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

Treatment Effectiveness Report
Third Quarter 1996

November 11, 1996

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

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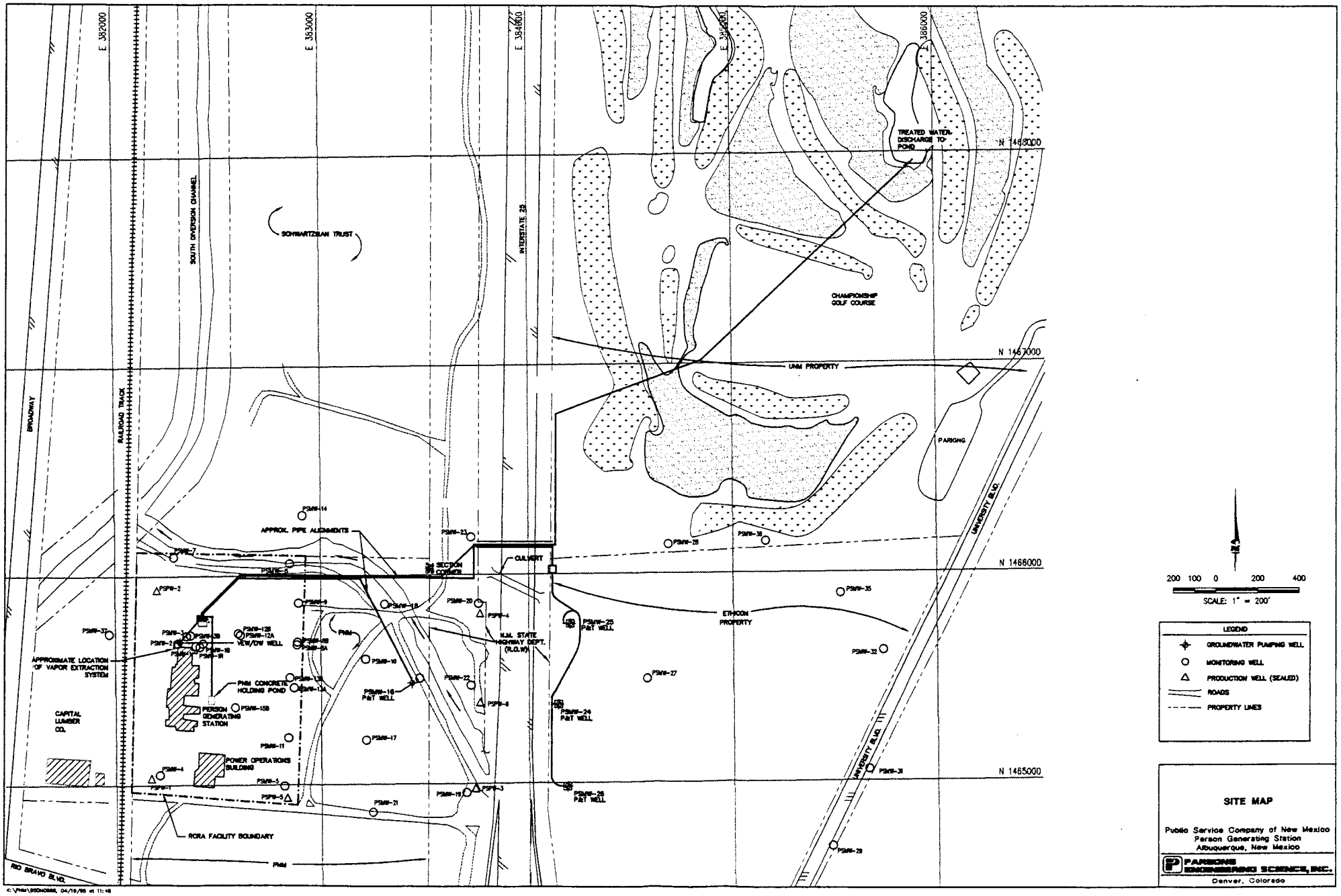
I. Introduction

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 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.



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II. Operational History

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

During the first month of operation, a series of groundwater level measurements were taken at monitoring wells in the vicinity of PSMW-16 and the VEW in order to determine the radius of influence of each well on the surrounding aquifer. Results from that data indicate that PSMW-16 has a radius of influence of 600 feet when pumped at 13.3 gpm, and the VEW has a radius of influence of 80 feet when pumped at 5.6 gpm.

In August 1995, a third extraction well was added to the GTS. This well was designated EW-1 and was drilled and completed specifically for extraction purposes.

During 1995, the GTS encountered periodic minor problems as well as a more serious problem with mineralization of the system components down stream from the air stripper. PNM contractor Parsons-Engineering Science, Inc. was asked to evaluate potential solutions for this problem. In late November, the mineralization problem became so severe that the GTS was shut down pending resolution of the problem.

The GTS was kept down during most of the first quarter of 1996 while the mineralization problem was studied. Parsons-Engineering Science, Inc. evaluated several alternatives including chemical treatment by acid addition, chemical treatment by inhibitors, chemical treatment by water softening, and a mixed oxidant process. After discussing the various alternatives with the NMED Groundwater Bureau (as to the effect of treatment on the discharge plan) and the UNM Championship Golf Course superintendent, PNM selected the acid treatment system for implementation.

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. Consequently, the GTS was operated only sporadically during May and June. The GTS resumed regular operation in mid-June and has operated satisfactorily during the third quarter.

III. Groundwater Treatment Effectiveness

Figures 2, 3, and 4 show graphs of concentration of total VOC's as measured at wells PSMW-16, VEW, and EW-1 over the operation of the GTS. Figure 5 shows a graph of concentration of total VOC's in the combined influent from wells PSMW-24, PSMW-25, and PSMW-26 over the operation of the GTS for the third quarter. More detailed data for 1995 and 1996 are shown in Tables 1, 2, 3, and 4. From February 1, 1995, through March 8, 1995, the total Chlorinated VOC's dropped from 318.4 ppb to 128.3 ppb at PSMW-16. During the same period, total Chlorinated VOC's dropped from 6.1 ppb to 1.8 ppb at the VEW. As anticipated, concentrations rose again when the system was restarted in March.

During the remainder of 1995, concentrations have held relatively steady at PSMW-16 prior to GTS shutdown in November. Concentrations at VEW have fluctuated up and down. Concentrations at EW-1 have risen over the period of its operation. At GTS re-start in March 1996, total Chlorinated VOC's rose dramatically at both PSMW-16 and VEW (EW-1 was not re-started at this time and was not tested). In April 1996, prior to the installation of the acid treatment system, total Chlorinated VOC's had dropped at both PSMW-16 and VEW. Total Chlorinated VOC's increased slightly at PSMW-16 and in the combined influent from PSMW-24, PSMW-25, and PSMW-26 once the GTS resumed full operation in July 1996, but had dropped by the end of the third quarter. Total Chlorinated VOC's have continued to drop at VEW. EW-1 total Chlorinated VOC's increased dramatically once the system resumed full operation, but had dropped by the end of this quarter.

Laboratory reports for this quarter are contained in appendix A.

Figure 2
Total VOCs at PSMW-16

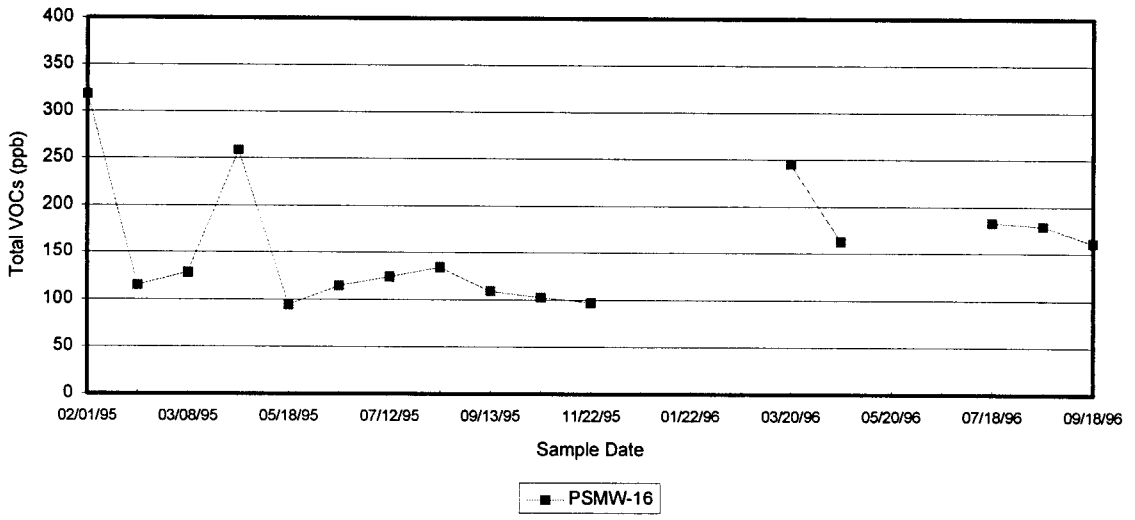


Figure 3
Total VOCs at the VEW

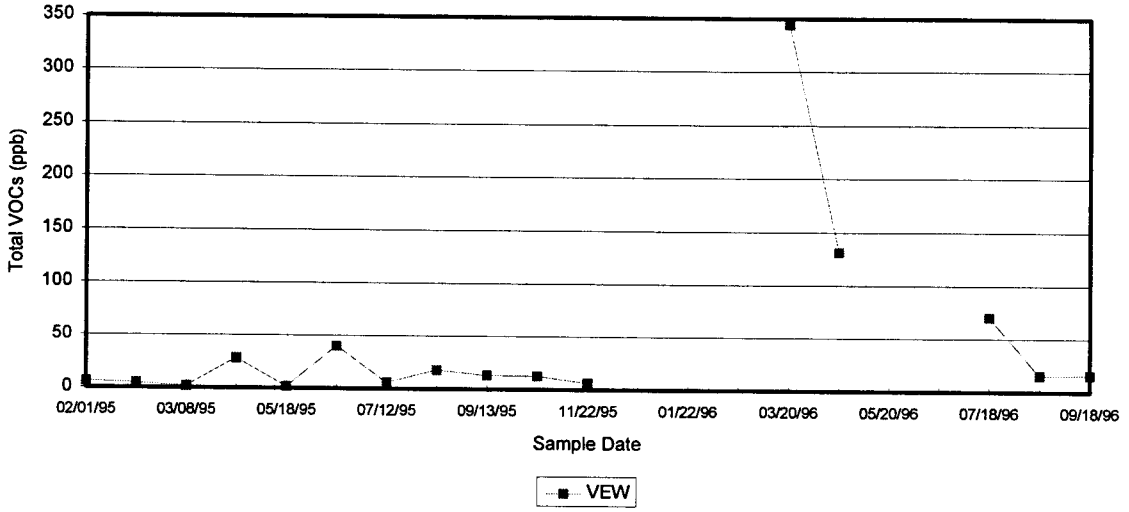


Figure 4
Total VOCs at EW-1

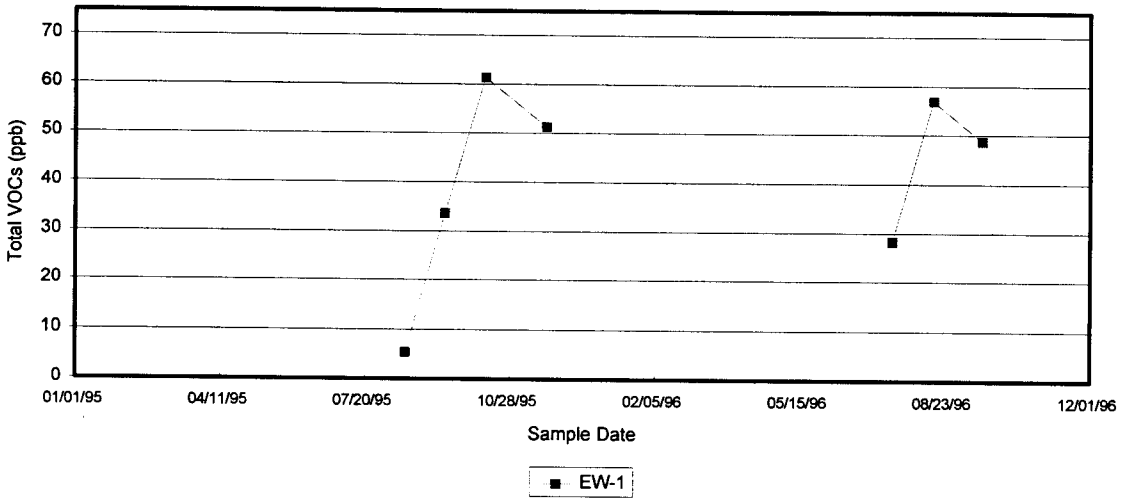


Figure 5
Total VOCs at PSMW-24,25,26

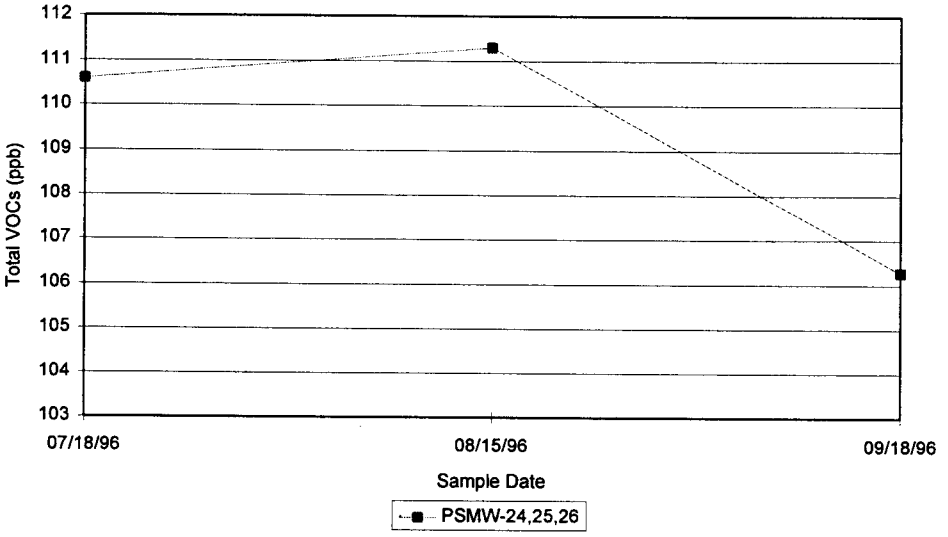


Table 1
Influent Concentrations at PSMW-16

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOC's (ppb)
2/1/95	502304	200	110	318.4
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

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

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

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

IV. Operational Dates

The GTS was not operated from January 1, 1996, through March 19, 1996, due to mineralization problems as discussed above. The GTS was re-started on March 20, 1996. The acid treatment system was installed during the second quarter of 1996. Also during the second quarter, monitor wells PSMW-24, PSMW-25, and PSMW-26 were converted to extraction wells as part of Corrective Action Program Phase II implementation. The GTS resumed full operation in mid-June. The table below details significant operational activities for this quarter.

Table 5
Significant Operational Activities

Date	Activity
9/20/96	Installation of sulfuric acid totalizer.

V. Influent and Effluent Flow Volumes

Flow totalizing meters are present on each influent well line and on the effluent flow line. Table 6 below details flow volumes from each influent well and the effluent line. Differences between total effluent and total influent 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 6
Influent and Effluent Flow Volumes

Source	Meter Number	Start Reading	End Reading	Volume (Gallons)
Flow Volumes for July 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,519,980	1,552,856	32,876
Influent (PSMW-16)	Hayes Meter No. 29408700	145,200	375,100	229,900
Influent (EW-1)	Hayes Meter No. 29408732	55,000	282,500	227,500
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	4,883	187,160	182,277
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	0	39,320	39,320
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	10,620	101,070	90,450
Effluent (to Golf Course)	Badger Meter No. 94398834	3,870,100	4,659,800	789,700
Flow Volumes for August 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,552,856	1,657,592	104,736
Influent (PSMW-16)	Hayes Meter No. 29408700	375,100	604,527	229,427
Influent (EW-1)	Hayes Meter No. 29408732	282,500	470,403	187,903
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	187,160	354,970	167,810
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	39,320	111,520	72,200
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	101,070	195,200	94,130
Effluent (to Golf Course)	Badger Meter No. 94398834	4,659,800	5,525,100	865,300
Flow Volumes for September 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,657,592	1,819,757	162,165
Influent (PSMW-16)	Hayes Meter No. 29408700	604,527	826,336	221,809
Influent (EW-1)	Hayes Meter No. 29408732	470,403	643,292	172,889
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	354,970	536,480	181,510
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	111,520	158,110	46,590
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	195,200	273,720	78,520
Effluent (to Golf Course)	Badger Meter No. 94398834	5,525,100	6,431,040	905,940
Quarterly Total for Influent (VEW+PSMW-16+EW-1+PSMW-24+PSMW-25+PSMW-26)				2,522,012
Quarterly Total for Effluent:				2,560,940
Annual Totals				
Annual Cumulative Influent Total for 1996:				3,139,202
Annual Cumulative Effluent Total for 1996:				3,195,000

VI. Laboratory Analysis

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

During the third operational quarter of the GTS, influent and effluent sampling was conducted pursuant to the routine schedule outlined in the NMED approved discharge plan, i.e., once each month. (The GTS was not operational during January or February 1996, and was operated only sporadically during May and June 1996, thus no influent/effluent samples were collected.) Total VOC analysis of GTS Influent and Effluent (after GAC units) is shown graphically in Figure 6. More detailed data are shown in Table 7 below. Laboratory analytical data reports are contained in appendix A. All influent/effluent sampling results show 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 stream 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

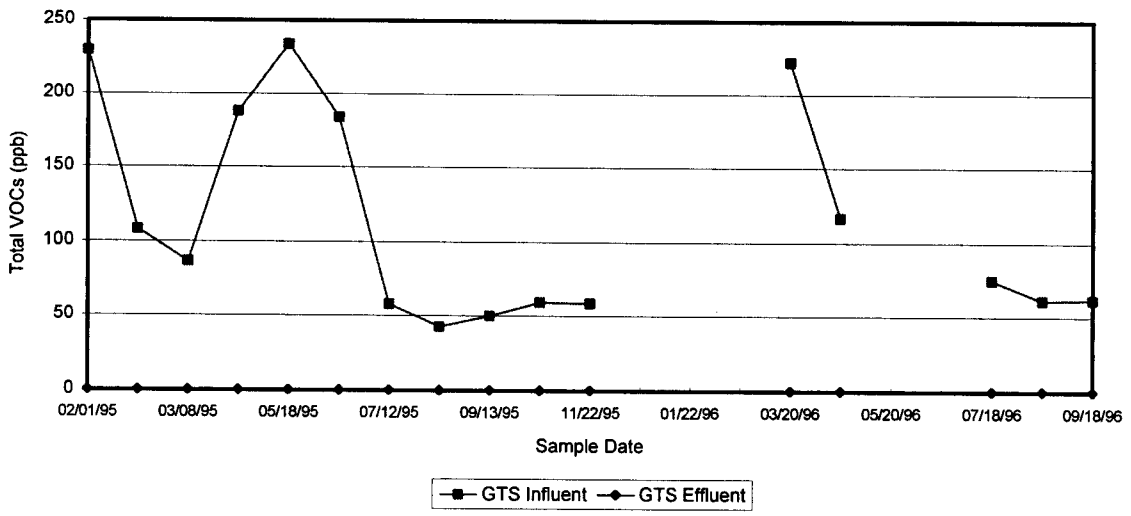


Table 7
Influent and Effluent VOC Concentrations

Sampling Date: 7/18/96	Lab Report Number: 607334		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Bromodichloromethane	0.2	< 0.2	< 0.2
Bromoform	0.8	< 0.5	< 0.5
Chloroform	2.6	< 0.5	< 0.5
1,1-Dichloroethane	0.6	< 0.3	< 0.3
1,1-Dichloroethene	25	< 0.2	< 0.2
Tetrachloroethene	44	< 0.5	< 0.5
1,1,1-Trichloroethane	1.4	< 1.0	< 1.0
TOTAL VOC'S	74.6	BDL	BDL

Sampling Date: 8/15/96	Lab Report Number: 608331		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Bromodichloromethane	0.2	< 0.2	< 0.2
Chloroform	2.1	< 0.5	< 0.5
1,2-Dibromomethane (EDB)	0.6	< 0.2	< 0.2
1,1-Dichloroethane	0.9	< 0.3	< 0.3
1,1-Dichloroethene	19	< 0.2	< 0.2
Tetrachloroethene	36	< 0.5	< 0.5
1,1,1-Trichloroethane	2.1	< 1.0	< 1.0
Trichloroethene	0.3	< 0.3	< 0.3
TOTAL VOC'S	61.2	BDL	BDL

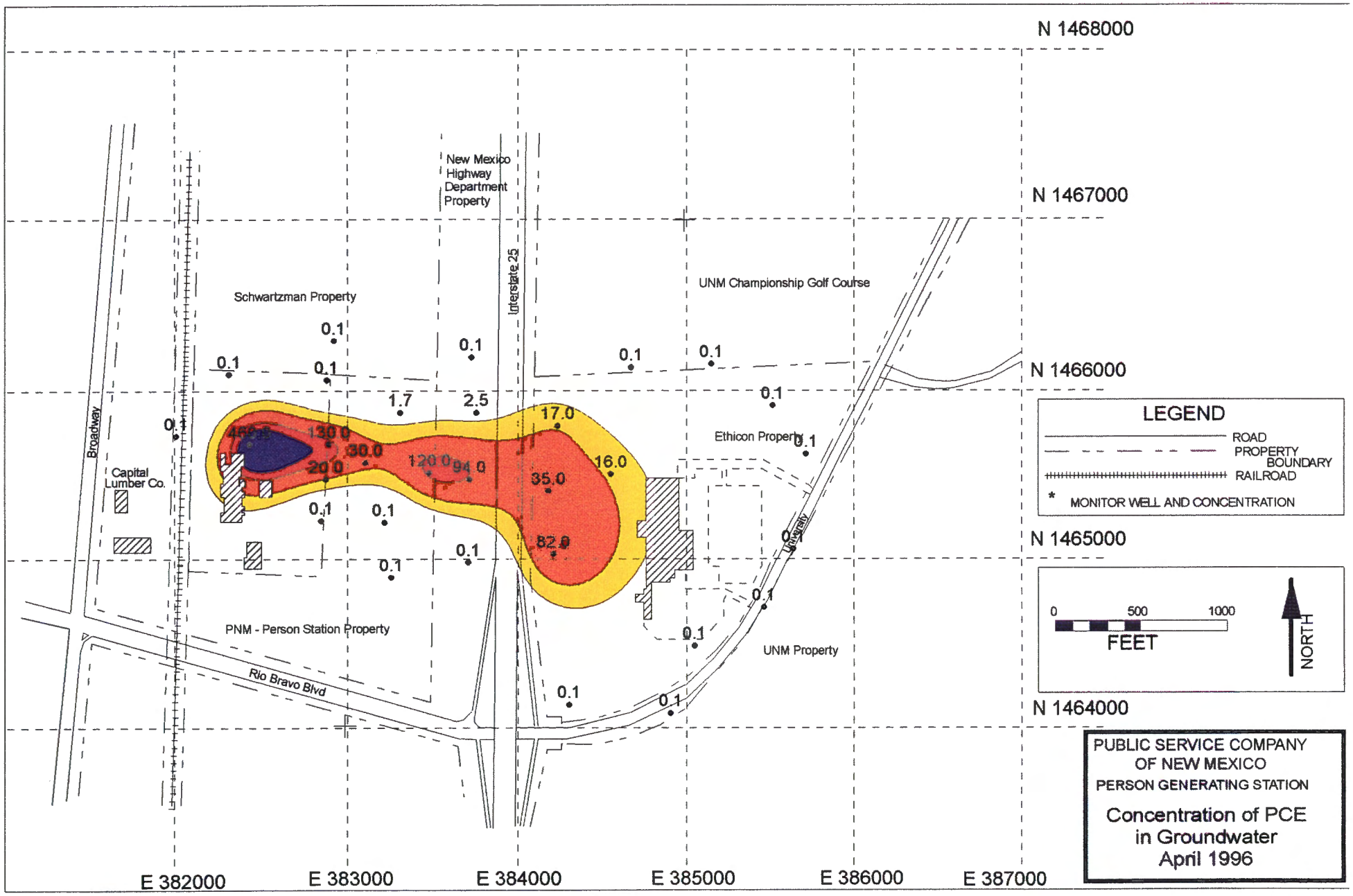
Sampling Date: 9/18/96	Lab Report Number: 609338		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Chloroform	1.0	< 0.5	< 0.5
Chloromethane	< 1.0	1.1	< 1.0
1,1-Dichloroethane	1.0	< 0.3	< 0.3
1,1-Dichloroethene	17	< 0.2	< 0.2
Tetrachloroethene	40	< 0.5	< 0.5
1,1,1-Trichloroethane	2.6	< 1.0	< 1.0
TOTAL VOC'S	61.6	1.1	BDL

B. Golf Course Pond Sampling

The GTS NMED Discharge Plan (DP 1006) requires monthly sampling of the east and west ponds for 8010 analysis after the first month of operation, and during each subsequent month of operation. During the third quarter of 1996, the ponds were sampled three times pursuant to this requirement. No EPA Method 8010 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.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N 1466000
N 1465000
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E 385000
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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
University
UNM Property
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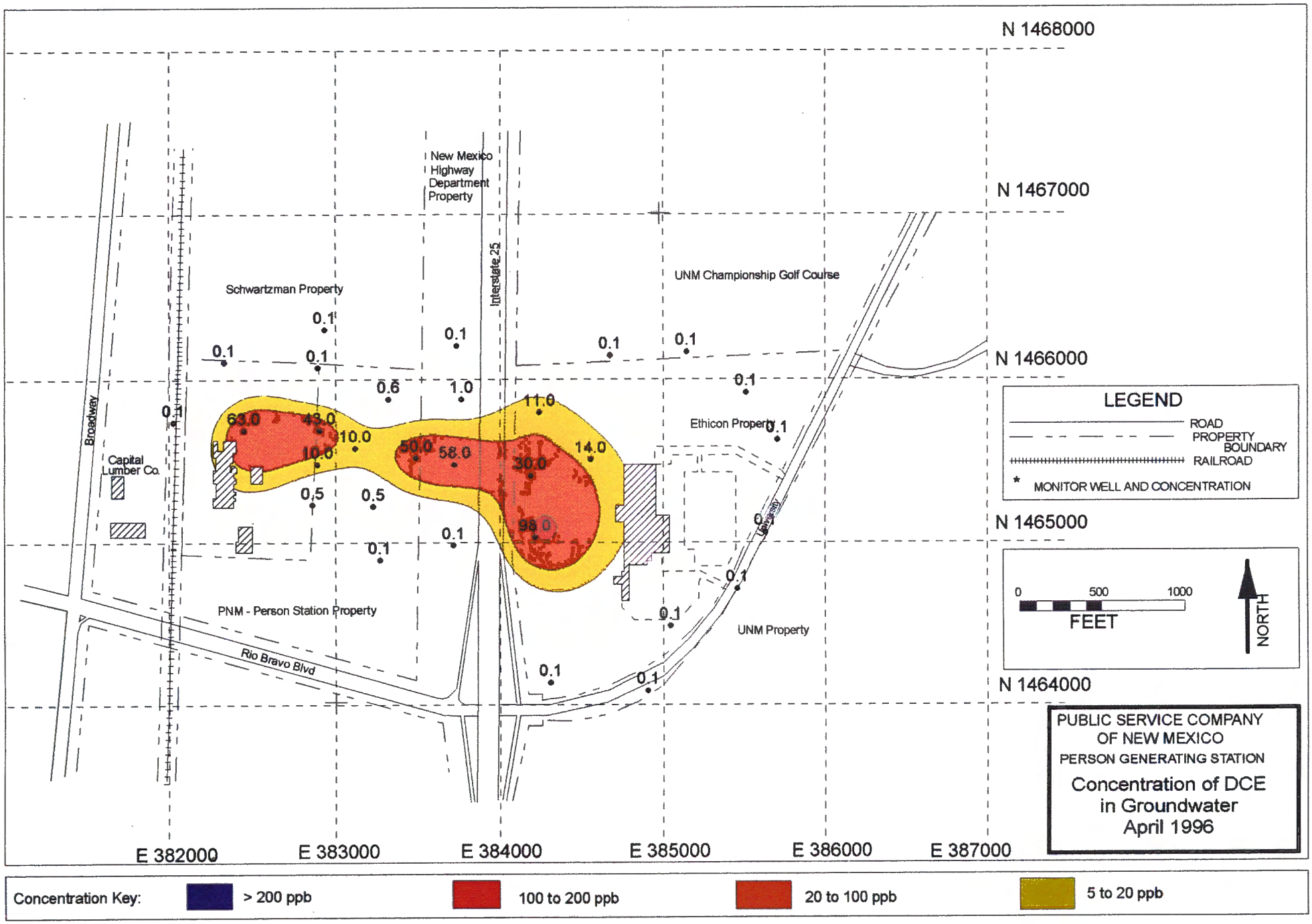
1.7
2.5
17.0
16.0
35.0
82.0
120.0
94.0
30.0
20.0
LEGEND
ROAD
PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
1000
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of PCE in Groundwater April 1996
Concentration Key:
> 200 ppb
100 to 200 ppb
20 to 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
63.0
43.0
10.0
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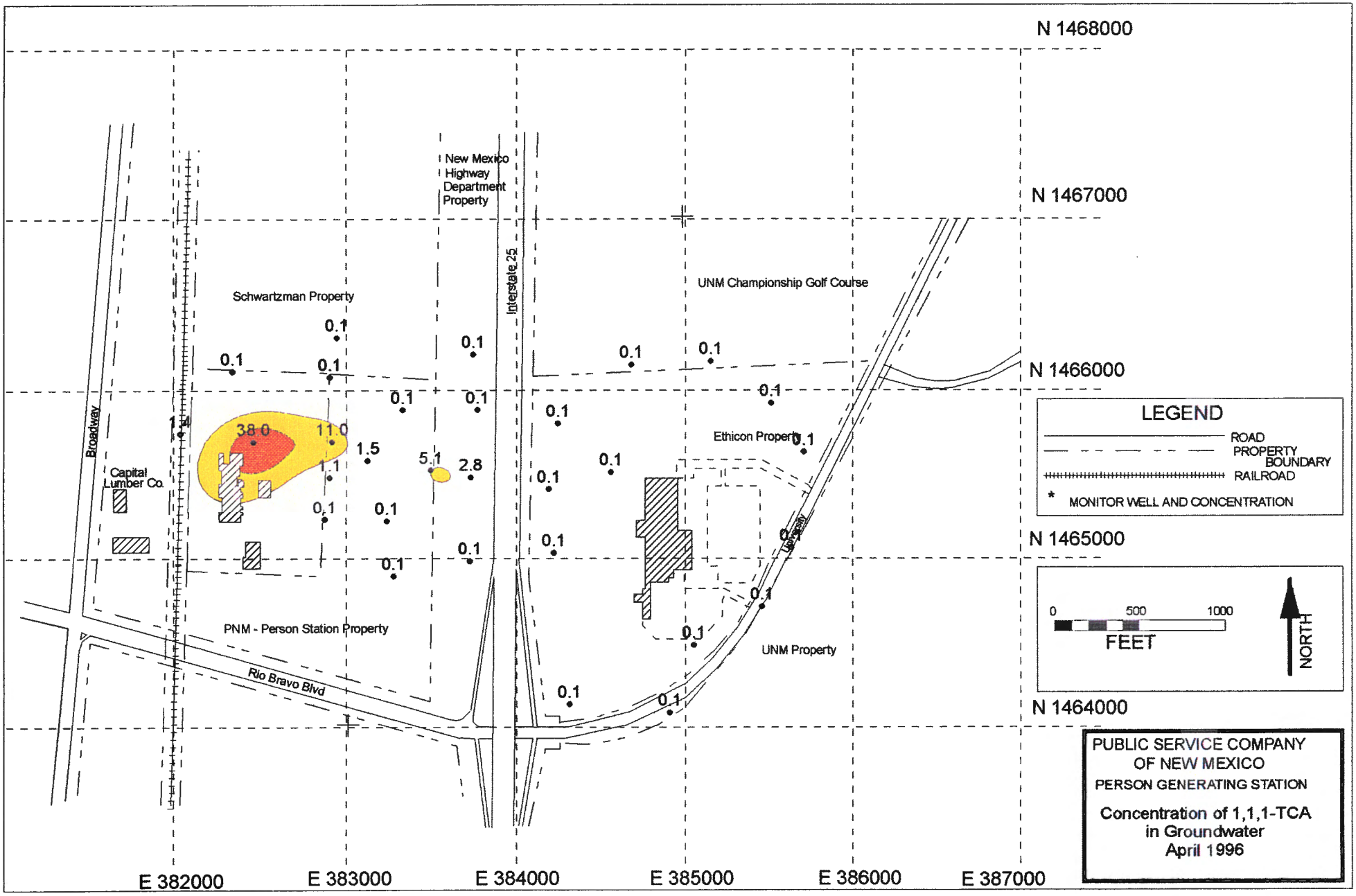
58.0
30.0
14.0
11.0
98.0
0.6
1.0
0.5
0.5
0.1
LEGEND
ROAD
PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
1000
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of DCE in Groundwater
April 1996
Concentration Key:
> 200 ppb
100 to 200 ppb
20 to 100 ppb
5 to 20 ppb



Concentration Key: > 200 ppb | 100 to 200 ppb | 20 to 100 ppb | 5 to 20 ppb

Appendix A. Laboratory Reports

American Environmental Network, Inc.

AEN I.D. **607334**

July 23, 1996

Public Service Company
Alvarado Square-MS0408
Albuquerque, NM 87158

Project Name/Number: PERSON STATION REMEDIATION

Attention: Ron Johnson

On **07/18/96**, 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.

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:ft

Enclosure

2709-D Pan American Freeway, NE • Albuquerque, NM 87107 • (505) 344-3777 • Fax (602) 344-4413

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY	DATE RECEIVED	: 07/18/96
PROJECT #	: REMEDIATION		
PROJECT NAME	: PERSON STATION	REPORT DATE	: 07/23/96

AEN ID: 607334

AEN #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQUEOUS	07/18/96
02	GTS-AIR STR EFF EAST	AQUEOUS	07/18/96
03	GTS GAC EFF EAST	AQUEOUS	07/18/96
04	UNM EAST RESERVOIR	AQUEOUS	07/18/96
05	UNM WEST RESERVOIR	AQUEOUS	07/18/96
06	VEW INFLUENT	AQUEOUS	07/18/96
07	PSMW-16 INFLUENT	AQUEOUS	07/18/96
08	EW-1 INFLUENT	AQUEOUS	07/18/96
09	PSMW-24,25,26 INFLUENT	AQUEOUS	07/18/96
10	TRIP BLANK	AQUEOUS	07/18/96
		AQUEOUS	07/18/96

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	10

AEN STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 607334
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS INFLUENT	AQUEOUS	07/18/96	NA	07/18/96	1
02	GTS-AIR STR EFF E	AQUEOUS	07/18/96	NA	07/18/96	1
03	GTS GAC EFF E	AQUEOUS	07/18/96	NA	07/18/96	1

PARAMETER	UNITS	01	02	03
BROMODICHLOROMETHANE	**UG/L**	**0.2**	<0.2	<0.2
BROMOFORM	**UG/L**	**0.8**	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5	<0.5
CHLOROFORM	**UG/L**	**2.6**	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	**UG/L**	**0.6**	<0.3	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	**25 D(10)**	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	UG/L	<2.0	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5	<0.5	<0.5
TETRACHLOROETHENE	**UG/L**	**44 D(10)**	<0.5	<0.5
1,1,1-TRICHLOROETHANE	**UG/L**	**1.4**	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5	<0.5
SURROGATE:				
BROMOCHLOROMETHANE (%)		99	102	101

D(10)=DILUTED 10X, ANALYZED 07/19/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 607334
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	PSMW-16 INFLUENT	AQUEOUS	07/18/96	NA	07/18/96	1
08	EW-1 INFLUENT	AQUEOUS	07/18/963	NA	07/19/96	1
09	PSMW-24,25,26 INF	AQUEOUS	07/18/96	NA	07/19/96	1

PARAMETER	UNITS	07	08	09
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
BROMOFORM	**UG/L**	**0.8**	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5	<0.5
CHLOROFORM	**UG/L**	**1.5**	<0.5	**5.7**
CHLOROMETHANE	UG/L	<1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	**UG/L**	**1.0**	**1.0**	**0.7**
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	**54 D(10)**	**5.7**	**55 D(10)**
CIS-1,2-DICHLOROETHENE	**UG/L**	<0.2	<0.2	**0.2**
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	UG/L	<2.0	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5	<0.5	<0.5
TETRACHLOROETHENE	**UG/L**	**120 D(10)**	**20 D(10)**	**49 D(10)**
1,1,1-TRICHLOROETHANE	**UG/L**	**5.1**	**1.5**	<1.0
1,1,2-TRICHLOROETHANE	**UG/L**	**0.2**	<0.2	<0.2
TRICHLOROETHENE	**UG/L**	**0.3**	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5	<0.5
SURROGATE:				
BROMOCHLOROMETHANE (%)		105	99	101

D(10)=DILUTED 10X, ANALYZED 07/19/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 607334
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	UNM E RES	AQUEOUS	07/18/96	NA	07/18/96	1
05	UNM W RES	AQUEOUS	07/18/96	NA	07/18/96	1
06	VEW INFLUENT	AQUEOUS	07/18/96	NA	07/18/96	1

PARAMETER	UNITS	04	05	06
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	**UG/L**	<0.3	<0.3	**2.2**
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	<0.2	<0.2	**14**
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2	<0.2
METHYLENE CHLORIDE	UG/L	<2.0	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5	<0.5	<0.5
TETRACHLOROETHENE	**UG/L**	<0.5	<0.5	**47 D(10)**
1,1,1-TRICHLOROETHANE	**UG/L**	<1.0	<1.0	**7.4**
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5	<0.5
SURROGATE:				
BROMOCHLOROMETHANE (%)		96	104	102

D(10)=DILUTED 10X, ANALYZED 07/19/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 607334
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TRIP BLANK	AQUEOUS	07/18/96	NA	07/19/96	1

PARAMETER	UNITS	10
BROMODICHLOROMETHANE	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	<0.2
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	<0.2
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 (%)	105

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 607334
BLANK I.D.	: 071896	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 07/18/96
PROJECT NAME	: PERSON STATION	DIL. FACTOR	: 1

PARAMETER	UNITS	
BROMODICHLOROMETHANE	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	<0.2
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	<0.2
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 (%)	101

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 607334
BLANK I.D.	: 071996	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 07/19/96
PROJECT NAME	: PERSON STATION	DIL. FACTOR	: 1

PARAMETER	UNITS	
BROMODICHLOROMETHANE	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	<0.2
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	<0.2
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 (%)	102

American Environmental Network, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 60733404	AEN I.D.	: 607334
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 07/19/96
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 60733404	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
CHLOROBENZENE	<0.5	10.0	10.0	100	10.0	100	0
1,1-DICHLOROETHENE	<0.2	10.0	9.1	91	9.2	92	1
TRICHLOROETHENE	<0.3	10.0	10.1	101	10.2	102	1

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

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

AnalyticalTechnologies, Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 7/18 PAGE 1 OF 2

ATI LAB I.D. 607334

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: RON JOHNSON

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - 0408
ALBUQUERQUE, NM 87158
PHONE: (505) 241-2998
FAX: (505) 241-2340

BILL TO: SAME
COMPANY:
ADDRESS:
ATTN: RON JOHNSON

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			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)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
GTS-INFLUENT	7-18-96	1025	W	-01							X																						3
GTS-AIR STRIPPER EFFLUENT EAST	7-18-96	1022	W	-02							X																						3
GTS-AIR STRIPPER EFFLUENT WEST			W								X																						
GTS GAC EFFLUENT EAST	7-18-96	1021	W	-03							X																						3
GTS GAC EFFLUENT WEST			W								X																						
UNM EAST RESERVOIR	7-18-96	1107	W	-04							X																						3
UNM WEST RESERVOIR	7-18-96	1112	W	-05							X																						3
TRIP BLANK			W								X																						1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	15
PROJ. NAME:	PERSON STATION	CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑ 2 WEEK

Comments:

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS HARD COPY

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [signature] Time: 1141	Signature: Time:	Signature: Time:
Printed Name: Charlie Avarez Date: 7-18-96	Printed Name: Date:	Printed Name: Date:
Company: PNM Phone: 241-4744	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: [signature] Time: 1145
Printed Name: Date:	Printed Name: Date:	Printed Name: John Caldwell Date: 7/18/96
Company:	Company:	Analytical Technologies, Inc.

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego ▪ Phoenix ▪ Seattle ▪ Pensacola ▪ Ft. Collins ▪ Portland ▪ Albuquerque

CHAIN OF CUSTODY

DATE: 7/18 PAGE 2 OF 2

ATI LAB I.D. 607334

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: RON JOHNSON

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - 0408
ALBUQUERQUE, NM 87158
PHONE: (505) 241-2998
FAX: (505) 241-2340

BILL TO: SAME
COMPANY:
ADDRESS:
ATTN: RON JOHNSON

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			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)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
VEW INFLUENT	7-18-96	1021	W	-06							X																						3
PSMW-16 INFLUENT	7-18-96	1029	W	-07							X																						3
EW-1 INFLUENT	7-18-96	1025	W	-08							X																						3
PSMW-24,25,26 INFLUENT	7-18-96	1024	W	-09							X																						3
TRIP BLANK	7/18	0945	W	-10							X																						

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	28
PROJ. NAME:	PERSON STATION	CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	17

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS HARD COPY

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Chk esb Time: 1141	Signature: Time:	Signature: Time:
Printed Name: Chuck Bratch Date: 7-18-96	Printed Name: Date:	Printed Name: Date:
Company: PNM Phone: 241-4744	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: John Caldwell Time: 1145
Printed Name: Date:	Printed Name: Date:	Printed Name: John Caldwell Date: 7/18/96
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 496-4400 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 • Portland (503) 684-0447 • Albuquerque (505) 344-3777 DISTRIBUTION: White - Canary - ATI - Pink - ORIGINATOR

American Environmental Network, Inc.

AEN I.D. 608331

August 27, 1996

PUBLIC SERVICE COMPANY OF NM
ALVARADO SQUARE-MSO408
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: RON JOHNSON

On 8/15/96 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.

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 (602) 344-4413

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY OF NM	AEN I.D.	: 608331
PROJECT #	: REMEDIATION	DATE RECEIVED	: 8/15/96
PROJECT NAME	: PERSON STATION	REPORT DATE	: 8/27/96

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQUEOUS	8/15/96
02	GTS-AIR Stripper Effluent West	AQUEOUS	8/15/96
03	GTS GAC EFFLUENT WEST	AQUEOUS	8/15/96
04	UNM EAST RESERVOIR	AQUEOUS	8/15/96
05	UNM WEST RESERVOIR	AQUEOUS	8/15/96
06	VEW INFLUENT	AQUEOUS	8/15/96
07	PSMW-16 INFLUENT	AQUEOUS	8/15/96
08	EW-1 INFLUENT	AQUEOUS	8/15/96
09	PSMW-24,25,26 INFLUENT	AQUEOUS	8/15/96
10	TRIP BLANK	AQUEOUS	8/15/96

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY OF NM
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 608331

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS-INFLUENT	AQUEOUS	8/15/96	NA	8/15/96	1
02	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	8/15/96	NA	8/15/96	1
03	GTS GAC EFFLUENT WEST	AQUEOUS	8/15/96	NA	8/15/96	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 D(1)A	< 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**	**2.1**	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0 D(1)	< 1.0 D(1)
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	**UG/L**	**0.6**	< 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**	**0.9**	< 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 D(10)**	< 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**	**36 D(10)**	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**2.1**	< 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 (%)			101	102	102
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES: D(1)=ANALYZED 8/19/96. D(10)=DILUTED 10X, ANALYZED 8/19/96.
D(1)A=ANALYZED 8/21/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY OF NM AEN I.D.: 608331
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	UNM EAST RESERVOIR	AQUEOUS	8/15/96	NA	8/16/96	1
05	UNM WEST RESERVOIR	AQUEOUS	8/15/96	NA	8/16/96	1
06	VEW INFLUENT	AQUEOUS	8/15/96	NA	8/16/96	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 D(1)
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	**2.4**
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	**2.1**
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**	< 0.5	< 0.5	**5.0**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	< 1.0	< 1.0	**5.7**
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 (%)			108	98	98
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES: D(1)=ANALYZED 8/19/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY OF NM
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 608331

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	PSMW-16 INFLUENT	AQUEOUS	8/15/96	NA	8/16/96	1
08	EW-1 INFLUENT	AQUEOUS	8/15/96	NA	8/16/96	1
09	PSMW-24,25-26 INFLUENT	AQUEOUS	8/15/96	NA	8/16/96	1

PARAMETER	DET. LIMIT	UNITS	07	08	09
BROMODICHLORMETHANE	0.2	**UG/L**	**0.2**	< 0.2	**0.4**
BROMOFORM	0.5	**UG/L**	**0.8 D(1)**	< 0.5 D(1)	< 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**	**1.6**	< 0.5	**5.4**
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0 D(1)
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**	**0.9**	**1.2**	**0.7**
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	**51 D(10)**	**8.4**	**50 D(10)**
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**	**120 D(10)**	**45 D(10)**	**47 D(10)**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**4.3**	**2.4**	**7.6**
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 (%)			102	94	93
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES: D(1)= ANALYZED 8/20/96. D(10)= DILUTED 10X, ANALYZED 8/20/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY OF NM
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 608331

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TRIP BLANK	AQUEOUS	8/15/96	NA	8/20/96	1

PARAMETER	DET. LIMIT	UNITS	10
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	0.2	UG/L	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2
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
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
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	0.2	UG/L	< 0.2
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	: EPA 8010		
BLANK I.D.	: 081996	AEN I.D.	: 608331
CLIENT	: PUBLIC SERVICE COMPANY OF NM		
PROJECT #	: REMEDIATION	DATE ANALYZED	: 8/19/96
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	<0.2
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	<0.2
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 (%)		102
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8010		
BLANK I.D.	: 081596	AEN I.D.	: 608331
CLIENT	: PUBLIC SERVICE COMPANY OF NM		
PROJECT #	: REMEDIATION	DATE ANALYZED	: 8/15/96
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	<0.2
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	<0.2
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 (%)		103
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8010		
BLANK I.D.	: 082096	AEN I.D.	: 608331
CLIENT	: PUBLIC SERVICE COMPANY OF NM		
PROJECT #	: REMEDIATION	DATE ANALYZED	: 8/20/96
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	<0.2
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	<0.2
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 (%)		97
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8010		
BLANK I.D.	: 082196	AEN I.D.	: 608331
CLIENT	: PUBLIC SERVICE COMPANY OF NM		
PROJECT #	: REMEDIATION	DATE ANALYZED	: 8/21/96
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	<0.2
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	<0.2
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 (%)		97
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 608331-04	AEN I.D.	: 608331
CLIENT	: PUBLIC SERVICE COMPANY OF NM		
PROJECT #	: REMEDIATION	DATE ANALYZED	: 8/20/96
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	10.4	104	9.8	98	6	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	10.4	104	9.3	93	11	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	10.8	108	10.0	100	8	(89 - 127)	20

CHEMIST NOTES:
N/A

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

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

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 8-15-96 PAGE 1 OF 2

ATI LAB I.D. 608331

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: RON JOHNSON

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - 0408
ALBUQUERQUE, NM 87158
PHONE: (505) 241-~~2000~~ 2576
FAX: (505) 241-2340

BILL TO: SAME
COMPANY:
ADDRESS:
ATTN: ~~RON JOHNSON~~ Steve Anderson

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			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)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
GTS-INFLUENT	8-15-96	1156	W	-01							X																						3
GTS-AIR STRIPPER EFFLUENT EAST			~~W~~								~~X~~																						
GTS-AIR STRIPPER EFFLUENT WEST	8-15-96	1153	W	-02							X																						3
GTS GAC EFFLUENT EAST			~~W~~								~~X~~																						
GTS GAC EFFLUENT WEST	8-15-96	1140	W	-03							X																						3
UNM EAST RESERVOIR	8-15-96	1219	W	-04							X																						3
UNM WEST RESERVOIR	8-15-96	1225	W	-05							X																						3
TRIP BLANK			W								X																						

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	15
PROJ. NAME:	PERSON STATION	CUSTODY SEALS	(Y) N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	Field

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☑ 2 WEEK

Comments:

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS HARD COPY

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: [illegible] Time: 1423	Signature: Time:	Signature: Time:
Printed Name: CHUCK CAVATTO Date: 8-15-96	Printed Name: Date:	Printed Name: Date:
Company: PNM Phone: 241-4744	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: [illegible] Time: 1630
Printed Name: Date:	Printed Name: Date:	Printed Name: Sabra Caldwell Date: 8/15/96
Company:	Company:	Analytical Technologies, Inc.

AnalyticalTechnologies,Inc., Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 8-15-96 PAGE 2 OF 2

ATI LAB I.D. 608331

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: RON JOHNSON

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO
ADDRESS: ALVARADO SQUARE - 0408
ALBUQUERQUE, NM 87158
PHONE: (505) 241-~~2008~~ 2576
FAX: (505) 241-2340

BILL TO: SAME
COMPANY:
ADDRESS:
ATTN: ~~RON JOHNSON~~ Steve Anderson

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1)	(MOD 8015) Gas/Diesel	Diesel/Gasoline/BTXE/MTBE (MOD 8015/8020)	BTXE/MTBE (8020)			Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	SDWA Volatiles (502.1/503.1), 502.2 Reg. & Unreg.			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)			SDWA Primary Standards - Arizona	SDWA Secondary Standards - Arizona	SDWA Primary Standards - Federal	SDWA Secondary Standards - Federal			The 13 Priority Pollutant Metals	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)		NUMBER OF CONTAINERS
VEW INFLUENT	8-15-96	1158	W	-06							X																						3
PSMW-16 INFLUENT	8-15-96	1200	W	-07							X																						3
EW-1 INFLUENT	8-15-96	1159	W	-08							X																						3
PSMW-24,25,26 INFLUENT	8-15-96	1202	W	-09							X																						3
TRIP BLANK	8/15	600	W	-10							X																						1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	12
PROJ. NAME:	PERSON STATION	CUSTODY SEALS	Y / N / NA
P.O. NO.:		RECEIVED INTACT	Y
SHIPPED VIA:		RECEIVED COLD	field

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒ 2 WEEK

Comments:

PLEASE PROVIDE DATA ON DISKETTE AS WELL AS HARD COPY

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Time: 1423	Signature: Time:	Signature: Time:
Printed Name: Chuck Anderson Date: 8-15-96	Printed Name: Date:	Printed Name: Date:
Company: PNM Phone: 241-4144	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY:(LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 1630
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 8/15/96
Company:	Company:	Analytical Technologies, Inc.

American Environmental Network, Inc.

AEN I.D. 609338

September 27, 1996

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-MSO408
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: RON JOHNSON

On 9/18/96 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.

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

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE COMPANY	AEN I.D.	: 609338
PROJECT #	: REMEDIATION	DATE RECEIVED	: 9/18/96
PROJECT NAME	: PERSON STATION	REPORT DATE	: 9/27/96

AEN I.D. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	VEW INFLUENT	AQUEOUS	9/18/96
02	PSMW-16 INFLUENT	AQUEOUS	9/18/96
03	EW-1 INFLUENT	AQUEOUS	9/18/96
04	PSMW-24,25,26 INFLUENT	AQUEOUS	9/18/96
05	GTS-INFLUENT	AQUEOUS	9/18/96
06	GTS-Air Stripper Effluent East	AQUEOUS	9/18/96
07	GTS GAC EFFLUENT EAST	AQUEOUS	9/18/96
08	UNM EAST RESERVOIR	AQUEOUS	9/18/96
09	UNM WEST RESERVOIR	AQUEOUS	9/18/96
10	TRIP BLANK	AQUEOUS	9/18/96

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 609338

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	VEW INFLUENT	AQUEOUS	9/18/96	NA	9/19/96	1
02	PSMW-16 INFLUENT	AQUEOUS	9/18/96	NA	9/19/96	1
03	EW-1 INFLUENT	AQUEOUS	9/18/96	NA	9/25/96	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	**0.8**	< 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	**1.6**	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0 D(1)	< 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**	**3.0**	**0.9**	**1.4**
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	**2.1**	**43 D(10)**	**7.8**
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**	**3.1**	**110 D(10)**	**37 D(10)**
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**7.6**	**4.3**	**2.6**
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 (%)			101	96	89
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
D(10)=DILUTED 10X, ANALYZED 9/24/96.
D(1)=DILUTED 1X, ANALYZED 9/25/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 609338

SAMPLE ID #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	PSMW-24,25,26 INFLUENT	AQUEOUS	9/18/96	NA	9/19/96	1
05	GTS-INFLUENT	AQUEOUS	9/18/96	NA	9/19/96	1
06	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	9/18/96	NA	9/19/96	1

PARAMETER	DET. LIMIT	UNITS	04	05	06
BROMODICHLORMETHANE	0.2	**UG/L**	**0.3**	< 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**	**2.0**	**1.0**	< 0.5
CHLOROMETHANE	1.0	**UG/L**	< 1.0	< 1.0	**1.1**
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**	**0.7**	**1.0**	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	**UG/L**	**44 D(10)**	**17 D(10)**	< 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**	**58 D(10)**	**40 D(10)**	< 0.5
1,1,1-TRICHLOROETHANE	1.0	**UG/L**	**1.1**	**2.6**	< 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 (%)			104	103	99
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
D(10)=DILUTED 10X, ANALYZED 9/25/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 609338
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	GTS GAC EFFLUENT EAST	AQUEOUS	9/18/96	NA	9/25/96	1
08	UNM EAST RESERVOIR	AQUEOUS	9/18/96	NA	9/20/96	1
09	UNM WEST RESERVOIR	AQUEOUS	9/18/96	NA	9/20/96	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	< 0.5	< 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	< 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	< 0.2	< 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	< 0.5	< 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	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5
SURROGATE:					
BROMOCHLOROMETHANE (%)			92	96	103
SURROGATE LIMITS	(73 - 117)				

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

AEN I.D.: 609338

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	TRIP BLANK	AQUEOUS	9/18/96	NA	9/20/96	1

PARAMETER	DET. LIMIT	UNITS	10
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**	**1.3**
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2
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
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2
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	0.2	UG/L	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5

SURROGATE:

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

CHEMIST NOTES:
Chloromethane was also found in the refrigerator blank for 9/18/96.

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8010		
BLANK I.D.	: 091996	AEN I.D.	: 609338
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
ROJECT #	: REMEDIATION	DATE ANALYZED	: 9/19/96
ROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

RAMETER	UNITS	
ROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
BROMOMETHANE	UG/L	<1.0
RBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
ILOROFORM	UG/L	<0.5
ILOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
-DIBROMOETHANE (EDB)	UG/L	<0.2
-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
-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
-1,2-DICHLOROETHENE	UG/L	<0.2
ans-1,2-DICHLOROETHENE	UG/L	<1.0
,2-DICHLOROPROPANE	UG/L	<0.2
-1,3-DICHLOROPROPENE	UG/L	<0.2
ns-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
,2,2-TETRACHLOROETHANE	UG/L	<0.5
TRACHLOROETHENE	UG/L	<0.5
,1,1-TRICHLOROETHANE	UG/L	<1.0
1,2-TRICHLOROETHANE	UG/L	<0.2
ICHLOROETHENE	UG/L	<0.3
RICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

RROGATE:

BROMOCHLOROMETHANE (%)		102
RROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8010		
BLANK I.D.	: 092496	AEN I.D.	: 609338
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
ROJECT #	: REMEDIATION	DATE ANALYZED	: 9/24/96
ROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS

ARAMETER	UNITS	
ROMODICHLORMETHANE	UG/L	<0.2
BROMOFORM	UG/L	<0.5
ROMOMETHANE	UG/L	<1.0
ARBON TETRACHLORIDE	UG/L	<0.2
CHLOROBENZENE	UG/L	<0.5
CHLOROETHANE	UG/L	<0.5
HLOROFORM	UG/L	<0.5
HLOROMETHANE	UG/L	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2
2-DIBROMOETHANE (EDB)	UG/L	<0.2
2-DICHLOROBENZENE	UG/L	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5
4-DICHLOROBENZENE	UG/L	<0.5
1-DICHLOROETHANE	UG/L	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5
1-DICHLOROETHENE	UG/L	<0.2
-1,2-DICHLOROETHENE	UG/L	<0.2
trans-1,2-DICHLOROETHENE	UG/L	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2
-1,3-DICHLOROPROPENE	UG/L	<0.2
trans-1,3-DICHLOROPROPENE	UG/L	<0.2
METHYLENE CHLORIDE	UG/L	<2.0
1,2,2-TETRACHLOROETHANE	UG/L	<0.5
TRACHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,2-TRICHLOROETHANE	UG/L	<0.2
ICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

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

CHEMIST NOTES:
NA

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8010		
BLANK I.D.	: 092596	AEN I.D.	: 609338
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 9/25/96
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	<0.2
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	<0.2
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 (%)		92
SURROGATE LIMITS	(73 - 117)	

CHEMIST NOTES:
N/A

American Environmental Network, Inc.

GAS CHROMOTOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 609335-01	AEN I.D.	: 609338
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 9/19/96
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	9.8	98	11.5	115	16	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	8.6	86	9.3	93	8	(44 - 99)	20
TRICHLOROETHENE	<0.3	10.0	10.0	100	11.4	114	13	(89 - 127)	20

CHEMIST NOTES:
N/A

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

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