

Public Service Company
of New Mexico
2401 Aztec NE
MS Z160
Albuquerque, NM 87107

August 21, 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Robert Warder, EI
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303



RE: *Treatment Effectiveness Report, Second Quarter 2001, Public Service Company of New Mexico Person Generating Station Groundwater Treatment System, NMT 360010342*

Dear Mr. Warder:

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

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.

A handwritten signature in cursive script, reading "Toni K. Ristau".

Toni K. Ristau
Director, Environmental Services

If you have any questions, please contact me at (505) 855-6392.

Sincerely,

A handwritten signature in cursive script, reading "John Hale".

John Hale, P.E.
Technical Project Manager

Enclosures

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

Treatment Effectiveness Report
Second Quarter 2001

August 15, 2001

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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Executive Summary

Contour maps of the three primary contaminants of concern, PCE, DCE, and TCA, are shown in Figures 10, 11, and 12, respectively. These contour maps indicate the areal extent of the groundwater plume and the associated contaminant concentrations within the plume. The contour maps are prepared twice per year using data from the spring and fall sampling events.

Figure 10 indicates that the low PCE concentration zone (5 ppb to 20 ppb) and the moderate PCE concentration zone (20 ppb to 100 ppb) have remained approximately the same in size since October 2000. However, the high PCE concentration zone (100 ppb to 200 ppb) that was present in the October 2000 contour map has disappeared. Figure 11 indicates that the low and moderate DCE concentration zones have changed shape slightly since last October. Figure 12 indicates the reappearance of a small, low concentration TCA plume.

During May and June 2001, construction activities were initiated for the drilling of two new extraction wells. The new extraction wells will replace extraction wells PSMW-16 and PSMW-24.

Due to the locally declining groundwater table, PSMW-16 had become hydrologically stranded and has been out of service during the past several quarters. PSMW-24 has been out of service during the past few quarters due to a damaged pump.

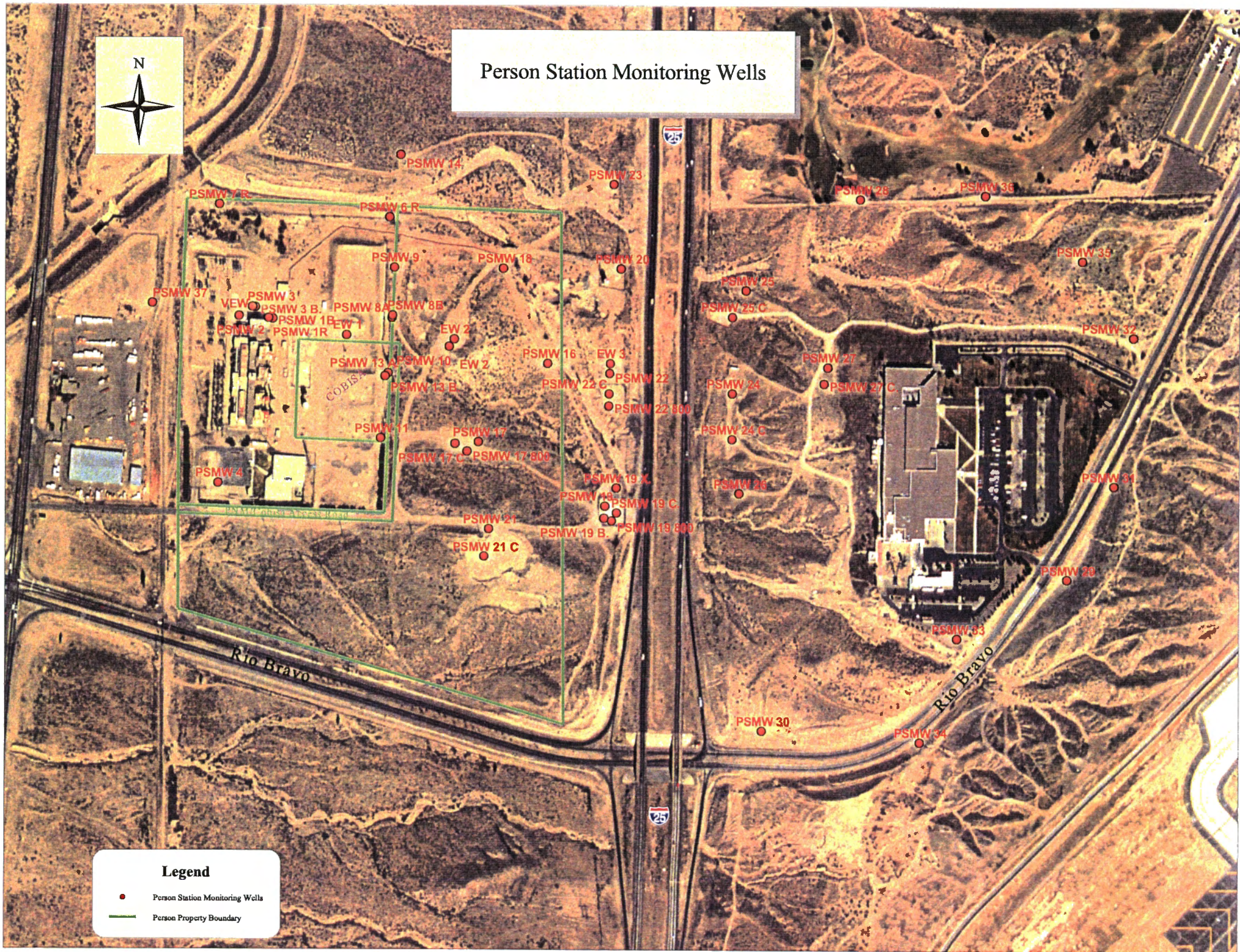
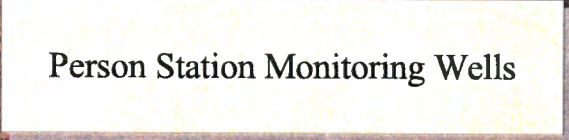
Continued operational problems with the sulfuric acid injection pump prevented operation of the east treatment train during this quarter.

I. Introduction

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

This report contains information on sampling results and operational activities at the Person Generating Station Groundwater Treatment System (GTS). The GTS is designed to extract volatile organic compound (VOC) 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 monitor well and extraction well locations.



II. Operational History

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

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

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

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

In an effort to enhance the GTS effectiveness by increasing system pumping rates, two new extraction wells were completed during October 1999. The new wells are designated EW-2 and EW-3.

Due to the locally declining groundwater table, extraction well PSMW-16 has become hydrologically stranded, and has been out of service for the past several quarters. Extraction well PSMW-24 has been out of service for the past few quarters due to a damaged pump. An inspection of PSMW-24 indicated that the borehole casing had developed a hole, allowing material from the surrounding formation to move into the borehole permanently damaging the pump.

During May and June 2001, construction activities were initiated for the drilling of two new extraction wells to replace PSMW-16 and PSMW-24. The new extraction wells are designated EW-4 and EW-5. EW-4 is located approximately 25 feet northwest of PSMW-16. EW-5 is located approximately 25 feet south of PSMW-24. EW-4 and EW-5 will be brought on line next quarter.

Prior to drilling the replacement extraction wells, PSMW-16 and PSMW-24 were plugged and abandoned in accordance with the appropriate regulations.

Continued operational problems with the sulfuric acid injection pump prevented operation of the east treatment train this quarter.

III. Groundwater Treatment Effectiveness

Figures 2, 3, and 4 show graphs of concentration of total chlorinated VOCs as measured at wells PSMW-16, VEW, and EW-1 over the operational period of the GTS. Figure 5 shows a graph of concentration of total chlorinated VOCs in the combined influent from wells PSMW-24, 25, and 26 over the operational period of these wells. Figures 6 and 7 show graphs of concentration of total chlorinated VOCs over the operational period of EW-3 and EW-2. More detailed data for these wells are shown in Tables 1, 2, 3, 4, 5, and 6.

As previously noted, PSMW-16 and PSMW-24 have been out of service for the past few quarters. The two extraction wells were permanently plugged and abandoned this quarter. Two new replacement extraction wells were drilled in May and June 2001, but are not on line yet.

Only VEW and EW-1 were in service for the entire second quarter. The other extraction wells were operated sporadically during this quarter due to operational and maintenance problems with the GTS and the extraction wells. Consequently, monthly samples were not collected from all the extraction wells this quarter.

In the VEW, total chlorinated VOCs remained relatively constant this quarter. Total chlorinated VOCs at EW-1 increased sharply in June.

PSMW-25 and PSMW-26 were only in service during April 2001. Consequently, no samples were collected during May and June 2001.

EW-2 was in service during April and May 2001. Total chlorinated VOCs remained relatively constant during this period. EW-3 was only in service during June 2001. Total chlorinated VOCs increased significantly since the last sampling event (August 2000). The concentration increase is probably due to a rebound effect.

Laboratory reports for this quarter are contained in Appendix A.

Figure 2
Total VOCs at PSMW-16

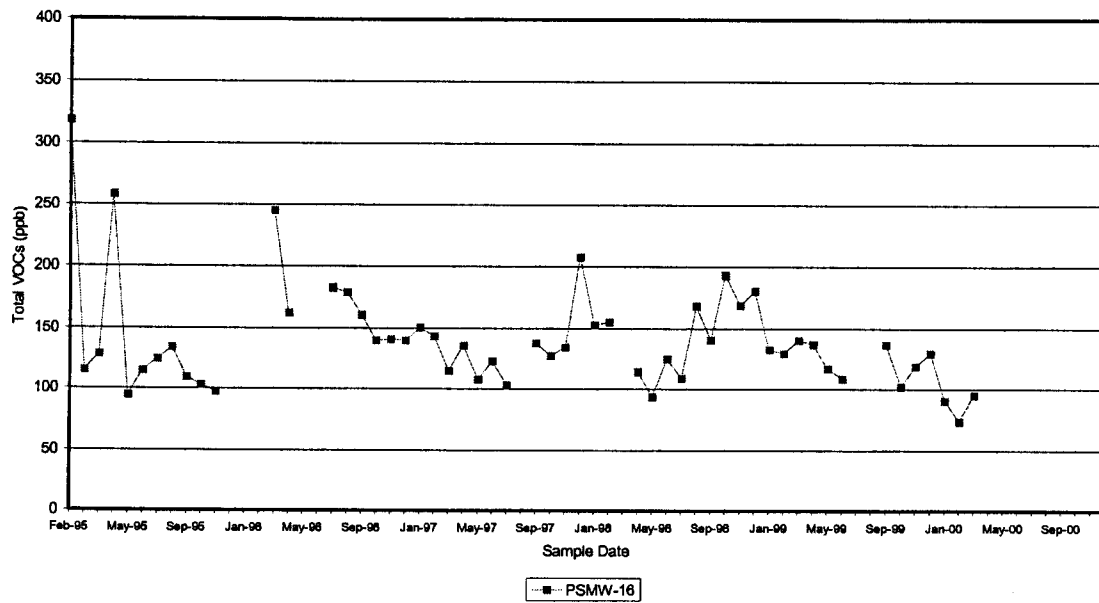


Figure 3
Total VOCs at VEW

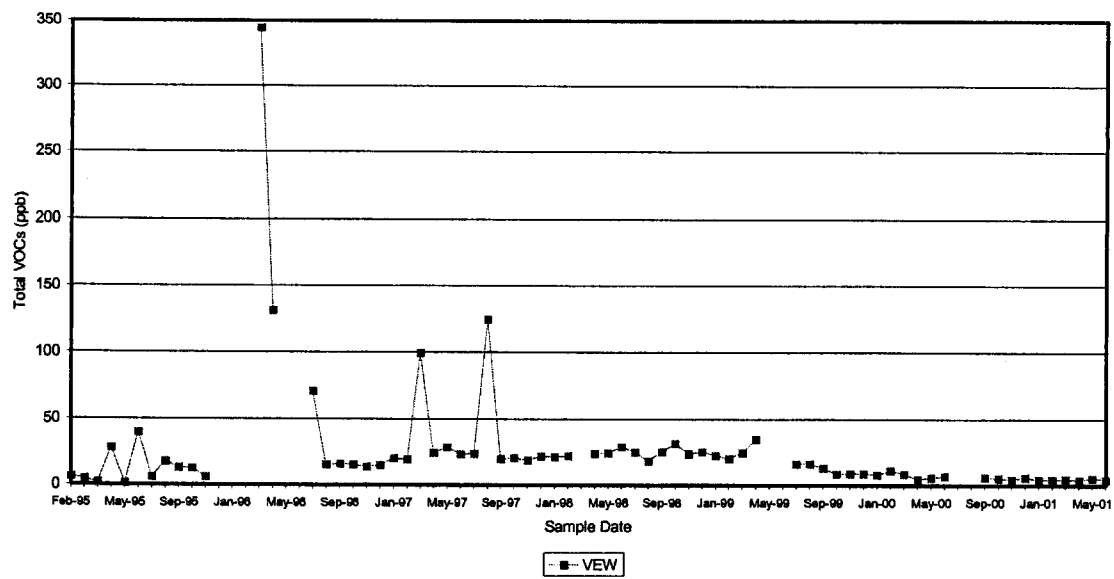


Figure 4
Total VOCs at EW-1

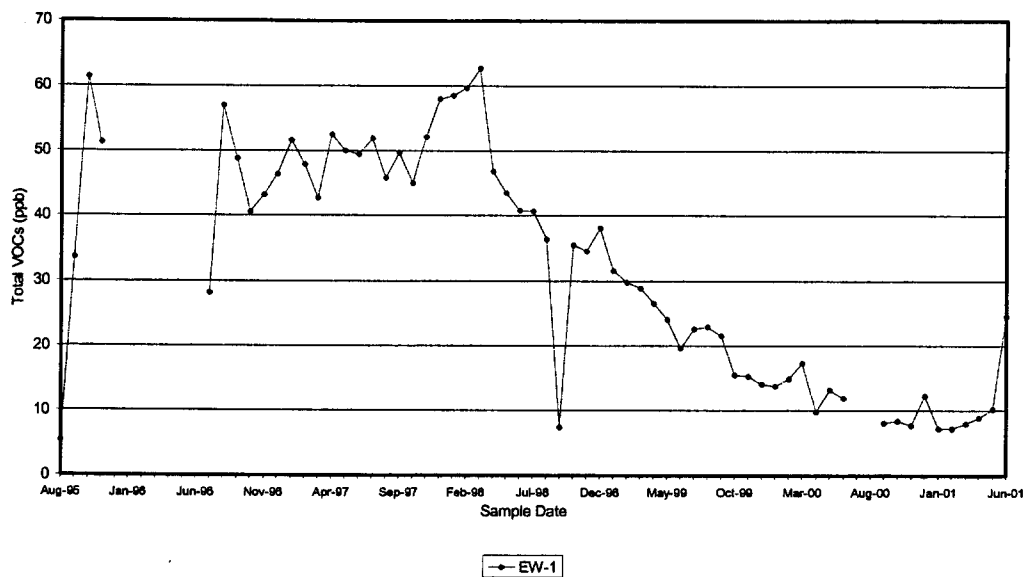


Figure 5
Total VOCs at PSMW-24,25,26

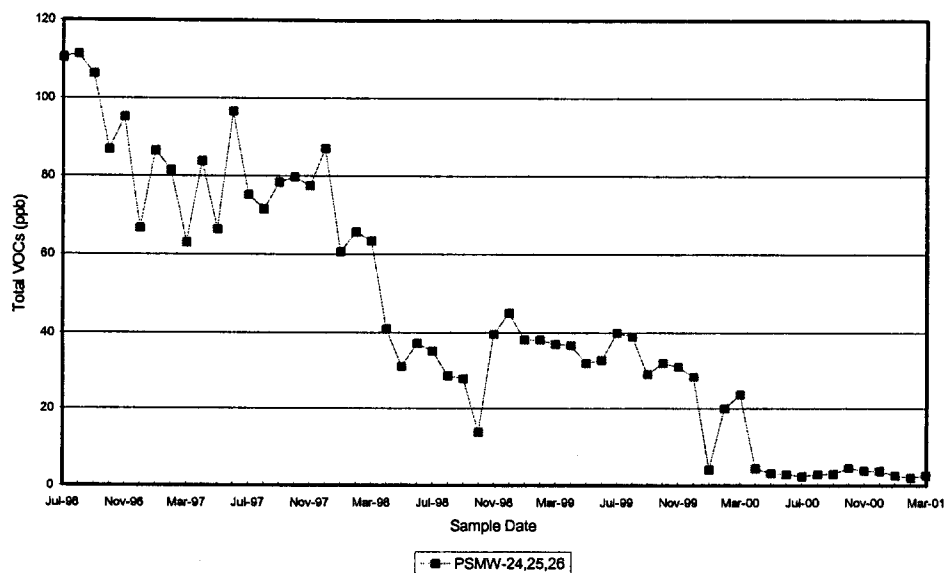


Figure 6
Total VOCs at EW-3

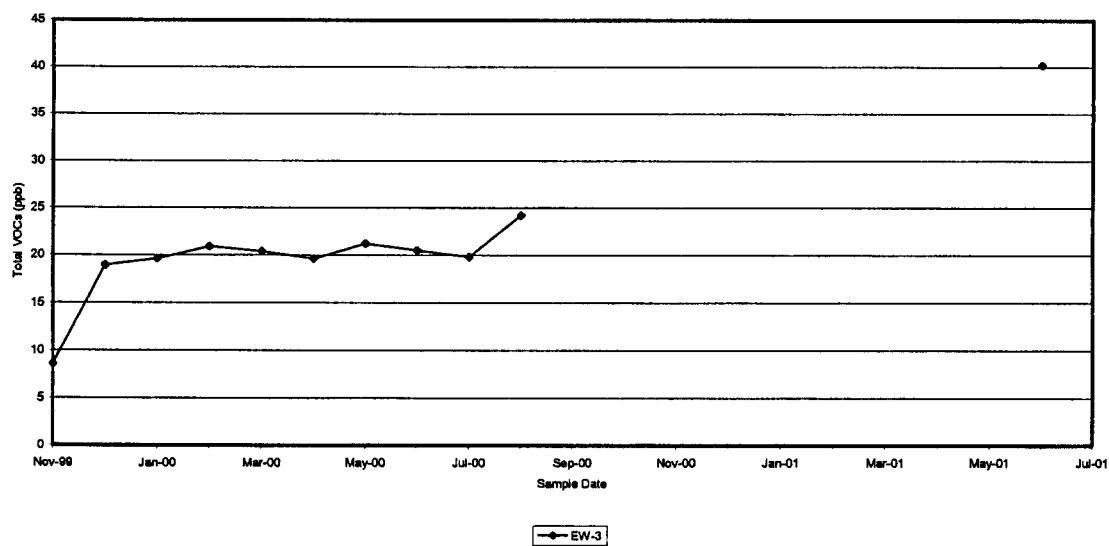


Figure 7
Total VOCs at EW-2

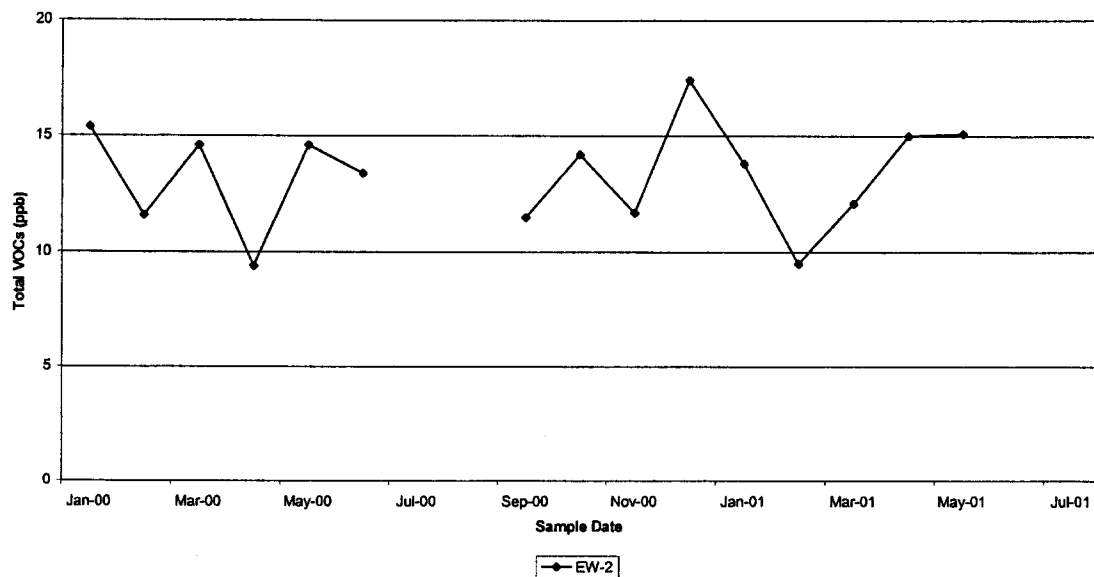


Table 1
Influent Concentrations at PSMW-16

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOCs (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
10/16/96	610361	97	37	140.0
11/19/96	611331	94	42	141.0
12/17/96	612331	96	39	140.0
1/16/97	701336	99	46	150.7
2/13/97	702332	100	40	143.7
3/19/97	703344	88	23	114.6
4/17/97	704355	93	38	135.8
5/15/97	705347	71	32	107.6
6/18/97	706353	83	36	122.6
7/23/97	707360	67	34	103.1
9/15/97	709332	100	34	137.9
10/15/97	710358	92	31	127.2
11/19/97	711335	95	34	134.5
12/16/97	712318	140	68	208
1/15/98	801334	110	37	153.1
2/11/98	802336	110	38	155.3
NS	-	-	-	-
4/8/98	804337	78	30	114.4
5/20/98	805379	67	23	93.4
6/16/98	806353	89	30	124.6
7/1/98	807300	76	29	108.8
8/13/98	808040	120	41	168.5
9/16/98	809042	110	26	140.7
10/7/98	810021	120	68	193.4
11/17/98	811049	100	64	169
12/9/98	812045	110	66	180.7
1/7/99	901010	100	28	132.8
2/4/99	902014	100	26	129.3
3/3/99	903010	100	36	140.5
4/21/99	904091	100	32	137.0
5/14/99	905048	87	25	116.7
6/9/99	906040	79	25	108.3
NS	-	-	-	-
NS	-	-	-	-
9/2/99	909005	99	32	136.8
10/11/99	910036	75	23	102
11/10/99	911035	80	33	118.6
12/8/99	912027	87	36	129.5
1/12/00	001021	64	20	90.5
2/10/00	002042	54	13	73.6
3/7/00	003023	62	26	95.1
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-

NS: Not Sampled

Table 2
Influent Concentrations at VEW

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOCs (ppb)
2/1/95	502304	5.3	0.8	6.1
2/15/95	502376	4	0.5	4.5
3/8/95	503317	1.5	0.3	1.8
4/10/95	504341	21	5.8	28.1
5/18/95	505371	1.4	<0.2	1.4
6/21/95	506396	25	9.4	39.8
7/12/95	507327	3.5	1.0	5.8
8/17/95	508405	6.4	1.1	17.7
9/13/95	509405	9.7	1.9	12.9
10/11/95	510335	9.3	1.8	12.5
11/22/95	511367	4.6	1.1	6.0
3/20/96	603347	270	72	344.3
4/17/96	604367	94	24	131.2
7/18/96	607334	47	14	70.6
8/15/96	608331	5.0	2.1	15.2
9/18/96	609338	3.1	2.1	15.8
10/16/96	610361	3.2	2.1	15.3
11/19/96	611331	0.8	1.8	13.6
12/17/96	612331	<0.5	2.0	15.0
1/16/97	701336	0.9	3.2	20.2
2/13/97	702332	1.0	2.4	19.2
3/19/97	703344	68	17	99.5
4/17/97	704355	2.8	3.4	24.4
5/15/97	705347	6.1	5.3	28.5
6/18/97	706353	3.8	4.2	23.5
7/23/97	707360	2.9	4.0	23.6
8/13/97	708339	57	50	124.8
9/15/97	709332	1.7	3.4	19.8
10/15/97	710358	3.2	3.1	20.5
11/19/97	711335	1.3	3.2	18.7
12/16/97	712318	1	4.8	21.7
1/15/98	801334	2.5	3.6	21.3
2/11/98	802336	2.9	3.7	22
NS	-	-	-	-
4/8/98	804337	6.4	5.0	23.7
5/20/98	805379	8.4	5.4	24.3
6/16/98	806353	11	6.2	29.1
7/1/98	807300	7.6	4.6	25.0
8/13/98	808040	5.6	3.8	18.2
9/16/98	809042	8.9	5.6	25.3
10/7/98	810021	10	9.4	31.7
11/17/98	811049	6.9	5.2	23.7
12/9/98	812045	7.9	5.6	25.4
1/7/99	901010	7.7	4.3	22.5
2/4/99	902014	7.0	4.0	20.0
3/3/99	903010	7.9	6.2	24.7
4/21/99	904091	17.0	8.9	34.8
NS	-	-	-	-
NS	-	-	-	-
7/6/99	907015	5.5	3.0	16.3
8/5/99	908021	5.4	3.2	16.3
9/2/99	909005	2.5	2.6	13.0
10/11/99	910036	0.7	0.9	8.3
11/10/99	911035	< 0.5	1	8.7
12/8/99	912027	0.8	1.1	8.8
1/12/00	001021	0.9	1.1	7.6
2/10/00	002042	3.7	1.3	11.1
3/7/00	003023	1.1	1.3	8.3
4/12/00	004041	1.2	1.2	4.5
5/3/00	005014	< 0.5	0.9	5.6
6/8/00	006035	< 0.5	0.8	6.7
NS	-	-	-	-
NS	-	-	-	-
9/19/00	009101	0.7	< 0.5	6.0
10/4/00	010016	< 0.5	1.5	5.2
11/3/00	011012	< 0.5	0.5	4.4
12/5/00	012017	< 0.5	0.5	5.9
1/17/01	101052	< 0.5	0.5	4.2
2/15/01	102052	< 0.5	0.6	4.2
3/1/01	103007	< 0.5	0.4	4.5
4/5/01	104018	< 0.5	0.3	4.1
5/1/01	105004	< 0.5	0.4	5.3
6/1/01	106007	< 0.5	0.2	4.4

NS: Not Sampled

Table 3
Influent Concentrations at EW-1

Date	Laboratory Report No.	PCE (ppb)	DCE(ppb)	Total VOCs (ppb)
8/17/95	508405	3.5	0.9	5.4
9/13/95	509339	25	6.1	33.6
10/11/95	510335	49	8.8	61.4
11/22/95	511367	38	9.5	51.3
7/18/96	607334	20	5.7	28.2
8/15/96	608331	45	8.4	57.0
9/18/96	609338	37	7.8	48.8
10/16/96	610361	29	7.3	40.6
11/19/96	611331	32	7.0	43.2
12/17/96	612331	33	7.7	46.4
1/16/97	701336	36	9.2	51.6
2/13/97	702332	32	7.7	47.9
3/19/97	703344	29	5.7	42.7
4/17/97	704355	31	8.4	52.5
5/15/97	705347	27	9.7	50
6/18/97	706353	23	8.6	49.4
7/23/97	707360	25	9.5	51.9
8/13/97	708339	20	6.8	45.8
9/15/97	709332	21	8.5	49.7
10/15/97	710358	18	6.5	45
11/19/97	711335	20	9.7	52.1
12/16/97	712318	21	12	58
1/15/98	801334	20	11	58.5
2/11/98	802336	21	11	59.7
3/11/98	803324	20	16	62.7
4/8/98	804337	16	9.7	46.8
5/20/98	805379	16	9	43.5
6/16/98	806353	13	7.9	40.8
7/1/98	807300	12	7.7	40.7
8/13/98	808040	8.5	7	36.4
9/16/98	809042	3.2	2.7	7.4
10/7/98	810021	9.5	7.7	35.5
11/17/98	811049	10	7.5	34.6
12/9/98	812045	12	8.4	38.1
1/7/99	901010	10	5.8	31.6
2/4/99	902014	10	5.7	29.8
3/3/99	903010	8.2	6.9	28.9
4/21/99	904091	8.3	5.5	26.6
5/14/99	905048	7.1	4.6	24.1
6/9/99	906040	5.5	3.5	19.7
7/6/99	907015	6.1	4.1	22.7
8/5/99	908021	6.2	4.3	23.0
9/2/99	909005	5.5	4.6	21.6
10/11/99	910036	5	2.3	15.5
11/10/99	911035	4	2.4	15.3
12/8/99	912027	3.7	2.5	14.1
1/12/00	001021	4.7	2.5	13.8
2/10/00	002042	4.3	3.2	14.9
3/7/00	003023	5.2	3.2	17.3
4/12/00	004041	3.7	2.6	9.8
5/3/00	005014	4	2.6	13.2
6/8/00	006035	3.3	2.3	11.9
NS	-	-	-	-
NS	-	-	-	-
9/19/00	009101	1.7	0.6	8.1
10/4/00	010016	1.1	1.5	8.4
11/3/00	011012	0.9	0.9	7.7
12/5/00	012017	2.6	1.6	12.3
1/17/01	101052	2.7	1.3	7.2
2/15/01	102052	2.4	1.3	7.2
3/1/01	103007	2.8	1.4	8.0
4/5/01	104018	3.3	1.6	8.9
5/1/01	105004	3.5	1.6	10.2
6/1/01	106007	17	3.7	24.6

NS: Not Sampled

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

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOCs (ppb)
7/18/96	607334	49	55	110.6
8/15/96	608331	47	50	111.3
9/18/96	609338	58	44	106.3
10/16/96	610361	41	40	86.8
11/19/96	611331	46	44	95.2
12/17/96	612331	33	30	66.7
1/16/97	701336	41	41	86.5
2/13/97	702332	41	37	81.5
3/19/97	703344	37	23	63.0
4/17/97	704355	42	37	83.8
5/15/97	705347	33	30	66.4
6/18/97	706353	39	55	96.6
7/23/97	707360	37	36	75.2
8/13/97	708339	39	30	71.5
9/15/97	709332	42	34	78.4
10/15/97	710358	48	29	79.8
11/19/97	711335	41	34	77.5
12/16/97	712318	40	47	87
1/15/98	801334	33	25	60.6
2/11/98	802336	36	27	65.7
3/11/98	803324	30	31	63.4
4/8/98	804337	21	18	41
5/20/98	805379	18	12	31.1
6/16/98	806353	21	15	37.3
7/1/98	807300	18	16	35.2
8/13/98	808040	14	13	28.6
9/16/98	809042	6.5	4.4	27.9
10/7/98	810021	5	7.3	13.9
11/17/98	811049	22	17	39.7
12/9/98	812045	25	19	45
1/7/99	901010	22	15	38.2
2/4/99	902014	23	14	38.2
3/3/99	903010	20	16	37.1
4/21/99	904091	20	15	36.8
5/14/99	905048	18	14	32
6/9/99	906040	18	14	32.8
7/6/99	907015	22	18	40
8/5/99	908021	22	17	39
9/2/99	909005	17	12	29
10/11/99	910036	19	13	32
11/10/99	911035	18	13	31
12/8/99	912027	16	12	28.3
1/12/00	001021	2.7	1.5	4.2
2/10/00	002042	10	0.2	20
3/7/00	003023	13	10	23.7
4/12/00	004041	2.5	2	4.5
5/3/00	005014	1.9	1.3	3.2
6/8/00	006035	1.8	1.2	3
7/24/00	007056	1.6	0.8	2.4
8/16/00	008062	2.1	0.9	3
9/19/00	009101	2.4	0.7	3.1
10/4/00	010016	2.5	2.1	4.6
11/3/00	011012	1.7	1.3	3.9
12/5/00	012017	1.3	1.0	3.8
1/17/01	101052	1.2	1.0	2.7
2/15/01	102052	1.1	1.0	2.1
3/1/01	103007	1.2	1.0	2.7
4/5/01	104018	1.3	0.9	2.2
NS	-	-	-	-
NS	-	-	-	-

NS: Not Sampled

Table 5
Influent Concentrations at EW-2

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOCs (ppb)
1/12/00	001021	2.7	4.3	15.4
2/10/00	002042	1.5	2.7	11.6
3/7/00	003023	2.7	4.3	14.6
4/12/00	004041	0.9	4.2	9.4
5/3/00	005014	1.9	4.4	14.6
6/8/00	006035	1	3.9	13.4
NS	-	-	-	-
NS	-	-	-	-
9/19/00	009101	0.9	2.2	11.5
10/4/00	010016	1.9	4.1	14.2
11/3/00	011012	1.1	3	11.7
12/5/00	012017	3.5	2.9	17.4
1/17/01	101052	3.5	3.4	13.8
2/15/01	102052	0.9	2.2	9.5
3/1/01	103007	2.1	2.9	12.1
4/5/01	104018	4.5	3.6	15
5/1/01	105004	4.4	3.3	15.1
NS	-	-	-	-

NS: Not Sampled

Table 6
Influent Concentrations at EW-3

Date	Laboratory Report No.	PCE (ppb)	DCE (ppb)	Total VOCs (ppb)
11/10/99	911035	5.1	2.9	8.6
12/8/99	912027	12	6.3	18.9
1/12/00	001021	13	5.7	19.6
2/10/00	002042	12	7.7	20.9
3/7/00	003023	12	7.3	20.4
4/12/00	004041	11	8	19.6
5/3/00	005014	12	8	21.2
6/8/00	006035	11	7.9	20.5
7/24/00	007056	12	6.3	19.8
8/16/00	008062	13	9.1	24.2
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
NS	-	-	-	-
6/1/01	106007	25	11	40.7

NS: Not Sampled

IV. Operational Activities

Operational activities during the second quarter included the drilling of two new extraction wells to replace PSMW-16 and PSMW-24. The new extraction wells are designated EW-4 and EW-5.

Work continued on the pH probes and the east treatment train sulfuric acid injection pump. Operational problems with the acid injection pump include a malfunctioning electronic controller and leaking seals.

V. Influent and Effluent Flow Volumes

Flow totalizing meters are present on each influent well line and on the effluent flow line. Table 7 below details flow volumes from each influent well and the effluent line.

Differences between total influent and total effluent volumes 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 7
Influent and Effluent Flow Volumes

Source	Meter Number	Start Reading	End Reading	Volume (Gallons)
Flow Volumes for April 2001:				
Influent (VEW)	Badger Meter No. 94976130	6,313,172	6,522,393	209,221
Influent (PSMW-16)	Hayes Meter No. 29408700	7,143,037	7,143,037	0
Influent (EW-1)	Hayes Meter No. 29408732	7,918,233	8,065,976	147,743
Influent (EW-2)	Badger Meter No. 15796506	2,912,959	3,180,285	267,326
Influent (EW-3)	Badger Meter No. 15796517	1,764,259	1,764,259	0
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	6,740,970	6,740,970	0
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	2,655,020	2,706,080	51,060
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	3,027,980	3,085,800	57,820
Monitor Well Sample Purge				821
Effluent (to Golf Course)	Fisher Porter Meter No. 960307112	4,649,684	5,342,812	693,128
Flow Volumes May 2001:				
Influent (VEW)	Badger Meter No. 94976130	6,522,393	6,692,881	170,488
Influent (PSMW-16)	Hayes Meter No. 29408700	7,143,078	7,143,078	0
Influent (EW-1)	Hayes Meter No. 29408732	8,065,976	8,106,572	40,596
Influent (EW-2)	Badger Meter No. 15796506	3,180,285	3,254,208	73,923
Influent (EW-3)	Badger Meter No. 15796517	1,764,259	2,879,901	1,115,642
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	6,740,970	6,740,970	0
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	2,706,080	2,706,080	0
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	3,085,800	3,085,800	0
Monitor Well Sample Purge				0
Effluent (to Golf Course)	Fisher Porter Meter No. 960307112	5,342,812	6,763,446	1,420,634
Flow Volumes for June 2001:				
Influent (VEW)	Badger Meter No. 94976130	6,692,881	6,797,415	104,534
Influent (PSMW-16)	Hayes Meter No. 29408700	7,143,037	7,143,037	0
Influent (EW-1)	Hayes Meter No. 29408732	8,106,572	8,179,131	72,559
Influent (EW-2)	Badger Meter No. 15796506	3,254,208	3,254,208	0
Influent (EW-3)	Badger Meter No. 15796517	2,879,901	3,667,477	787,576
Influent (PSMW-24)	Fisher Porter Meter No. 960307112	6,740,970	6,740,970	0
Influent (PSMW-25)	Fisher Porter Meter No. 960307112	2,706,080	2,706,080	0
Influent (PSMW-26)	Fisher Porter Meter No. 960307112	3,085,800	3,085,800	0
Monitor Well Sample Purge				
Effluent (to Golf Course)	Fisher Porter Meter No. 960307112	6,763,446	7,741,320	977,874
Quarterly Total for Influent (VEW+PSMW-16+EW-1+EW-2+EW-3+PSMW-24+PSMW-25+PSMW-26+Monitor Well Sample Purge)				3,099,309
Quarterly Total for Effluent:				3,091,636
Annual Totals				
Annual Cumulative Influent Total for 2001:				4,959,907
Annual Cumulative Effluent Total for 2001:				4,895,763

VI. Laboratory Analysis

A. Influent and Effluent Sampling for Chlorinated VOCs (8021 Analysis)

During the second quarter, influent and effluent sampling was conducted pursuant to the routine schedule outlined in DP-1006, i.e., once each month. Chlorinated VOC analysis of GTS influent and effluent (after GAC units) is shown graphically in Figures 8 and 9. More detailed data are shown in Table 8 below.

As noted in previous treatment effectiveness reports, the addition of EW-2 and EW-3 required the operation of both treatment trains (east and west) to handle the increased influent flow rate. However, due to operational difficulties with the sulfuric acid injection pump, the east treatment train has remained out of service this quarter.

As Figure 9 indicates, total chlorinated VOCs in the GTS west treatment train influent increased sharply in June 2001. This increase is a result of bringing EW-3 back on line in June.

Laboratory analytical data reports are contained in Appendix A. Influent and effluent sampling results indicate that the GTS has consistently removed chlorinated VOC contaminants in the 20 to 200 ppb range to levels below laboratory detection limits in the effluent sent to the golf course. Laboratory analysis of the water at a point after the air stripper and before the granular activated carbon treatment also show that at these influent concentrations and a flow rate of approximately 50 gpm, the air stripper alone is capable of treating the groundwater to concentrations consistently below or near laboratory detection limits for chlorinated VOCs.

Figure 8
Total VOCs GTS Influent vs. Effluent - East

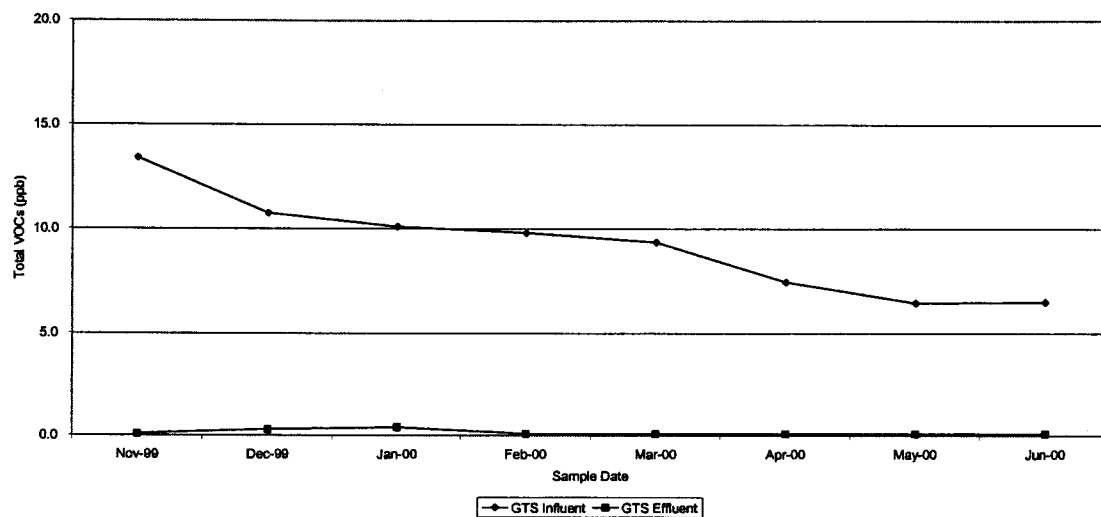


Figure 9
Total VOCs GTS Influent vs. Effluent - West

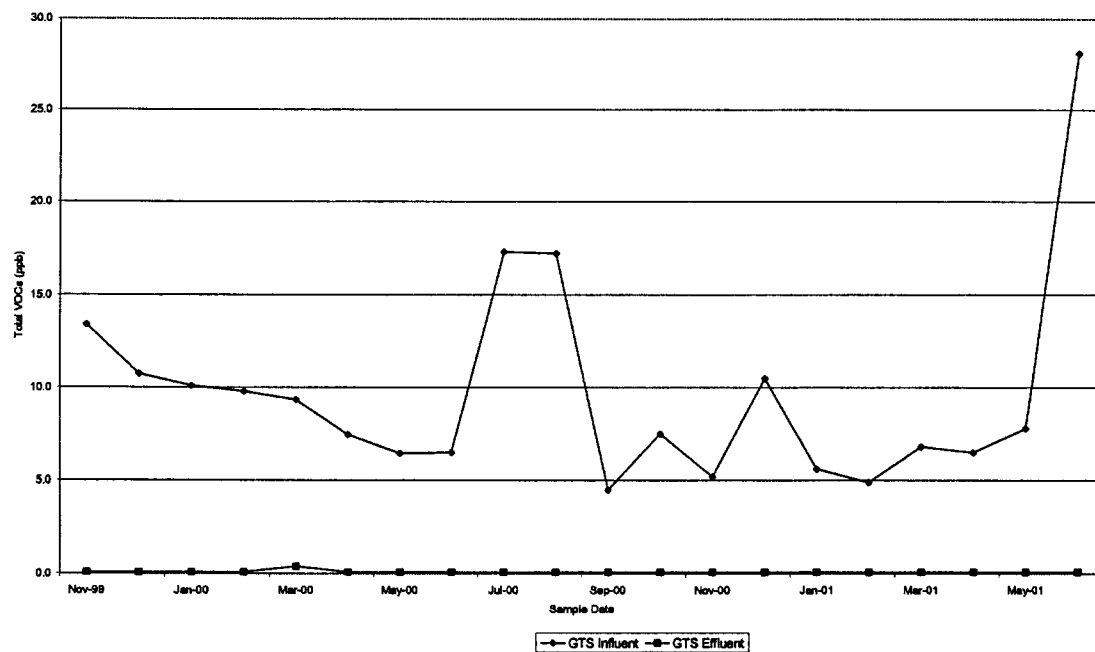


Table 8
Influent and Effluent VOC Concentrations

Sampling Date: 4/5/01		Lab Report Number: 104018			
VOC Compound	Influent (ppb)	Effluent After East Air Stripper (ppb)	Effluent After West Air Stripper (ppb)	Effluent After East GAC Unit (ppb)	Effluent After West GAC Unit (ppb)
1,1-Dichloroethane	3.2	NA	< 0.3	NA	< 0.3
1,1-Dichloroethene	1.2	NA	< 0.2	NA	< 0.2
Tetrachloroethene	2.1	NA	< 0.5	NA	< 0.5
TOTAL VOC'S	6.5	NA	BDL	NA	BDL

Sampling Date: 5/1/01		Lab Report Number: 105004			
VOC Compound	Influent (ppb)	Effluent After East Air Stripper (ppb)	Effluent After West Air Stripper (ppb)	Effluent After East GAC Unit (ppb)	Effluent After West GAC Unit (ppb)
1,1-Dichloroethane	4.3	NA	< 0.3	NA	< 0.3
1,1-Dichloroethene	1.3	NA	< 0.2	NA	< 0.2
Tetrachloroethene	2.2	NA	< 0.5	NA	< 0.5
TOTAL VOC'S	7.8	NA	BDL	NA	BDL

Sampling Date: 6/1/00		Lab Report Number: 106007			
VOC Compound	Influent (ppb)	Effluent After East Air Stripper (ppb)	Effluent After West Air Stripper (ppb)	Effluent After East GAC Unit (ppb)	Effluent After West GAC Unit (ppb)
Chloroform	0.8	NA	< 0.3	NA	< 0.3
1,1-Dichloroethane	3	NA	< 0.3	NA	< 0.3
1,1-Dichloroethene	1.3	NA	< 0.2	NA	< 0.2
Tetrachloroethene	1.5	NA	< 0.5	NA	< 0.5
TOTAL VOC'S	6.6	NA	BDL	NA	BDL

B. Effluent Sulfate Analysis and pH Monitoring

The June 1997 amendment to DP-1006 requires monthly sulfate analysis and daily pH monitoring of the GTS effluent. Table 9 presents the results of the second quarter sulfate analysis using EPA Method 375.4. The elevated sulfate concentrations in the samples collected this quarter are due to operational difficulties with the system pH probes and electronic controllers. Maintenance personnel have been working to correct the problem.

The monthly minimum, maximum, and average pH readings for this quarter are shown in Table 10.

Table 9
GTS Effluent Sulfate Concentrations

Date	Lab Report Number	Sulfate (mg/l)
4/5/01	104018	510
5/1/01	105004	790
6/1/01	106007	640

Table 10
Monthly pH Readings

Date	Minimum pH	Maximum pH	Average pH
4/01	7.1	7.2	7.1
5/01	7.1	7.6	7.4
6/01	7.2	7.8	7.4

C. Golf Course Pond Sampling

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

VII. Groundwater Sampling

Under the RCRA permit, a network of groundwater monitoring wells are sampled on a twice per year schedule (normally in the spring and fall). Once sampling is complete and analytical results have been analyzed, contour maps showing the areal extent and concentration of the contaminants in the groundwater are prepared. Contour maps for PCE, DCE, and TCA for the 2001 spring sampling event are shown in Figures 10, 11, and 12, respectively.

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

Schwartzman Property

UNM Championship Golf Course

Ethicon Property

PNM - Person Station Property

UNM Property

Rio Bravo Blvd

Interstate 25

Broadway

Capital
Lumber Co.

LEGEND

- ROAD
- PROPERTY BOUNDARY
- RAILROAD
- * MONITOR WELL AND CONCENTRATION

0 500 1000
FEET



PUBLIC SERVICE COMPANY
OF NEW MEXICO
PERSON GENERATING STATION
Concentration of PCE
in Groundwater
April 2001

Concentration Key:



> 200 ppb



100 to 200 ppb



20 to 100 ppb



5 to 20 ppb

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

Schwartzman Property

UNM Championship Golf Course

Ethicon Property

PNM - Person Station Property

UNM Property

Capital
Lumber Co.

Rio Bravo Blvd

Interstate 25

Broadway

LEGEND

- ROAD
- PROPERTY BOUNDARY
- RAILROAD
- * MONITOR WELL AND CONCENTRATION

0 500 1000
FEET



PUBLIC SERVICE COMPANY
OF NEW MEXICO
PERSON GENERATING STATION
Concentration of DCE
in Groundwater
April 2001

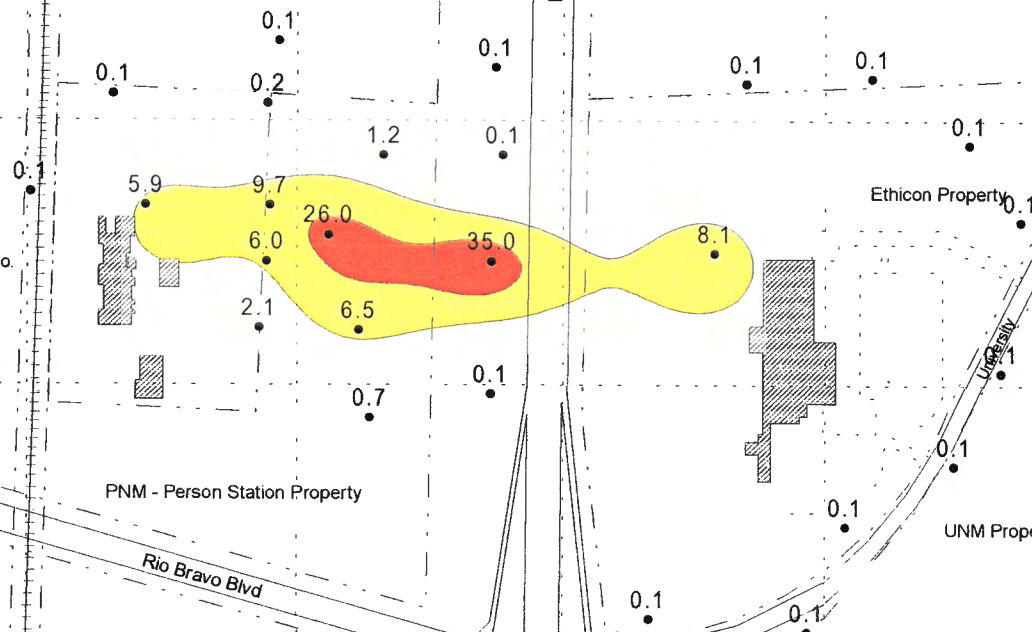
Concentration Key:

> 200 ppb

100 to 200 ppb

20 to 100 ppb

5 to 20 ppb



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

Schwartzman Property

UNM Championship Golf Course

Ethicon Property

Capital
Lumber Co.

PNM - Person Station Property

UNM Property

Rio Bravo Blvd

Interstate 25

Broadway

LEGEND

- ROAD
- PROPERTY BOUNDARY
- RAILROAD
- * MONITOR WELL AND CONCENTRATION

0 500 1000
FEET



PUBLIC SERVICE COMPANY
OF NEW MEXICO
PERSON GENERATING STATION
Concentration of 1,1,1-TCA
in Groundwater
April 2001

Concentration Key:



> 200 ppb



100 to 200 ppb

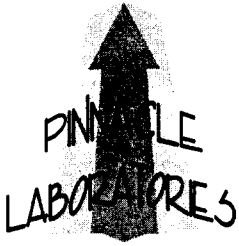


20 to 100 ppb



5 to 20 ppb

Appendix A. Laboratory Reports



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **104018**
April 23, 2001

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-ER16
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: CHUAK ARATER

On 04/05/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), 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.

EPA Method 8021 Halo was performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

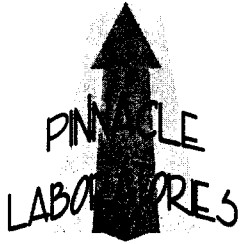
All other analyses were performed by Severn Trent Services, Pensacola, FL.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: ft

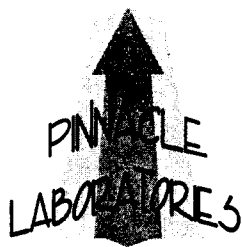
Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PUBLIC SERVICE COMPANY	PINNACLE ID	: 104018
PROJECT #	: REMEDIATION	DATE RECEIVED	: 04/05/01
PROJECT NAME	: PERSON STATION	REPORT DATE	: 04/23/01

PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
104018 - 01	GTS-INFLUENT	AQUEOUS	04/05/01
104018 - 02	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	04/05/01
104018 - 03	GTS-GAC EFFLUENT WEST	AQUEOUS	04/05/01
104018 - 04	UNM EAST RESERVOIR	AQUEOUS	04/05/01
104018 - 05	UNM WEST RESERVOIR	AQUEOUS	04/05/01
104018 - 06	TRIP BLANK	AQUEOUS	04/05/01
104018 - 07	VEW INFLUENT	AQUEOUS	04/05/01
104018 - 08	EW-1 INFLUENT	AQUEOUS	04/05/01
104018 - 09	PSMW 24,25,26 INFLUENT	AQUEOUS	04/05/01
104018 - 10	EW-2	AQUEOUS	04/05/01
104018 - 11	SURGE TANK DISCHARGE	AQUEOUS	04/05/01



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

EST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 104018

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
	GTS-INFLUENT	AQUEOUS	04/05/01	NA	04/06/01	1
	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	04/05/01	NA	04/06/01	1
03	GTS-GAC EFFLUENT WEST	AQUEOUS	04/05/01	NA	04/06/01	1

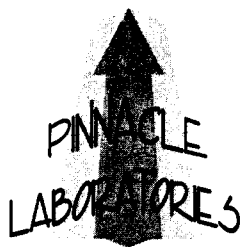
PARAMETER	DET. LIMIT	UNITS	GTS-INFLUENT	GTS-AIR STRIPPER EFFLUENT WEST	GTS-GAC EFFLUENT WEST
BROMODICHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 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
BROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
BROMOETHANE (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	3.2	< 0.3	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROETHENE	0.2	UG/L	1.2	< 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
1,1,1-TRICHLOROETHANE	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	2.1	< 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
1,1,2-TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
TRICHLOROFLUOROMETHANE	0.5	UG/L	< 0.5	< 0.5	< 0.5
VINYL CHLORIDE					

SURROGATE:

BROMOCHLOROMETHANE (%) 115 122 113
SURROGATE LIMITS (71 - 126)

TEST NOTES:

N/A



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

EST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 104018

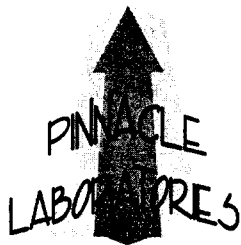
SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
	UNM EAST RESERVOIR	AQUEOUS	04/05/01	NA	04/06/01	1
	UNM WEST RESERVOIR	AQUEOUS	04/05/01	NA	04/06/01	1
06	TRIP BLANK	AQUEOUS	04/05/01	NA	04/06/01	1

PARAMETER	DET. LIMIT	UNITS	UNM EAST RESERVOIR	UNM WEST RESERVOIR	TRIP BLANK
BROMODICHLOROMETHANE	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
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-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
1,1,1,2-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 (%) 113 119 101
SURROGATE LIMITS (71 - 126)

CHEMIST NOTES:



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

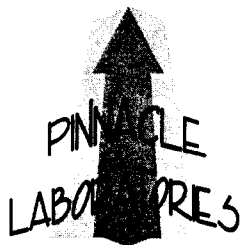
PINNACLE I.D.: 104018

SAMPLE		PERSON STATION				
ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	VEW INFLUENT	AQUEOUS	04/05/01	NA	04/06/01	1
1	EW-1 INFLUENT	AQUEOUS	04/05/01	NA	04/06/01	1
09	PSMW 24,25,26 INFLUENT	AQUEOUS	04/05/01	NA	04/06/01	1

PARAMETER	DET. LIMIT	UNITS	VEW INFLUENT	EW-1 INFLUENT	PSMW 24,25,26 INFLUENT
BROMODICHLOROMETHANE	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
1,1-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,1-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	3.8	4.0	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,3-DICHLOROETHANE	0.2	UG/L	0.3	1.6	0.9
cis-1,2-DICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
trans-1,2-DICHLOROETHANE	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
1,1,2-TRICHLOROETHANE	0.5	UG/L	< 0.5	3.3	1.3
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
1,1,1-TRICHLOROETHANE	0.3	UG/L	< 0.3	< 0.3	< 0.3
1,1,1-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5

SURROGATE:
BROMOCHLOROMETHANE (%) 110 115 116
SURROGATE LIMITS (71 - 126)

ANALYST NOTES:



2709-D Pan American Freeway NE
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GAS CHROMATOGRAPHY RESULTS

TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 104018

SAMPLE		DATE		DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
	EW-2	AQUEOUS	04/05/01	NA	04/06/01	1
PARAMETER	DET. LIMIT	UNITS	EW-2			
BROMODICHLOROMETHANE	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			
1,2-DICHLOROETHANE	0.3	UG/L	5.4			
1,1,2-TRICHLOROETHANE (EDC)	0.5	UG/L	< 0.5			
1,1,1-TRICHLOROETHANE	0.2	UG/L	3.6			
trans-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			
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			
1,1,2-TRICHLOROETHANE	0.5	UG/L	4.5			
1,1,1-TRICHLOROETHANE	1.0	UG/L	1.5			
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2			
1,1,1-TRICHLOROETHANE	0.3	UG/L	< 0.3			
1,1,1-TRICHLOROETHANE	0.2	UG/L	< 0.2			
VINYL CHLORIDE	0.5	UG/L	< 0.5			

SURROGATE:

BROMOCHLOROMETHANE (%)

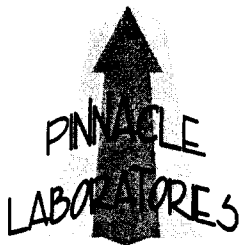
112

SURROGATE LIMITS

(71 - 126)

CHEMIST NOTES:

MA



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021	PINNACLE I.D.	: 104018
BLANK I.D.	: 040601	DATE EXTRACTED	: NA
CLIENT	: PUBLIC SERVICE COMPANY	DATE ANALYZED	: 04/06/01
PROJECT #	: REMEDIATION	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: PERSON STATION		

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
1,1-BROMOCHLOROMETHANE	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
1,2-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
1,1,2-TRICHLOROETHENE	UG/L	<0.5
1,1,1-TRICHLOROETHANE	UG/L	<1.0
1,1,2-TRICHLOROETHANE	UG/L	<0.2
1,1,1-TRICHLOROETHENE	UG/L	<0.3
TRICHLOROFLUOROMETHANE	UG/L	<0.2
VINYL CHLORIDE	UG/L	<0.5

SURROGATE:

BROMOCHLOROMETHANE (%)

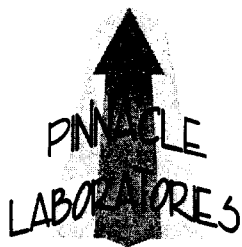
110

SURROGATE LIMITS

(71 - 126)

CHEMIST NOTES:

N/A



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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY - QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
SMSD # : 104018-05
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 104018
DATE EXTRACTED : NA
DATE ANALYZED : 04/06/01
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	10.6	106	11.0	110	4	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	9.4	94	9.2	92	2	(80 - 120)	20
TRICHLOROETHENE	<0.3	10.0	10.0	100	10.3	103	3	(89 - 127)	20

CHEMIST NOTES:

/A

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

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

SEVERN**TRENT****SERVICES****STL Pensacola**

LOG NO: C1-04132

Received: 06 APR 01

Reported: 18 APR 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104018, PNM PERSON STATION

Sampled By: Client

Code: 150810418

Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
04132-1	SURGE TANK DISCHARGE/104018-11	04-05-01/10:02
PARAMETER	04132-1	
Sulfate as SO4 (375.4), mg/l	510	
Dilution Factor	25	
Prep Date	04.10.01	
Analysis Date	04.10.01	
Batch ID	SEW037	
Prep Method	N/A	
Analyst	BE	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C1-04132

Received: 06 APR 01

Reported: 18 APR 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 104018, PNM PERSON STATION

Sampled By: Client

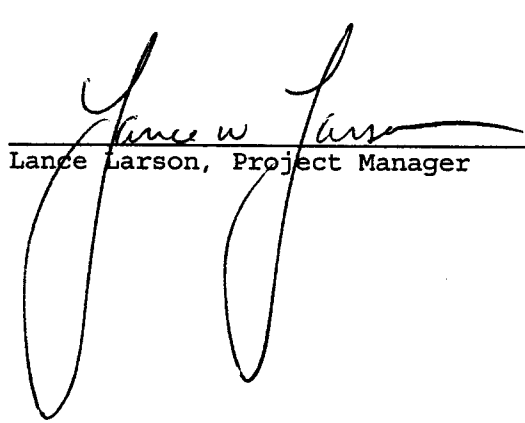
Code: 150810418

Page 2

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
04132-2	Method Blank			
04132-3	Lab Control Standard % Recovery			
04132-4	Matrix Spike % Recovery			
04132-5	Matrix Spike Duplicate % Recovery			
PARAMETER	04132-2	04132-3	04132-4	04132-5
Sulfate as SO4 (375.4), mg/l	<5.0	91 %	108 %	113 %
Dilution Factor	1	1	1	1
Prep Date	04.10.01	04.10.01	04.10.01	04.10.01
Analysis Date	04.10.01	04.10.01	04.10.01	04.10.01
Batch ID	SEW037	SEW037	SEW037	SEW037
Prep Method	N/A	N/A	N/A	N/A
Analyst	BE	BE	BE	BE

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.


Lance Larson, Project Manager

Final Page Of Report

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$), non-reportable for NDPEs compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present (¹ sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, ² sample and/or MS/MSD chromatogram(s) had interfering peaks, ³ sample result was > 4 X spike added, ⁴ metals serial dilution was performed, or ⁵ metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$); non-reportable for NDPEs compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPEs compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPEs compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace > 1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is \leq Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

**STL PENSACOLA
STATE CERTIFICATIONS**

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waster)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		RELINQUISHED BY:	
PROJECT #:	104018	Total Number of Containers		PENSACOLA - STL-FL	X	Signature:	Time:	Signature:	Time:
PROJ. NAME:	PNM	Chain of Custody Seals		ESL - OR		Signature:	Time:	Signature:	Time:
QC LEVEL:	STD. IV	Received Intact?		STL - CT		Printed Name:	Date:	Printed Name:	Date:
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ		Printed Name:	Date:	Printed Name:	Date:
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MARION		Pinnacle Laboratories, Inc.		Company	
				ATEL - MELMORE		RECEIVED BY:	1.	RECEIVED BY:	2.
DUE DATE:	4/19	COMMENTS:		BARRINGER		Signature:	Time:	Signature:	Time:
RUSH SURCHARGE:			ENVIRO TEST LABS		Signature:	Time:	Signature:	Time:	
CLIENT DISCOUNT:			WCAS		Printed Name:	Date:	Printed Name:	Date:	
SPECIAL CERTIFICATION			WOHL		Printed Name:	Date:	Printed Name:	Date:	
REQUIRED: YES NO					Company		Company		

STL Pensacola PROJECT SAMPLE INSPECTION FORM



Lab Order #: C104132 Date Received: 4-6-01

- | | |
|---|--|
| <p>1. Was there a Chain of Custody? <u>Yes</u> No⁺</p> <p>2. Was Chain of Custody properly filled out and relinquished? <u>Yes</u> No⁺</p> <p>3. Were samples received cold? <u>Yes</u> No⁺ N/A
(Criteria: 2° - 6°C: STL-SOP)</p> <p>4. Were all samples properly labeled and identified? <u>Yes</u> No⁺</p> <p>5. Did samples require splitting or compositing? Yes⁺ <u>No</u>
Req By: PM Client Other⁺</p> <p>6. Were samples received in proper containers for analysis requested? <u>Yes</u> No⁺</p> <p>7. Were all sample containers received intact? <u>Yes</u> No⁺</p> | <p>8. Were samples checked for preservative? (Check pH of all H₂O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)* Yes No⁺ <u>N/A</u></p> <p>9. Is there sufficient volume for analysis requested? <u>Yes</u> No⁺ N/A (Can.)</p> <p>10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) <u>Yes</u> No⁺</p> <p>11. Is Headspace visible > ¼" in diameter in VOA vials? * If any headspace is evident, comment in out-of-control section. Yes⁺ No <u>N/A</u></p> <p>12. If sent, were matrix spike bottles returned? Yes No⁺ <u>N/A</u></p> <p>13. Was Project Manager notified of problems? (initials: _____) Yes No⁺ <u>N/A</u></p> |
|---|--|

Airbill Number(s): 12878 168 0144014631

Shipped By: UPS

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 15#

Cooler Temp(s) (°C): 2°C

(CCK1)

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

MULTIPLE PROJECT SHIPMENT

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: AL Date: 4-6-01

Logged By: LLK Date: 06-APR-01

- * Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O₂, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.
- * If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- + All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- * According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-5-01

PAGE: 1 OF 2

PLI Accession #:

104018

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO

ADDRESS: ALVARADO SQUARE - ER16

ALBUQUERQUE, NM 87158

PHONE: (505) 241-4744

FAX: (505) 241-2487

BILL TO: SAME

COMPANY:

ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

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

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) <input type="checkbox"/> MTBE <input type="checkbox"/> TMB <input type="checkbox"/> PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
GTS-INFLUENT	4-5-01	1009	W								X																	3
GTS-AIR STRIPPER EFFLUENT EAST																												
GTS-AIR STRIPPER EFFLUENT WEST	4-5-01	1007	W								X																	3
GTS-GAC EFFLUENT EAST																												
GTS-GAC EFFLUENT WEST	4-5-01	1006	W								X																	3
UNM EAST RESERVIOR	4-5-01	1027	W								X																	3
UNM WEST RESERVOIR	4-5-01	1033	W								X																	3
TRIP BLANK	4-5-01	0930	W								X																	1

PROJECT INFORMATION

PROJ. NO.: Remediation

PROJ. NAME: Person Station

P.O. NO.:

SHIPPED VIA:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK

(NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

4 copies Please
3

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

From Field

RELINQUISHED BY:

1.

Signature:

Time:

Printed Name:

Date:

Company:

See reverse side (Force Majeure)

RELINQUISHED BY:

2.

Signature:

Time:

Printed Name:

Date:

Company:

RECEIVED BY:

1.

Signature:

Time:

Printed Name:

Date:

Company:

RECEIVED BY: (LAB)

2.

Signature:

Time:

Printed Name:

Date:

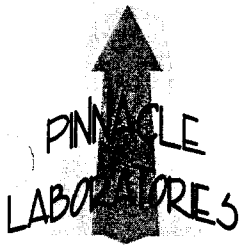
Pinnacle Laboratories Inc.

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: Remediation		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: <i>Chuck Anter</i> Time: <i>1115</i>		Signature: _____ Time: _____	
PROJ. NAME: Person Station		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: _____ Date: _____		Printed Name: _____ Date: _____	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company: <i>PNW</i>		Company: _____	
SHIPPED VIA:		COMMENTS: FIXED FEE <input type="checkbox"/> <i>4 copies Please</i>		See reverse side (Force Majeure)			
SAMPLE RECEIPT				RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
NO. CONTAINERS	<i>13</i>	PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408 <i>From Field</i>		Signature: _____ Time: _____		Signature: <i>Marcine Turolo</i> Time: <i>1120</i>	
CUSTODY SEALS	<i>PNW</i>			Printed Name: _____ Date: _____		Printed Name: <i>Marcine Turolo</i> Date: <i>4/5/01</i>	
RECEIVED INTACT	<i>YES</i>			Company: _____		Pinnacle Laboratories Inc.	
BLUE ICE/ICE	<i>126</i>						



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **105004**
May 18, 2001

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-ER16
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: CHUCK ARATER

On 05/01/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), 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.

EPA Method 8021 Halo was performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

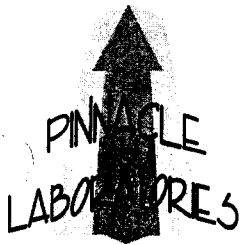
All other analyses were performed by Severn Trent Services, Pensacola, FL.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: ft

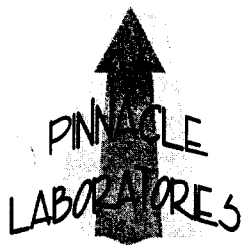
Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: PUBLIC SERVICE COMPANY	PINNACLE ID	: 105004
PROJECT #	: REMEDIATION	DATE RECEIVED	: 05/01/01
PROJECT NAME	: PERSON STATION	REPORT DATE	: 05/18/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
105004 - 01	GTS-INFLUENT	AQUEOUS	05/01/01
105004 - 02	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	05/01/01
105004 - 03	GTS-GAC EFFLUENT WEST	AQUEOUS	05/01/01
105004 - 04	UNM EAST RESERVOIR	AQUEOUS	05/01/01
105004 - 05	UNM WEST RESERVOIR	AQUEOUS	05/01/01
105004 - 06	TRIP BLANK	AQUEOUS	05/01/01
105004 - 07	VEW INFLUENT	AQUEOUS	05/01/01
105004 - 08	EW-1 INFLUENT	AQUEOUS	05/01/01
105004 - 09	EW-2	AQUEOUS	05/01/01
105004 - 10	SURGE TANK DISCHARGE	AQUEOUS	05/01/01



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GAS CHROMATOGRAPHY RESULTS

TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 105004

SAMPLE			DATE	DATE	DATE	DIL.
D. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
01	GTS-INFLUENT	AQUEOUS	05/01/01	NA	05/02/01	1
02	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	05/01/01	NA	05/02/01	1
03	GTS-GAC EFFLUENT WEST	AQUEOUS	05/01/01	NA	05/02/01	1

PARAMETER	DET. LIMIT	UNITS	GTS-INFLUENT	GTS-AIR STRIPPER EFFLUENT WEST	GTS-GAC EFFLUENT WEST
BROMODICHLOROMETHANE	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	4.3	< 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	1.3	< 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	2.2	< 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 (%)
SURROGATE LIMITS

(71 - 126)

101

108

94



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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

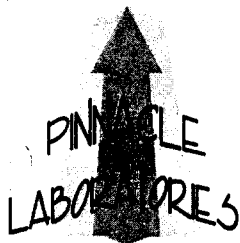
TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION
PINNACLE I.D.: 105004

SAMPLE	D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04		UNM EAST RESERVOIR	AQUEOUS	05/01/01	NA	05/02/01	1
05		UNM WEST RESERVOIR	AQUEOUS	05/01/01	NA	05/02/01	1
06		TRIP BLANK	AQUEOUS	05/01/01	NA	05/02/01	1

PARAMETER	DET. LIMIT	UNITS	UNM EAST RESERVOIR	UNM WEST RESERVOIR	TRIP BLANK
BROMODICHLOROMETHANE	0.2	UG/L	< 0.2	0.4	< 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 (%) 118 95 105
SURROGATE LIMITS (71 - 126)

CHEMIST NOTES:



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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

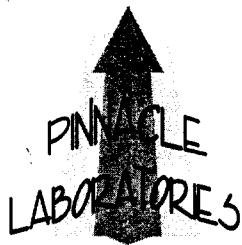
TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION
PINNACLE I.D.: 105004

SAMPLE		DATE		DATE		DATE		DIL.	
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED			FACTOR	
07	VEW INFLUENT	AQUEOUS	05/01/01	NA	05/02/01			1	
08	EW-1 INFLUENT	AQUEOUS	05/01/01	NA	05/02/01			1	
09	EW-2	AQUEOUS	05/01/01	NA	05/02/01			1	

PARAMETER	DET. LIMIT	UNITS	VEW INFLUENT	EW-1 INFLUENT	EW-2
BROMODICHLOROMETHANE	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	4.9	5.1	5.6
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	0.4	1.6	3.3
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	3.5	4.4
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0	< 1.0	1.8
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:
BROMODICHLOROMETHANE (%) 121 103 96
SURROGATE LIMITS (71 - 126)

CHEMIST NOTES:



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Albuquerque, New Mexico 87107
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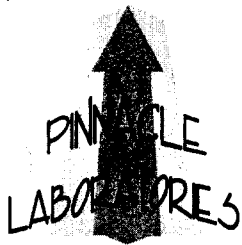
GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021	PINNACLE I.D.	: 105004
BLANK I.D.	: 050201	DATE EXTRACTED	: NA
CLIENT	: PUBLIC SERVICE COMPANY	DATE ANALYZED	: 05/02/01
PROJECT #	: REMEDIATION	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: PERSON STATION		

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
1,1,1-BROMOETHANE (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
SURROGATE LIMITS	(71 - 126)

CHEMIST NOTES:
N/A



2709-D Pan American Freeway NE
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GAS CHROMATOGRAPHY - QUALITY CONTROL
MSMSD

TEST	: EPA 8021 MODIFIED	PINNACLE I.D.	: 105004
MSMSD #	: 105004-05	DATE EXTRACTED	: NA
CLIENT	: PUBLIC SERVICE COMPANY	DATE ANALYZED	: 05/02/01
PROJECT #	: REMEDIATION	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: PERSON STATION	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	10.9	109	10.4	104	5	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	10.4	104	9.9	99	5	(80 - 120)	20
TRICHLOROETHENE	<0.3	10.0	11.0	110	11.9	119	8	(89 - 127)	20

CHEMIST NOTES:

N/A

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

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

SEVERN**TRENT****SERVICES****STL Pensacola**

LOG NO: C1-05052

Received: 02 MAY 01

Reported: 09 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 105004, PNM PERSON STATION

Sampled By: Client

Code: 07571059

Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
05052-1	SURGE TANK DISCHARGE/105004-10	05-01-01/10:57
PARAMETER	05052-1	
Sulfate as SO4 (375.4), mg/l	790	
Dilution Factor	25	
Prep Date	05.04.01	
Analysis Date	05.04.01	
Batch ID	SEW051	
Analyst	BE	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C1-05052

Received: 02 MAY 01

Reported: 09 MAY 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 105004, PNM PERSON STATION

Sampled By: Client

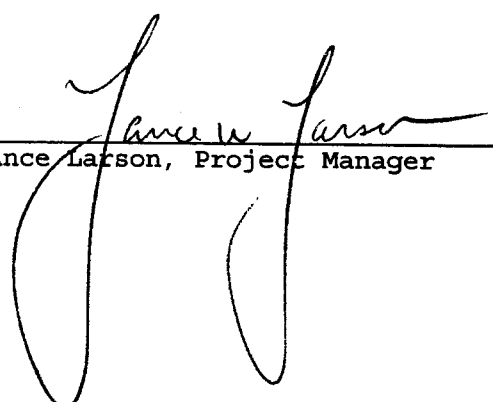
Code: 07571059

Page 2

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
05052-2	Method Blank			
05052-3	Lab Control Standard % Recovery			
05052-4	Matrix Spike % Recovery			
05052-5	Matrix Spike Duplicate % Recovery			
PARAMETER	05052-2	05052-3	05052-4	05052-5
Sulfate as SO4 (375.4), mg/l	<5.0	99 %	113 %	115 %
Dilution Factor	1	---	---	---
Prep Date	05.04.01	---	---	---
Analysis Date	05.04.01	---	---	---
Batch ID	SEW051	---	---	---
Analyst	BE	---	---	---

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.



Lance Larson, Project Manager

Final Page Of Report

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$), non-reportable for NPDES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present (¹ sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, ² sample and/or MS/MSD chromatogram(s) had interfering peaks, ³ sample result was > 4 X spike added, ⁴ metals serial dilution was performed, or ⁵ metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$); non-reportable for NPDES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NPDES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NPDES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is \leq Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
*(Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

**STL PENSACOLA
STATE CERTIFICATIONS**

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 01128CA (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OccH, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waste)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

ANALYSIS REQUEST

C105052

[illegible]

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY:		RELINQUISHED BY:	
PROJECT #:	105004	Total Number of Containers		PENSACOLA - STL-FL	X	Signature:	Time:	Signature:	Time:
PROJ. NAME:	PNM	Chain of Custody Seals		ESL - OR		Signature:	Time:	Signature:	Time:
QC LEVEL:	STD. IV	Received Intact?		STL - CT		Printed Name:	Date:	Printed Name:	Date:
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ		Printed Name:	Date:	Printed Name:	Date:
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MARION		Pinnacle Laboratories, Inc.		Company	
				ATEL - MELMORE		RECEIVED BY:		RECEIVED BY:	
DUE DATE:	5/15	COMMENTS:		BARRINGER		Signature:	Time:	Signature:	Time:
RUSH SURCHARGE:				ENVIRO TEST LABS		Signature:	Time:	Signature:	Time:
CLIENT DISCOUNT:				WCAS		Printed Name:	Date:	Printed Name:	Date:
SPECIAL CERTIFICATION				WOHL		Printed Name:	Date:	Printed Name:	Date:
REQUIRED: YES NO						Company		Company	

STL Pensacola PROJECT SAMPLE INSPECTION FORM



Lab Order #: 0105052 Date Received: 5/2/01

- | | |
|--|---|
| <p>1. Was there a Chain of Custody? <u>Yes</u> No⁺</p> <p>2. Was Chain of Custody properly filled out and relinquished? <u>Yes</u> No⁺</p> <p>3. Were samples received cold? <u>Yes</u> No⁺ N/A
(Criteria: 2° - 6°C: STL-SOP)</p> <p>4. Were all samples properly labeled and identified? <u>Yes</u> No⁺</p> <p>5. Did samples require splitting or compositing*? Yes⁺ <u>No</u>
Req By: PM Client Other⁺</p> <p>6. Were samples received in proper containers for analysis requested? <u>Yes</u> No⁺</p> <p>7. Were all sample containers received intact? <u>Yes</u> No⁺</p> | <p>8. Were samples checked for preservative? (Check pH of all H₂O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)* Yes No⁺ <u>N/A</u></p> <p>9. Is there sufficient volume for analysis requested? <u>Yes</u> No⁺ N/A (Can)</p> <p>10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) <u>Yes</u> No⁺</p> <p>11. Is Headspace visible > ¼" in diameter in VOA vials? If any headspace is evident, comment in out-of-control section. Yes⁺ No <u>N/A</u></p> <p>12. If sent, were matrix spike bottles returned? Yes No⁺ <u>N/A</u></p> <p>13. Was Project Manager notified of problems? (initials: _____) Yes No⁺ <u>N/A</u></p> |
|--|---|

Airbill Number(s): 178781686143942527

Shipped By: UPS

Cooler Number(s): Client

Shipping Charges: N/A

Cooler Weight(s): 15 #

Cooler Temp(s) (°C): 4°C
CCU 11
(USE THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

Multiple project cooler

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: MHS Date: 5/2/01

Logged By: LLK Date: 02-MAY-01

- * Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O₂, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.
- * If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- + All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- * According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

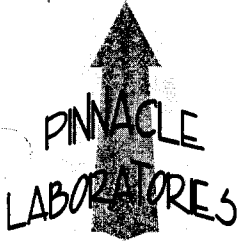
PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: Remediation		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: Time: <i>cheat 1150</i>		Signature: Time:	
PROJ. NAME: Person Station		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: Date: <i>CHUCK MATEA 5-1-01</i>		Printed Name: Date:	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company: <i>PNM</i> See reverse side (Force Majeure)		Company:	
SHIPPED VIA:		COMMENTS: FIXED FEE <input type="checkbox"/> <i>4 copies Please</i> <i>3</i>		RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
SAMPLE RECEIPT NO. CONTAINERS: <i>16</i> CUSTODY SEALS: <i>Y-1100</i> RECEIVED INTACT: <i>YES</i> BLUE TAGS: <i>YES</i>		PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408		Signature: Time:		Signature: Time: <i>Francine 1155</i>	
				Printed Name: Date:		Printed Name: Date: <i>Francine 1155 5/1/01</i>	
				Company:		Pinnacle Laboratories Inc.	

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: Remediation		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: Time: 1150		Signature: Time:	
PROJ. NAME: Person Station		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: Date: 5-1-01		Printed Name: Date:	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company: P. Pin See reverse side (Force Majeure)		Company:	
SHIPPED VIA:		COMMENTS: FIXED FEE <input type="checkbox"/> 4 copies Please 3		RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
SAMPLE RECEIPT		PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408		Signature: Time:		Signature: Time: 1155	
NO. CONTAINERS	Printed Name: Date:			Printed Name: Date: 5/1/01			
CUSTODY SEALS	Company:			Company:			
RECEIVED INTACT	Pinnacle Laboratories Inc.						
BLUE ICE							



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
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Pinnacle Lab ID number **106007**
June 19, 2001

PUBLIC SERVICE COMPANY
ALVARADO SQUARE-ER16
ALBUQUERQUE, NM 87158

Project Name PERSON STATION
Project Number REMEDIATION

Attention: CHUCK ARATER

On 06/01/01 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), 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.

EPA method 8021 HALO analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

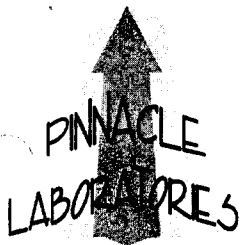
All other analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

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

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

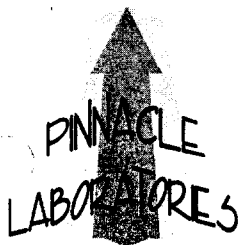
Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT : PUBLIC SERVICE COMPANY PINNACLE ID : 106007
PROJECT # : REMEDIATION DATE RECEIVED : 06/01/01
PROJECT NAME : PERSON STATION REPORT DATE : 06/19/01

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
106007 - 01	GTS-INFLUENT	AQUEOUS	06/01/01
106007 - 02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	06/01/01
106007 - 03	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	06/01/01
106007 - 04	GTS-GAC EFFLUENT EAST	AQUEOUS	06/01/01
106007 - 05	GTS-GAC EFFLUENT WEST	AQUEOUS	06/01/01
106007 - 06	UNM EAST RESERVOIR	AQUEOUS	06/01/01
106007 - 07	UNM WEST RESERVOIR	AQUEOUS	06/01/01
106007 - 08	TRIP BLANK	AQUEOUS	06/01/01
106007 - 09	VEW INFLUENT	AQUEOUS	06/01/01
106007 - 10	EW-1 INFLUENT	AQUEOUS	06/01/01
106007 - 11	EW-3	AQUEOUS	06/01/01
106007 - 12	SURGE TANK DISCHARGE	AQUEOUS	06/01/01



2709-D Pan American Freeway NE
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GAS CHROMATOGRAPHY RESULTS

EST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 106007

SAMPLE			DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.	MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR
	GTS-INFLUENT	AQUEOUS	06/01/01	NA	06/05/01	1
02	GTS-AIR STRIPPER EFFLUENT EAST	AQUEOUS	06/01/01	NA	06/05/01	1
03	GTS-AIR STRIPPER EFFLUENT WEST	AQUEOUS	06/01/01	NA	06/05/01	1

PARAMETER	DET. LIMIT	UNITS	GTS-INFLUENT	GTS-AIR STRIPPER EFFLUENT EAST	GTS-AIR STRIPPER EFFLUENT WEST
BROMODICHLOROMETHANE	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	0.8	< 0.5	< 0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0	< 1.0
BROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,2-DICHLOROETHANE (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	< 0.3	< 0.3
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	7.2	< 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
1,1,1-ETHYLENE 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	16	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	1.0	UG/L	1.1	< 1.0	< 1.0
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,1,1-TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
PERFLUORONYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5

SURROGATE:
BROMOCHLOROMETHANE (%) 110 114 112
SURROGATE LIMITS (71 - 126)

CHEMIST NOTES:
N/A



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GAS CHROMATOGRAPHY RESULTS

EST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 106007

SAMPLE						
ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
4	GTS-GAC EFFLUENT EAST	AQUEOUS	06/01/01	NA	06/05/01	1
5	GTS-GAC EFFLUENT WEST	AQUEOUS	06/01/01	NA	06/05/01	1
06	UNM EAST RESERVOIR	AQUEOUS	06/01/01	NA	06/05/01	1

PARAMETER	DET. LIMIT	UNITS	GTS-GAC EFFLUENT EAST	GTS-GAC EFFLUENT WEST	UNM EAST RESERVOIR
BROMODICHLOROMETHANE	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
1,1,2,2-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
1,1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
1,1,2-TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3	< 0.3
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2	< 0.2
VINYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5	< 0.5

INQUIRY:

BROMOCHLOROMETHANE (%)
SURROGATE LIMITS

(71 - 126)

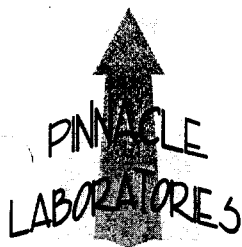
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REMARKS:

A



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GAS CHROMATOGRAPHY RESULTS

EST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 106007

SAMPLE						
ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
7	UNM WEST RESERVOIR	AQUEOUS	06/01/01	NA	06/05/01	1
3	TRIP BLANK	AQUEOUS	06/01/01	NA	06/05/01	1
09	VEW INFLUENT	AQUEOUS	06/01/01	NA	06/05/01	1

PARAMETER	DET. LIMIT	UNITS	UNM WEST RESERVOIR	TRIP BLANK	VEW INFLUENT
BROMODICHLOROMETHANE	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	4.2
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	0.2
trans-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2	< 0.2
cis-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
ETHYLENE 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

INTERROGATE:

BROMOCHLOROMETHANE (%)
SURROGATE LIMITS

(71 - 126)

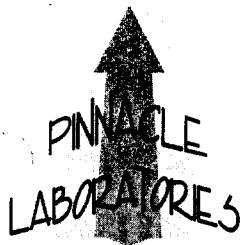
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CHEMIST NOTES:

A



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GAS CHROMATOGRAPHY RESULTS

TEST : 8021 HALO
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION

PINNACLE I.D.: 106007

ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	EW-1 INFLUENT	AQUEOUS	06/01/01	NA	06/05/01	1
2	EW-3	AQUEOUS	06/01/01	NA	06/05/01	1

PARAMETER	DET. LIMIT	UNITS	EW-1 INFLUENT	EW-3
BROMODICHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2
BROMOFORM	0.5	UG/L	< 0.5	< 0.5
BROMOMETHANE	1.0	UG/L	< 1.0	< 1.0
CARBON TETRACHLORIDE	0.2	UG/L	< 0.2	< 0.2
CHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
CHLOROETHANE	0.5	UG/L	< 0.5	< 0.5
CHLOROFORM	0.5	UG/L	< 0.5	0.5
CHLOROMETHANE	1.0	UG/L	< 1.0	< 1.0
DIBROMOCHLOROMETHANE	0.2	UG/L	< 0.2	< 0.2
1,2-DIBROMOETHANE (EDB)	0.2	UG/L	< 0.2	< 0.2
1,2-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,3-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,4-DICHLOROBENZENE	0.5	UG/L	< 0.5	< 0.5
1,1-DICHLOROETHANE	0.3	UG/L	3.9	2.9
1,2-DICHLOROETHANE (EDC)	0.5	UG/L	< 0.5	< 0.5
1,1-DICHLOROETHENE	0.2	UG/L	3.7	11
cis-1,2-DICHLOROETHENE	0.2	UG/L	< 0.2	< 0.2
trans-1,2-DICHLOROETHENE	1.0	UG/L	< 1.0	< 1.0
1,2-DICHLOROPROPANE	0.2	UG/L	< 0.2	< 0.2
cis-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2
trans-1,3-DICHLOROPROPENE	0.2	UG/L	< 0.2	< 0.2
ETHYLENE CHLORIDE	2.0	UG/L	< 2.0	< 2.0
1,1,2,2-TETRACHLOROETHANE	0.5	UG/L	< 0.5	< 0.5
TETRACHLOROETHENE	0.5	UG/L	17	25
1,1,1-TRICHLOROETHANE	1.0	UG/L	< 1.0	1.3
1,1,2-TRICHLOROETHANE	0.2	UG/L	< 0.2	< 0.2
TRICHLOROETHENE	0.3	UG/L	< 0.3	< 0.3
TRICHLOROFLUOROMETHANE	0.2	UG/L	< 0.2	< 0.2
NYL CHLORIDE	0.5	UG/L	< 0.5	< 0.5

SURROGATE:
BROMOCHLOROMETHANE (%) 111 100
SURROGATE LIMITS (71 - 126)

CHEMIST NOTES:
N/A



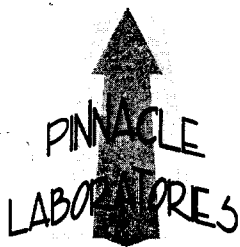
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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021		
BLANK I.D.	: 060401-B	PINNACLE I.D.	: 106007
CLIENT	: PUBLIC SERVICE COMPANY	DATE EXTRACTED	: NA
PROJECT #	: REMEDIATION	DATE ANALYZED	: 06/05/01
PROJECT NAME	: PERSON STATION	SAMPLE MATRIX	: AQUEOUS
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	
1,1,2,2-TETRACHLOROETHANE	UG/L	<2.0	
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	
PERFLUORONYL CHLORIDE	UG/L	<0.5	
SURROGATE:			
BROMOCHLOROMETHANE (%)		115	
SURROGATE LIMITS	(71 - 126)		

REMARKS:

NA



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GAS CHROMATOGRAPHY - QUALITY CONTROL
MSMSD

TEST : EPA 8021 MODIFIED
MSMSD # : 106007-07
CLIENT : PUBLIC SERVICE COMPANY
PROJECT # : REMEDIATION
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 106007
DATE EXTRACTED : NA
DATE ANALYZED : 06/05/01
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
CHLOROBENZENE	<0.5	10.0	11.1	111	11.0	110	1	(87 - 124)	20
1,1-DICHLOROETHENE	<0.2	10.0	10.3	103	10.5	105	2	(80 - 120)	20
TRICHLOROETHENE	<0.3	10.0	11.1	111	11.2	112	1	(89 - 127)	20

CHEMIST NOTES:

N/A

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

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

SEVERN
TRENT
SERVICES

STL Pensacola

LOG NO: C1-06044

Received: 02 JUN 01

Reported: 12 JUN 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 106007,PNM-PERSON STATION

Sampled By: Client

Code: 143710612

Page 1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
06044-1	SURGE TANK DISCHARGE/106007-12	06-01-01/10:45
PARAMETER	06044-1	
Sulfate as SO4 (375.2), mg/l	640	
Dilution Factor	20	
Analysis Date	06.11.01	
Batch ID	SEW068	
Analyst	BE	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C1-06044

Received: 02 JUN 01

Reported: 12 JUN 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 106007, PNM-PERSON STATION

Sampled By: Client

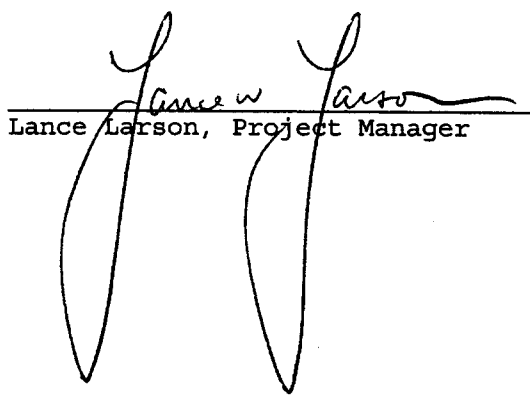
Code: 143710612

Page 2

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED		
06044-2	Method Blank			
06044-3	Lab Control Standard % Recovery			
06044-4	Matrix Spike % Recovery			
06044-5	Matrix Spike Duplicate % Recovery			
PARAMETER	06044-2	06044-3	06044-4	06044-5
Sulfate as SO ₄ (375.2), mg/l	<5.0	95 %	117 %	116 %
Dilution Factor	1	---	---	---
Analysis Date	06.11.01	---	---	---
Batch ID	SEW068	SEW068	SEW068	SEW068
Analyst	BE	---	---	---

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.


Lance Larson, Project Manager

Final Page Of Report

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$), non-reportable for NPDES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present (¹ sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, ² sample and/or MS/MSD chromatogram(s) had interfering peaks, ³ sample result was > 4 X spike added, ⁴ metals serial dilution was performed, or ⁵ metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
(description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ($\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$); non-reportable for NPDES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NPDES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NPDES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace > 1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is \leq Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix Interference (dilution prior to digestion and/or analysis)

Revised: 12/20/00

**STL PENSACOLA
STATE CERTIFICATIONS**

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 01128CA (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&Occh, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waste)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

word\certlist\condcert.lst revised 04/10/01

STL Pensacola PROJECT SAMPLE INSPECTION FORM



Lab Order #: C106041 Date Received: 6-2-01

- | | |
|--|---|
| <p>1. Was there a Chain of Custody? <u>Yes</u> No*</p> <p>2. Was Chain of Custody properly filled out and relinquished? <u>Yes</u> No*</p> <p>3. Were samples received cold? <u>Yes</u> No* N/A
(Criteria: 2° - 6°C: STL-SOP)</p> <p>4. Were all samples properly labeled and identified? <u>Yes</u> No*</p> <p>5. Did samples require splitting or compositing*? Yes* <u>No</u>
Req By: PM Client Other*</p> <p>6. Were samples received in proper containers for analysis requested? <u>Yes</u> No*</p> <p>7. Were all sample containers received intact? <u>Yes</u> No*</p> | <p>8. Were samples checked for preservative? (Check pH of all H₂O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)* Yes No* N/A</p> <p>9. Is there sufficient volume for analysis requested? <u>Yes</u> No* N/A (Can)</p> <p>10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) <u>Yes</u> No*</p> <p>11. Is Headspace visible > 1/4" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section. Yes* No <u>N/A</u></p> <p>12. If sent, were matrix spike bottles returned? Yes No* <u>N/A</u></p> <p>13. Was Project Manager notified of problems? (initials: <u> </u>) Yes No* <u>N/A</u></p> |
|--|---|

Airbill Number(s): 128781684443799564

Shipped By: UPS

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 15#

Cooler Temp(s) (°C): 22

(CCK1)

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

MULTIPLE PROJECT SHIPMENT

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: DL Date: 6-2-01 Logged By: DL Date: 6-2-01

- + Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O₂, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.
- + If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- + All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- * According to EPA, 1/4" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).



Interlab Chain of Custody

6/1

Page:

1

Network Project Manager:

Jacinta A. Tenorio

ANALYSIS REQUEST

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

C106044

[illegible]

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJECT #:	106007	Total Number of Containers		PENSACOLA - STL-FL	X	Signature:		Time:	
PROJ. NAME:	PNM	Chain of Custody Seals		ESL - OR		Signature:		Time:	
QC LEVEL:	STD IV	Received Intact?		STL - CT		Printed Name:		Date:	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - AZ		Printed Name:		Date:	
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MARION		Pinnacle Laboratories, Inc.		Company	
				ATEL - MELMORE		RECEIVED BY:	1.	RECEIVED BY:	2.
DUE DATE:	6/15	COMMENTS:		BARRINGER		Signature:		Time:	
RUSH SURCHARGE:	-			ENVIRO TEST LABS		Signature:		Time:	
CLIENT DISCOUNT:				WCAS		Printed Name:		Date:	
SPECIAL CERTIFICATION				WOHL		Printed Name:		Date:	
REQUIRED: YES NO	NO					Company		Company	



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 6-1-01

PAGE: 1 OF 2

PLI Accession #:

106005

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: CHUCK ARATER

COMPANY: PUBLIC SERVICE COMPANY OF NEW MEXICO

ADDRESS: ALVARADO SQUARE - ER16
ALBUQUERQUE, NM 87158

PHONE: (505) 241-4744

FAX: (505) 241-2487

BILL TO: SAME

COMPANY:

ADDRESS: ATTN: CHUCK ARATER

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTX)/8015 (Gasoline) MTBE	8021 (BTX) <input type="checkbox"/> MTBE <input type="checkbox"/> TMB <input type="checkbox"/> PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides / PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:	NUMBER OF CONTAINERS
GTS-INFLUENT	6-1	1053	W								X																	3
GTS-AIR STRIPPER EFFLUENT EAST	6-1	1051	W								X																	3
GTS-AIR STRIPPER EFFLUENT WEST	6-1	1052	W								X																	3
GTS-GAC EFFLUENT EAST	6-1	1047	W								X																	3
GTS-GAC EFFLUENT WEST	6-1	1049	W								X																	3
UNM EAST RESERVOIR	6-1	1100	W								X																	3
UNM WEST RESERVOIR	6-1	1120	W								X																	3
TRIP BLANK	6-1-01	1015									X																	1

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: Remediation		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: <i>Chuck Arater</i> Time: 1220		Signature: _____ Time: _____	
PROJ. NAME: Person Station		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: CHUCK ARATER Date: 6-1-01		Printed Name: _____ Date: _____	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Company: PNN See reverse side (Force Majeure)		Company: _____	
SHIPPED VIA:		COMMENTS: FIXED FEE <input type="checkbox"/> # copies Please 3		RECEIVED BY: 1.		RECEIVED BY (LAB) 2.	
SAMPLE RECEIPT		PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408		Signature: _____ Time: 1224		Signature: _____ Time: _____	
NO. CONTAINERS: 22				Printed Name: _____ Date: _____		Printed Name: _____ Date: _____	
CUSTODY SEALS: Y/D NA				Company: _____		Company: _____	
RECEIVED INTACT: <input checked="" type="checkbox"/>							
BLUE ICE/ICE: Direct Ship Field				Pinnacle Laboratories Inc.			

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

[illegible]

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: Remediation		(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK (NORMAL) <input checked="" type="checkbox"/>		Signature: Time: 12:20		Signature: Time:	
PROJ. NAME: Person Station		CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER		Printed Name: Date:		Printed Name: Date:	
P.O. NO.:		METHANOL PRESERVATION <input type="checkbox"/>		Chuck Rosten 6-1-01			
SHIPPED VIA:		COMMENTS: FIXED FEE <input type="checkbox"/> 4 copies Please 3		Company: Pinnacle		Company:	
SAMPLE RECEIPT				See reverse side (Force Majeure)			
NO. CONTAINERS 12				RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
CUSTODY SEALS 100 NA				Signature: Time: 12:24		Signature: Time:	
RECEIVED INTACT 1				Printed Name: Date:		Printed Name: Date:	
BLUE ICE/ICE Direct from Field				Company:		Pinnacle Laboratories Inc.	
		PLEASE PROVIDE DATA ON DISKETTE AS WELL AS EXTRA HARD COPY TO RON JOHNSON MS-0408					