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

May 13, 1998

Certified Mail,
Return Receipt Requested

Mr. Benito Garcia
Executive Director
Chief, Hazardous and Radioactive
Materials Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502

MAY 1998
RECEIVED

Dear Mr. Garcia:

Subject: **Treatment Effectiveness Report, First Quarter 1998, Groundwater Treatment System, Person Generating Station, NMT 360010342**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Toni Ristau
Director, Environmental Services

Enclosed please find three (3) copies of the subject report submitted pursuant to requirements contained in the Person Station Corrective Action Directive issued in September 1991.

If you have any questions, please contact me at (505) 241-2014.

Sincerely,

John Hale
Environmental Engineer

enclosure

Public Service Company of New Mexico
Person Generating Station
Groundwater Treatment System

Treatment Effectiveness Report
First Quarter 1998

May 13, 1998

Report Prepared Pursuant to Requirements Contained in:

The Person Generating Station Corrective Action Directive (NMT 360010342)
and
The New Mexico Environment Department Discharge Plan, DP-1006

Table of Contents

I. Introduction 1
II. Operational History 3
III. Groundwater Treatment Effectiveness 4
IV. Operational Activities 11
V. Influent / Effluent Flow Volumes 12
VI. Laboratory Analysis 14
A. Influent/Effluent Sampling for Chlorinated VOC's (8010 Analysis) 14
B. Effluent Sulfate Analysis and pH Monitoring 16
C. Golf Course Pond Sampling 16
VII. Groundwater Sampling 17

Appendix A. Laboratory Reports

List of Figures

Figure 1. Person Generating Station Site Map 2
Figure 2. Total VOCs at PSMW-16 4
Figure 3. Total VOCs at the VEW 5
Figure 4. Total VOCs at EW-1 5
Figure 5. Total VOCs at PSMW-24, 25, 26 6
Figure 6. Total VOCs GTS Influent vs. Effluent 14
Figure 7. Concentration of PCE in Groundwater 18
Figure 8. Concentration of DCE in Groundwater 19
Figure 9. Concentration of TCA in Groundwater 20

List of Tables

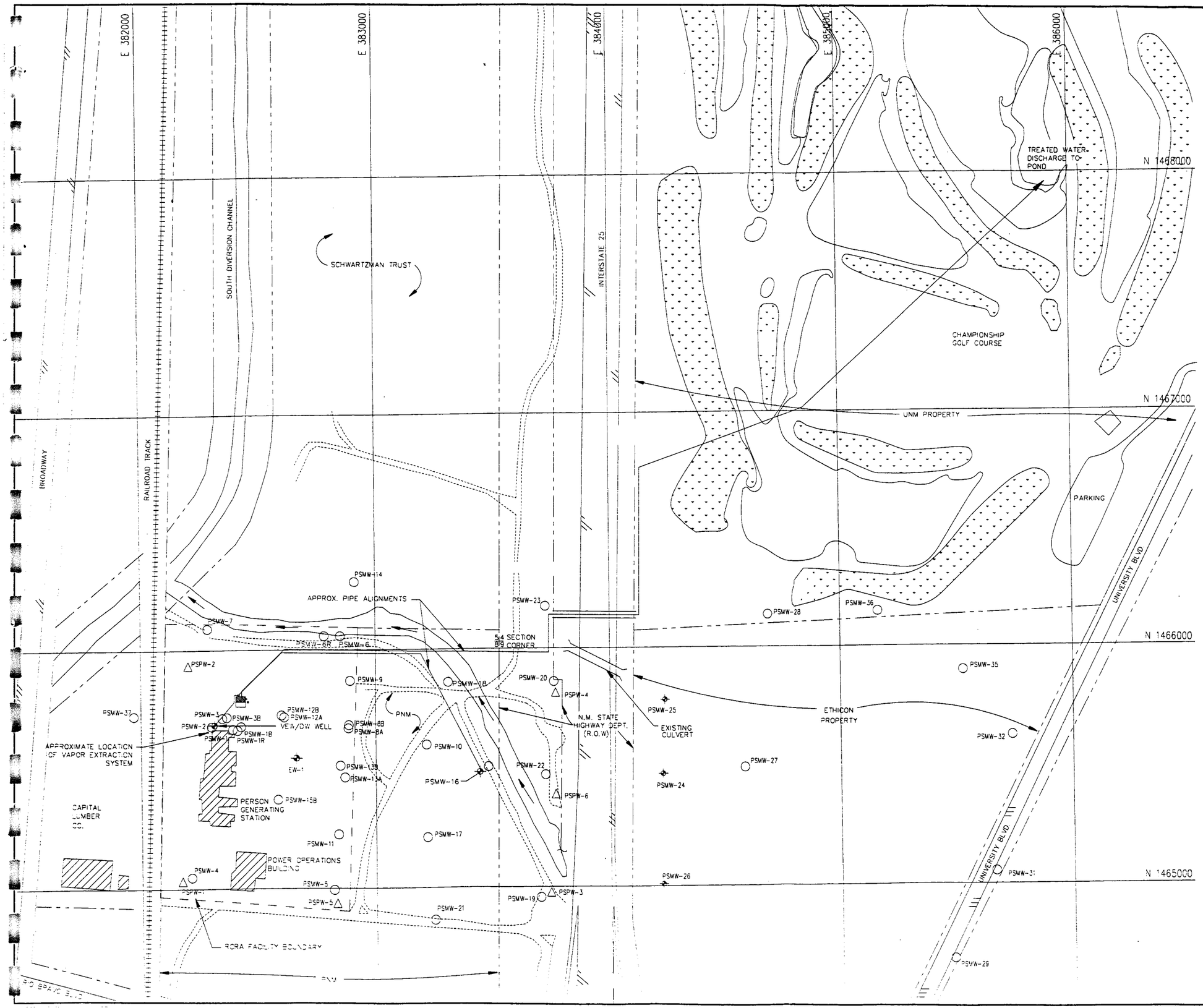
Table 1. Influent Concentrations at PSMW-16 7
Table 2. Influent Concentrations at VEW 8
Table 3. Influent Concentrations at EW-1 9
Table 4. Combined Influent Concentrations at PSMW-24, 25, and 26 10
Table 5. Influent and Effluent Flow Volumes 13
Table 6. Influent and Effluent VOC Concentrations 15
Table 7. GTS Effluent Sulfate Concentrations 16
Table 8. Monthly pH Readings 16

I. Introduction

This report is prepared pursuant to requirements contained in the Person Generating Station Corrective Action Directive (NMT360010342) issued by the New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau, and requirements contained in Discharge Plan DP-1006 issued by the NMED Groundwater Protection and Remediation Bureau.

This report contains information on sampling results and operational activities at the Person Generating Station Groundwater Treatment System (GTS). The GTS is designed to extract volatile organic compound contaminated groundwater, treat through an air stripper and granular activated carbon filter, and discharge the treated water to an irrigation pond at the UNM Championship Golf Course.

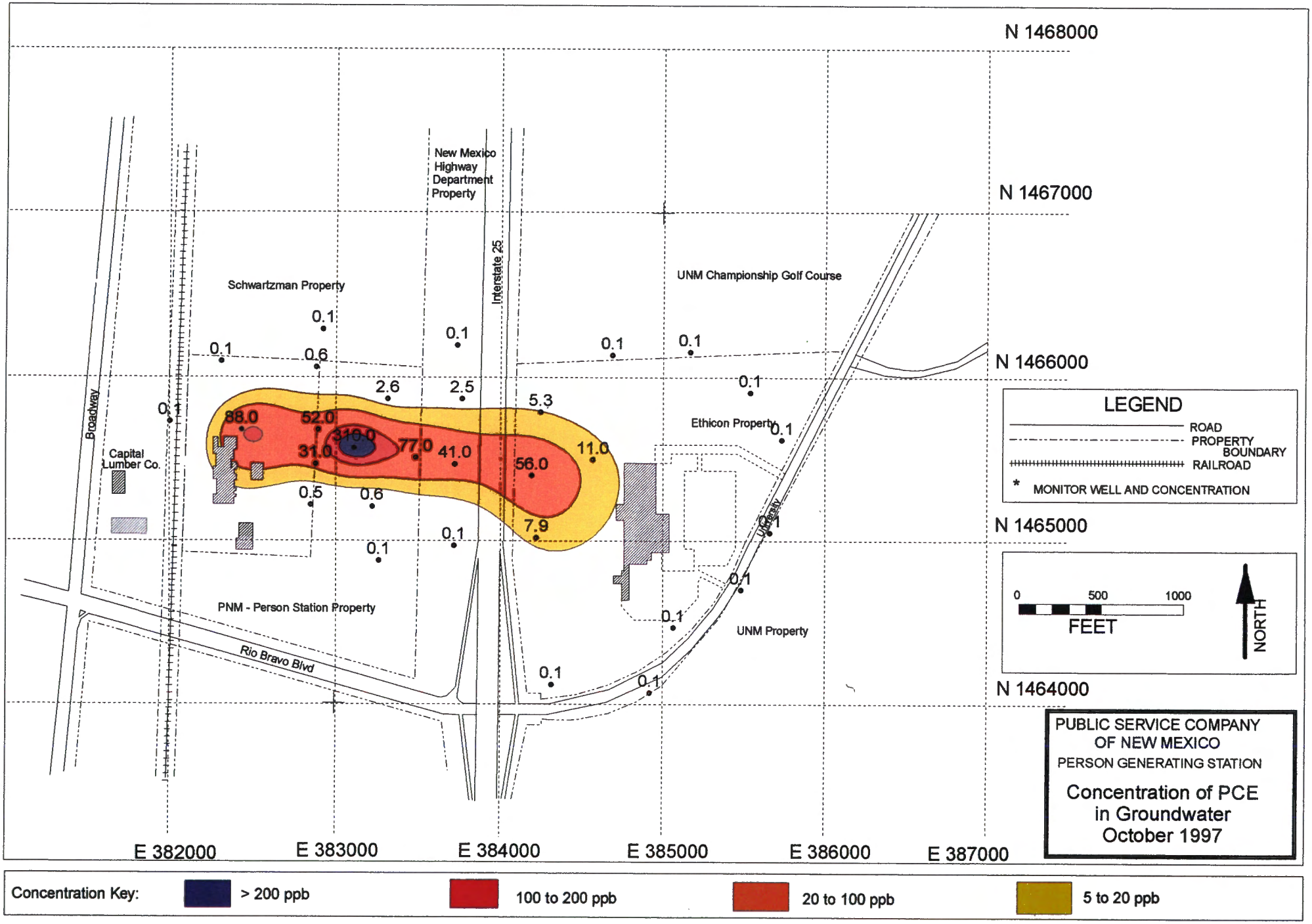
Figure 1 is a site map of the Person Generating Station vicinity and shows well locations and the location of the pipeline system.



SITE MAP

Public Service Company of New Mexico
Person Generating Station
Albuquerque, New Mexico

PARSONS ENGINEERING SCIENCE, INC.
Denver, Colorado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N 1467000
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E 382000
E 383000
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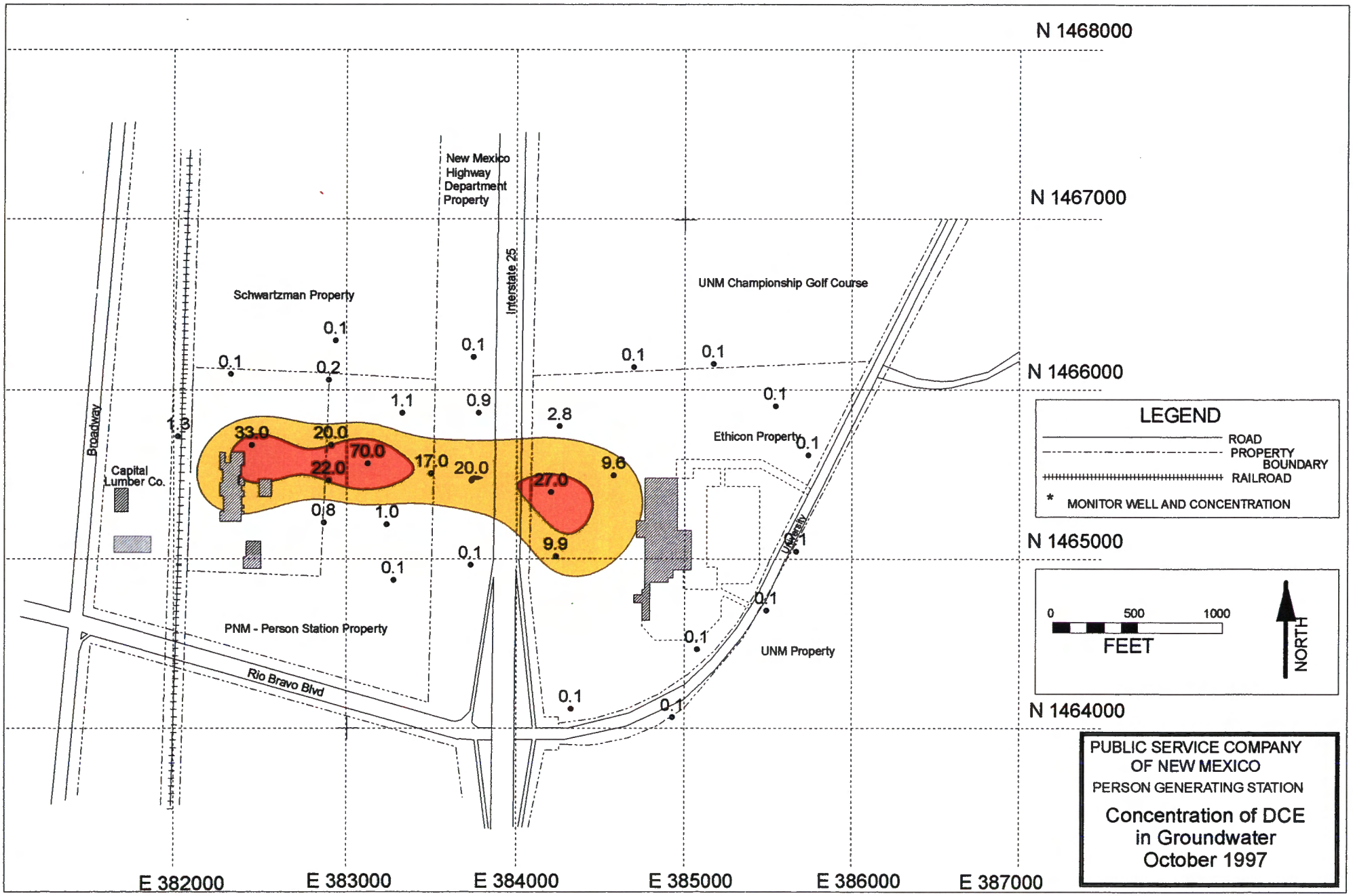
E 385000
E 386000
E 387000
New Mexico Highway Department Property
Interstate 25
Schwartzman Property
UNM Championship Golf Course
Ethicon Property
Broadway
Capital Lumber Co.
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
88.0
52.0
310.0
31.0
77.0
41.0
56.0
11.0
7.9
2.6
2.5
5.3
0.1
0.6
0.5
LEGEND
ROAD
PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
1000
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of PCE in Groundwater October 1997
Concentration Key:
> 200 ppb
100 to 200 ppb
20 to 100 ppb
5 to 20 ppb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New Mexico Highway Department Property
Interstate 25
Schwartzman Property
UNM Championship Golf Course
Ethicon Property
Capital Lumber Co.
Broadway
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
University
33.0
20.0
70.0
22.0
17.0
20.0
27.0
9.6
9.9
2.8
1.1
0.9
1.3
0.8
1.0
0.1
0.2
LEGEND
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PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
1000
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of DCE in Groundwater October 1997
Concentration Key:
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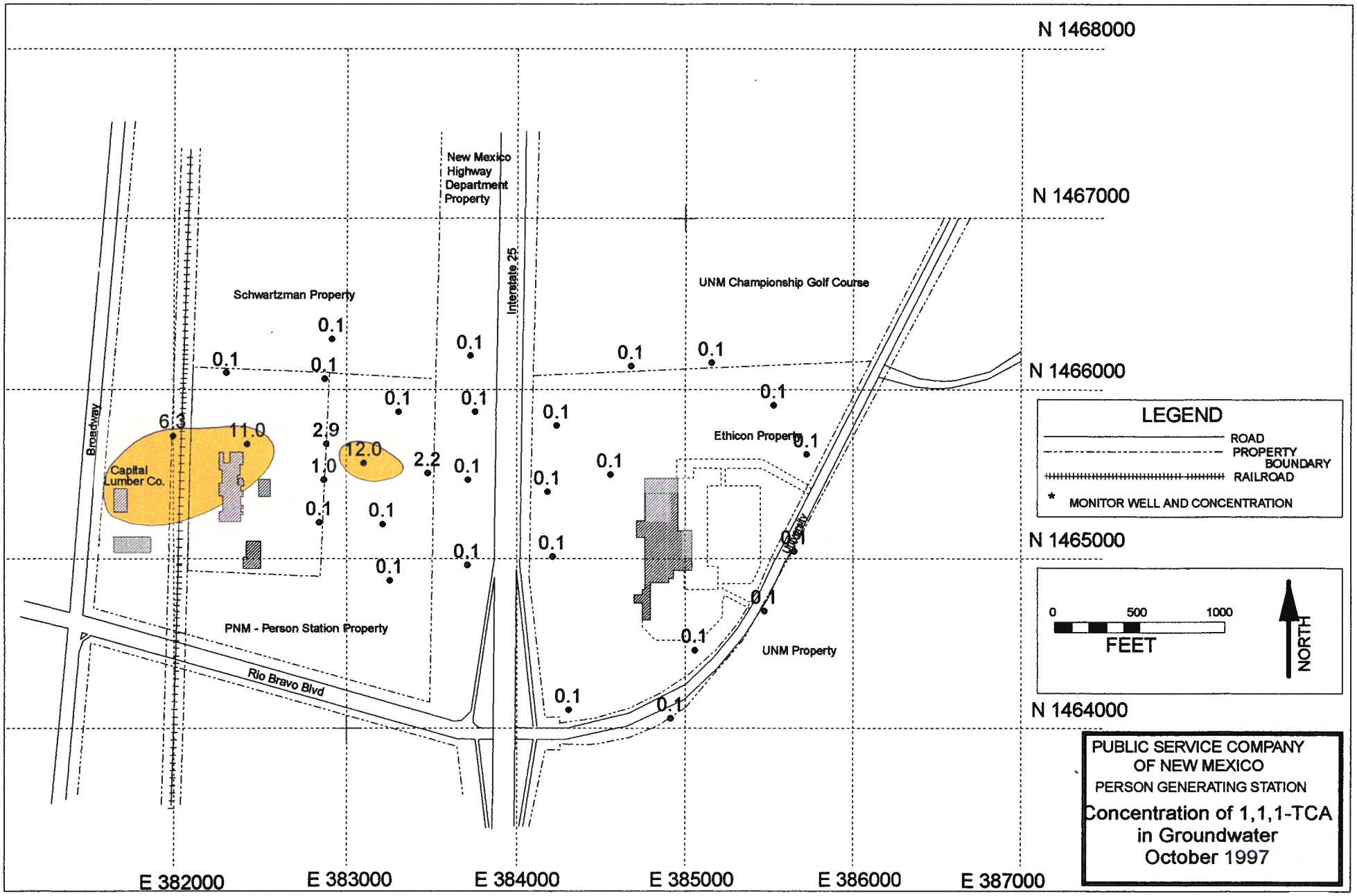
100 to 200 ppb
20 to 100 ppb
5 to 20 ppb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E 387000
New Mexico Highway Department Property
Interstate 25
Schwartzman Property
UNM Championship Golf Course
Ethicon Property
Capital Lumber Co.
Broadway
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
Yale
6.3
11.0
2.9
12.0
1.0
2.2
0.1
LEGEND
ROAD
PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
1000
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of 1,1,1-TCA in Groundwater
October 1997
Concentration Key:
> 200 ppb
100 to 200 ppb
20 to 100 ppb
5 to 20 ppb

II. Operational History

The GTS was started on Friday, January 27, 1995, with treated effluent being sent to the UNM Championship Golf Course.

During 1995, the GTS encountered periodic minor problems as well as a more serious problem with mineralization of the system components downstream from the air stripper. The GTS was kept off-line for most of the first quarter of 1996 while the mineralization problem was studied. After evaluation of various treatment methods, an acid treatment system was selected as the most feasible solution to the mineralization problem.

Installation of the acid treatment system began in early May 1996. In early April, construction activities were initiated to convert monitor wells PSMW-24, PSMW-25, and PSMW-26 to extraction wells. The GTS resumed regular operation in mid-June 1996.

The Person Generating Station Discharge Plan, DP-1006, was amended and approved by the Groundwater Protection and Remediation Bureau in mid-June 1997. As part of the amended plan, the existing plan requirement for the sulfuric acid treatment system was replaced. Previously, acid addition to the effluent was restricted to 35 mg/l. The new requirement specifies adjustment of the acid treatment system to maintain an effluent pH range of 6.0 to 9.0. A pH probe and chart recorder were installed on the effluent discharge tank for daily monitoring of pH, and effluent samples are collected monthly for total sulfate analysis. The GTS has operated satisfactorily during the first quarter of 1998.

III. Groundwater Treatment Effectiveness

Figures 2, 3, and 4 show graphs of concentration of total chlorinated VOC's as measured at wells PSMW-16, VEW, and EW-1 over the operational period of the GTS. Figure 5 shows a graph of concentration of total chlorinated VOC's in the combined influent from wells PSMW-24, PSMW-25, and PSMW-26 over the operational period of the GTS. More detailed data for these wells are shown in Tables 1, 2, 3, and 4.

During the first quarter of 1998, total chlorinated VOC's increased slightly at EW-1. Total chlorinated VOC's fluctuated during the first quarter in the combined influent from wells PSMW-24, PSMW-25, and PSMW-26. During March 1998, PSMW-16 and VEW were redeveloped. Therefore, no samples were collected from these wells in March. Prior to redevelopment activities total chlorinated VOC's had been relatively constant at these wells.

Beginning in January 1998, EPA Method 8021 (Halo) replaced EPA Method 8010. Therefore, all first quarter groundwater samples were analyzed with the 8021 (Halo) method. Laboratory reports for this quarter are contained in appendix A.

Figure 2
Total VOCs at PSMW-16

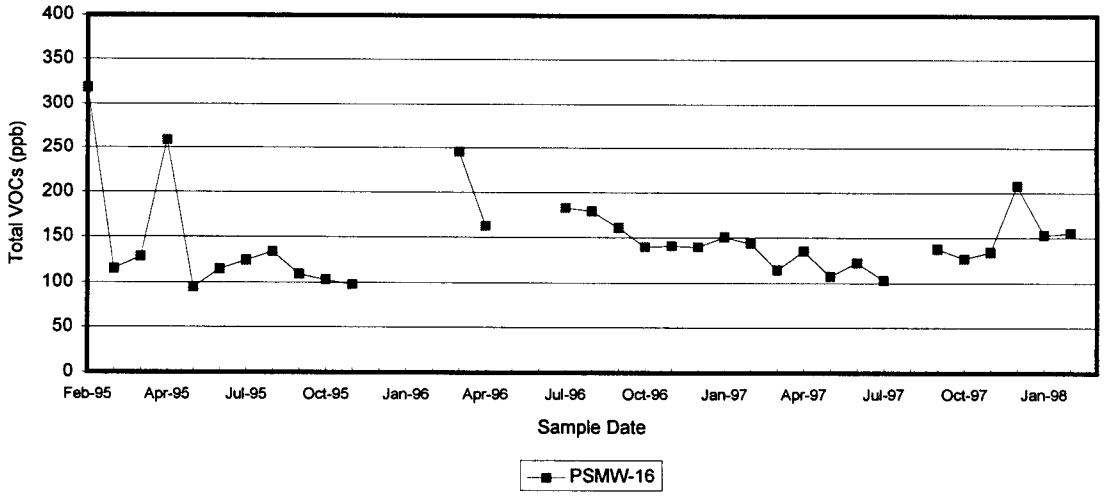

Figure 3
Total VOCs at the VEW

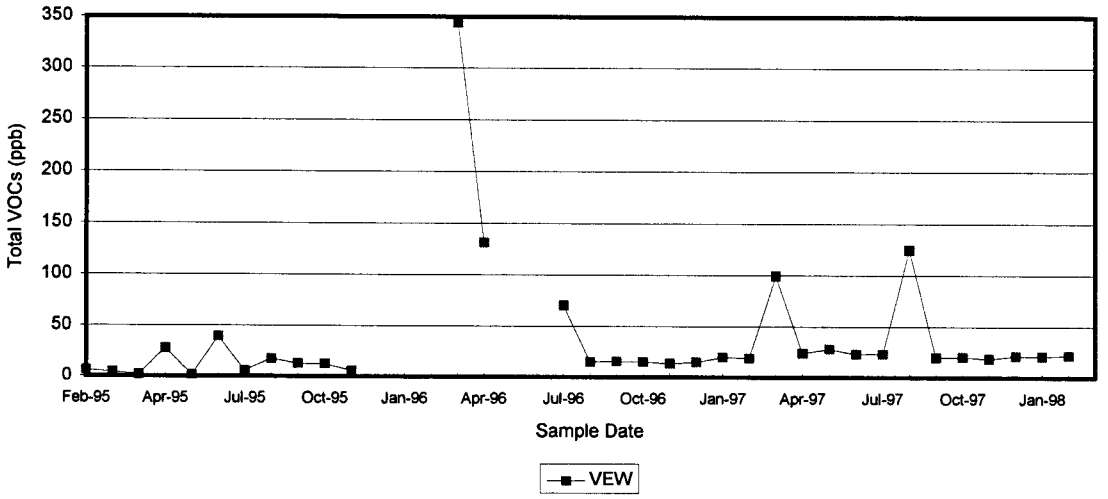

Figure 4
Total VOCs at EW-1

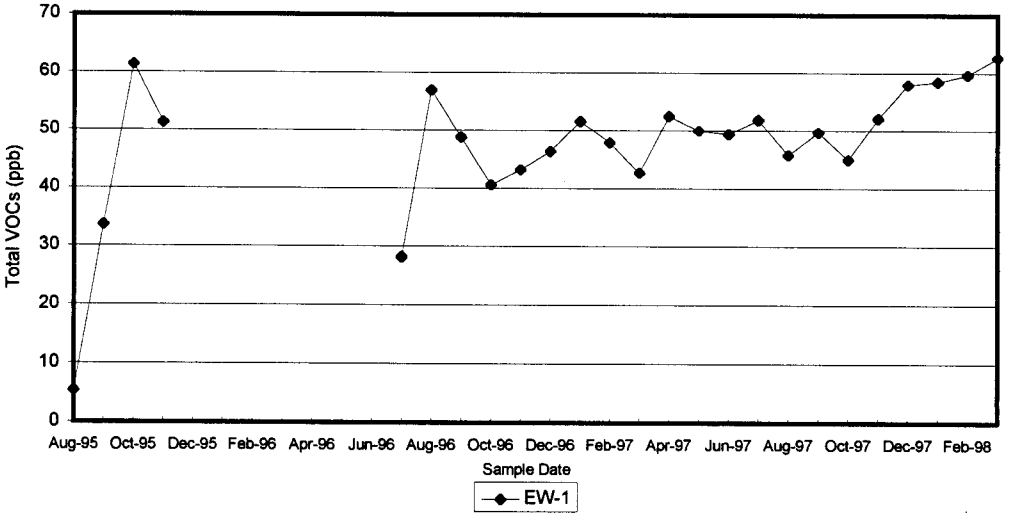

Figure 5
Total VOCs at PSMW-24,25,26

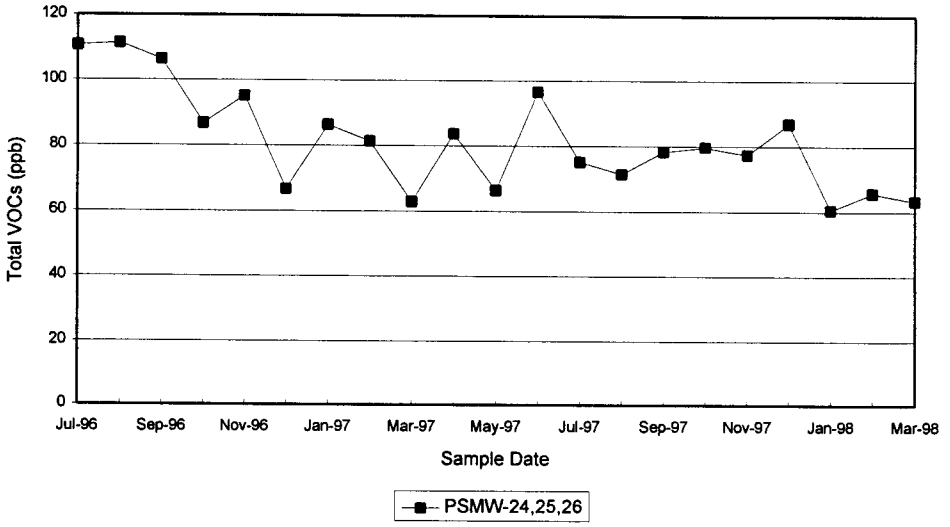

Table 1
Influent Concentrations at PSMW-16

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOC's (ppb)
2/1/95	502304	200	110	3[illegible]04
2/15/95	502376	69	39	115.0
3/8/95	503317	78	46	128.3
4/10/95	504341	170	81	258.6
5/18/95	505371	62	30	94.6
6/21/95	506396	76	36	114.8
7/12/95	507327	75	41	124.3
8/17/95	508405	83	45	134.0
9/13/95	509339	69	35	109.2
10/11/95	510335	66	32	102.8
11/22/95	511367	58	35	97.5
3/20/96	603347	180	63	245.3
4/17/96	604367	110	46	162.5
7/18/96	607334	120	54	182.9
8/15/96	608331	120	51	179.1
9/18/96	609338	110	43	160.9
10/16/96	610361	97	37	140.0
11/19/96	611331	94	42	141.0
12/17/96	612331	96	39	140.0
1/16/97	701336	99	46	150.7
2/13/97	702332	100	40	143.7
3/19/97	703344	88	23	114.6
4/17/97	704355	93	38	135.8
5/15/97	705347	71	32	107.6
6/18/97	706353	83	36	122.6
7/23/97	707360	67	34	103.1
9/15/97	709332	100	34	137.9
10/15/97	710358	92	31	127.2
11/19/97	711335	95	34	134.5
12/16/97	712318	140	68	208
1/15/98	801334	110	37	153.1
2/11/98	802336	110	38	155.3
3/11/98	NA	NA	NA	NA

Table 2
Influent Concentrations at VEW

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOC's (ppb)
2/1/95	502304	5.3	0.8	6.1
2/15/95	502376	4	0.5	4.5
3/8/95	503317	1.5	0.3	1.8
4/10/95	504341	21	5.8	28.1
5/18/95	505371	1.4	<0.2	1.4
6/21/95	506396	25	9.4	39.8
7/12/95	507327	3.5	1.0	5.8
8/17/95	508405	6.4	1.1	17.7
9/13/95	509405	9.7	1.9	12.9
10/11/95	510335	9.3	1.8	12.5
11/22/95	511367	4.6	1.1	6.0
3/20/96	603347	270	72	344.3
4/17/96	604367	94	24	131.2
7/18/96	607334	47	14	70.6
8/15/96	608331	5.0	2.1	15.2
9/18/96	609338	3.1	2.1	15.8
10/16/96	610361	3.2	2.1	15.3
11/19/96	611331	0.8	1.8	13.6
12/17/96	612331	<0.5	2.0	15.0
1/16/97	701336	0.9	3.2	20.2
2/13/97	702332	1.0	2.4	19.2
3/19/97	703344	68	17	99.5
4/17/97	704355	2.8	3.4	24.4
5/15/97	705347	6.1	5.3	28.5
6/18/97	706353	3.8	4.2	23.5
7/23/97	707360	2.9	4.0	23.6
8/13/97	708339	57	50	124.8
9/15/97	709332	1.7	3.4	19.8
10/15/97	710358	3.2	3.1	20.5
11/19/97	711335	1.3	3.2	18.7
12/16/97	712318	1	4.8	21.7
1/15/98	801334	2.5	3.6	21.3
2/11/98	802336	2.9	3.7	22
3/11/98	NA	NA	NA	NA

Table 3
Influent Concentrations at EW-1

Date	Laboratory Report No.	PCE (ppb)	DCE(ppb)	Total VOC's (ppb)
8/17/95	508405	3.5	0.9	5.4
9/13/95	509339	25	6.1	33.6
10/11/95	510335	49	8.8	61.4
11/22/95	511367	38	9.5	51.3
7/18/96	607334	20	5.7	28.2
8/15/96	608331	45	8.4	57.0
9/18/96	609338	37	7.8	48.8
10/16/96	610361	29	7.3	40.6
11/19/96	611331	32	7.0	43.2
12/17/96	612331	33	7.7	46.4
1/16/97	701336	36	9.2	51.6
2/13/97	702332	32	7.7	47.9
3/19/97	703344	29	5.7	42.7
4/17/97	704355	31	8.4	52.5
5/15/97	705347	27	9.7	50
6/18/97	706353	23	8.6	49.4
7/23/97	707360	25	9.5	51.9
8/13/97	708339	20	6.8	45.8
9/15/97	709332	21	8.5	49.7
10/15/97	710358	18	6.5	45
11/19/97	711335	20	9.7	52.1
12/16/97	712318	21	12	58
1/15/98	801334	20	11	58.5
2/11/98	802336	21	11	59.7
3/11/98	803324	20	16	62.7

Table 4
Combined Influent Concentrations at PSMW-24, 25, and 26

Date	Laboratory Report No.	PCE (ppb)	DCE(ppb)	Total VOC's (ppb)
7/18/96	607334	49	55	110.6
8/15/96	608331	47	50	111.3
9/18/96	609338	58	44	106.3
10/16/96	610361	41	40	86.8
11/19/96	611331	46	44	95.2
12/17/96	612331	33	30	66.7
1/16/97	701336	41	41	86.5
2/13/97	702332	41	37	81.5
3/19/97	703344	37	23	63.0
4/17/97	704355	42	37	83.8
5/15/97	705347	33	30	66.4
6/18/97	706353	39	55	96.6
7/23/97	707360	37	36	75.2
8/13/97	708339	39	30	71.5
9/15/97	709332	42	34	78.4
10/15/97	710358	48	29	79.8
11/19/97	711335	41	34	77.5
12/16/97	712318	40	47	87
1/15/98	801334	33	25	60.6
2/11/98	802336	36	27	65.7
3/11/98	803324	30	31	63.4

IV. Operational Activities

Flow rates at PSMW-16, PSMW-25, and VEW have dropped significantly since the wells were originally installed or converted to extraction wells. In order to improve flow rates, redevelopment activities were initiated on these wells in March 1998. The results are shown below.

Well	Before Redevelopment (gpm)	After Redevelopment (gpm)
PSMW-16	3.8	7.4
PSMW-25	0.44	2.4
VEW	1.1	1.8

V. Influent and Effluent Flow Volumes

Flow totalizing meters are present on each influent well line and on the effluent flow line. Table 5 below details flow volumes from each influent well and the effluent line. Differences between total influent and total effluent may be attributed to water loss (evaporation) out the stack in the air stripper system and to differences, inaccuracies, and operational problems with the flow meters.

Table 5
Influent and Effluent Flow Volumes

Source	Meter Number	Start Reading	End Reading	Volume (Gallons)
Flow Volumes for January 1998:				
Influent (VEW)	Badger Meter No. 94976130	3,179,247	3,232,674	53,427
Influent (PSMW-16)	Hayes Meter No. 29408700	4,115,985	4,286,796	170,811
Influent (EW-1)	Hayes Meter No. 29408732	3,166,278	3,382,047	215,769
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	3,185,090	3,374,460	189,370
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	709,510	737,130	27,620
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	1,499,340	1,600,140	100,800
Effluent (to Golf Course)	Fisher Porter Meter No. 960307112	10,545,898	11,293,681	747,783
Flow Volumes for February 1998:				
Influent (VEW)	Badger Meter No. 94976130	3,232,674	3,276,122	43,448
Influent (PSMW-16)	Hayes Meter No. 29408700	4,286,796	4,437,332	150,536
Influent (EW-1)	Hayes Meter No. 29408732	3,382,047	3,570,656	188,609
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	3,374,460	3,528,890	154,430
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	751,000	737,130	13,870
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	1,687,860	1,600,140	87,720
Effluent (to Golf Course)	Fisher Porter Meter No. 960307112	11,293,681	11,921,413	627,732
Flow Volumes for March 1998:				
Influent (VEW)	Badger Meter No. 94976130	3,276,122	3,330,775	54,653
Influent (PSMW-16)	Hayes Meter No. 29408700	4,437,332	4,581,328	143,996
Influent (EW-1)	Hayes Meter No. 29408732	3,570,656	3,759,616	188,960
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	3,528,890	3,697,510	168,620
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	751,000	791,440	40,440
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	1,687,860	1,775,440	87,580
Effluent (to Golf Course)	Fisher Porter Meter No.960307112	11,921,413	12,594,741	673,328
Quarterly Total for Influent (VEW+PSMW-16+EW-1+PSMW-24+PSMW-25+PSMW-26 +Monitor Well Sample Purge)				2,080,659
Quarterly Total for Effluent:				2,048,843
Annual Totals				
Annual Cumulative Influent Total for 1998:				2,080,659
Annual Cumulative Effluent Total for 1998:				2,048,843

VI. Laboratory Analysis

A. Influent/Effluent Sampling for Chlorinated VOC's (8010 Analysis)

During the first quarter, influent and effluent sampling was conducted pursuant to the routine schedule outlined in DP-1006, i.e., once each month. Chlorinated VOC analysis of GTS influent and effluent (after GAC units) is shown graphically in figure 6. More detailed data are shown in table 6 below. Laboratory analytical data reports are contained in appendix A. All influent/effluent sampling results indicate that the GTS has consistently removed chlorinated VOC contaminants in the 50 to 200 ppb range to levels below laboratory detection limits in the effluent sent to the golf course. Laboratory analysis of the water at a point after the air stripper and before the granular activated carbon treatment also show that at these influent concentrations and a flow rate of approximately 20 to 25 gpm, the air stripper alone is capable of treating the groundwater to concentrations consistently below or near laboratory detection limits for chlorinated VOC's.

Figure 6
Total VOCs GTS Influent vs. Effluent

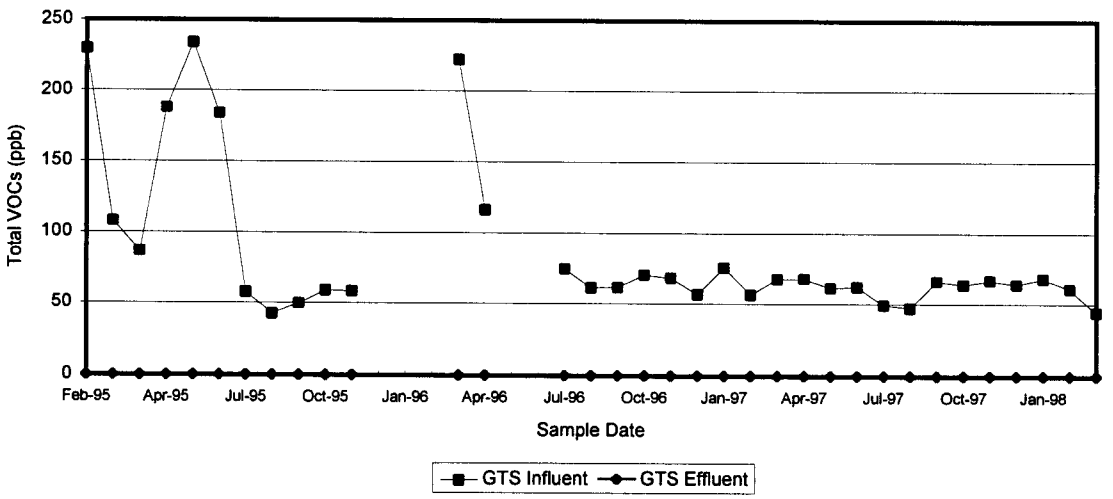

Table 6
Influent and Effluent VOC Concentrations

Sampling Date: 1/15/98	Lab Report Number: 810334		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Chloroform	1.4	< 0.5	< 0.5
1,1-Dichloroethane	2.2	< 0.3	< 0.3
1,1-Dichloroethene	19	< 0.2	< 0.2
Tetrachloroethene	39	< 0.5	< 0.5
1,1,1-Trichloroethane	6.4	< 1.0	< 1.0
TOTAL VOC'S	68.0	BDL	BDL

Sampling Date: 2/11/98	Lab Report Number: 802336		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
1,1-Dichloroethene	19	< 0.2	< 0.2
Tetrachloroethene	42	< 0.5	< 0.5
TOTAL VOC'S	61.0	BDL	BDL

Sampling Date: 3/11/98	Lab Report Number: 803324		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Chloroform	1.4	< 0.5	< 0.5
1,1-Dichloroethane	2.1	< 0.3	< 0.3
1,1-Dichloroethene	15	< 0.2	< 0.2
Tetrachloroethene	20	< 0.5	< 0.5
1,1,1-Trichloroethane	5.9	< 1.0	< 1.0
TOTAL VOC'S	64	BDL	BDL

B. Effluent Sulfate Analysis and pH Monitoring

The June 1997 amendment to DP-1006 requires monthly sulfate analysis and daily pH monitoring of the GTS effluent. Table 7 presents the results of the first quarter sulfate analysis using EPA Method 375.4. The monthly minimum, maximum, and average pH readings for this quarter are shown in table 8.

Table 7
GTS Effluent Sulfate Concentrations

Date	Lab Report Number	Sulfate (Mg/l)
1/15/98	801334	380
2/11/98	802336	380
3/11/98	803324	320

Table 8
Monthly pH Readings

Date	Minimum pH	Maximum pH	Average pH
1/98	6.8	7.1	6.9
2/98	6.8	7.0	6.9
3/98	6.2	7.2	6.9

C. Golf Course Pond Sampling

DP-1006 requires monthly sampling of the east and west ponds for 8010 analysis during each month of operation. During the first quarter, the ponds were sampled three times pursuant to this requirement. No EPA Method 8021 (Halo) parameters were detected in the samples. Copies of the laboratory reports are contained in appendix A.

VII. Groundwater Sampling

Under the RCRA permit, a network of groundwater monitoring wells are sampled on a twice per year schedule (normally in the spring and fall). Once sampling is complete and analytical results have been received, contour maps showing the distribution of the contaminants in the groundwater are prepared. Contour maps for PCE, DCE, and TCA for the most recent sampling event are shown in Figures 7, 8, and 9.

Appendix A. Laboratory Reports

American Environmental Network, Inc.

AEN I.D. 801334

January 26, 1998

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-MS0408
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: CHUCK ARATER

On 1/15/98 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Sulfate was analyzed by American Environmental Network (FL) Inc., Pensacola, FL.

All other analyses were analyzed by American Environmental Network (NM) Inc., Albuquerque, NM.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY	AEN I.D.	: 801334
PROJECT #	: REMEDIATION	DATE RECEIVED	: 1/15/98
PROJECT NAME	: PERSON STATION	REPORT DATE	: 1/26/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQ	1/15/98
02	GTS-AIR STRIPPER EFFLUENT EAST	AQ	1/15/98
03	GTS GAC EFFLUENT EAST	AQ	1/15/98
04	UNM EAST RESERVOIR	AQ	1/15/98
05	UNM WEST RESERVOIR	AQ	1/15/98
06	VEW INFLUENT	AQ	1/15/98
07	PSMW-16 INFLUENT	AQ	1/15/98
08	EW-1 INFLUENT	AQ	1/15/98
09	PSMW 24,25,26 INFLUENT	AQ	1/15/98
10	SURGE TANK DISCHARGE	AQ	1/15/98
	TRIP BLANK	AQ	1/15/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 801334

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS-INFLUENT	AQUEOUS	1/15/98	NA	1/21/98	1
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	1/15/98	NA	1/21/98	1
03	GTS GAC EFFLUENT EAST	AQUEOUS	1/15/98	NA	1/21/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	**1.4**	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	**2.2**	< 0.3	< 0.3
CHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHENE	0.2	**UG/L**	**19**	< 0.2	< 0.2
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**39**	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**6.4**	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5

SURROGATE:					
BROMOCHLOROMETHANE (%)			99	108	103
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 801334

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	UNM EAST RESERVOIR	AQUEOUS	1/15/98	NA	1/21/98	1
05	UNM WEST RESERVOIR	AQUEOUS	1/15/98	NA	1/21/98	1
06	VEW INFLUENT	AQUEOUS	1/15/98	NA	1/21/98	1

PARAMETER	DET. LIMIT	UNITS	04	05	06
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	< 0.3	< 0.3	**5.2**
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	< 0.2	< 0.2	**3.6**
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	< 0.5	< 0.5	**2.5**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	< 1.0	< 1.0	**10**
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			102	102	101
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 801334

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	PSMW-16 INFLUENT	AQUEOUS	1/15/98	NA	1/21/98	1
08	EW-1 INFLUENT	AQUEOUS	1/15/98	NA	1/21/98	1
09	PSMW 24,25,26 INFLUENT	AQUEOUS	1/15/98	NA	1/22/98	1

PARAMETER	DET. LIMIT	UNITS	07	08	09
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	**1.4**	**1.4**	**2.2**
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	**1.1**	**6.1**	**0.4**
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	**37 (D5)**	**11**	**25**
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**110 (D5)**	**20**	**33**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**3.6**	**20**	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			103	102	95
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
(D5) 5X DILUTION, ANALYZED 1-22-98.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 801334

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
11	TRIP BLANK	AQUEOUS	1/15/98	NA	1/21/98	1

PARAMETER	DET. LIMIT	UNITS	11
BROMODICHLORMETHANE	0.2	UG/L	< 0.2
BROMOFORM	0.5	UG/L	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	< 0.2
DICHLOROETHENE	0.2	UG/L	< 0.2
,2-DICHLOROETHENE	1.0	UG/L	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5
rans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5
TETRACHLOROETHENE	0.5	UG/L	< 0.5
',1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		104
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
BLANK I.D.	: 12198B	AEN I.D.	: 801334
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 1/21/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.5
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
[illegible]-DICHLOROBENZENE	UG/L	<0.5
[illegible]ICHLOROETHANE	UG/L	<0.3
[illegible]-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.5
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.5
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		107
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
BLANK I.D.	: 012298	AEN I.D.	: 801334
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 1/22/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.5
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1 4-DICHLOROBENZENE	UG/L	<0.5
DICHLOROETHANE	UG/L	<0.3
,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.5
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.5
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		100
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
MSMSD #	: 801334-01	AEN I.D.	: 801334
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 1/22/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
CHLOROBENZENE	<0.5	10.0	11.3	113	11.3	113	0	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	9.9	99	9.4	94	5	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	11.6	116	11.5	115	1	(89 - 127)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network, Inc.

11 East Olive Road • Pensacola, FL 32514 • (850) 474-1001

SIGNATURE PAGE

Reviewed by: Linda Lofton
AEN Project Manager

Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC. ALBUQUERQUE, NEW MEXICO
Project Name:	PNM
Project Number:	801334
Project Location:	PERSON ST.
Accession Number:	801407
Project Manager:	KIMBERLY D. MCNEILL
Sampled By:	N/S

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Analysis Report

Analysis: Group of Single Wetchem

Accession:	801407
Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number:	801334
Project Name:	PNM
Project Location:	PERSON ST.
Department:	WET CHEM

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

"FINAL REPORT FORMAT - SINGLE"

Accession: 801407
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 801334
Project Name: PNM
Project Location: PERSON ST.
Test: Group of Single Wetchem
Matrix: WATER
QC Level: II

Lab ID: 001
Client Sample Id: 801334-10
Sample Date/Time: 15-JAN-98 1009
Received Date: 16-JAN-98

Parameters:	Units:	Results:	Rpt Lmts:	Q:	Batch:	Analyst:
SULFATE (375.4)	MG/L	380	130	+	SEW006	AB

Comments:

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

"Method Report Summary"

Accession Number: 801407
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 801334
Project Name: PNM
Project Location: PERSON ST.
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
801334-10	SULFATE (375.4)	MG/L	380

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Rd Pensacola, FL 32514 (850) 474-1001

Data Qualifiers for Final Report

EN-Pensacola Inorganic/Organic

②	Adjusted reporting limit due to sample matrix (dilution prior to digestion and/or analysis)
+	Elevated reporting limit due to dilution into calibration range
*	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)
#	Elevated reporting limit due to insufficient sample size
D	Diluted out
J5	The reported value is quantitated as a TIC; therefore, it is estimated
ND = Not Detected	N/S = Not Submitted N/A = Not Applicable

Florida Projects Inorganic/Organic

Y1	Improper preservation, no preservative present in sample upon receipt
Y2	Improper preservation, incorrect preservative present in sample upon receipt
Y3	Improper preservation, sample temperature exceeded EPA temperature limits of 2-6°C upon receipt
Y (FL description)	The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
Q	Sample held beyond the accepted holding time
I	The reported value is < Laboratory RL and > laboratory MDL
U1	The reported value is ≤ Laboratory MDL (value for sample result is reported as the MDL)
U (FL description)	Indicates the compound was analyzed for but not detected.
T	The reported value is < Laboratory MDL (value shall not be used for statistical analysis)
V	The analyte was detected in both the sample and the associated method blank.
J1	Surrogate recovery limits have been exceeded
J2	The sample matrix interfered with the ability to make any accurate determinations
J3	The reported value failed to meet the established quality control criteria for either precision or accuracy
J (FL description)	Estimated value; not accurate.

AFCEE Projects (under QAPP) and **All Other (AEN-PN) Projects/Sites for Inorganic/Organic Parameters**

J4	(For positive results) Temperature limits exceeded (≤2°C or ≥ 6°C)
J (AFCEE description)	The analyte was positively identified, the quantitation is an estimation
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C)
[illegible]	Improper preservation, no preservative present in sample upon receipt
R3	Improper preservation, incorrect preservative present in sample upon receipt
R4	Holding time exceeded
R5	Collection requirements not met, improper container used for sample
R (AFCEE description)	The data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
F	< RL and > laboratory MDL
F (AFCEE description)	The analyte was positively identified but the associated numerical value is below the AFCEE or lab RL
U2	≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
U (AFCEE description)	The analyte was analyzed for but not detected. The associated numerical value is at or below the MDL
B (AFCEE description)	The analyte was found in the associated blank, as well as in the sample

ICR Projects Inorganic/Organic

A	Acceptable
R6	Rejected

Examples: ICR Flags

R6 = Laboratory extracted the sample but the refrigerator malfunctioned so the extract became warm and client was notified

R6 = Sample arrived in laboratory in good condition; however, the laboratory did not analyze it within EPA's established holding time limit.

CLP and CLP-like Projects

Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers

IDL = Laboratory Instrument Detection Limit
MDL = Laboratory Method Detection Limit
RL = Reporting Limit (AFCEE RLs are listed in the AFCEE QAPP)
CLP CRDL = CLP Contract Required Detection Limit (these limits are listed in the EPA CLP Statement of Work or SOW)
CLP CRQL = CLP Contract Required Quantitation Limit (these limits are listed in the EPA CLP Statement of Work or SOW)

'y time a sample arrives at the laboratory improperly preserved (at improper pH or temperature) or after holding time has expired or prepared or lyzed after holding time, client must be notified in writing (i.e. case narrative).

AEN-Pensacola uses the most current promulgated methods contained in the reference manuals.

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

Quality Control Report

Analysis: Group of Single Wetchem

Accession:	801407
Client:	AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number:	801334
Project Name:	PNM
Project Location:	PERSON ST.
Department:	WET CHEM

AMERICAN ENVIRONMENTAL NETWORK 11 East Olive Road Pensacola, Florida 32514 (904) 474-1001

"WetChem Quality Control Report"

Parameter:	SULFATE
Batch Id:	SEW006
Blank Result:	<10
Anal. Method:	375.4
Prep. Method:	N/A
Analysis Date:	19-JAN-98
Prep. Date:	19-JAN-98

Sample Duplication

Sample Dup:	801251-1
Rept Limit:	<10
Sample Result:	<10
Dup Result:	<10
Sample RPD:	N/C
Max RPD:	10
Dry Weight%	N/A

Matrix Spike

Sample Spiked:	801251-1
Rept Limit:	<10
Sample Result:	<10
Spiked Result:	21.6
Spike Added:	20.0
% Recovery:	108
% Rec Limits:	64-150
Dry Weight%	N/A

ICV

ICV Result:	18.4
True Result:	20.0
% Recovery:	92
% Rec Limits:	90-110

LCS

LCS Result:	
True Result:	
% Recovery:	
% Rec Limits:	

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE (DILUTION PRIOR DIGESTION AND/OR ANALYSIS).
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX (DILUTION PRIOR TO DIGESTION AND/OR ANALYSIS).
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = REPORTING LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest EPA-approved edition.
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, latest EPA-approved edition.
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUMES 11.01 and 11.02, latest EPA-approved edition.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993
METHODS FOR SOIL ANALYSIS, PART 2, CHEMICAL AND MICROBILOGICAL PROPERTIES, 2ND EDITION.
AEN-PN USES THE MOST CURRENT PROMULGATED METHODS FROM THE REFERENCES LISTED ABOVE.

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).
RPT LMTS = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG	RB = REBECCA BROWN	JL = JANET LECLEAR
MM = MIKE MCKENZIE	ED = ESTHER DANTIN	CR = CYNTHIA ROBERTS
PLD = PAULA L. DOUGHTY	LV = LASSANDRA VON APPEN	JTZ = JONATHAN T. ZIENTARSKI
RH = RICKY HAGENDORFER	MG = MARY GUTIERREZ	AB = AMY BRADLEY
NK = NIKKI KILBURN		

American Environmental Network of Florida
PROJECT SAMPLE INSPECTION FORM

b Accession #: 801407 Date Received: 1/16/98

Was there a Chain of Custody?	Yes	No*	
Was Chain of Custody properly filled out and relinquished?	Yes	No*	
Were samples received cold? (Criteria: 2° - 6°C: AEN-SOP 1055)	Yes	No*	N/A
Were all samples properly labeled and identified?	Yes	No*	
Did samples require splitting? Req By: PM Client Other*	Yes*	No	
Were samples received in proper containers for analysis requested?	Yes	No*	
Were all sample containers received intact?	Yes	No*	

8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative except VOA vials that require zero headspace)**	Yes	No*	N/A
9.	Is there sufficient volume for analysis requested?	Yes	No*	
10.	Were samples received within Holding Time? (REFER TO AEN-SOP 1040)	Yes	No*	
11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No	N/A
12.	If sent, were matrix spike bottles returned?	Yes	No*	N/A
13.	Was Project Manager notified of problems? (initials:_____)	Yes	No*	N/A

rbill Number(s): 341 9568993 Shipped By: FEDEX

ooler Number(s): Theers Shipping Charges: N/A

ooler Weight(s): 6 # Cooler Temp(s) (°C): cck3 2°C

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

ut of Control Events and Inspection Comments:

(USE BACK OF PSIFFOR ADDITIONAL NOTES AND COMMENTS)

ed By: WS Date: 1/16/98 Logged By: PJC Date: 1/16/98

Note all Out-of-Control and/or questionable events on Comment Section of this form.

Note who requested the splitting of samples on the Comment Section of this form.

All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (AEN-SOP 938, section 2.2.9).

According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, AEN makes it policy to record any headspace as out-of-control (AEN-SOP 938, section 2.2.12).

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

801407 DATE: 1-15-98 PAGE 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry	SO4		Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
801334-10	1-15	1009	AQ	1										X																			

PROJECT INFORMATION

PROJECT NUMBER: 801334
PROJECT NAME: PNM
QC LEVEL: STD. IV
QC REQUIRED: MS MSD BLANK
TAT: STANDARD RUSH!

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS
CHAIN OF CUSTODY SEALS
INTACT?
RECEIVED GOOD COND./COLD
LAB NUMBER

SAMPLES SENT TO:
SAN DIEGO
Paragon
RENTON
PENSACOLA X
PORTLAND
PHOENIX

DUE DATE: ~~1-15-98~~ 1-28-98
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL C ATION REQUIRED: ☐YES ☐NO

RELINQUISHED BY: 1.
Signature: Time: 1700
Printed Name: Brian Price Date: 1-15-98
Albuquerque NM
Company:

RELINQUISHED BY: 2.
Signature: Time: 1/16/98
Printed Name: Date:
Company:

RECEIVED BY: 1.
Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 2.
Signature: Time: 1000
Printed Name: R. ELSPERMAN Date: 1/16/98
Company: FL

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 1-11-99 PAGE: 1 OF 2

AEN LAB I.D.: [redacted]

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

801407

ANALYSIS REQUEST

LAB I.D.	SAMPLE ID	DATE	TIME	MATRIX	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
-01	GTS-INFLUENT	1-11-99	1021	W								X														3
-02	GTS-AIR STRIPPER EFFLUENT EAST	1-11-99	1019	W								X														3
	~~GTS AIR STRIPPER EFFLUENT WEST~~			~~W~~								~~X~~														
-03	GTS GAC EFFLUENT EAST	1-11-99	1017	W								X														3
	~~GTS GAC EFFLUENT WEST~~			~~W~~								~~X~~														
-04	UNM EAST RESERVOIR	1-11-99	1039	W								X														3
-05	UNM WEST RESERVOIR	1-11-99	1045	W								X														3
	~~TRIP BLANK~~			~~W~~								~~X~~														

PROJECT INFORMATION

PROJ. NO.: REMEDIATION
PROJ. NAME: PERSON STATION
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	15
CUSTODY SEALS	ON/NA
RECEIVED INTACT	YES
BLUE ICE/ICE	ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 copies plants

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY: 1.

Signature: [illegible] Time: 1120
Printed Name: Chuck Arater Date: 1-11-99
Company: PNM

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2.

Signature: Time
Printed Name: Date
Company:

RECEIVED BY (LAB): 2.

[redacted]

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Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 1-15-98 PAGE: 2 OF 2

AEN LAB I.D. 801334

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

801407

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	TOTAL LIFTS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
VEW INFLUENT	1-15-98	1026	W	-06									X																				3
PSMW-16 INFLUENT	1-15-98	1023	W	-07									X																				3
EW-1 INFLUENT	1-15-98	1024	W	-08									X																				3
PSMW 24,25,26 INFLUENT	1-15-98	1022	W	-09									X																				3
Surge Tank Discharge	1-15-98	1009	W	-10														X															1
TRIP BLANK	1-15-98	0945	W	-11									X																				1

PROJECT INFORMATION

PROJ. NO.: REMEDIATION
PROJ. NAME: PERSON STATION
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	14
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Y/N
BOTTLES	Y/N

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 copies please

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY:

Signature: Chuck Arater Time: 11:20
Printed Name: CHUCK Arater Date: 1-15-98
Company: PNM

RECEIVED BY:

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY:

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY (LAB):

Signature:
Printed Name:

Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Me

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CHAIN OF CUSTODY

DATE: 1-15-99 PAGE: 1 OF 2

AEN LAB I.D. 80134

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PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject	(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)	504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
GTS-INFLUENT	1-15-99	1021	W	-01								X														3
GTS-AIR STRIPPER EFFLUENT EAST	1-15-99	1019	W	-02								X														3
~~GTS AIR STRIPPER EFFLUENT WEST~~			~~W~~									~~X~~														
GTS GAC EFFLUENT EAST	1-15-99	1017	W	-03								X														3
~~GTS GAC EFFLUENT WEST~~			~~W~~									~~X~~														
UNM EAST RESERVOIR	1-15-99	1039	W	-04								X														3
UNM WEST RESERVOIR	1-15-99	1045	W	-05								X														3
~~TRIP BLANK~~			~~W~~									~~X~~														

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	15
CUSTODY SEALS	ONNA
RECEIVED INTACT	Yes
BLUE ICE/ICE	11°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 Copies Plania

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Chl ato Time: 1120	Signature: Time:
Printed Name: CHUCK Arater Date: 1-15-99	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: 1150
Printed Name: Date:	Printed Name: 1/15/99
Company:	American Environmental Network (NM)

Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mex

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American Environmental Network (NM), Inc.
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CHAIN OF CUSTODY

DATE: 1-15-99 PAGE: 2 OF 2

AEN LAB I.D. 801334

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PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Total Sulfate	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
VEW INFLUENT	1-15-99	1026	W	-06									X																				3
PSMW-16 INFLUENT	1-15-99	1023	W	-07									X																				3
EW-1 INFLUENT	1-15-99	1024	W	-08									X																				3
PSMW 24,25,26 INFLUENT	1-15-99	1022	W	-09									X																				3
Surge Tank Discharge	1-15-99	1009	W	-10														X															1
TRIP BLANK	1-15-98	0945	W	-11									X																				1

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	14
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Yes
BLUE/ICE	ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 copies please

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Chuck Arater Time: 11:20	Signature: Time:
Printed Name: CHUCK Arater Date: 1-15-99	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: [illegible]
Printed Name: Date:	Printed Name: [illegible]
Company:	Company: [illegible]

Inc.: American Environmental Network (NM), Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mex

DISTRIBUTION: Whi AEN Pink - ORIGINATOR

American Environmental Network, Inc.

AEN I.D. 802336

February 23, 1998

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-MS0408
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: CHUCK ARATER

On 2/11/98 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Sulfate was analyzed by American Environmental Network (OR) Inc., Portland, OR.

All other parameters were analyzed by American Environmental Network (NM) Inc., Albuquerque, NM.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505) 344-4413

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY	AEN I.D.	: 802336
PROJECT #	: REMEDIATION	DATE RECEIVED	: 2/11/98
PROJECT NAME	: PERSON STATION	REPORT DATE	: 2/23/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQUEOUS	2/11/98
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	2/11/98
03	GTS-GAC EFFLUENT EAST	AQUEOUS	2/11/98
04	UNM EAST RESERVOIR	AQUEOUS	2/11/98
05	UNM WEST RESERVOIR	AQUEOUS	2/11/98
06	VEW INFLUENT	AQUEOUS	2/11/98
07	PSMW-16 INFLUENT	AQUEOUS	2/11/98
08	EW-1 INFLUENT	AQUEOUS	2/11/98
09	PSMW 24,25,26 INFLUENT	AQUEOUS	2/11/98
10	SURVEY TANK DISCHARGE	AQUEOUS	2/11/98
	TRIP BLANK	AQUEOUS	2/11/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 802336

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS-INFLUENT	AQUEOUS	2/11/98	NA	2/11/98	1
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	2/11/98	NA	2/11/98	1
03	GTS-GAC EFFLUENT EAST	AQUEOUS	2/11/98	NA	2/11/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	< 0.3	< 0.3	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	**19**	< 0.2	< 0.2
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**42**	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			106	101	111
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 802336

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	UNM EAST RESERVOIR	AQUEOUS	2/11/98	NA	2/11/98	1
05	UNM WEST RESERVOIR	AQUEOUS	2/11/98	NA	2/11/98	1
06	VEW INFLUENT	AQUEOUS	2/11/98	NA	2/11/98	1

PARAMETER	DET. LIMIT	UNITS	04	05	06
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	< 0.3	< 0.3	**5.4**
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	< 0.2	< 0.2	**3.7**
cis-1,2-DICHLOROETHENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	< 0.5	< 0.5	**2.9**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	< 1.0	< 1.0	**10**
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			107	111	104
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 802336

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	PSMW-16 INFLUENT	AQUEOUS	2/11/98	NA	2/11/98	1
08	EW-1 INFLUENT	AQUEOUS	2/11/98	NA	2/11/98	1
09	PSMW 24,25,26 INFLUENT	AQUEOUS	2/11/98	NA	2/11/98	1

PARAMETER	DET. LIMIT	UNITS	07	08	09
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	**1.4**	**1.3**	**2.3**
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	**1.2**	**6.4**	**0.4**
'CHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
ICHLOROETHENE	0.2	**UG/L**	**38**	**11**	**27**
cis-1,2-DICHLOROETHENE	0.2	**UG/L**	**0.6***	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**110 (D5)**	**21**	**36**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**3.8**	**20**	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	**UG/L**	**0.3 (D1)**	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			108	107	107
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:

(D5) 5X DILUTION, ANALYZED 2-12-98.

(D1) 1X DILUTION, ANALYZED 2-12-98.

*** - COMPOUND PRESENCE CONFIRMED BY SECOND DETECTOR AND REANALYZES**

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 802336

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
11	TRIP BLANK	AQUEOUS	2/11/98	NA	2/11/98	1

PARAMETER	DET. LIMIT	UNITS	11
BROMODICHLORMETHANE	0.2	UG/L	< 0.2
BROMOFORM	0.5	UG/L	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0
DIBROMOCHLOROMETHANE	0.5	UG/L	< 0.5
1,2-DIBROMOETHANE (EDB)	0.5	UG/L	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	< 0.2
[illegible] DICHLOROETHENE	0.2	UG/L	< 0.2
[illegible],2-DICHLOROETHENE	1.0	UG/L	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2
cis-1,3-DICHLOROPROPENE	0.5	UG/L	< 0.5
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5
TETRACHLOROETHENE	0.5	UG/L	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5
VINYL CHLORIDE	0.5	UG/L	< 0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		105
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
BLANK I.D.	: 021198	AEN I.D.	: 802336
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 2/11/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.5
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.5
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.5
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		103
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
BLANK I.D.	: 021198B	AEN I.D.	: 802336
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 2/11/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.5
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.5
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.5
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		113
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
BLANK I.D.	: 021298	AEN I.D.	: 802336
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 2/12/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.5
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
[illegible]ICHLOROBENZENE	UG/L	<0.5
[illegible] CHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.5
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.5
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		108
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
MSMSD #	: 802336-05	AEN I.D.	: 802336
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 2/11/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
CHLOROBENZENE	<0.5	10.0	11.7	117	11.7	117	0	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	8.8	88	9.2	92	4	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	11.3	113	11.3	113	0	(89 - 127)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Environmental Laboratory Network, Inc.

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Kim McNeill
AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 02/19/1998
AEN Account No.: 90147
AEN Job Number: 98.00320

Project: 802336
Location: PNM

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
90310	802336-10 (Tank Discharge)	Water	02/11/1998	02/12/1998

Approved by:

Andi Hoevet
Project Manager
AEN, INC.

Technical Review
AEN, INC.

The results from these samples relate only to the items tested. This report shall not be reproduced, except in full, without the written approval of the laboratory.

ANALYTICAL REPORT

Kim McNeill
AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

02/19/1998
Job No.: 98.00320

Project Name: 802336
Date Received: 02/12/1998

Sample Number	Sample Description
90310	802336-10 (Tank Discharge)

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Sulfate	375.4	380	125	mg/L	02/18/1998	DIL,Q

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

American Environmental Network, Inc. (503) 684-0447 (503) 620-0393 FAX
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QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 02/19/1998

Job Number: 98.00320

Contact: Kim McNeill
Project: 802336

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Sulfate	17.3	15.7	90.8	02/18/1998

CCV - Continuing Calibration Verification

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
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QUALITY CONTROL REPORT
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 02/19/1998

Job Number: 98.00320

Contact: Kim McNeill
Project: 802336

Analyte	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD	Flags
Sulfate	600	380	200	mg/L	110.0	580	200	mg/L	100.0	9.5	DIL,Q

QC Sample:

NOTE: Matrix Spike Samples may not be samples from this job.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference
dil.= Diluted Out

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
BLANKS

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 02/19/1998

Job Number: 98.00320

Contact: Kim McNeill
Project: 802336
Location: PNM

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Sulfate	ND	5.0	mg/L	02/18/1998

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
DUPLICATES

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 02/19/1998

Job Number: 98.00320

Contact: Kim McNeill
Project: 802336

Analyte	Original Analysis	Duplicate Analysis	Units	RPD	Date Analyzed	Flag
Sulfate	380	380	mg/L	0.0	02/18/1998	DIL,Q

NOTE: Duplicates may not be samples from this job.

RPD - Relative Percent Difference

FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 2-11-98 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry	Total SO4		Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
802336-10	2-11-98	1030	AQ											X																			

PROJECT INFORMATION	
PROJECT NUMBER:	802 336
PROJECT NAME:	Public Service Co.
QC LEVEL:	(STD.) IV
QC REQUIRED:	MS MSD BLANK
TAT:	(STANDARD) RUSH!

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

DUE DATE: 2/24/98
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL C[illegible]ATION REQUIRED: ☐YES ☐NO

SAMPLES SENT TO:	
SAN DIEGO	
N.C.	
RENTON	
PENSACOLA	
PORTLAND	X
PHOENIX	
ILL	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John Caldwell Time: 1700	Signature: Time:
Printed Name: John Caldwell Date: 2/11/98	Printed Name: Date:
Albuquerque	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: [illegible] Time: 10:16
Printed Name: Date:	Printed Name: T. Baker Date: 2/12/98
Company:	Company: AEN

[illegible]n Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) [illegible] • Portland (503) 684-0447 • Albuquerque (505) 344-3777

RECEIVED BY:

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CHAIN OF CUSTODY

DATE: 2/11 PAGE: 1 OF 2

AEN LAB I.D.: 80232

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydorcarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS		Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
GTS-INFLUENT	2/11/98	1035	W	-01									X																				3
GTS-AIR STRIPPER EFFLUENT EAST	2/11/98	1031	W	-02									X																				3
GTS-AIR STRIPPER EFFLUENT ~~WEST~~			W										X																				2
GTS GAC EFFLUENT EAST	2/11/98	1032	W	-03									X																				3
GTS GAC EFFLUENT ~~WEST~~			W										X																				2
UNM EAST RESERVOIR	2/11/98	1052	W	-04									X																				3
UNM WEST RESERVOIR	2/11/98	1055	W	-05									X																				3
TRIP BLANK			W										X																				

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	15
CUSTODY SEALS	ONNA
RECEIVED INTACT:	YES
[illegible]	8°C

Direct from Field

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 copies Please

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: [signature] Time: 1157	Signature: Time:
Printed Name: Chuck Arater Date: 2-11-98	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: [signature] Time: 12:00
Printed Name: Date:	Printed Name: Francine Torres 2/11/98
Company:	Company:

DISTRIBUTION: White EN Pink - ORIGINATOR

American Environmental Network (NM), Inc.
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CHAIN OF CUSTODY

DATE: 2/11 PAGE: 2 OF 2

AEN LAB I.D. 802336

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Total Sulfate	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
VEW INFLUENT	2/11/98	1040	W	-06									X																				
PSMW-16 INFLUENT	2/11/98	1037	W	-07									X																				
EW-1 INFLUENT	2/11/98	1038	W	-08									X																				
PSMW 24,25,26 INFLUENT	2/11/98	1036	W	-09									X																				
Surge Tank Discharge	2-11-98	1030	W	-10														X															
TRIP BLANK	2/11/98	1000	W	-11									X																				

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	14
CUSTODY SEALS	ONNA
RECEIVED INTACT	YES
BLUE ICE	8°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 Copies please

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct from Field

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1157	Signature: Time:
Printed Name: Chuck Arater Date: 2-11-98	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	RECEIVED BY: 2.
Signature: Time:	Signature: Time: 12:00
Printed Name: Date:	Printed Name:
Company:	Company:

American Environmental Network, Inc.

AEN I.D. 803324

March 27, 1998

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-MS0408
ALBUQUERQUE, NM 87158

oject Name PERSON STATION
Project Number REMEDIATION

ention: CHUCK ARATER

3/11/98 American Environmental Network (NM), Inc. (ADHS License No. AZ0015),
ived a request to analyze **aqueous** samples. The samples were analyzed
ith EPA methodology or equivalent methods. The results of these analyses and the quality
ol data, which follow each set of analyses, are enclosed.

lfate was analyzed by American Environmental Network (OR) Inc., Portland, OR.

er parameters were analyzed by American Environmental Network (NM) Inc.,
uquerque, NM.

have any questions or comments, please do not hesitate to contact us
05)344-3777.

D. McNeill
t Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (505)

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY	AEN I.D.	: 803324
PROJECT #	: REMEDIATION	DATE RECEIVED	: 3/11/98
PROJECT NAME	: PERSON STATION	REPORT DATE	: 3/27/98

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQUEOUS	3/11/98
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	3/11/98
03	GTS GAC EFFLUENT EAST	AQUEOUS	3/11/98
04	UNM EAST RESERVOIR	AQUEOUS	3/11/98
05	UNM WEST RESERVOIR	AQUEOUS	3/11/98
06	EW-1 INFLUENT	AQUEOUS	3/11/98
07	PSMW 24,25,26 INFLUENT	AQUEOUS	3/11/98
08	SURGE TANK DISCHARGE	AQUEOUS	3/17/98
09	TRIP BLANK	AQUEOUS	3/11/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 803324

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS-INFLUENT	AQUEOUS	3/11/98	NA	3/23/98	1
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	3/11/98	NA	3/25/98	1
03	GTS GAC EFFLUENT EAST	AQUEOUS	3/11/98	NA	3/25/98	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	**1.4**	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	**2.1**	< 0.3	< 0.3
DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
,-DICHLOROETHENE	0.2	**UG/L**	**15**	< 0.2	< 0.2
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**20 (D1)**	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**5.9**	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			88	82	89
SURROGATE LIMITS	(73 - 117)				
TRIFLUOROTOLUENE (%)			95 (D1)	N/A	N/A
SURROGATE LIMITS	(69 - 117)				

CHEMIST NOTES:

(D1) = 1X DILUTION, ANALYZED USING PID ON 3/23/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 803324

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	UNM EAST RESERVOIR	AQUEOUS	3/11/98	NA	3/19/98	1
05	UNM WEST RESERVOIR	AQUEOUS	3/11/98	NA	3/19/98	1
06	EW-1 INFLUENT	AQUEOUS	3/11/98	NA	3/23/98	1

PARAMETER	DET. LIMIT	UNITS	04	05	06
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	< 0.5	< 0.5	**1.5**
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.2	**UG/L**	< 0.2	**0.2** *	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	**UG/L**	< 0.2	**0.2** *	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	< 0.3	< 0.3	**6.2**
-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
-DICHLOROETHENE	0.2	**UG/L**	< 0.2	< 0.2	**16**
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0	< 2.0
,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETRACHLOROETHENE	0.5	**UG/L**	< 0.5	< 0.5	**20 (D1)**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	< 1.0	< 1.0	**19**
,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
RICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
URROGATE:					
BROMOCHLOROMETHANE (%)			104	112	92
URROGATE LIMITS	(73 - 117)				
RIFLUOROTOLUENE (%)			N/A	N/A	97 (D1)
SURROGATE LIMITS	(69 - 117)				

HEMIST NOTES:

D1) = 1X DILUTION, ANALYZED USING PID ON 3/23/98

* Talked to Kim McNeil, AEN re. these values. She verified presence of peaks on GC chart. No evidence of bleed over from previous sample on the GC (which was, in this case the East Reservoir sample).

Ken Johnson
4/2/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8021 HALO)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 803324

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	PSMW 24,25,26 INFLUENT	AQUEOUS	3/11/98	NA	3/23/98	1
09	TRIP BLANK	AQUEOUS	3/11/98	NA	3/19/98	1

PARAMETER	DET. LIMIT	UNITS	07	09
BROMODICHLORMETHANE	0.2	UG/L	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5
CHLOROFORM	0.5	**UG/L**	**2.0**	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	**UG/L**	**0.4**	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5
-DICHLOROETHENE	0.2	**UG/L**	**31 (D1)**	< 0.2
-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2
rans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2
METHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	**UG/L**	**30 (D1)**	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		86	111
SURROGATE LIMITS	(73 - 117)		
RIFLUOROTOLUENE (%)		89 (D1)	N/A
URROGATE LIMITS	(69 - 117)		

CHEMIST NOTES:

D1) = 1X DILUTION, ANALYZED USING PID ON 3/23/98

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021.		
BLANK I.D.	: 031998	AEN I.D.	: 803324
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 3/19/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		100
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021		
BLANK I.D.	: 032398	AEN I.D.	: 803324
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 3/23/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
'-DICHLOROETHANE	UG/L	<0.3
,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:		
BROMOCHLOROMETHANE (%)		79
SURROGATE LIMITS	(73 - 117)	
TRIFLUOROTOLUENE (%)		83 (D1)
SURROGATE LIMITS	(69 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021		
BLANK I.D.	: 032598	AEN I.D.	: 803324
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 3/25/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

PARAMETER	UNITS	
BROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
CHLOROFORM	UG/L	<0.5
CHLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.5
1,2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5
-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2
cis-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
cis-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TETRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)		83
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8021 HALO)		
MSMSD #	: 803324-04	AEN I.D.	: 803324
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: N/A
PROJECT #	: REMEDIATION	DATE ANALYZED	: 3/19/98
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
		UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
CHLOROBENZENE	<0.5	10.0	11.3	113	11.3	113	0	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	10.2	102	10.1	101	1	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	11.2	112	10.6	106	6	(89 - 127)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network, Inc.

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 684-0447

Kim McNeill
AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 03/18/1998
AEN Account No.: 90147
AEN Job Number: 98.00670

Project: 803324 / Public Service Co.
Location:

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Sample Number	Sample Description	Matrix Type	Date Taken	Date Received
91858	803324-08	Water	03/17/1998	03/18/1998

Approved by:

Andi Hoevet
Project Manager
AEN, INC.

Technical Review
AEN, INC.

The results from these samples relate only to the items tested. This report shall not be reproduced, except in full, without the written approval of the laboratory.

ANALYTICAL REPORT

Kim McNeill
AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

03/18/1998
Job No.: 98.00670

Project Name: 803324 / Public Service Co.
Date Received: 03/18/1998

Sample Number	Sample Description
91858	803324-08

PARAMETERS	METHODS	RESULTS	REPORT LIMIT	UNITS	DATE ANALYZED	FLAG
Sulfate	375.4	320	125.0	mg/L	03/18/1998	DIL,Q

A sample result of ND indicates the parameter was Not Detected at the reporting limit.

QUALITY CONTROL REPORT
CONTINUING CALIBRATION VERIFICATION

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 03/18/1998

Job Number: 98.00670

Contact: Kim McNeill
Project: 803324 / Public Service Co.

Analyte	CCV True Concentration	Concentration Found	Percent Recovery	Date Analyzed
Sulfate	86.6	81.7	94.3	03/18/1998

CCV - Continuing Calibration Verification

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Suite 270, Portland, OR 97224

QUALITY CONTROL REPORT
BLANKS

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 03/18/1998

Job Number: 98.00670

Contact: Kim McNeill
Project: 803324 / Public Service Co.
Location:

Analyte	Blank Analysis	Report Limit	Units	Date Analyzed
Sulfate	ND	5.0	mg/L	03/18/1998

American Environmental Network, Inc. (503)684-0447 (503)620-0393 FAX
17400 SW Upper Boones Ferry Rd., Portland, OR 97224

QUALITY CONTROL REPORT
DUPLICATES

AEN - Albuquerque
2709-D Pan American Fwy NE
Albuquerque, NM 87107

Date: 03/18/1998

Job Number: 98.00670

Contact: Kim McNeill
Project: 803324 / Public Service Co.

Analyte	Original Analysis	Duplicate Analysis	Units	RPD	Date Analyzed	Flag
Sulfate	ND	ND	mg/L		03/18/1998	DIL,Q

NOTE: Duplicates may not be samples from this job.

RPD - Relative Percent Difference

FLAG GLOSSARY

A	This sample does not have a typical gasoline pattern.
B1	This sample does not have a typical diesel pattern.
B	Analyte found in the associated blank as well as the sample.
C	The sample contains a lighter hydrocarbon than gasoline.
CN	See case narrative
CS	Outside control limits or unusual matrix; see case narrative.
D	The sample extends to a heavier hydrocarbon range than gasoline.
d	Results on a dry weight basis
DIL	Result was calculated from dilution.
E	The sample extends to a lighter hydrocarbon range than diesel.
F	The sample extends to a heavier hydrocarbon range than diesel.
G	The positive result for gasoline is due to single component comtamination.
I	The oil pattern for this sample is not typical.
J	The result for this compound is an estimated concentration.
L	The LCS recovery exceeded control limits. See the LCS page of this report.
LM	The LCS recovery exeeded control limits; the MS/MSD were in control validating the batch.
M	MS and/or MSD percent recovery exceeds control limits.
MD	Unable to calculate MS/MSD recovery due to high amount of analyte; greater than 4 times spike level.
MR	The MS/MSD RPD is greater than method critera. The sample was re-extracted and re-analyzed with similar results indica a non-homogeneous sample.
MM	The Matrix Spike exceeded control limits; LCS/LCS-D were in control validating the batch.
MI	Outside control limits due to matrix interference.
N	Manual integration performed on sample for quantification.
N/A	Not Applicable.
NC	Not calcuable.
NO	Not Analyzed.
P	A post digestion spike was analyzed, and recoveries were within control limits.
Q	Detection limits elevated due to sample matrix.
Q1	Detection limits elevated due to high levels of non-target compounds. Sample(s) run at a dilution.
R	The duplicate RPD was greater than 20%. The sample was re-extracted and re-analyzed with similar results. This indicates a matrix interference in the sample, likely a non-homogeneity of the sample.
RD	RPD not applicable for results less than five times the reporting limit.
RP	MS/MSD RPD is greater than 20%
SR	Surrogate recovery outside control limits. See the surrogate page of the report.
SD	Unable to quantitate surrogate due to sample dilution.
SC	Sample not provided to laboratory in proper sampling container.
V	Volatile analysis was requested, sample container received with headspace.
X1	The duplicate RPD was greater than 20%. Due to insufficient sample, re-analysis was not possible.
X	Sample was analyzed outside recommended holding times.
Y	The result for this parameter was greater than the TCLP regulatory limit.
Z	The pattern seen for the parameter being analyzed is not typical.

AMERICAN ENVIRONMENTAL NETWORK
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 3/17 PAGE: 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: AMERICAN ENVIRONMENTAL NETWORK
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

CLIENT PROJECT MANAGER: Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals - TAL	Metals - PP List	Metals - RCRA	RCRA Metals by TCLP (1311)	SO4		TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
803324 -08	3/17	0954	AQ						X																								

PROJECT INFORMATION	
PROJECT NUMBER:	803324
PROJECT NAME:	Public Service Company
QC LEVEL:	STD. IV
QC REQUIRED:	MS MSD BLANK
TAT:	STANDARD RUSH!

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

DUE DATE: 3/23
RUSH SURCHARGE:
CLIENT DISCOUNT:
SPECIAL CERTIFICATION REQUIRED: ☐ YES ☐ NO

SAMPLES SENT TO:	
CONNECTICUT	
ILLINOIS	
MASSACHUSETTS	
PENSACOLA	
PORTLAND	X
PHOENIX	
N.CAROLINA	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John Caldwell Time: 1700	Signature: Time:
Printed Name: John Caldwell Date: 3/17/98	Printed Name: Date:
Albuquerque	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Company:

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 3-11-98 PAGE: 1 OF 2

AEN LAB I.D. 803324

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydorcarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS		Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
GTS-INFLUENT	3-11-98	0930	W	-01									X																				3
GTS-AIR STRIPPER EFFLUENT EAST	3-11-98	0929	W	-02									X																				3
GTS-AIR STRIPPER EFFLUENT WEST			W										X																				
GTS GAC EFFLUENT EAST	3-11-98	827	W	-03									X																				3
GTS GAC EFFLUENT WEST			W										X																				
UNM EAST RESERVOIR	3-11-98	0946	W	-04									X																				3
UNM WEST RESERVOIR	3-11-98	0952	W	-05									X																				3
TRIP BLANK			W										X																				

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	

SAMPLE RECEIPT	
NO. CONTAINERS	15
CUSTODY SEALS	ON/NA
RECEIVED INTACT	Yes
AVG. TEMP °C	14°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4-Copies plate

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: [signature] Time: 1045	Signature: Time:
Printed Name: Chuck Arater Date: 3-11-98	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: [signature] Time: 1045
Printed Name: Date:	Printed Name: John Caldwell Date: 3/11/98
Company:	American Environmental Network (NM)

American Environmental Network (NM), Inc.
Albuquerque • Phoenix • Pensacola • Portland • Pleasant Hills • Columbia

CHAIN OF CUSTODY

DATE: 3-11-98 PAGE: 2 OF 2

AEN LAB I.D. 803324

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-4744
FAX: (505) 241-2487
BILL TO: SAME
COMPANY:
ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct/Inject		(M8015) Gas/Purge & Trap	Gasoline/BTEX & MTBE (M8015/8020)	BTXE/MTBE(8020)	BTXE & Chlorinated Aromatics (602/8020)	BTEX/MTBE/EDC &EDB (8020/8010/Short)	Chlorinated Hydrocarbons (601/8010)		504.1 EDB / DBCP	Polynuclear Aromatics (610/8310)	Volatile Organics (624/8240) GC/MS	Volatile Organics (8260) GC/MS	Total Sulfate	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral/Acid Compounds GC/MS (625/8270)		General Chemistry:			Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
~~VEW INFLUENT~~			~~W~~										~~X~~																				
~~PSMW-16 INFLUENT~~	~~3-11-98~~		~~W~~	~~-06~~									X																				19
EW-1 INFLUENT	3-11-98	0933	W	-06									X																				3
PSMW 24,25,26 INFLUENT	3-11-98	0932	W	~~-07~~ -07									X																				3
Surge Tank Discharge	3-11-98	0926	W	-08														X															1
TRIP BLANK	3/11/98	0900	W	~~-07~~									X																				1

PROJECT INFORMATION	
PROJ. NO.:	REMEDIATION
PROJ. NAME:	PERSON STATION
P.O. NO.:	
SHIPPED VIA:	
SAMPLE RECEIPT	
NO. CONTAINERS	8
CUSTODY SEALS	Y/N/NA
RECEIVED INTACT	Yes
GLIDE ICE/ICE	14°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS; FIXED FEE ☐ 4 copies please

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408

Direct From Field

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1045	Signature: Time:
Printed Name: Chuck Arater Date: 3-11-98	Printed Name: Date:
Company: PNM	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: 1045
Printed Name: Date:	Printed Name: 3-11-98
Company:	American Environmental Network (NM), Inc.