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

PNM96

Bantau

August 12, 1996

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

Dear Mr. Garcia:

Subject: Treatment Effectiveness Report, Second Quarter 1996, 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

Barton

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

Treatment Effectiveness Report
Second Quarter 1996

August 12, 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 Ground Water Treatment System which 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.

E 382000
E 383000
E 384000
E 385000
E 386000
N 1468000
N 1467000
N 1466000
N 1465000
BROADWAY
RAILROAD TRACK
SOUTH DIVERSION CHANNEL
INTERSTATE 25
UNIVERSITY BLVD.
SCHWARTZMAN TRUST
TREATED WATER DISCHARGE TO POND
CHAMPIONSHIP GOLF COURSE
UNM PROPERTY
PARKING
APPROX. PIPE ALIGNMENTS
SECTION 89 CORNER
AIR STRIPPER BUILDING
PSMW-12B
PSMW-12A
VEW/DW WELL
EW-1
PNM
PNM CONCRETE HOLDING POND
PSMW-16 P&T WELL
PERSON GENERATING STATION
CAPITAL LUMBER CO.
POWER OPERATIONS BUILDING
RCRA FACILITY BOUNDARY
N.M. STATE HIGHWAY DEPT. (R.O.W)
EXISTING CULVERT
ETHICON PROPERTY
APPROXIMATE LOCATION OF VAPOR EXTRACTION SYSTEM
PSMW-1 PSMW-2 PSMW-3 PSMW-4 PSMW-5 PSMW-6 PSMW-7 PSMW-8 PSMW-9 PSMW-10 PSMW-11 PSMW-13 PSMW-14 PSMW-15 PSMW-16 PSMW-17 PSMW-18 PSMW-19 PSMW-20 PSMW-21 PSMW-22 PSMW-23 PSMW-24 PSMW-25 PSMW-26 PSMW-27 PSMW-28 PSMW-29 PSMW-31 PSMW-32 PSMW-35 PSMW-36 PSMW-37 PSPW-1 PSPW-2 PSPW-3 PSPW-4 PSPW-5 PSPW-6

N

200 100 200 400
SCALE: 1" = 200'

LEGEND
- GROUNDWATER PUMPING WELL
- MONITORING WELL
- PRODUCTION WELL (SEALED)
- ROADS
- PROPERTY LINES
- WATER PIPELINE

Figure 1
Person Generating Station
Groundwater Treatment System
Site Map

PUBLIC SERVICE COMPANY
of NEW MEXICO

II. Operational History

The Person Station Groundwater Treatment system was started on Friday, January 27, 1995, with treated effluent being sent to the University of New Mexico 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 system. This well was designated EW-1 and was drilled and completed specifically for extraction purposes.

During 1995, the system 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 system was shut down pending resolution of the problem.

The system 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 affect 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 system was operated only sporadically during May and June. The system resumed regular operation in mid June. However, since resuming operation the system has experienced periodic operational difficulties resulting in system shutdowns. Additional system tuning will aid in alleviating future operational difficulties.

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 groundwater treatment system. More detailed data for 1995 and 1996 are shown in Tables 1, 2 and 3. 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 shutdown in November. Concentrations at VEW have fluctuated up and down. Concentrations at EW-1 have risen over the period of its operation. At 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. No samples were collected during May and June as the system was operated only sporadically.

Laboratory reports for this quarter are contained in Appendix A.

Figure 2
Total VOCs at PSMW-16

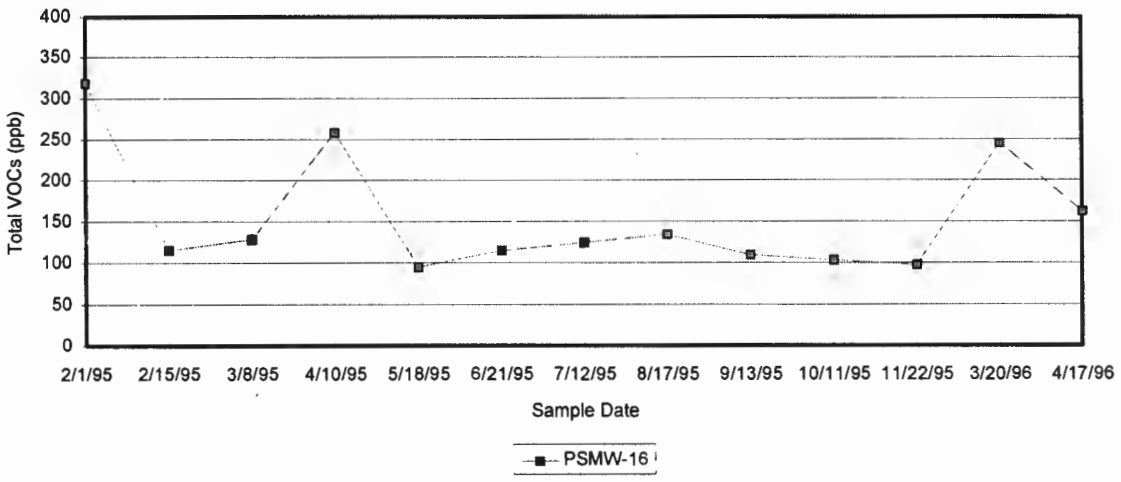


Figure 3
Total VOCs at the VEW

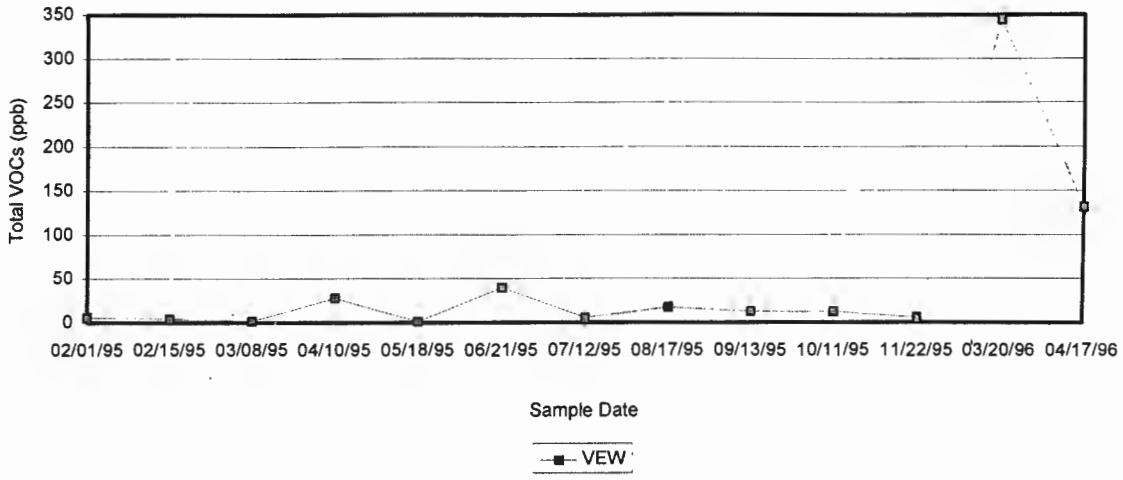


Figure 4
Total VOCs at EW-1

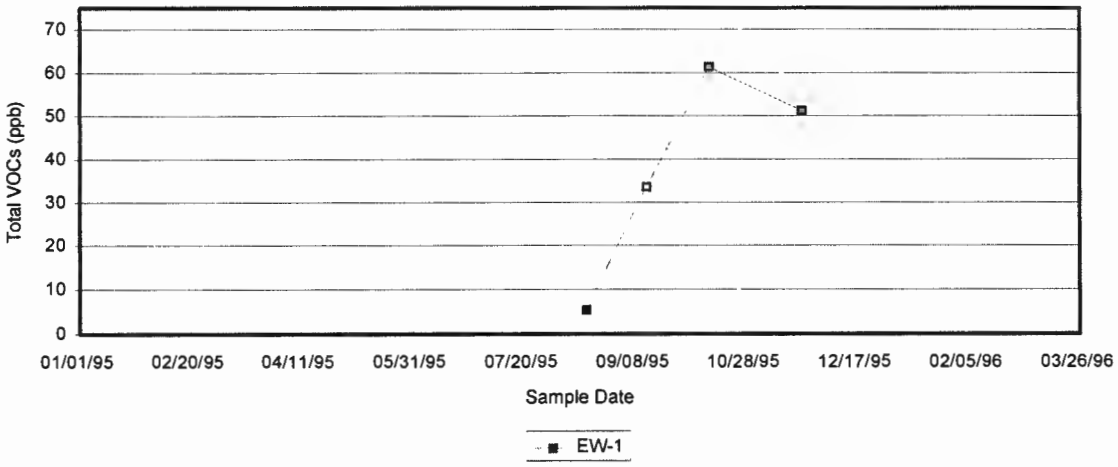


Table 1
Influent Concentrations From PSMW-16

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

Table 2
Influent Concentrations From 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
03/20/96	603347	270	72	344.3
04/17/96	604367	94	24	131.2

Table 3
Influent Concentrations From 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

IV. Operational Dates

The Person Station Groundwater Treatment system was not operated from January 1, 1996, through March 19, 1996, due to mineralization problems as discussed above. The system was re-started on March 20, 1996. The acid treatment system was installed during the second quarter of 1996. Also during this 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 table below details significant operational activities for this report quarter.

Table 4
Significant Operational Activities
Second Quarter 1996

Date	Activity
4/1/96 - 5/15/96	Conversion of monitor wells PSMW-24, PSMW-25, and PSMW-26 to extraction wells.
5/2/96	Installation of acid treatment system began.
6/13/96	GTS re-started with new extraction wells, and acid treatment system on-line.
6/14/96 - 6/19/96	Flow control valves failed and replaced.
6/21/96	New dual system pH controller installed.
6/26/96	Golf course pond level switch failed and eliminated.

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 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.

Note that for the month of June, the golf course effluent volume greatly exceeds the combined influent volume. This discrepancy is due to the use of City of Albuquerque drinking water in testing the system.

Table 5
Influent and Effluent Flow Volumes

Source	Meter Number	Start Reading	End Reading	Volume (Gallons)
Flow Volumes for April 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,432,596	1,437,670	5,074
Influent (PSMW-16)	Badger Meter No. 94398832	3,567,452	3,693,600	126,148
Influent (EW-1)	Badger Meter No. 94398833	822,955	822,955	0
Effluent (to Golf Course)	Badger Meter No. 94398834	5,666,780	5,785,300	118,520
Flow Volumes for May 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,437,670	1,510,874	73,204
Influent (PSMW-16)	Hayes Meter No. 29408700	0	87,812	87,812
Influent (EW-1)	Hayes Meter No. 29408732	0	0	0
Influent (PSMW-24)	Not Available	0	0	0
Influent (PSMW-25)	Not Available	0	0	0
Influent (PSMW-26)	Not Available	0	1,666	1,666
Effluent (to Golf Course)	Badger Meter No. 94398834	5,785,300	5,945,584	160,284
Flow Volumes for June 1996:				
Influent (VEW)	Badger Meter No. 94976130	1,510,874	1,519,980	9,106
Influent (PSMW-16)	Hayes Meter No. 29408700	87,812	145,200	57,388
Influent (EW-1)	Hayes Meter No. 29408732	0	55,000	55,000
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	0	4,883	4,883
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	0	0	0
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	1,666	10,620	8,954
Effluent (to Golf Course)	Badger Meter No. 94398834	3,693,700	3,870,100	176,400
Quarterly Total for Influent (VEW+PSMW-16+EW-1+PSMW-24+PSMW-25+PSMW-26)				429,235
Quarterly Total for Effluent:				455,204
Annual Totals				
Annual Cumulative Influent Total for 1996:				617,190
Annual Cumulative Effluent Total for 1996:				634,060

VI. Laboratory Analysis

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

During the fourth operational quarter of the groundwater treatment system, influent and effluent sampling was conducted pursuant to the routine schedule outlined in the NMED approved discharge plan, i.e., once each month. (The system 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 5. More detailed data results are shown in Table 6 below. Laboratory analytical data reports are contained in Appendix A. All influent/effluent sampling results show that the treatment system 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 VOCs.

Figure 5
Total VOCs GTS Influent vs. Effluent

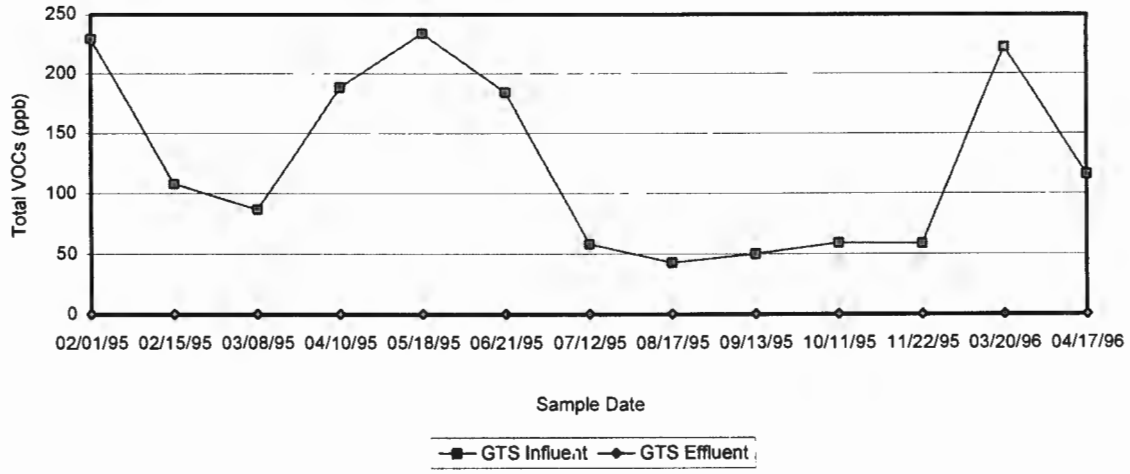


Table 6
Influent and Effluent VOC Concentrations

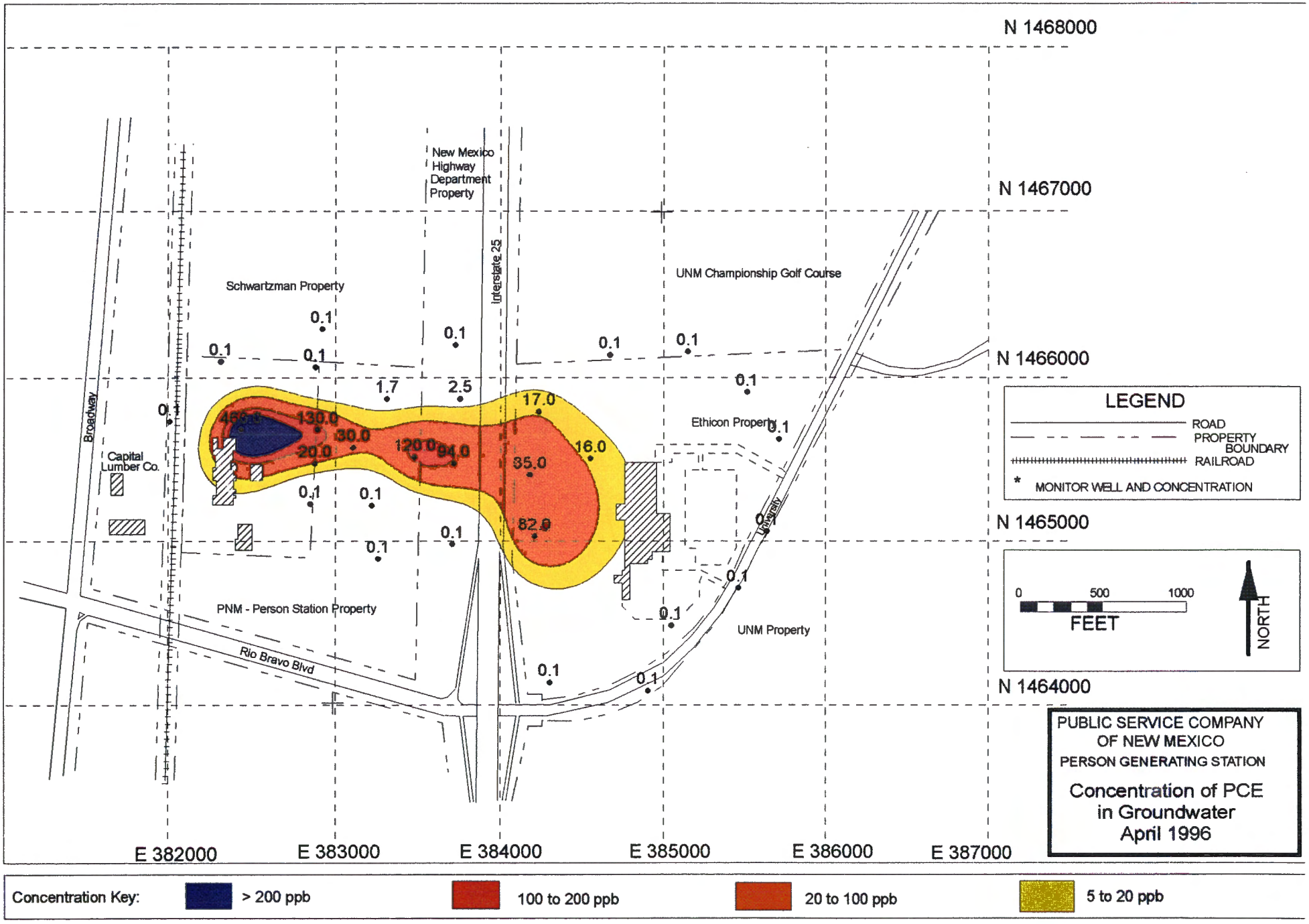
Sampling Date: 4/17/96	Lab Report Number: 604367		
VOC Compound	Influent (ppb)	Effluent After Air Stripper (ppb)	Effluent After GAC Unit (ppb)
Chloroform	1.1	< 0.5	< 0.5
1,1-Dichloroethane	0.8	< 0.3	< 0.3
1,1-Dichloroethene	29	< 0.2	< 0.2
Tetrachloroethene	82	< 0.5	< 0.5
1,1,1-Trichloroethane	3.4	< 1.0	< 1.0
Trichloroethene	< 0.3	< 0.3	< 0.3
TOTAL VOC'S	116.3	BDL	BDL

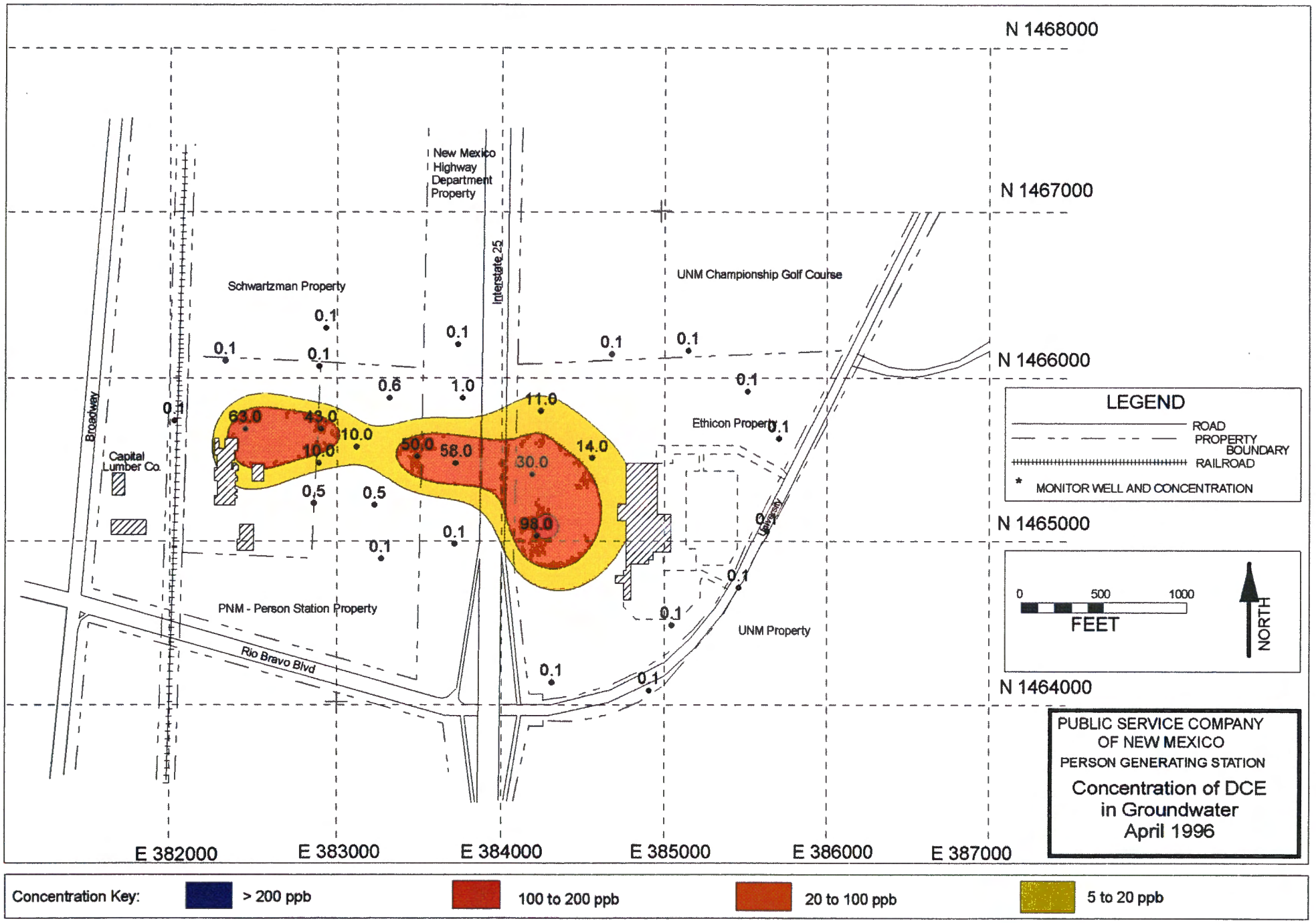
B. Golf Course Pond Sampling

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 second 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 6, 7, and 8.


N 1468000
N 1467000
N 1466000
N 1465000
N 1464000
E 382000
E 383000
E 384000
E 385000
E 386000
E 387000
New Mexico Highway Department Property
Interstate 25
Schwartzman Property
UNM Championship Golf Course
Broadway
Capital Lumber Co.
Ethicon Property
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
University
466.0
130.0
30.0
20.0
120.0
94.0
17.0
16.0
35.0
82.0
1.7
2.5
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 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
Broadway
Capital Lumber Co.
Ethicon Property
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
63.0
43.0
10.0
10.0
50.0
58.0
30.0
14.0
11.0
98.0
0.6
1.0
0.5
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LEGEND
ROAD
PROPERTY BOUNDARY
RAILROAD
* MONITOR WELL AND CONCENTRATION
0
500
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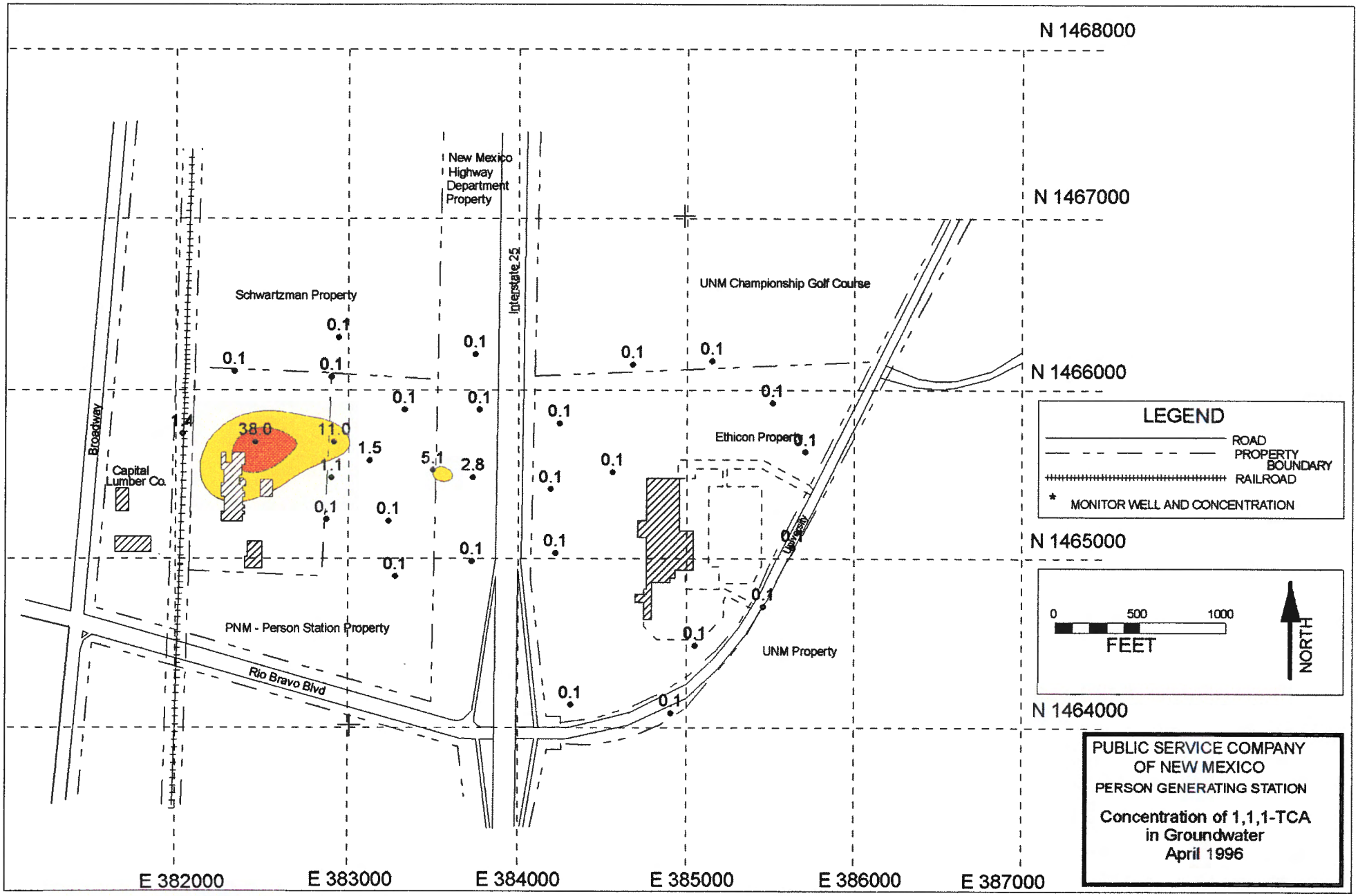
FEET
NORTH
PUBLIC SERVICE COMPANY OF NEW MEXICO
PERSON GENERATING STATION
Concentration of DCE in Groundwater
April 1996
Concentration Key:
> 200 ppb
100 to 200 ppb
20 to 100 ppb
5 to 20 ppb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E 382000
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E 385000
E 386000
E 387000
New Mexico Highway Department Property
Interstate 25
Schwartzman Property
UNM Championship Golf Course
Broadway
Capital Lumber Co.
Ethicon Property
PNM - Person Station Property
Rio Bravo Blvd
UNM Property
38.0
11.0
1.5
5.1
2.8
1.1
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
April 1996
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. **604367**

April 26, 1996

Public Service Co of NM
Alvarado Square ER16
Albuquerque, NM 87158

Project Name/Number: PERSON STATION REMEDIATION

Attention: Steve Anderson

On **04/17/96**, American Environmental Network (NM), Inc., (ADHS License No. AZ0015) (formerly ATI-NM), 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.
Laboratory Manager

MR:jt

Enclosure

American Environmental Network, Inc.

CLIENT	: PUBLIC SERVICE CO OF NM	DATE RECEIVED	: 04/17/96
PROJECT #	: REMEDIATION		
PROJECT NAME	: PERSON STATION	REPORT DATE	: 04/26/96

AEN ID: 604367

AEN #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	GTS-INFLUENT	AQUEOUS	04/17/96
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	04/17/96
03	GTS GAC EFFLUENT EAST	AQUEOUS	04/17/96
04	UNM EAST RESERVOIR	AQUEOUS	04/17/96
05	UNM WEST RESERVOIR	AQUEOUS	04/17/96
06	VEW INFLUENT	AQUEOUS	04/17/96
07	PSMW-16 INFLUENT	AQUEOUS	04/17/96
08	TRIP BLANK	AQUEOUS	04/11/96

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	8

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 CO OF NM AEN I.D.: 604367
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	GTS-INFLUENT	AQUEOUS	04/17/96	NA	04/20/96	1
02	GTS-AIR STRIPPER	AQUEOUS	04/17/96	NA	04/20/96	1
03	GTS GAC EFFLUENT EAST	AQUEOUS	04/17/96	NA	04/20/96	1

PARAMETER	UNITS	01	02	03
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**	**1.1**	<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**	**0.8 D(1)**	<0.3	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	**29 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**	**82 D(10)**	<0.5	<0.5
1,1,1-TRICHLOROETHANE	**UG/L**	**3.4**	<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 (%)		88	90	95

D(10)=DILUTED 10X, ANALYZED 04/22/96
D(1)=DILUTED 1X, ANALYZED 04/24/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE CO OF NM AEN I.D.: 604367
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	04/17/96	NA	04/22/96	1
05	UNM WEST RESERVOIR	AQUEOUS	04/17/96	NA	04/20/96	1
06	VEW INFLUENT	AQUEOUS	04/17/96	NA	04/20/96	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	**2.4 D(1)**
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	<0.2	<0.2	**24 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**	<0.5	<0.5	**94 D(10)**
1,1,1-TRICHLOROETHANE	**UG/L**	<1.0	<1.0	**9.7**
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2	<0.2
TRICHLOROETHENE	**UG/L**	<0.3	<0.3	**1.1**
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5	<0.5
SURROGATE:				
BROMOCHLOROMETHANE (%)		95	85	85

D(10)=DILUTED 10X, ANALYZED 04/22/96
D(1)=DILUTED 1X, ANALYZED 04/24/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE CO OF NM AEN I.D.: 604367
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	04/17/96	NA	04/20/96	1
08	TRIP BLANK	AQUEOUS	04/11/96	NA	04/20/96	1

PARAMETER	UNITS	07	08
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	**UG/L**	**1.3**	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	**UG/L**	**0.7 D(1)**	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	**UG/L**	**46 D(10)**	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5	<0.5
TETRACHLOROETHENE	**UG/L**	**110 D(10)**	<0.5
1,1,1-TRICHLOROETHANE	**UG/L**	**4.5**	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
SURROGATE:			
BROMOCHLOROMETHANE (%)		82	91

D(10)=DILUTED 10X, ANALYZED 04/22/96
D(1)=DILUTED 1X, ANALYZED 04/24/96

American Environmental Network, Inc.

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 604367
BLANK I.D.	: 041996	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/19/96
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 (%)		105

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 604367
BLANK I.D.	: 041996B	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/20/96
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 (%)		91

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 604367
BLANK I.D.	: 042296	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/22/96
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 (%)		90

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 604367
BLANK I.D.	: 042396	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/23/96
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 (%)		94

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 604367
BLANK I.D.	: 042496	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/24/96
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 (%)		92

American Environmental Network, Inc.

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 60436502	AEN I.D.	: 604367
CLIENT	: PUBLIC SERVICE CO OF NM	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 04/19/96
			04/22/96
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 60436502	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
CHLOROBENZENE	<0.5	10.0	11.8	118	11.8	118	0
1,1-DICHLOROETHENE	<0.2	10.0	8.9	89	8.8	88	1
TRICHLOROETHENE	<0.3	10.0	11.6	116	12.0	120	3

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

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

Analytical Technologies, Inc., Albuquerque, NM

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CHAIN OF CUSTODY

DATE: 4-17-96 PAGE 1 OF 2

ATI LAB I.D. 604367

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 - ~~0498~~ EA76

ALBUQUERQUE, NM 87158

PHONE: (505) 241-~~2998~~ 2576

FAX: (505) 241-2340 2437

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	4-17-96	1004	W	-01							X																						3
GTS-AIR STRIPPER EFFLUENT EAST	4-17-96	1002	W	-02							X																						3
~~GTS-AIR STRIPPER EFFLUENT WEST~~	~~4-17~~		~~W~~								~~X~~																						
GTS GAC EFFLUENT EAST	4-17-96	1000	W	-03							X																						3
~~GTS GAC EFFLUENT WEST~~			~~W~~								~~X~~																						
UNM EAST RESERVOIR	4-17-96	0925	W	-04							X																						3
UNM WEST RESERVOIR	4-17-96	0930	W	-05							X																						3
~~TRIP BLANK~~			W								X																						

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	15 ~~16~~
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: Time: 1110	Signature: Time:	Signature: Time:
Printed Name: Chuck Norton Date: 4-17-96	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: Time: 1125
Printed Name: Date:	Printed Name: Date:	Printed Name: John Caldwell Date: 4/17/96
Company:	Company:	Analytical Technologies, Inc.

Analytical Technologies, Inc., Albuquerque, NM

San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 4-17-96 PAGE 2 OF 2

ATI LAB I.D. 604367

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 - ~~0498~~ GR16
ALBUQUERQUE, NM 87158
PHONE: (505) 241-~~2538~~ 2576
FAX: (505) 241-~~2540~~ 2407

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

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
VEW INFLUENT	4-17-96	1007	W	-06
PSMW-16 INFLUENT	4-17-96	1020	W	-07
~~EW-1 INFLUENT~~			~~W~~	
~~PSMW-24,25,26 INFLUENT~~			~~W~~	
TRIP BLANK	4-11-96		W	-08

ANALYSIS REQUEST

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
						X																						3
						X																						3
						~~X~~																						
						~~X~~																						
						X																						1

PROJECT INFORMATION

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

SAMPLE RECEIPT

NO. CONTAINERS: 7
CUSTODY SEALS: (Y) N / NA
RECEIVED INTACT: Y
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: [signature] Time: 1110	Signature: Time:	Signature: Time:
Printed Name: CHUCK AUSTIN Date: 4-17-96	Printed Name: Date:	Printed Name: Date:
Company: ATI Phone: 241-4744	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: [signature] Time: 1125
Printed Name: Date:	Printed Name: Date:	Printed Name: John Caldwell Date: 4/10/96
Company:	Company:	Analytical Technologies, Inc.

AEN I.D. **605329**

May 21, 1996

Public Service Company
Alvarado Square ER16
Albuquerque, NM 87158

Project Name/Number: PERSON STATION REMEDIATION

Attention: Steve Anderson

On **05/15/96**, 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:ft

Enclosure

CLIENT	: PUBLIC SERVICE COMPANY	DATE RECEIVED	: 05/15/96
PROJECT #	: REMEDIATION		
PROJECT NAME	: PERSON STATION	REPORT DATE	: 05/21/96

AEN ID: 605329

AEN #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	UNM EAST RESERVOIR	AQUEOUS	05/15/96
02	UNM WEST RESERVOIR	AQUEOUS	05/15/96

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	2

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.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 605329
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	UNM EAST RESERVOIR	AQUEOUS	05/15/96	NA	05/15/96	1
02	UNM WEST RESERVOIR	AQUEOUS	05/15/96	NA	05/15/96	1

PARAMETER	UNITS	01	02
BROMODICHLOROMETHANE	UG/L	<0.2	<0.2
BROMOFORM	UG/L	<0.5	<0.5
BROMOMETHANE	UG/L	<1.0	<1.0
CARBON TETRACHLORIDE	UG/L	<0.2	<0.2
CHLOROBENZENE	UG/L	<0.5	<0.5
CHLOROETHANE	UG/L	<0.5	<0.5
CHLOROFORM	UG/L	<0.5	<0.5
CHLOROMETHANE	UG/L	<1.0	<1.0
DIBROMOCHLOROMETHANE	UG/L	<0.2	<0.2
1,2-DIBROMOETHANE (EDB)	UG/L	<0.2	<0.2
1,2-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,3-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,4-DICHLOROBENZENE	UG/L	<0.5	<0.5
1,1-DICHLOROETHANE	UG/L	<0.3	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<0.2
CIS-1,2-DICHLOROETHENE	UG/L	<0.2	<0.2
TRANS-1,2-DICHLOROETHENE	UG/L	<1.0	<1.0
1,2-DICHLOROPROPANE	UG/L	<0.2	<0.2
CIS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
TRANS-1,3-DICHLOROPROPENE	UG/L	<0.2	<0.2
METHYLENE CHLORIDE	UG/L	<2.0	<2.0
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.5	<0.5
TETRACHLOROETHENE	UG/L	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2	<0.2
TRICHLOROETHENE	UG/L	<0.3	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2	<0.2
VINYL CHLORIDE	UG/L	<0.5	<0.5
SURROGATE:			
BROMOCHLOROMETHANE (%)		79	80

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 605329
BLANK I.D.	: 051596	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 05/15/96
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 (%)		81

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 605329
BLANK I.D.	: 051696	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 05/16/96
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 (%)		88

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 60532902	AEN I.D.	: 605329
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 05/16/96
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 60432902	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
CHLOROBENZENE	<0.5	10.0	9.8	98	8.7	87	12
1,1-DICHLOROETHENE	<0.2	10.0	5.7	57	4.8	48	17
TRICHLOROETHENE	<0.3	10.0	10.1	101	8.7	87	15

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

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

Analytical **Technologies, Inc.**, Albuquerque, NM
San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 5/15 PAGE 1 OF 1

ATI LAB I.D. 60532

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-~~2775~~ 2576
FAX: (505) 241-~~2781~~ 2407

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

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~~			~~W~~								X																						
~~GTS AIR STRIPPER EFFLUENT~~			W								X																						
~~GTS GAC EFFLUENT~~			W								X																						
UNM EAST RESERVOIR	5-15-96	1022	W	-01							X																						3
UNM WEST RESERVOIR	5-15-96	1045	W	-02							X																						3
~~NEW WELL SAMPLE~~			~~W~~								X																						
~~PSMW-16 WELL SAMPLE~~			W								X																						
~~TRIP BLANK~~			~~W~~								X																						1

PROJECT INFORMATION

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

SAMPLE RECEIPT

NO. CONTAINERS: 5 6
CUSTODY SEALS: (Y) N/A
RECEIVED INTACT: Y
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: Time: 1115	Signature: Time:	Signature: Time:
Printed Name: Chuck Date: 5-15-96	Printed Name: Date:	Printed Name: Date:
Company: Phone: 241-4744	Company:	Company:

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

AEN I.D. **606333**

June 25, 1996

Public Service Company
Alvarado Square-MS0408
Albuquerque, NM 87158

Project Name/Number: PERSON STATION REMEDIATION

Attention: Ron Johnson

On **06/20/96**, 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

CLIENT	: PUBLIC SERVICE COMPANY	DATE RECEIVED	: 06/20/96
PROJECT #	: REMEDIATION		
PROJECT NAME	: PERSON STATION	REPORT DATE	: 06/25/96

AEN ID: 606333

AEN #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	UNM EAST RESERVOIR	AQUEOUS	06/20/96
02	UNM WEST RESERVOIR	AQUEOUS	06/20/96
03	TRIP BLANK	AQUEOUS	06/20/96

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	3

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.

GAS CHROMATOGRAPHY RESULTS

TEST : PURGEABLE HALOCARBONS (EPA 8010)
CLIENT : PUBLIC SERVICE COMPANY AEN I.D.: 606333
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	UNM EAST RESERVOIR	AQUEOUS	06/20/96	NA	06/20/96	1
02	UNM WEST RESERVOIR	AQUEOUS	06/20/96	NA	06/20/96	1
03	TRIP BLANK	AQUEOUS	06/20/96	NA	06/20/96	1

PARAMETER	UNITS	01	02	03
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	<0.3
1,2-DICHLOROETHANE (EDC)	UG/L	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	UG/L	<0.2	<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	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0	<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 (%)		106	105	107

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 606333
BLANK I.D.	: 06/20/96	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 06/20/96
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 (%)		114

GAS CHROMATOGRAPHY RESULTS - QUALITY CONTROL

REAGENT BLANK

TEST	: EPA 8010	AEN I.D.	: 606333
BLANK I.D.	: 062196	MATRIX	: AQUEOUS
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 06/21/96
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 (%)		98

GAS CHROMATOGRAPHY - QUALITY CONTROL

MSMSD

TEST	: PURGEABLE HALOCARBONS (EPA 8010)		
MSMSD #	: 60633301	AEN I.D.	: 606333
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 06/20/96 06/21/96
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
REF. I.D.	: 60633301	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD
CHLOROBENZENE	<0.5	10.0	9.1	91	9.2	92	1
1,1-DICHLOROETHENE	<0.2	10.0	9.5	95	8.8	88	8
TRICHLOROETHENE	<0.3	10.0	9.6	96	8.8	88	9

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

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

Analytical Technologies, Inc., Albuquerque, NM

San Diego • Phoenix • Seattle • Pensacola • Ft. Collins • Portland • Albuquerque

CHAIN OF CUSTODY

DATE: 6-22-96 PAGE 1 OF 1

ATI LAB I.D. 606833

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-~~2658~~ 2575
FAX: (505) 241-2340

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

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			W						X															
GTS-AIR STRIPPER EFFLUENT EAST			W						X															
GTS-AIR STRIPPER EFFLUENT WEST			W						X															
GTS GAC EFFLUENT EAST			W						X															
GTS GAC EFFLUENT WEST			W						X															
UNM EAST RESERVOIR	6-22-96	1114	W	-01					X															3
UNM WEST RESERVOIR	6-22-96	1117	W	-02					X															3
TRIP BLANK	6-22-96		W	-03					X															1

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJ. NO.:	REMEDIATION	NO. CONTAINERS	7
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: Time: 1210	Signature: Time:	Signature: Time:
Printed Name: C Hucker Date: 6-22-96	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: Time: 1210
Printed Name: Date:	Printed Name: Date:	Printed Name: Date: 6/22/96
Company:	Company:	Analytical Technologies, Inc.