	
Relinquished by: 	Date/Time: 	Received by: 		Date/Time: 	Date/Time: 	
Method of Shipment:		24-48 Hours	10 Working Days	Special Instructions:		
Authorized by: Russell Dadrick	Date: 5/10/98	Rush			Results to be sent to both parties.	

OFF: (505) 325-5667



LAB: (505) 325-1556

October 19, 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 1998

RE: Miles Federal 1E Drip

Order No.: 9809074

Dear Maureen Gannon,

On Site Technologies, LTD. received 5 samples on 9/25/98 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Alkalinity, Total (M2320 B)
- BTEX (SW8020A)
- Calcium by AA (SW7140)
- Chloride (M4500-Cl C.)
- Conductivity (E120.1)
- Hardness, Total (E130.1)
- Lead, Dissolved (SW6010A)
- Magnesium by AA (SW7450)
- pH (E150.1)
- Potassium by AA (SW7610)
- Sodium by AA (SW7770)
- Sulfate (M4500-SO4 D)
- Total Dissolved Solids (M2540 C.)

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

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

Sincerely,

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

David Cox

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 19-Oct-98

CLIENT: PNM - Public Service Company of NM
Project: Miles Federal 1E Drip
Lab Order: 9809074

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.

Standard Methods for The Examination of Water and Wastewater, 18th Edition.

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

Cation-Anion Balance 9809074-01A: Miles Federal 1E Drip, MW-1

Total Cation-Anion = 101.42 me/L
Difference Cation-Anion = 3.49 me/L
% Difference = 3.4%

Cation-Anion Balance 9809074-02A: Miles Federal 1E Drip, MW-2

Total Cation-Anion = 99.85 me/L
Difference Cation-Anion = 4.26 me/L
% Difference = 4.3%



ANALYTICAL REPORT

Date: 19-Oct-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9809074	Client Sample ID: 9809241400; MW-1
Lab ID: 9809074-01B Matrix: AQUEOUS	Collection Date: 9/24/98 2:00:00 PM
Project: Miles Federal 1E Drip	COC Record: 7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM BY AA		SW7140				Analyst: HR
Calcium	50	6.2		mg/L	25	10/2/98
POTASSIUM BY AA		SW7610				Analyst: HR
Potassium	2	0.25		mg/L	1	10/2/98
MAGNESIUM BY AA		SW7450				Analyst: HR
Magnesium	12	1.2		mg/L	5	10/2/98
SODIUM BY AA		SW7770				Analyst: HR
Sodium	1100	100		mg/L	400	10/2/98
ALKALINITY, TOTAL		M2320 B				Analyst: HR
Alkalinity, Bicarbonate (As CaCO3)	550	10		mg/L CaCO3	1	9/29/98
Alkalinity, Carbonate (As CaCO3)	ND	10		mg/L CaCO3	1	9/29/98
Alkalinity, Total (As CaCO3)	550	10		mg/L CaCO3	1	9/29/98
CHLORIDE		M4500-CL C.				Analyst: HR
Chloride	11	10		mg/L	1	9/29/98
CONDUCTIVITY		E120.1				Analyst: HR
Specific Conductance	4350	2		uS/cm	1	9/28/98
HARDNESS, TOTAL		E130.1				Analyst: HR
Hardness (As CaCO3)	176	1		mg/L	1	10/2/98
PH		E150.1				Analyst: HR
pH	7.74	2		pH units	1	9/28/98
SULFATE		M4500-SO4 D				Analyst: HR
Sulfate	1900	25		mg/L	1	10/2/98
TOTAL DISSOLVED SOLIDS		M2540 C.				Analyst: HR
Total Dissolved Solids (Residue, Filterable)	3600	40		mg/L	1	10/2/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 19-Oct-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9809074	Client Sample ID: 9809241430; MW-2
Lab ID: 9809074-02A Matrix: AQUEOUS	Collection Date: 9/24/98 2:30:00 PM
Project: Miles Federal 1E Drip	COC Record: 7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	19	1		µg/L	1	10/5/98
Toluene	ND	1		µg/L	1	10/5/98
Ethylbenzene	6	1		µg/L	1	10/5/98
m,p-Xylene	19	2		µg/L	1	10/5/98
o-Xylene	ND	1		µg/L	1	10/5/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -



ANALYTICAL REPORT

Date: 19-Oct-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9809074	Client Sample ID: 9809241430; MW-2
Lab ID: 9809074-02B Matrix: AQUEOUS	Collection Date: 9/24/98 2:30:00 PM
Project: Miles Federal 1E Drip	COC Record: 7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CALCIUM BY AA						Analyst: HR
Calcium	55	25		mg/L	50	10/2/98
POTASSIUM BY AA						Analyst: HR
Potassium	16	1.2		mg/L	5	10/2/98
MAGNESIUM BY AA						Analyst: HR
Magnesium	44	5		mg/L	20	10/2/98
SODIUM BY AA						Analyst: HR
Sodium	1000	100		mg/L	400	10/2/98
ALKALINITY, TOTAL						Analyst: HR
Alkalinity, Bicarbonate (As CaCO3)	2400	25		mg/L CaCO3	1	9/29/98
Alkalinity, Carbonate (As CaCO3)	ND	25		mg/L CaCO3	1	9/29/98
Alkalinity, Total (As CaCO3)	2400	25		mg/L CaCO3	1	9/29/98
CHLORIDE						Analyst: HR
Chloride	110	10		mg/L	1	9/29/98
CONDUCTIVITY						Analyst: HR
Specific Conductance	4230	2		uS/cm	1	9/28/98
HARDNESS, TOTAL						Analyst: HR
Hardness (As CaCO3)	320	1		mg/L	1	10/2/98
PH						Analyst: HR
pH	7.11	2		pH units	1	9/28/98
SULFATE						Analyst: HR
Sulfate	253	5		mg/L	1	10/2/98
TOTAL DISSOLVED SOLIDS						Analyst: HR
Total Dissolved Solids (Residue, Filterable)	3900	40		mg/L	1	10/2/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 19-Oct-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Federal 1E Drip
Work Order:	9809074	Client Sample ID:	9809241500; MW-3
Lab ID:	9809074-03A	Matrix:	AQUEOUS
Project:	Miles Federal 1E Drip	Collection Date:	9/24/98 3:00:00 PM
		COC Record:	7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	ND	1		µg/L	1	10/5/98
Toluene	ND	1		µg/L	1	10/5/98
Ethylbenzene	ND	1		µg/L	1	10/5/98
m,p-Xylene	ND	2		µg/L	1	10/5/98
o-Xylene	ND	1		µg/L	1	10/5/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 19-Oct-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9809074	Client Sample ID: 9809241530; MW-5
Lab ID: 9809074-04A Matrix: AQUEOUS	Collection Date: 9/24/98 3:30:00 PM
Project: Miles Federal 1E Drip	COC Record: 7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	62	1		µg/L	1	10/5/98
Toluene	ND	1		µg/L	1	10/5/98
Ethylbenzene	12	1		µg/L	1	10/5/98
m,p-Xylene	2.8	2		µg/L	1	10/5/98
o-Xylene	ND	1		µg/L	1	10/5/98

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 BLENDING INDUSTRY WITH THE ENVIRONMENT -



ANALYTICAL REPORT

Date: 19-Oct-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9809074	Client Sample ID: 9809241600; MW-6
Lab ID: 9809074-05A Matrix: AQUEOUS	Collection Date: 9/24/98 4:00:00 PM
Project: Miles Federal 1E Drip	COC Record: 7295

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: DC
Benzene	19	1		µg/L	1	10/5/98
Toluene	ND	1		µg/L	1	10/5/98
Ethylbenzene	6	1		µg/L	1	10/5/98
m,p-Xylene	20	2		µg/L	1	10/5/98
o-Xylene	ND	1		µg/L	1	10/5/98

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

On Site Technologies, LTD.

Date: 19-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Method Blank

Sample ID: MB1	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID:	9809074	Run ID: GC-1_981005A		SeqNo: 7318							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.045	1									J
Ethylbenzene	ND	1									
m,p-Xylene	ND	2									
Methyl tert-Butyl Ether	ND	1									
o-Xylene	ND	1									
Toluene	.0848	1									J

Sample ID: MB1	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/10/98	Prep Date:						
Client ID:	9809074	Run ID: GC-1_981010A		SeqNo: 7552							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0539	1									J
Ethylbenzene	ND	1									
m,p-Xylene	.1836	2									J
o-Xylene	.0811	1									J
Toluene	.1533	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: 19-Oct-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9809074
 Project: Miles Federal IE Drip

QC SUMMARY REPORT
 Sample Matrix Spike

Sample ID: 9809063-06AMS	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:				
Client ID: 9809074	Run ID: GC-1_981005A	PQL	SPK value	SeqNo: 7319					
Analyte	Result	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1445	10	400	1007	56	128	109.5%		
Ethylbenzene	1268	10	400	812.1	78	107	114.0%		
m,p-Xylene	983.7	20	800	150.6	67	118	104.1%		
Methyl tert-Butyl Ether	415.3	10	400	86.91	70	130	82.1%		
o-Xylene	490.4	10	400	97.51	78	107	98.2%		
Toluene	509	10	400	90.15	74	116	104.7%		

S ✓

Sample ID: 9809063-06AMSD	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:				
Client ID: 9809074	Run ID: GC-1_981005A	PQL	SPK value	SeqNo: 7320					
Analyte	Result	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1360	10	400	1007	56	128	88.1%		12
Ethylbenzene	1168	10	400	812.1	78	107	88.9%		11
m,p-Xylene	898	20	800	150.6	67	118	93.4%		10
Methyl tert-Butyl Ether	403.8	10	400	86.91	70	130	79.2%		15
o-Xylene	463.9	10	400	97.51	78	107	91.6%		14
Toluene	473.3	10	400	90.15	74	116	95.8%		14

Sample ID: 9809078-01AMS	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/10/98	Prep Date:				
Client ID: 9809074	Run ID: GC-1_981010A	PQL	SPK value	SeqNo: 7553					
Analyte	Result	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	384.3	10	400	5.268	56	128	94.8%		
Ethylbenzene	413.4	10	400	1.482	78	107	103.0%		
m,p-Xylene	880.2	20	800	120.6	67	118	95.0%		
o-Xylene	388	10	400	5.668	78	107	95.6%		
Toluene	402.1	10	400	7.565	74	116	98.6%		

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

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

CLIENT: PNM - Public Service Company of NM
 Work Order: 9809074
 Project: Miles Federal 1E Drip

Sample ID: 9809078-01AMSD	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/10/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981010A	SeqNo: 7555									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	380.5	10	400	5.268	93.8%	56	128	384.3	1.0%	12	
Ethylbenzene	398.8	10	400	1.482	99.3%	78	107	413.4	3.6%	11	
m,p-Xylene	871	20	800	120.6	93.8%	67	118	880.2	1.0%	10	
o-Xylene	395.5	10	400	5.668	97.5%	78	107	388	1.9%	14	
Toluene	400.5	10	400	7.565	98.2%	74	116	402.1	0.4%	14	

Sample ID: 9809082-01AMS	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/12/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981010A	SeqNo: 7554									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	401.4	10	400	10.74	97.7%	56	128				
Ethylbenzene	1024	10	400	610	103.4%	78	107				
m,p-Xylene	1163	20	800	389.7	96.7%	67	118				
o-Xylene	531.8	10	400	128.1	100.9%	78	107				
Toluene	1033	10	400	628.1	101.1%	74	116				

Sample ID: 9809082-01AMSD	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/12/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981010A	SeqNo: 7556									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	398.5	10	400	10.74	97.0%	56	128	401.4	0.7%	12	
Ethylbenzene	1017	10	400	610	101.7%	78	107	1024	0.7%	11	
m,p-Xylene	1158	20	800	389.7	96.0%	67	118	1163	0.4%	10	
o-Xylene	531.7	10	400	128.1	100.9%	78	107	531.8	0.0%	14	
Toluene	1028	10	400	628.1	99.9%	74	116	1033	0.5%	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: 19-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID: LCS WATER	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID:	9809074	Run ID: GC-1_981005A		SeqNo: 7317							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.27	1	40	0.045	100.6%	56	128				
Ethylbenzene	41.28	1	40	0	103.2%	78	107				
m,p-Xylene	81.47	2	80	0	101.8%	67	118				
Methyl tert-Butyl Ether	36.37	1	40	0	90.9%	70	130				
o-Xylene	40.64	1	40	0	101.6%	78	107				
Toluene	40.08	1	40	0.0848	100.0%	74	116				

Sample ID: LCS WATER	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/10/98	Prep Date:						
Client ID:	9809074	Run ID: GC-1_981010A		SeqNo: 7551							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.35	1	40	0.0539	95.7%	56	128				
Ethylbenzene	38.82	1	40	0	97.0%	78	107				
m,p-Xylene	76.82	2	80	0.1836	95.8%	67	118				
o-Xylene	39.36	1	40	0.0811	98.2%	78	107				
Toluene	38.71	1	40	0.1533	96.4%	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: 19-Oct-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV1 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A			SeqNo: 7310							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.59	1	20	0	103.0%	85	115				
Ethylbenzene	21.17	1	20	0	105.9%	85	115				
m,p-Xylene	41.4	2	40	0	103.5%	85	115				
Methyl tert-Butyl Ether	19.69	1	20	0	98.4%	85	115				
o-Xylene	20.9	1	20	0	104.5%	85	115				
Toluene	20.68	1	20	0	103.4%	85	115				
1,4-Difluorobenzene	91.25	0	100	0	91.3%	70	130				
4-Bromochlorobenzene	98.67	0	100	0	98.7%	70	130				
Fluorobenzene	89.98	0	100	0	90.0%	70	130				

Sample ID: CCV2 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A			SeqNo: 7311							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.37	1	20	0	101.9%	85	115				
Ethylbenzene	20.95	1	20	0	104.8%	85	115				
m,p-Xylene	41.04	2	40	0	102.6%	85	115				
Methyl tert-Butyl Ether	19.97	1	20	0	99.9%	85	115				
o-Xylene	20.79	1	20	0	104.0%	85	115				
Toluene	20.49	1	20	0	102.4%	85	115				
1,4-Difluorobenzene	91.26	0	100	0	91.3%	70	130				
4-Bromochlorobenzene	99.5	0	100	0	99.5%	70	130				
Fluorobenzene	89.66	0	100	0	89.7%	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: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.52	1	20	0	102.6%	85	115				
Ethylbenzene	21.07	1	20	0	105.4%	85	115				
m,p-Xylene	41.62	2	40	0	104.0%	85	115				
Methyl tert-Butyl Ether	16.94	1	20	0	84.7%	85	115				S
o-Xylene	21.32	1	20	0	106.6%	85	115				
Toluene	21.15	1	20	0	105.7%	85	115				
1,4-Difluorobenzene	90.25	0	100	0	90.3%	70	130				
4-Bromochlorobenzene	87.72	0	100	0	87.7%	70	130				
Fluorobenzene	88.84	0	100	0	88.8%	70	130				

Sample ID: CCV4 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.02	1	20	0	100.1%	85	115				
Ethylbenzene	20.55	1	20	0	102.8%	85	115				
m,p-Xylene	40.87	2	40	0	102.2%	85	115				
Methyl tert-Butyl Ether	17.77	1	20	0	88.9%	85	115				
o-Xylene	21.11	1	20	0	105.5%	85	115				
Toluene	20.74	1	20	0	103.7%	85	115				
1,4-Difluorobenzene	90.75	0	100	0	90.7%	70	130				
4-Bromochlorobenzene	85.14	0	100	0	85.1%	70	130				
Fluorobenzene	88.9	0	100	0	88.9%	70	130				

Qualifiers: NID - 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
 2 of 7

QC SUMMARY REPORT
Continuing Calibration Verification Standard

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

Sample ID: CCV5 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A			SeqNo: 7321							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.79	1	20	0	99.0%	85	115				
Ethylbenzene	20.81	1	20	0	104.1%	85	115				
m,p-Xylene	40.81	2	40	0	102.0%	85	115				
o-Xylene	20.56	1	20	0	102.8%	85	115				
Toluene	20.34	1	20	0	101.7%	85	115				
1,4-Difluorobenzene	90.49	0	100	0	90.5%	70	130				
4-Bromochlorobenzene	87.07	0	100	0	87.1%	70	130				
Fluorobenzene	88.88	0	100	0	88.9%	70	130				

Sample ID: CCV6 QC0606/07	Batch ID: GC-1_981005	Test Code: SW8020A	Units: µg/L	Analysis Date 10/5/98	Prep Date:						
Client ID: 9809074	Run ID: GC-1_981005A			SeqNo: 7314							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.42	1	20	0	102.1%	85	115				
Ethylbenzene	22.58	1	20	0	112.9%	85	115				
m,p-Xylene	44.24	2	40	0	110.6%	85	115				
o-Xylene	21.04	1	20	0	105.2%	85	115				
Toluene	21.69	1	20	0	108.5%	85	115				
1,4-Difluorobenzene	88.39	0	100	0	88.4%	70	130				S
4-Bromochlorobenzene	62.52	0	100	0	62.5%	70	130				
Fluorobenzene	86.17	0	100	0	86.2%	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

QC SUMMARY REPORT
Continuing Calibration Verification Standard

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

Sample ID:	CCV7 QC0606/07	Batch ID:	GC-1_981005	Test Code:	SW8020A	Units:	µg/L	Analysis Date:	10/5/98	SeqNo:	7315	Prep Date:	
Client ID:	9809074	Run ID:	GC-1_981005A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result	20.27	1	20	0	101.4%	85	115					
Benzene	20.27	1	20	0	101.4%	85	115						
Ethylbenzene	21.91	1	20	0	109.5%	85	115						
m,p-Xylene	42.63	2	40	0	106.6%	85	115						
o-Xylene	21.01	1	20	0	105.1%	85	115						
Toluene	21.37	1	20	0	106.9%	85	115						
1,4-Difluorobenzene	89.71	0	100	0	89.7%	70	130						S
4-Bromochlorobenzene	65.83	0	100	0	65.8%	70	130						
Fluorobenzene	88.41	0	100	0	88.4%	70	130						

Sample ID:	CCV8 QC0606/07	Batch ID:	GC-1_981005	Test Code:	SW8020A	Units:	µg/L	Analysis Date:	10/5/98	SeqNo:	7316	Prep Date:	
Client ID:	9809074	Run ID:	GC-1_981005A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result	19.98	1	20	0	99.9%	85	115					
Benzene	19.98	1	20	0	99.9%	85	115						
Ethylbenzene	21.29	1	20	0	106.4%	85	115						
m,p-Xylene	41.58	2	40	0	104.0%	85	115						
o-Xylene	21.11	1	20	0	105.5%	85	115						
Toluene	20.86	1	20	0	104.3%	85	115						
1,4-Difluorobenzene	90.22	0	100	0	90.2%	70	130						
4-Bromochlorobenzene	83.45	0	100	0	83.4%	70	130						
Fluorobenzene	89.08	0	100	0	89.1%	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: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV1 QC0606/07** Batch ID: **GC-1_981010** Test Code: **SW8020A** Units: **µg/L** Analysis Date **10/10/98** Prep Date:

Client ID: **9809074** Run ID: **GC-1_981010A** SeqNo: **7546**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.63	1	20	0	103.1%	85	115				
Ethylbenzene	21.03	1	20	0	105.1%	85	115				
m,p-Xylene	41.52	2	40	0	103.8%	85	115				
o-Xylene	21.26	1	20	0	106.3%	85	115				
Toluene	20.87	1	20	0	104.3%	85	115				
1,4-Difluorobenzene	91.12	0	100	0	91.1%	70	130				
4-Bromochlorobenzene	99.37	0	100	0	99.4%	70	130				
Fluorobenzene	90.47	0	100	0	90.5%	70	130				

Sample ID: **CCV2 QC0606/07** Batch ID: **GC-1_981010** Test Code: **SW8020A** Units: **µg/L** Analysis Date **10/10/98** Prep Date:

Client ID: **9809074** Run ID: **GC-1_981010A** SeqNo: **7547**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.21	1	20	0	101.0%	85	115				
Ethylbenzene	20.52	1	20	0	102.6%	85	115				
m,p-Xylene	40.18	2	40	0	100.5%	85	115				
o-Xylene	20.8	1	20	0	104.0%	85	115				
Toluene	20.34	1	20	0	101.7%	85	115				
1,4-Difluorobenzene	91.45	0	100	0	91.5%	70	130				
4-Bromochlorobenzene	99.84	0	100	0	99.8%	70	130				
Fluorobenzene	90.84	0	100	0	90.8%	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: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: CCV3 QC0606/07	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/10/98		Prep Date:					
				SeqNo: 7548	HighLimit	RPD Limit	RPD Limit	Qual			
Client ID: 9809074	Run ID: GC-1_981010A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.86	1	40	0	99.6%	85	115				
Ethylbenzene	40.09	1	40	0	100.2%	85	115				
m,p-Xylene	79.23	2	80	0	99.0%	85	115				
o-Xylene	40.7	1	40	0	101.7%	85	115				
Toluene	40.2	1	40	0	100.5%	85	115				
1,4-Difluorobenzene	90.63	0	100	0	90.6%	70	130				
4-Bromochlorobenzene	95.53	0	100	0	95.5%	70	130				
Fluorobenzene	89.9	0	100	0	89.9%	70	130				

Sample ID: CCV4 QC0606/07	Batch ID: GC-1_981010	Test Code: SW8020A	Units: µg/L	Analysis Date 10/12/98		Prep Date:					
				SeqNo: 7549	HighLimit	RPD Limit	RPD Limit	Qual			
Client ID: 9809074	Run ID: GC-1_981010A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.17	1	20	0	105.9%	85	115				
Ethylbenzene	21.54	1	20	0	107.7%	85	115				
m,p-Xylene	42.44	2	40	0	106.1%	85	115				
o-Xylene	21.74	1	20	0	108.7%	85	115				
Toluene	21.37	1	20	0	106.8%	85	115				
1,4-Difluorobenzene	91.19	0	100	0	91.2%	70	130				
4-Bromochlorobenzene	97.57	0	100	0	97.6%	70	130				
Fluorobenzene	90.69	0	100	0	90.7%	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: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: CCV5 QC0606/07 Batch ID: GC-1_981010 Test Code: SW8020A Units: µg/L Analysis Date 10/12/98 Prep Date:

Client ID: 9809074 Run ID: GC-1_981010A SeqNo: 7550

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.59	1	20	0	103.0%	85	115				
Ethylbenzene	20.98	1	20	0	104.9%	85	115				
m,p-Xylene	41.18	2	40	0	102.9%	85	115				
o-Xylene	21.23	1	20	0	106.2%	85	115				
Toluene	20.88	1	20	0	104.4%	85	115				
1,4-Difluorobenzene	91.12	0	100	0	91.1%	70	130				
4-Bromochlorobenzene	98.55	0	100	0	98.6%	70	130				
Fluorobenzene	90.14	0	100	0	90.1%	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: 9809074
Project: Miles Federal 1E Drip
Test No: SW8020A

**QC SUMMARY REPORT
 SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9809060-05A	91.4	99.2	89.9
9809060-06A	91.2	89.8	90
9809060-07A	91.2	89.3	88.2
9809060-08A	89	87.1	87.2
9809060-09A	87	84.5	85.7
9809063-03A	90.9	92.5	90
9809063-04A	86.4	84.1	86
9809063-05A	84.4	87.3	85.6
9809063-06A	98.9	91.6	96.3
9809063-06AMS	101	91	97.4
9809063-06AMSD	99.7	93.7	96.8
9809073-01A	90.4	63 *	87.9
9809074-02A	82.9	62.5 *	81.3
9809074-03A	90.5	74.3	88.7
9809074-04A	90.7	88.5	88.8
9809074-05A	83.4	61.8 *	82.2
9809075-01A	90.6	86.3	88.8
9809075-02A	89.2	71.2	86.6
9809075-03A	89.3	62.6 *	86.1
9809075-04A	88.5	56.7 *	86.1
9809075-05A	87.5	53.5 *	84.2
9809078-01A	86.9	103	95.5
9809078-01AMS	88.9	97.7	88.9
9809078-01AMSD	88.9	97.3	89.1
9809078-02A	90.6	99.3	90.4
9809078-03A	91.1	98.8	90.4
9809078-04A	91.3	98	90.6

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

* Surrogate recovery outside acceptance limits

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip
Test No: SW8020A

QC SUMMARY REPORT SURROGATE RECOVERIES

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9809078-05A	91.5	106	90.3
9809078-06A	90.2	98.8	91.4
9809082-01A	90.9	96.5	90.2
9809082-01AMS	90.5	98.8	89.9
9809082-01AMSD	91.1	98.9	90.2
9810013-01A	91	100	91.3
9810013-02A	91.6	101	91.3
9810013-03A	91.3	100	90.2
CCV1 QC0606/07	91.1	99.4	90.5
CCV2 QC0606/07	91.4	99.8	90.8
CCV3 QC0606/07	90.6	95.5	89.9
CCV4 QC0606/07	91.2	97.6	90.7
CCV5 QC0606/07	91.1	98.6	90.1
CCV6 QC0606/07	88.4	62.5 *	86.2
CCV7 QC0606/07	89.7	65.8 *	88.4
CCV8 QC0606/07	90.2	83.4	89.1
LCS WATER	90.3	99	90.1
MB1	91.2	98.8	90.5

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

* Surrogate recovery outside acceptance limits

On Site Technologies, LTD.

Date: 14-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Method Blank

Sample ID:	MBIblank	Batch ID:	API H2O_981	Test Code:	SW7140	Units:	mg/L	Analysis Date:	10/2/98	SeqNo:	7167	Prep Date:
Client ID:	9809074	Run ID:	API H2O_981002A									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Calcium	.02		0.25								J	

Sample ID:	MBIblank	Batch ID:	API H2O_981	Test Code:	SW7450	Units:	mg/L	Analysis Date:	10/2/98	SeqNo:	7176	Prep Date:
Client ID:	9809074	Run ID:	API H2O_981002A									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Magnesium	ND		0.25									

Sample ID:	MBIblank	Batch ID:	API H2O_981	Test Code:	SW7610	Units:	mg/L	Analysis Date:	10/2/98	SeqNo:	7194	Prep Date:
Client ID:	9809074	Run ID:	API H2O_981002A									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Potassium	ND		0.25									

Sample ID:	MBIblank	Batch ID:	API H2O_981	Test Code:	SW7770	Units:	mg/L	Analysis Date:	10/2/98	SeqNo:	7203	Prep Date:
Client ID:	9809074	Run ID:	API H2O_981002A									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Sodium	ND		0.25									

Sample ID:	MBIblank	Batch ID:	API H2O_981	Test Code:	M2320 B	Units:	mg/L CaCO3	Analysis Date:	9/29/98	SeqNo:	7212	Prep Date:
Client ID:	9809074	Run ID:	API H2O_981002A									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Alkalinity, Bicarbonate (As CaCO3)	2.3		5								J	
Alkalinity, Carbonate (As CaCO3)	ND		5									
Alkalinity, Total (As CaCO3)	2.3		5								J	

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

QC SUMMARY REPORT

Method Blank

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

Sample ID: MBlank Batch ID: **API H2O_981** Test Code: **M4500-Cl C** Units: **mg/L** Analysis Date: **9/29/98** Prep Date:
Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7220**
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Chloride 1.4 10 J

Sample ID: MBlank Batch ID: **API H2O_981** Test Code: **M4500-Cl C** Units: **mg/L** Analysis Date: **9/29/98** Prep Date:
Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7225**
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Chloride 2.4 10 J

Sample ID: MBlank Batch ID: **API H2O_981** Test Code: **E120.1** Units: **uS/cm** Analysis Date: **9/28/98** Prep Date:
Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7231**
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Specific Conductance ND 2

Sample ID: MBlank Batch ID: **API H2O_981** Test Code: **M4500-SO4 D** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7249**
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Sulfate ND 5

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

On Site Technologies, LTD.

Date: 14-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Sample Duplicate

Sample ID: 9809073-01BD	Batch ID: API H2O_981	Test Code: M2320 B	Units: mg/L CaCO3	Analysis Date: 9/29/98	Prep Date:						
Client ID:	9809074	Run ID: API H2O_981002A	SeqNo: 7215								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	236	5	0	0	0.0%	0	0	236	0.0%	3	3
Alkalinity, Carbonate (As CaCO3)	ND	5	0	0	0.0%	0	0	0	0.0%	3	3
Alkalinity, Total (As CaCO3)	236	5	0	0	0.0%	0	0	236	0.0%	3	3

Sample ID: 9809073-01BD	Batch ID: API H2O_981	Test Code: M4500-Cl C.	Units: mg/L	Analysis Date: 9/29/98	Prep Date:						
Client ID:	9809074	Run ID: API H2O_981002A	SeqNo: 7228								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	607	10	0	0	0.0%	0	0	616	1.5%	7	7

Sample ID: 9809074-01BD	Batch ID: API H2O_981	Test Code: M4500-Cl C.	Units: mg/L	Analysis Date: 9/29/98	Prep Date:						
Client ID: 9809241400; MW-	9809074	Run ID: API H2O_981002A	SeqNo: 7223								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.93	10	0	0	0.0%	0	0	11.05	0.0%	7	J

Sample ID: 9809074-01BD	Batch ID: API H2O_981	Test Code: M4500-SO4 D	Units: mg/L	Analysis Date: 10/2/98	Prep Date:						
Client ID: 9809241400; MW-	9809074	Run ID: API H2O_981002A	SeqNo: 7253								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	1910	25	0	0	0.0%	0	0	1904	0.3%	6	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: 14-Oct-98

CLIENT: PNM - Public Service Company of NM
 Work Order: 9809074
 Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Sample Matrix Spike

Sample ID: 9809073-01AMS	Batch ID: API H2O_981	Test Code: SW7610	Units: mg/L	Analysis Date: 10/2/98	Prep Date:						
Client ID: 9809074	Run ID: API H2O_981002A	SeqNo: 7201									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	12.6	0.25	5	7.4	104.0%	67	157				

Sample ID: 9809074-02BMS	Batch ID: API H2O_981	Test Code: SW7140	Units: mg/L	Analysis Date: 10/2/98	Prep Date:						
Client ID: 9809241430; MW-	Run ID: API H2O_981002A	SeqNo: 7174									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	298	0.25	100	182	116.0%	69	159				

Sample ID: 9809074-02BMS	Batch ID: API H2O_981	Test Code: SW7450	Units: mg/L	Analysis Date: 10/2/98	Prep Date:						
Client ID: 9809241430; MW-	Run ID: API H2O_981002A	SeqNo: 7183									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	66.4	0.25	20	44	112.0%	78	126				

Sample ID: 9809075-02BMS	Batch ID: API H2O_981	Test Code: SW7770	Units: mg/L	Analysis Date: 10/2/98	Prep Date:						
Client ID: 9809074	Run ID: API H2O_981002A	SeqNo: 7210									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	1360	0.25	400	990	92.5%	81	135				

Qualifiers: NID - 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: 14-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID:	LCS	Batch ID:	API H2O_981	Test Code:	M2320 B	Units:	mg/L CaCO3	Analysis Date:	9/29/98	Prep Date:		
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7213	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Analyte:	Result	PQL	SPK value	SPK Ref Val	%REC	207	5	201	2	102.0%	91	116
Alkalinity, Total (As CaCO3)												

Sample ID:	LCS	Batch ID:	API H2O_981	Test Code:	M4500-Cl C	Units:	mg/L	Analysis Date:	9/29/98	Prep Date:		
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7221	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Analyte:	Result	PQL	SPK value	SPK Ref Val	%REC	112	10	108	1	102.8%	90	114
Chloride												

Sample ID:	LCS	Batch ID:	API H2O_981	Test Code:	M4500-Cl C	Units:	mg/L	Analysis Date:	9/29/98	Prep Date:		
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7226	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Analyte:	Result	PQL	SPK value	SPK Ref Val	%REC	110	10	108	2	100.0%	90	114
Chloride												

Sample ID:	LCS	Batch ID:	API H2O_981	Test Code:	E120.1	Units:	uS/cm	Analysis Date:	9/28/98	Prep Date:		
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7232	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Analyte:	Result	PQL	SPK value	SPK Ref Val	%REC	1121	2	1100	0	101.9%	97	103
Specific Conductance												

Sample ID:	LCS	Batch ID:	API H2O_981	Test Code:	E150.1	Units:	pH units	Analysis Date:	9/28/98	Prep Date:		
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7243	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Analyte:	Result	PQL	SPK value	SPK Ref Val	%REC	8.982	2	9.11	0	98.6%	98	102
pH												

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

QC SUMMARY REPORT
 Laboratory Control Spike - generic

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal IE Drip

Sample ID: LCS **Batch ID:** API H2O_981 **Test Code:** M4500-SO4 D **Units:** mg/L **Analysis Date:** 10/2/98 **Prep Date:**

Client ID: 9809074 **Run ID:** API H2O_981002A **SeqNo:** 7250

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	123	5	139	0	88.5%	83	113				

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

On Site Technologies, LTD.

Date: 14-Oct-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID:	CCV1 QC0573	Batch ID:	API H2O_981	Test Code:	SW7450	Units:	mg/L	Analysis Date:	10/2/98	Prep Date:	
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7177						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	1.61	0.25	1.58	0	101.9%	96	114				

Sample ID:	CCV1 QC0610	Batch ID:	API H2O_981	Test Code:	SW7610	Units:	mg/L	Analysis Date:	10/2/98	Prep Date:	
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7195						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	2.65	0.25	2.68	0	98.9%	84	114				

Sample ID:	CCV1 QC0610	Batch ID:	API H2O_981	Test Code:	SW7770	Units:	mg/L	Analysis Date:	10/2/98	Prep Date:	
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7204						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	2.84	0.25	2.64	0	107.6%	87	111				

Sample ID:	CCV1 QC0611	Batch ID:	API H2O_981	Test Code:	SW7140	Units:	mg/L	Analysis Date:	10/2/98	Prep Date:	
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7168						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	1.98	0.25	1.95	0	101.5%	89	107				

Sample ID:	CCV2 QC0573	Batch ID:	API H2O_981	Test Code:	SW7450	Units:	mg/L	Analysis Date:	10/2/98	Prep Date:	
Client ID:	9809074	Run ID:	API H2O_981002A	SeqNo:	7184						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Magnesium	1.62	0.25	1.58	0	102.5%	96	114				

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: 9809074
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID: **CCV2 QC0610** Batch ID: **API H2O_981** Test Code: **SW7610** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
 Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7202**
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Potassium 2.66 0.25 2.68 0 99.3% 84 114

Sample ID: **CCV2 QC0610** Batch ID: **API H2O_981** Test Code: **SW7770** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
 Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7211**
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Sodium 2.8 0.25 2.64 0 106.1% 87 111

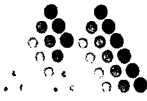
Sample ID: **CCV2 QC0611** Batch ID: **API H2O_981** Test Code: **SW7140** Units: **mg/L** Analysis Date: **10/2/98** Prep Date:
 Client ID: **9809074** Run ID: **API H2O_981002A** SeqNo: **7175**
 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
 Calcium 1.98 0.25 1.95 0 101.5% 89 107

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

RECEIVED OCT 19 1998



Mountain States Analytical, Inc.

The Quality Solution

October 12, 1998

Mr. David Cox
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Reference:

Project: WQCC Pb Analysis
MSAI Group: 24280

Dear Mr. Cox:

Enclosed are the analytical results for your project referenced above. The following sample is included in the report.

9809074-01C

All holding times were met for the tests performed on these samples.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

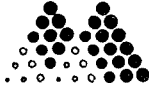
Rolf E. Larsen
Project Manager

10
Years of
Quality
Service

Corporate Office
1645 West 2200 South, Salt Lake City, Utah 84119
801-973-0050 • 1-800-973-6724(MSAI) • FAX 801-972-6278
e-mail: service@msailabs.com

Southwest States Region
6223 Bayonne, Spring, Texas 77389
281-320-2842 • FAX 281-320-0989
e-mail: gbrewer@msailabs.com





Mountain States Analytical, Inc.

The Quality Solution

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: WQCC Pb Analysis

MSAI Sample: 87354
MSAI Group: 24280
Date Reported: 10/12/98
Discard Date: 11/11/98
Date Submitted: 10/01/98
Date Sampled: 09/24/98
Collected by:
Purchase Order:
Project No.:

Sample ID: 9809074-01C

Matrix: Water

Miles Federal 1E Drip 9809241400; MW-1 ⁽⁰²⁾

Test Analysis	Results as Received	Units	Limit of Quantitation
03921 Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Batch. w650		
13001 Metals by ICP, 6010A, w/ww Method: SW-846 6010A Lead	ND	mg/l	0.250
0939 Sample Filtering, ww, MSAI Method: IN HOUSE MSAI	COMPLETE		

ND - Not detected at the Limit of Quantitation.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:

Rolf E. Larsen
Project Manager

Analysis Batch Number: ICPWA-10/06/98-061 -1
 Identification : ICPWA-*Metals by ICP
 Number of Samples : 7
 Batch Data-Date/Time : 10/07/98 / 17:43:29

Sequence : DATA279

LANK#	ANALYTE	CONC FOUND #	CONC LIMIT
BW-650	Aluminum	0.0266	0.0300
	Arsenic	ND	0.0350
	Calcium	0.0652	0.3000
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	ND	0.0100
	Iron	0.0156	0.2000
	Potassium	0.0030	0.1500
	Magnesium	0.0125	0.0500
	Sodium	0.2547(1c)	0.1500
	Lead	ND	0.0500 ✓
	Selenium	ND	0.0600
	Zinc	0.0250	0.0250

SPIKE						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
24274-87338	Aluminum	4.0000	0.0507	4.0739	100.6	80.0	120.0
	Arsenic	4.0000	-0.0007	4.0537	101.4	80.0	120.0
	Calcium	4.0000	99.6287	99.7651	3.4(2k)	80.0	120.0
	Cadmium	0.1000	0.0025	0.1039	101.4	80.0	120.0
	Chromium	0.4000	0.0008	0.4155	103.7	80.0	120.0
	Copper	0.5000	-0.0031	0.5031	101.2	80.0	120.0
	Iron	2.0000	0.1111	2.1192	100.4	80.0	120.0
	Potassium	20.0000	4.4708	24.5650	100.5	80.0	120.0
	Magnesium	4.0000	64.7513	67.1555	60.1(2k)	80.0	120.0
	Sodium	20.0000	58.1826	78.1379	99.8	80.0	120.0
	Lead	1.0000	0.0016	1.0615	106.0 ✓	80.0	120.0
	Selenium	4.0000	-0.0171	4.0757	102.3	80.0	120.0
	Zinc	1.0000	0.0567	1.1505	109.4	80.0	120.0

MSD						QC LIMITS			
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
24274-87338	Aluminum	4.0000	0.0507	4.3477	107.4	80.0	120.0	6.5	20.0
	Arsenic	4.0000	-0.0007	4.1923	104.8	80.0	120.0	3.4	20.0
	Calcium	4.0000	99.6287	108.2528	215.6(2k)	80.0	120.0	8.2	20.0
	Cadmium	0.1000	0.0025	0.1092	106.7	80.0	120.0	4.9	20.0
	Chromium	0.4000	0.0008	0.4216	105.2	80.0	120.0	1.5	20.0
	Copper	0.5000	-0.0031	0.5144	103.5	80.0	120.0	2.2	20.0
	Iron	2.0000	0.1111	2.2177	105.3	80.0	120.0	4.5	20.0
	Potassium	20.0000	4.4708	25.4818	105.1	80.0	120.0	3.7	20.0
	Magnesium	4.0000	64.7513	72.5666	195.4(2k)	80.0	120.0	7.7	20.0
	Sodium	20.0000	58.1826	83.0821	124.5(2f)	80.0	120.0	6.1	20.0
	Lead	1.0000	0.0016	1.0913	109.0	80.0	120.0	2.8	20.0
	Selenium	4.0000	-0.0171	4.2109	105.7	80.0	120.0	3.3	20.0
	Zinc	1.0000	0.0567	1.1606	110.4	80.0	120.0	0.9	20.0

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
24274-87338	Aluminum	0.0507	0.0394	25.0(5a)	20.0	1.00
	Arsenic	-0.0007	0.0048	265.4(11)	20.0	1.00

Analysis Batch Number: ICPWA-10/06/98-061 -1
Identification : ICPWA-*Metals by ICP
Number of Samples : 7
Batch Data-Date/Time : 10/07/98 / 17:43:29

Sequence : DATA279

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
4274-87338	Calcium	99.6287	99.6216	0.0	20.0	1.00
	Cadmium	0.0025	0.0002	172.0(11)	20.0	1.00
	Chromium	0.0008	0.0047	140.5(11)	20.0	1.00
	Copper	-0.0031	0.0031	***** (11)	20.0	1.00
	Iron	0.1111	0.1013	9.2	20.0	1.00
	Potassium	4.4708	4.6474	3.9	20.0	1.00
	Magnesium	64.7513	64.6938	0.1	20.0	1.00
	Sodium	58.1826	57.9215	0.4	20.0	1.00
	Lead	0.0016	0.0159	164.6(11)	20.0 ✓	1.00
	Selenium	-0.0171	0.0000	200.0(11)	20.0	1.00
	Zinc	0.0567	0.1099	63.9(5a)	20.0	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS	
					LOWER	UPPER
CSW-650	Aluminum	3.9920	4.0000	99.8	80.0	120.0
	Arsenic	4.0637	4.0000	101.6	80.0	120.0
	Calcium	4.2563	4.0000	106.4	80.0	120.0
	Cadmium	0.1070	0.1000	107.0	80.0	120.0
	Chromium	0.4196	0.4000	104.9	80.0	120.0
	Copper	0.5076	0.5000	101.5	80.0	120.0
	Iron	2.1450	2.0000	107.2	80.0	120.0
	Potassium	19.5778	20.0000	97.9	80.0	120.0
	Magnesium	3.9736	4.0000	99.3	80.0	120.0
	Sodium	20.1730	20.0000	100.9	80.0	120.0
	Lead	1.0754	1.0000	107.5 ✓	80.0	120.0
	Selenium	4.0125	4.0000	100.3	80.0	120.0
	Zinc	1.1225	1.0000	112.3	80.0	120.0

QC LIMITS

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS	
					LOWER	UPPER
ICV-	Aluminum	20.0000	20.1813	100.9	90.0	110.0
	Arsenic	1.6000	1.6546	103.4	90.0	110.0
	Calcium	40.0000	41.5082	103.8	90.0	110.0
	Cadmium	4.0000	4.1896	104.7	90.0	110.0
	Chromium	4.0000	4.2005	105.0	90.0	110.0
	Copper	4.0000	4.0895	102.2	90.0	110.0
	Iron	4.0000	4.2808	107.0	90.0	110.0
	Potassium	40.0000	40.1933	100.5	90.0	110.0
	Magnesium	20.0000	20.3530	101.8	90.0	110.0
	Sodium	40.0000	40.0427	100.1	90.0	110.0
	Lead	20.0000	21.3896	106.9 ✓	90.0	110.0
	Selenium	1.6000	1.5892	99.3	90.0	110.0
	Zinc	4.0000	4.2066	105.2	90.0	110.0
CCV1--2	Aluminum	20.0000	20.1204	100.6	90.0	110.0
	Arsenic	1.6000	1.6404	102.5	90.0	110.0
	Calcium	40.0000	41.2105	103.0	90.0	110.0
	Cadmium	4.0000	4.1821	104.6	90.0	110.0
	Chromium	4.0000	4.1810	104.5	90.0	110.0
	Copper	4.0000	4.0748	101.9	90.0	110.0

Mountain States Analytical, Inc.
 Daily QC Batching Data
 Data Released for Reporting

10/12/98
 12:49:37
 Group: 24280

Analysis Batch Number: ICPWA-10/06/98-061 -1
 Identification : ICPWA-*Metals by ICP
 Number of Samples : 7
 Batch Data-Date/Time : 10/07/98 / 17:43:29

Sequence : DATA279

ICV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS	
					LOWER	UPPER
ICV1--2	Iron	4.0000	4.2410	106.0	90.0	110.0
	Potassium	40.0000	39.9918	100.0	90.0	110.0
	Magnesium	20.0000	20.2215	101.1	90.0	110.0
	Sodium	40.0000	39.8686	99.7	90.0	110.0
	Lead	20.0000	21.3246	106.6	90.0	110.0
	Selenium	1.6000	1.6264	101.6	90.0	110.0
	Zinc	4.0000	4.1855	104.6	90.0	110.0
ICV2--3	Aluminum	20.0000	20.1005	100.5	90.0	110.0
	Arsenic	1.6000	1.6295	101.8	90.0	110.0
	Calcium	40.0000	41.1645	102.9	90.0	110.0
	Cadmium	4.0000	4.1754	104.4	90.0	110.0
	Chromium	4.0000	4.1770	104.4	90.0	110.0
	Copper	4.0000	4.0925	102.3	90.0	110.0
	Iron	4.0000	4.2111	105.3	90.0	110.0
	Potassium	40.0000	40.3054	100.8	90.0	110.0
	Magnesium	20.0000	20.2326	101.2	90.0	110.0
	Sodium	40.0000	39.9524	99.9	90.0	110.0
	Lead	20.0000	21.3444	106.7	90.0	110.0
	Selenium	1.6000	1.5983	99.9	90.0	110.0
	Zinc	4.0000	4.1819	104.5	90.0	110.0
	ICV3--4	Aluminum	20.0000	19.9076	99.5	90.0
Arsenic		1.6000	1.6256	101.6	90.0	110.0
Calcium		40.0000	40.7550	101.9	90.0	110.0
Cadmium		4.0000	4.1549	103.9	90.0	110.0
Chromium		4.0000	4.1463	103.7	90.0	110.0
Copper		4.0000	4.0685	101.7	90.0	110.0
Iron		4.0000	4.1524	103.8	90.0	110.0
Potassium		40.0000	40.1589	100.4	90.0	110.0
Magnesium		20.0000	20.1634	100.8	90.0	110.0
Sodium		40.0000	39.6352	99.1	90.0	110.0
Lead		20.0000	21.2088	106.0	90.0	110.0
Selenium		1.6000	1.5775	98.6	90.0	110.0
Zinc		4.0000	4.1437	103.6	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Aluminum	0.0228	0.0300
	Arsenic	0.0128	0.0350
	Calcium	0.0206	0.3000
	Cadmium	ND	0.0040
	Chromium	ND	0.0100
	Copper	0.0010	0.0100
	Iron	0.0282	0.2000
	Potassium	ND	0.1500
	Magnesium	0.0303	0.0500
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	0.0004	0.0600
	Zinc	0.0012	0.0250
	CCB1-	Aluminum	ND

Analysis Batch Number: ICPWA-10/06/98-061 -1
 Identification : ICPWA-*Metals by ICP
 Number of Samples : 7
 Batch Data-Date/Time : 10/07/98 / 17:43:29

Sequence : DATA279

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB1-	Arsenic	0.0122	0.0350
	Calcium	0.0134	0.3000
	Cadmium	0.0018	0.0040
	Chromium	0.0066	0.0100
	Copper	0.0064	0.0100
	Iron	0.0113	0.2000
	Potassium	0.1377	0.1500
	Magnesium	0.0331	0.0500
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	0.0240	0.0600
	Zinc	0.0014	0.0250
	CB2-	Aluminum	ND
Arsenic		0.0068	0.0350
Calcium		0.0133	0.3000
Cadmium		0.0004	0.0040
Chromium		0.0033	0.0100
Copper		0.0039	0.0100
Iron		0.0031	0.2000
Potassium		0.0534	0.1500
Magnesium		0.0228	0.0500
Sodium		ND	0.1500
Lead		0.0094	0.0500
Selenium		0.0028	0.0600
Zinc		0.0011	0.0250
CB3-	Aluminum	ND	0.0300
	Arsenic	0.0006	0.0350
	Calcium	0.0124	0.3000
	Cadmium	0.0009	0.0040
	Chromium	0.0037	0.0100
	Copper	0.0032	0.0100
	Iron	ND	0.2000
	Potassium	0.0778	0.1500
	Magnesium	0.0251	0.0500
	Sodium	ND	0.1500
	Lead	ND	0.0500
	Selenium	0.0171	0.0600
	Zinc	0.0009	0.0250

----- Result Footnotes -----

- (1c) - The preparation blank concentration is less than 5% of each sample in the batch
- (2k) - Sample concentration >4X spk added. Serial dilution was recovered within 10% limits.
- (2f) - Spike result outside limits. Serial dilution is within 10% acceptance limits.
- (5a) - Duplicates not evaluated: Results are <10x detection limit
- (11) - The duplicate results cannot be evaluated because both results are <MDL.

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting

10/12/98
12:49:38
Group: 24280

Analysis Batch Number: ICPWA-10/06/98-061 -1
Lot Identification : ICPWA-*Metals by ICP
Number of Samples : 7
Batch Date-Time : 10/07/98 / 17:43:29

Sequence : DATA279

Groups & Samples

24217-87124 24255-87258 24255-87259 24274-87338 24280-87354 24281-87355 24281-87356

On Site Technologies, LTD.

612 E. Murray Drive
Farmington, NM 87401
(505) 325-2432

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Mountain States Analytical, Inc.
1645 West 2200 South

TEL: (800) 973-6724
FAX: (801) 972-6278

Salt Lake City, UT 84119

Acct #:

30-Sep-98

Sample ID	Matrix	Collection Date	Bottle Type	SW6010A	Requested Tests
9809074-01C	Aqueous	9/24/98 2:00:00 PM	1LCU	1	

Comments: Please analyze one (1) water for Lead (Pb), Dissolved ONLY per WQCC Standards.

Relinquished by: *Heich Reese*

Date/Time

9/28/98 11:00

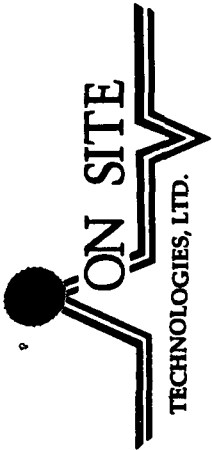
Received by:

Fathy A. Alend

Received by:

Date/Time

10/01/98 0105



CHAIN OF CUSTODY RECORD

Page: 1 of 1

Date: 7/24/93

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
Company	PNM Gas Services
Address	603 W. Elm Street
City, State, Zip	Farmington, NM 87401

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.: _____

INVOICE TO _____

Sampling Location: Miles Federal Field

Sampler: Mark Sullivan

SAMPLE IDENTIFICATION	SAMPLE DATE		MATRIX	PRES.	Containers	ANALYSIS REQUESTED	LAB ID
	DATE	TIME					
9809241400 MW-1	1/23	1400	↓		2		
9809241430 MW-2			↑		2		
9809241500 MW-3			↓		2		
9809241530 MW-5			↑		2		
9809241600 MW-6			↓		2		

Report RESULTS TO _____

Received by: [Signature] Date/Time: 7/26/93

Received by: [Signature] Date/Time: _____

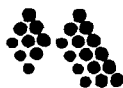
Received by: _____ Date/Time: _____

Rush: 24-48 Hours / 10 Working Days

Authorized by: [Signature] Date: 9/20/93

(Client Signature Must Accompany Request)

Special Instructions: Results to be sent to both parties.

Analytical Report**Mountain States Analytical, Inc.***The Quality Solution*

On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: WQCC Pb Analysis

MSAI Sample: 87354
MSAI Group: 24280
Date Reported: 10/12/98
Discard Date: 11/11/98
Date Submitted: 10/01/98
Date Sampled: 09/24/98
Collected by:
Purchase Order:
Project No.:


Sample ID: 9809074-01C MILES FEDERAL IE DRIP
Matrix: Water 9809241400 MWI-1

Test Analysis	Results as Received	Units	Method Detection Limit
0392I Flame/ICP Prep, w/w, 3005A Method: SW-846 3005A	Batch. w650		
1300I Metals by ICP, 6010A, w/w Method: SW-846 6010A Lead	ND	mg/l	0.050
0939 Sample Filtering, w, MSAI Method: IN HOUSE MSAI	COMPLETE		

ND - Not detected at the Method Detection Limit.

This report consists of the following items: A cover letter, a signed analytical report for each sample specified on the cover letter, and if applicable, an inorganic quality control summary. Organic sample reports contain footnotes which describe any quality control anomalies which may have occurred.

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

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

4th Quarter 1998

RE: Miles Federal 1E Drip

Order No.: 9812025

Dear Maureen Gannon,

On Site Technologies, LTD. received 4 samples on 12/10/98 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 black 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: 15-Dec-98

CLIENT: PNM - Public Service Company of NM

Project: Miles Federal 1E Drip

Lab Order: 9812025

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: Miles Federal 1E Drip
Work Order: 9812025	Client Sample ID: 9812091200; MW-2
Lab ID: 9812025-01A Matrix: AQUEOUS	Collection Date: 12/9/98 12:00:00 PM
Project: Miles Federal 1E Drip	COC Record: 7305

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX						Analyst: HR
		SW8020A				
Benzene	16	1		µg/L	1	12/11/98
Toluene	ND	1		µg/L	1	12/11/98
Ethylbenzene	4.1	1		µg/L	1	12/11/98
m,p-Xylene	14	2		µg/L	1	12/11/98
o-Xylene	1.5	1		µg/L	1	12/11/98

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

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- 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: Miles Federal 1E Drip
Work Order: 9812025	Client Sample ID: 9812091220; MW-5
Lab ID: 9812025-02A Matrix: AQUEOUS	Collection Date: 12/9/98 12:20:00 PM
Project: Miles Federal 1E Drip	COC Record: 7305

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	43	1		µg/L	1	12/11/98
Toluene	1.7	1		µg/L	1	12/11/98
Ethylbenzene	10	1		µg/L	1	12/11/98
m,p-Xylene	24	2		µg/L	1	12/11/98
o-Xylene	1.3	1		µg/L	1	12/11/98

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

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- 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:** Miles Federal 1E Drip
Work Order: 9812025 **Client Sample ID:** 9812091240; MW-6
Lab ID: 9812025-03A **Matrix:** AQUEOUS **Collection Date:** 12/9/98 12:40:00 PM
Project: Miles Federal 1E Drip **COC Record:** 7305

MW-5
Duplicate

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	42	1		µg/L	1	12/11/98
Toluene	1.6	1		µg/L	1	12/11/98
Ethylbenzene	9.5	1		µg/L	1	12/11/98
m,p-Xylene	23	2		µg/L	1	12/11/98
o-Xylene	1.3	1		µg/L	1	12/11/98

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



ANALYTICAL REPORT

Date: 15-Dec-98

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9812025	Client Sample ID: 9812091300; MW-3
Lab ID: 9812025-04A Matrix: AQUEOUS	Collection Date: 12/9/98 1:00:00 PM
Project: Miles Federal 1E Drip	COC Record: 7305

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8020A				Analyst: HR
Benzene	2	1		µg/L	1	12/11/98
Toluene	ND	1		µg/L	1	12/11/98
Ethylbenzene	ND	1		µg/L	1	12/11/98
m,p-Xylene	ND	2		µg/L	1	12/11/98
o-Xylene	ND	1		µg/L	1	12/11/98

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 15-Dec-98

CLIENT: PNM - Public Service Company of NM
Work Order: 9812025
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Method Blank

Sample ID:	Batch ID:	GC-1_981211	Test Code:	SW8020A	Units:	µg/L	Analysis Date	12/11/98	SeqNo:	9492	Prep Date:		
Client ID:	9812025	Run ID:	GC-1_981211A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	.2564			1									J
Ethylbenzene	.1588			1									J
m,p-Xylene	.4285			2									J
o-Xylene	.1668			1									J
Toluene	.4123			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

Date: 15-Dec-98

On Site Technologies, LTD.

CLIENT: PNM - Public Service Company of NM
Work Order: 9812025
Project: Miles Federal 1E Drip

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 9812009-01AMS	Batch ID: GC-1_981211	Test Code: SW8020A	Units: µg/L	Analysis Date 12/11/98	Prep Date:						
Client ID: 9812025	Run ID: GC-1_981211A	SeqNo: 9493									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	256.4	5	200	75.59	90.4%	56	128				
Ethylbenzene	205.3	5	200	16.65	94.3%	78	107				
m,p-Xylene	476.6	10	400	118.2	89.6%	67	118				
o-Xylene	225.2	5	200	38.78	93.2%	78	107				
Toluene	423.2	5	200	256.6	83.3%	74	116				

Sample ID: 9812009-01AMSD	Batch ID: GC-1_981211	Test Code: SW8020A	Units: µg/L	Analysis Date 12/11/98	Prep Date:						
Client ID: 9812025	Run ID: GC-1_981211A	SeqNo: 9494									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	254.8	5	200	75.59	89.6%	56	128	256.4	0.6%	12	
Ethylbenzene	204.5	5	200	16.65	93.9%	78	107	205.3	0.4%	11	
m,p-Xylene	474.4	10	400	118.2	89.1%	67	118	476.6	0.5%	10	
o-Xylene	224.5	5	200	38.78	92.8%	78	107	225.2	0.3%	14	
Toluene	421.2	5	200	256.6	82.3%	74	116	423.2	0.5%	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: 9812025
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID:	LCS WATER	Batch ID:	GC-1_981211	Test Code:	SW8020A	Units:	µg/L	Analysis Date	12/11/98	Prep Date:			
Client ID:	9812025	Run ID:	GC-1_981211A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	39.16	1	40	0.2564	97.3%	56	128						
Ethylbenzene	39.55	1	40	0.1588	98.5%	78	107						
m,p-Xylene	77.38	2	80	0.4285	96.2%	67	118						
o-Xylene	39.81	1	40	0.1668	99.1%	78	107						
Toluene	39.36	1	40	0.4123	97.4%	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: 9812025
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Sample ID:	CCV1 QC0606/07	Batch ID:	GC-1_981211	Test Code:	SW8020A	Units:	µg/L	Analysis Date:	12/11/98	Prep Date:			
Client ID:	9812025	Run ID:	GC-1_981211A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	20.65	1	20	0	0	0	103.2%	85	115				
Ethylbenzene	20.89	1	20	0	0	0	104.4%	85	115				
m,p-Xylene	40.66	2	40	0	0	0	101.7%	85	115				
o-Xylene	20.99	1	20	0	0	0	105.0%	85	115				
Toluene	20.86	1	20	0	0	0	104.3%	85	115				
1,4-Difluorobenzene	90.02	0	100	0	0	0	90.0%	70	130				
4-Bromochlorobenzene	97.45	0	100	0	0	0	97.5%	70	130				
Fluorobenzene	88.69	0	100	0	0	0	88.7%	70	130				

Sample ID:	CCV2 QC0606/07	Batch ID:	GC-1_981211	Test Code:	SW8020A	Units:	µg/L	Analysis Date:	12/11/98	Prep Date:			
Client ID:	9812025	Run ID:	GC-1_981211A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result												
Benzene	20.17	1	20	0	0	0	100.9%	85	115				
Ethylbenzene	20.37	1	20	0	0	0	101.9%	85	115				
m,p-Xylene	39.6	2	40	0	0	0	99.0%	85	115				
o-Xylene	20.61	1	20	0	0	0	103.1%	85	115				
Toluene	20.37	1	20	0	0	0	101.8%	85	115				
1,4-Difluorobenzene	89.98	0	100	0	0	0	90.0%	70	130				
4-Bromochlorobenzene	97.79	0	100	0	0	0	97.8%	70	130				
Fluorobenzene	88.58	0	100	0	0	0	88.6%	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

QC SUMMARY REPORT
Continuing Calibration Verification Standard

CLIENT: PNM - Public Service Company of NM
Work Order: 9812025
Project: Miles Federal 1E Drip

Sample ID: **CCV3 QC0606/07** Batch ID: **GC-1_981211** Test Code: **SW8020A** Units: **µg/L** Analysis Date **12/11/98** Prep Date:

Client ID: **9812025** Run ID: **GC-1_981211A** SeqNo: **9488**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	38.19	1	40	0	95.5%	85	115				
Ethylbenzene	38.64	1	40	0	96.6%	85	115				
m,p-Xylene	75.65	2	80	0	94.6%	85	115				
o-Xylene	39.11	1	40	0	97.8%	85	115				
Toluene	38.57	1	40	0	96.4%	85	115				
1,4-Difluorobenzene	89.69	0	100	0	89.7%	70	130				
4-Bromochlorobenzene	98.67	0	100	0	98.7%	70	130				
Fluorobenzene	89.01	0	100	0	89.0%	70	130				

Sample ID: **CCV4 QC0606/07** Batch ID: **GC-1_981211** Test Code: **SW8020A** Units: **µg/L** Analysis Date **12/11/98** Prep Date:

Client ID: **9812025** Run ID: **GC-1_981211A** SeqNo: **9489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.66	1	20	0	103.3%	85	115				
Ethylbenzene	20.96	1	20	0	104.8%	85	115				
m,p-Xylene	40.56	2	40	0	101.4%	85	115				
o-Xylene	21.22	1	20	0	106.1%	85	115				
Toluene	20.77	1	20	0	103.9%	85	115				
1,4-Difluorobenzene	90.18	0	100	0	90.2%	70	130				
4-Bromochlorobenzene	97.08	0	100	0	97.1%	70	130				
Fluorobenzene	88.52	0	100	0	88.5%	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

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

CLIENT: PNM - Public Service Company of NM
Work Order: 9812025
Project: Miles Federal 1E Drip

Sample ID: **CCV5 QC0606/07** Batch ID: **GC-1_981211** Test Code: **SW8020A** Units: **µg/L** Analysis Date **12/11/98** Prep Date:

Client ID: **9812025** Run ID: **GC-1_981211A** SeqNo: **9490**

Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.21	1	20	0	101.0%	85	115				
Ethylbenzene	20.51	1	20	0	102.6%	85	115				
m,p-Xylene	39.72	2	40	0	99.3%	85	115				
o-Xylene	20.91	1	20	0	104.5%	85	115				
Toluene	20.42	1	20	0	102.1%	85	115				
1,4-Difluorobenzene	89.72	0	100	0	89.7%	70	130				
4-Bromochlorobenzene	98.29	0	100	0	98.3%	70	130				
Fluorobenzene	88.64	0	100	0	88.6%	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

CLIENT: PNM - Public Service Company of NM
 Work Order: 9812025
 Project: Miles Federal 1E Drip
 Test No: SW8020A

**QC SUMMARY REPORT
 SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9812009-01A	89.7	97.4	89
9812009-01AMS	89.2	98.3	88.8
9812009-01AMSD	89.7	98.5	88.4
9812021-01A	88	96.2	89.7
9812021-02A	88.5	96.4	87.5
9812021-03A	89.4	98.4	88.3
9812024-01A	89.8	97.8	88.7
9812024-02A	89.8	124	89.2
9812024-03A	90	97.6	88.6
9812024-04A	90.2	98.3	89.5
9812024-05A	89.5	99	88.6
9812025-01A	86.1	92	84.6
9812025-02A	89.9	98.5	88.9
9812025-03A	89.9	98.2	88.6
9812025-04A	89.6	97.9	88.8
CCV1 QC0606/07	90	97.4	88.7
CCV2 QC0606/07	90	97.8	88.6
CCV3 QC0606/07	89.7	98.7	89
CCV4 QC0606/07	90.2	97.1	88.5
CCV5 QC0606/07	89.7	98.3	88.6
LCS WATER	89.6	97.8	89
MB1	90.4	96	89.2

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

* Surrogate recovery outside acceptance limits

OFF: (505) 325-5667



LAB: (505) 325-1556

February 23, 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

1st Quarter 1999

Rec'd. Mar 02 1999

RE: Miles Federal 1E Drip

Order No.: 9902065

Dear Maureen Gannon,

On Site Technologies, LTD. received 4 samples on 2/11/99 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,

A handwritten signature in black ink, appearing to read "David Cox". The signature is written in a cursive, flowing style.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 23-Feb-99

CLIENT: PNM - Public Service Company of NM
Project: Miles Federal 1E Drip
Lab Order: 9902065

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: 23-Feb-99

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9902065	Client Sample ID: 9902111140; MW-2
Lab ID: 9902065-01A Matrix: AQUEOUS	Collection Date: 2/11/99 11:40:00 AM
Project: Miles Federal 1E Drip	COC Record: 7533

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	8.6	0.5		µg/L	1	2/17/99
Toluene	ND	0.5		µg/L	1	2/17/99
Ethylbenzene	2	0.5		µg/L	1	2/17/99
m,p-Xylene	3.7	1		µg/L	1	2/17/99
o-Xylene	1	0.5		µg/L	1	2/17/99

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Feb-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Federal 1E Drip
Work Order:	9902065	Client Sample ID:	9902111200; MW-3
Lab ID:	9902065-02A	Matrix:	AQUEOUS
Project:	Miles Federal 1E Drip	Collection Date:	2/11/99 12:00:00 PM
		COC Record:	7533

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	1.2	0.5		µg/L	1	2/17/99
Toluene	ND	0.5		µg/L	1	2/17/99
Ethylbenzene	ND	0.5		µg/L	1	2/17/99
m,p-Xylene	ND	1		µg/L	1	2/17/99
o-Xylene	ND	0.5		µg/L	1	2/17/99

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

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Feb-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Miles Federal 1E Drip
Work Order:	9902065	Client Sample ID:	9902111220; MW-5
Lab ID:	9902065-03A	Matrix:	AQUEOUS
Project:	Miles Federal 1E Drip	Collection Date:	2/11/99 12:20:00 PM
		COC Record:	7533

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX		SW8021B				Analyst: HR
Benzene	93	0.5		µg/L	1	2/17/99
Toluene	3.1	0.5		µg/L	1	2/17/99
Ethylbenzene	29	0.5		µg/L	1	2/17/99
m,p-Xylene	46	1		µg/L	1	2/17/99
o-Xylene	0.9	0.5		µg/L	1	2/17/99

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Feb-99

Client: PNM - Public Service Company of NM	Client Sample Info: Miles Federal 1E Drip
Work Order: 9902065	Client Sample ID: 9902111240; MW-6
Lab ID: 9902065-04A Matrix: AQUEOUS	Collection Date: 2/11/99 12:40:00 PM
Project: Miles Federal 1E Drip	COC Record: 7533

MW-5
Duplicate

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
BTEX						Analyst: HR
		SW8021B				
Benzene	84	0.5		µg/L	1	2/17/99
Toluene	2	0.5		µg/L	1	2/17/99
Ethylbenzene	25	0.5		µg/L	1	2/17/99
m,p-Xylene	39	1		µg/L	1	2/17/99
o-Xylene	0.6	0.5		µg/L	1	2/17/99

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

1 of 1

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- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

On Site Technologies, LTD.

Date: 23-Feb-99

CLIENT: PNM - Public Service Company of NM
Work Order: 9902065
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Method Blank

Sample ID: MB1	Batch ID: GC-1_990217	Test Code: SW8021B	Units: µg/L	Analysis Date: 2/17/99	Prep Date:						
Client ID:	9902065	Run ID: GC-1_990217A		SeqNo: 11133							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	.0423		0.5								J
Ethylbenzene	ND		0.5								
m,p-Xylene	ND		1								
Methyl tert-Butyl Ether	ND		1								J
o-Xylene	.0269		0.5								J
Toluene	.1228		0.5								J

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
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Date: 23-Feb-99

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QC SUMMARY REPORT
 Sample Matrix Spike

Sample ID: 9902063-02AMS	Batch ID: GC-1_990217	Test Code: SW8021B	Units: µg/L	Analysis Date 2/17/99	Prep Date:						
Client ID: 9902065	Run ID: GC-1_990217A			SeqNo: 11134							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	621.5	2.5	200	432.8	94.3%	73	115				
Ethylbenzene	202.6	2.5	200	0.762	100.9%	74	117				
m,p-Xylene	388.5	5	400	1.306	96.8%	76	112				
Methyl tert-Butyl Ether	205	5	200	0	102.5%	62	122				
o-Xylene	202.5	2.5	200	0.9555	100.8%	83	112				
Toluene	200.7	2.5	200	0.763	100.0%	71	120				

Sample ID: 9902063-02AMSD	Batch ID: GC-1_990217	Test Code: SW8021B	Units: µg/L	Analysis Date 2/17/99	Prep Date:						
Client ID: 9902065	Run ID: GC-1_990217A			SeqNo: 11135							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	631.3	2.5	200	432.8	99.2%	73	115	621.5	1.6%	8	
Ethylbenzene	205.6	2.5	200	0.762	102.4%	74	117	202.6	1.5%	9	
m,p-Xylene	393.8	5	400	1.306	98.1%	76	112	388.5	1.4%	9	
Methyl tert-Butyl Ether	203.6	5	200	0	101.8%	62	122	205	0.7%	7	
o-Xylene	205.2	2.5	200	0.9555	102.1%	83	112	202.5	1.3%	9	
Toluene	203.8	2.5	200	0.763	101.5%	71	120	200.7	1.5%	9	

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On Site Technologies, LTD.

Date: 23-Feb-99

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QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID:	LCS WATER	Batch ID:	GC-1_990217	Test Code:	SW8021B	Units:	µg/L	Analysis Date	2/17/99	Prep Date:	
Client ID:	9902065	Run ID:	GC-1_990217A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	SeqNo:	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	39.99	0.5	40	0.0423	99.9%	84	110				
Ethylbenzene	40.12	0.5	40	0	100.3%	86	113				
m,p-Xylene	77.23	1	80	0	96.5%	81	114				
Methyl tert-Butyl Ether	41.32	1	40	0	103.3%	69	129				
o-Xylene	39.98	0.5	40	0.0269	99.9%	86	112				
Toluene	39.75	0.5	40	0.1228	99.1%	85	111				

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On Site Technologies, LTD.

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Project: Miles Federal 1E Drip

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID:	CCV1 QC0606/07	Batch ID:	GC-1_990217	Test Code:	SW8021B	Units:	µg/L	Analysis Date	2/17/99	Prep Date:			
Client ID:	9902065	Run ID:	GC-1_990217A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result	21.27	0.5	0.5	20	0	106.3%	85	115				
Benzene	21.16	0.5	0.5	20	0	105.8%	85	115					
Ethylbenzene	40.62	1	1	40	0	101.5%	85	115					
m,p-Xylene	21.15	0.5	0.5	20	0	105.8%	85	115					
Methyl tert-Butyl Ether	21.08	0.5	0.5	20	0	105.4%	85	115					
o-Xylene	21.04	0	0	100	0	93.2%	84	100					
Toluene	93.24	0	0	100	0	97.6%	87	105					
1,4-Difluorobenzene	94.06	0	0	100	0	94.1%	87	99					
4-Bromochlorobenzene													
Fluorobenzene													

Sample ID:	CCV2 QC0606/07	Batch ID:	GC-1_990217	Test Code:	SW8021B	Units:	µg/L	Analysis Date	2/17/99	Prep Date:			
Client ID:	9902065	Run ID:	GC-1_990217A	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result	21.68	0.5	0.5	20	0	108.4%	85	115				
Benzene	21.52	0.5	0.5	20	0	107.6%	85	115					
Ethylbenzene	41.22	1	1	40	0	103.1%	85	115					
m,p-Xylene	20.81	0.5	0.5	20	0	104.1%	85	115					
Methyl tert-Butyl Ether	21.42	0.5	0.5	20	0	107.1%	85	115					
o-Xylene	21.42	0	0	100	0	94.0%	84	100					
Toluene	94.01	0	0	100	0	96.0%	87	105					
1,4-Difluorobenzene	96.02	0	0	100	0	94.1%	87	99					
4-Bromochlorobenzene													
Fluorobenzene													

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 I of 2

CLIENT: PNM - Public Service Company of NM
Work Order: 9902065
Project: Miles Federal 1E Drip

QC SUMMARY REPORT
 Continuing Calibration Verification Standard

Prep Date:

Analysis Date 2/17/99

Units: µg/L

Test Code: SW8021B

Batch ID: GC-1_990217

Sample ID: CCV3 QC0606/07

SeqNo: 11131

Run ID: GC-1_990217A

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	40.77	0.5	40	0	101.9%	85	115				
Ethylbenzene	40.64	0.5	40	0	101.6%	85	115				
m,p-Xylene	77.98	1	80	0	97.5%	85	115				
Methyl tert-Butyl Ether	40.07	1	40	0	100.2%	85	115				
o-Xylene	40.58	0.5	40	0	101.4%	85	115				
Toluene	40.48	0.5	40	0	101.2%	85	115				
1,4-Difluorobenzene	93.25	0	100	0	93.2%	84	100				
4-Bromochlorobenzene	97.11	0	100	0	97.1%	87	105				
Fluorobenzene	93.63	0	100	0	93.6%	87	99				

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Work Order: 9902065
Project: Miles Federal 1E Drip
Test No: SW8021B

**QC SUMMARY REPORT
 SURROGATE RECOVERIES**

BTEX

Sample ID	14FBZ	4BCBZ	FLBZ
9902052-01A	90.6	96.1	91.9
9902060-04A	92.4	96.1	92.8
9902060-05A	92.8	97	93
9902063-02A	92.5	97.2	93.1
9902063-02AMS	92.2	97.6	92.2
9902063-02AMSD	92	97.1	92.2
9902063-03A	93.6	96.9	94
9902063-04A	94.1	97.4	94.8
9902063-05A	94.4	96.8	94.9
9902063-06A	87	89.5	92.3
9902063-08A	88.1	90.8	93.9
9902065-01A	87.1	89.4	87.7
9902065-02A	94.1	97.6	94.7
9902065-03A	90.8	94.8	90.8
9902065-04A	90.4	94.6	91.3
9902067-01A	94.8	97.2	94.6
9902067-02A	93.7	96.6	93.8
9902067-03A	95.2	97.5	95.5
9902067-04A	94.4	97.3	95
9902069-02A	91.5	93.7	92.1
CCV1 QC0606/07	93.2	97.6	94
CCV2 QC0606/07	94	96	94.1
CCV3 QC0606/07	93.2	97.1	93.6
LCS WATER	93.4	97.5	93.6
MBI	94	96.9	95.1

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

* Surrogate recovery outside acceptance limits

