

3R - 330

REPORTS

DATE:

1997

April 15, 1997

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



RE: 1997 SAN JUAN BASIN ANNUAL GROUNDWATER REPORT

Dear Bill:

PNM is pleased to submit the 1997 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.

Cozzens B1
Florance 32A
Florance 40
Florance 44
Florance 47X
Florance 124
Hampton 4M
Honolulu Loop-Line Drip
Jacques 2A
Kaufmann 1
Mangum 1E
McClanahan A2E
McClanahan 22
McCoy A1A
Reid 16 Drip
Templeton 1E
Zachry 18E

RECEIVED

APR 16 1997

Environmental Bureau
Oil Conservation Division

PNM plans to request closure of two of the above sites, the Florance 124 and the Templeton 1E, in our April 30, 1997 filing of the San Juan Pit Closure Reports to the OCD Santa Fe office. We did not report on our newest groundwater site, the Sammons 2, since this was discovered in the second quarter of 1997. 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 that reads "Maureen Gannon".

Maureen Gannon
Project Manager

Attachment

cc: Denver Bearden, PNMGS
Denny Foust, OCD-Aztec Office
Robin Prisk, WFS

**PNM 1997 San Juan Basin Groundwater Report
April 15, 1997**

Prepared for:

**New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505**

Prepared by:

**Public Service Company of New Mexico
Environmental Services Department
Alvarado Square - MS 0408
Albuquerque, New Mexico 87158**

PNMGS Well Site: **McClanahan A2E**

Groundwater Site Summary Report

Quarter/Year: 4/96 & 1/97

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

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

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

Topo Map: previously submitted
Well Completion Diagram: Figure 1
Site Map with Analytical Results: Figure 2
Groundwater Contour Map: Figure 3 (March 1996)
Hydrograph: Figure 4
Full-Suite Groundwater Sampling Results: Table 1
Analytical Results: attached

Activities for Previous Two Quarters (Oct. - Dec. 1996 & Jan. - Mar. 1997):

PNM installed four wells at the McClanahan A2E on February 11, 1997. All well installations were conducted pursuant to the PNM San Juan Basin Groundwater Management Plan. Figure 1 presents a typical well completion diagram for the site.

PNM performed initial groundwater monitoring at the McClanahan A2E well site on March 11, 1997. Water level measurements were taken in each of the four monitoring wells. PNM conducted groundwater sampling in each well for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX). In addition, MW-1 and MW-2 were sampled for major cations/anions and Water Quality Control Commission (WQCC) dissolved metals. PAH analysis was also conducted on groundwater in MW-2 since this well exhibited a strong hydrocarbon odor, and a noticeable sheen was observed in the purge water. All sampling was performed in strict compliance with EPA protocol.

PNM delivered the samples to OnSite Technologies, Farmington, New Mexico. The samples were analyzed using the following methods:

- benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020
- major cations/anions using various EPA methods
- PAHs using EPA Method 8310
- WQCC metals- filtered (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg using inductively coupled plasma (ICP) for heavy metals and atomic absorption spectroscopy (AAS) for Hg and Se).

Results:

Figure 1 presents a typical monitoring well diagram for well installation at the McClanahan A2E. Table 1 provides a summary of the full suite of analytical results from groundwater samples collected on March 11, 1997. Figure 2 provides a site map with BTEX results for each well. MW-1 and MW-3 are "clean" wells. MW-2, located in the former pit area, and MW-4, located cross-gradient of MW-2, contain concentrations of benzene and xylenes above the WQCC standards. In addition, MW-4 shows an elevated level of toluene at 3.28 ppm which is above the WQCC standard of 0.75 ppm (see table 1). A naphthalene concentration of 0.110 ppm was detected in groundwater from MW-2 which is above the WQCC standard of 0.03 ppm. Metals in MW-1 and MW-2 were below the WQCC standards.

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: McClanahan A2E (continued)

Figure 3 provides a groundwater contour map for the first quarter of 1997. Contrary to PNM's visual surface interpretation of the direction of groundwater, groundwater flow beneath the site is actually in a southeasterly direction. Figure 4 provides current groundwater elevation data points at the site. Only one round of water level measurements have been collected to date.

Future Actions:

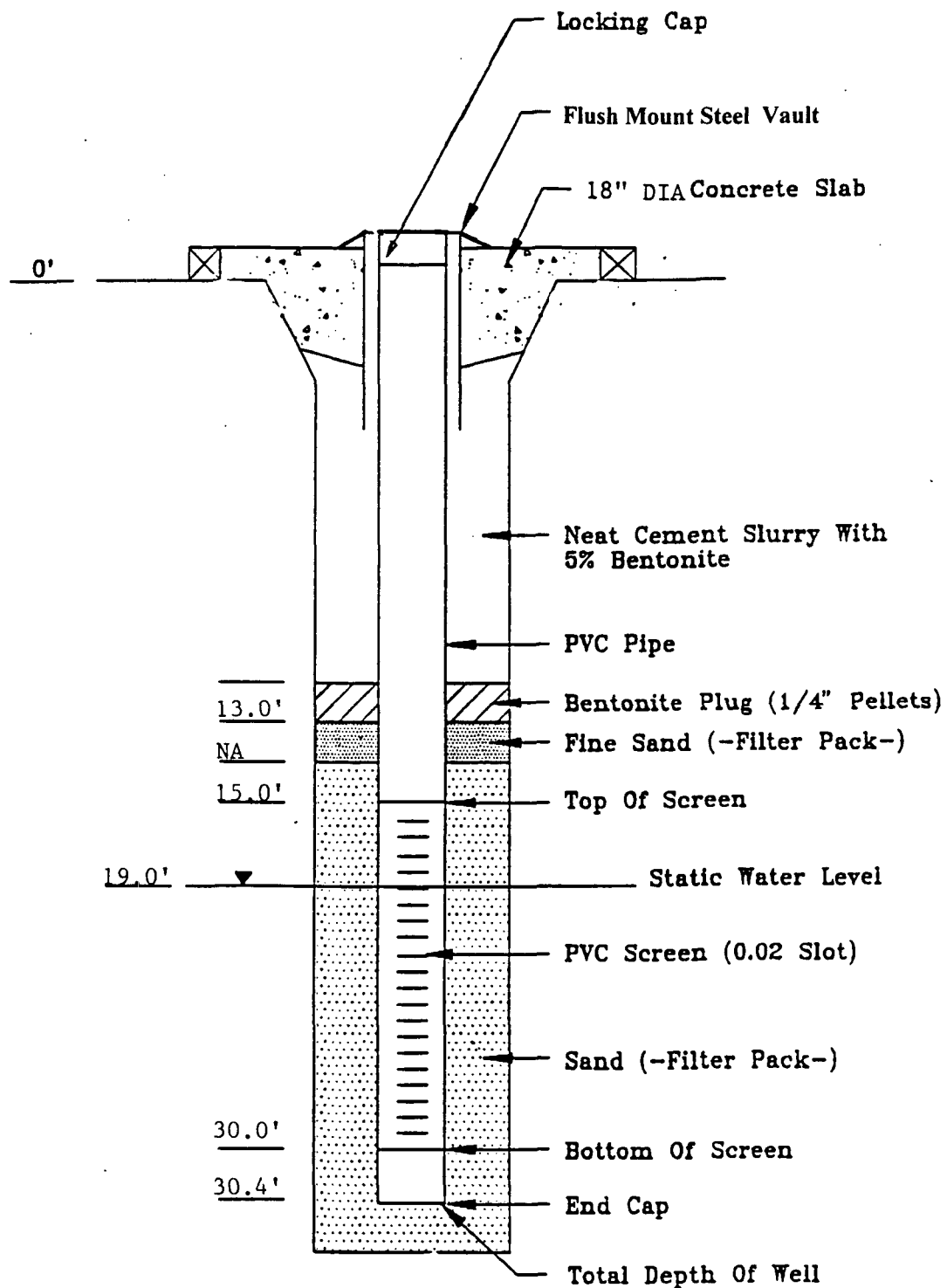
PNM will continue to monitor groundwater gradient and perform quarterly sampling at the McClanahan A2E well site. We will again sample for PAHs in MW-2 as well as in MW-3 and MW-4 to determine if there is an ongoing presence of PAHs at the site. After obtaining results from our next quarterly sampling event, we will evaluate the need for additional wells.

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



CLIENT: PNM	
DATE:	REV. NO.: 0
AUTHOR: M.D.G.	DRAWN BY: M.P.
CK'D BY: M.D.G.	FILE: DWG

Figure 1
Well Completion Diagram

Figure 2. McClanahan A2E Site Map with Analytical Results
(Concentrations in ppb)

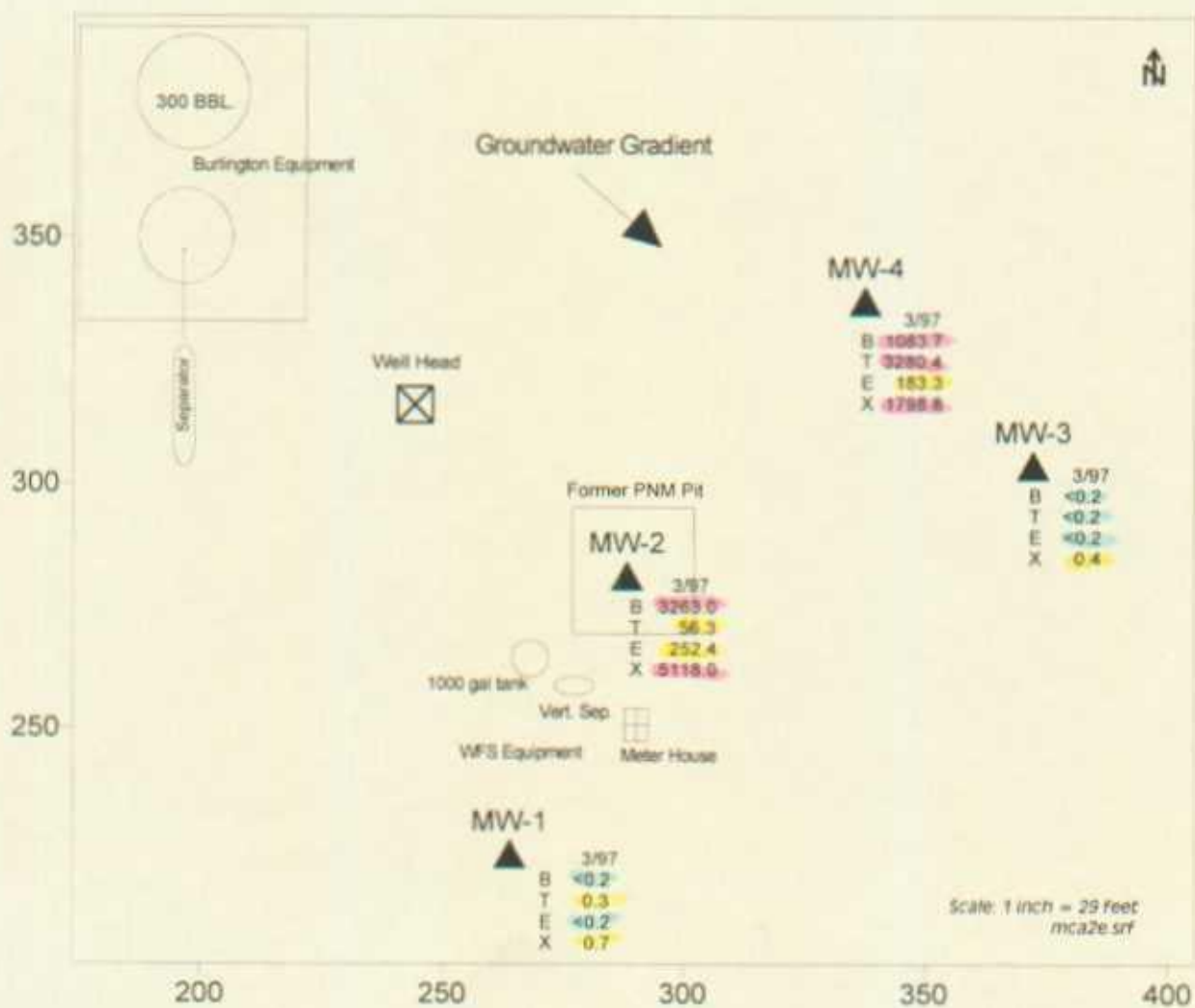


Figure 3. McClanahan A2E Groundwater Contour Map (March 1997)

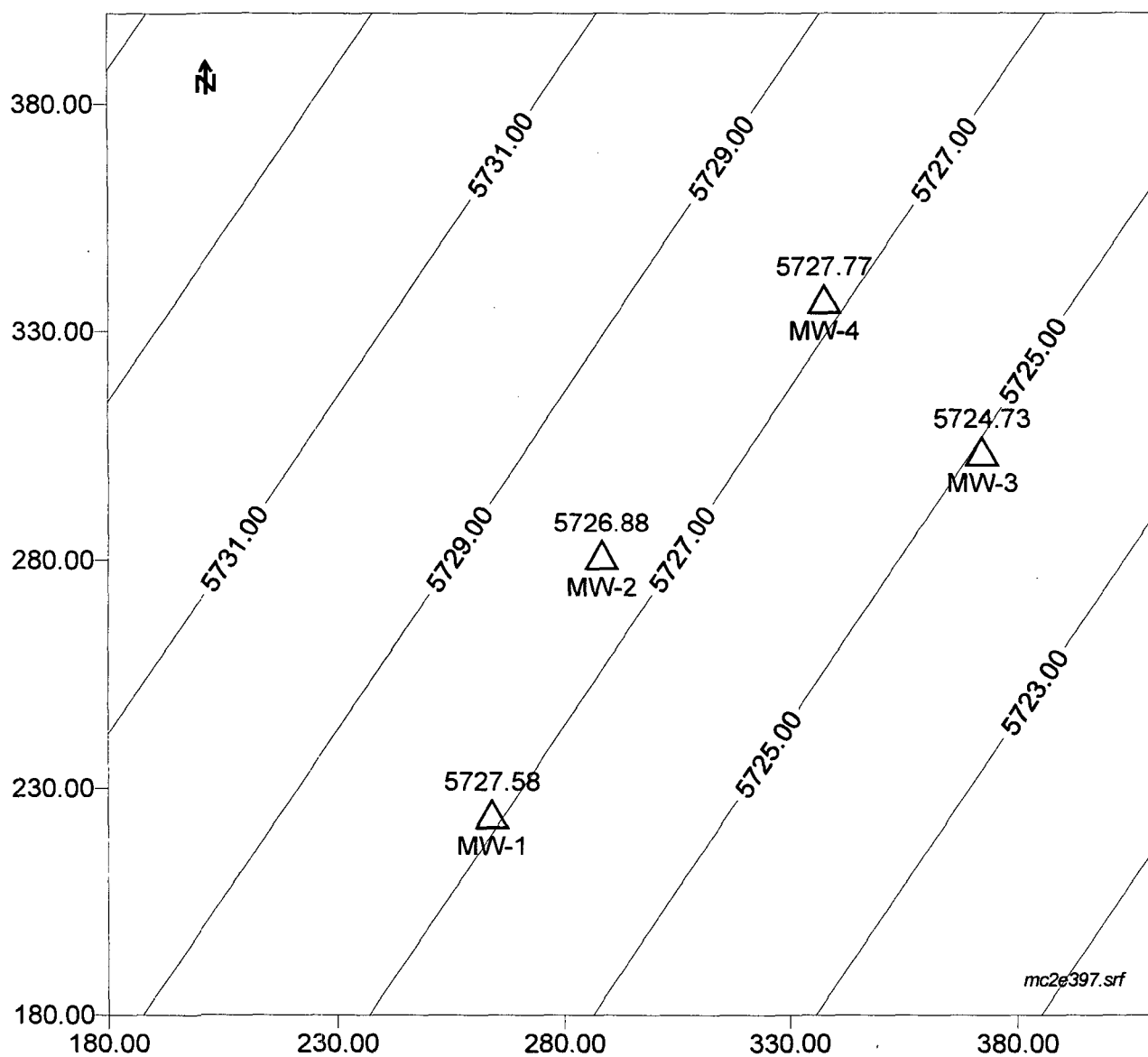


Figure 4. McClanahan A2E Hydrograph
(water level vs. time)

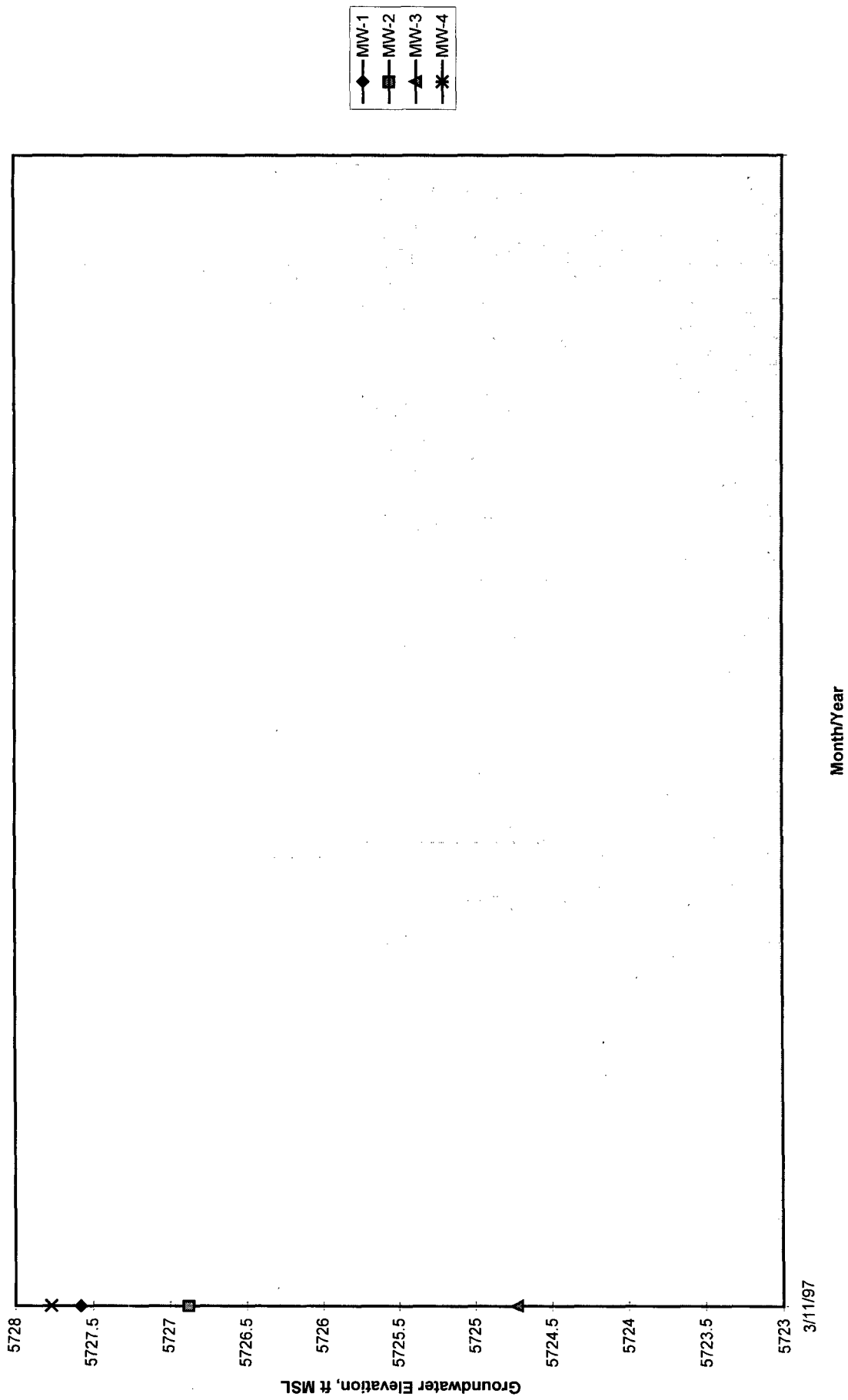


Table 1. McClanahan A2E GROUNDWATER SAMPLING RESULTS, mg/l (3/11/97)

Constituent	WQCC Stds.	MW-1	MW-2	MW-3	MW-4	MW-5 (MW-2 duplicate)
<i>B</i>	0.01	<0.0002	3.2630	<0.0002	1.0837	3.2439
<i>T</i>	0.75	0.0003	0.0563	<0.0002	3.2804	0.0522
<i>E</i>	0.75	<0.0002	0.2524	<0.0002	0.1833	0.2387
<i>X</i>	0.62	0.0007	5.1180	0.0004	1.7988	5.0937
<i>PAHs</i>	0.03	NA	0.110	NA	NA	NA
<i>Metals</i>						
As	0.1	<0.030	<0.030	NA	NA	NA
Ba	1	0.014	0.033	NA	NA	NA
Cd	0.01	<0.004	<0.004	NA	NA	NA
Cr	0.05	<0.010	<0.010	NA	NA	NA
Pb	0.05	<0.040	<0.040	NA	NA	NA
Se	0.05	0.005	<0.003	NA	NA	NA
Ag	0.05	<0.006	<0.006	NA	NA	NA
Hg	0.002	0.0003	0.0001	NA	NA	NA
<i>Cations/Anions</i>						
Na	NA	752	1384	NA	NA	NA
Ca	NA	449	426	NA	NA	NA
Mg	NA	25.8	68.8	NA	NA	NA
K	NA	5.9	23.4	NA	NA	NA
Cl	NA	60	428	NA	NA	NA
SO4	NA	2462	3245	NA	NA	NA
CO3	NA	<1	<1	NA	NA	NA
HCO3	NA	165	817	NA	NA	NA
OH	NA	<1	<1	NA	NA	NA
<i>Cation/Anion Balance</i>						
Difference Cation- Anion	NA	1.74	5.30	NA	NA	NA
Total Cation-Anion	NA	113.04	180.74	NA	NA	NA
% Difference	NA	1.5	2.9	NA	NA	NA
TDS, calc	NA	3920	6392	NA	NA	NA
TDS, meas	NA	3873	6282	NA	NA	NA
Hardness as CaCO3	NA	1227	1347	NA	NA	NA

NA: Not Applicable

BDL: Below Detection Limit

NS: Not Sampled

Bold: Concentration Above WQCC Standard

** Out of Acceptable Range % Diff. +/- 5

OFF: (505) 325-5667



LAB: (505) 325-1556

7 April 1997

Denver Bearden
PNM Gas Services
603 W. Elm Street
Farmington, NM 87401

Reference:

Project Name: McClanahan A2E
Project Loc.: MW1, MW2, MW3, MW4, MW5; 970311
On Site ID: COC No.5750

Dear Denver,

Enclosed please find the analytical results for your project referenced above. Should you have any questions please feel free to call me at your convenience, (505) 325-2432.

Thank you once again for your consideration.

Sincerely,

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

David Cox
Laboratory Manager

Attachments (3)

cc: Maureen Gannon, PNM Gas Services

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: **18-Mar-97**
 COC No.: **5750**
 Sample ID: **13876**
 Job No.: **2-1000**

Project Name: **PNM Gas Services - McClanahan A2E**

Project Location: **9703111230; MW-1**

Sampled by: **MS/MG**

Date: **11-Mar-97** Time: **12:30**

Analyzed by: **HR**

Date: **17-Mar-97**

Laboratory Analysis

Parameter	Result	Unit of Measure		Result	Unit of Measure	
Cations						
Sodium Na	752	mg/L		32.71	me/L	
Calcium Ca	449	mg/L		22.41	me/L	
Magnesium Mg	25.8	mg/L		2.12	me/L	
Potassium K	5.9	mg/L		0.15	me/L	
Anions						
Chloride Cl	60	mg/L		1.69	me/L	
Sulfate SO4	2462	mg/L		51.26	me/L	
Carbonate CO3 as CaCO3	<1	mg/L		<0.01	me/L	
Bicarbonate HCO3 as CaCO3	165	mg/L		2.70	me/L	
Hydroxide OH as CaCO3	<1	mg/L		<0.01	me/L	
Total Dissolved Solids			Cation-Anion Balance 1.74 Difference Cation-Anion, me/L 113.04 Total Cation-Anion, me/L 1.5 % Difference Cation-Anion Comments			
Calculated, Sum of Cation/Anion	3920	mg/L				
Total Dissolved Solids						
Dried @ 180 C	3873	mg/L				
pH	7.27					
Conductivity @ 25 C	4330	uS/cm				
Total Hardness as CaCO3	1227	mg/L				

Approved by: *[Signature]*
 Date: **3/18/97**

OFF: (505) 325-5667

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: **18-Mar-97**
 COC No.: **5750**
 Sample ID: **13877**
 Job No.: **2-1000**

Project Name: **PNM Gas Services - McClanahan A2E**

Project Location: **9703111300; MW-2**

Sampled by: **MS/MG**

Date: **11-Mar-97** Time: **13:00**

Analyzed by: **HR**

Date: **17-Mar-97**

Laboratory Analysis

Parameter	Result	Unit of Measure		Result	Unit of Measure	
Cations						
Sodium <i>Na</i>	1384	mg/L		60.20	me/L	
Calcium <i>Ca</i>	426	mg/L		21.26	me/L	
Magnesium <i>Mg</i>	68.8	mg/L		5.66	me/L	
Potassium <i>K</i>	23.4	mg/L		0.60	me/L	
Anions						
Chloride <i>Cl</i>	428	mg/L		12.07	me/L	
Sulfate <i>SO4</i>	3245	mg/L		67.56	me/L	
Carbonate <i>CO3 as CaCO3</i>	<1	mg/L		<0.01	me/L	
Bicarbonate <i>HCO3 as CaCO3</i>	817	mg/L		13.39	me/L	
Hydroxide <i>OH as CaCO3</i>	<1	mg/L		<0.01	me/L	
Total Dissolved Solids			Cation-Anion Balance 5.30 Difference Cation-Anion, me/L 180.74 Total Cation-Anion, me/L 2.9 % Difference Cation-Anion Comments			
Calculated, Sum of Cation/Anion	6392	mg/L				
Total Dissolved Solids						
Dried @ 180 C	6262	mg/L				
pH	7.14					
Conductivity @ 25 C	7140	uS/cm				
Total Hardness as CaCO3	1347	mg/L				

Approved by: 

Date: **3/18/97**

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNICAL PERSONNEL QUALIFIED WITH THE LATEST EQUIPMENT

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT*Cation/Anion Balance*

Date: 17-Mar-97

Quality Control Sample

Parameter	Laboratory Identification	True Value	Analyzed Value	Unit of Measure	% Diff	Limit % Diff
Sodium, Na	0524-QC	3.16	3.28	mg/L	4	10
Calcium, Ca	0462-QC	2.18	2.16	mg/L	-1	10
Magnesium, Mg	0462-QC	1.14	1.21	mg/L	6	10*
Potassium, K	1524-QC	2.92	2.75	mg/L	-6	10
Chloride, Cl	0524-QC	95	92	mg/L	-3	10
Sulfate, SO ₄	0539-QC	78	74	mg/L	-4	10
Alkalinity	1524-QC	209	218	mg/L	4	10
pH	0524-QC	9.08	9.27		2	10
Conductivity	0524-QC	1280	1154	uS/cm	-10	15
Total Dissolved Solids, 180C	0524-QC	959	964	uS/cm	1	15

Matrix Spike

Parameter	Laboratory Identification	Analyzed Value	Matrix Spike	Spike Value	Unit of Measure	Spike Recovery
Sodium, Na	13877-5750	1.73	0.50	2.29	mg/L	103%
Calcium, Ca	13877-5750	2.13	0.50	2.70	mg/L	103%
Magnesium, Mg	13877-5750	1.72	0.50	2.29	mg/L	103%
Potassium, K	13876-5750	1.46	1.00	2.32	mg/L	94%

Method Blank

Parameter	Laboratory Identification	Analyzed Value	Unit of Measure
Sodium, Na	LF-Blank	<0.2	mg/L
Calcium, Ca	LF-Blank	<0.05	mg/L
Magnesium, Mg	LF-Blank	<0.05	mg/L
Potassium, K	LF-Blank	<0.05	mg/L
Chloride, Cl	LF-Blank	<3 X DL	mg/L
Sulfate, SO ₄	LF-Blank	<1	mg/L
Conductivity	LF-Blank	<2	uS/cm

(71)

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

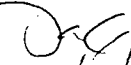
Date: *18-Mar-97*
COC No.: *5750*
Sample No.: *13876*
Job No.: *2-1000*

Project Name: *PNM Gas Services - McClanahan A2E*
Project Location: *9703111230; MW-1*
Sampled by: *MS/MG*
Analyzed by: *DC*
Sample Matrix: *Liquid*

Date: *11-Mar-97* Time: *12:30*
Date: *17-Mar-97*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>0.3</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i><0.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>0.4</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>0.3</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>1.0</i>	<i>ug/L</i>		

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

Approved By: 
Date: *3/18/97*

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *19-Mar-97*
COC No.: *5750*
Sample No.: *13877*
Job No.: *2-1000*

Project Name: *PNM Gas Services - McClanahan A2E*

Project Location: *9703111300; MW-2*

Sampled by: *MS/MG*

Date: *11-Mar-97* Time: *13:00*

Analyzed by: *DC*

Date: *18-Mar-97*

Sample Matrix: *Liquid*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i>3263.0</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>56.3</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>252.4</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>5104.8</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>13.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>8689.7</i>	<i>ug/L</i>		

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

Approved By: *[Signature]*

Date: *3/19/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

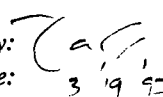
Date: **19-Mar-97**
COC No.: **5750**
Sample No.: **13878**
Job No.: **2-1000**

Project Name: **PNM Gas Services - McClanahan A2E**
Project Location: **9703111330; MW-3**
Sampled by: **MS/MG**
Analyzed by: **DC**
Sample Matrix: **Liquid**

Date: **11-Mar-97** Time: **13:30**
Date: **18-Mar-97**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Benzene	<0.2	ug/L	0.2	ug/L
Toluene	<0.2	ug/L	0.2	ug/L
Ethylbenzene	<0.2	ug/L	0.2	ug/L
m,p-Xylene	0.4	ug/L	0.2	ug/L
o-Xylene	<0.2	ug/L	0.2	ug/L
TOTAL	0.4	ug/L		

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

Approved By: 

Date: **3/19/97**

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: *19-Mar-97*
COC No.: *5750*
Sample No.: *13879*
Job No.: *2-1000*

Project Name: *PNM Gas Services - McClanahan A2E*

Project Location: *9703111400; MW-4*

Sampled by: *MS/MG*

Date: *11-Mar-97*

Time: *14:00*

Analyzed by: *DC*

Date: *18-Mar-97*

Sample Matrix: *Liquid*

<i>Parameter</i>	<i>Result</i>	<i>Unit of Measure</i>	<i>Detection Limit</i>	<i>Unit of Measure</i>
<i>Benzene</i>	<i>1083.7</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Toluene</i>	<i>3280.4</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>Ethylbenzene</i>	<i>183.3</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>m,p-Xylene</i>	<i>1245.6</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>o-Xylene</i>	<i>553.2</i>	<i>ug/L</i>	<i>0.2</i>	<i>ug/L</i>
<i>TOTAL</i>	<i>6346.2</i>	<i>ug/L</i>		

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

Approved By: *CAF*

Date: *3/19/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

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

Date: **19-Mar-97**
COC No.: **5750**
Sample No.: **13880**
Job No.: **2-1000**

Project Name: **PNM Gas Services - McClanahan A2E**
Project Location: **9703111430; MW-5**
Sampled by: **MS/MG** Date: **11-Mar-97** Time: **14:30**
Analyzed by: **DC** Date: **18-Mar-97**
Sample Matrix: **Liquid**

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Benzene	3243.9	ug/L	0.2	ug/L
Toluene	52.2	ug/L	0.2	ug/L
Ethylbenzene	238.7	ug/L	0.2	ug/L
m,p-Xylene	5068.6	ug/L	0.2	ug/L
o-Xylene	25.1	ug/L	0.2	ug/L
TOTAL	8628.5	ug/L		

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

Approved By: 
Date: **3/19/97**

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT for EPA Method 8020

Date Analyzed: 17-Mar-97

Internal QC No.: 0527-STD

Surrogate QC No.: 0528-STD

Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	19.7	1	15%
Toluene	ppb	20.0	20.1	0	15%
Ethylbenzene	ppb	20.0	20.5	2	15%
m,p-Xylene	ppb	40.0	39.2	2	15%
o-Xylene	ppb	20.0	20.1	0	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	95	89	(39-150)	4	20%
Toluene	98	92	(46-148)	4	20%
Ethylbenzene	100	94	(32-160)	4	20%
m,p-Xylene	98	90	(35-145)	6	20%
o-Xylene	98	92	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
13876-5750	96				

S1: Fluorobenzene

OFF: (505) 325-5667



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT for EPA Method 8020

Date Analyzed: 18-Mar-97

Internal QC No.: 0527-STD

Surrogate QC No.: 0528-STD

Reference Standard QC No.: 0529/30-QC

Method Blank

Parameter	Result	Unit of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Parameter	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	20.7	3	15%
Toluene	ppb	20.0	21.4	7	15%
Ethylbenzene	ppb	20.0	21.7	9	15%
m,p-Xylene	ppb	40.0	41.9	5	15%
o-Xylene	ppb	20.0	21.4	7	15%

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	77	91	(39-150)	4	20%
Toluene	94	100	(46-148)	4	20%
Ethylbenzene	94	86	(32-160)	5	20%
m,p-Xylene	82	94	(35-145)	4	20%
o-Xylene	96	101	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
13877-5750	96				
13878-5750	97				
13879-5750	96				
13880-5750	96				

S1: Fluorobenzene

nc



RECEIVED APR " 2 1997 (nc)

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

March 24, 1997

Mr. David Cox
ON SITE TECHNOLOGIES
612 East Murray
Farmington, NM 87401

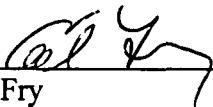
The following report contains analytical results for samples received at Southern Petroleum Laboratories (SPL) on March 14, 1997. The samples were assigned to Certificate of Analysis No. 9703728 and analyzed for all parameters as listed on the chain of custody.

There were no analytical problems encountered with this group of samples and all quality control data was within acceptance limits.

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories



Ed Fry
Project Manager

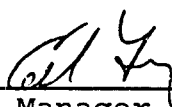


HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 97-03-728

Approved for Release by:



Ed Fry, Project Manager

3/22/97

Date:

Greg Grandits
Laboratory Director

Idelis Williams
Quality Assurance Officer

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.

**HOUSTON LABORATORY**8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Certificate of Analysis No. H9-9703728-01

On Site Technologies
612 East Murray
Farmington, NM 87401
ATTN: David CoxP.O.#
5750
03/24/97PROJECT: McClanahan A2E
SITE: Farmington, NM
SAMPLED BY: On Site Technologies, LTD.
SAMPLE ID: 9703111300 MW-2 13877-5750PROJECT NO: PNM1002
MATRIX: WATER
DATE SAMPLED: 03/11/97 13:00:00
DATE RECEIVED: 03/14/97**ANALYTICAL DATA**

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	110	22.50	ug/L
Acenaphthylene	ND	12.50	ug/L
Acenaphthene	ND	25.0	ug/L
Fluorene	ND	50.0	ug/L
Phenanthrene	ND	50.0	ug/L
Anthracene	ND	25.0	ug/L
Fluoranthene	ND	25.0	ug/L
Pyrene	ND	25.0	ug/L
Chrysene	ND	20.00	ug/L
Benzo (a) anthracene	ND	20.00	ug/L
Benzo (b) fluoranthene	ND	15.00	ug/L
Benzo (k) fluoranthene	ND	17.50	ug/L
Benzo (a) pyrene	ND	7.50	ug/L
Dibenzo (a,h) anthracene	ND	17.50	ug/L
Benzo (g,h,i) perylene	ND	25.0	ug/L
Indeno (1,2,3-cd) pyrene	ND	20.00	ug/L

SURROGATES

	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
Biphenyl	200 ug/L	D	50	150
Coronene	200 ug/L	D	50	150

ANALYZED BY: KA DATE/TIME: 03/21/97 02:13:58
EXTRACTED BY: AM DATE/TIME: 03/17/97 10:00:00
METHOD: 8310 Polynuclear Aromatic Hydrocarbons
NOTES: * - Practical Quantitation Limit ND - Not Detected
NA - Not Analyzed
D - Diluted, control limits not applicable.**COMMENTS:**QUALITY ASSURANCE: These analyses are performed in accordance
with EPA guidelines for quality assurance.

QUALITY CONTROL

DOCUMENTATION



SPL BATCH QUALITY CONTROL REPORT **
METHOD EPA 8310

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous
Units: ug/L

Batch Id: 1970320060000

LABORATORY CONTROL SAMPLE

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike		QC Limits(**) (Mandatory) % Recovery Range
			Result <1>	Recovery %	
Naphthalene	ND	0.10	0.082	82.0	33 - 122
Acenaphthylene	ND	0.10	0.079	79.0	42 - 138
Acenaphthene	ND	0.10	0.082	82.0	25 - 123
Fluorene	ND	0.10	0.079	79.0	19 - 142
Phenanthrene	ND	0.10	0.088	88.0	40 - 121
Anthracene	ND	0.10	0.077	77.0	32 - 121
Fluoranthene	ND	0.10	0.088	88.0	51 - 115
Pyrene	ND	0.10	0.086	86.0	45 - 117
Chrysene	ND	0.10	0.091	91.0	44 - 122
Benzo (a) anthracene	ND	0.10	0.087	87.0	57 - 118
Benzo (b) fluoranthene	ND	0.10	0.093	93.0	62 - 121
Benzo (k) fluoranthene	ND	0.10	0.093	93.0	63 - 117
Benzo (a) pyrene	ND	0.10	0.093	93.0	42 - 120
Dibenzo (a,h) anthracene	ND	0.10	0.091	91.0	53 - 118
Benzo (g,h,i) perylene	ND	0.10	0.084	84.0	51 - 116
Indeno (1,2,3-cd) pyrene	ND	0.10	0.11	110	60 - 116

MATRIX SPIKES

S P I K E C O M P O U N D S	Sample Results <2>	Spike Added <3>	Matrix Spike		Matrix Spike Duplicate		MS/MSD Relative % Difference	QC Limits(***) (Advisory)	
			Result <1>	Recovery <4>	Result <1>	Recovery <5>		RPD Max.	Recovery Range
NAPHTHALENE	ND	0.50	0.39	78.0	0.30	60.0	26.1	30	1 - 122
ACENAPHTHYLENE	ND	0.50	0.38	76.0	0.31	62.0	20.3	30	1 - 124
ACENAPHTHENE	ND	0.5	0.39	78.0	0.33	66.0	16.7	30	1 - 124
FLUORENE	ND	0.5	0.38	76.0	0.33	66.0	14.1	30	1 - 142
PHENANTHRENE	ND	0.5	0.41	82.0	0.34	68.0	18.7	30	1 - 155
ANTHRACENE	ND	0.5	0.36	72.0	0.30	60.0	18.2	30	1 - 126
FLUORANTHENE	ND	0.5	0.42	84.0	0.40	80.0	4.88	30	14 - 123
PYRENE	ND	0.5	0.40	80.0	0.38	76.0	5.13	30	1 - 140
CHRYSENE	ND	0.50	0.43	86.0	0.45	90.0	4.55	30	1 - 199
BENZO (A) ANTHRACENE	ND	0.50	0.41	82.0	0.43	86.0	4.76	30	12 - 135
BENZO (B) FLUORANTHENE	ND	0.50	0.44	88.0	0.47	94.0	6.59	30	6 - 150
BENZO (K) FLUORANTHENE	ND	0.50	0.43	86.0	0.46	92.0	6.74	30	1 - 159
BENZO (A) PYRENE	ND	0.50	0.43	86.0	0.46	92.0	6.74	30	1 - 128
DIBENZO (A,H) ANTHRACENE	ND	0.50	0.41	82.0	0.44	88.0	7.06	30	1 - 110
BENZO (G,H,I) PERYLENE	ND	0.5	0.50	100	0.60	120 *	18.2	30	1 - 116
INDENO (1,2,3-CD) PYRENE	ND	0.50	0.41	82.0	0.48	96.0	15.7	30	1 - 116



SPL BATCH QUALITY CONTROL REPORT **
METHOD EPA 8310

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Aqueous
Units: ug/L

Batch Id: 1970320060000

Analyst: KA

Sequence Date: 03/20/97

SPL ID of sample spiked: 970317SFB1

Sample File ID: 970320A\010-0101

Method Blank File ID:

Blank Spike File ID: 970320A\011-0101

Matrix Spike File ID: 970320A\029-0101

Matrix Spike Duplicate File ID: 970320A\030-0101 (***) = Source: Temporary Limits

* = Values Outside QC Range. * = Data outside Method Specification limits.

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = $[(<1> - <2>) / <3>] \times 100$

LCS % Recovery = $(<1> / <3>) \times 100$

Relative Percent Difference = $| <4> - <5> | / [(<4> + <5>) \times 0.5] \times 100$

(**) = Source: SPL-Houston Historical Data (3rd Q '96)

SAMPLES IN BATCH(SPL ID):

9703728-01A 9703726-01A 9703726-03A 9703726-02A

CHAIN OF CUSTODY
AND
SAMPLE RECEIPT CHECKLIST



657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

Date: 3/13/97

Page 1 of 1

9703728 3/11/97 5046

Purchase Order No.: 5752		Job No. PM-1002	
SEND INVOICE TO			
Name: ACCOUNTS PAYABLE		Dept.	
Company: ON SITE		Address	
City, State, Zip		Telephone No.	
Sampling Location: McCLANAHAN A2E		Telefax No.	
Sampler: MS/MS		REPORT RESULTS TO	
NAME IDENTIFICATION		Name: DAVID COX	
DATE TIME MATRIX PRES.		Company: ON SITE	
3/11 1300 H2O 4% 1		Mailing Address	
		City, State, Zip	
		Telephone No.	
		Telefax No.	
		ANALYSIS REQUESTED	
		LAB ID	
		13897-5750	
Relinquished by: [Signature]		Received by: S. West	
Date/Time: 3/13/97 1715		Date/Time: 3/14/97 1000	
Relinquished by: [Signature]		Received by: [Signature]	
Date/Time:		Date/Time:	
Relinquished by:		Received by:	
Date/Time:		Date/Time:	
Method of Shipment:		Rush	
Authorized by: [Signature]		24-48 Hours	
(Client Signature Must Accompany Request)		10 Working Days	
Date: 3/13/97		Special Instructions: NOTE RUSH	

SPL Houston Environmental Laboratory

Sample Login Checklist

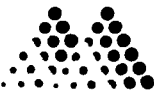
Date: 3/14/97	Time: 1000
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SPL Sample ID: 9703728

		Yes	No
1	Chain-of-Custody (COC) form is present.	✓	
2	COC is properly completed.	✓	
3	If no, Non-Conformance Worksheet has been completed.		
4	Custody seals are present on the shipping container.	✓	
5	If yes, custody seals are intact.	✓	
6	All samples are tagged or labeled.	✓	
7	If no, Non-Conformance Worksheet has been completed.		
8	Sample containers arrived intact	✓	
9	Temperature of samples upon arrival:	3° C	
10	Method of sample delivery to SPL:	SPL Delivery	
		Client Delivery	
		FedEx Delivery (airbill #)	
		Other:	UPS
11	Method of sample disposal:	SPL Disposal	✓
		HOLD	
		Return to Client	

Name: S. West	Date: 3/14/97
---------------	---------------

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Mountain States Analytical

The Quality Solution

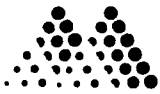
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: McClanahan ~~AZE~~ A2E

Sample ID: 13876-5750 (Dissolved) 970311230 MW-1
Matrix: Waste Water

MSAI Sample: 59921
MSAI Group: 15558
Date Reported: 03/28/97
Discard Date: 04/27/97
Date Submitted: 03/13/97
Date Sampled: 03/11/97
Collected by:
Purchase Order: 5750
Project No.: PNM 1002

Test Analysis	Results as Received	Units	Method Detection Limit
0249D Cadmium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.004
0251F Chromium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.010
0255F Lead by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.040
0259F Mercury by CVAA, w/ww Diss, 245.1 Method: SW-846 245.1	0.0003	mg/l	0.0001
0266D Silver by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.006
0392I Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Complete		
0392M Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	Complete		
0401 Prep for HAA, w/ww, 7062/7742 Method: SW-846 7062/7742	Complete	mg/l	
1045I Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030
1451 Selenium by HAA, w/ww, 7742 Method: SW-846 7742	0.005	mg/l	0.003
2541B Barium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	0.014	mg/l	0.003



Mountain States Analytical

The Quality Solution

On Site Technologies, Ltd.

Sample ID: 13876-5750 (Dissolved)

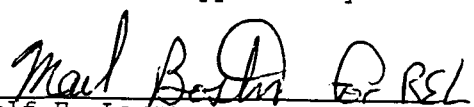
Page 2

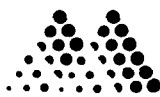
MSAI Sample: 59921

MSAI Group: 15558

Test	Analysis	Results as Received	Units	Method Detection Limit
----	-----	-----	-----	-----
0939	Sample Filtering Method: MSAI IN-HOUSE	3 /14/97		

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager



Mountain States Analytical

The Quality Solution

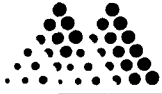
On Site Technologies, Ltd.
612 E Murray Drive
Farmington, NM 87401

Attn: Mr. David Cox
Project: McClanahan ~~AZE~~ ALE

Sample ID: 13877-5750 (Dissolved) 9703111300 MW-2
Matrix: Waste Water

MSAI Sample: 59922
MSAI Group: 15558
Date Reported: 03/28/97
Discard Date: 04/27/97
Date Submitted: 03/13/97
Date Sampled: 03/11/97
Collected by:
Purchase Order: 5750
Project No.: PNM 1002

Test Analysis	Results as Received	Units	Method Detection Limit
0249D Cadmium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.004
0251F Chromium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.010
0255F Lead by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.040
0259F Mercury by CVAA, w/ww Diss, 245.1 Method: SW-846 245.1	0.0001	mg/l	0.0001
0266D Silver by ICP, w/ww Diss, 6010A Method: SW-846 6010A	ND	mg/l	0.006
0392I Flame/ICP Prep, w/ww, 3005A Method: SW-846 3005A	Complete		
0392M Mercury Prep CVAA, w/ww, 7470 Method: SW-846 7470	Complete		
0401 Prep for HAA, w/ww, 7062/7742 Method: SW-846 7062/7742	Complete	mg/l	
1045I Arsenic by ICP, w/ww, 6010A Method: SW-846 6010A	ND	mg/l	0.030
1451 Selenium by HAA, w/ww, 7742 Method: SW-846 7742	ND	mg/l	0.003
2541B Barium by ICP, w/ww Diss, 6010A Method: SW-846 6010A	0.033	mg/l	0.003



Mountain States Analytical

The Quality Solution

On Site Technologies, Ltd.

Sample ID: 13877-5750 (Dissolved)

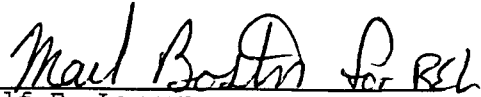
Page 2

MSAI Sample: 59922

MSAI Group: 15558

Test	Analysis	Results as Received	Units	Method Detection Limit
----	-----	-----	-----	-----
0939	Sample Filtering Method: MSAI IN-HOUSE	3 /14/97		

Respectfully Submitted,
Reviewed and Approved by:


Rolf E. Larsen
Project Manager

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

03/28/97
08:23:01
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-971	Silver	0.0023	0.0060
	Aluminum	0.0189	0.0500
	Arsenic	0.0095	0.0300
	Boron	0.0067	0.0400
	Barium	0.0008	0.0030
	Beryllium	ND	0.0002
	Cadmium	0.0012	0.0040
	Cobalt	0.0001	0.0040
	Chromium	0.0024	0.0100
	Copper	0.0051	0.0100
	Potassium	0.0698	0.1000
	Manganese	0.0010	0.0020
	Molybdenum	0.0018	0.0300
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	0.0502	0.1000
	Selenium	0.0081	0.0700
	Thallium	ND	0.1000
	Vanadium	0.0009	0.0030
	Zinc	0.0358(Q2)	0.0300
'BW2-971-2	Silver	0.0022	0.0060
	Aluminum	0.0094	0.0500
	Arsenic	ND	0.0300
	Boron	0.0208	0.0400
	Barium	0.0007	0.0030
	Beryllium	ND	0.0002
	Cadmium	0.0008	0.0040
	Cobalt	0.0001	0.0040
	Chromium	0.0044	0.0100
	Copper	0.0043	0.0100
	Potassium	0.0485	0.1000
	Manganese	0.0006	0.0020
	Molybdenum	0.0007	0.0300
	Nickel	0.0061	0.0300
	Lead	0.0015	0.0400
	Antimony	0.0290	0.1000
	Selenium	0.0079	0.0700
	Thallium	ND	0.1000
	Vanadium	0.0001	0.0030
	Zinc	0.0238	0.0300

PIKE

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS	
						LOWER	UPPER
5524-59809	Silver	0.0500	0.0017	0.0522	101.0	80.0	120.0
	Aluminum	2.0000	0.0096	2.1709	108.1	80.0	120.0
	Arsenic	2.0000	-0.0057	2.1219	106.4	80.0	120.0
	Boron	0.5000	0.1192	0.6826	112.7	80.0	120.0
	Barium	2.0000	0.1508	2.1775	101.3	80.0	120.0
	Beryllium	0.0500	0.0000	0.0522	104.4	80.0	120.0
	Cadmium	0.0500	0.0002	0.0538	107.2	80.0	120.0

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Time : 03/28/97 / 07:35:38

SPIKE						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
15524-59809	Cobalt	0.5000	0.0013	0.4924	98.2	80.0	120.0
	Chromium	0.2000	0.0049	0.2069	101.0	80.0	120.0
	Copper	0.2500	0.0029	0.2569	101.6	80.0	120.0
	Potassium	10.0000	7.4470	18.7280	112.8	80.0	120.0
	Manganese	0.5000	-0.0009	0.5038	100.9	80.0	120.0
	Molybdenum	0.5000	-0.0034	0.5071	102.1	80.0	120.0
	Nickel	0.5000	-0.0076	0.5065	102.8	80.0	120.0
	Lead	0.5000	0.0046	0.5044	100.0	80.0	120.0
	Antimony	0.5000	0.0607	0.5038	88.6	80.0	120.0
	Selenium	2.0000	-0.0217	2.0596	104.1	80.0	120.0
	Thallium	2.0000	0.0217	1.9956	98.7	80.0	120.0
	Vanadium	0.5000	0.0027	0.5239	104.2	80.0	120.0
	Zinc	0.5000	0.0191	0.5262	101.4	80.0	120.0

MSD						QC LIMITS			
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
15524-59810	Silver	0.0500	0.0017	0.0556	107.8	80.0	120.0	6.5	20.0
	Aluminum	2.0000	0.0096	2.1353	106.3	80.0	120.0	1.7	20.0
	Arsenic	2.0000	-0.0057	2.1213	106.4	80.0	120.0	0.0	20.0
	Boron	0.5000	0.1192	0.6547	107.1	80.0	120.0	5.1	20.0
	Barium	2.0000	0.1508	2.1466	99.8	80.0	120.0	1.5	20.0
	Beryllium	0.0500	0.0000	0.0519	103.8	80.0	120.0	0.6	20.0
	Cadmium	0.0500	0.0002	0.0504	100.4	80.0	120.0	6.6	20.0
	Cobalt	0.5000	0.0013	0.4897	97.7	80.0	120.0	0.5	20.0
	Chromium	0.2000	0.0049	0.2074	101.3	80.0	120.0	0.3	20.0
	Copper	0.2500	0.0029	0.2566	101.5	80.0	120.0	0.1	20.0
	Potassium	10.0000	7.4470	17.9277	104.8	80.0	120.0	7.4	20.0
	Manganese	0.5000	-0.0009	0.5020	100.6	80.0	120.0	0.3	20.0
	Molybdenum	0.5000	-0.0034	0.4980	100.3	80.0	120.0	1.8	20.0
	Nickel	0.5000	-0.0076	0.4985	101.2	80.0	120.0	1.6	20.0
	Lead	0.5000	0.0046	0.4934	97.8	80.0	120.0	2.2	20.0
	Antimony	0.5000	0.0607	0.3923	66.3(G)	80.0	120.0	28.8(G)	20.0
	Selenium	2.0000	-0.0217	2.0961	105.9	80.0	120.0	1.7	20.0
	Thallium	2.0000	0.0217	2.0415	101.0	80.0	120.0	2.3	20.0
	Vanadium	0.5000	0.0027	0.5207	103.6	80.0	120.0	0.6	20.0
	Zinc	0.5000	0.0191	0.5333	102.8	80.0	120.0	1.4	20.0

UPPLICATE						
AMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
5524-59808	Silver	0.0017	0.0038	76.4(11)	20.0	1.00
	Aluminum	0.0096	0.0179	60.4(11)	20.0	1.00
	Arsenic	-0.0057	0.0096	784.6(11)	20.0	1.00
	Boron	0.1192	0.1224	2.6	20.0	1.00
	Barium	0.1508	0.1519	0.7	20.0	1.00
	Beryllium	0.0000	0.0000	0.0	20.0	1.00
	Cadmium	0.0002	0.0014	150.0(11)	20.0	1.00
	Cobalt	0.0013	0.0008	47.6(11)	20.0	1.00
	Chromium	0.0049	0.0053	7.8	20.0	1.00
	Copper	0.0029	0.0026	10.9	20.0	1.00

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

03/28/97
08:23:12
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

DUPLICATE

SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
15524-59808	Potassium	7.4470	7.5364	1.2	20.0	1.00
	Manganese	-0.0009	0.0000	200.0(11)	20.0	1.00
	Molybdenum	-0.0034	0.0000	200.0(11)	20.0	1.00
	Nickel	-0.0076	0.0047	848.3(11)	20.0	1.00
	Lead	0.0046	0.0000	200.0(11)	20.0	1.00
	Antimony	0.0607	0.0279	74.0(11)	20.0	1.00
	Selenium	-0.0217	0.0000	200.0(11)	20.0	1.00
	Thallium	0.0217	0.0000	200.0(11)	20.0	1.00
	Vanadium	0.0027	0.0027	0.0	20.0	1.00
	Zinc	0.0191	0.0250	26.8(11)	20.0	1.00

CONTROL

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS	
					LOWER	UPPER
CSW-971	Silver	0.0565	0.0500	113.0	80.0	120.0
	Aluminum	2.1459	2.0000	107.3	80.0	120.0
	Arsenic	2.1177	2.0000	105.9	80.0	120.0
	Boron	0.5507	0.5000	110.1	80.0	120.0
	Barium	2.0733	2.0000	103.7	80.0	120.0
	Beryllium	0.0519	0.0500	103.8	80.0	120.0
	Cadmium	0.0531	0.0500	106.2	80.0	120.0
	Cobalt	0.5132	0.5000	102.6	80.0	120.0
	Chromium	0.2109	0.2000	105.5	80.0	120.0
	Copper	0.2645	0.2500	105.8	80.0	120.0
	Potassium	10.8997	10.0000	109.0	80.0	120.0
	Manganese	0.5186	0.5000	103.7	80.0	120.0
	Molybdenum	0.5197	0.5000	103.9	80.0	120.0
	Nickel	0.5188	0.5000	103.8	80.0	120.0
	Lead	0.4890	0.5000	97.8	80.0	120.0
	Antimony	0.5019	0.5000	100.4	80.0	120.0
	Selenium	2.1419	2.0000	107.1	80.0	120.0
	Thallium	2.0950	2.0000	104.8	80.0	120.0
	Vanadium	0.5289	0.5000	105.8	80.0	120.0
	Zinc	0.5251	0.5000	105.0	80.0	120.0

QC LIMITS

V #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
V-	Silver	0.4000	0.4030	100.8	90.0	110.0
	Aluminum	20.0000	20.4315	102.2	90.0	110.0
	Arsenic	1.6000	1.6229	101.4	90.0	110.0
	Boron	0.8000	0.8335	104.2	90.0	110.0
	Barium	4.0000	3.8703	96.8	90.0	110.0
	Beryllium	0.4000	0.4037	100.9	90.0	110.0
	Cadmium	4.0000	3.9269	98.2	90.0	110.0
	Cobalt	0.8000	0.7840	98.0	90.0	110.0
	Chromium	4.0000	3.9842	99.6	90.0	110.0
	Copper	4.0000	3.9301	98.3	90.0	110.0
	Potassium	40.0000	42.2866	105.7	90.0	110.0
	Manganese	4.0000	3.9090	97.7	90.0	110.0
	Molybdenum	20.0000	19.9164	99.6	90.0	110.0

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

03/28/97
08:23:16
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

		QC LIMITS			
CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER UPPER
ICV-	Nickel	8.0000	7.8689	98.4	90.0 110.0
	Lead	20.0000	19.4967	97.5	90.0 110.0
	Antimony	4.0000	4.0020	100.1	90.0 110.0
	Selenium	1.6000	1.6250	101.6	90.0 110.0
	Thallium	4.0000	3.9152	97.9	90.0 110.0
	Vanadium	1.6000	1.6023	100.1	90.0 110.0
	Zinc	4.0000	3.9448	98.6	90.0 110.0
CCV1--2	Silver	0.4000	0.4047	101.2	90.0 110.0
	Aluminum	20.0000	20.6674	103.3	90.0 110.0
	Arsenic	1.6000	1.6366	102.3	90.0 110.0
	Boron	0.8000	0.8332	104.2	90.0 110.0
	Barium	4.0000	3.9344	98.4	90.0 110.0
	Beryllium	0.4000	0.4078	101.9	90.0 110.0
	Cadmium	4.0000	3.9292	98.2	90.0 110.0
	Cobalt	0.8000	0.7872	98.4	90.0 110.0
	Chromium	4.0000	3.9968	99.9	90.0 110.0
	Copper	4.0000	3.9889	99.7	90.0 110.0
	Potassium	40.0000	42.9975	107.5	90.0 110.0
	Manganese	4.0000	3.9295	98.2	90.0 110.0
	Molybdenum	20.0000	19.9596	99.8	90.0 110.0
	Nickel	8.0000	7.8752	98.4	90.0 110.0
	Lead	20.0000	19.3429	96.7	90.0 110.0
	Antimony	4.0000	3.9202	98.0	90.0 110.0
	Selenium	1.6000	1.6294	101.8	90.0 110.0
	Thallium	4.0000	3.8851	97.1	90.0 110.0
	Vanadium	1.6000	1.6153	101.0	90.0 110.0
	Zinc	4.0000	3.9487	98.7	90.0 110.0
CCV2--3	Silver	0.4000	0.4052	101.3	90.0 110.0
	Aluminum	20.0000	20.6973	103.5	90.0 110.0
	Arsenic	1.6000	1.6500	103.1	90.0 110.0
	Boron	0.8000	0.8396	105.0	90.0 110.0
	Barium	4.0000	3.9144	97.9	90.0 110.0
	Beryllium	0.4000	0.4063	101.6	90.0 110.0
	Cadmium	4.0000	3.9516	98.8	90.0 110.0
	Cobalt	0.8000	0.7845	98.1	90.0 110.0
	Chromium	4.0000	3.9873	99.7	90.0 110.0
	Copper	4.0000	3.9647	99.1	90.0 110.0
	Potassium	40.0000	42.2398	105.6	90.0 110.0
	Manganese	4.0000	3.9402	98.5	90.0 110.0
	Molybdenum	20.0000	20.0374	100.2	90.0 110.0
	Nickel	8.0000	7.8579	98.2	90.0 110.0
	Lead	20.0000	19.4301	97.2	90.0 110.0
	Antimony	4.0000	3.9013	97.5	90.0 110.0
	Selenium	1.6000	1.7009	106.3	90.0 110.0
	Thallium	4.0000	3.9351	98.4	90.0 110.0
	Vanadium	1.6000	1.6150	100.9	90.0 110.0
	Zinc	4.0000	3.9659	99.1	90.0 110.0
CCV3--4	Silver	0.4000	0.4076	101.9	90.0 110.0
	Aluminum	20.0000	20.6444	103.2	90.0 110.0

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS	
					LOWER	UPPER
CCV3--4	Arsenic	1.6000	1.6139	100.9	90.0	110.0
	Boron	0.8000	0.8400	105.0	90.0	110.0
	Barium	4.0000	3.8964	97.4	90.0	110.0
	Beryllium	0.4000	0.4038	100.9	90.0	110.0
	Cadmium	4.0000	3.9029	97.6	90.0	110.0
	Cobalt	0.8000	0.7781	97.3	90.0	110.0
	Chromium	4.0000	3.9478	98.7	90.0	110.0
	Copper	4.0000	3.9506	98.8	90.0	110.0
	Potassium	40.0000	41.8737	104.7	90.0	110.0
	Manganese	4.0000	3.9151	97.9	90.0	110.0
	Molybdenum	20.0000	19.8879	99.4	90.0	110.0
	Nickel	8.0000	7.7526	96.9	90.0	110.0
	Lead	20.0000	19.2590	96.3	90.0	110.0
	Antimony	4.0000	3.9312	98.3	90.0	110.0
	Selenium	1.6000	1.6050	100.3	90.0	110.0
	Thallium	4.0000	4.0070	100.2	90.0	110.0
	Vanadium	1.6000	1.6080	100.5	90.0	110.0
	Zinc	4.0000	3.9247	98.1	90.0	110.0
CCV4--5	Silver	0.4000	0.4097	102.4	90.0	110.0
	Aluminum	20.0000	20.9213	104.6	90.0	110.0
	Arsenic	1.6000	1.6363	102.3	90.0	110.0
	Boron	0.8000	0.8527	106.6	90.0	110.0
	Barium	4.0000	3.9369	98.4	90.0	110.0
	Beryllium	0.4000	0.4038	100.9	90.0	110.0
	Cadmium	4.0000	3.8827	97.1	90.0	110.0
	Cobalt	0.8000	0.7731	96.6	90.0	110.0
	Chromium	4.0000	3.9301	98.3	90.0	110.0
	Copper	4.0000	3.9778	99.4	90.0	110.0
	Potassium	40.0000	42.4611	106.2	90.0	110.0
	Manganese	4.0000	3.9272	98.2	90.0	110.0
	Molybdenum	20.0000	19.9622	99.8	90.0	110.0
	Nickel	8.0000	7.7342	96.7	90.0	110.0
	Lead	20.0000	19.2727	96.4	90.0	110.0
	Antimony	4.0000	3.8784	97.0	90.0	110.0
	Selenium	1.6000	1.6183	101.1	90.0	110.0
	Thallium	4.0000	3.9539	98.8	90.0	110.0
	Vanadium	1.6000	1.6138	100.9	90.0	110.0
	Zinc	4.0000	3.9232	98.1	90.0	110.0
CV5--6	Silver	0.4000	0.4049	101.2	90.0	110.0
	Aluminum	20.0000	20.5513	102.8	90.0	110.0
	Arsenic	1.6000	1.5999	100.0	90.0	110.0
	Boron	0.8000	0.8306	103.8	90.0	110.0
	Barium	4.0000	3.8154	95.4	90.0	110.0
	Beryllium	0.4000	0.3938	98.4	90.0	110.0
	Cadmium	4.0000	3.8611	96.5	90.0	110.0
	Cobalt	0.8000	0.7643	95.5	90.0	110.0
	Chromium	4.0000	3.8925	97.3	90.0	110.0
	Copper	4.0000	3.8728	96.8	90.0	110.0
	Potassium	40.0000	43.1465	107.9	90.0	110.0

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

03/28/97
08:23:24
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

CCV #	ANALYTE	QC LIMITS				
		TRUE VALUE	BATCH READ	% REC #	LOWER	UPPER
CCV5--6	Manganese	4.0000	3.8790	97.0	90.0	110.0
	Molybdenum	20.0000	19.6928	98.5	90.0	110.0
	Nickel	8.0000	7.6798	96.0	90.0	110.0
	Lead	20.0000	19.1094	95.5	90.0	110.0
	Antimony	4.0000	3.8033	95.1	90.0	110.0
	Selenium	1.6000	1.6097	100.6	90.0	110.0
	Thallium	4.0000	3.9615	99.0	90.0	110.0
	Vanadium	1.6000	1.5904	99.4	90.0	110.0
	Zinc	4.0000	3.8647	96.6	90.0	110.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Silver	0.0010	0.0060
	Aluminum	0.0141	0.0500
	Arsenic	0.0055	0.0300
	Boron	0.0013	0.0400
	Barium	0.0001	0.0030
	Beryllium	ND	0.0002
	Cadmium	0.0017	0.0040
	Cobalt	ND	0.0040
	Chromium	0.0022	0.0100
	Copper	0.0011	0.0100
	Potassium	ND	0.1000
	Manganese	ND	0.0020
	Molybdenum	0.0065	0.0300
	Nickel	0.0061	0.0300
	Lead	0.0116	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0011	0.0300
ICB1-	Silver	0.0017	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0093	0.0300
	Boron	0.0001	0.0400
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Cadmium	ND	0.0040
	Cobalt	ND	0.0040
	Chromium	0.0018	0.0100
	Copper	0.0014	0.0100
	Potassium	ND	0.1000
	Manganese	ND	0.0020
	Molybdenum	0.0032	0.0300
	Nickel	ND	0.0300
	Lead	ND	0.0400
	Antimony	0.0722	0.1000
	Selenium	ND	0.0700
	Thallium	ND	0.1000

Mountain States Analytical, Inc.
Daily QC Batching Data
Data Released for Reporting03/28/97
08:23:27
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB1-	Vanadium	ND	0.0030
	Zinc	0.0008	0.0300
CCB2-	Silver	0.0017	0.0060
	Aluminum	ND	0.0500
	Arsenic	0.0041	0.0300
	Boron	0.0035	0.0400
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Cadmium	ND	0.0040
	Cobalt	ND	0.0040
	Chromium	0.0017	0.0100
	Copper	0.0009	0.0100
	Potassium	0.0017	0.1000
	Manganese	ND	0.0020
	Molybdenum	ND	0.0300
	Nickel	0.0031	0.0300
	Lead	ND	0.0400
	Antimony	0.0267	0.1000
	Selenium	ND	0.0700
	Thallium	0.0292	0.1000
	Vanadium	ND	0.0030
	Zinc	ND	0.0300
CCB3-	Silver	0.0035	0.0060
	Aluminum	0.0093	0.0500
	Arsenic	0.0122	0.0300
	Boron	0.0023	0.0400
	Barium	0.0005	0.0030
	Beryllium	ND	0.0002
	Cadmium	0.0002	0.0040
	Cobalt	ND	0.0040
	Chromium	0.0026	0.0100
	Copper	0.0023	0.0100
	Potassium	ND	0.1000
	Manganese	ND	0.0020
	Molybdenum	0.0095	0.0300
	Nickel	0.0066	0.0300
	Lead	0.0041	0.0400
	Antimony	0.0373	0.1000
	Selenium	ND	0.0700
	Thallium	ND	0.1000
	Vanadium	ND	0.0030
	Zinc	0.0007	0.0300
CCB4-	Silver	0.0034	0.0060
	Aluminum	ND	0.0500
	Arsenic	ND	0.0300
	Boron	0.0137	0.0400
	Barium	0.0006	0.0030
	Beryllium	ND	0.0002
	Cadmium	ND	0.0040
	Cobalt	0.0010	0.0040

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

03/28/97
08:23:31
Group: 15558

Analysis Batch Number: ICPWA-03/27/97-010 -1

Test Identification : ICPWA-Metals by ICP

Sequence : DATD086

Number of Samples : 20

Batch Data-Date/Time : 03/28/97 / 07:35:38

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
CCB4-	Chromium	0.0034	0.0100
	Copper	0.0031	0.0100
	Potassium	0.0102	0.1000
	Manganese	ND	0.0020
	Molybdenum	ND	0.0300
	Nickel	0.0037	0.0300
	Lead	ND	0.0400
	Antimony	0.0118	0.1000
	Selenium	ND	0.0700
	Thallium	ND	0.1000
	Vanadium	0.0005	0.0030
	Zinc	0.0021	0.0300
	Silver	0.0041	0.0060
CCB5-	Aluminum	ND	0.0500
	Arsenic	0.0076	0.0300
	Boron	0.0081	0.0400
	Barium	0.0002	0.0030
	Beryllium	ND	0.0002
	Cadmium	0.0010	0.0040
	Cobalt	ND	0.0040
	Chromium	0.0001	0.0100
	Copper	0.0020	0.0100
	Potassium	0.0229	0.1000
	Manganese	ND	0.0020
	Molybdenum	0.0121	0.0300
	Nickel	0.0071	0.0300
	Lead	ND	0.0400
	Antimony	ND	0.1000
	Selenium	ND	0.0700
	Thallium	0.0005	0.1000
	Vanadium	0.0003	0.0030
	Zinc	0.0013	0.0300

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

- 22) - Sample concentration >20X blank concentration.
3) - Marginal Outlier - Result is between the 95 and 99% confidence interval
11) - Both Duplicate results are less than the MDL.

Groups & Samples

15524-59806	15524-59807	15524-59808	15524-59809	15524-59810	15532-59831	15532-59832	15532-59833
15532-59834	15532-59835	15532-59836	15540-59865	15546-59895	15551-59900	15558-59921	15558-59922
15562-59932	15563-59933	15593-60046	15594-60048				

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

03/28/97
08:22:55
Group: 15558

Analysis Batch Number: 1451 -03/26/97-001 -1

Test Identification : 1451 -Selenium by HAA, w/ww, 7742

Sequence : DAAC085

Number of Samples : 6

Batch Data-Date/Time : 03/27/97 / 07:00:50

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-981	Selenium	0.0021	0.0030

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	QC LIMITS	
						LOWER	UPPER
15535-59842	Selenium	0.0800	0.0104	0.0739	79.4	75.0	125.0

SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	QC LIMITS		
						LOWER	UPPER	RPD #
15535-59842	Selenium	0.0800	0.0104	0.0776	84.0	75.0	125.0	5.6

SAMPLE#	ANALYTE	RESULT		RPD #	LIMIT	DILUTION
		1	2			
15535-59842	Selenium	0.0104	0.0175	50.9(3a)	20.0	2.00

SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	QC LIMITS	
					LOWER	UPPER
LCSW-981	Selenium	0.0407	0.0400	101.8	80.0	120.0

CCV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	QC LIMITS	
					LOWER	UPPER
ICV-	Selenium	0.0500	0.0526	105.2	80.0	120.0
CCV1--2	Selenium	0.0500	0.0508	101.6	80.0	120.0
CCV2--3	Selenium	0.0500	0.0498	99.6	80.0	120.0
CCV3--4	Selenium	0.0500	0.0492	98.4	80.0	120.0

CCB#	ANALYTE	CONC FOUND #	CONC LIMIT
ICB-	Selenium	0.0020	0.0030
CCB1-	Selenium	0.0007	0.0030
CCB2-	Selenium	0.0002	0.0030
CCB3-	Selenium	ND	0.0030

----- Result Footnotes -----
(3a) - Duplicate results are <5x the quantitation limit

Groups & Samples

15535-59842 15535-59843 15535-59844 15558-59921 15558-59922 15593-60046

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

03/28/97
08:22:46
Group: 15558

Analysis Batch Number: 0259B-03/22/97-107 -1

Test Identification : 0259B-Mercury by CVAA, w/ww, 7470

Sequence : 0259B-1

Number of Samples : 24

Batch Data-Date/Time : 03/24/97 / 13:46:35

BLANK#	ANALYTE	CONC FOUND #	CONC LIMIT
PBW1-973	Mercury	-0.0900	0.1000
PBW2-973-2	Mercury	-0.0800	0.1000
PBW1-974-3	Mercury	-0.0900	0.1000
PBW2-974-4	Mercury	-0.0900	0.1000

SPIKE						QC LIMITS	
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	CONC SPIKE	% REC #	LOWER	UPPER
15524-59809	Mercury	1.0000	-0.1000	0.8500	95.0	80.0	120.0
15568-59957-2	Mercury	1.0000	0.0800	0.9200	84.0	80.0	120.0

MSD						QC LIMITS			
SAMPLE#	ANALYTE	CONC ADDED	CONC SAMPLE	RESULT 2	%REC2 #	LOWER	UPPER	RPD #	LIMIT
15524-59810	Mercury	1.0000	-0.1000	0.8200	92.0	80.0	120.0	3.2	20.0
15568-59957-2	Mercury	1.0000	0.0800	0.9500	87.0	80.0	120.0	3.5	20.0

DUPLICATE						
SAMPLE#	ANALYTE	RESULT 1	RESULT 2	RPD #	LIMIT	DILUTION
15524-59808	Mercury	-0.1000	-0.1100	9.5	20.0	1.00
15568-59957-2	Mercury	0.0800	-0.0100	257.1(11)	20.0	1.00

CONTROL					QC LIMITS	
SAMPLE#	ANALYTE	CONC FOUND	CONC KNOWN	% REC #	LOWER	UPPER
LCSW-973	Mercury	2.5900	2.5000	103.6	80.0	120.0
LCSW-974-2	Mercury	2.4400	2.5000	97.6	80.0	120.0

QC LIMITS					
ICV #	ANALYTE	TRUE VALUE	BATCH READ	% REC #	LOWER UPPER
ICV-	Mercury	3.0000	2.9300	97.7	90.0 110.0
ICV--2	Mercury	5.0000	4.9900	99.8	80.0 120.0
ICV--3	Mercury	5.0000	4.8900	97.8	80.0 120.0
ICV--4	Mercury	5.0000	5.0100	100.2	80.0 120.0
ICV--5	Mercury	5.0000	5.0100	100.2	80.0 120.0
ICV--6	Mercury	5.0000	4.9900	99.8	80.0 120.0

CB#	ANALYTE	CONC FOUND #	CONC LIMIT
CB-	Mercury	0.0200	0.1000
CB-	Mercury	0.0200	0.1000
CB-	Mercury	0.0500	0.1000
CB-	Mercury	0.0600	0.1000
CB-	Mercury	-0.0700	0.1000
CB-	Mercury	-0.0600	0.1000

----- Result Footnotes -----
11) - Both Duplicate results are less than the MDL.

Groups & Samples

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

03/28/97
08:22:50
Group: 15558

Analysis Batch Number: 02598-03/22/97-107 -1

Test Identification : 02598-Mercury by CVAA, w/ww, 7470

Sequence : 02598-1

Number of Samples : 24

Batch Data-Date/Time : 03/24/97 / 13:46:35

15524-59806	15524-59807	15524-59808	15524-59809	15524-59810	15532-59831	15532-59832	15532-59833
15532-59834	15532-59835	15532-59836	15534-59841	15539-59864	15541-59867	15541-59868	15541-59869
15541-59870	15558-59921	15558-59922	15560-59929	15565-59946	15568-59957	15570-59963	15572-59967
15575-59972	15593-60046						



657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

5047

Page 1 of 1

Date: 3/13/97

Purchase Order No.: 5750		Job No. PNM1002	
Name ACCOUNTS PAYABLE		Name DAVID COX	
Company ON SITE		Company ON SITE TECH	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
Sampling Location: McCLANAHAN AVE		Telephone No. 505 325-2432	
Telefax No. 505-6252		Title	
SEND INVOICE TO		RESULTS TO	
Sampler: MS/mg		Number of Containers	
SAMPLE IDENTIFICATION		LAB ID	
DATE	TIME	MATRIX	PRES.
3/11	1300	H2O	car
1	1302	✓	✓
9703111230 MW-1		13876-5750	
9703111300 MW-2		13877-5750	
ANALYSIS REQUESTED		ANALYSIS REQUESTED	
RECEIVED BY: [Signature]		RECEIVED BY: [Signature]	
DATE/TIME: 3/10/97 1720		DATE/TIME: 3-14-97 1015	
RECEIVED BY: [Signature]		RECEIVED BY: [Signature]	
DATE/TIME: [Signature]		DATE/TIME: [Signature]	
RECEIVED BY: [Signature]		RECEIVED BY: [Signature]	
DATE/TIME: [Signature]		DATE/TIME: [Signature]	
METHOD OF SHIPMENT: [Signature]		METHOD OF SHIPMENT: [Signature]	
AUTHORIZED BY: [Signature]		AUTHORIZED BY: [Signature]	
DATE: 3/13/97		DATE: 3/13/97	
SPECIAL INSTRUCTIONS: SAMPLES HAVE NOT BEEN FILTERED		SPECIAL INSTRUCTIONS: SAMPLES HAVE NOT BEEN FILTERED	

657 W. M.

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