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RECEIVED

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*A personal commitment to New Mexico*

January 11, 2008

**VIA FEDEX**

Mr. John Kieling
Program Manager
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

**RE: PERSON GENERATING STATION, NMT 360010342, RCRA PART B POST-CLOSURE CARE PERMIT APPLICATION – ELECTRONIC COPY**

Dear Mr. Kieling:

Enclosed please find two compact discs containing electronic copies of the RCRA Part B Post-Closure Care Permit application, relevant groundwater monitoring data, and proposed permit changes for the Public Service Company of New Mexico (PNM) Person Generating Station, NMT 360010342.

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

Sincerely,

John Hale

John Hale, P.E.
Technical Project Manager

Enclosures

# RCRA PART B POST-CLOSURE CARE PERMIT APPLICATION

## *Person Generating Station*

***June 2007***

Prepared for:
PNM Resources
2401 Aztec NE
Albuquerque, NM 87107

Prepared by:
Shaw Environmental, Inc.
2400 Louisiana Blvd. NE
AFC Building 5, Suite 300
Albuquerque, New Mexico 87110

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# Acronyms and Abbreviations

| | |
|---|---|
| bgs | below ground surface |
| CAD | Corrective Action Directive |
| CAP | Corrective Action Plan |
| CFR | Code of Federal Regulations |
| CMP | Corrective Measures Plan |
| COC | chain-of-custody |
| COPC | chemical of potential concern |
| 1,1-DCE | 1,1-dichloroethene |
| DNAPL | dense non-aqueous phase liquid |
| EPA | United States Environmental Protection Agency |
| ft | foot (feet) |
| gpm | gallon(s) per minute |
| GWTS | groundwater treatment system |
| HWMR | Hazardous Waste Management Regulations |
| lb/hr | pound(s) per hour |
| MCL | maximum contaminant level |
| METRIC | METRIC Corporation |
| MW | megawatt(s) |
| μg/kg | microgram(s) per kilogram |
| μg/L | microgram(s) per liter |
| μmhos | micromho(s) |
| mi | mile(s) |
| mg/kg | milligram(s) per kilogram |
| $mg/m^3$ | milligram(s) per cubic meter |
| NFA | no further action |
| NMAC | New Mexico Administrative Code |
| NMED | New Mexico Environment Department |
| NMWQCC | New Mexico Water Quality Control Commission |
| O&M | operations and maintenance |
| PCE | tetrachloroethene |
| PID | photoionization detector |
| PNM | Public Service Company of New Mexico Resources |
| ppmv | part(s) per million by volume |
| QA/QC | Quality Assessment/Quality Control |
| RCRA | Resource Conservation and Recovery Act |
| SSL | soil screening level |
| SVE | soil vapor extraction |
| SWMU | solid waste management unit |
| 1,1,1-TCA | 1,1,1-trichloroethane |
| UCL | upper confidence level |
| VMP | vapor monitoring point |
| VOC | volatile organic compound |

# *Executive Summary*

Public Service Company of New Mexico Resources (PNM) has prepared this post-closure care permit application for ongoing corrective action activities to address groundwater contamination from historical operations at Person Generating Station, located in Albuquerque, New Mexico. An open-bottomed metal pipe (the “Unlined Well”) was used as a repository for wastes generated during equipment cleaning from 1976 to 1983. The Unlined Well was the likely source of soil and groundwater contamination at the site. The principal historical site contaminants are tetrachloroethene, 1,1-dichloroethene, and 1,1,1-trichloroethane.

The purpose of this post-closure care permit application is to remove corrective action/post-closure care requirements at the Unlined Well (the original source of groundwater contamination at the site), to modify the recovery well network, to decrease the number of wells that are sampled and gauged as part of the groundwater corrective action/post-closure care plan, and to better define the path to site closure. All proposed changes are a result of the substantial remediation progress that has been achieved at the site.

This post-closure care permit application was prepared in accordance with the requirements of Code of Federal Regulations Title 40, Parts 260 to 266, Part 268, and Part 270; the New Mexico Hazardous Waste Act; and New Mexico Hazardous Waste Management Regulations, all of which are adopted, with few exceptions, in 20.4.1.900 New Mexico Administrative Code.

# *1.0 Introduction*

Public Service Company of New Mexico Resources (PNM) is submitting this Resource Conservation and Recovery Act (RCRA) Part B post-closure care permit application to update the existing post-closure care permit for Person Generating Station (United States Environmental Protection Agency [EPA] Permit Number NMT-360010342) dated August 17, 2000 (NMED, 2000). The proposed changes to the existing post-closure care permit reflect the remediation progress that has been achieved for site soil and groundwater. The principal site contaminants are tetrachloroethene (PCE), 1,1-dichloroethene (1,1-DCE), and 1,1,1-trichloroethane (1,1,1-TCA). The RCRA Part A (Hazardous Waste Permit Application) is provided as Attachment 1.

All RCRA-regulated units at the site ceased operating in 1988. A post-closure care permit was initially issued for the Person Generating Station on September 1, 1988 to establish monitoring and possible corrective action activities necessary for PNM to “clean close” areas of the site, such as soil and groundwater, that were affected by historical operations at the facility. The post-closure care permit was modified in 1991 based on a Corrective Action Directive (CAD) issued by the New Mexico Environment Department (NMED) in September 1991. A renewed permit application was requested by PNM in 2000, resulting in the current post-closure care permit (issued by NMED on August 17, 2000), scheduled to expire on August 17, 2010. A Class III Permit Modification to the 2000 post-closure care permit was issued by NMED in March 2003, which resulted in the removal of four solid waste management units (SWMUs) from the permit (NMED, 2003).

PNM has prepared this post-closure care permit application to remove corrective action/post-closure care requirements at the Unlined Well, to modify the groundwater recovery well network, to decrease the number of wells that are sampled and gauged as part of the groundwater corrective action/post-closure care plan, and to better define the path to site closure. These proposed changes are a result of the substantial remediation progress that has been achieved at the site, and are being submitted in the form of an early post-closure care permit application, although the existing permit does not expire until 2010. The elimination of the Unlined Well from the post-closure care permit requirements and a reduction of the groundwater monitoring requirements will reduce PNM’s administrative and financial burdens at the site and will allow the area of the Unlined Well to be released for redevelopment.

This post-closure care permit application was prepared in accordance with the requirements of Code of Federal Regulations (CFR) Title 40, Parts 260 to 266, Part 268, and Part 270; the New Mexico Hazardous Waste Act; and New Mexico Hazardous Waste Management Regulations

(HWMR), all of which are adopted, with few exceptions, in 20.4.1.900 New Mexico Administrative Code (NMAC).

No additional hazardous material treatment, storage, or disposal activities are taking place, or are planned to take place, at this facility. If groundwater remediation progress continues to be achieved at the site, PNM may elect to petition the NMED for early termination of the post-closure care permit prior to the 30-year post-closure care period specified in 40 CFR 264.117 (i.e., prior to the year 2018). As part of this goal, PNM will continue to collect relevant site data that can help support a determination from NMED regarding early termination of post-closure care.

## *1.1 Facility Description and Operational History*

This section presents general information describing the Person Generating Station, including a description of the facility location, site topography and hydrology, surface waters and surrounding land use, and operational history. The general facility information provided herein has been tailored for this post-closure care permit application, pursuant to 40 CFR 270.28.

### *1.1.1 Facility Location*

[40 CFR 270.14(b)(1) and (b)(19)(vii), (viii), (x), (xii)]

The Person Generating Station is located on a 22-acre site that is south of the Albuquerque metropolitan area in Bernalillo County, New Mexico (Figure 1). The site is northeast of the intersection of Broadway Boulevard and Rio Bravo Boulevard and is approximately 2 miles (mi) east of the Rio Grande. Figure 2 is an aerial photograph of the site showing on-site buildings, abutting properties, and important features of the site, including the Unlined Well and the groundwater treatment system (GWTS) building.

### *1.1.2 Site Topography and Hydrology*

[40 CFR 270.14(b)(1) and (b)(11)(i), (ii), (iii); 264.18(a), (b)]

The Person Generating Station is located on a terrace along the eastern edge of the Rio Grande Valley. Ground surface elevations within property boundaries range from approximately 5,015 to 5,070 feet (ft) above mean sea level. Surface water in the area consists mainly of the Rio Grande, located approximately two mi from the site and flowing north to south, and the Albuquerque Municipal Arroyo Flood Control Authority South Diversion Channel, an unlined drainage channel located adjacent to the northwest corner of the site that flows only during storm events.

A topographic map of the site and surrounding area, including the 100-year floodplain of the Rio Grande is included as Figure 3. The topography is provided at a scale of 1 inch equals 400 ft and with elevation contours at 20-ft intervals, sufficient for presenting the generally flat terrain at the site. According to 2003 data from the Federal Emergency Management Agency (FEMA, 2003), the Person Generating Station is not within the designated 100-year floodplain. A portion of the 100-year floodplain abuts the facility to the north, corresponding to a small arroyo that receives intermittent water flow from precipitation events; this arroyo is more than 300 ft from the Unlined Well.

The Rio Grande Basin aquifer lies below Person Generating Station. Depth to groundwater at the site ranges from 120 to 200 ft below ground surface (bgs). Groundwater at the site has been grouped into two categories for the purposes of investigation and corrective action: shallow and deeper groundwater. The shallow portion of the aquifer refers to water from 120 ft bgs, and the deeper portion is 200 to 900 ft below bgs. Historically, contamination has been detected in the shallow and deeper portions of the aquifer, as well as in “B Zone” wells screened in the interval between the two groundwater units (from 120 to 200 ft bgs).

The permeability of the aquifer sediments is significantly greater in the horizontal direction than in the vertical direction; thus, documented contaminant migration has been predominately in the horizontal direction with limited vertical migration under natural aquifer conditions (Parsons Engineering Science, Inc., 1995). Deeper contamination may have resulted from groundwater production wells associated with Person Generating Station. These production wells have now been plugged, eliminating this transport pathway.

The Person Generating Station is not within 200 ft of a fault that has had displacement during the Holocene (METRIC Corporation [METRIC], 1986) and, thus, meets the siting requirements of 40 CFR 264.18.

### *1.1.3 Surface Waters and Surrounding Land Use*

[270.14(b)(19)(iii), (iv), (v)]

Figure 4 presents area land use and zoning around the Person Generating Station, as well as a wind rose for this area of Albuquerque. As seen on the map, current land types and allowable land uses in proximity of the site include surface waters, agricultural, vacant/abandoned, commercial, transportation/utility, and recreation/open space. The BNSF Railroad runs through the right-of-way on the site’s western boundary. Interstate 25 and its right-of-way property are located approximately 1,200 ft (0.2 mi) east of the site. The University of New Mexico Championship Golf Course is located east of Interstate 25 approximately 2,100 ft (0.4 mi) to the northeast of, and generally downgradient from, the site. The closest residential development to the site is approximately 1,500 ft (0.3 mi) to the southwest and generally upgradient from the facility. Future development in the area is expected to be similar to the current land use surrounding the site.

### *1.1.4 Operational History*

PNM operated the Person Generating Station from 1952 to 1986. Photographs of the facility and prominent on-site structures taken during a site visit on April 6, 2007 are presented in Appendix A. The power plant contained four oil-fired electric generating units that were built between 1951 and 1957 with the rated capacity of each unit ranging from 18 to 33 megawatts (MW). The generating units operated regularly until 1981, after which intermittent operations occurred from 1982 to 1986. The power generating facilities were deactivated in 1993.

The generating station consisted of several supporting structures including four aboveground 10,000 to 50,000-barrel fuel oil tanks, four cooling towers, a switchyard, and several large-capacity water production wells. Several of the support structures, such as the evaporative cooling towers, have been removed. The switchyard is operational, but is not typically staffed because of its automated control systems. PNM also operates a Power Operations Center within the facility boundary. Access to the operations center is controlled separately from access to the former power plant/structures and is restricted by a series of security fences and locked gates. Present-day activities at the facility (excluding the Power Operations Center) consist of:

- Periodic switchyard maintenance;
- Operation and maintenance of the groundwater remediation system;
- Collection of samples from monitoring wells;
- Activities to monitor and maintain the integrity of the cover of the Unlined Well; and
- Post-closure care plan inspections and other miscellaneous activities conducted at the site.

In July 2000, a single unit, simple-cycle, gas turbine generating unit with a nominal rating of 132 MW was installed and began operating commercially. This generating unit, known as the Delta-Person Generating Station, is owned and operated by Delta-Power, LLC and can be seen on Figure 2.

## *1.2 Description and History of the Unlined Well Source Area*

[40 CFR 270.14(b)(1)]

The facility included a maintenance area to support, among other activities, equipment cleaning efforts. The area included a sump and a 3.5-ft by 10-ft cylindrical open-bottomed metal pipe (referred to in this application as the “Unlined Well”) that was installed below-grade in a vertical position. Liquid wastes collected in the sump were piped approximately 9 ft to the metal pipe; the metal pipe did not extend into groundwater. The Unlined Well was used as a repository for wastes generated during equipment cleaning from 1976 to 1983. The Unlined Well was the likely source of soil and groundwater contamination at the site.

Historical records and interviews of retired personnel indicate that waste oils and greases, kerosene, a water-trisodium phosphate mixture used in steam cleaning, Stoddard® solvent (a petroleum distillate), Dowclene EC® (active ingredients 1,1,1-TCA and PCE), and other solvent mixtures generated during maintenance activities were piped to the Unlined Well for storage (METRIC, 1993). Records suggest that significant use of Dowclene EC® began in 1979. Maintenance personnel noted when the Unlined Well appeared to be full and arranged for various waste oil reclamation contractors to remove the contents and recycle the material at offsite locations. Equipment repainting activities in 1980 generated a new type of liquid effluent, including waste paint, thinners, and turpentine, which were also collected in the Unlined Well.

The Unlined Well was in use from July 1976 to October 13, 1983, when it was discovered that the bottom of the below-grade pipe was open. PNM immediately emptied the pipe and removed it from service. PNM notified the EPA, the New Mexico Environmental Improvement Division (predecessor to the NMED), and the National Response Center of the discovery. The sump, discharge pipe, upper portion of the pipe, and contaminated shallow soils from the bottom of the Unlined Well were removed in 1983 and disposed of as hazardous waste in 1987 (Engineering Science, Inc., 1994).

Preliminary investigations of the nature and extent of soil and groundwater contamination at the Unlined Well began in 1984; investigation results were subsequently used to develop a Closure Plan and the initial post-closure care permit. The Unlined Well was capped in 1987; the final cover consists of two 80-mil high-density polyethylene liners overlain with a 6-inch thick compacted soil layer and a 25-ft by 35-ft, 6-inch thick reinforced concrete slab. Photographs of the site, including the Unlined Well, are included in Appendix A. Section 3.0 provides details on the corrective action activities at the Unlined Well.

### *1.2.1 Overview of Corrective Action/Post-Closure Activities*

Corrective action activities at the site have included site investigations to determine the extent of soil and groundwater contamination, capping of the Unlined Well area, shallow groundwater recovery and treatment, monitored natural attenuation of deeper groundwater, soil vapor extraction, soil sampling, and periodic groundwater monitoring consisting of gauging and sampling of shallow and deeper groundwater at the site. In addition, visual inspection of the closure cap, wells, and gate are conducted on the dates of groundwater monitoring. Additional information on these key elements of the post-closure care activities at the site is provided below.

#### *1.2.1.1 Soil Remediation*

Soil remediation consisted of:

- Excavation of soils from the Unlined Well in 1983 (disposal of sixteen 55-gallon drums of material in 1987);
- Capping of the area to preclude infiltration of surface water in 1987 (details in Section 1.2); and
- Soil vapor extraction (SVE) in various phases and operation intervals from 1995-2003.

The basic soil remediation requirements for the Unlined Well are stipulated in Permit Condition IV.A.1 of the 2000 post-closure care permit (NMED, 2000) and are based on the soil corrective action plan (CAP) identified in Volumes 2 and 3 of the 2000 post-closure care permit application:

- Operation and maintenance of a SVE system to remove soil contaminants;
- Remediation of the entire soil column (ground surface to water table) to soil screening levels (SSLs) protective of groundwater; and
- Remediation of surface soils (ground surface to 12 ft bgs) to SSLs protective of human health based on a residential receptor.

The corrective action taken at the Unlined Well, including confirmation that soil remediation has been achieved to meet both protection of groundwater and human health standards, is detailed in Section 3.0.

#### *1.2.1.2 Groundwater Monitoring and Remediation*

[40 CFR 264.93; 264.94(a)]

According to conditions stipulated in the 2000 permit, groundwater monitoring and remediation activities at the site have consisted of:

- Extraction and treatment of shallow groundwater from a network of recovery wells, with treatment using air stripping and activated carbon and discharge of treated water to irrigation ponds at the UNM Championship Golf Course. Note that the current configuration of the GWTS does not use air stripping in the process, per changes to the system as approved by the Groundwater Bureau in 2002 (NMED, 2002).
- Periodic groundwater gauging and sampling of numerous shallow and deeper groundwater wells, with laboratory analysis for halogenated organic compounds.
- Monitored natural attenuation of deeper groundwater.

The basic groundwater remediation requirements stipulated in Permit Condition IV.A.2 of the 2000 post-closure care permit (NMED, 2000) are based on the groundwater CAP identified in Volumes 2, 4, and 5 of the 2000 post-closure care permit application. These requirements are listed below.

- Groundwater cleanup levels consist of promulgated water quality standards: EPA maximum contaminant levels (MCLs) under the Safe Drinking Water Act or the New Mexico Water Quality Control Commission (NMWQCC) groundwater protection standards, whichever is lower. For 1,1,1-TCA, the groundwater cleanup level is 60 micrograms per liter (μg/L); for 1,1-DCE, the groundwater cleanup level is 5 μg/L; and for PCE the groundwater cleanup level is 5 μg/L.
- Monitoring and corrective action must continue until all wells at, and downgradient from, the facility's point-of-compliance have attained the final groundwater cleanup levels specified above for a period of three consecutive years. Compliance with groundwater cleanup levels is demonstrated by assessing contaminant concentration on an individual well basis.
- Samples are collected semiannually from the monitored wells for three years, and a trend analysis is completed to statistically verify that concentrations of contaminants in groundwater are not expected to significantly increase after the three-year final monitoring period. The process of selecting the best trend analysis method (e.g., parametric, nonparametric, time series, etc.) is discussed in EPA (1994).
- When three years of semiannual monitoring data indicate that contaminant concentrations have remained at or below groundwater cleanup levels, PNM may petition NMED to approve a determination that corrective actions for groundwater are no longer necessary. As described in Section 1.0, PNM may also petition NMED for early termination of the post-closure care permit, pursuant to 40 CFR 264.117(a)(2)(i).

## *1.3 Regulatory Framework*

### *1.3.1 Regulatory Timeline*

A timeline of key regulatory submittals and documents for Person Generating Station is as follows:

| Date | Submittal/Document |
|---|---|
| September 1, 1988 | Initial Post-Closure Care Permit issued by NMED. |
| September 1991 | NMED issued CAD, detailing corrective action plan(s) for soil and groundwater. |
| June 1993 | NMED approved the deep-plume work plan, an addendum to the CAD requirements. |
| October 1993 | PNM requested Class III Permit Modification to replace two groundwater monitoring wells, clarify monitoring requirements, and allow for SVE installation at the Unlined Well. |
| January 1994 | Corrective Measures Plan (CMP) submitted to the NMED, as partial response to the CAD. |

| Date | Submittal/Document |
|---|---|
| June 3, 1994 | October 1993 Class III Permit Modification request approved by NMED. |
| January 15, 1995 | Groundwater discharge plan approved by NMED Groundwater Quality Board |
| August 17, 2000 | Second Post-Closure Care Permit issued by NMED, incorporating all 5 volumes of the July 2000 permit application. |
| March 2003 | PNM requested Class III Permit Modification to remove 3 SWMUs from the permit: four leach fields, bone yard area, and spin-off filter. |
| October 2003 | March 2003 Class III Permit Modification request approved by NMED. |

### *1.3.2 Regulatory Requirements*

The specific regulatory requirements for this post-closure care permit application are listed in Table 1, along with the section in this application where each applicable requirement is addressed.

# *2.0 General Permit Requirements*

[40 CFR 270.28 and applicable 270.14(b) subsections]

The regulatory requirements for post-closure care permits specified in 40 CFR 270.28 are addressed in the following subsections.

## *2.1 Facility Description*

[40 CFR 270.14(b)(1) and (b)(11)]

A complete description of the Person Generating Station is provided in Sections 1.1 and 1.2.

## *2.2 Security Provisions*

[40 CFR 270.14(b)(4); 264.14(b)(2) and (c)]

PNM has operated Person Generating Station since 1952. Because the facility was an electrical generating station that included dangerous electrical and mechanical equipment, on-site security was required to minimize the unauthorized entry of persons or livestock on the 22-acre site. The Person Generating Station is enclosed by an 8-ft-high chain link security fence with barbed-wire outrigging. Gates are locked by mechanical means or by electrical locking mechanisms, except during those periods when maintenance activity is occurring or groundwater monitoring is being conducted. Warning signs are attached to the fence.

An additional gate is located at the western end of the southern fence line, which allows restricted access only to the parking lot serving the active Power Operations Center on the south side of Person Generating Station. Locked gates prevent unauthorized access to Person Generating Station from the Operations Center. Access from the Operations Center to Person Generating Station requires a PNM employee escort.

The GWTS is locked while the facility is unoccupied to prevent unauthorized exposure to potentially hazardous operations. The vaults for the groundwater recovery pumps are designated as confined spaces as defined in OSHA 29 CFR §1910.120. As such, these vaults are secured by padlocks.

Because closure of the Unlined Well has precluded physical contact or disturbance of any waste or residual environmental contamination that may remain in the soil beneath the cover, the described security measures for the facility are believed to be adequate for the Unlined Well.

Various PNM personnel periodically drive through the site, at which time breaches in security can be identified and investigated.

## *2.3 Inspection Provisions*

[40 CFR 270.14(b)(5), 264.15(a) and (b)]

The groundwater monitoring and extraction wells are inspected semiannually at the time of groundwater monitoring activities for the following:

- Evidence of surface leakage into the well;
- Integrity of concrete apron and well cover; and
- Signs of malfunction, deterioration, or vandalism.

In addition, during monitoring well purging activities, any visual changes in water turbidity or indications of well plugging or blockage are noted. Any damage noted to the monitoring or extraction wells or the associated barriers is repaired as soon as practicable.

Inspection of the security fence and its gates also occurs semiannually to assure that they are in good repair and have not been breached in any manner. Any damage noted to the fencing is repaired as soon as practicable.

All inspection records become part of a log maintained at the PNM offices in Albuquerque. These records are maintained for a minimum of three years from the date of inspection and include the date and time of the inspection, name of the inspector, notations of observations made, and the date and nature of any repairs or other remedial actions.

Inspection of the condition of the cap on the Unlined Well is no longer required, as the corrective action of the soils is complete (Section 3.0).

### *2.3.1 NMED Inspection Results*

Two inspections have been conducted at Person Generating Station by the NMED since the issuance of the 2000 permit:

1. A June 2002 inspection that focused on the conditionally exempt generator status of Person Generating Station resulted in no findings.
2. A June 2003 inspection that focused on the 2000 permit resulted in no findings.

## *2.4 Preparedness and Prevention*

[40 CFR 270.14(b)(6) and applicable 264, Subpart C subsections]

### *2.4.1 Emergency Equipment*

[40 CFR 264.32]

The following emergency equipment is available at the building housing the GWTS: system alarm, fire extinguisher, and a safety shower. The location of emergency equipment and evacuation routes at the GWTS facility are shown in Figure 5.

Emergency equipment requirements related to soil remediation activities at the Unlined Well are no longer applicable, as the corrective action of the soils is complete and the SVE system has been removed (Section 3.0).

### *2.4.2 Testing and Maintenance of Emergency Equipment*

[40 CFR 264.33]

The testing and maintenance of the emergency equipment at the GWTS includes monthly inspections of the system alarm, fire extinguisher, and safety shower.

Testing and maintenance of emergency equipment related to soil remediation activities at the Unlined Well are no longer applicable, as the corrective action of the soils is complete and the SVE system has been removed (Section 3.0).

### *2.4.3 Access to Communications and Alarm Systems*

[40 CFR 264.34]

All personnel involved in post-closure care activities at the GWTS (e.g., sampling activities, inspections, etc.) have access to, and are trained to use, the emergency equipment including the alarm and communication systems (see also Section 2.6).

### *2.4.4 Arrangements with Local Authorities*

[40 CFR 264.37]

In the event of any situation or unplanned occurrence requiring assistance of local authorities or emergency responders, appropriate contacts will be made from the list provided below. For emergency situations, telephone or radio contact will be made with the site emergency coordinator or emergency personnel responding to the situation.

| Contingency Contact | Phone Number(s) |
|---|---|
| Emergency Coordinators | John Hale<br>505-241-2014 (work)<br>505-362-1129 (mobile)<br>505-293-7930 (home)<br>Jim Farrell<br>505-241-4714 (work)<br>505-220-9728 (mobile)<br>505-865-4737 (home) |
| Fire Department | 911 |
| Medical Emergency | 911 |
| Bernalillo County Sheriff | South Valley Area Command<br>505-314-0010 |
| NM State Police | District Five (Albuquerque)<br>505-841-9256 |
| Local Hospital | Presbyterian<br>505-841-1234 |
| Rocky Mountain Poison Center | 800-222-1222 |
| Equipment Breakdowns | John Hale (PNM Point of Contact)<br>505-241-2014 (work)<br>505-362-1129 (mobile)<br>505-293-7930 (home) |
| RCRA Notification | Will Moats (NMED)<br>505-222-9551 |

### *2.4.5 Contingency Plan and Emergency Procedures*

#### *2.4.5.1 Responses to Non-Sudden Hazards and Releases*

The Health and Safety Plan prepared for the Person Generating Station includes an emergency response plan detailing action to be taken by site workers if a hazard or sudden release should occur. The Health and Safety Plan is included in site training requirements (Section 2.6) and is mandatory for all on-site workers.

#### *2.4.5.2 Emergency Procedures for Sudden Hazards and Releases*

There are no significant hazards or releases of concern for the post-closure care program. The only potential hazard that could occur relating to the GWTS or sampling and gauging activities is the mishandling of the nitrogen gas cylinders used for operating the monitoring well bladder pumps. Standard safety procedures for handling compressed gas (secured tank and proper gas regulator) are followed to prevent any mishap associated with the nitrogen gas cylinders.

The GWTS involves treatment of groundwater contaminated with hazardous chemicals. The GWTS is inspected monthly during sampling activities. In the event of an automated system shutdown, an alarm is tripped at Reeves Generating Station. Reeves Generating Station is staffed with a six-person fire and chemical emergency response team. In the event of a release, Reeves Generating Station personnel will respond to the situation and the appropriate agencies will be notified in accordance with the notification procedures in Section 2.4.4 and PNM's Spill Manual.

#### *2.4.5.3 Fire Prevention*

In the event of a fire involving the GWTS, the system will be immediately shut down, if possible. Upon shutdown, personnel will contain and extinguish the fire using a fire extinguisher located in the facility, if within their capacity to do so. If not, personnel will evacuate the facility using the safest evacuation route possible and implement fire response procedures by calling 911 for the Albuquerque Fire Department. Figure 5 shows the GWTS evacuation routes.

Re-start of the GWTS will not occur until damage resulting from the fire is repaired, unless the fire did not adversely affect the safety, operability, and effectiveness of the GWTS.

#### *2.4.5.4 Explosion Prevention*

There are no flammable or explosive materials at the GWTS. Therefore, procedures for the prevention of explosions are not included with the Person Generating Station contingency plan.

#### *2.4.5.5 Other Hazards, Adverse Releases, and Mitigation*

[40 CFR 270.30(d)]

Accidents that may occur during operation of the GWTS include accidental releases of contaminated groundwater to soils and/or surface water. Accidental releases could result from pipe failure, pump leakage, leakage from valves and fittings, and tank rupture or overfill. In the event of an accidental release of untreated groundwater, the GWTS will be shut down immediately and facility notification procedures will be implemented (Section 2.4.4). Re-start of the GWTS will not occur until the release has been mitigated and system repairs have been made as necessary to prevent a recurrence of the release.

PNM will take all reasonable steps to minimize releases to the environment and will carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

## *2.5 Recordkeeping and Reporting*

### *2.5.1 Operating Record*

[40 CFR 264.73]

Copies of the following reports and records (including any amendments, revisions, or modifications to such documents) will be retained as part of the facility's operating record:

1. The operative permit application and NMED permit will be retained at the facility until post-closure care activities are determined complete by the Secretary of the NMED.
   [40 CFR 264.118(a)]

2. All monitoring information, including all calibration and maintenance records and any recordings for continuous monitoring instrumentation will be retained at the PNM offices in Albuquerque for the duration of the post-closure care period and until post-closure care activities are determined complete by the Secretary of the NMED. Monitoring records will include: the date, place, and time of sampling/measurement; name of individual performing the monitoring; dates of analyses performed; name of the laboratory and individuals performing the analyses; analytical procedures and methods used; quality assurance and quality control procedures used; and analytical results.
   [40 CFR 264.74(b); 270.30(j)(2) and (3)]

3. A written record of waste, soil, and/or groundwater analyses, relevant to the post-closure care activities conducted at the facility (e.g., field notebooks, monitoring data, and annual groundwater reports), including all data used to complete this application, will be maintained at the PNM offices in Albuquerque for the duration of the post-closure care period or for three years beyond completion of activities. Field notes will include the items listed in Section 4.6.
   [40 CFR 264.73(b)(6); 264.100(g)]

4. All inspection records, schedules, and results (Section 2.3) will be retained at the PNM offices in Albuquerque for a minimum of three years from the date of inspection. Inspection records will include: the date and time of the inspection; name of the inspector; notations of observations made; and the date and nature of any repairs or other remedial actions taken.
   [40 CFR 264.15(b)(2) and (d); 264.73(b)(5)]

5. A record of the nature and extent of any system repairs or spill response action, including those that require the implementation of the facility's contingency plan, will be documented in the operations and maintenance (O&M) logbook maintained at the facility and will be retained for the duration of the post-closure care period and until post-closure care activities are determined complete by the Secretary of the NMED.
   [40 CFR 264.73(b)(4)]

6. Records documenting the required training will be maintained at the facility and will be retained for the duration of the post-closure care period and until post-closure care

activities are determined complete by the Secretary of the NMED for current employees or for three years from the date an employee last worked at the facility.
[40 CFR 264.16(d)]

7. Post-closure care cost estimates (Section 2.8) will be updated annually and retained at the PNM offices in Albuquerque for the duration of the post-closure care period and until post-closure care activities are determined complete by the Secretary of the NMED.
[40 CFR 264.73(b)(8); 264.144(d)]

### *2.5.2 24-Hour Reporting*

[40 CFR 270.30(1)(6)(i), (ii), (iii)]

PNM will report orally to the Secretary of NMED any noncompliance or incident at the facility that may endanger human health, human safety, or the environment within 24 hours of the time PNM is aware of such an incident, including:

- Releases of any hazardous waste or hazardous constituents that may endanger public drinking water supplies; or
- Releases or discharges of any hazardous waste or hazardous constituents or fires or explosions at the facility that could threaten the environment or human health outside of the facility.

The oral report will include:

- Name, address, and telephone number of the Permittee (PNM) and the facility (Person Generating Station);
- Date, time, and type of incident;
- Name and quantity of materials involved, including an estimate of the quantity and disposition of recovered material resulting from the incident; and
- An assessment of actual or potential hazards to the environment and human health outside of the facility.

PNM will provide a written report to the Secretary of NMED within five calendar days of the time PNM is aware of such an incident, including:

- A description of the noncompliance or incident and its cause;
- The period(s) of noncompliance or incident, including exact date and times, and the anticipated time it is expected to be corrected (if not already done); and
- Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, incident, or imminent hazard.

### 2.5.3 Post-Closure Care Plan Changes

[40 CFR 270.42, 264.118(d)]

Changes to the post-closure care plan will follow the notification schedules and procedures outlined in 40 CFR 270.42 and 264.118(d) for Class I, II, or III permit modifications.

## 2.6 Personnel Training Program Requirements

[40 CFR 264.16]

Personnel training will be conducted to ensure that facility personnel will be able to respond effectively to emergencies by familiarizing them with the Person Generating Station Health and Safety Plan emergency procedures, equipment, and emergency systems, including (where applicable):

- Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment;
- Communications or alarm systems;
- Response to fires or explosions; and
- Response to groundwater contamination incidents.

Personnel conducting post-closure care activities will be trained to inspect security measures and the condition of monitoring wells. The PNM training program will be conducted by an individual trained in hazardous waste management procedures, and will include instruction in hazardous waste management procedures (including contingency plan implementation) relevant to their job functions.

Employees will be trained within six months of their employment or assignment. Employees will not work in unsupervised positions until they have completed the required training. Annual refresher training will be provided to all personnel trained in accordance with this section.

A written description of each position and the name of each employee filling the position will be maintained at the facility, in accordance with the recordkeeping procedures described in Section 2.5.1. Job descriptions and training requirements are included in Appendix E.

## 2.7 Post-Closure Care Plan

All regulated units at Person Generating Station have been closed since 1988. As such, only a post-closure care plan is required. The post-closure care plans for shallow and deeper groundwater are included in Section 4 of this application. No post-closure care activities are proposed for the Unlined Well because remediation of the soil has achieved relevant and appropriate action levels defined in the 2000 post-closure care permit for Person Generating Station (NMED, 2000), as detailed in Section 3.0.

## *2.8 Post-Closure Cost Estimate*

[40 CFR 270.14(b)(16); 264.144(c), (d)]

The post-closure care cost estimate associated with implementation of corrective actions at Person Generating Station is separately revised and submitted to NMED on an annual basis. The cost estimate for 2008 has been adjusted accordingly to reflect completion of the corrective actions identified in this post-closure care permit application (i.e., modifications to the groundwater remediation and well sampling and gauging) and is provided in Attachment 2.

## *2.9 Proof of Insurance*

[40 CFR 270.14(b)(16), 264.145, 264.147, and 264.151]

The financial assurance instrument for the post-closure care costs is provided in Attachment 3. In addition, PNM carries liability insurance for the Person Generating Station pursuant to the requirements of 40 CFR 264.147 to cover sudden and non-sudden accidental occurrences with coverage limits of $4,000,000 (each occurrence) and $8,000,000 (annual aggregate), respectively.

# 3.0 Removal of Post-Closure Care of the Unlined Well

This section presents information demonstrating that all corrective action requirements for the Unlined Well have been met, as delineated in the current post-closure care permit (NMED, 2000; Permit Condition IV.A.1). It is PNM's intention to remove the RCRA cap and redevelop the area of the Unlined Well. A "corrective action complete/no further action [NFA]" decision by NMED for the Unlined Well will allow for other uses of this area of the facility.

## 3.1 Previous Investigations and Activities

Section 1.2 summarizes historical investigation and remediation activities that have been conducted at the Unlined Well.

## 3.2 Unlined Well Corrective Action Plan

The 2000 CAP for the Unlined Well detailed the remediation goals for this area of the site and included a specific approach for demonstrating that soil remediation goals have been met. The CAP for the Unlined Well included the following three, general components:

1. Semiannual Inspection Program – inspection and confirmation that the cover integrity is intact; verification that no deterioration of the cover surface, erosion, or subsidence has occurred; and inspection of the security fence and gates for signs of damage or disrepair.
2. Soil Confirmation Sampling – confirmation that soil impacted by historical releases to the Unlined Well has been remediated to concentrations at or below standards determined to be protective of both human health and groundwater.
3. Operations Closeout – provisions for removal of the RCRA cap, SVE system components, and unneeded vapor monitoring wells; and reuse of the Unlined Well area.

The following subsections focus on the soil remediation and confirmation sampling requirements detailed in the CAP.

### 3.2.1 Soil Action Levels

The following concentrations in surface soils (maximum or 95% upper confidence level [UCL] of the mean, 0-12 ft bgs) at the Unlined Well were determined in the CAP to be sufficient to ensure protection of current and potential future human receptors:

- PCE: 16,000 micrograms per kilogram (μg/kg)
- 1,1-DCE: 180 μg/kg
- 1,1,1-TCA: 1,400,000 μg/kg

The following concentrations in surface and subsurface soils (based on an average concentration, 0-130 ft bgs) at the Unlined Well were determined to be protective of groundwater:

- 1,1-DCE: 60 μg/kg
- 1,1,1-TCA: 2,000 μg/kg
- PCE: 60 μg/kg

Additionally, the following concentrations of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene (additional soil contaminants analyzed for in soil and pore gas) were determined to be protective of current and future human receptors (no levels protective of groundwater for these analytes are currently available either through EPA Region 6 or NMED):

- 1,2,4-trimethylbenzene: 52,000 μg/kg
- 1,3,5-trimethylbenzene: 21,000 μg/kg

### *3.2.2 Soil and Pore Gas Confirmation Sampling Design*

The following soil sampling and analysis program was implemented in 2003 to confirm that soil cleanup levels have been met for the Unlined Well (per Vol. III, Section 6.3.2 of the 2000 post-closure care permit application; complete details provided in Appendix B of this application):

- Three soil borings within 10 ft of the SVE well were completed to approximately 120 ft bgs (Appendix B, Figures B-1 through B-4).

- Soil samples were collected at nine depths at each location (3, 6, 9, 12, 33, 57, 77, 97, and 117 ft bgs) and analyzed using EPA Method SE5035/SW8260B (low-level volatile organic compounds [VOCs]).

- Surface soil (3, 6, 9, and 12 ft bgs) analytical results were used for comparison to surface soil cleanup levels determined to be protective of human health.

- Five vapor probes (referred to as vapor monitoring points [VMPs]) were installed in each boring at 118, 98, 78, 58, and 38 ft bgs and were analyzed for 1,1-DCE, 1,1,1-TCA, PCE, 1,2,4-trimethylbenzene, and 1,3,5- trimethylbenzene.

- Measured pore gas concentrations in units of milligrams per cubic meter ($mg/m^3$) were converted to residual soil concentrations in units of μg/kg (as specified in Vol. III, Section 5.3.2 of the 2000 post-closure care permit application; calculations presented in Appendix B of this application).

- Soil sample analytical results from all nine depths and calculated residual soil concentrations based on pore gas analytical results (whichever was greater for a given location and depth) were used for comparison to cleanup levels determined to be protective of groundwater.

- Duplicate soil samples from each depth at each location were collected for field screening of VOCs using a photoionization detector (PID). Results of the VOC field screening were used to determine if additional vapor probes should be installed. The PID reading used as the basis for determining additional VMPs was 10 parts per million by volume (ppmv). All PID readings of the duplicate soil samples were equal to or less than 0.2 ppmv, significantly lower than action level of 10 ppmv for additional VMPs. Thus, no additional vapor probes were required based on the PID field screening.

### *3.2.3 Soil Sample and Soil Vapor Analytical Results*

The analytical results for surface (0-12 ft bgs) and subsurface (33-117 ft bgs) soil samples are presented in Table 2. Detection limits for all analytes ranged from 4.6 to 5.4 μg/kg, one to six orders of magnitude less than soil action levels. Of the 27 samples taken in soil, 26 were non-detect for all analytes; PCE was detected in one sample (11.00 μg/kg at SVP-1-33, 33 ft bgs).

The analytical results for subsurface soil vapor samples are presented in Table 3. The detection limit for all analytes was 0.10 mg/m$^3$. 1,1-DCE was detected in 7 of 16 samples at concentrations ranging from 0.28 to 2.2 mg/m$^3$. 1,1,1-TCA was detected in 2 of 16 samples (0.28 and 2.2 mg/m$^3$). PCE was detected in 15 of 16 samples at concentrations ranging from 0.17 to 4.10 mg/m$^3$. There were no detections of either 1,2,4-trimethylbenzene or 1,3,5-trimethylbenzene in any of the soil vapor samples.

### *3.2.4 Comparison of Analytical Results to Action Levels*

All of the surface soil samples (0-12 ft bgs) were non-detect for all analytes (Table 2) and the detection limits were well below any of the soil action levels. The CAP committed to comparing action levels for the protection of human health to 95% UCLs of the mean for each of the chemicals of potential concern (COPCs); however, the statistics are not necessary or meaningful for demonstrating that concentrations of VOCs in the soil are below action levels because none of the COPCs were detected above detection limits (i.e., the data set had 100% non-detects).

The creation of the dataset combining soil matrix and soil vapor analytical results involved two steps:

1. Measured soil vapor concentrations in units of mg/m$^3$ were converted to residual soil concentrations in units of μg/kg (Appendix B provides full details of the conversions); and
2. The larger of the concentration measured in soil samples or the calculated residual soil concentration based on vapor sampling was conservatively chosen as the representative concentration at a given location and depth.

The CAP committed to comparing action levels protective of groundwater to the average of the representative concentrations; however, statistical averages are not meaningful representations of the data because of the high percentage of non-detects in the combined data sets. Rather, the maximum representative concentration is compared to the groundwater protection action level for each COPC (Tables 4, 5, and 6) and summarized below.

- 1,1-DCE (Table 4): 36 of the 42 soil matrix and soil vapor samples were non-detects; the maximum representative concentration of 2.7 μg/kg (based on a detection limit) is less than the groundwater protection action level of 60 μg/kg.
- 1,1,1-TCA (Table 5): 40 of the 42 soil matrix and soil vapor samples were non-detects; the maximum representative concentration of 2.7 μg/kg (based on a detection limit) is less than the groundwater protection action level of 2,000 μg/kg.
- PCE (Table 6): 27 of the 42 soil matrix and soil vapor samples were non-detects; the maximum representative concentration of 11.0 μg/kg (based on residual concentration) is less than the groundwater protection action level of 60 μg/kg.

### *3.3 NFA Recommendation*

The soil matrix and soil vapor sampling results confirm that soil COPC concentrations at the Unlined Well are below action levels deemed protective of both human health and groundwater. The Unlined Well, the original source of soil and groundwater contamination at the site, does not pose a potential threat to human health or the environment. The requirements of the 2000 CAP have been met, and a NFA decision is requested for the Unlined Well.

### *3.4 Request for Alternate Uses*

Given that corrective action is complete at the Unlined Well and NFA is appropriate for this area of the site, PNM is requesting:

1. Removal of the Unlined Well from the post-closure care permit for Person Generating Station;
2. Approval to remove the RCRA cap and the SVE well from the site; and
3. That all conditions of the current operating permit related to the Unlined Well are remanded such that this area can be turned to other uses.

# *4.0 Groundwater Post-Closure Care Plan*

[40 CFR 264, Subpart F]

This section describes the proposed groundwater post-closure care plan for the site. All groundwater activities are consolidated under this plan, including groundwater recovery and treatment, and groundwater monitoring (sampling and gauging).

The following subsections:

- Review the activities and requirements of the 2000 groundwater CAP and proposed changes;
- Review the conceptual model of groundwater contamination;
- Summarize the progress of shallow and deeper groundwater remediation;
- Review the definition of the point-of-compliance;
- Propose a process for demonstrating attainment of groundwater cleanup levels;
- Propose changes to the shallow groundwater recovery system;
- Propose a revised groundwater well network for extraction, sampling, and gauging; and
- Present protocols for groundwater sampling and gauging and operations and maintenance of the GWTS.

## *4.1 2000 Permit Groundwater Corrective Action Plan and Proposed Changes*

[40 CFR 270.14(b)(13), (c)(5) and (7); 264.100; 264.117(d), and 264.188(b)]

This section summarizes the major elements of the 2000 groundwater CAP and proposed changes, which are discussed in detail in relevant subsections. In this permit application, the CAP will not be referred to as such; rather these major elements will be detailed, along with proposed modifications, in this post-closure care plan.

### *4.1.1 Relationship to the CAD*

The CAD issued by NMED in 1991 provided requirements for both Phase I and Phase II of the CAP. These requirements specified that a proposal for a groundwater pumping and treatment system capable of capturing the plume be provided in a CMP. The CAD also specified the methods for determining the extent of the plume, and specified the contaminant concentrations which had to be met to conclude corrective action for shallow groundwater at the site.

In order to fulfill the requirements of the CAD, PNM installed a groundwater extraction and treatment system at the site to remediate the shallow groundwater. Remediation of potential source contamination found in vadose zone (unsaturated zone) soils was included in the CAP through installation and operation of a SVE system (see Section 3.0).

### *4.1.2 Groundwater Final Cleanup Levels and Attainment Demonstration*

[40 CFR 264.93; 264.94(a)]

EPA recommends (EPA, 2004) that regulators and facilities use the following three threshold criteria as general goals for final cleanup of groundwater:

1. Protect human health and the environment;
2. Achieve media (soil and groundwater) cleanup objectives; and
3. Control the source(s) of release to reduce or eliminate, to the extent practicable, further releases of hazardous waste or hazardous constituents that may pose a threat to human health and the environment.

PNM uses promulgated water quality standards as the final groundwater cleanup levels for the contaminants of concern for Person Generating Station (1,1-DCE, 1,1,1-TCA and PCE). These groundwater cleanup levels are the more stringent of either MCLs under the Safe Drinking Water Act or NMWQCC groundwater standards. The groundwater cleanup levels are 5 μg/L for 1,1-DCE, 60 μg/L for 1,1,1-TCA, and 5 μg/L for PCE (Table 7). No modifications to these cleanup levels are proposed.

Under the 2000 permit and 40 CFR §260.100, monitoring and corrective action must continue until all wells at, and downgradient from, the facility's point of compliance (PSMW-01R) have attained the final cleanup levels specified above for a period of three consecutive years. Compliance with groundwater cleanup levels is demonstrated by assessing contaminant concentration on an individual well basis.

The 2000 permit does not address shutdown of the GWTS and possible rebound of contaminant concentrations above the cleanup levels. While not specifically required by regulations governing groundwater monitoring and remediation, PNM is proposing to monitor "key wells" along the center and edges of the plume for possible rebound after the GWTS has been turned off. Once all wells have met groundwater cleanup standards for three consecutive years, a graduated shutdown process of the GWTS will commence and the key wells will be sampled semiannually to assess their rebound potential. One additional year of compliance will be required for these key wells while the GWTS is off. If concentrations continue to be below cleanup levels, PNM will apply for site closure. These proposed changes are discussed further in Section 4.4.2.

### *4.1.3 Point of Compliance and Monitoring Well Network*

The 2000 permit established a single point of compliance and identified plume, sentry, and background wells. Tables 8 and 9 list these wells for shallow and deeper groundwater, respectively. The 2000 permit also stipulated that compliance with cleanup levels must be demonstrated in all groundwater monitoring wells downgradient from the point of compliance. This definition of point of compliance is retained for this permit application.

### *4.1.4 Groundwater Recovery Well Network and Treatment System*

Eight groundwater recovery wells were specified in the 2000 permit. As a result of several site conditions, including a drop in the water table, recovery wells PSMW-25, and PSMW-26 are non-functional. Recovery well EW-5 is no longer functional due to a collapsed well casing. Elimination of these recovery wells is proposed. To compensate for the loss of these wells, recovery well EW-3 will be operated at a higher flow rate, which was identified as part of a pump test conducted at EW-3 (METRIC, 2005). Due to changes to the GWTS in 2003, an activated carbon system, rather than the air stripper/carbon system used under the 2000 permit, is now used. These changes are described in detail in Sections 4.3.1 and 4.4.3.

## *4.2 Conceptual Site Model of Groundwater Contamination*

The conceptual site model summarizes the current understanding of how contaminants were released into the subsurface and their subsequent migration to other areas. Several detailed site investigations have been performed at the site since discovery of the release from the Unlined Well in October 1983 (METRIC, 1993; Engineering-Science, Inc., 1994; Parsons Engineering Science, Inc., October 1996). Important aspects of the conceptual model include the location of the contaminant release, contaminant concentrations, and hydrogeological factors including depth to groundwater and groundwater flow rate and direction.

### *4.2.1 Groundwater Contaminants*

[40 CFR 264.93; 264.94(a); 264.100(a)(1),(2)]

The primary groundwater contaminants identified by previous sampling activities at the site are three VOCs: 1,1,1-TCA, PCE, and 1,1-DCE. Secondary contaminants which have not been consistently detected above applicable EPA or the NMWQCC standards include chloroform and 1,1-dichloroethane. As stated in Section 1.2.1.2, groundwater cleanup levels for the primary contaminants are 60 µg/L for 1,1-TCA, 5 µg/L for 1,1-DCE, and 5 µg/L for PCE. These groundwater cleanup levels reflect the more conservative of either the EPA or the NMWQCC standard.

PNM is confident that pure forms of the contaminants, known as dense non-aqueous phase liquids (DNAPL), are not present in soils at the Unlined Well. This position has been supported by historical documents (METRIC, 1993; Parsons Engineering Science, Inc., 1994), and continues to be supported by groundwater and soil data described for closure of the SVE system at the Unlined Well (Section 3.2). Several important observations support this conclusion:

1. Pure PCE or 1,1,1-TCA were never placed in the Unlined Well. The Unlined Well was used to contain wash waters with diluted concentrations of oils and chlorinated solvents.
2. The maximum concentration of PCE in soil directly beneath the Unlined Well (2,127 mg/kg) is much less than would be expected in PCE-saturated soils (>100,000 mg/kg).
3. A maximum concentration of PCE in groundwater (2,741 μg/L) was measured in PSMW-01 in October 1988. Five years later, in August 1993, and prior to any groundwater pumping, the maximum concentration of PCE in PSMW-01 had decreased to 350 μg/L. In October 2006, the concentration at PSMW-01R (a replacement well for PSMW-01) was 5.0 μg/L. This concentration would have remained high if a continual source of DNAPL was present in the source area.
4. Successful SVE operation in the source area removed over 1,400 pounds of VOCs with virtually no rebound of PCE vapors after a 247-day shutdown period of equilibration. This strongly indicates that there are no DNAPL in the soil.

### *4.2.2 Groundwater Transport*

[40 CFR 270.14(b)(19)(ix) and (c)(2),(3); 264.31; 264.97(c)]

Groundwater at the site has two zones: shallow and deeper. The shallow aquifer at the site, located at a depth of approximately 120 ft bgs, is defined as the upper 50 ft of the water bearing zone. This zone is unconfined, and consists of silty sand to gravel. In general, the elevation of the water table surface has dropped approximately 1 ft per year. The groundwater in deeper zones (200 to 900 ft bgs) is likely to be under confined conditions, and is referred to as the deeper aquifer.

As described in Section 1.2, the source of these contaminants is the Unlined Well. Contaminants released into the Unlined Well migrated approximately 120 ft to shallow groundwater as both a liquid and vapor (METRIC, 1993). Within the shallow aquifer, contaminants were carried by a generally eastward groundwater flow under a groundwater gradient of approximately 0.006 ft/ft (METRIC, 1993), with groundwater flow rates (based on local permeability) ranging between 1 and 2500 ft/year. Figure 6 shows the locations of the shallow and deeper groundwater monitoring well networks according to the 2000 permit. Tables 8 and 9 summarize the sampling and gauging requirements for the shallow and deeper groundwater wells, respectively. Well construction diagrams and well completion information are provided in Appendix C for those wells proposed to be retained in the network. All wells were constructed in accordance with the requirements of 40 CFR 264.97(c).

### 4.2.3 Potential Receptors

There are no drinking water wells within a 1-mi radius of the site (OSE, 2007). Two irrigation wells are located to the northeast of and generally downgradient from, the Person Generating Station. These wells, located almost 1 mi to the northeast of the site, are used for irrigation at the University of New Mexico Championship Golf Course. These wells draw from the deeper portions of the aquifer and do not appear to influence the direction of deeper groundwater flow (METRIC, 1992).

## 4.3 Summary of Groundwater Remediation

[40 CFR 270.14(c)(4)]

This section presents a description of the status of the shallow and deeper groundwater remediation, including analysis of the shallow groundwater remediation system, the results of the semiannual sampling events, and progress achieved since groundwater remediation activities began.

### 4.3.1 Shallow Groundwater Remediation

The shallow GWTS was installed as part of corrective action implementation at Person Generating Station in 1995. Currently, the shallow GWTS uses activated carbon to treat approximately 60 gallons per minute (gpm) of groundwater from five groundwater recovery wells (VEW, EW-1, EW-2, EW-3, and EW-4). Figure 7 presents the process flow diagram for the GWTS. Treated water is discharged to the UNM Championship Golf Course, where it is used for irrigation. Prior to modification of the GWTS in 2002 (NMED, 2002), the primary treatment involved air stripping followed by activated carbon treatment.

In 1993, the total estimated extent of the VOC plume in the shallow aquifer was 36 acres, with dissolved PCE and 1,1-DCE plumes extending to the east approximately 2,400 ft from the Unlined Well. Remediation efforts have substantially reduced the extent of these plumes. Prior to the initiation of groundwater recovery and treatment in 1995, the maximum detected concentrations of contaminants were 10,700 μg/L of 1,1,1-TCA, 1,600 μg/L of 1,1-DCE, and 2,700 μg/L of PCE. Contaminant migration in the shallow groundwater has been predominantly in the horizontal, eastward direction, and there has been limited vertical migration to deeper groundwater zones (Parsons Engineering Science, Inc., 1995). The presence of sporadic, trace (PCE < 5 μ/L and 1,1-DCE < 15 μ/L) concentrations of VOCs in these zones may have been due to Person Generating Station groundwater production wells, which may have provided vertical migration pathways. The production wells were plugged and abandoned in 1993.

Using semiannual sampling data (provided on CD as Attachment 4), historical concentrations of contaminants measured for shallow groundwater monitoring wells are presented in Appendix C as Figures C-1 through C-34. These time-series graphs uniformly indicate substantial reductions in the groundwater concentrations of the primary contaminants and provide a useful summary of remediation achievements. From the graphs it can be seen that the main contaminants are 1,1-DCE and PCE. As shown in the plots, all contaminant concentrations in the monitoring wells (exclusive of PSMW-01/01R, PSMW-08A, PSMW-10, PSMW-13A, and PSMW-24/EW-5) have been below groundwater cleanup levels for at least three consecutive years.

The progress of shallow groundwater remediation at the site can be assessed by analyzing the historical data for PCE, 1,1-DCE, and 1,1,1-TCA. Table 10 presents a comparison of contaminant groundwater concentrations in the shallow wells for two sampling dates: October 1997 and October 2006. As demonstrated by this table, significant progress has been made in reducing contaminant concentrations, with numerous wells now showing concentrations below detection limits (and below applicable groundwater cleanup levels) for these contaminants.

The data from Table 10 are presented in the form of isoconcentration contour plots for the primary contaminants. The 1,1-DCE data for 1997 and 2006 are plotted on Figures 8 and 9, respectively. The PCE data for 1997 and 2006 are plotted on Figures 10 and 11, respectively. These plots also indicate substantial reductions in the shallow groundwater plume size and contaminant concentrations during the period of 1997 to 2006.

The data graphs in Appendix C show historical trends in contaminant concentrations. Of particular interest are the trends of recovery wells VEW (Figure C-35), EW-1 (Figure C-36), EW-4 (Figure C-13), and EW-5 (Figure C-21). Contaminant data from these wells show exponentially decreasing concentrations, characteristic of pump and treat systems when the source of contamination (e.g., the Unlined Well) is removed (1997). Generally decreasing water levels at the site may also have contributed to a decrease in groundwater contaminant concentrations. Measured concentrations in recovery wells VEW and EW-1 fell below groundwater cleanup levels in 2000, while EW-4 fell below cleanup levels in 2004. Recovery well EW-5 has shown substantial decreases in concentrations, with 1,1-DCE and PCE concentrations falling below 10 μg/L in April 2002, though as of October 2006 PCE concentrations were still slightly above the groundwater cleanup level of 5 μg/L.

In order to address whether the groundwater remediation has reached asymptotic concentrations of contaminants, a point at which further remediation is not effective (Gilbert, 1987), an analysis of monitoring wells located in the center of the plume was performed. Based on the location of the plumes on Figures 8, 9, 10, and 11, monitoring wells PSMW-01R, PSMW-10, and PSMW-22 are located on the central longitudinal plume axis. The statistical significance of the observed time-trends of PCE concentrations were evaluated using the Mann-Kendall test (Appendix C) which is a trend estimator specifically recommended for environmental data (Gilbert, 1987; EPA, 2000). The results show decreasing trends in all three wells. Of these wells, PSMW-01R and PSMW-10 have not attained the groundwater cleanup levels.

### 4.3.2 Deeper Groundwater Remediation

This section presents a description of the status of the deeper groundwater contaminant plume. The terms “deep” and “deeper” describe the deeper portions (200 to 900 ft bgs) of the aquifer underlying the Person Generating Station. PNM is currently performing monitored natural attenuation in the deeper groundwater as part of the 2000 post-closure care permit due to the low concentrations of contaminants.

Historical data collected from deep well clusters indicate that site-related contaminants were present at depths as deep as 800 feet bgs. Data from October 1997 show low concentrations of PCE and 1,1-DCE detected at 500, 600, and 800 ft bgs. As shown in Table 11, considerable progress has been achieved in reducing contaminant concentrations, with all but three deeper groundwater monitoring wells showing concentrations below detection limits as of October 2006 (and all are below applicable groundwater cleanup levels). Isoconcentration contour plots using data from Table 11 for the primary contaminants are included as Figures 12 (1,1-DCE) and 13 (PCE).

Plots of historical deep groundwater concentration data versus time, presented in Appendix C as Figures C-39 through C-53, provide a useful summary of contamination trends in this groundwater zone. As shown in the plots, all deeper groundwater monitoring wells have been below the groundwater cleanup levels for at least three consecutive years. Therefore, no deeper groundwater wells are proposed for further monitoring.

## 4.4 Post-Closure Care Plan Groundwater Remediation

[40 CFR 264.97(d),(e)]

This post-closure care plan for groundwater remediation reflects the substantial remediation of soil and groundwater that has been achieved at the site. Achieving soil cleanup levels at the Unlined Well (Section 3.2) removed the source area for groundwater contamination. Specifically, soil remediation is complete and is no longer included in the CAP (Section 3.0); the CAP addresses only groundwater. Based on the remediation progress to date, the remaining task is to achieve the groundwater cleanup objectives for the site.

To attain the groundwater cleanup objectives, this groundwater post-closure care plan proposes:

- Continued operation of the GWTS for shallow groundwater until compliance with cleanup levels is attained for all wells downgradient of the compliance well for a period of three consecutive years (40 CFR §260.100);
- Suspension of semiannual sampling in those wells that have already attained the required three years of compliance;
- Once all wells have attained three years of compliance, initiating a phased shutdown of the GWTS, which will include sampling of key wells (see Tables 12 and 13); and
- Defining a process and timeframe for a technical feasibility application if a well cannot attain or maintain compliance for the required three years or for a one year period (spanned by two semiannual sampling events) after GWTS shutdown.

### *4.4.1 Point of Compliance and Downgradient Wells*

[40 CFR 270.14(c)(3),(5),(7); 264.95; 264.100(a)(3)]

The point of compliance for groundwater is where a facility should monitor groundwater quality and/or achieve specified cleanup levels to meet facility-specific goals (EPA, 2004). The 2000 post-closure care permit specified a single point of compliance (PSMW-01R) [Permit Condition IV.A.2.a.1.(c)], but then stated that downgradient wells should also attain the cleanup levels. PNM is proposing that this definition be retained in the renewed post-closure care permit.

Currently, PNM is required to sample 38 shallow wells (8 of which are extraction wells) and 15 deeper wells using Method 8021 Halo (Tables 8 and 9). Of these 38 wells, 34 of the shallow and all of the deeper wells have met the 2000 post-closure care permit conditions of three consecutive years below applicable groundwater cleanup levels. Because of the attainment of compliance in many wells, PNM is proposing to conduct semiannual sampling and gauging only at those monitoring wells that have not attained three years of compliance. Sampling and gauging would also be conducted semiannually at the five remaining functional extraction wells.

As of the date of this application, four monitoring wells have not yet attained three consecutive years of compliance are PSMW-01R, PSMW-08A, PSMW-10, and PSMW-13A.

Once these monitoring wells have attained three years of compliance, a phased shutdown of the GWTS will begin and key wells will be sampled to determine if concentrations of primary contaminants rebound above cleanup levels. Table 12 lists all of the site wells and compares the existing permit monitoring requirements with proposed monitoring. Table 13 lists the monitoring wells that (as of the date of this application) have not attained three years below cleanup levels and summarizes key wells that will be sampled during the phased GWTS shutdown.

The key wells are:

- PSMW-01R
- PSMW-07R (upgradient background well sampled once per year for Appendix IX constituents only)
- PSMW-08A
- PSMW-10
- PSMW-13A
- PSMW-17
- PSMW-18
- PSMW-22
- PSMW-27
- VEW (Extraction Well)
- EW-1 (Extraction Well)
- EW-2 (Extraction Well)
- EW-3 (Extraction Well)
- EW-4 (Extraction Well)

Figure 14 presents a map of these key wells. Additional details of proposed changes to the shallow groundwater post-closure care plan are provided in Sections 4.4.2 and 4.4.3.

### *4.4.2 Demonstrating Attainment of Groundwater Cleanup Levels*

[40 CFR 264.117; 264.96(c); 264.100(a)(4) and (f)]

To demonstrate attainment of groundwater cleanup levels, groundwater contaminant concentrations in the point of compliance well (PSMW-01R) and downgradient wells must fall below the groundwater cleanup levels and maintain concentrations below those levels for three consecutive years. For this post-closure care permit application, PNM proposes to continue sampling of only those wells that have not yet attained three consecutive years of compliance at the time of permit issuance (four monitoring wells as of this application date). Once all wells meet the three-year requirement, a phased process for shutdown of the GWTS will begin, during which key wells will be monitored to determine if contaminant concentrations rebound above cleanup levels. The proposed process is described below and presented graphically in Figure 15 in the form of a decision flow chart.

The following overall process being proposed as the path to site closure:

1. At the date of permit issuance by NMED, suspension of sampling and gauging in all wells that have already attained the three consecutive years of compliance set forth by the 2000 post-closure care permit.
2. While the GTWS continues to operate, continued semiannual sampling of those wells not meeting the conditions of #1 until three consecutive years (six semiannual sampling events) of compliance have been achieved, including any progress made under the current 2000 permit. As of the date of this permit application, four functional wells have not met this criterion. If any of the remaining wells do not attain compliance within three additional years, PNM may elect to prepare a technical infeasibility demonstration that makes use of EPA guidance to show an asymptotic condition is present and that improvement using groundwater pumping is unlikely. Moreover, with NMED concurrence, PNM may proceed with the phased shutdown of the GWTS to demonstrate that significant rebound above the asymptotic condition at these wells does not occur, and additionally, that other key wells do not rebound above cleanup levels.
3. Following attainment of three years of compliance in all wells, initiate the shutdown of the GWTS, followed by semiannual gauging and sampling of key wells (representative of the former plume) until one additional year (two semiannual sampling events) of compliance under conditions of GWTS shutdown is achieved. The list of key wells is presented in Table 13, along with the rationale for their selection. If concentrations in key wells rebound above cleanup levels, the system will be operated for another six-month period, followed by sampling and GWTS shutdown if concentrations have fallen below cleanup levels. If within three calendar years of the date GWTS shutdown was first initiated a well does not achieve the one additional year of compliance (two consecutive semiannual sampling events), PNM may elect to prepare a technical infeasibility demonstration or propose monitored natural attenuation.

### *4.4.3 Shallow Groundwater Recovery System*

[40 CFR 270.14(c)(5) and (7); 264.97(c); 264.100(a)(3) and (d)]

PNM will continue to operate the groundwater recovery and treatment system subject to the provisions of Section 4.4.2, which proposes a phased shutdown of the GWTS following attainment of the compliance conditions, and eventually shutdown of the system if all conditions are met. Changes in the system since the last permit are described below.

Due to continued drop in local groundwater table, recovery wells PSMW-25 and PSMW-26 have not been able to function since April of 2004. In 2003, the average groundwater extraction rates from PSMW-25 and PSMW-26 were 0.15 gpm and 0.25 gpm, respectively. Prior to April 2004, VOC concentrations had been below applicable groundwater cleanup levels in these extraction wells since 1998. These wells will remain off and will not be gauged or sampled.

EW-5 was taken out of service in November 2003 due to a collapsed well casing. A pump test conducted in EW-3 in May 2004 and subsequent data analysis showed that EW-3 operating at an increased pumping rate can contain and remediate the remaining downgradient VOC groundwater plume at the site (METRIC, 2005). Consequently, EW-5 will remain off and will not be gauged or sampled. Groundwater extraction will continue in five recovery wells: VEW, EW-1, EW-2, EW-3, and EW-4. The extraction flow rate in EW-3 will be maintained at a level sufficient to provide capture in downgradient areas, as shown in the 2004 pump test (METRIC, 2005). In 2006, the average groundwater extraction rates (in parentheses) were: VEW (2.2 gpm), EW-1 (1.4 gpm), EW-2 (5 gpm), EW-3 (39 gpm), EW-4 (13.5 gpm), for a total average flow rate of approximately 61 gpm.

#### *Other Permits*

Treated groundwater is discharged to two University of New Mexico Championship Golf Course irrigation lagoons under a groundwater discharge permit (DP-1006) from the Ground Water Protection and Remediation Bureau of the NMED. The permit allows the discharge of up to 144,000 gallons per day of treated groundwater. Cleanup levels for PCE, 1,1-DCE, and 1,1,1-TCA, are 5 µg/L , 5 µg/L, and 60 µg/L, respectively. Monthly sample collection includes: influent; the effluent from the two carbon units; and water from the two irrigation lagoons. All samples are currently analyzed by EPA Method 8021; however, PNM will propose to the Groundwater Protection Bureau that this method be changed to EPA Method 8260. The monthly discharge volume is calculated from totalizer readings. Results are reported to the NMED semiannually.

An air discharge permit was obtained from the City of Albuquerque for the SVE system and two air stripper units. This permit was identified as “1353 Air Stripping/Vapor Extraction and Treatment System”. This permit was canceled in October 2006 because of previous removal of the air stripper from the GWTS and the discontinuance/removal of the SVE at the Unlined Well.

### *4.4.4 Groundwater Treatment System Operations and Maintenance*

[40 CFR 270.30(e) and (l)(1),(2)]

PNM will ensure that the GWTS is properly operated and maintained to achieve the objectives of the post-closure care plan. PNM will report to NMED any planned physical alterations or additions to the facility or GWTS, including any alterations that may result in noncompliance.

A complete O&M manual for the Person Generating Station (Parsons Engineering Science, Inc., August 1996) was prepared to provide information on the proper operation, maintenance, and monitoring of the shallow GWTS; revision 2 is the current version of the O&M manual used for Person Generating Station (Parsons, 2003). This O&M manual provides a detailed description of the GWTS as well as the startup and shutdown procedures. Other elements of the O&M manual include system maintenance and repairs, a contingency plan, and sampling and analysis requirements.

### *O&M Procedures and Schedules*

All functional checks of the GWTS are performed by personnel from PNM's Reeves Generating Station during periodic visits to the site, or during unscheduled visits needed to re-start the system. Routine monitoring of the GWTS includes daily checks on operating parameters and sampling of water influent, between, and effluent of the GAC units. In general, all system checks and data recording are as described in Parsons, 2003. Weekly flow readings are taken from GWTS influent, the influent surge tank, the effluent surge tank. This data is then used to calculate flow rates to ensure that the rate is within the recommended flow range for each well. Monthly data are reported to the State Engineer's Office. Pressure readings and pressure drops are also recorded weekly.

### *Maintenance and Repairs*

Routine monitoring of the GWTS provides information needed to schedule preventative maintenance and to detect conditions that require repair or replacement. Maintenance procedures for the strainer, equalization tank, influent tank, pump, bag filter, GAC unit, and effluent surge tank are described fully in the manual.

### *Treatment System Sampling Procedures*

Sampling ports are located throughout the system to allow for collection and analysis of samples to characterize influent and effluent water, and to verify the level of treatment between the GAC units. The objectives of sampling and analysis are to ensure that groundwater cleanup levels are achieved and to provide operational data needed for routine system maintenance.

Specific sampling collection, analysis, evaluation, and documentation procedures presented in the O&M manual were developed in accordance with the Discharge Plan Approval (Appendix C of Parsons, May 2003). Samples will be collected in discrete events to provide a data set representative of actual operating conditions at a particular point in time.

## *4.4.5 Deeper Groundwater Monitored Natural Attenuation*

All deeper groundwater wells have attained three years of compliance (see Section 4.3.2). Accordingly, monitored natural attenuation will not be necessary for these wells, and sampling and gauging of these wells will be suspended.

## *4.4.6 Voluntary Use Restrictions*

[40 CFR 264.117(a)(1)]

To further minimize the potential for adverse health or environmental impacts during corrective actions, PNM proposes to voluntarily implement two specific groundwater use restrictions:

1. The first restriction will prevent the siting of any new production wells within 1,000 ft of the shallow groundwater plume that are screened within the upper 100 ft of the saturated zone. This restriction will remain in effect until concentrations of all COPCs at all compliance program monitoring wells have been reduced to levels that would not pose a significant risk to industrial receptors if extracted groundwater is used for industrial purposes.
2. The second restriction will prevent the siting of any new production well within 200 ft of the shallow groundwater plume, regardless of the depth of the screened interval. This restriction is in accordance with New Mexico Drinking Water Supply Regulation Title 20, Chapter 7, Part 1, Subpart 109.C.2. This restriction will remain in effect until the mean concentrations of all plume wells has been reduced to groundwater cleanup levels.

These groundwater well restrictions will not apply to groundwater recovery and monitoring wells intended for remediation of the shallow groundwater. These restrictions will be noted in the property plat for Person Generating Station which shall be filed with the Bernalillo County Zoning Division, and in the property deed if land transfers to another owner.

## *4.5 Groundwater Monitoring*

[40 CFR 264.97(d),(e),(f); 264.98(e); 264.100(g)]

The post-closure groundwater monitoring program at the Person Generating Station site will consist of groundwater sampling and gauging in order to: (1) measure groundwater flow direction and calculate groundwater flow rates, and (2) assess the progress towards attainment of groundwater cleanup levels through groundwater sampling and analysis, as described in Section 4.3.4. Results of the post-closure care semiannual sampling will be reported to the NMED on an annual basis.

### *4.5.1 Sampling and Analysis Plan*

#### *Sampling Schedule*

As described in Sections 4.4.1 and 4.4.2, monitoring wells that have not attained three consecutive years of compliance with cleanup levels (as of the date of NMED permit renewal) will be gauged and sampled on a semiannual basis until they attain three consecutive years of compliance. As of the date of this permit application, four wells have not attained three years. Operating groundwater extraction wells will also be sampled semiannually, although the extraction wells have already attained three years of compliance. Once all monitoring wells have attained three consecutive years of compliance, the GWTS system will be turned off, and the key wells, shown in Figure 14 and listed in Table 13, will be sampled to determine if rebound above the cleanup levels occurs. In addition, a background monitoring well, PSMW-07R, will be sampled annually for Appendix IX constituents prior to, and during, the phased shutdown process.

### *Sample Collection*

Sample collection in most monitoring wells, with the exception of the extraction wells, is conducted using dedicated installed bladder pumps; however, because of a general decrease in the site water table, several monitoring wells require hand bailing. The dedicated pumps use compressed nitrogen gas to squeeze the bladder and force groundwater up to the surface. Two monitoring wells, PSMW-01B and PSMW-13B, have both a purge pump and sample pump installed. All other pump wells use only one bladder pump for purging and sampling. Pneumatic controllers are used to control the pressure and refill/discharge cycles.

For high yielding wells, field measurements of pH and specific conductivity shall be taken during purging. Stability is achieved when three consecutive measurements are within 0.1 pH units for pH, and within 20 micromhos (μmhos) for conductivity at the calculated purge volume. Due to exposure of the sampling lines to ambient temperatures, temperature is not used as an indication of stability. The final three measurements of these parameters shall be recorded in the field notes as the official field measurements. The official field measurements shall be recorded to the 0.01 pH unit and the pH meter must be accurate to the 0.01 pH unit. The conductivity measurements must be recorded to the nearest 10 μmhos and the conductivity meter must be accurate to the 10 μmhos. During purging, the discharge rate of the wells should not exceed the rate used during development. In addition, the purge rate must not be so fast that the recharging water rushes turbulently into the well, creating an audible noise.

Low yielding wells may be evacuated to dryness once. As soon as the well recovers sufficiently to yield an adequate sample volume, samples should be collected and containerized in the order of the parameters' volatilization sensitivity. The well should be retested for pH and specific conductance after sampling as a measure of purging efficiency, and as a check on the stability of the water samples over time. Whenever full recovery exceeds two hours, the sample should be extracted as soon as sufficient volume is available for a sample for each parameter. At no time, should the well be pumped to dryness if the recharge rate causes the formation water to vigorously cascade down the sides of the screen and cause an accelerated loss of volatiles.

All monitoring well purge water shall be stored in containers until discharged into the influent of the Person Generating Station GWTS. The required sample volumes, preservatives, container types, and holding times shall follow appropriate EPA test method requirements. Water samples will not be filtered. Sample containers for analysis of volatiles will be filled to eliminate headspace.

The majority of groundwater samples will be analyzed for volatile chlorinated aliphatic hydrocarbons by EPA Method 8260. All samples to be analyzed by this method will be preserved using hydrochloric acid and will be stored and transported at a maximum of 4 degrees centigrade. Samples will be packaged in a manner that prevents breakage. Packaging will prevent direct contact between sample containers.

The chain-of-custody (COC) record shall ensure that the samples are not left unattended unless they are in a secure, locked location, with restricted access. Only authorized people shall have access to the samples. The COC provides the necessary information to the laboratory (e.g., identification of sample, analyses requested, preservatives used, etc.). The COC shall include the following:

- Facility name;
- Sample identification number (same as well identification number, duplicates will be given a different identification number);
- Date and time of collection;
- Number of containers and analyses required (e.g., VOCs, total metals);
- Preservatives used or required;
- Sample container temperatures or presence of ice in shipping container upon opening at the laboratory;
- Signature, date, and time of receipt of collector and all person(s) in the chain of possession; and
- Laboratory personnel statement of the condition of seals at time of receipt at laboratory.

### *Analytical Requirements*

All groundwater samples will be analyzed for VOCs using EPA Method 8260. In addition, samples from well PSMW-07R (the background well) will be analyzed annually for all constituents defined in 40 CFR 264 Appendix IX to demonstrate that new contaminants are not impacting the groundwater from upgradient sources.

### *Data Quality*

Field Quality Assessment/Quality Control (QA/QC) samples shall be routinely collected and reported to ensure that the groundwater samples are representative of the groundwater quality, and to ensure that cross-contamination has not occurred.

The selected analytical laboratory shall prepare a minimum of one trip blank for each sampling event. The trip blank shall be prepared by filling one 40 milliliter (ml) vial with deionized, distilled water. The container must be filled to eliminate headspace. The deionized, distilled water must be free of contamination. The trip blank shall be transported from the laboratory to the sampling location and returned to the laboratory in a manner identical to the handling procedure used for the monitoring well samples. The trip blanks shall be analyzed for volatile organic constituents using EPA Method 8260. Trip blank analyses shall not be used to correct the groundwater sample data. Trip blank contamination can be attributed to improperly cleaned containers, contaminated deionized, distilled water, cross-contamination during sample transportation, or at the laboratory. If contamination is detected in a trip blank, the probable cause of the contamination will be determined as quickly as possible. If necessary, PNM or the laboratory shall modify the sampling and/or laboratory procedures in question to correct potential problems.

For each sampling event, at least one set of duplicate samples shall be collected per 10 wells. The duplicate volatile sample shall be collected immediately after the primary volatile sample, and assigned a unique sample identification number. Duplicate samples shall be analyzed for the same parameters as the primary groundwater samples. In addition, they shall be handled in a manner identical to the handling procedures used for the primary groundwater samples. Duplicate sample analyses shall not be used to correct the primary groundwater sample data.

Before and after the daily sampling event, a calibration check using the manufacturer’s directions and known standards shall be performed for the pH/conductivity meter and noted in the instrument logbook. The instrument manufacturer’s procedures for calibration shall be used, and any deviations, problems, and repairs shall be noted in the instrument logbook. The batteries shall be tested prior to use. If the instrument provides unstable readings, the batteries shall be replaced. The manufacturer’s procedures for cleaning and storage of the equipment shall be used and any deviations, or problems shall be noted in the instrument logbook.

PNM shall ensure that the laboratory performing the sample analyses adheres to QA/QC procedures and methods described in EPA (1986), the most recent edition of SW-846, or other EPA-approved laboratory QA/QC procedures. The purpose of the laboratory QA/QC program is to ensure the validity and reliability of the laboratory data and shall include the following:

- Use of EPA acceptable sample preparation and analytical methods.
- Calibration of laboratory instruments to within acceptable limits according to EPA or manufacturer’s specifications. Reference standards shall be used when necessary.
- Periodic inspection, maintenance, and servicing of laboratory instruments and equipment.
- Periodic training, testing, and evaluation of laboratory personnel to ensure accurate performance.

- The use of reference standards and QC samples (e.g., checks, spikes, laboratory blanks, duplicates, splits) as necessary to determine the accuracy and precision of procedures, instruments, and operators, as well as the identification of potential interference by the sample matrix.
- QA/QC samples shall not to be used to correct data.
- The use of adequate statistical procedures (e.g., QC charts) to monitor the precision and accuracy of the data, and to establish acceptable confidence limits.
- The use of the appropriate percentage of the reference standards, spiked standards, blanks and split samples based on EPA standards.
- If an alternative method for analysis is used, split samples shall be run with another laboratory for comparison purposes, and shall be included with the laboratory data.
- Review of results to identify and correct problems within the measurement system (e.g., instrumentation problems, inadequate operator training, inaccurate measurement methodologies, etc.).
- Documenting the performance of systems and operators.
- Documenting any deviation from SW-846 or other EPA-approved procedures (latest editions).
- Use of acceptable sample identification and, as necessary, formal chain-of-custody procedures in the laboratory.
- Maintenance and storage of complete records, charts, and logs of all pertinent laboratory calibration, analytical, and QC activities and data.
- Ensure all data outputs are presented in their prescribed format. The following information shall be provided for each parameter and included on the raw laboratory data sheets for each sampling event: sample identification number; detection limit; percent recovery; surrogate standards; date that sample was collected; date that sample was received by laboratory; date that sample was extracted, if applicable; and date that sample was analyzed.
- Laboratory logbooks shall include the following information:
- Observation of headspace in any sample received for volatile analysis.
- Results for all QA/QC samples.
- Time, date, and name of person for each processing step.
- Sample preparation technique.
- Instrumental methods.
- The actual holding time information.

- Laboratory sample identification number (if different from field identification number).
- Analyses to be performed.

### *4.5.2 Groundwater Gauging*

Groundwater gauging will consist of water elevation measurements in all wells in which a groundwater sample is collected. Water elevation measurements shall be taken on all monitoring wells prior to sampling. However, since the primary indicators of stability are pH and conductivity, and, historically, water levels have changed very little over the duration of a typical sampling event, it is unnecessary to take water level measurements within 24 hours prior to sampling any monitoring well. Therefore, water levels may be measured up to a month prior to sampling a monitoring well. These data will be used to generate water level contour maps and to calculate monitoring well approximate purge volumes.

All measurements shall be made from a visibly marked surveyed reference point on the well casing rim. The elevation of the reference point shall be measured to within 0.01 ft with respect to mean sea level by a professional land surveyor. The surveyed elevations and the materials of construction for the measuring devices shall be recorded in the field notes, and included in the facility operating record.

An electronic sounder will be used to measure monitoring well water levels. The depth to water is determined by the sounding reading taken at the surveyed point on the well casing rim. The depth to water measurement shall be subtracted from the elevation of the surveyed point in order to determine the water elevation measurement. All water elevation measurements shall be accurate to the nearest 0.01 ft and recorded to the nearest 0.01 ft.

If PNM suspects the presence of any light or dense immiscible layers in a monitoring well due to visible evidence or significant increases in dissolved contaminants, the guidelines in EPA (1986) shall be followed for determining the presence, measuring the thickness, and collecting a sample of these layers. These procedures shall be completed prior to purging the well.

## *4.6 Field Notes Reporting Requirements*

Field notes shall be included in the facility operating record. They shall include the following information:

- Well identification;
- Well depth;
- Static water level depth, measurement method, and date measurement was taken;

- Presence of immiscible layers, detection method, and collection method, if applicable;
- Well purging/sampling procedures and equipment;
- Purge volume and purge/sample pumping rate;
- Time purge began and completed;
- Sample identification;
- Date and time of sample collection;
- Types of sample containers and preservatives used;
- Analytical methods and/or parameters requested for analysis;
- Name of sample collector;
- COC information;
- Field observations on sampling event;
- Climatic conditions including approximate air temperature and- wind speed;
- Purpose of sampling (e.g., detection, compliance, corrective action, etc.); and
- Well condition, including:
    - security of well cap,
    - presence of cracks in concrete pad,
    - presence of standing water around well,
    - condition of protective posts,
    - condition of inner and outer well casing, and presence of cracks, holes and/or burrows in the ground near the well.

# *5.0 References*

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# Table 1
# Applicable Regulatory References and Corresponding Application Location
# Person Generating Station

| Regulatory Citation(s) | Description of Requirement | Location in this Document |
|---|---|---|
| General Facility Information | | |
| §270.14(b)(1) | General facility description | Sections 1.1.1, 1.1.2, 1.2, 2.1 |
| §270.14(b)(11)(i),(ii); §264.18(a) | Location standards and seismic standard applicability | Section 1.1.2 |
| §270.14(b)(11)(iii) and (b)(19)(ii); §264.18(b) | 100-Year floodplain and topography | Section 1.1.2, Figure 3 |
| §270.14(b)(19)(iii), (iv), (v) | Surface waters, surrounding land uses, and wind rose | Section 1.1.3, Figure 4 |
| §270.14(b)(19)(vii), (viii), (x), (xii) | Legal boundaries, access controls, on-site buildings, and operational units | Section 1.1.1, Figure 2 |
| §270.14(b)(19)(ix)and (c)(3) | On- and off-site wells | Section 4.2.2, Figure 6 |
| §270.14(b)(4); §264.14(b)(2) and (c) | Security provisions | Section 2.2 |
| §270.14(b)(5); §264.15(a), (b) | Inspection provisions | Section 2.3 |
| §270.14(b)(6); §264, Subpart C | Preparedness and prevention | Section 2.4 |
| §264.32 | Required emergency equipment | Section 2.4.1 |
| §264.33 | Testing and maintenance of emergency equipment | Section 2.4.2 |
| §264.34 | Access to communications and alarm systems | Section 2.4.3 |
| §264.37 | Arrangements with local authorities | Section 2.4.4 |
| §270.30(d) | Hazard or release mitigation | Section 2.4.5.5 |
| §264.73 | Operating record and documents to be maintained at the facility | Section 2.5.1 |
| §264.118(a) | Permit and permit application | Section 2.5.1 (bullet 1) |
| §264.74(b); §270.30(j)(2) and (3) | Monitoring records | Section 2.5.1 (bullet 2) |
| §264.73(b)(6); §264.100(g) | Groundwater monitoring, testing, and analytical data results | Sections 2.5.1 (bullet 3) and 4.5 |
| §264.15(b)(2) and (d); §264.73(b)(5) | Inspection records (schedule and reports) | Section 2.5.1 (bullet 4) |
| §264.73(b)(4) | Repairs, spill response actions, incidents requiring contingency plan implementation | Section 2.5.1 (bullet 5) |
| §264.16(d) | Training records | Section 2.5.1 (bullet 6) |
| §264.73(b)(8); §264.144(d) | Post-closure care cost estimate | Section 2.5.1 (bullet 7) |
| §270.30(1)(6)(i), (ii), (iii) | 24-Hour reporting | Section 2.5.2 |

## Table 1 (Continued)
## Regulatory References and Corresponding Application Location
## Person Generating Station

| Regulatory Citation(s) | Description of Requirement | Location in this Document |
|---|---|---|
| General Facility Information (Continued) | | |
| §270.42; §264.118(d) | Post-closure care plan changes | Section 2.5.3 |
| §264.16 | Personnel training | Section 2.6 |
| Post-Closure Care Conditions and Requirements for Groundwater Units | | |
| §264.96(c); §264.100(f); §264.117 | Post-closure care period | Section 4.4.2 |
| §270.14(b)(13), (c)(5) and (7); §264 Subpart F; §264.117(d); §264.188(b) | Post-closure care plan and procedures | Sections 4.0 and 4.1 |
| §270.14(b)(14); §264.119 | Post-closure notifications | NA |
| §264.117(a)(1) | Use of property | Section 4.4.6 |
| §270.14(b)(16); §264.144(c); §264.144(d) | Cost estimate for facility post-closure | Section 2.8 |
| §270.14(b)(16); §264.145; §264.147; §264.151 | Financial assurance | Sections 2.8, 2.9 |
| Corrective Action Conditions and Requirements for Groundwater Units | | |
| §264.100 | Corrective action program, general requirements | Section 4.1 |
| §264.93; §264.94(a); §264.100(a)(1)(2) | Hazardous constituents and concentration limits | Sections 1.2.1.2, 4.1.2, 4.2.1 |
| §270.14(c)(4) | Contaminant plume maps | Section 4.3, Figures 8 through 13 |
| §270.14(c)(3); §264.95; §264.100(a)(3) | Point of compliance | Section 4.4.1 |
| §264.31; §264.97(c) | Monitoring well network design and well construction | Section 4.2.2, Appendix C |
| §270.14(c)(2) | Groundwater flow rate and direction | Section 4.2.2 |
| §264.97(f) | Groundwater surface elevation | Section 4.2.2 |
| §264.100(a)(4) and (f) | Duration of corrective action | Section 4.4.2 |
| §264.93 | Groundwater monitoring frequency | Section 4.4.2 |
| §270.14(c)(5), (7); §264.97(c); §264.100(a)(3), (d) | Groundwater monitoring program, revised well network | Sections 4.4.3, Figures 6, 14, and 15 |
| §270.130(e), (l)(1), (2) | Groundwater treatment system operations and maintenance | Section 4.4.4 |
| §264.97(d), (e); §264.98(e) | Groundwater sampling and analysis procedures | Section 4.5 |

*NA = Not applicable.*

## Table 2
## Soil Matrix Analytical Results
## Person Generating Station

| | Analyte | | | | |
|---|---|---|---|---|---|
| Probe ID | 1,1,-DCE (µg/kg) | 1,1,1-TCA (µg/kg) | PCE (µg/kg) | 1,2,4-Trimethylbenzene (µg/kg) | 1,3,5-Trimethylbenzene (µg/kg) |
| Shallow Soil Samples (0–12 ft bgs) | | | | | |
| SVP-1-3 | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) |
| SVP-1-6 | ND(5.1) | ND(5.1) | ND(5.1) | ND(5.1) | ND(5.1) |
| SVP-1-9 | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) |
| SVP-1-12 | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) |
| SVP-2-3 | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) |
| SVP-2-6 | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) | ND(5.2) |
| SVP-2-9 | ND(5.1) | ND(5.1) | ND(5.1) | ND(5.1) | ND(5.1) |
| SVP-2-12 | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) |
| SVP-3-3 | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) |
| SVP-3-6 | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) |
| SVP-3-9 | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) |
| SVP-3-12 | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) |
| Surface Soil Action Level[a] | 180 | 1,400,000 | 16,000 | 52,000 | 21,000 |
| Deep Soil Samples (33–117 ft bgs) | | | | | |
| SVP-1-33 | ND(5.2) | ND(5.2) | 11.00 | ND(5.2) | ND(5.2) |
| SVP-1-57 | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) |
| SVP-1-77 | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) |
| SVP-1-97 | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) |
| SVP-1-117 | ND(4.7) | ND(4.7) | ND(4.7) | ND(4.7) | ND(4.7) |
| SVP-2-33 | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) |
| SVP-2-57 | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) | ND(5.4) |
| SVP-2-77 | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) |
| SVP-2-97 | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) |
| SVP-2-117 | ND(5.3) | ND(5.3) | ND(5.3) | ND(5.3) | ND(5.3) |
| SVP-3-33 | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) | ND(5.0) |

## Table 2 (Continued)
## Soil Matrix Analytical Results
## Person Generating Station

| Probe ID | Analyte | | | | |
|---|---|---|---|---|---|
| | 1,1,-DCE (µg/kg) | 1,1,1-TCA (µg/kg) | PCE (µg/kg) | 1,2,4-Trimethylbenzene (µg/kg) | 1,3,5-Trimethylbenzene (µg/kg) |
| Deep Soil Samples (33–117 ft bgs) (Continued) | | | | | |
| SVP-3-57 | ND(4.7) | ND(4.7) | ND(4.7) | ND(4.7) | ND(4.7) |
| SVP-3-77 | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) | ND(4.6) |
| SVP-3-97 | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) | ND(4.9) |
| SVP-3-117 | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) | ND(4.8) |

*[a]2000 Permit Condition IV.A.1.a.i.*

*bgs = Below ground surface.*

*1,1-DCE = 1,1-Dichloroethene.*

*ft = Foot (feet).*

*ID = Identification.*

*µg/kg = Microgram(s) per kilogram.*

*ND = Not detected above method detection limit (shown in parentheses).*

*PCE = Tetrachloroethene.*

*1,1,1-TCA = 1,1,1-Trichloroethane.*

## Table 3
## Soil Gas Analytical Results
## Person Generating Station

| Probe ID[a] | Analyte | | | | |
|---|---|---|---|---|---|
| | 1,1,-DCE ($mg/m^3$) | 1,1,1-TCA ($mg/m^3$) | PCE ($mg/m^3$) | 1,2,4-Trimethylbenzene ($mg/m^3$) | 1,3,5-Trimethylbenzene ($mg/m^3$) |
| SVP-1-33 (38) | ND(0.10) | ND(0.10) | 0.41 | ND(0.10) | ND(0.10) |
| SVP-1-57 (58) | ND(0.10) | ND(0.10) | ND(0.10) | ND(0.10) | ND(0.10) |
| SVP-1-77 (78) | ND(0.10) | ND(0.10) | 0.36 | ND(0.10) | ND(0.10) |
| SVP-1-97 (98) | 0.37 | ND(0.10) | 0.73 | ND(0.10) | ND(0.10) |
| SVP-1-117 (118) | 1.80 | ND(0.10) | 2.90 | ND(0.10) | ND(0.10) |
| SVP-2-33 (38) | ND(0.10) | ND(0.10) | 0.17 | ND(0.10) | ND(0.10) |
| SVP-2-57 (58) | ND(0.10) | ND(0.10) | 0.40 | ND(0.10) | ND(0.10) |
| SVP-2-77 (78) | ND(0.10) | ND(0.10) | 0.67 | ND(0.10) | ND(0.10) |
| SVP-2-97 (98) | 0.60 | ND(0.10) | 1.90 | ND(0.10) | ND(0.10) |
| SVP-2-117 (118) | 2.20 | 0.15 | 4.10 | ND(0.10) | ND(0.10) |
| SVP-3-33 (38) | ND(0.10) | ND(0.10) | 0.49 | ND(0.10) | ND(0.10) |
| SVP-3-57 (58) | ND(0.10) | ND(0.10) | 0.35 | ND(0.10) | ND(0.10) |
| SVP-3-77 (78) | ND(0.10) | ND(0.10) | 0.54 | ND(0.10) | ND(0.10) |
| SVP-3-97 (98) | 0.28 | ND(0.10) | 1.10 | ND(0.10) | ND(0.10) |
| SVP-3-117 (118) | 1.60 | 0.11 | 2.90 | ND(0.10) | ND(0.10) |
| VEW-1 | 0.10 | ND(0.10) | 0.75 | ND(0.10) | ND(0.10) |

[a] *Soil vapor probe depth is shown in parentheses (feet below ground surface).*

| | |
|---|---|
| *1,1-DCE* | *= 1,1-Dichloroethene.* |
| *ID* | *= Identification.* |
| *PCE* | *= Tetrachloroethene.* |
| *$mg/m^3$* | *= Milligram(s) per cubic meter.* |
| *ND* | *= Not detected above method detection limit (shown in parentheses).* |
| *1,1,1-TCA* | *= 1,1,1-Trichloroethane.* |

## Table 4
## Comparison of 1,1-DCE Soil Concentrations with Groundwater Protection Soil Action Level
## Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/m$^3$) | Calculated Soil Residual Concentration (μg/kg) | Measured Soil Matrix Concentration (μg/kg) | Representative Concentration (μg/kg)[b,c] |
|---|---|---|---|---|
| SVP-1-3 | – | – | ND(4.8) | 2.4 |
| SVP-1-6 | – | – | ND(5.1) | 2.6 |
| SVP-1-9 | – | – | ND(5.4) | 2.7 |
| SVP-1-12 | – | – | ND(5.2) | 2.6 |
| SVP-1-33 (38) | ND(0.10) | ND(0.04) | ND(5.2) | 2.6 |
| SVP-1-57 (58) | ND(0.10) | ND(0.04) | ND(4.8) | 2.4 |
| SVP-1-77 (78) | ND(0.10) | ND(0.04) | ND(4.6) | 2.3 |
| SVP-1-97 (98) | 0.37 | 0.13 | ND(4.6) | 2.3 |
| SVP-1-117 (118) | 1.80 | 0.63 | ND(4.7) | 2.4 |
| SVP-2-3 | – | – | ND(5.2) | 2.6 |
| SVP-2-6 | – | – | ND(5.2) | 2.6 |
| SVP-2-9 | – | – | ND(5.1) | 2.6 |
| SVP-2-12 | – | – | ND(5.4) | 2.7 |
| SVP-2-33 (38) | ND(0.10) | ND(0.04) | ND(5.0) | 2.5 |
| SVP-2-57 (58) | ND(0.10) | ND(0.04) | ND(5.4) | 2.7 |
| SVP-2-77 (78) | ND(0.10) | ND(0.04) | ND(4.9) | 2.5 |
| SVP-2-97 (98) | 0.60 | 0.21 | ND(5.0) | 2.5 |
| SVP-2-117 (118) | 2.20 | 0.77 | ND(5.3) | 2.7 |
| SVP-3-3 | – | – | ND(4.6) | 2.3 |
| SVP-3-6 | – | – | ND(5.0) | 2.5 |
| SVP-3-9 | – | – | ND(4.9) | 2.5 |
| SVP-3-12 | – | – | ND(5.0) | 2.5 |
| SVP-3-33 (38) | ND(0.10) | ND(0.04) | ND(5.0) | 2.5 |
| SVP-3-57 (58) | ND(0.10) | ND(0.04) | ND(4.7) | 2.4 |
| SVP-3-77 (78) | ND(0.10) | ND(0.04) | ND(4.6) | 2.3 |

## Table 4 (Continued)
## Comparison of 1,1-DCE Soil Concentrations with Groundwater Protection Soil Action Level
## Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/$m^3$) | Calculated Soil Residual Concentration (μg/kg) | Measured Soil Matrix Concentration (μg/kg) | Representative Concentration (μg/kg)[b,c] |
|---|---|---|---|---|
| SVP-3-97 (98) | 0.28 | 0.10 | ND(4.9) | 2.5 |
| SVP-3-117 (118) | 1.60 | 0.56 | ND(4.8) | 2.4 |
| Maximum | | | | 2.7 |
| Groundwater Protection Soil Action Level[d] | | | | 60 |

*[a] Soil vapor probe depth is shown in parentheses (ft bgs).*

*[b] Calculated residual or measured soil concentration.*

*[c] Non-detections included at 1/2 method detection limit.*

*[d] Risk-based soil standard protective of groundwater, per 2000 Permit Condition IV.A.1.a.i.*

*1,1-DCE = 1,1-Dichloroethene.*
*ID = Identification.*
*μg/kg = Microgram(s) per kilogram.*
*mg/$m^3$ = Milligram(s) per cubic meter.*
*ND = Not detected above method detection limit (shown in parentheses).*
*– = Analysis not performed.*

# Table 5
# Comparison of 1,1,1-TCA Soil Concentrations with Groundwater Protection Soil Action Level
# Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/m$^3$) | Calculated Soil Residual Concentration (μg/kg) | Measured Soil Matrix Concentration (μg/kg) | Representative Concentration (μg/kg)[b,c] |
|---|---|---|---|---|
| SVP-1-3 | – | – | ND(4.8) | 2.4 |
| SVP-1-6 | – | – | ND(5.1) | 2.6 |
| SVP-1-9 | – | – | ND(5.4) | 2.7 |
| SVP-1-12 | – | – | ND(5.2) | 2.6 |
| SVP-1-33 (38) | ND(0.10) | ND(0.07) | ND(5.2) | 2.6 |
| SVP-1-57 (58) | ND(0.10) | ND(0.07) | ND(4.8) | 2.4 |
| SVP-1-77 (78) | ND(0.10) | ND(0.07) | ND(4.6) | 2.3 |
| SVP-1-97 (98) | ND(0.10) | ND(0.07) | ND(4.6) | 2.3 |
| SVP-1-117 (118) | ND(0.10) | ND(0.07) | ND(4.7) | 2.4 |
| SVP-2-3 | – | – | ND(5.2) | 2.6 |
| SVP-2-6 | – | – | ND(5.2) | 2.6 |
| SVP-2-9 | – | – | ND(5.1) | 2.6 |
| SVP-2-12 | – | – | ND(5.4) | 2.7 |
| SVP-2-33 (38) | ND(0.10) | ND(0.07) | ND(5.0) | 2.5 |
| SVP-2-57 (58) | ND(0.10) | ND(0.07) | ND(5.4) | 2.7 |
| SVP-2-77 (78) | ND(0.10) | ND(0.07) | ND(4.9) | 2.5 |
| SVP-2-97 (98) | ND(0.10) | ND(0.07) | ND(5.0) | 2.5 |
| SVP-2-117 (118) | 0.15 | 0.11 | ND(5.3) | 2.7 |
| SVP-3-3 | – | – | ND(4.6) | 2.3 |
| SVP-3-6 | – | – | ND(5.0) | 2.5 |
| SVP-3-9 | – | – | ND(4.9) | 2.5 |
| SVP-3-12 | – | – | ND(5.0) | 2.5 |
| SVP-3-33 (38) | ND(0.10) | ND(0.07) | ND(5.0) | 2.5 |
| SVP-3-57 (58) | ND(0.10) | ND(0.07) | ND(4.7) | 2.4 |
| SVP-3-77 (78) | ND(0.10) | ND(0.07) | ND(4.6) | 2.3 |

# Table 5 (Continued)
# Comparison of 1,1,1-TCA Soil Concentrations with Groundwater Protection Soil Action Level
# Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/m$^3$) | Calculated Soil Residual Concentration (µg/kg) | Measured Soil Matrix Concentration (µg/kg) | Representative Concentration (µg/kg)[b,c] |
|---|---|---|---|---|
| SVP-3-97 (98) | ND(0.10) | ND(0.07) | ND(4.9) | 2.5 |
| SVP-3-117 (118) | 0.11 | 0.08 | ND(4.8) | 2.4 |
| Maximum | | | | 2.7 |
| Groundwater Protection Soil Action Level[d] | | | | 2,000 |

*[a] Soil vapor probe depth is shown in parentheses (feet below ground surface).*

*[b] Calculated residual or measured soil concentration.*

*[c] Non-detections included at 1/2 method detection limit.*

*[d] Risk-based soil standard protective of groundwater, per 2000 Permit Condition IV.A.1.a.i.*

*ID = Identification.*

*µg/kg = Microgram(s) per kilogram.*

*mg/m$^3$ = Milligram(s) per cubic meter.*

*ND = Not detected above method detection limit (shown in parentheses).*

*1,1,1-TCA = 1,1,1-Trichloroethane.*

*– = Analysis not performed.*

# Table 6
# Comparison of PCE Soil Concentrations with Groundwater Protection Soil Action Level
# Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/m$^3$) | Calculated Soil Residual Concentration (μg/kg) | Measured Soil Matrix Concentration (μg/kg) | Representative Concentration (μg/kg)[b,c] |
|---|---|---|---|---|
| SVP-1-3 | – | – | ND(4.8) | 2.4 |
| SVP-1-6 | – | – | ND(5.1) | 2.6 |
| SVP-1-9 | – | – | ND(5.4) | 2.7 |
| SVP-1-12 | – | – | ND(5.2) | 2.6 |
| SVP-1-33 (38) | 0.41 | 0.47 | 11.00 | 11.00 |
| SVP-1-57 (58) | ND(0.10) | ND(0.12) | ND(4.8) | 2.4 |
| SVP-1-77 (78) | 0.36 | 0.41 | ND(4.6) | 2.3 |
| SVP-1-97 (98) | 0.73 | 0.84 | ND(4.6) | 2.3 |
| SVP-1-117 (118) | 2.90 | 3.34 | ND(4.7) | 3.34 |
| SVP-2-3 | – | – | ND(5.2) | 2.6 |
| SVP-2-6 | – | – | ND(5.2) | 2.6 |
| SVP-2-9 | – | – | ND(5.1) | 2.6 |
| SVP-2-12 | – | – | ND(5.4) | 2.7 |
| SVP-2-33 (38) | 0.17 | 0.20 | ND(5.0) | 2.5 |
| SVP-2-57 (58) | 0.40 | 0.28 | ND(5.4) | 2.7 |
| SVP-2-77 (78) | 0.67 | 0.77 | ND(4.9) | 2.5 |
| SVP-2-97 (98) | 1.90 | 2.19 | ND(5.0) | 2.5 |
| SVP-2-117 (118) | 4.10 | 4.71 | ND(5.3) | 4.71 |
| SVP-3-3 | – | – | ND(4.6) | 2.3 |
| SVP-3-6 | – | – | ND(5.0) | 2.5 |
| SVP-3-9 | – | – | ND(4.9) | 2.5 |
| SVP-3-12 | – | – | ND(5.0) | 2.5 |
| SVP-3-33 (38) | 0.49 | 0.56 | ND(5.0) | 2.5 |
| SVP-3-57 (58) | 0.35 | 0.40 | ND(4.7) | 2.4 |
| SVP-3-77 (78) | 0.54 | 0.62 | ND(4.6) | 2.3 |

## Table 6 (Continued)
## Comparison of PCE Soil Concentrations with Groundwater Protection Soil Action Level
## Person Generating Station

| Probe ID[a] | Measured Soil Gas Concentration (mg/m$^3$) | Calculated Soil Residual Concentration (μg/kg) | Measured Soil Matrix Concentration (μg/kg) | Representative Concentration (μg/kg)[b,c] |
|---|---|---|---|---|
| SVP-3-97 (98) | 1.10 | 1.27 | ND(4.9) | 2.5 |
| SVP-3-117 (118) | 2.90 | 3.34 | ND(4.8) | 3.34 |
| Maximum | | | | 11.00 |
| Groundwater Protection Soil Action Level[d] | | | | 60 |

*[a] Soil vapor probe depth is shown in parentheses (feet below ground surface).*

*[b] Calculated residual or measured soil concentration.*

*[c] Non-detections included at 1/2 method detection limit.*

*[d] Risk-based soil standard protective of groundwater, per 2000 Permit Condition IV.A.1.a.i.*

*ID = Identification.*
*μg/kg = Microgram(s) per kilogram.*
*mg/m$^3$ = Milligram(s) per cubic meter.*
*ND = Not detected above method detection limit (shown in parentheses).*
*PCE = Tetrachloroethene.*
*– = Analysis not performed.*

## Table 7
## Relevant Groundwater Standards and Resulting Groundwater Cleanup Levels
## Person Generating Station

| Chemical | SDWA MCL (μg/L) | NMWQCC Groundwater Protection Standard (μg/L) | Groundwater Cleanup Level (μg/L) |
|---|---|---|---|
| 1,1-DCE | 7 | 5 | 5 |
| 1,1,1-TCA | 200 | 60 | 60 |
| PCE | 5 | 20 | 5 |

*1,1-DCE = 1,1-Dichloroethene.*
*MCL = Maximum contaminant level.*
*μg/L = Microgram(s) per liter.*
*NMWQCC = New Mexico Water Quality Control Commission.*
*PCE = Tetrachloroethene.*
*SDWA = Safe Drinking Water Act.*
*1,1,1-TCA = 1,1,1-Trichloroethane.*

## Table 8
## Current/2000 Permit Monitoring and Sampling Requirements for Shallow Groundwater
## Person Generating Station

| Well ID | Type | Function | 2000 Permit Sampling Requirement |
|---|---|---|---|
| PSMW-01 | NA, abandoned and replaced with PSMW-01R | | |
| PSMW-01R | Point of compliance | Source | Method 8021 Halo semiannually |
| PSMW-01B | Plume | Vertical boundary | Method 8021 Halo semiannually |
| PSMW-02 | Water levels only | | |
| PSMW-03 | Water levels only | | |
| PSMW-03B | Plume | Vertical boundary | Method 8021 Halo semiannually |
| PSMW-04 | NA | Horizontal boundary | Water levels only |
| PSMW-05 | NA, abandoned and substituted with PSMW-11 | | |
| PSN4W-06 | NA, abandoned and replaced with PSMW-06R | | |
| PSMW-06R | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-07 | NA, abandoned and replaced with PSMW-07R | | |
| PSMW-07R | Permit | Background | Method 8021 Halo semiannually,<br>Appendix IX 1/yr |
| PSMW-08A | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-08B | Plume | Vertical boundary | Method 8021 Halo semiannually |
| PSMW-09 | Water levels only | | |
| PSMW-10 | Plume | Plume centerline | Method 8021 Halo semiannually |
| PSMW-11 | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSNM-12A | NA, abandoned | | |
| PSNM-12B | NA, abandoned | | |
| PSMW-13A | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSISM-13B | Plume | Vertical boundary | Method 8021 Halo semiannually |
| PSMW-14 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-15B | NA, abandoned | | |
| PSMW-16 | NA, abandoned and replaced with EW-4 | | |
| PSMW-17 | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-18 | Plume | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-19 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-19X | Water levels only | | |
| PSMW-20 | Plume | Horizontal boundary | Method 8021 Halo semiannually |

## Table 8 (Continued)
## Current/2000 Permit Monitoring and Sampling Requirements for Shallow Groundwater
## Person Generating Station

| Well ID | Type | Function | 2000 Permit Sampling Requirement |
|---|---|---|---|
| PSMW-21 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-22 | Plume | Plume centerline | Method 8021 Halo semiannually |
| PSMW-23 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-24 | NA, abandoned and replaced with EW-5 | | |
| PSMW-25 | Plume and extraction well | Horizontal boundary and extraction well | Method 8021 Halo semiannually |
| PSMW-26 | Plume and extraction well | Horizontal boundary and extraction well | Method 8021 Halo semiannually |
| PSMW-27 | Plume | Plume centerline | Method 8021 Halo semiannually |
| PSMW-28 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-29 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-30 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-31 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-32 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-33 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-34 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-35 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-36 | Sentry | Horizontal boundary | Method 8021 Halo semiannually |
| PSMW-37 | Sentry | Upgradient | Method 8021 Halo semiannually |
| VEW | Extraction well | Extraction well | Method 8021 Halo semiannually |
| EW-1 | Extraction well | Extraction well | Method 8021 Halo semiannually |
| EW-2 | Extraction well | Extraction well | Method 8021 Halo semiannually |
| EW-3 | Extraction well | Extraction well | Method 8021 Halo semiannually |
| EW-4 | Plume and extraction well | Plume centerline and extraction well | Method 8021 Halo semiannually |
| EW-5 | Plume and extraction well | Plume centerline and extraction well | Method 8021 Halo semiannually |

*NA = Not applicable.*
*yr = Year.*

## Table 9
## Current/2000 Permit Monitoring and Sampling Requirements for Deeper Groundwater
## Person Generating Station

| Well ID | Type | Function | Sampling Requirement |
|---|---|---|---|
| PSMW17-300 | No associated groundwater plume | | Water levels only |
| PSMW17-400 | No associated groundwater plume | | Water levels only |
| PSMW17-500 | No associated groundwater plume | | Water levels only |
| PSMW17-600 | No associated groundwater plume | | Water levels only |
| PSMW17-700 | No associated groundwater plume | | Water levels only |
| PSMW17-800 | Background | Background, 800 ft plume, source at PSPW-6 | Method 8021 Halo semiannually |
| PSMW17-900 | No associated groundwater plume | | Water levels only |
| PSMW19-300 | No associated groundwater plume | | Water levels only |
| PSMW19-400 | No associated groundwater plume | | Water levels only |
| PSMW19-500 | Plume | Source area, 500 ft plume, PSPW-3 | Method 8021 Halo semiannually |
| PSMW19-600 | No associated groundwater plume | | Water levels only |
| PSMW19-700 | No associated groundwater plume | | Water levels only |
| PSMW19-800 | Plume | Source area, 800 ft plume, PSPW-3 | Method 8021 Halo semiannually |
| PSMW19-900 | No associated groundwater plume | | Water levels only |
| PSMW21-400 | No associated groundwater plume | | Water levels only |
| PSMW21-500 | Background | Background, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW21-600 | No associated groundwater plume | | Water levels only |
| PSMW21-700 | No associated groundwater plume | | Water levels only |
| PSMW21-800 | Background | Background, 800 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW21-900 | No associated groundwater plume | | Water levels only |
| PSMW22-300 | No associated groundwater plume | | Water levels only |
| PSMW22-400 | No associated groundwater plume | | Water levels only |
| PSMW22-500 | No associated groundwater plume | | Water levels only |
| PSMW22-600 | No associated groundwater plume | | Water levels only |
| PSMW22-700 | No associated groundwater plume | | Water levels only |
| PSMW22-800 | Plume | Source area, 800 ft plume, PSPW-6 | Method 8021 Halo semiannually |
| PSMW22-900 | No associated groundwater plume | | Water levels only |

## Table 9 (Continued)
## Current/2000 Permit Monitoring and Sampling Requirements for Deeper Groundwater Person Generating Station

| Well ID | Type | Function | Sampling Requirement |
|---|---|---|---|
| PSMW24-400 | Sentry | Vertical boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW24-500 | Plume | Centerline, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW24-600 | Sentry | Vertical boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW24-700 | No associated groundwater plume | | Water levels only |
| PSMW24-800 | Plume | Centerline, 800 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW24-900 | No associated groundwater plume | | Water levels only |
| PSMW25-400 | No associated groundwater plume | | Water levels only |
| PSMW25-500 | Sentry | Horizontal boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW25-600 | No associated groundwater plume | | Water levels only |
| PSMW25-700 | No associated groundwater plume | | Water levels only |
| PSMW25-800 | Plume | Horizontal boundary, 800 ft plume, source at PSPW-3<br>Horizontal boundary, 800 ft plume, source at PSPW-6 | Method 8021 Halo semiannually |
| PSMW25-900 | No associated groundwater plume | | Water levels only |
| PSMW27-400 | Sentry | Vertical boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW27-500 | Sentry | Horizontal boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |
| PSMW27-600 | Sentry | Vertical boundary, 500 ft plume, source at PSPW-3 | Method 8021 Halo semiannually |

*ft = Foot (feet).*

## Table 10
## Percent Change in Analyte Shallow Groundwater Concentrations from 1997 to 2006
## Person Generating Station

| Well ID | 1,1,1-TCA | | | 1,1-DCE | | | PCE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change |
| PSMW-01R | 11 | <1.0 | -91% | 33 | 1.4 | -96% | 88 | 5.0 | -94% |
| PSMW-01B | 21 | <1.0 | -95% | 5.2 | <0.2 | -96% | <0.5 | <0.5 | NC |
| PSMW-03B | 10 | <1.0 | -90% | 3.7 | <0.2 | -95% | <0.5 | <0.5 | NC |
| PSMW-06R | <1.0 | <1.0 | NC | 0.2 | <0.2 | NC | 0.6 | <0.5 | -17% |
| PSMW-07/07R | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-08A | 2.9 | <1.0 | -66% | 20 | 4.3 | -79% | 52 | 10 | -81% |
| PSMW-08B | 2.8 | <1.0 | -64% | 1.1 | <0.2 | -82% | 2.1 | <0.5 | -76% |
| PSMW-10 | 12 | <1.0 | -92% | 70 | 1.7 | -98% | 310 | 3.2 | -99% |
| PSMW-11 | <1.0 | <1.0 | NC | 0.8 | <0.2 | -75% | 0.5 | 0.6 | -20% |
| PSMW-13A | 1.0 | <1.0 | NC | 22 | 1.8 | -92% | 31 | 3.1 | -90% |
| PSMW-13B | 10 | <1.0 | -90% | 3.1 | <0.2 | -94% | <0.5 | <0.5 | NC |
| PSMW-14 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-16/EW-4 | 2.2 | <1.0 | -55% | 17 | 2.8 | -84% | 77 | 3.4 | -96% |
| PSMW-17 | <1.0 | <1.0 | NC | 1.0 | <0.2 | -80% | 0.6 | <0.5 | -17% |
| PSMW-18 | <1.0 | <1.0 | NC | 1.1 | 1.8 | 64% | 2.6 | 3.9 | 5NC |
| PSMW-19 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-20 | <1.0 | <1.0 | NC | 0.9 | <0.2 | -78% | 2.5 | <0.5 | -80% |

## Table 10 (Continued)
## Percent Change in Analyte Shallow Groundwater Concentrations from 1997 to 2006
## Person Generating Station

| Well ID | 1,1,1-TCA | | | 1,1-DCE | | | PCE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change |
| PSMW-21 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-22 | <1.0 | <1.0 | NC | 20 | 0.4 | -98% | 41 | <0.5 | -99% |
| PSMW-23 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-24/EW-5 | <1.0 | NA | NC | 27 | NA | NC | 56 | NA | NC |
| PSMW-25 | <1.0 | NA | NC | 2.8 | NA | NC | 5.3 | NA | NC |
| PSMW-26 | <1.0 | NA | NC | 9.9 | NA | NC | 7.9 | NA | NC |
| PSMW-27 | 0.5 | 0.5 | NC | 9.6 | 0.9 | -91% | 11 | 1.4 | -87% |
| PSMW-28 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-29 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-30 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-31 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-32 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-33 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-34 | <1.0 | <1.0[a] | NC | <0.2 | <0.2[a] | NC | <0.5 | <0.5[a] | NC |
| PSMW-35 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW-36 | <1.0 | <1.0 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |

## Table 10 (Continued)
## Percent Change in Analyte Shallow Groundwater Concentrations from 1997 to 2006
## Person Generating Station

| Well ID | 1,1,1-TCA | | | 1,1-DCE | | | PCE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Oct. 1997 (μg/L) | Oct. 2006 (μg/L) | % Change | Oct. 1997 (μg/L) | Oct. 2006 (μg/L) | % Change | Oct. 1997 (μg/L) | Oct. 2006 (μg/L) | % Change |
| PSMW-37 | 6.3 | <1.0 | -84% | 1.3 | <0.2 | -85% | <0.5 | <0.5 | NC |
| EW-1 | NA | <1.0 | NC | NA | 0.4 | NC | NA | 1.1 | NC |
| VEW | 10 | <1.0 | -90% | 2.6 | <0.2 | -92% | 2.1 | <0.5 | -76% |

***Bold** indicates the analyte was detected at or above applicable standards.*

[a]*Well not sampled in October 2006, data from December 2006.*

*1,1-DCE = 1,1-Dichloroethene.*
*ID = Identification.*
*μg/L = Microgram(s) per liter.*
*NA = Not sampled.*
*NC = Not calculated because 1997 concentration was at or below detection limit, or data from both years are not available.*
*PCE = Tetrachloroethene.*
*1,1,1-TCA = 1,1,1-Trichloroethane.*

## Table 11
## Percent Change in Analyte Deeper Groundwater Concentrations from 1997 to 2006
## Person Generating Station

| Well ID | 1,1,1-TCA | | | 1,1-DCE | | | PCE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change | Oct. 1997 (µg/L) | Oct. 2006 (µg/L) | % Change |
| PSMW17-800 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW19-500 | <1[a] | <1 | NC | 3.9[a] | <0.2 | -95% | 0.7[a] | <0.5 | -29% |
| PSMW19-800 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW21-500 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW21-800 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW22-800 | <1 | <1 | NC | 0.5 | <0.2 | -60% | <0.5 | <0.5 | NC |
| PSMW24-400 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW24-500 | <1 | <1 | NC | **14** | 1.9 | -86% | 4.0 | 0.8 | -80% |
| PSMW24-600 | <1 | <1 | NC | <0.2 | <0.2 | NC | 0.6 | <0.5 | -17% |
| PSMW24-800 | <1 | <1 | NC | **5.4** | <0.2 | -96% | 2.5 | <0.5 | -80% |
| PSMW25-500 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW25-800 | <1 | <1 | NC | 0.9 | <0.2 | -78% | 0.6 | <0.5 | -17% |
| PSMW27-400 | <1 | <1 | NC | <0.2 | <0.2 | NC | <0.5 | <0.5 | NC |
| PSMW27-500 | <1 | <1 | NC | 2.8 | 0.4 | -86% | 1.5 | <0.5 | -67% |
| PSMW27-600 | <1 | <1 | NC | <0.2 | 0.5 | 150% | 0.5 | 0.6 | 20% |

***Bold*** *indicates the analyte was detected at or above applicable standards.*

[a] *Well not sampled in October 2006, data from September 2006.*

*1,1-DCE = 1,1-Dichloroethene.*
*ID = Identification.*
*µg/L = Microgram(s) per liter.*
*NC = Not calculated because 1997 concentration was at or below detection limit.*
*PCE = Tetrachloroethene.*
*1,1,1-TCA = 1,1,1-Trichloroethane.*

## Table 12
## Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
## Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| PSMW-01R | Semiannual sampling and gauging | Semiannual sampling and gauging | No change; prior to GWTS shutdown, sample until three years compliance achieved. Key well; after GWTS shutdown, sample until one additional year of compliance achieved. |
| PSMW-01B | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-02 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW-03 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW-03B | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-04 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW-06R | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-07R | Semiannual sampling and gauging | Annual sampling and gauging through GWTS shutdown | Currently sampled semiannually using EPA Method 8021 and annually for Appendix IX constituents. Analyte levels have been below cleanup levels for the duration of the monitoring program. Key well; change to yearly sampling for Appendix IX constituents. |
| PSMW-08A | Semiannual sampling and gauging | Semiannual sampling and gauging | No change; prior to GWTS shutdown, sample until three years compliance achieved. Key well; after GWTS shutdown, sample until one additional year of compliance achieved. |
| PSMW-08B | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-09 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW-10 | Semiannual sampling and gauging | Semiannual sampling and gauging | No change; prior to GWTS shutdown, sample until three years compliance achieved. Key well; after GWTS shutdown, sample until one additional year of compliance achieved. |
| PSMW-11 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |

## Table 12 (Continued)
## Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
## Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| PSMW-13A | Semiannual sampling and gauging | Semiannual sampling and gauging | No change; prior to GWTS shutdown, sample until three years compliance achieved. Key well; after GWTS shutdown, sample until one additional year of compliance achieved. |
| PSMW-13B | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-14 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-17 | Semiannual sampling and gauging | Semiannual sampling and gauging during GWTS shutdown | Well has attained three years of compliance; after GWTS shutdown, sample until one additional year of compliance achieved (key well for southern plume boundary) |
| PSMW-18 | Semiannual sampling and gauging | Semiannual sampling and gauging during GWTS shutdown | Well has attained three years of compliance; after GWTS shutdown, sample until one additional year of compliance achieved (key well for northern plume boundary). |
| PSMW-19 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-19X | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW-20 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW-21 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-22 | Semiannual sampling and gauging | Semiannual sampling and gauging during GWTS shutdown | Well has attained three years of compliance; after GWTS shutdown, sample until one additional year of compliance achieved (key well for plume centerline). |
| PSMW-23 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-25 | Semiannual sampling and gauging | None | Extraction well. Not functional because water table has fallen below screen. |
| PSMW-26 | Semiannual sampling and gauging | None | Extraction well. Not functional because water table has fallen below screen. |
| PSMW-27 | Semiannual sampling and gauging | Semiannual sampling and gauging during GWTS shutdown | Well has attained three years of compliance; after GWTS shutdown, sample until one additional year of compliance achieved (key well for eastern plume boundary). |

## Table 12 (Continued)
## Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
## Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| PSMW-28 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-29 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-30 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-31 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-32 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-33 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-34 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-35 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-36 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW-37 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| VEW | Semiannual sampling and gauging | Semiannual sampling and gauging | Extraction well. Continue to sample semiannually prior to GWTS shutdown although three years of compliance have been attained at this well. After GWTS shutdown, sample until one additional year of compliance achieved. |
| EW-1 | Semiannual sampling and gauging | Semiannual sampling and gauging | Extraction well. Continue to sample semiannually prior to GWTS shutdown although three years of compliance have been attained at this well. After GWTS shutdown, sample until one additional year of compliance achieved. |
| EW-2 | Semiannual sampling and gauging | Semiannual sampling and gauging | Extraction well. Continue to sample semiannually prior to GWTS shutdown although three years of compliance have been attained at this well. After GWTS shutdown, sample until one additional year of compliance achieved. |
| EW-3 | Semiannual sampling and gauging | Semiannual sampling and gauging | Extraction well. Continue to sample semiannually prior to GWTS shutdown although three years of compliance have been attained at this well. After GWTS shutdown, sample until one additional year of compliance achieved. |

## Table 12 (Continued)
## Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
## Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| EW-4 | Semiannual sampling and gauging | Semiannual sampling and gauging | Extraction well. Continue to sample semiannually prior to GWTS shutdown although three years of compliance have been attained at this well. After GWTS shutdown, sample until one additional year of compliance achieved. |
| EW-5 | Semiannual sampling and gauging | None | Extraction well. Not functional due to collapsed well casing. |
| PSMW17-300 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW17-400 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW17-500 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW17-600 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW17-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW17-800 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW17-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW19-300 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW19-400 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW19-500 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW19-600 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW19-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW19-800 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW19-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW21-400 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |

## Table 12 (Continued)
## Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
## Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| PSMW21-500 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW21-600 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW21-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW21-800 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW21-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-300 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-400 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-500 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-600 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW22-800 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW22-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW24-400 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW24-500 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW24-600 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW24-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW24-800 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW24-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |

### Table 12 (Continued)
### Comparison of 2000 Permit and Proposed Monitoring Requirements for Shallow and Deeper Groundwater
### Person Generating Station

| Well ID | 2000 Permit Requirements | Proposed Monitoring | Justification |
|---|---|---|---|
| PSMW25-400 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW25-500 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW25-600 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW25-700 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW25-800 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW25-900 | Semiannual gauging only | None | Proximal wells provide adequate water level data. |
| PSMW27-400 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |
| PSMW27-500 | Semiannual sampling and gauging | None | Attained three years of compliance. |
| PSMW27-600 | Semiannual sampling and gauging | None | Analyte levels have been below cleanup levels for the duration of the monitoring program. |

*GWTS = Groundwater treatment system.*

*ID = Identification.*

### Table 13
### Proposed Key Well Network
### Person Generating Station

| Well ID | Semiannual Sampling Prior to GWTS Shutdown | Semiannual Sampling During GWTS Shutdown | Reason for Selection as Key Well |
|---|---|---|---|
| PSMW-01R[a] | X | X | Point of compliance well |
| PSMW-07R[b] | X | X | Background well |
| PSMW-08A[a] | X | X | Plume center well |
| PSMW-10[a] | X | X | Plume center well |
| PSMW-13A[a] | X | X | Plume center well |
| PSMW-17 |  | X | Southern plume boundary well |
| PSMW-18 |  | X | Northern plume boundary well |
| PSMW-22 |  | X | Plume center well |
| PSMW-27 |  | X | Downgradient plume boundary well |
| VEW (Extraction well) | X | X | Extraction well |
| EW-1 (Extraction well) | X | X | Extraction well |
| EW-2 (Extraction well) | X | X | Extraction well |
| EW-3 (Extraction well) | X | X | Extraction well |
| EW-4 (Extraction well) | X | X | Extraction well |

*[a] As of the date of this permit application, this well has not met three years of compliance.*

*[b] Monitoring well PSMW-07R is a background well that will be sampled annually for Appendix IX constituents.*

*GWTS = Groundwater treatment system.*

*ID = Identification.*

# *Figures*

# *Tables*

# *Attachment 1*
# *Part A Permit Application*

# *Attachment 2*
# *Post-Closure Care Cost Estimate*

# *Attachment 3*
# *Financial Assurance*

# *Attachment 4*
# *Groundwater COPC Analytical Data and Proposed Changes to 2000 Permit*
# *(provided on CD)*

# *Appendix A*
# *Site Photographs*

# *Appendix B*
# *Soil and Vapor Sampling Beneath the RCRA Cap at the Unlined Well*

# *Appendix C*
# *Groundwater Monitoring*
## *(well completion information, historical data, and analyses)*

# *Well Completion Information*

# *Historical Data Figures*

# *Appendix C*
# *List of Figures*

# *Appendix C*
# *List of Figures (continued)*

# *Mann-Kendall Trend Analysis*

# *Appendix D*
# *2000 Permit (NMT 360010342), Proposed Changes*

# *Appendix E*
# *Job Descriptions and Training Requirements*

**Photo 1**
**Groundwater Treatment System, Carbon Unit**
**Person Generating Station**

**Photo 2**
**Groundwater Treatment System, Influent Pipes**
**Person Generating Station**

**Photo 3**
**Monitoring Well Example:  PSMW-03B**
**Person Generating Station**

**Photo 4**
**Delta-Person Generating Station (view to the southeast)**
**Person Generating Station**

**Photo 5**
**Unlined Well (view to the southeast)**
**Person Generating Station**

**Photo 6**
**Unlined Well (view to the southwest)**
**Person Generating Station**

**Photo 7**
**Abandoned Power Plant Facility (view to the southwest)**
**Person Generating Station**

*Attachment B-1*
*Volume III, Section 6 of the Person Station*
*RCRA Permit Renewal Application (NMT 360010342),*
*Dated March 1998*

# *Appendix B*

# *Soil and Vapor Sampling Beneath the RCRA Cap at the Unlined Well*

# Table of Contents

# List of Figures

# List of Attachments

# Acronyms and Abbreviations

| | |
|---|---|
| DCE | dichloroethene |
| EPA | U.S. Environmental Protection Agency |
| kg | kilogram(s) |
| mg | milligram(s) |
| PCE | tetrachloroethene |
| PID | photoionization detector |
| ppmv | parts per million by volume |
| RCRA | Resource Conservation and Recovery Act |
| SVE | Soil Vapor Extraction |
| TCA | trichloroethane |

# 1.0 Introduction

This appendix summarizes the soil and soil vapor sampling conducted to demonstrate that soil remediation standards have been met beneath the Resource Conservation and Recovery Act (RCRA) Cap over the Unlined Well at Person Generating Station, and to fulfill specific requirements for demonstrating that corrective action is complete at this area. The soil sampling and vapor probe installation was completed in November 2002, and the soil vapor sampling was conducted in March 2003. All work was conducted in accordance with Volume III, Section 6 of the Person Station RCRA Permit Renewal Application (NMT 360010342), dated March 1998, which is repeated in Attachment B-1 of this appendix.

# 2.0 Collection of Soil Samples

Three 12-inch-diameter holes were cored through the RCRA Cap at location SVP-1, SVP-2, and SVP-3 as shown in Figure B-1. Soil samples were collected at depths of 3, 6, 9, 12, 33, 57, 77, 97, and 117 feet at each location. Soil borings were advanced using 6.25-inch diameter hollow-stem augers. Soil samples were collected using a California split-spoon sampler, which was driven 1 to 2 feet in front of the auger at appropriate sampling intervals.

Two soil samples were removed from the split-spoon sampler at each sampling interval. One sample was immediately placed in an En-core® sampler, and labeled for laboratory analysis using U.S. Environmental Protection Agency (EPA) Method SW535/8260B. The second sample from that depth interval was placed in a 1 gallon, Zip-loc® bag, sealed and labeled. After a 30-minute equilibration period at 70 degrees Fahrenheit, the headspace of the plastic bag was analyzed by inserting a photoionization detector (PID) probe through the plastic bag and recorded. The PID was equipped with an 11.7 electron volt detector and was calibrated using a suitable calibration gas. Results of the headspace measurements are presented in Attachment B-2 for each of the three borings. Volume III, Section 6.3.3 of the Person Station Renewal Application (NMT 360010342) dated March 1998 indicates that "any soil sample with a headspace reading over 10 ppmv [parts per million by volume] will be considered potentially contaminated, and that interval will be considered for installation of a VMP" (vapor probe). Because no headspace measurements were greater than 0.2 ppmv, only the originally planned vapor probes were installed.

# 3.0 Installation of Multilevel Soil Vapor Probes

Five soil vapor probes were installed in each boring at the following depths: 118, 98, 78, 58, and 38 feet. Each vapor probe was completed with a 5-foot sand filter pack and hydrated bentonite pellets to seal off the annular space between sampling intervals. Details of the vapor probe installations are shown in Figures B-2, B-3, and B-4. At the top of each vapor probe riser, a ball-valve, a 3/16-inch hose barb, and a depth label was installed.

## 4.0 Laboratory Analysis of Soil Samples

Soil matrix samples were transported at 4 degrees Celsius to Pinnacle Laboratories for analysis using EPA Method SW5035/SW8260B for low-level volatile organics. Laboratory detection limits between 0.0048 milligrams (mg)/kilogram (kg) and 0.0054 mg/kg were achieved for tetrachloroethene (PCE), 1,1,1-trichloroethane (TCA), and 1,1-dichloroethene (DCE), ensuring that soil concentrations well below the action levels of 0.06 mg/kg for PCE and 1,1-DCE could be quantified. Each of the 9 samples from SVP-2 were analyzed for soil moisture content and total organic carbon (using EPA Method SW9060 or equivalent method) to provide more site-specific information for any additional fate and transport calculations. The analytical laboratory reports are presented in Attachment B-3.

## 5.0 Collection of Soil Gas Samples

Following a 30-day equilibration period with the Soil Vapor Extraction (SVE) system turned off, soil gas samples were collected from the SVE extraction well (VEW) and each of the 15 discrete soil vapor probes on March 11, 2003. Each soil vapor probe was purged and sampled using a shop built vapor sampling system, measuring probe head vacuum, sample chamber vacuum, and soil gas flow rate. Each probe had three casing volumes of soil gas purged over a 10-minute period prior to sampling. The time, purged volume, and probe head vacuum were tabulated on the field data sheets during the purge (Attachment B-4). Following evacuation of the three casing volumes, a Tedlar® bag was placed in the sampling chamber and filled with soil gas from the probe. The filled sample bags were placed in a cooler, out of sunlight, and transported to Pinnacle Laboratories for analysis for 1,1-DCE, PCE, 1,1,1-TCA, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene. The analytical laboratory reports are presented in Attachment B-5.

## 6.0 Conversion of Soil Gas Concentrations

The soil gas concentrations were converted to soil residual concentration using the following equation from the American Society for Testing and Materials (ASTM, 1995).

$$C_v = \frac{H\, C_s\, \rho_s}{\left[\theta_w + K_s\, \rho_s + H\, \theta_v\right]}$$

Where:

$C_v$ = concentration in soil vapor [(g/cm$^3$-vapor)]
$H$ = Henry's Law Constant [(g/cm$^3$-vapor)/(g/cm$^3$-$H_2O$)]
$C_s$ = concentration in soil [(g/g-soil)]
$\rho_s$ = soil bulk density [(g-soil/cm$^3$-soil)]
$\theta_w$ = volumetric content of soil pore water [(cm$^3$-$H_2O$/cm$^3$-soil)]
$K_s$ = sorption coefficient [(g/g-soil)/(g/cm$^3$-$H_2O$)]
$\theta_v$ = volumetric content of soil vapor [(cm$^3$-vapor/cm$^3$-soil)]

The above equation was specified in Volume III, Section 5.3.2 of the Person Station RCRA Permit Renewal Application (NMT 360010342), dated March 1998. The conversions are detailed in Attachment B-6.

# *Figures*

**Figure B-1**
**Soil and Soil Gas Sampling Locations, Person Generation Station**

**Figure B-2**
**SVP-1 Construction Diagram**

**Figure B-3**
**SVP-2 Construction Diagram**

**Figure B-4**
**SVP-3 Construction Diagram**

# *Attachment B-1*
# *Volume III, Section 6 of the Person Station*
# *RCRA Permit Renewal Application (NMT 360010342),*
# *Dated March 1998*

# *Attachment B-2*
# *Headspace Results*

## Table B2-1
## Headspace Results for SVP-1

| Sample ID | Date | Time Sampled | Time Read | HNU Read (ppm) |
|---|---|---|---|---|
| SVP-1-3' | 11-11-02 | 13:32 | 14:00 | 0.0 |
| SVP-1-6' | 11-11-02 | 13:45 | 14:15 | 0.0 |
| SVP-1-9' | 11-11-02 | 13:58 | 14:30 | 0.0 |
| SVP-1-12' | 11-11-02 | 14:20 | 14:50 | 0.0 |
| SVP-1-33' | 11-11-02 | 14:45 | 15:15 | 0.0 |
| SVP-1-57' | 11-11-02 | 15:30 | 16:05 | 0.0 |
| SVP-1-77' | 11-11-02 | 16:25 | 16:55 | 0.0 |
| SVP-1-97' | 11-12-02 | 9:40 | 10:35 | 0.0 |
| SVP-1-117' | 11-12-02 | 11:30 | 12:00 | 0.0 |

*ID* = *Identification.*

*ppm* = *Parts per million.*

## Table B2-2
## Headspace Results for SVP-2

| Sample ID | Date | Time Sampled | Time Read | HNU Read (ppm) |
|---|---|---|---|---|
| SVP-2-3' | 11-28-02 | 9:00 | 9:30 | 0.2 |
| SVP-2-6' | 11-18-02 | 9:20 | 9:50 | 0.2 |
| SVP-2-9' | 11-18-02 | 9:30 | 10:05 | 0.0 |
| SVP-2-12' | 11-18-02 | 9:45 | 10:20 | 0.2 |
| SVP-2-33' | 11-18-02 | 10:15 | 10:45 | 0.0 |
| SVP-2-57' | 11-18-02 | 10:55 | 11:30 | 0.0 |
| SVP-2-77' | 11-18-02 | 11:40 | 12:30 | 0.0 |
| SVP-2-97' | 11-18-02 | 13:55 | 14:35 | 0.0 |
| SVP-2-117 | 11-18-02 | 15:10 | 15:50 | 0.0 |

*ID = Identification.*

*ppm = Parts per million.*

## Table B2-3
## Headspace Results for SVP-3

| Sample ID | Date | Time Sampled | Time Read | HNU Read (ppm) |
|---|---|---|---|---|
| SVP-3-3 | 11-20-02 | 13:40 | 14:20 | 0.1 |
| SVP-3-6' | 11-20-02 | 13:55 | 14:40 | 0.0 |
| SVP-3-9' | 11-20-02 | 14:05 | 14:45 | 0.0 |
| SVP-3-12' | 11-20-02 | 14:10 | 14:50 | 0.0 |
| SVP-3-33' | 11-20-02 | 14:40 | 15:20 | 0.2 |
| SVP-3-57' | 11-20-02 | 15:40 | 16:20 | 0.0 |
| SVP-3-77' | 11-20-02 | 16:25 | 16:55 | 0.0 |
| SVP-3-97' | 11-21-02 | 8:55 | 9:30 | 0.2 |
| SVP-3-117 | 11-21-02 | 10:15 | 11:00 | 0.1 |

*ID = Identification.*
*ppm = Parts per million.*

# *Attachment B-3*
# *Soil Sample Analytical Results*

# *Attachment B-4*
# *Soil Vapor Probe Sampling Field Data Sheets*

# *Attachment B-5*
# *Soil Gas Analytical Results*

# *Attachment B-6*
# *Conversion of Soil Gas Concentrations to Residual Soil Concentrations*

*Estimate Residual Soil Concentration Based on Measured Soil Gas Concentration*

Equation (ASTM, 1995):

$$C_s = \frac{\left[\theta_w + K_s \rho_s + H \theta_v\right] C_v}{H \rho_s}$$

$$K_s = K_{oc} \times f_{oc}$$

## Table B6-1
## Residual Soil Concentrations

| Where | 1,1-DCE | 1,1,1-TCA | PCE | 1,2,4-Trimethylbenzene | 1,3,5-Trimethylbenzene |
|---|---|---|---|---|---|
| $H$ = g/cm$^3$vapor+g/cm$^3$$H_2O$ | 1.07[a] | 0.705[a] | 0.754[a] | 0.212[b] | 0.237[c] |
| $\rho_s$ = (g+cm$^3$) x soil | 1.6[d] | 1.6[d] | 1.6[d] | 1.6[d] | 1.6[d] |
| $\theta_w$ = cm$^3$$H_2O$+cm$^3$soil | 0.074[d] | 0.074[d] | 0.074[d] | 0.074[d] | 0.074[d] |
| $\theta_v$ = cm$^3$vapor+cm$^3$soil | 0.23[e,f] | 0.23[e,f] | 0.23[e,f] | 0.23[e,f] | 0.23[e,f] |
| $K_{oc}$ = (g+cm$^3$) x $H_2O$ | 65[a] | 135[a] | 265[a] | 472[b] | 661[g] |
| $f_{oc}$ = (g+g) x soil | 0.0027[e,f] | 0.0027[e,f] | 0.0027[e,f] | 0.0027[e,f] | 0.0027[e,f] |
| $K_s$ = g/g soil+g/cm$^3$ $H_2O$ | 0.176 | 0.365 | 0.716 | 1.27 | 1.78 |
| $C_s/C_v$ = $\mu$g/kg+mg/m$^3$ | 0.325 | 0.727 | 0.352 | 6.35 | 5.70 |

[a] *U.S. Environmental Protection Agency, 1996, Soil Screening Guidance: Technical Background Document, EPA/540/R-95/128, May.*

[b] *U.S. Environmental Protection Agency, August 1994, Chemical Summary for 1,2,4-Trimethylbenzene, EPA 749F-94-022a.*

[c] *Electric Power Research Institute, July 1993, Remedial Technologies for Petroleum Contaminated Soils and Groundwater.*

[d] *Geoscience Consultants, Ltd., 1984, Final Soil Contamination Assessment and Preliminary Ground Water Contamination Assessment, PNM Person Generating Station.*

[e] *Parsons, E.S., 1994a, Test Plan for Evaluation of the Soil Vapor Extraction System at Person Generating Station, Public Service Company of New Mexico.*

[f] *Parsons, E.S., 1994b, Final Focused Risk Assessment for the Person Generating Station, Public Service Company of New Mexico.*

[g] *State of New York Recommended Soil Cleaner Objectives for Fuel Oil Contaminated Soil, undated, www.dec.state.NY.US/website/der/tagms/soil-fueloil.pdf.*

# SECTION 6

# DOCUMENTING COMPLETION OF SOIL CORRECTIVE ACTION REQUIREMENTS

## 6.1 OBJECTIVE

The primary objective of implementing soil corrective actions at the Person Generating Station site using SVE is the removal of contaminant mass so that health- and environmentally-protective levels are achieved. Once health- and environmentally-protective cleanup objectives are achieved, PNM intends to petition NMED to agree that RCRA corrective action and possibly even post-closure responsibilities, associated with the closure cover and underlying soil, can be terminated. If NMED approves such a petition, the concrete cap could be removed, and the area returned to productive industrial uses. Based on the significant quantities of volatile organics which have been removed from the soil and the equilibrium soil gas data presented in Section 5, PNM believes that site soils have been remediated to levels below proposed final cleanup standards (Table 6.1) Any residual contamination remaining in soils will not pose a long-term risk to human health or to the environment.

In a 9 September 1996 letter to NMED, PNM requested that NMED consider soil gas equilibrium data as evidence that the soil column had been remediated. PNM has provided data and calculations to support our assertion that soils have been remediated below USEPA's conservative groundwater-protective SSLs. To date, NMED has requested that more intensive soil gas or soil sampling be used to demonstrate soil decontamination.

## TABLE 6.1
## PROPOSED SOIL REMEDIATION STANDARDS
## PERSON GENERATING STATION

| | Remediation Standards (mg/kg) | |
|---|---|---|
| **Chemical** | **Maximum/95 Percent UTL in Shallow Soils (0-12 ft)** | **Average in Soil Column (0-130 ft)** |
| PCE | 16 | 0.06 |
| 1,1-DCE | 0.18 | 0.06 |
| 1,1,1-TCA | 1,400 | 2.0 |

In response to NMED's request, PNM intends to complete a soil sampling event within the former source area with the intention of demonstrating that source area soils beneath the RCRA cap have been remediated, that corrective actions and even the post-closure care status of the cap can be terminated, and that the cap can be removed if removal is required for future PNM industrial activities.

This section of the permit renewal application is intended to both describe activities to be completed to document soil remediation, as well as serve as the formal request for permit modification to conduct said activities at the RCRA cap and underlying soils. This and previous sections of this volume of the permit renewal application are intended to demonstrate that disturbance of the final cover, to conduct the proposed sampling, will not increase the potential hazard to human health or the environment, per 40 CFR §264.117(c). That is, by gaining NMED's approval of this section of the permit renewal application, PNM plans to proceed with final soil sampling through the closure cap. If sampling data confirms attainment of the proposed remediation standards, PNM plans to petition NMED to approve a request to formally halt corrective action addressing the soils underlying the closure cap, because it is no longer warranted to protect human health and the environment (as described by USEPA corrective action guidance (55 FR 145, p. 30813; 55 FR 145, p. 30830). Results of soil and soil gas sampling and data analysis will be included in this petition for NMED's review and approval. PNM also may, at the time of requesting NMED to approve completion of soil corrective actions, petition NMED for early termination of all permit conditions and possibly post-closure care requirements applicable to the RCRA cap and underlying soils, pursuant to 40 CFR §264.117(a)(2)(i).

This section reviews the conservative remediation goals that PNM has proposed for site soils and the method of sampling, analysis, and data interpretation that will be used to determine if proposed remediation standards have been attained.

## 6.2 SOIL REMEDIATION PERFORMANCE STANDARDS

Section 3.3 of this document set forth the rationale for proposed soil remediation standards for the source area. Two primary standards were proposed:

- Shallow soils (surface to 12 feet bgs) be remediated to the calculated screening levels for residential soils based on the USEPA Region 6 screening levels (see Section 3.3.1). The maximum or 95 percent UTL on the arithmetic mean of the soil samples collected in the upper 12 feet of the source area will be compared to the residential screening levels to determine if these final cleanup standards have been attained.
- The entire 130-foot unsaturated soil column will be remediated so that the average level of contamination is protective of long-term groundwater resources (i.e., demonstrate that the average concentration does not exceed the groundwater-protective SSLs established by USEPA Region 6 (see Section 3.3.2).

Table 6.1 summarizes the proposed soil remediation standards which will be used to determine if corrective actions for the soils have been completed.

## 6.3 PROPOSED VERIFICATION/SAMPLING PROGRAM

### 6.3.1 Request to Disrupt and Reseal Cap

As a part of this permit renewal application, PNM is requesting that NMED approve a soil sampling plan that will include three penetrations of the concrete closure cap so that a hollow-stem auger can be used to advance a split-spoon sampling device from ground surface to a depth of approximately 130 feet. A concrete coring device will be used to neatly cut three, 12-inch diameter holes in the closure cap at the locations shown on Figure 6.1. Following the completion of each boring, soil gas probes will be

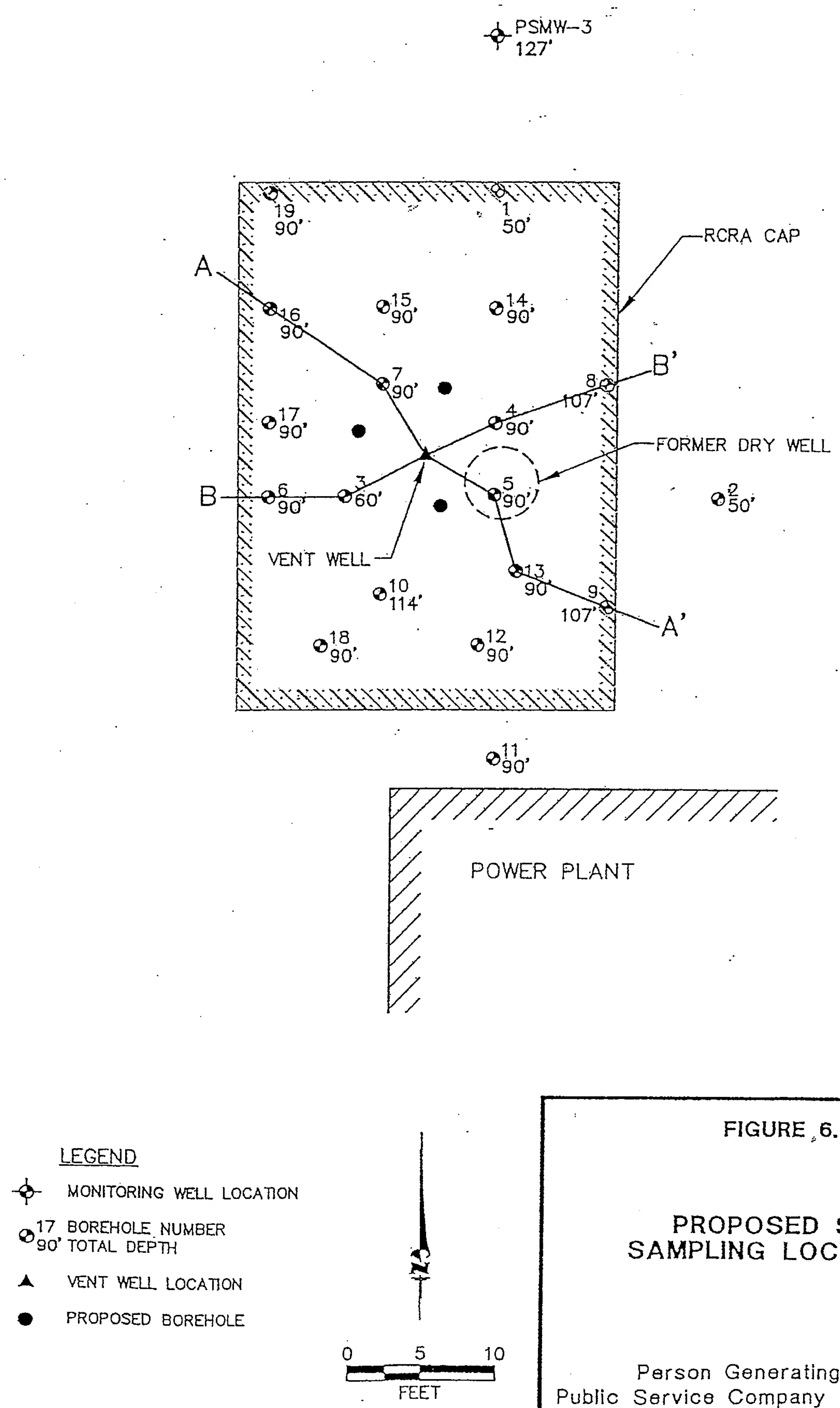

**FIGURE 6.1**

**PROPOSED SOIL SAMPLING LOCATIONS**

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

S:\ES\cad\730308\97dn1156.dwg, 07/22/99 at 09:00

installed at five discrete depths in each boring as described in Section 6.3.3 of this volume.

### 6.3.2 Collection of Soil Samples

The strategy proposed for soil sampling has been designed to provide adequate data for determining if source area soils have been remediated to target levels using common statistical methods. Because of the high intensity of initial soil sampling in the source area, the initial horizontal and vertical distribution of contamination was very well defined (see Figures 2.1, 2.2 and 2.3). The current SVE vent well was positioned near the center of contaminant mass, and the vent well was screened over the entire vertical interval of contamination. Based on initial soil sampling, a contaminated column of soil with a diameter of approximately 30 feet and a depth of 110 feet was intensely sampled at 10-foot intervals (5-foot intervals for the VEW).

During the proposed confirmation sampling, three soil borings will be completed within 10 feet of the SVE extraction well and extend to a depth of approximately 120 feet. Soil samples will be collected at depths of 3, 6, 9, 12, 33, 57, 77, 97, and 117 feet in each boring using the En-Core© sampling method. Analytical results from all samples will be used to establish an arithmetic average for comparison against groundwater-protective SSLs. Analytical results from samples at 3, 6, 9, and 12 feet will be used to establish the 95 percent UTL for shallow soils, which will then be compared to the calculated screening levels.

Soil borings will be advanced using a 3.75-inch inside diameter (ID) hollow-stem auger. Soil samples will be collected using a California split-spoon sampler which will be driven 1 to 2 feet in front of the auger at appropriate sampling intervals. Soils will be recovered from the split spoon and immediately placed in an En-Core® soil sampler to minimize the loss of volatiles. A second sample will be removed from the split spoon at approximately the same interval and placed in a one gallon, Zip-loc® bag and the top sealed. This sample will be used for field screening as described below.

### 6.3.3 Installation of Multilevel Soil Vapor Monitoring Points

As a contingency for future performance sampling at this site, PNM proposes to install at least five soil vapor probes in each boring within the following depth intervals (120-115, 100-95, 80-75, 60-55, and 40-35 feet or other intervals exhibiting elevated volatiles during field sampling). Each vapor point will be completed with a five-foot sand filter pack and a bentonite-sand mixture will be used to seal off the annular space between sampling intervals. These discrete level vapor monitoring points (VMPs) would be available to supplement planned soil sampling and/or any future monitoring of soil gas VOCs in the most contaminated intervals. PNM proposes to use equilibrium soil gas data from these multiple VMPs to confirm that the soil has been remediated to target levels after additional SVE treatment (if required).

Two soil samples will be removed from the coring device at each 10-foot sampling interval. One sample will be immediately placed in an En-Core® sampler, and labeled for laboratory analysis using Method SW5035/8260B. The second sample from that depth interval will be placed in one gallon, Zip-loc® bag, sealed and labeled. After a 30-minute equilibration period at 70 °F, the headspace of the plastic bag will be analyzed by inserting a PID probe through the plastic bag. The headspace PID reading will be recorded. Any soil sample with a headspace reading over 10 ppmv will be considered potentially contaminated, and that interval will be considered for installation of a VMP. The PID will be equipped with an 11.7 eV detector and will be calibrated using a suitable calibration gas.

Individual VMPs will be constructed of a 1- to 2-foot section of well screen and a riser pipe extending to the surface. The diameter of the VMP will be determined after determining how many intervals in each borehole will require additional monitoring. For example, if several contaminated intervals are suspected, up to six, 0.25-inch ID steel soil gas probes could be placed in one boring. Boreholes will be reamed using 6.25-inch ID augers for installation of up to 6 VMPs. A sand pack will be placed at each VMP screened interval and a bentonite seal used to separate sampling intervals. At the top of each VMP riser, a ball-valve, a 3/16-inch hose barb, and a depth label will be installed for future sampling needs. At the top of each borehole, an aboveground well protector will be set into the existing concrete emplaced in a concrete skirt.

### 6.3.4 Laboratory Analysis of Soil Samples

Soil samples will be shipped at 4° C to Pinnacle Laboratories for analysis using USEPA Method SW5035/SW8260B for low-level volatile organics. A laboratory detection limit of less than 0.005 mg/kg is desired for PCE, 1,1,1-TCA, and 1,1-DCE. This detection limit will ensure that soil concentrations well below the 0.06 mg/kg SSLs for PCE and 1,1-DCE can be quantified and used to define the average concentration of each contaminant. Each of the 9 samples from one boring also will be analyzed for soil moisture content and total organic carbon (using USEPA Method SW9060 or equivalent method) to provide more site-specific information for any additional fate and transport calculations.

### 6.3.5 Collection of Multilevel Soil Gas Data

Following a 30-day equilibration period (where the SVE system is turned off), soil gas samples will be collected from the SVE extraction well and each of the newly installed discrete soil vapor probes. Soil gas samples will be analyzed for 1,1-DCE, PCE, 1,1,1-TCA, 1,3,5-trimethylbenzene, and 1,2,4-trimethylbenzene.

Using a standard equilibrium equation described in Section 5.3.2, soil gas concentrations will be converted to soil residual concentrations. These average soil concentrations will be compared to the soil matrix sample collected from each interval and the larger value used to determine the overall average concentration within the soil column. This average concentration will then be compared to the Region 6 SSLs. Based on previous SVE soil gas values, PNM believes the SSLs have been achieved at the site.

### 6.3.6 Comparing Analytical Data to Final Remediation Standards

Upon receipt of laboratory data, PNM will complete a data validation and general quality assurance check to insure that data has reliably met the specified detection limits. Once validated, the maximum or 95 percent UTL for data collected in shallow soils and the average concentration value using all data points will be calculated (non-detects will be conservatively included at one-half the detection limit). The maximum or 95 percent UTL on the arithmetic mean for shallow soil data will be compared to the residential soil screening levels based on the USEPA Region 6 screening values (1999). The average from all soil intervals (including the shallow soils) will be compared against the groundwater-protective SSLs. If the appropriate site data values are equal to or less than these proposed cleanup criteria, the soil underlying the closure cover will be considered remediated.

### 6.3.7 Reporting Requirements

PNM intends to complete this soil sampling event as soon as this permit renewal application is approved by NMED. The results of the soil sampling event will be provided to NMED in a letter report approximately 60 days after laboratory analysis is complete. The letter report will discuss the detected concentrations of contaminants, establish a maximum or 95 percent UTL value for the shallow soils and an average value for the entire soil column, and then compare these values to the health- and groundwater-protective remediation standards. If site data are equal to or less than the remediation standards, PNM will petition NMED to certify completion of soil corrective actions at the site. Furthermore, PNM also may, depending on relevant data and needs, petition NMED for early termination of all permit conditions and post-closure care responsibilities related to the closure cover and underlying soils. If remediation standards have not been attained, PNM will describe to NMED how the contingency plan outlined in the next section will be implemented.

## 6.4 CONTINGENCY PLAN

In the event that soil sampling results do not confirm soil remediation to levels below Table 6.1 standards, the following contingency plan will be implemented at the site. PNM is including this contingency plan in the permit renewal application so that, if necessary, the actions can be implemented at the site under the new permit (i.e., no permit modification would be necessary).

### 6.4.1 Continued Operations and Resampling

The existing SVE system will be restarted and operated for an additional 200 days. Following 200 days of operation, the system will be shut down for 150 days to allow soil contamination to equilibrate with soil gas. Soil gas levels in each VMP will be compared to soil gas levels measured before the SVE system was restarted. Based on the established relationship between soil gas and soil concentrations (see Section 5.3.2), the soil gas data will be used to determine if soil contamination has been reduced to remediation standards. In the event that this contingency is implemented, PNM proposes to use soil gas data from the vent well and multiple VMPs in lieu of soil samples to confirm attainment of final remediation standards.

### 6.4.2 Extended Compliance Period

At this time, PNM is not intending to pursue compliance with any form of alternate concentration limits. Consequently, the generic soil remediation standards prescribed in Table 6.1 are the targeted endpoint for soil corrective actions at this site. PNM will notify NMED in writing when available site data indicate these remediation standards have been achieved. Termination of soil corrective actions (and post-closure care responsibilities) will not occur until approved by NMED.

## 6.5 POST CLOSURE NOTIFICATION FOR SOILS

### 6.5.1 Required Soil/Soil Gas Sampling Results

NMED will provide notification to PNM that the soil underlying the final closure cap has been decontaminated after receiving and reviewing soil or soil gas data which indicates the standards presented in Table 6.1 have been attained.

### 6.5.2 Termination of Corrective Action/Post-Closure Care Requirements

Following receipt of NMED notification, PNM will no longer be required to continue corrective actions for soils at the site. Depending on relevant data and needs, PNM may request NMED to approve early termination of all permit conditions associated with the final closure cap and the underlying soils, pursuant to 40 CFR §264.117(a)(2)(i). Early termination of these elements of the permit may be warranted and technically justifiable even if groundwater corrective action plans are still in progress at the site. Hazardous waste contamination of groundwater cannot be permitted, as such; rather, the RCRA permit will prescribe the corrective actions needed to address the release to groundwater. If the soil underlying the former unlined dry well is remediated to levels that are both protective of human receptors and underlying groundwater, continuing post-closure care responsibilities at the closure cap may not be necessary. Such actions should not have an impact on the scope, nature and duration of groundwater corrective actions.

Upon termination of corrective actions, the SVE system will be removed from the site and GAC will be returned to the supplier for regeneration. The vent well will not be grouted until it is no longer needed as a groundwater extraction well. Any VMPs installed on the site will be abandoned by pumping them full of grout and removing the well box. Additionally, the Albuquerque/Bernalillo County Air Pollution Control Division will be notified that this source no longer exists. The air discharge permit for the air stripper system associated with the groundwater treatment system will become the only source regulated under this permit.

### 6.5.3 Revised Notice To Local Land Authorities and Revisions to Deed

Once NMED has notified PNM that the soil has been decontaminated, PNM will advise the Bernalillo County Zoning Division that the surface cap is no longer necessary to manage hazardous waste, that the source area no longer requires corrective action (or possibly RCRA post-closure care), and is available for other industrial/commercial uses. The property deed and survey plat will also be revised to show that industrial land use is appropriate for the surface of the site. Specific deed restrictions limiting groundwater use and continued groundwater corrective action and monitoring are discussed in Volume 4 of this permit renewal application.

# *Attachment B-3*
# *Soil Sample Analytical Results*

done

PINNACLE LABORATORIES

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

RECEIVED DEC 04 2002

SVP-1

PL I.D. **211080**

December 3, 2002

Metric Corporation
8429 Washington Place NE
Albuquerque, NM 87113

Project Name/Number: PERSON STATION, NM

Attention: Gary Richardson

On **11/12/02,** Pinnacle Laboratories Inc., (ADHS License No. AZ0592 pending), received a request to analyze **non-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.

All 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

PINNACLE LABORATORIES

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

| | | | |
|---|---|---|---|
| CLIENT | : METRIC CORPORATION | DATE RECEIVED | : 11/12/02 |
| PROJECT # | : (NONE) | | |
| PROJECT NAME | : PERSON STATION, NM | REPORT DATE | : 12/03/02 |

PL ID: 211080

| | PINNACLE ID # | CLIENT DESCRIPTION | MATRIX | DATE COLLECTED |
|---|---|---|---|---|
| 01 | 211080-01 | SVP-1-3’ | NON-AQ | 11/11/02 |
| 02 | 211080-02 | SVP-1-6’ | NON-AQ | 11/11/02 |
| 03 | 211080-03 | SVP-1-9’ | NON-AQ | 11/11/02 |
| 04 | 211080-04 | SVP-1-12’ | NON-AQ | 11/11/02 |
| 05 | 211080-05 | SVP-1-33’ | NON-AQ | 11/11/02 |
| 06 | 211080-06 | SVP-1-57’ | NON-AQ | 11/11/02 |
| 07 | 211080-07 | SVP-1-77’ | NON-AQ | 11/11/02 |
| 08 | 211080-08 | SVP-1-97’ | NON-AQ | 11/12/02 |
| 09 | 211080-09 | SVP-1-117’ | NON-AQ | 11/12/02 |

---TOTALS---

| MATRIX | #SAMPLES |
|---|---|
| NON-AQ | 9 |

LOG NO: C2-11231
Received: 13 NOV 02
Reported: 20 NOV 02

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

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-1 | SVP-1-3' | 11-11-02/13:32 |
| 11231-2 | SVP-1-6' | 11-11-02/13:45 |
| 11231-3 | SVP-1-9' | 11-11-02/13:58 |
| 11231-4 | SVP-1-12' | 11-11-02/14:20 |
| 11231-5 | SVP-1-33' | 11-11-02/14:45 |

| PARAMETER | 11231-1 | 11231-2 | 11231-3 | 11231-4 | 11231-5 |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Bromobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Bromochloromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Bromodichloromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Bromoform, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Bromomethane (Methyl bromide), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Carbon tetrachloride, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Chlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Chloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Chloroform, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Chloromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 2-Chlorotoluene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 4-Chlorotoluene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Dibromochloromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Dibromomethane (Methylene bromide), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2-Dibromoethane (EDB), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2-Dichlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,3-Dichlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,4-Dichlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |

LOG NO: C2-11231
Received: 13 NOV 02
Reported: 20 NOV 02

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

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-1 | SVP-1-3' | 11-11-02/13:32 |
| 11231-2 | SVP-1-6' | 11-11-02/13:45 |
| 11231-3 | SVP-1-9' | 11-11-02/13:58 |
| 11231-4 | SVP-1-12' | 11-11-02/14:20 |
| 11231-5 | SVP-1-33' | 11-11-02/14:45 |

| PARAMETER | 11231-1 | 11231-2 | 11231-3 | 11231-4 | 11231-5 |
|---|---|---|---|---|---|
| Dichlorodifluoromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1-Dichloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2-Dichloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1-Dichloroethene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| cis-1,2-Dichloroethene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| trans-1,2-Dichloroethene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2-Dichloropropane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,3-Dichloropropane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 2,2 Dichloropropane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| cis-1,3-Dichloropropene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| trans-1,3-Dichloropropene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Ethylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Hexachlorobutadiene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Isopropylbenzene (Cumene), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| p-Isopropyltoluene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Methylene chloride (Dichloromethane), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Methyl t-butyl ether (MTBE), ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Naphthalene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| n-Butylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| n-Propylbenzene , ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| sec-Butylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |

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**STL Pensacola**

LOG NO: C2-11231
Received: 13 NOV 02
Reported: 20 NOV 02

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

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-1 | SVP-1-3' | 11-11-02/13:32 |
| 11231-2 | SVP-1-6' | 11-11-02/13:45 |
| 11231-3 | SVP-1-9' | 11-11-02/13:58 |
| 11231-4 | SVP-1-12' | 11-11-02/14:20 |
| 11231-5 | SVP-1-33' | 11-11-02/14:45 |

| PARAMETER | 11231-1 | 11231-2 | 11231-3 | 11231-4 | 11231-5 |
|---|---|---|---|---|---|
| Styrene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| t-Butylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1,1,2-Tetrachloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1,2,2-Tetrachloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Tetrachloroethene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | 11 |
| Toluene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1,1-Trichloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,1,2-Trichloroethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2,3-Trichlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2,4-Trichlorobenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Trichloroethene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Trichlorofluoromethane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2,3-Trichloropropane, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,2,4-Trimethylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| 1,3,5-Trimethylbenzene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| Vinyl chloride, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| o-Xylene, ug/kg | <4.8 | <5.1 | <5.4 | <5.2 | <5.2 |
| mp-Xylene, ug/kg | <9.6 | <10 | <11 | <10 | <10 |
| Surrogate - Dibromofluoromethane | 103 % | 103 % | 103 % | 104 % | 105 % |
| Surrogate - Toluene-d8 | 99 % | 98 % | 97 % | 95 % | 94 % |
| Surrogate - 4-Bromofluorobenzene | 104 % | 103 % | 103 % | 96 % | 91 % |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 |
| Prep Date | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 |
| Analysis Date | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 |
| Batch ID | KAS203 | KAS203 | KAS203 | KAS203 | KAS203 |
| Prep Method | 5035 | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB | DWB |

LOG NO: C2-11231
Received: 13 NOV 02
Reported: 20 NOV 02

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

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-1 | SVP-1-3' | 11-11-02/13:32 |
| 11231-2 | SVP-1-6' | 11-11-02/13:45 |
| 11231-3 | SVP-1-9' | 11-11-02/13:58 |
| 11231-4 | SVP-1-12' | 11-11-02/14:20 |
| 11231-5 | SVP-1-33' | 11-11-02/14:45 |

| PARAMETER | 11231-1 | 11231-2 | 11231-3 | 11231-4 | 11231-5 |
|---|---|---|---|---|---|

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Albuquerque, NM 87107

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-6 | SVP-1-57' | 11-11-02/15:30 |
| 11231-7 | SVP-1-77' | 11-11-02/16:25 |
| 11231-8 | SVP-1-97' | 11-12-02/09:40 |
| 11231-9 | SVP-1-117' | 11-12-02/11:00 |

| PARAMETER | 11231-6 | 11231-7 | 11231-8 | 11231-9 |
|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | |
| Benzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Bromobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Bromochloromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Bromodichloromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Bromoform, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Bromomethane (Methyl bromide), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Carbon tetrachloride, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Chlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Chloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Chloroform, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Chloromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 2-Chlorotoluene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 4-Chlorotoluene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Dibromochloromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Dibromomethane (Methylene bromide), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2-Dibromoethane (EDB), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2-Dichlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,3-Dichlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,4-Dichlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Dichlorodifluoromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,1-Dichloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2-Dichloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |

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2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-6 | SVP-1-57' | 11-11-02/15:30 |
| 11231-7 | SVP-1-77' | 11-11-02/16:25 |
| 11231-8 | SVP-1-97' | 11-12-02/09:40 |
| 11231-9 | SVP-1-117' | 11-12-02/11:00 |

| PARAMETER | 11231-6 | 11231-7 | 11231-8 | 11231-9 |
|---|---|---|---|---|
| 1,1-Dichloroethene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| cis-1,2-Dichloroethene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| trans-1,2-Dichloroethene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2-Dichloropropane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,3-Dichloropropane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 2,2 Dichloropropane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| cis-1,3-Dichloropropene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| trans-1,3-Dichloropropene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Ethylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Hexachlorobutadiene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Isopropylbenzene (Cumene), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| p-Isopropyltoluene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Methylene chloride (Dichloromethane), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Methyl t-butyl ether (MTBE), ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Naphthalene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| n-Butylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| n-Propylbenzene , ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| sec-Butylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Styrene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| t-Butylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,1,1,2-Tetrachloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,1,2,2-Tetrachloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Tetrachloroethene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |

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**STL Pensacola**

LOG NO: C2-11231
Received: 13 NOV 02
Reported: 20 NOV 02

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

Project: 211080 MC-PERSON STATION-NM
Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-6 | SVP-1-57' | 11-11-02/15:30 |
| 11231-7 | SVP-1-77' | 11-11-02/16:25 |
| 11231-8 | SVP-1-97' | 11-12-02/09:40 |
| 11231-9 | SVP-1-117' | 11-12-02/11:00 |

| PARAMETER | 11231-6 | 11231-7 | 11231-8 | 11231-9 |
|---|---|---|---|---|
| Toluene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,1,1-Trichloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,1,2-Trichloroethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2,3-Trichlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2,4-Trichlorobenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Trichloroethene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Trichlorofluoromethane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2,3-Trichloropropane, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,2,4-Trimethylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| 1,3,5-Trimethylbenzene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| Vinyl chloride, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| o-Xylene, ug/kg | <4.8 | <4.6 | <4.6 | <4.7 |
| mp-Xylene, ug/kg | <9.7 | <9.3 | <9.3 | <9.4 |
| Surrogate - Dibromofluoromethane | 105 % | 104 % | 103 % | 105 % |
| Surrogate - Toluene-d8 | 96 % | 98 % | 99 % | 99 % |
| Surrogate - 4-Bromofluorobenzene | 94 % | 102 % | 102 % | 100 % |
| Dilution Factor | 1 | 1 | 1 | 1 |
| Prep Date | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 |
| Analysis Date | 11.13.02 | 11.13.02 | 11.13.02 | 11.13.02 |
| Batch ID | KAS203 | KAS203 | KAS203 | KAS203 |
| Prep Method | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB |

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Sampled By: Client
Code: 093621120

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11231-10 | Method Blank | |
| 11231-11 | Lab Control Standard % Recovery | |
| 11231-12 | Matrix Spike % Recovery | |
| 11231-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11231-10 | 11231-11 | 11231-12 | 11231-13 |
|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | |
| Benzene, ug/kg | <5.0 | 109 % | NoMS | NoMS |
| Bromobenzene, ug/kg | <5.0 | 119 % | --- | --- |
| Bromochloromethane, ug/kg | <5.0 | 117 % | --- | --- |
| Bromodichloromethane, ug/kg | <5.0 | 102 % | --- | --- |
| Bromoform, ug/kg | <5.0 | 128 % | --- | --- |
| Bromomethane (Methyl bromide), ug/kg | <5.0 | 137 % | --- | --- |
| Carbon tetrachloride, ug/kg | <5.0 | 105 % | --- | --- |
| Chlorobenzene, ug/kg | <5.0 | 113 % | --- | --- |
| Chloroethane, ug/kg | <5.0 | 124 % | --- | --- |
| Chloroform, ug/kg | <5.0 | 101 % | --- | --- |
| Chloromethane, ug/kg | <5.0 | 100 % | --- | --- |
| 2-Chlorotoluene, ug/kg | <5.0 | 118 % | --- | --- |
| 4-Chlorotoluene, ug/kg | <5.0 | 119 % | --- | --- |
| Dibromochloromethane, ug/kg | <5.0 | 111 % | --- | --- |
| Dibromomethane (Methylene bromide), ug/kg | <5.0 | 105 % | --- | --- |
| 1,2-Dibromoethane (EDB), ug/kg | <5.0 | 107 % | --- | --- |
| 1,2-Dichlorobenzene, ug/kg | <5.0 | 126 % | --- | --- |
| 1,3-Dichlorobenzene, ug/kg | <5.0 | 124 % | --- | --- |
| 1,4-Dichlorobenzene, ug/kg | <5.0 | 122 % | --- | --- |
| Dichlorodifluoromethane, ug/kg | <5.0 | 90 % | --- | --- |
| 1,1-Dichloroethane, ug/kg | <5.0 | 102 % | --- | --- |
| 1,2-Dichloroethane, ug/kg | <5.0 | 96 % | --- | --- |

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**STL Pensacola**

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Albuquerque, NM 87107

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Sampled By: Client
Code: 093621120

REPORT OF RESULTS

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|---|---|---|
| 11231-10 | Method Blank | |
| 11231-11 | Lab Control Standard % Recovery | |
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| 11231-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11231-10 | 11231-11 | 11231-12 | 11231-13 |
|---|---|---|---|---|
| 1,1-Dichloroethene, ug/kg | <5.0 | 108 % | --- | --- |
| cis-1,2-Dichloroethene, ug/kg | <5.0 | 111 % | --- | --- |
| trans-1,2-Dichloroethene, ug/kg | <5.0 | 109 % | --- | --- |
| 1,2-Dichloropropane, ug/kg | <5.0 | 105 % | --- | --- |
| 1,3-Dichloropropane, ug/kg | <5.0 | 104 % | --- | --- |
| 2,2 Dichloropropane, ug/kg | <5.0 | 98 % | --- | --- |
| cis-1,3-Dichloropropene, ug/kg | <5.0 | 109 % | --- | --- |
| trans-1,3-Dichloropropene, ug/kg | <5.0 | 113 % | --- | --- |
| Ethylbenzene, ug/kg | <5.0 | 108 % | --- | --- |
| Hexachlorobutadiene, ug/kg | <5.0 | 122 % | --- | --- |
| Isopropylbenzene (Cumene), ug/kg | <5.0 | 112 % | --- | --- |
| p-Isopropyltoluene, ug/kg | <5.0 | 118 % | --- | --- |
| Methylene chloride (Dichloromethane), ug/kg | <5.0 | 106 % | --- | --- |
| Methyl t-butyl ether (MTBE), ug/kg | <5.0 | 94 % | --- | --- |
| Naphthalene, ug/kg | <5.0 | 85 % | --- | --- |
| n-Butylbenzene, ug/kg | <5.0 | 114 % | --- | --- |
| n-Propylbenzene , ug/kg | <5.0 | 113 % | --- | --- |
| sec-Butylbenzene, ug/kg | <5.0 | 116 % | --- | --- |
| Styrene, ug/kg | <5.0 | 114 % | --- | --- |
| t-Butylbenzene, ug/kg | <5.0 | 116 % | --- | --- |
| 1,1,1,2-Tetrachloroethane, ug/kg | <5.0 | 115 % | --- | --- |
| 1,1,2,2-Tetrachloroethane, ug/kg | <5.0 | 133 % | --- | --- |
| Tetrachloroethene, ug/kg | <5.0 | 115 % | --- | --- |

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REPORT OF RESULTS

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| 11231-10 | Method Blank | |
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| 11231-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11231-10 | 11231-11 | 11231-12 | 11231-13 |
|---|---|---|---|---|
| Toluene, ug/kg | <5.0 | 106 % | --- | --- |
| 1,1,1-Trichloroethane, ug/kg | <5.0 | 104 % | --- | --- |
| 1,1,2-Trichloroethane, ug/kg | <5.0 | 112 % | --- | --- |
| 1,2,3-Trichlorobenzene, ug/kg | <5.0 | 106 % | --- | --- |
| 1,2,4-Trichlorobenzene, ug/kg | <5.0 | 108 % | --- | --- |
| Trichloroethene, ug/kg | <5.0 | 112 % | --- | --- |
| Trichlorofluoromethane, ug/kg | <5.0 | 110 % | --- | --- |
| 1,2,3-Trichloropropane, ug/kg | <5.0 | 116 % | --- | --- |
| 1,2,4-Trimethylbenzene, ug/kg | <5.0 | 103 % | --- | --- |
| 1,3,5-Trimethylbenzene, ug/kg | <5.0 | 105 % | --- | --- |
| Vinyl chloride, ug/kg | <5.0 | 112 % | --- | --- |
| o-Xylene, ug/kg | <5.0 | 112 % | --- | --- |
| mp-Xylene, ug/kg | <10 | 113 % | --- | --- |
| Surrogate - Dibromofluoromethane | 102 % | 100 % | --- | --- |
| Surrogate - Toluene-d8 | 98 % | 98 % | --- | --- |
| Surrogate - 4-Bromofluorobenzene | 104 % | 104 % | --- | --- |
| Dilution Factor | 1 | --- | --- | --- |
| Prep Date | 11.13.02 | --- | --- | --- |
| Analysis Date | 11.13.02 | --- | --- | --- |
| Batch ID | KAS203 | KAS203 | --- | --- |
| Prep Method | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | --- | --- | --- |

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| PARAMETER | 11231-10 | 11231-11 | 11231-12 | 11231-13 |
|---|---|---|---|---|

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.
Data from any samples that do not meet client, federal, or state sample acceptance criteria (collection, preservation, or holding time) will be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF).
A statement of the estimated uncertainty of the test result is available upon request.

WPope for
Lance Larson, Project Manager

Final Page Of Report

# STL Pensacola
# PROJECT SAMPLE INSPECTION FORM

Lab Order #: C211231

Date Received: 11/13/02

1. Was there a Chain of Custody? [✓ Yes] No*
2. Was Chain of Custody properly filled out and relinquished? [✓ Yes] No*
3. Were all samples properly labeled and identified? [✓ Yes] No*
4. Were samples received cold? [✓ Yes] No* N/A
(Criteria: 2° - 6°C: STL-SOP 1055)
5. Did samples require splitting or compositing♦? Yes [✓ No]
6. Were samples received in proper containers for analysis requested? [✓ Yes] No*
7. Were all sample containers received intact? [✓ Yes] No*
8. Were samples checked for preservative? *(Check pH of all $H_2O$ requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+* Yes No* [✓ N/A]
9. Is there sufficient volume for analysis requested? Yes [✓ No*] N/A *(Can)*
10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) [✓ Yes] No*
11. Is Headspace visible > ¼" in diameter in VOA vials?• Yes* No [✓ N/A]
12. **Were Trip Blanks Received?** Yes No [✓ N/A]
13. If sent, were matrix spike bottles returned? Yes No [✓ N/A]
14. If sent, were T-Handles returned? Yes No* [✓ N/A]
15. If any issues, how was PM notified? PSIF ☒ Verbal ☐

**Airbill Number(s):** 1287816801 4401 7389 **Shipped By:** [✓ UPS] FedX HD BUS ABX *(HD – Hand Delivery)*

**Cooler Numbers & Temp(s) (°C):** Client 4°c CCK11
(IE. 340L-4°C-CCK8 -- LIST THERMOMETER NUMBER FOR VERIFICATION)

***Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):***

1-3. COC/Sample ID/COC discrepancy:

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐
5. Samples were Split ☐ Composited ☐ Requested by: Client ☐ PM ☐ Other:
6. Improper Containers (ID/Size/desc):
7. Broken bottles/Test:
8. Incorrect pH:
9. Test/Matrix/Volume: No Soil jars were received only 2-5g encores
10. Out of Holding Time/Test:
11. VOA headspace >1/4" (list˜size)

List additional comments by above number:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

**Inspected By:** MHS **Date:** 11/13/02 **Logged By:** LLK **Date:** 13-NOV-02

* *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.*

♦ *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 pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).*

• *According to EPA, ¼" of headspace is acceptable in 40 ml vials requiring volatile analysis.*

SEVERN TRENT STL

# STL Pensacola Data Qualifiers for Final Report

| | |
|---|---|
| B | The analyte was detected in the associated method blank and in the client's sample. |
| C | The compound has been quantitated against a one point calibration. |
| D | Recovery is not calculable due to dilution. |
| E | Estimated value because the analyte concentration exceeds the upper calibration range of the instrument or method. |
| I | Estimated value because the analyte concentration is less than the lower calibration range of the instrument but is at the method detection limit or greater than the method detection limit. |
| H | 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. |
| J1 | A sample surrogate or an LCS target compound recovered above the upper control limit (UCL). Compounds qualified with a J1 may be biased high. |
| J2 | A sample surrogate or an LCS target compound recovered outside the lower control limit (LCL). Compounds qualified with a J2 may be biased low. |
| M1 | A matrix effect was present. |
| 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 use this flag in place of negative numbers). |
| R1 | Internal standard area exceeds the acceptance criteria |
| R2 | Calibration verification exceeds the acceptance criteria. |
| S1 | The Method of Standard Additions (MSA) has been performed on this sample. |
| T | Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound. |
| TIC | The compound is not included in the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound. |
| U or < | The analyte was not detected at or above the MDL or the RL, whichever is entered next to the "U" or "<". |
| W | Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance. |

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

## Abbreviations

| | |
|---|---|
| ND | Not Detected at or above the STL Pensacola reporting limit (RL) |
| NS | Not Submitted |
| NA | Not Applicable |
| MDL | STL Pensacola Method Detection Limit |
| RL | STL Pensacola Reporting Limit |
| NoMS | Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD) |

## Florida Projects Inorganic/Organic

Refer to FL DEP 62-160.700(7); Table 7 Data Qualifier Codes. FL DEP Rule 62-160.670(1)(h) states that laboratories shall include the analytical result for each analysis with applicable data qualifiers. FL DEP Rule 62-160.700(7), Table 7 lists the FL DEP data qualifiers. FL DEP Rule 62-160.700(3), Table 3 lists the Florida sites which require data qualifiers.

## AFCEE QAPP Projects

Refer to AFCEE QAPP for appropriate data qualifiers (AFCEE QAPP Version will be specified by client for the project).

## Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

## CLP and CLP-like Projects

Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers. CLP SOW to be followed must be specified to client.

Revised 10/01/02

SEVERN TRENT STL

## *STL PENSACOLA*
## *Certifications, Memberships & Affiliations*

***Alabama*** *Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/03*

***Arizona*** *Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/03*

***Arkansas*** *Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental), expires 02/20/03*

***California*** *Department of Health Services, **ELAP** Laboratory ID No. I-2510 (Hazardous Waste and Wastewater), expires 03/31/03*

***Connecticut*** *Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/03*

***Florida*** *DOH, **NELAP** Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/03*

***Florida*** *DEP/DOH CompQAP # 980156*

***Iowa*** *Department of Natural Resources, Laboratory ID No. 367 (UST), expires 08/01/04*

***Kansas*** *Department of Health & Environment, **NELAP** Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/03*

***Kentucky*** *NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/02.*

***Louisiana*** *DEQ, LELAP, **NELAP** Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental, expires 6/30/03)*

***Maryland*** *DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/03*

***Massachusetts*** *DEP, Laboratory ID No. M-FL094 ( Wastewater), expires 06/30/03*

***Michigan*** *Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/03*

***New Hampshire*** *DES ELAP, **NELAP** Laboratory ID No. 250502 (Drinking Water & Wastewater), expires 08/16/03*

***New Jersey*** *DEP&E, **NELAP** Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/03.*

***New York State*** *Department of Health, **NELAP** Laboratory ID No. 11503 (WW and Solids/Hazardous Waste), expires 04/01/2003*

***North Carolina*** *DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/02.*

***North Dakota*** *DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida), expires 06/30/03*

***Oklahoma*** *Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/03*

***Pennsylvania*** *Department of Environmental Resources, **NELAP** Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/02*

***South Carolina*** *DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/03*

***Tennessee*** *Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04*

***Virginia*** *Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/03.*

***Washington*** *Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater), expires 09/14/03.*

***West Virginia*** *DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/02.*

***AIHA*** *(American Industrial Hygiene Association) Accredited Laboratory, Laboratory ID No. 100704, expires April 1, 2004. Participant in AIHA sponsored Laboratory PAT Rounds*

***EPA ICR*** *(Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031*

***NFESC*** *(Naval Facilities Engineering Services Center), expires December 31, 2002.*

***USACE*** *(United States Army Corps. of Engineers), MRD, expires January 5, 2003.*

*STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599*

*certlist\condcert.lst revised 11/15/02*

Total Pages of Report ______

Look C2110135
11-7-02

# Chain of Custody Record

Severn Trent Laboratories
3355 McLemore Drive
Pensacola, FL 32514

SEVERN
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Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: METRIC Corporation
Project Manager: Gary Richardson
Date: 11-11-02
Chain of Custody Number: 172843
Address: 8429 Washington Pl. NE. #A
Telephone Number (Area Code)/Fax Number: 505-828-2801
Lab Number: C211231
Page 1 of 1
City: Albuquerque
State: NM
Zip Code: 87110
Site Contact:
Lab Contact:
Project Name and Location (State): Pierson Station - N.M.
Carrier/Waybill Number:
Contract/Purchase Order/Quote No. 211080

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | EnCore | Analysis (Attach list if more space is needed): 8260 | Lab ID # | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-1-3' | 11-11-02 | 13:32 | | | | X | | | | | | | 2 | X | 01 | |
| SVP-1-6' | " | 13:45 | | | | X | | | | | | | 2 | X | 02 | |
| SVP-1-9' | " | 13:58 | | | | X | | | | | | | 2 | X | 03 | |
| SVR-1-12' | " | 14:20 | | | | X | | | | | | | 2 | X | 04 | |
| SVP-1-33' | " | 14:45 | | | | X | | | | | | | 2 | X | 05 | |
| SVP-1-57' | " | 15:30 | | | | X | | | | | | | 2 | X | 06 | |
| SVP-1-77' | " | 16:25 | | | | X | | | | | | | 2 | X | 07 | |
| SVP-1-97' | 11-12-02 | 09:40 | | | | X | | | | | | | 2 | X | 08 | |
| SVP-1-117' | " | 11:00 | | | | X | | | | | | | 2 | X | 09 | |

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other____

QC Requirements (Specify)

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By: Gary Richardson | 11-12-02 | 16:10 | 1. Received By: Francine Juino | 11/12/02 | 1610 |
| 2. Relinquished By: Francine Juino | 11/12/02 | 1700 | 2. Received By: Mark Swafford | 11/13/02 | 945 |
| 3. Relinquished By | | | 3. Received By | | |

Comments: Detection limit less than 0.005 mg/kg desired for PCE, 1,1,1-TCA & 1,1-DCE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rec'd @ 15.9°c

**Chain of Custody Record**

Severn Trent Laboratories
3355 McLemore Drive
Pensacola, FL 32514

SEVERN TRENT SERVICES
Severn Trent Laboratories, Inc.

LWL Ca110735
11-7-02

STL-4124 (0901)

Client: METRIC Corporation

Project Manager: Gary Richardson

Date: 11-11-02

Chain of Custody Number: 172843

Address: 8429 Washington Pl. NE. #A

Telephone Number (Area Code)/Fax Number: 505-828-2801

Lab Number:

Page 1 of 1

City: Albuquerque

State: NM

Zip Code: 87110

Site Contact:

Lab Contact:

Project Name and Location (State): Person Station - N.M.

Carrier/Waybill Number:

Contract/Purchase Order/Quote No. 211080

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix | | | | | Containers & Preservatives | | | | | | | Analysis (Attach list if more space is needed) | | | | | | | | | | | | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Air | Aqueous | Sed. | Soil | | Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/ NaOH | Encore | | 8260 | | | | | | | Lab ID# | | | | |
| SVP-1-3' | 11-11-02 | 13:32 | | | | X | | | | | | | | 2 | | X | | | | | | | 01 | | | | |
| SVP-1-6' | " | 13:45 | | | | X | | | | | | | | 2 | | X | | | | | | | 02 | | | | |
| SVP-1-9' | " | 13:58 | | | | X | | | | | | | | 2 | | X | | | | | | | 03 | | | | |
| SVR-1-12' | " | 14:20 | | | | X | | | | | | | | 2 | | X | | | | | | | 04 | | | | |
| SVP-1-33' | " | 14:45 | | | | X | | | | | | | | 2 | | X | | | | | | | 05 | | | | |
| SVP-1-57' | " | 15:30 | | | | X | | | | | | | | 2 | | X | | | | | | | 06 | | | | |
| SVP-1-77' | " | 16:25 | | | | X | | | | | | | | 2 | | X | | | | | | | 07 | | | | |
| SVP-1-97' | 11-12-02 | 09:40 | | | | X | | | | | | | | 2 | | X | | | | | | | 08 | | | | |
| SVP-1-117' | " | 11:00 | | | | X | | | | | | | | 2 | | X | | | | | | | 09 | | | | |

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other

QC Requirements (Specify)

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By Gary Richardson | 11-12-02 | 16:10 | 1. Received By Francine Triiro | 11/12/02 | 1610 |
| 2. Relinquished By Francine Triiro | 11/12/02 | 1700 | 2. Received By | | |
| 3. Relinquished By | | | 3. Received By | | |

Comments: Detection limit less than 0.005 mg/kg desired for PCE, 1,1,1-TCA & 1,1-DCE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rec'd @ 15.9°c

PINNACLE LABORATORIES

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

RECEIVED DEC 04 2002

SVP-2

PL I.D. **211137**

November 29, 2002

Metric Corporation
8429 Washington Place NE
Albuquerque, NM 87113

Project Name/Number: PERSON STATION, NM

Attention: Gary Richardson

On **11/18/02**, Pinnacle Laboratories Inc., (ADHS License No. AZ0592 pending), received a request to analyze **non-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.

All 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

PINNACLE LABORATORIES

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

CLIENT : METRIC CORPORATION
DATE RECEIVED : 11/18/02
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION, NM
REPORT DATE : 11/29/02

PL ID: 211137

| | PINNACLE ID # | CLIENT DESCRIPTION | MATRIX | DATE COLLECTED |
|---|---|---|---|---|
| 01 | 211137-01 | SVP-2-3’ | NON-AQ | 11/18/02 |
| 02 | 211137-02 | SVP-2-6’ | NON-AQ | 11/18/02 |
| 03 | 211137-03 | SVP-2-9’ | NON-AQ | 11/18/02 |
| 04 | 211137-04 | SVP-2-12’ | NON-AQ | 11/18/02 |
| 05 | 211137-05 | SVP-2-33’ | NON-AQ | 11/18/02 |
| 06 | 211137-06 | SVP-2-57’ | NON-AQ | 11/18/02 |
| 07 | 211137-07 | SVP-2-77’ | NON-AQ | 11/18/02 |
| 08 | 211137-08 | SVP-2-97’ | NON-AQ | 11/18/02 |
| 09 | 211137-09 | SVP-2-117’ | NON-AQ | 11/18/02 |

---TOTALS---

| MATRIX | #SAMPLES |
|---|---|
| NON-AQ | 9 |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

## REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-1 | SVP-2-3' | 11-18-02/09:00 |
| 11358-2 | SVP-2-6' | 11-18-02/09:20 |
| 11358-3 | SVP-2-9 | 11-18-02/09:30 |
| 11358-4 | SVP-2-12' | 11-18-02/09:45 |
| 11358-5 | SVP-2-33' | 11-18-02/10:15 |

| PARAMETER | 11358-1 | 11358-2 | 11358-3 | 11358-4 | 11358-5 |
|---|---|---|---|---|---|
| Organic Carbon (WALKLEY-BLACK), % | <0.050 | <0.050 | <0.050 | 0.48 | 0.13 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 |
| Analysis Date | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 |
| Batch ID | WTS040 | WTS040 | WTS040 | WTS040 | WTS040 |
| Analyst | CR | CR | CR | CR | CR |
| Moisture Content (ASTM D2216), % | 5.7 | 4.4 | 3.2 | 3.8 | 3.2 |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 |
| Analysis Date | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 |
| Batch ID | TSS134 | TSS134 | TSS134 | TSS134 | TSS134 |
| Analyst | ST | ST | ST | ST | ST |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-1 | SVP-2-3' | 11-18-02/09:00 |
| 11358-2 | SVP-2-6' | 11-18-02/09:20 |
| 11358-3 | SVP-2-9 | 11-18-02/09:30 |
| 11358-4 | SVP-2-12' | 11-18-02/09:45 |
| 11358-5 | SVP-2-33' | 11-18-02/10:15 |

| PARAMETER | 11358-1 | 11358-2 | 11358-3 | 11358-4 | 11358-5 |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Bromobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Bromochloromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Bromodichloromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Bromoform, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Bromomethane (Methyl bromide), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Carbon tetrachloride, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Chlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Chloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Chloroform, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Chloromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 2-Chlorotoluene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 4-Chlorotoluene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Dibromochloromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Dibromomethane (Methylene bromide), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2 Dibromoethane (EDB), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2-Dichlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,3-Dichlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,4-Dichlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-1 | SVP-2-3' | 11-18-02/09:00 |
| 11358-2 | SVP-2-6' | 11-18-02/09:20 |
| 11358-3 | SVP-2-9 | 11-18-02/09:30 |
| 11358-4 | SVP-2-12' | 11-18-02/09:45 |
| 11358-5 | SVP-2-33' | 11-18-02/10:15 |

| PARAMETER | 11358-1 | 11358-2 | 11358-3 | 11358-4 | 11358-5 |
|---|---|---|---|---|---|
| Dichlorodifluoromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1-Dichloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2-Dichloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1-Dichloroethene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| cis-1,2-Dichloroethene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| trans-1,2-Dichloroethene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2-Dichloropropane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,3-Dichloropropane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 2,2 Dichloropropane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| cis-1,3-Dichloropropene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| trans-1,3-Dichloropropene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Ethylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Hexachlorobutadiene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Isopropylbenzene (Cumene), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| p-Isopropyltoluene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Methylene chloride (Dichloromethane), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Methyl t-butyl ether (MTBE), ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Naphthalene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |

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2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-1 | SVP-2-3' | 11-18-02/09:00 |
| 11358-2 | SVP-2-6' | 11-18-02/09:20 |
| 11358-3 | SVP-2-9 | 11-18-02/09:30 |
| 11358-4 | SVP-2-12' | 11-18-02/09:45 |
| 11358-5 | SVP-2-33' | 11-18-02/10:15 |

| PARAMETER | 11358-1 | 11358-2 | 11358-3 | 11358-4 | 11358-5 |
|---|---|---|---|---|---|
| n-Butylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| n-Propylbenzene , ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| sec-Butylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Styrene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| t-Butylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1,1,2-Tetrachloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1,2,2-Tetrachloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Tetrachloroethene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Toluene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1,1-Trichloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,1,2-Trichloroethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2,3-Trichlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2,4-Trichlorobenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Trichloroethene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Trichlorofluoromethane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2,3-Trichloropropane, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,2,4-Trimethylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| 1,3,5-Trimethylbenzene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| Vinyl chloride, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |
| o-Xylene, ug/kg dw | <5.2 | <5.2 | <5.1 | <5.4 | <5.0 |

LOG NO: C2-11358
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Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-1 | SVP-2-3' | 11-18-02/09:00 |
| 11358-2 | SVP-2-6' | 11-18-02/09:20 |
| 11358-3 | SVP-2-9 | 11-18-02/09:30 |
| 11358-4 | SVP-2-12' | 11-18-02/09:45 |
| 11358-5 | SVP-2-33' | 11-18-02/10:15 |

| PARAMETER | 11358-1 | 11358-2 | 11358-3 | 11358-4 | 11358-5 |
|---|---|---|---|---|---|
| mp-Xylene, ug/kg dw | <10 | <10 | <10 | <11 | <10 |
| Surrogate - Dibromofluoromethane | 104 % | 104 % | 104 % | 105 % | 104 % |
| Surrogate - Toluene-d8 | 98 % | 98 % | 98 % | 98 % | 98 % |
| Surrogate - 4-Bromofluorobenzene | 102 % | 102 % | 100 % | 100 % | 99 % |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 |
| Prep Date | 11.18.02 | 11.18.02 | 11.18.02 | 11.18.02 | 11.18.02 |
| Analysis Date | 11.20.02 | 11.20.02 | 11.20.02 | 11.20.02 | 11.20.02 |
| Batch ID | KAS209 | KAS209 | KAS209 | KAS209 | KAS209 |
| Prep Method | 5035 | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB | DWB |
| Quantitation Factor | 1.04 | 1.05 | 1.02 | 1.07 | 1.01 |
| Percent Solids | 95 | 94 | 99 | 95 | 97 |

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**STL Pensacola**

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

## REPORT OF RESULTS

Page 6

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-6 | SVP-2-57' | 11-18-02/10:55 |
| 11358-7 | SVP-2-77' | 11-18-02/11:40 |
| 11358-8 | SVP-2-97 | 11-18-02/13:55 |
| 11358-9 | SVP-2-117 | 11-18-02/15:10 |

| PARAMETER | 11358-6 | 11358-7 | 11358-8 | 11358-9 |
|---|---|---|---|---|
| Organic Carbon (WALKLEY-BLACK), % | <0.050 | <0.050 | <0.050 | <0.050 |
| Dilution Factor | 1 | 1 | 1 | 1 |
| Analysis Date | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 |
| Batch ID | WTS040 | WTS040 | WTS040 | WTS040 |
| Analyst | CR | CR | CR | CR |
| Moisture Content (ASTM D2216), % | 4.8 | 2.4 | 4.6 | 9.1 |
| Dilution Factor | 1 | 1 | 1 | 1 |
| Analysis Date | 11.22.02 | 11.22.02 | 11.22.02 | 11.22.02 |
| Batch ID | TSS134 | TSS134 | TSS134 | TSS134 |
| Analyst | ST | ST | ST | ST |

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-6 | SVP-2-57' | 11-18-02/10:55 |
| 11358-7 | SVP-2-77' | 11-18-02/11:40 |
| 11358-8 | SVP-2-97 | 11-18-02/13:55 |
| 11358-9 | SVP-2-117 | 11-18-02/15:10 |

| PARAMETER | 11358-6 | 11358-7 | 11358-8 | 11358-9 |
|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | |
| Benzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Bromobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Bromochloromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Bromodichloromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Bromoform, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Bromomethane (Methyl bromide), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Carbon tetrachloride, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Chlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Chloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Chloroform, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Chloromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 2-Chlorotoluene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 4-Chlorotoluene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Dibromochloromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Dibromomethane (Methylene bromide), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2-Dibromoethane (EDB), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2-Dichlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,3-Dichlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,4-Dichlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Dichlorodifluoromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,1-Dichloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2-Dichloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-6 | SVP-2-57' | 11-18-02/10:55 |
| 11358-7 | SVP-2-77' | 11-18-02/11:40 |
| 11358-8 | SVP-2-97 | 11-18-02/13:55 |
| 11358-9 | SVP-2-117 | 11-18-02/15:10 |

| PARAMETER | 11358-6 | 11358-7 | 11358-8 | 11358-9 |
|---|---|---|---|---|
| 1,1-Dichloroethene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| cis-1,2-Dichloroethene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| trans-1,2-Dichloroethene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2-Dichloropropane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,3-Dichloropropane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 2,2 Dichloropropane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| cis-1,3-Dichloropropene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| trans-1,3-Dichloropropene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Ethylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Hexachlorobutadiene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Isopropylbenzene (Cumene), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| p-Isopropyltoluene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Methylene chloride (Dichloromethane), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Methyl t-butyl ether (MTBE), ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Naphthalene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| n-Butylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| n-Propylbenzene , ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| sec-Butylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Styrene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| t-Butylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,1,1,2-Tetrachloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,1,2,2-Tetrachloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126
Page 9

## REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-6 | SVP-2-57' | 11-18-02/10:55 |
| 11358-7 | SVP-2-77' | 11-18-02/11:40 |
| 11358-8 | SVP-2-97 | 11-18-02/13:55 |
| 11358-9 | SVP-2-117 | 11-18-02/15:10 |

| PARAMETER | 11358-6 | 11358-7 | 11358-8 | 11358-9 |
|---|---|---|---|---|
| Tetrachloroethene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Toluene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,1,1-Trichloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,1,2-Trichloroethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2,3-Trichlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2,4-Trichlorobenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Trichloroethene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Trichlorofluoromethane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2,3-Trichloropropane, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,2,4-Trimethylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| 1,3,5-Trimethylbenzene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| Vinyl chloride, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| o-Xylene, ug/kg dw | <5.4 | <4.9 | <5.0 | <5.3 |
| mp-Xylene, ug/kg dw | <11 | <9.8 | <10 | <11 |
| Surrogate - Dibromofluoromethane | 106 % | 105 % | 105 % | 105 % |
| Surrogate - Toluene-d8 | 98 % | 98 % | 99 % | 97 % |
| Surrogate - 4-Bromofluorobenzene | 100 % | 100 % | 100 % | 101 % |
| Dilution Factor | 1 | 1 | 1 | 1 |
| Prep Date | 11.18.02 | 11.18.02 | 11.18.02 | 11.18.02 |
| Analysis Date | 11.20.02 | 11.20.02 | 11.20.02 | 11.20.02 |
| Batch ID | KAS209 | KAS209 | KAS209 | KAS209 |
| Prep Method | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB |
| Quantitation Factor | 1.09 | 0.98 | 1.00 | 1.06 |
| Percent Solids | 90 | 97 | 96 | 90 |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11358
Received: 19 NOV 02
Reported: 26 NOV 02

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

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-10 | Method Blank | |
| 11358-11 | Lab Control Standard % Recovery | |
| 11358-12 | Matrix Spike % Recovery | |
| 11358-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11358-10 | 11358-11 | 11358-12 | 11358-13 |
|---|---|---|---|---|
| Organic Carbon (WALKLEY-BLACK), % | <0.050 | 83 % | 106 % | 110 % |
| Dilution Factor | 1 | --- | --- | --- |
| Analysis Date | 11.22.02 | --- | --- | --- |
| Batch ID | WTS040 | WTS040 | WTS040 | WTS040 |
| Analyst | CR | --- | --- | --- |
| Moisture Content (ASTM D2216), % | <0.10 | N/A | N/A | N/A |
| Dilution Factor | 1 | --- | --- | --- |
| Analysis Date | 11.22.02 | --- | --- | --- |
| Batch ID | TSS134 | --- | --- | --- |
| Analyst | ST | --- | --- | --- |

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Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-10 | Method Blank | |
| 11358-11 | Lab Control Standard % Recovery | |
| 11358-12 | Matrix Spike % Recovery | |
| 11358-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11358-10 | 11358-11 | 11358-12 | 11358-13 |
|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | |
| Benzene, ug/kg dw | <5.0 | 103 % | NoMS | NoMS |
| Bromobenzene, ug/kg dw | <5.0 | 117 % | --- | --- |
| Bromochloromethane, ug/kg dw | <5.0 | 112 % | --- | --- |
| Bromodichloromethane, ug/kg dw | <5.0 | 98 % | --- | --- |
| Bromoform, ug/kg dw | <5.0 | 118 % | --- | --- |
| Bromomethane (Methyl bromide), ug/kg dw | <5.0 | 113 % | --- | --- |
| Carbon tetrachloride, ug/kg dw | <5.0 | 101 % | --- | --- |
| Chlorobenzene, ug/kg dw | <5.0 | 106 % | --- | --- |
| Chloroethane, ug/kg dw | <5.0 | 117 % | --- | --- |
| Chloroform, ug/kg dw | <5.0 | 99 % | --- | --- |
| Chloromethane, ug/kg dw | <5.0 | 91 % | --- | --- |
| 2-Chlorotoluene, ug/kg dw | <5.0 | 108 % | --- | --- |
| 4-Chlorotoluene, ug/kg dw | <5.0 | 108 % | --- | --- |
| Dibromochloromethane, ug/kg dw | <5.0 | 105 % | --- | --- |
| Dibromomethane (Methylene bromide), ug/kg dw | <5.0 | 100 % | --- | --- |
| 1,2-Dibromoethane (EDB), ug/kg dw | <5.0 | 101 % | --- | --- |
| 1,2-Dichlorobenzene, ug/kg dw | <5.0 | 119 % | --- | --- |
| 1,3-Dichlorobenzene, ug/kg dw | <5.0 | 119 % | --- | --- |
| 1,4 Dichlorobenzene, ug/kg dw | <5.0 | 117 % | --- | --- |
| Dichlorodifluoromethane, ug/kg dw | <5.0 | 80 % | --- | --- |
| 1,1-Dichloroethane, ug/kg dw | <5.0 | 100 % | --- | --- |
| 1,2-Dichloroethane, ug/kg dw | <5.0 | 95 % | --- | --- |

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Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-10 | Method Blank | |
| 11358-11 | Lab Control Standard % Recovery | |
| 11358-12 | Matrix Spike % Recovery | |
| 11358-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11358-10 | 11358-11 | 11358-12 | 11358-13 |
|---|---|---|---|---|
| 1,1-Dichloroethene, ug/kg dw | <5.0 | 101 % | --- | --- |
| cis-1,2-Dichloroethene, ug/kg dw | <5.0 | 107 % | --- | --- |
| trans-1,2-Dichloroethene, ug/kg dw | <5.0 | 103 % | --- | --- |
| 1,2-Dichloropropane, ug/kg dw | <5.0 | 101 % | --- | --- |
| 1,3-Dichloropropane, ug/kg dw | <5.0 | 98 % | --- | --- |
| 2,2 Dichloropropane, ug/kg dw | <5.0 | 96 % | --- | --- |
| cis-1,3-Dichloropropene, ug/kg dw | <5.0 | 103 % | --- | --- |
| trans-1,3-Dichloropropene, ug/kg dw | <5.0 | 106 % | --- | --- |
| Ethylbenzene, ug/kg dw | <5.0 | 103 % | --- | --- |
| Hexachlorobutadiene, ug/kg dw | <5.0 | 111 % | --- | --- |
| Isopropylbenzene (Cumene), ug/kg dw | <5.0 | 105 % | --- | --- |
| p-Isopropyltoluene, ug/kg dw | <5.0 | 110 % | --- | --- |
| Methylene chloride (Dichloromethane), ug/kg dw | <5.0 | 101 % | --- | --- |
| Methyl t-butyl ether (MTBE), ug/kg dw | <5.0 | 92 % | --- | --- |
| Naphthalene, ug/kg dw | <5.0 | 89 % | --- | --- |
| n-Butylbenzene, ug/kg dw | <5.0 | 104 % | --- | --- |
| n-Propylbenzene , ug/kg dw | <5.0 | 107 % | --- | --- |
| sec-Butylbenzene, ug/kg dw | <5.0 | 111 % | --- | --- |
| Styrene, ug/kg dw | <5.0 | 104 % | --- | --- |
| t-Butylbenzene, ug/kg dw | <5.0 | 112 % | --- | --- |
| 1,1,1,2-Tetrachloroethane, ug/kg dw | <5.0 | 108 % | --- | --- |
| 1,1,2,2-Tetrachloroethane, ug/kg dw | <5.0 | 122 % | --- | --- |

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Received: 19 NOV 02
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Albuquerque, NM 87107

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

## REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-10 | Method Blank | |
| 11358-11 | Lab Control Standard % Recovery | |
| 11358-12 | Matrix Spike % Recovery | |
| 11358-13 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | 11358-10 | 11358-11 | 11358-12 | 11358-13 |
|---|---|---|---|---|
| Tetrachloroethene, ug/kg dw | <5.0 | 103 % | --- | --- |
| Toluene, ug/kg dw | <5.0 | 98 % | --- | --- |
| 1,1,1-Trichloroethane, ug/kg dw | <5.0 | 102 % | --- | --- |
| 1,1,2-Trichloroethane, ug/kg dw | <5.0 | 104 % | --- | --- |
| 1,2,3-Trichlorobenzene, ug/kg dw | <5.0 | 99 % | --- | --- |
| 1,2,4-Trichlorobenzene, ug/kg dw | <5.0 | 96 % | --- | --- |
| Trichloroethene, ug/kg dw | <5.0 | 105 % | --- | --- |
| Trichlorofluoromethane, ug/kg dw | <5.0 | 106 % | --- | --- |
| 1,2,3-Trichloropropane, ug/kg dw | <5.0 | 116 % | --- | --- |
| 1,2,4-Trimethylbenzene, ug/kg dw | <5.0 | 99 % | --- | --- |
| 1,3,5-Trimethylbenzene, ug/kg dw | <5.0 | 100 % | --- | --- |
| Vinyl chloride, ug/kg dw | <5.0 | 102 % | --- | --- |
| o-Xylene, ug/kg dw | <5.0 | 103 % | --- | --- |
| mp-Xylene, ug/kg dw | <10 | 105 % | --- | --- |
| Surrogate - Dibromofluoromethane | 103 % | 104 % | --- | --- |
| Surrogate - Toluene-d8 | 98 % | 97 % | --- | --- |
| Surrogate - 4-Bromofluorobenzene | 103 % | 102 % | --- | --- |
| Dilution Factor | 1 | --- | --- | --- |
| Prep Date | 11.20.02 | --- | --- | --- |
| Analysis Date | 11.20.02 | --- | --- | --- |
| Batch ID | KAS209 | KAS209 | --- | --- |
| Prep Method | 5030B | --- | --- | --- |
| Analyst | DWB | --- | --- | --- |
| Quantitation Factor | 1 | --- | --- | --- |

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Received: 19 NOV 02
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Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 211137 MC-PERSON STATION
Sampled By: Client
Code: 151421126

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11358-14 | Method Blank | |
| 11358-15 | Lab Control Standard % Recovery | |

| PARAMETER | | | 11358-14 | 11358-15 | |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg dw | | | N/A | N/A | |

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.
Data from any samples that do not meet client, federal, or state sample acceptance criteria (collection, preservation, or holding time) will be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF).
A statement of the estimated uncertainty of the test result is available upon request.

M Pope for
Lance Larson, Project Manager

Final Page Of Report

**STL Pensacola** TRENT **STL**

# PROJECT SAMPLE INSPECTION FORM

**Lab Order #:** C211358 Date Received: 11/19/02

1. Was there a Chain of Custody? [✓ Yes] No*
2. Was Chain of Custody properly filled out and relinquished? [✓ Yes] No*
3. Were all samples properly labeled and identified? [✓ Yes] No*
4. Were samples received cold? [✓ Yes] No* N/A (Criteria: 2° - 6°C: STL-SOP 1055)
5. Did samples require splitting or compositing◆? Yes* [✓ No]
6. Were samples received in proper containers for analysis requested? [✓ Yes] No*
7. Were all sample containers received intact? [✓ Yes] No*
8. Were samples checked for preservative? ***(Check pH of all $H_2O$ requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*** Yes No* [✓ N/A]
9. Is there sufficient volume for analysis requested? [✓ Yes] No* N/A *(Can)*
10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) [✓ Yes] No*
11. Is Headspace visible > ¼" in diameter in VOA vials?• Yes* No [✓ N/A]
12. Were Trip Blanks Received? Yes No [✓ N/A]
13. If sent, were matrix spike bottles returned? Yes No* [✓ N/A]
14. If sent, were T-Handles returned? Yes No* [✓ N/A]
15. If any issues, how was PM notified? PSIF ☐ Verbal ☐

**Airbill Number(s):** 1z8781680143825212 **Shipped By:** [✓ UPS] FedX HD BUS ABX *(HD – Hand Delivery)*

**Cooler Numbers & Temp(s) (°C):** Client 4°c CCK11
(IE. 340L-4°C-CCK8 -- LIST THERMOMETER NUMBER FOR VERIFICATION)

***Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):***

1-3. COC/Sample ID/COC discrepancy:

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐
5. Samples were Split ☐ Composited ☐ Requested by: Client ☐ PM ☐ Other:
6. Improper Containers (ID/Size/desc):
7. Broken bottles/Test:
8. Incorrect pH:
9. Test/Matrix/Volume:
10. Out of Holding Time/Test:
11. VOA headspace >1/4" (list size)

List additional comments by above number:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS) ☞

**Inspected By:** MHS **Date:** 11/19/02 **Logged By:** LLK **Date:** 19-NOV-02

* *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.*

◆ *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 pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).*

• *According to EPA, ¼" of headspace is acceptable in 40 ml vials requiring volatile analysis.*

SEVERN TRENT STL

# STL Pensacola Data Qualifiers for Final Report

| | |
|---|---|
| B | The analyte was detected in the associated method blank and in the client's sample. |
| C | The compound has been quantitated against a one point calibration. |
| D | Recovery is not calculable due to dilution. |
| E | Estimated value because the analyte concentration exceeds the upper calibration range of the instrument or method. |
| I | Estimated value because the analyte concentration is less than the lower calibration range of the instrument but is at the method detection limit or greater than the method detection limit. |
| H | 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. |
| J1 | A sample surrogate or an LCS target compound recovered above the upper control limit (UCL). Compounds qualified with a J1 may be biased high. |
| J2 | A sample surrogate or an LCS target compound recovered outside the lower control limit (LCL). Compounds qualified with a J2 may be biased low. |
| M1 | A matrix effect was present. |
| 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 use this flag in place of negative numbers). |
| R1 | Internal standard area exceeds the acceptance criteria |
| R2 | Calibration verification exceeds the acceptance criteria. |
| S1 | The Method of Standard Additions (MSA) has been performed on this sample. |
| T | Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound. |
| TIC | The compound is not included in the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound. |
| U or < | The analyte was not detected at or above the MDL or the RL, whichever is entered next to the "U" or "<". |
| W | Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance. |

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

### Abbreviations

| | |
|---|---|
| ND | Not Detected at or above the STL Pensacola reporting limit (RL) |
| NS | Not Submitted |
| NA | Not Applicable |
| MDL | STL Pensacola Method Detection Limit |
| RL | STL Pensacola Reporting Limit |
| NoMS | Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD) |

### Florida Projects Inorganic/Organic

Refer to FL DEP 62-160.700(7); Table 7 Data Qualifier Codes. FL DEP Rule 62-160.670(1)(h) states that laboratories shall include the analytical result for each analysis with applicable data qualifiers. FL DEP Rule 62-160.700(7), Table 7 lists the FL DEP data qualifiers. FL DEP Rule 62-160.700(3), Table 3 lists the Florida sites which require data qualifiers.

### AFCEE QAPP Projects

Refer to AFCEE QAPP for appropriate data qualifiers (AFCEE QAPP Version will be specified by client for the project).

### Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

### CLP and CLP-like Projects

Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers. CLP SOW to be followed must be specified to client.

Revised 10/01/02

# STL PENSACOLA
## Certifications, Memberships & Affiliations

***Alabama*** *Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/03*

***Arizona*** *Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/03*

***Arkansas*** *Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental), expires 02/20/03*

***California*** *Department of Health Services,* ***ELAP*** *Laboratory ID No. I-2510 (Hazardous Waste and Wastewater), expires 03/31/03*

***Connecticut*** *Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/03*

***Florida*** *DOH,* ***NELAP*** *Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/03*

***Florida*** *DEP/DOH CompQAP # 980156*

***Iowa*** *Department of Natural Resources, Laboratory ID No. 367 (UST), expires 08/01/04*

***Kansas*** *Department of Health & Environment,* ***NELAP*** *Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/03*

***Kentucky*** *NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/02.*

***Louisiana*** *DEQ, LELAP,* ***NELAP*** *Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental, expires 6/30/03)*

***Maryland*** *DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/03*

***Massachusetts*** *DEP, Laboratory ID No. M-FL094 ( Wastewater), expires 06/30/03*

***Michigan*** *Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/03*

***New Hampshire*** *DES ELAP,* ***NELAP*** *Laboratory ID No. 250502 (Drinking Water & Wastewater), expires 08/16/03*

***New Jersey*** *DEP&E,* ***NELAP*** *Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/03.*

***New York State*** *Department of Health,* ***NELAP*** *Laboratory ID No. 11503 (WW and Solids/Hazardous Waste), expires 04/01/2003*

***North Carolina*** *DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/02.*

***North Dakota*** *DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida), expires 06/30/03*

***Oklahoma*** *Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/03*

***Pennsylvania*** *Department of Environmental Resources,* ***NELAP*** *Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/02*

***South Carolina*** *DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/03*

***Tennessee*** *Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04*

***Virginia*** *Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/03.*

***Washington*** *Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater), expires 09/14/03.*

***West Virginia*** *DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/02.*

***AIHA*** *(American Industrial Hygiene Association) Accredited Laboratory, Laboratory ID No. 100704, expires April 1, 2004. Participant in AIHA sponsored Laboratory PAT Rounds*

***EPA ICR*** *(Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031*

***NFESC*** *(Naval Facilities Engineering Services Center), expires December 31, 2002.*

***USACE*** *(United States Army Corps. of Engineers), MRD, expires January 5, 2003.*

*STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599*

*certlist\condcert.lst revised 11/15/02*

Total Pages of Report _______

# Chain of Custody Record

Severn Trent Laboratories
3355 McLemore Drive
Pensacola, FL 32514

SEVERN TRENT SERVICES

211137

Severn Trent Laboratories, Inc.

STL-4124 (0901)

| | | | |
|---|---|---|---|
| Client<br>Metric Corporation | Project Manager<br>Gary L. Richardson | Date<br>11-18-02 | Chain of Custody Number<br>172836 |
| Address<br>8429 Washington Pl NE #A | Telephone Number (Area Code)/Fax Number<br>828-2801 | Lab Number<br>C211358 | Page 1 of 1 |
| City Albuquerque · State NM · Zip Code 87113 | Site Contact · Lab Contact | | |
| Project Name and Location (State)<br>Person Station - New Mexico | Carrier/Waybill Number | | |
| Contract/Purchase Order/Quote No. | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | Encore # | Analysis (Attach list if more space is needed): 8260 | TOC | Soil Moist | Total Samples | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-2-3' | 11-18-02 | 0900 | | | | X | | | | | | | 2 | X | X | X | 4 | 01 |
| SVP-2-6' | " | 0920 | | | | X | | | | | | | 2 | X | X | X | 4 | 02 |
| SVP-2-9' | " | 0930 | | | | X | | | | | | | 2 | X | X | X | 4 | 03 |
| SVP-2-12' | " | 0945 | | | | X | | | | | | | 2 | X | X | X | 4 | 04 |
| SVP-2-33' | " | 1015 | | | | X | | | | | | | 2 | X | X | X | 4 | 05 |
| SVP-2-57' | " | 1055 | | | | X | | | | | | | 2 | X | X | X | 4 | 06 |
| SVP-2-77' | " | 1140 | | | | X | | | | | | | 2 | X | X | X | 4 | 07 |
| SVP-2-97 | " | 1355 | | | | X | | | | | | | 2 | X | X | X | 4 | 08 |
| SVP-2-117 | " | 1510 | | | | X | | | | | | | 2 | X | X | X | 4 | 09 |

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other______

QC Requirements (Specify)

| | | | | | |
|---|---|---|---|---|---|
| 1. Relinquished By<br>Gary L. Ri | Date<br>11-18-02 | Time<br>1620 | 1. Received By<br>Francine Ionio | Date<br>11/18/02 | Time<br>1620 |
| 2. Relinquished By<br>Francine Ionio | Date<br>11/18/02 | Time<br>1700 | 2. Received By<br>Mark Swafford | Date<br>11/19/02 | Time<br>940 |
| 3. Relinquished By | Date | Time | 3. Received By | Date | Time |

Comments
Detection Limit less than 0.005 mg/kg desired for PCE, 1,1,1-TCA & 1,1-DCE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rec'd @ 5.4°c

# Chain of Custody Record

Severn Trent Laboratories
3355 McLemore Drive
Pensacola, FL 32514

SEVERN TRENT SERVICES
Severn Trent Laboratories, Inc.

211137

STL-4124 (0901)

Client: Metric Corporation
Project Manager: Gary L. Richardson
Date: 11-18-02
Chain of Custody Number: 172836
Address: 8429 Washington Pl NE #A
Telephone Number (Area Code)/Fax Number: 828-2801
Lab Number:
Page 1 of 1
City: Albuquerque
State: NM
Zip Code: 87113
Site Contact:
Lab Contact:
Project Name and Location (State): Person Station - New Mexico
Carrier/Waybill Number:
Contract/Purchase Order/Quote No.:

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | Encore # | Analysis: 8260 | TOC | Soil Moist. | Total Samples | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-2-3' | 11-18-02 | 0900 | | | | X | | | | | | | 2 | X | X | X | 4 | 01 |
| SVP-2-6' | " | 0920 | | | | X | | | | | | | 2 | X | X | X | 4 | 02 |
| SVP-2-9' | " | 0930 | | | | X | | | | | | | 2 | X | X | X | 4 | 03 |
| SVP-2-12' | " | 0945 | | | | X | | | | | | | 2 | X | X | X | 4 | 04 |
| SVP-2-33' | " | 1015 | | | | X | | | | | | | 2 | X | X | X | 4 | 05 |
| SVP-2-57' | " | 1055 | | | | X | | | | | | | 2 | X | X | X | 4 | 06 |
| SVP-2-77' | " | 1140 | | | | X | | | | | | | 2 | X | X | X | 4 | 07 |
| SVP-2-97 | " | 1355 | | | | X | | | | | | | 2 | X | X | X | 4 | 08 |
| SVP-2-117 | " | 1510 | | | | X | | | | | | | 2 | X | X | Y | 4 | 09 |

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other______

QC Requirements (Specify)

1. Relinquished By: Gary L Ri
Date: 11-18-02 Time: 1620
1. Received By: Francine Ianni
Date: 11/18/02 Time: 1620

2. Relinquished By: Date: Time:
2. Received By: Date: Time:

3. Relinquished By: Date: Time:
3. Received By: Date: Time:

Comments: Detection Limit Less than 0.005 mg/kg desired for PCE, 1,1,1-TCA & 1,1-DCE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rec'd @ 5.4°c

PINNACLE
LABORATORIES

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

RECEIVED DEC 04 2002

SVP-3

PL I.D. **211184**

November 29, 2002

Metric Corporation
8429 Washington Place NE
Albuquerque, NM 87113

Project Name/Number: PERSON STATION, NM

Attention: Gary Richardson

On **11/21/02**, Pinnacle Laboratories Inc., (ADHS License No. AZ0592 pending), received a request to analyze **non-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.

All 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

PINNACLE LABORATORIES

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

CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION, NM
DATE RECEIVED : 11/21/02
REPORT DATE : 11/29/02

PL ID: 211184

| | PINNACLE ID # | CLIENT DESCRIPTION | MATRIX | DATE COLLECTED |
|---|---|---|---|---|
| 01 | 211184-01 | SVP-3-3’ | NON-AQ | 11/20/02 |
| 02 | 211184-02 | SVP-3-6’ | NON-AQ | 11/20/02 |
| 03 | 211184-03 | SVP-3-9’ | NON-AQ | 11/20/02 |
| 04 | 211184-04 | SVP-3-12’ | NON-AQ | 11/20/02 |
| 05 | 211184-05 | SVP-3-33’ | NON-AQ | 11/20/02 |
| 06 | 211184-06 | SVP-3-57’ | NON-AQ | 11/20/02 |
| 07 | 211184-07 | SVP-3-77’ | NON-AQ | 11/20/02 |
| 08 | 211184-08 | SVP-3-97’ | NON-AQ | 11/21/02 |
| 09 | 211184-09 | SVP-3-117’ | NON-AQ | 11/21/02 |

---TOTALS---

| MATRIX | #SAMPLES |
|---|---|
| NON-AQ | 9 |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-1 | SVP-3-3' | 11-20-02/13:40 |
| 11444-2 | SVP-3-6' | 11-20-02/13:55 |
| 11444-3 | SVP-3-9' | 11-20-02/14:05 |
| 11444-4 | SVP-3-12 | 11-20-02/14;10 |
| 11444-5 | SVP-3-33 | 11-20-02/14:40 |

| PARAMETER | 11444-1 | 11444-2 | 11444-3 | 11444-4 | 11444-5 |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Bromobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Bromochloromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Bromodichloromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Bromoform, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Bromomethane (Methyl bromide), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Carbon tetrachloride, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Chlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Chloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Chloroform, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Chloromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 2-Chlorotoluene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 4-Chlorotoluene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Dibromochloromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Dibromomethane (Methylene bromide), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2-Dibromoethane (EDB), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2-Dichlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,3-Dichlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,4-Dichlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-1 | SVP-3-3' | 11-20-02/13:40 |
| 11444-2 | SVP-3-6' | 11-20-02/13:55 |
| 11444-3 | SVP-3-9' | 11-20-02/14:05 |
| 11444-4 | SVP-3-12 | 11-20-02/14:10 |
| 11444-5 | SVP-3-33 | 11-20-02/14:40 |

| PARAMETER | 11444-1 | 11444-2 | 11444-3 | 11444-4 | 11444-5 |
|---|---|---|---|---|---|
| Dichlorodifluoromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1-Dichloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2-Dichloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1-Dichloroethene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| cis-1,2-Dichloroethene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| trans-1,2-Dichloroethene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2-Dichloropropane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,3-Dichloropropane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 2,2 Dichloropropane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| cis-1,3-Dichloropropene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| trans-1,3-Dichloropropene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Ethylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Hexachlorobutadiene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Isopropylbenzene (Cumene), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| p-Isopropyltoluene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Methylene chloride (Dichloromethane), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Methyl t-butyl ether (MTBE), ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Naphthalene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| n-Butylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| n-Propylbenzene , ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| sec-Butylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127
Page 3

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-1 | SVP-3-3' | 11-20-02/13:40 |
| 11444-2 | SVP-3-6' | 11-20-02/13:55 |
| 11444-3 | SVP-3-9' | 11-20-02/14:05 |
| 11444-4 | SVP-3-12 | 11-20-02/14;10 |
| 11444-5 | SVP-3-33 | 11-20-02/14:40 |

| PARAMETER | 11444-1 | 11444-2 | 11444-3 | 11444-4 | 11444-5 |
|---|---|---|---|---|---|
| Styrene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| t-Butylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1,1,2-Tetrachloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1,2,2-Tetrachloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Tetrachloroethene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Toluene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1,1-Trichloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,1,2-Trichloroethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2,3-Trichlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2,4-Trichlorobenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Trichloroethene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Trichlorofluoromethane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2,3-Trichloropropane, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,2,4-Trimethylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| 1,3,5-Trimethylbenzene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| Vinyl chloride, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| o-Xylene, ug/kg | <4.6 | <5.0 | <4.9 | <5.0 | <5.0 |
| mp-Xylene, ug/kg | <9.3 | <10 | <9.8 | <9.9 | <9.9 |
| Surrogate - Dibromofluoromethane | 103 % | 105 % | 104 % | 106 % | 106 % |
| Surrogate - Toluene-d8 | 101 % | 100 % | 100 % | 94 % | 94 % |
| Surrogate - 4-Bromofluorobenzene | 102 % | 101 % | 103 % | 129 % | 130 % |
| Dilution Factor | 1 | 1 | 1 | 1 | 1 |
| Prep Date | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 |
| Analysis Date | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 |
| Batch ID | MAS192 | MAS192 | MAS192 | MAS192 | MAS192 |
| Prep Method | 5035 | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB | DWB |

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-1 | SVP-3-3' | 11-20-02/13:40 |
| 11444-2 | SVP-3-6' | 11-20-02/13:55 |
| 11444-3 | SVP-3-9' | 11-20-02/14:05 |
| 11444-4 | SVP-3-12 | 11-20-02/14:10 |
| 11444-5 | SVP-3-33 | 11-20-02/14:40 |

| PARAMETER | 11444-1 | 11444-2 | 11444-3 | 11444-4 | 11444-5 |
|---|---|---|---|---|---|

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-6 | SVP-3-57 | 11-20-02/15:40 |
| 11444-7 | SVP-3-77 | 11-20-02/16:25 |
| 11444-8 | SVP-3-97 | 11-21-02/08:55 |
| 11444-9 | SVP-3-117 | 11-21-02/10;15 |

| PARAMETER | 11444-6 | 11444-7 | 11444-8 | 11444-9 |
|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | |
| Benzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Bromobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Bromochloromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Bromodichloromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Bromoform, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Bromomethane (Methyl bromide), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Carbon tetrachloride, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Chlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Chloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Chloroform, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Chloromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 2-Chlorotoluene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 4-Chlorotoluene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Dibromochloromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Dibromomethane (Methylene bromide), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2-Dibromoethane (EDB), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2-Dichlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,3-Dichlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,4-Dichlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Dichlorodifluoromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,1-Dichloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2-Dichloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |

SEVERN
TRENT
SERVICES

**STL Pensacola**

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

# REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-6 | SVP-3-57 | 11-20-02/15:40 |
| 11444-7 | SVP-3-77 | 11-20-02/16:25 |
| 11444-8 | SVP-3-97 | 11-21-02/08:55 |
| 11444-9 | SVP-3-117 | 11-21-02/10:15 |

| PARAMETER | 11444-6 | 11444-7 | 11444-8 | 11444-9 |
|---|---|---|---|---|
| 1,1-Dichloroethene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| cis-1,2-Dichloroethene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| trans-1,2-Dichloroethene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2-Dichloropropane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,3-Dichloropropane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 2,2 Dichloropropane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| cis-1,3-Dichloropropene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| trans-1,3-Dichloropropene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Ethylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Hexachlorobutadiene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Isopropylbenzene (Cumene), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| p-Isopropyltoluene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Methylene chloride (Dichloromethane), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Methyl t-butyl ether (MTBE), ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Naphthalene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| n-Butylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| n-Propylbenzene , ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| sec-Butylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Styrene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| t-Butylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,1,1,2-Tetrachloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,1,2,2-Tetrachloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Tetrachloroethene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

# REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-6 | SVP-3-57 | 11-20-02/15:40 |
| 11444-7 | SVP-3-77 | 11-20-02/16:25 |
| 11444-8 | SVP-3-97 | 11-21-02/08:55 |
| 11444-9 | SVP-3-117 | 11-21-02/10:15 |

| PARAMETER | 11444-6 | 11444-7 | 11444-8 | 11444-9 |
|---|---|---|---|---|
| Toluene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,1,1-Trichloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,1,2-Trichloroethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2,3-Trichlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2,4-Trichlorobenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Trichloroethene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Trichlorofluoromethane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2,3-Trichloropropane, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,2,4-Trimethylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| 1,3,5-Trimethylbenzene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| Vinyl chloride, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| o-Xylene, ug/kg | <4.7 | <4.6 | <4.9 | <4.8 |
| mp-Xylene, ug/kg | <9.4 | <9.1 | <9.8 | <9.6 |
| Surrogate - Dibromofluoromethane | 103 % | 105 % | 107 % | 105 % |
| Surrogate - Toluene-d8 | 98 % | 99 % | 98 % | 99 % |
| Surrogate - 4-Bromofluorobenzene | 116 % | 101 % | 102 % | 101 % |
| Dilution Factor | 1 | 1 | 1 | 1 |
| Prep Date | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 |
| Analysis Date | 11.25.02 | 11.25.02 | 11.25.02 | 11.25.02 |
| Batch ID | MAS192 | MAS192 | MAS192 | MAS192 |
| Prep Method | 5035 | 5035 | 5035 | 5035 |
| Analyst | DWB | DWB | DWB | DWB |

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-10 | Method Blank | |
| 11444-11 | Lab Control Standard % Recovery | |
| 11444-12 | Matrix Spike % Recovery | |
| 11444-13 | Matrix Spike Duplicate % Recovery | |
| 11444-14 | Matrix Spike % Recovery | |

| PARAMETER | 11444-10 | 11444-11 | 11444-12 | 11444-13 | 11444-14 |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg | <5.0 | 103 % | NoMS | NoMS | NoMS |
| Bromobenzene, ug/kg | <5.0 | 98 % | --- | --- | --- |
| Bromochloromethane, ug/kg | <5.0 | 101 % | --- | --- | --- |
| Bromodichloromethane, ug/kg | <5.0 | 107 % | --- | --- | --- |
| Bromoform, ug/kg | <5.0 | 112 % | --- | --- | --- |
| Bromomethane (Methyl bromide), ug/kg | <5.0 | 118 % | --- | --- | --- |
| Carbon tetrachloride, ug/kg | <5.0 | 104 % | --- | --- | --- |
| Chlorobenzene, ug/kg | <5.0 | 104 % | --- | --- | --- |
| Chloroethane, ug/kg | <5.0 | 102 % | --- | --- | --- |
| Chloroform, ug/kg | <5.0 | 103 % | --- | --- | --- |
| Chloromethane, ug/kg | <5.0 | 98 % | --- | --- | --- |
| 2-Chlorotoluene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| 4-Chlorotoluene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| Dibromochloromethane, ug/kg | <5.0 | 105 % | --- | --- | --- |
| Dibromomethane (Methylene bromide), ug/kg | <5.0 | 106 % | --- | --- | --- |
| 1,2-Dibromoethane (EDB), ug/kg | <5.0 | 105 % | --- | --- | --- |
| 1,2-Dichlorobenzene, ug/kg | <5.0 | 102 % | --- | --- | --- |
| 1,3-Dichlorobenzene, ug/kg | <5.0 | 101 % | --- | --- | --- |
| 1,4-Dichlorobenzene, ug/kg | <5.0 | 101 % | --- | --- | --- |

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-10 | Method Blank | |
| 11444-11 | Lab Control Standard % Recovery | |
| 11444-12 | Matrix Spike % Recovery | |
| 11444-13 | Matrix Spike Duplicate % Recovery | |
| 11444-14 | Matrix Spike % Recovery | |

| PARAMETER | 11444-10 | 11444-11 | 11444-12 | 11444-13 | 11444-14 |
|---|---|---|---|---|---|
| Dichlorodifluoromethane, ug/kg | <5.0 | 89 % | --- | --- | --- |
| 1,1-Dichloroethane, ug/kg | <5.0 | 103 % | --- | --- | --- |
| 1,2-Dichloroethane, ug/kg | <5.0 | 103 % | --- | --- | --- |
| 1,1-Dichloroethene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| cis-1,2-Dichloroethene, ug/kg | <5.0 | 105 % | --- | --- | --- |
| trans-1,2-Dichloroethene, ug/kg | <5.0 | 102 % | --- | --- | --- |
| 1,2-Dichloropropane, ug/kg | <5.0 | 102 % | --- | --- | --- |
| 1,3-Dichloropropane, ug/kg | <5.0 | 101 % | --- | --- | --- |
| 2,2 Dichloropropane, ug/kg | <5.0 | 100 % | --- | --- | --- |
| cis-1,3-Dichloropropene, ug/kg | <5.0 | 107 % | --- | --- | --- |
| trans-1,3-Dichloropropene, ug/kg | <5.0 | 114 % | --- | --- | --- |
| Ethylbenzene, ug/kg | <5.0 | 99 % | --- | --- | --- |
| Hexachlorobutadiene, ug/kg | <5.0 | 101 % | --- | --- | --- |
| Isopropylbenzene (Cumene), ug/kg | <5.0 | 97 % | --- | --- | --- |
| p-Isopropyltoluene, ug/kg | <5.0 | 99 % | --- | --- | --- |
| Methylene chloride (Dichloromethane), ug/kg | <5.0 | 100 % | --- | --- | --- |
| Methyl t-butyl ether (MTBE), ug/kg | <5.0 | 94 % | --- | --- | --- |
| Naphthalene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| n-Butylbenzene, ug/kg | <5.0 | 99 % | --- | --- | --- |
| n-Propylbenzene , ug/kg | <5.0 | 97 % | --- | --- | --- |
| sec-Butylbenzene, ug/kg | <5.0 | 97 % | --- | --- | --- |

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-10 | Method Blank | |
| 11444-11 | Lab Control Standard % Recovery | |
| 11444-12 | Matrix Spike % Recovery | |
| 11444-13 | Matrix Spike Duplicate % Recovery | |
| 11444-14 | Matrix Spike % Recovery | |

| PARAMETER | 11444-10 | 11444-11 | 11444-12 | 11444-13 | 11444-14 |
|---|---|---|---|---|---|
| Styrene, ug/kg | <5.0 | 101 % | --- | --- | --- |
| t-Butylbenzene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| 1,1,1,2-Tetrachloroethane, ug/kg | <5.0 | 104 % | --- | --- | --- |
| 1,1,2,2-Tetrachloroethane, ug/kg | <5.0 | 103 % | --- | --- | --- |
| Tetrachloroethene, ug/kg | <5.0 | 103 % | --- | --- | --- |
| Toluene, ug/kg | <5.0 | 98 % | --- | --- | --- |
| 1,1,1-Trichloroethane, ug/kg | <5.0 | 105 % | --- | --- | --- |
| 1,1,2-Trichloroethane, ug/kg | <5.0 | 108 % | --- | --- | --- |
| 1,2,3-Trichlorobenzene, ug/kg | <5.0 | 97 % | --- | --- | --- |
| 1,2,4-Trichlorobenzene, ug/kg | <5.0 | 101 % | --- | --- | --- |
| Trichloroethene, ug/kg | <5.0 | 104 % | --- | --- | --- |
| Trichlorofluoromethane, ug/kg | <5.0 | 98 % | --- | --- | --- |
| 1,2,3-Trichloropropane, ug/kg | <5.0 | 99 % | --- | --- | --- |
| 1,2,4-Trimethylbenzene, ug/kg | <5.0 | 98 % | --- | --- | --- |
| 1,3,5-Trimethylbenzene, ug/kg | <5.0 | 100 % | --- | --- | --- |
| Vinyl chloride, ug/kg | <5.0 | 97 % | --- | --- | --- |
| o-Xylene, ug/kg | <5.0 | 102 % | --- | --- | --- |
| mp-Xylene, ug/kg | <10 | 103 % | --- | --- | --- |
| Surrogate - Dibromofluoromethane | 104 % | 102 % | --- | --- | |
| Surrogate - Toluene-d8 | 100 % | 100 % | --- | --- | --- |
| Surrogate - 4-Bromofluorobenzene | 101 % | 96 % | --- | --- | --- |
| Dilution Factor | 1 | --- | --- | --- | --- |
| Prep Date | 11.25.02 | --- | --- | --- | --- |
| Analysis Date | 11.25.02 | --- | --- | --- | --- |
| Batch ID | MAS192 | MAS192 | --- | --- | --- |
| Prep Method | 5030B | --- | --- | --- | --- |
| Analyst | DWB | --- | --- | --- | --- |

SEVERN
TRENT
SERVICES

STL Pensacola

LOG NO: C2-11444
Received: 22 NOV 02
Reported: 27 NOV 02

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

Project: 211184 MC-PERSON STATION, NM
Sampled By: Client
Code: 133421127

REPORT OF RESULTS

| LOG NO | SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID | DATE/ TIME SAMPLED |
|---|---|---|
| 11444-15 | Matrix Spike Duplicate % Recovery | |

| PARAMETER | | | 11444-15 | | |
|---|---|---|---|---|---|
| Volatile Organic Compounds (8260B) | | | | | |
| Benzene, ug/kg | | | NoMS | | |

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.
Data from any samples that do not meet client, federal, or state sample acceptance criteria (collection, preservation, or holding time) will be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF).
A statement of the estimated uncertainty of the test result is available upon request.

MPope for
Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT STL

# STL Pensacola Data Qualifiers for Final Report

| | |
|---|---|
| B | The analyte was detected in the associated method blank and in the client's sample. |
| C | The compound has been quantitated against a one point calibration. |
| D | Recovery is not calculable due to dilution. |
| E | Estimated value because the analyte concentration exceeds the upper calibration range of the instrument or method. |
| I | Estimated value because the analyte concentration is less than the lower calibration range of the instrument but is at the method detection limit or greater than the method detection limit. |
| H | 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. |
| J1 | A sample surrogate or an LCS target compound recovered above the upper control limit (UCL). Compounds qualified with a J1 may be biased high. |
| J2 | A sample surrogate or an LCS target compound recovered outside the lower control limit (LCL). Compounds qualified with a J2 may be biased low. |
| M1 | A matrix effect was present. |
| 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 use this flag in place of negative numbers). |
| R1 | Internal standard area exceeds the acceptance criteria |
| R2 | Calibration verification exceeds the acceptance criteria. |
| S1 | The Method of Standard Additions (MSA) has been performed on this sample. |
| T | Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound. |
| TIC | The compound is not included in the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound. |
| U or < | The analyte was not detected at or above the MDL or the RL, whichever is entered next to the "U" or "<". |
| W | Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance. |

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

## Abbreviations

| | |
|---|---|
| ND | Not Detected at or above the STL Pensacola reporting limit (RL) |
| NS | Not Submitted |
| NA | Not Applicable |
| MDL | STL Pensacola Method Detection Limit |
| RL | STL Pensacola Reporting Limit |
| NoMS | Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD) |

## Florida Projects Inorganic/Organic

Refer to FL DEP 62-160.700(7); Table 7 Data Qualifier Codes. FL DEP Rule 62-160.670(1)(h) states that laboratories shall include the analytical result for each analysis with applicable data qualifiers. FL DEP Rule 62-160.700(7), Table 7 lists the FL DEP data qualifiers. FL DEP Rule 62-160.700(3), Table 3 lists the Florida sites which require data qualifiers.

## AFCEE QAPP Projects

Refer to AFCEE QAPP for appropriate data qualifiers (AFCEE QAPP Version will be specified by client for the project).

## Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

## CLP and CLP-like Projects

Refer to referenced CLP Statement of Work (SOW) for explanation of data qualifiers. CLP SOW to be followed must be specified to client.

Revised 10 01 02

# *STL PENSACOLA*
# *Certifications, Memberships & Affiliations*

*__Alabama__ Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL), expires 06/30/03*

*__Arizona__ Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater), expires 01/11/03*

*__Arkansas__ Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental), expires 02/20/03*

*__California__ Department of Health Services, __ELAP__ Laboratory ID No. I-2510 (Hazardous Waste and Wastewater), expires 03/31/03*

*__Connecticut__ Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater), expires 09/30/03*

*__Florida__ DOH, __NELAP__ Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater), expires 06/30/03*

*__Florida__ DEP/DOH CompQAP # 980156*

*__Iowa__ Department of Natural Resources, Laboratory ID No. 367 (UST), expires 08/01/04*

*__Kansas__ Department of Health & Environment, __NELAP__ Laboratory ID No. E10253 (Wastewater and Hazardous Waste), expires 10/31/03*

*__Kentucky__ NR&EPC, Laboratory ID No. 90043 (Drinking Water), expires 12/31/02.*

*__Louisiana__ DEQ, LELAP, __NELAP__ Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental, expires 6/30/03)*

*__Maryland__ DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida), expires 09/30/03*

*__Massachusetts__ DEP, Laboratory ID No. M-FL094 ( Wastewater), expires 06/30/03*

*__Michigan__ Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida), expires 06/30/03*

*__New Hampshire__ DES ELAP, __NELAP__ Laboratory ID No. 250502 (Drinking Water & Wastewater), expires 08/16/03*

*__New Jersey__ DEP&E, __NELAP__ Laboratory ID No. FL006 (Wastewater and Hazardous Waster), expires 06/30/03.*

*__New York State__ Department of Health, __NELAP__ Laboratory ID No. 11503 (WW and Solids/Hazardous Waste), expires 04/01/2003*

*__North Carolina__ DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater), expires 12/31/02.*

*__North Dakota__ DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida), expires 06/30/03*

*__Oklahoma__ Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater), expires 08/31/03*

*__Pennsylvania__ Department of Environmental Resources, __NELAP__ Laboratory ID No. 68-467 (Drinking Water & Wastewater), expires 12/01/02*

*__South Carolina__ DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL), expires 06/30/03*

*__Tennessee__ Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water), expires 08/03/04*

*__Virginia__ Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL), expires 06/30/03.*

*__Washington__ Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater), expires 09/14/03.*

*__West Virginia__ DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater), expires 04/30/02.*

*__AIHA__ (American Industrial Hygiene Association) Accredited Laboratory, Laboratory ID No. 100704, expires April 1, 2004. Participant in AIHA sponsored Laboratory PAT Rounds*

*__EPA ICR__ (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031*

*__NFESC__ (Naval Facilities Engineering Services Center), expires December 31, 2002.*

*__USACE__ (United States Army Corps. of Engineers), MRD, expires January 5, 2003.*

*STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599*

*certlist\condcert.lst revised 11/15/02*

Total Pages of Report _______

**Chain of Custody Record**

STL-4124 (0901)

Severn Trent Laboratories
3355 McLemore Drive
Pensacola, FL 32514

SEVERN TRENT SERVICES

211184

Severn Trent Laboratories, Inc.

Client: Metric Corp
Project Manager: Gary L. Richardson
Date: 11-20-02
Chain of Custody Number: 172844
Address: 8429 Washington Pl. NE #A
Telephone Number (Area Code)/Fax Number:
Lab Number:
Page 1 of 1
City: Albuquerque
State: NM
Zip Code: 87113
Site Contact:
Lab Contact:
Project Name and Location (State): Person Station, New Mexico
Carrier/Waybill Number:
Contract/Purchase Order/Quote No.:

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | #Encore | Analysis (Attach list if more space is needed): 8260 | Lab ID# | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-3-3' | 11-20-02 | 1340 | | | | X | | | | | | | 2 | X | 01 | |
| SVP-3-6' | " | 1355 | | | | X | | | | | | | 2 | X | 02 | |
| SVP-3-9' | " | 1405 | | | | X | | | | | | | 2 | X | 03 | |
| SVP-3-12 | " | 1410 | | | | X | | | | | | | 2 | X | 04 | |
| SVP-3-33 | " | 1440 | | | | X | | | | | | | 2 | X | 05 | |
| SVP-3-57 | " | 1540 | | | | X | | | | | | | 2 | X | 06 | |
| SVP-3-77 | " | 1625 | | | | X | | | | | | | 2 | X | 07 | |
| SVP-3-97 | 11-21-02 | 0855 | | | | X | | | | | | | 2 | X | 08 | |
| SVP-3-117 | " | 1015 | | | | X | | | | | | | 2 | X | 09 | |

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☑ 14 Days ☐ 21 Days ☐ Other______

QC Requirements (Specify)

1. Relinquished By: Gary L R — Date: 11-21-02 — Time: 1155
1. Received By: Francine Trino — Date: 11/21/02 — Time: 1155
2. Relinquished By: — Date: — Time:
2. Received By: — Date: — Time:
3. Relinquished By: — Date: — Time:
3. Received By: — Date: — Time:

Comments
Detection limit less than 0.005 mg/Kg desired for PCE, 1,1,1-TCA, 1,1-DCE.

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Rcvd @ 12°

# *Attachment B-4*
# *Soil Vapor Probe Sampling Field Data Sheets*

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-1-38

Probe Diameter (d) 0.364 in. Probe Depth (D) 40 ft.

Date ________ Sampler ________

Casing Volume = $\frac{\overset{0.00072}{\pi [d(in.)/12]^2}}{4}$ x D = 0.0289 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.087 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.52 scfh

Selected Purge Rate = 0.52 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 10:41 | | 0 | | 0 | | start |
| 10:42 | | 1 | 0.0087 | 0.5 | | |
| 10:43 | | 2 | 0.0174 | 0.5 | | |
| 10:44 | | 3 | 00261 | 0.5 | | |
| 10:45 | | 4 | .0348 | 0.5 | | |
| 10:46 | | 5 | .0435 | 0.5 | | |
| 10:47 | | 6 | .0522 | 0.5 | | |
| 10:48 | | 7 | .0609 | 0.5 | | |
| 10:49 | | 8 | .0696 | 0.5 | | |
| 10:50 | | 9 | .0783 | 0.5 | | |
| 10:51 | | 10 | .0870 | 0.5 | | |
| 10:53 | | | | | | Sampled |

**METRIC**
Corporation

Person Station

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-1-58'

Probe Diameter (d) 0.364 in. Probe Depth (D) 60 ft.

Date 3-11-03 Sampler Don Briggs

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.043 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.13 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.78 scfh

Leak test OK 30" for 1 min

Selected Purge Rate = scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 10:00 | 0 | | 0 | 0 | | Start |
| 10:01 | 1 | | 0.013 | 0.5 | | |
| 10:02 | 2 | | 0.026 | 0.5 | | |
| 10:03 | 3 | | 0.039 | 0.5 | | |
| 10:04 | 4 | | 0.052 | 0.5 | | |
| 10:05 | 5 | | 0.065 | 0.5 | | |
| 10:06 | 6 | | 0.078 | 0.5 | | |
| 10:07 | 7 | | 0.091 | 0.5 | | |
| 10:08 | 8 | | 0.104 | 0.5 | | |
| 10:09 | 9 | | 0.117 | 0.5 | | |
| 10:10 | 10 | | 0.130 | 0.5 | | |
| 10:12 | 12 | | | | | Sampled |
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**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-1-78

Probe Diameter (d) 0.364 in. Probe Depth (D) 80 ft.

Date ________ Sampler ________

Casing Volume = $\frac{\pi\,[d(\text{in.})/12]^2}{4} \times D =$ 0.058 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.17 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.04 scfh

Selected Purge Rate = 1.04 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 10:23 | | 0 | 0 | 0 | | start |
| 10:24 | | 1 | 0.17 | 0.5 | | |
| 10:25 | | 2 | 0.34 | 0.5 | | |
| 10:26 | | 3 | 0.51 | 0.5 | | |
| 10:27 | | 4 | 0.68 | 0.5 | | |
| 10:28 | | 5 | 0.85 | 0.5 | | |
| 10:29 | | 6 | 0.102 | 0.5 | | |
| 10:30 | | 7 | 0.119 | 0.5 | | |
| 10:31 | | 8 | 0.136 | 0.5 | | |
| 10:32 | | 9 | 0.153 | 0.5 | | |
| 10:33 | | 10 | 0.170 | 0.5 | | |
| 10:35 | | 11 | | | | sampled |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-1-98

Probe Diameter (d) 0.364 in. Probe Depth (D) 100 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi\,[d(\text{in.})/12]^2}{4}$ x D = 0.072 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.216 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.29 scfh

Selected Purge Rate = ______ scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 11:02 | 0 | | 0 | | | start |
| 11:03 | 1 | | 0.0216 | 0.5 | | |
| 11:04 | 2 | | 0.0432 | 0.5 | | |
| 11:05 | 3 | | .0648 | 0.75 | | |
| 11:06 | 4 | | .0864 | 0.75 | | |
| 11:07 | 5 | | .1080 | 0.75 | | |
| 11:08 | 6 | | .1296 | 0.75 | | |
| 11:09 | 7 | | .1512 | 0.75 | | |
| 11:10 | 8 | | .1728 | 0.75 | | |
| 11:11 | 9 | | .1944 | 0.75 | | |
| 11:12 | 10 | | .216 | 0.75 | | |
| 11:15 | | | | | | Sampled |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-1-118

Probe Diameter (d) 0.364 in. Probe Depth (D) 120 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.0867 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.26 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.56 scfh

Selected Purge Rate = 1.56 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 11:21 | 0 | | 0 | 0 | | |
| 11:22 | 1 | | 0.026 | 0.75 | | |
| 11:23 | 2 | | 0.052 | 0.75 | | |
| 11:24 | 3 | | 0.078 | 0.75 | | |
| 11:25 | 4 | | 0.104 | 0.75 | | |
| 11:26 | 5 | | 0.130 | 0.75 | | |
| 11:27 | 6 | | 0.156 | 0.75 | | |
| 11:28 | 7 | | 0.182 | 0.75 | | |
| 11:29 | 8 | | 0.208 | 0.75 | | |
| 11:30 | 9 | | 0.234 | 0.75 | | |
| 11:31 | 10 | | 0.260 | 0.75 | | |
| 11:33 | | | | | | |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-2-38

Probe Diameter (d) 0.364 in. Probe Depth (D) 40 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4} \times D$ = 0.0288 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.086 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.51 scfh

Selected Purge Rate = 0.51 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 13:55 | 0 | | 0 | 0 | | Start |
| 56 | 1 | | .0086 | 0.25 | | |
| 57 | 2 | | .0172 | 0.25 | | |
| 58 | 3 | | .0258 | 0.25 | | |
| 59 | 4 | | .0344 | 0.25 | | |
| 14:00 | 5 | | .0430 | 0.25 | | |
| 01 | 6 | | .0516 | 0.25 | | |
| 02 | 7 | | .0602 | 0.25 | | |
| 03 | 8 | | .0688 | 0.25 | | |
| 04 | 9 | | .0774 | 0.25 | | |
| 05 | 10 | | .086 | 0.25 | | |
| 14:07 | | | | | | Sample |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-2-58

Probe Diameter (d) 0.364 in. Probe Depth (D) 60 ft.

Date 3-11-03 Sampler DP

Casing Volume = $\frac{\pi\,[d(in.)/12]^2}{4}$ x D = 00432 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.13 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.78 scfh

Selected Purge Rate = 0.78 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 14:10 | 0 | | 0 | 0 | | start |
| 11 | 1 | | .013 | 0.25 | | |
| 12 | 2 | | .026 | 0.25 | | |
| 13 | 3 | | .039 | 0.25 | | |
| 14 | 4 | | .052 | 0.25 | | |
| 15 | 5 | | .065 | 0.25 | | |
| 16 | 6 | | .078 | 0.25 | | |
| 17 | 7 | | .091 | 0.25 | | |
| 18 | 8 | | .104 | 0.25 | | |
| 19 | 9 | | .117 | 0.25 | | |
| 20 | 10 | | .130 | 0.25 | | |
| 1422 | | Bad | Bag | | | ~~Sample~~ |
| 1429 | | | | | | Sample |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-2-78

Probe Diameter (d) 0.364 in. Probe Depth (D) 80 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.058 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.17 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.04 scfh

Selected Purge Rate = 1.04 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 14:35 | 0 | | 0 | 0 | | Start |
| 36 | 1 | | .017 | 0.25 | | |
| 37 | 2 | | .034 | 0.25 | | |
| 38 | 3 | | .051 | 0.25 | | |
| 39 | 4 | | .068 | 0.25 | | |
| 40 | 5 | | .085 | 0.25 | | |
| 41 | 6 | | .102 | 0.25 | | |
| 42 | 7 | | .119 | 0.25 | | |
| 43 | 8 | | .136 | 0.25 | | |
| 44 | 9 | | .153 | 0.25 | | |
| 45 | 10 | | .170 | 0.25 | | |
| 1447 | | | | | | Sample |
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**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-2-98

Probe Diameter (d) 0.364 in. Probe Depth (D) 100 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.072 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.216 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.29 scfh

Selected Purge Rate = 1.29 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 14:50 | 0 | | 0 | 0 | | start |
| 51 | 1 | | .0216 | 0.5 | | |
| 52 | 2 | | .0432 | 0.5 | | |
| 53 | 3 | | .0648 | 0.5 | | |
| 54 | 4 | | .0864 | 0.5 | | |
| 55 | 5 | | .1080 | 0.5 | | |
| 56 | 6 | | .1296 | 0.5 | | |
| 57 | 7 | | .1512 | 0.5 | | |
| 58 | 8 | | .1728 | 0.5 | | |
| 59 | 9 | | .1944 | 0.5 | | |
| 15:00 | 10 | | .2160 | 0.5 | | |
| 15:02 | | | | | | sample |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-2-118

Probe Diameter (d) 0.364 in. Probe Depth (D) 120 ft.

Date 3-11-02 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.0867 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.26 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.56 scfh

Selected Purge Rate = 1.56 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 15:16 | 0 | | 0 | 0 | | Start |
| 17 | 1 | | .026 | 0.5 | | |
| 18 | 2 | | .052 | 0.5 | | |
| 19 | 3 | | .078 | 0.5 | | |
| 20 | 4 | | .104 | 0.5 | | |
| 21 | 5 | | .130 | 0.5 | | |
| 22 | 6 | | .156 | 0.5 | | |
| 23 | 7 | | .182 | 0.5 | | |
| 24 | 8 | | .208 | 0.5 | | |
| 25 | 9 | | .234 | 0.5 | | |
| 26 | 10 | | .260 | 0.5 | | |
| 15:28 | | | | | | Sample |
| | | | | | | |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-3-38

Probe Diameter (d) 0.364 in. Probe Depth (D) 40' ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4} \times D$ = 0.0288 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.086 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.51 scfh

Selected Purge Rate = 0.51 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 11:54 | 0 | | 0 | 0 | | Start |
| 11:55 | 1 | | 0.0086 | 0.25 | | |
| 11:56 | 2 | | .0172 | 0.25 | | |
| 11:57 | 3 | | .0258 | 0.25 | | |
| 11:58 | 4 | | .0344 | 0.25 | | |
| 11:59 | 5 | | .0430 | 0.25 | | |
| 12:00 | 6 | | .0516 | 0.25 | | |
| 12:01 | 7 | | .0602 | 0.25 | | |
| 12:02 | 8 | | .0688 | 0.25 | | |
| 12:03 | 9 | | .0774 | 0.25 | | |
| 12:04 | 10 | | .086 | 0.25 | | |
| 12:06 | | | | | | Sampled |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-3-58

Probe Diameter (d) 0.364 in. Probe Depth (D) 60 ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi\,[d(\text{in.})/12]^2}{4} \times D$ = 0.043 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.13 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 0.78 scfh

Selected Purge Rate = 0.78 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 12:12 | 0 | | 0 | 0 | | |
| 12:13 | 1 | | 0.013 | 0.5 | | |
| 14 | 2 | | 0.026 | 0.5 | | |
| 15 | 3 | | 0.039 | 0.5 | | |
| 16 | 4 | | 0.052 | 0.5 | | |
| 17 | 5 | | 0.065 | 0.5 | | |
| 18 | 6 | | 0.078 | 0.5 | | |
| 19 | 7 | | 0.091 | 0.5 | | |
| 20 | 8 | | 0.104 | 0.5 | | |
| 21 | 9 | | 0.117 | 0.5 | | |
| 22 | 10 | | 0.13 | 0.5 | | |
| 12:24 | | | | | | Sampled |
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**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-3-78

Probe Diameter (d) 0.364 in. Probe Depth (D) 80 ft.

Date 3-11-03 Sampler SDB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.058 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.17 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.04 scfh

Selected Purge Rate = 1.04 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 12:30 | 0 | | 0 | 0 | | |
| 31 | 1 | | .017 | 0.75 | | |
| 32 | 2 | | .034 | 0.75 | | |
| 33 | 3 | | .051 | 0.75 | | |
| 34 | 4 | | .068 | 0.75 | | |
| 35 | 5 | | .085 | 0.75 | | |
| 36 | 6 | | .102 | 0.75 | | |
| 37 | 7 | | .119 | 0.75 | | |
| 38 | 8 | | .136 | 0.75 | | |
| 39 | 9 | | .153 | 0.75 | | |
| 40 | 10 | | .170 | 0.75 | | |
| 12:42 | | | | | | Sampled |

**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-3-98

Probe Diameter (d) 0.364 in. Probe Depth (D) 100 ft.

Date 3-11-03 Sampler JDB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4}$ x D = 0.072 ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = 0.216 ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = 1.29 scfh

Selected Purge Rate = 1.29 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 12:47 | 0 | | 0 | 0 | | Start |
| 48 | 1 | | 0.0216 | 1.0 | | |
| 49 | 2 | | .0432 | 1.0 | | |
| 50 | 3 | | .0648 | 1.0 | | |
| 51 | 4 | | .0864 | 1.0 | | |
| 52 | 5 | | .1080 | 1.0 | | |
| 53 | 6 | | .1296 | 1.0 | | |
| 54 | 7 | | .1512 | 1.0 | | |
| 55 | 8 | | .1728 | 1.0 | | |
| 56 | 9 | | .1944 | 1.0 | | |
| 57 | 10 | | .2160 | 1.0 | | |
| 12:59 | | | | | | sampled |
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**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number SVP-3-118

Probe Diameter (d) 0.360 in. Probe Depth (D) 120 ft.

Date 3-11-03 Sampler SDB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4} \times D =$ 0.0867 $ft.^3$

Minimum Purge Volume = 3 x Casing Volume = 0.26 $ft.^3$

Approximate Purge Rate = Purge Volume ($ft^3$) x $\frac{60}{10}$ = 1.56 scfh

Selected Purge Rate = 1.56 scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume ($ft^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 13:03 | 0 | | 0 | 0 | | start |
| 04 | 1 | | .026 | 0.25 | | |
| 05 | 2 | | .052 | 0.25 | | |
| 06 | 3 | | .078 | 0.25 | | |
| 07 | 4 | | .104 | 0.25 | | |
| 08 | 5 | | .130 | 0.25 | | |
| 09 | 6 | | .156 | 0.25 | | |
| 10 | 7 | | .182 | 0.25 | | |
| 11 | 8 | | .208 | 0.25 | | |
| 12 | 9 | | .234 | 0.25 | | |
| 13 | 10 | | .260 | 0.25 | | |
| 13:15 | | | | | | Sampled |
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**METRIC**
Corporation

## SOIL VAPOR PROBE SAMPLING

Probe Number Vapor Extraction Well

Probe Diameter (d) 4" in. Probe Depth (D) 120'? ft.

Date 3-11-03 Sampler DB

Casing Volume = $\frac{\pi [d(in.)/12]^2}{4} \times D =$ ______ ft.$^3$

Minimum Purge Volume = 3 x Casing Volume = ______ ft.$^3$

Approximate Purge Rate = Purge Volume (ft$^3$) x $\frac{60}{10}$ = ? scfh

Selected Purge Rate = ______ scfh

| Time (H:M) | Purge Time (min) | Purge Time (hr) | Purged Volume (ft$^3$) | Probe Head Vac (in $H_2O$) | PID Reading (ppm) | Comments |
|---|---|---|---|---|---|---|
| 15:30 | 0 | | | 0 | | Start |
| 15:35 | 5 | | | 27 | | |
| 1545 | | | | 27 | | |
| 16:00 | | | | 27 | | Sample |
| 16:01 | | | | 32 | | |

# *Attachment B-5*
## *Soil Gas Analytical Results*

PINNACLE LABORATORIES

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

Pinnacle Lab ID number **303028**
March 18, 2003

METRIC CORPORATION
8429 WASHINGTON PLACE NE
ALBUQUERQUE, NM 87113

Project Name PERSON STATION
Project Number (NONE)

Attention: GARY RICHARDSON

On 03/11/03 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **air** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

H Mitchell

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: jt

Enclosure

PINNACLE LABORATORIES

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

CLIENT : METRIC CORPORATION | PINNACLE ID : 303028
PROJECT # : (NONE) | DATE RECEIVED : 03/11/03
PROJECT NAME : PERSON STATION | REPORT DATE : 03/18/03

| PINNACLE ID # | CLIENT DESCRIPTION | MATRIX | DATE COLLECTED |
|---|---|---|---|
| 303028 - 01 | SVP-1-58 | AIR | 03/11/03 |
| 03028 - 02 | SVP-1-78 | AIR | 03/11/03 |
| 03028 - 03 | SVP-1-38 | AIR | 03/11/03 |
| 303028 - 04 | SVP-1-98 | AIR | 03/11/03 |
| 303028 - 05 | SVP-1-118 | AIR | 03/11/03 |
| 03028 - 06 | SVP-3-38 | AIR | 03/11/03 |
| 303028 - 07 | SVP-3-58 | AIR | 03/11/03 |
| 303028 - 08 | SVP-3-78 | AIR | 03/11/03 |
| 03028 - 09 | SVP-3-98 | AIR | 03/11/03 |
| 03028 - 10 | SVP-3-118 | AIR | 03/11/03 |
| 303028 - 11 | SVP-2-38 | AIR | 03/11/03 |
| 303028 - 12 | SVP-2-58 | AIR | 03/11/03 |
| 03028 - 13 | SVP-2-78 | AIR | 03/11/03 |
| 303028 - 14 | SVP-2-98 | AIR | 03/11/03 |
| 303028 - 15 | SVP-2-118 | AIR | 03/11/03 |
| 03028 - 16 | VEW-1 | AIR | 03/11/03 |

PINNACLE LABORATORIES

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

## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-01 | SVP-1-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M$^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Tetrachloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-01 | SVP-1-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 99<br>( 80 - 120 ) |
| Toluene-d8 | 99<br>( 81 - 117 ) |
| Bromofluorobenzene | 99<br>( 74 - 121 ) |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-02 | SVP-1-78 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Bromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Acetone | 1.0 | < 1.0 | $MG/M^3$ |
| Acrolein | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Iodomethane | 0.50 | < 0.50 | $MG/M^3$ |
| Methylene Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Acrylonitrile | 0.50 | < 0.50 | $MG/M^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Butanone | 1.0 | < 1.0 | $MG/M^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | $MG/M^3$ |
| Bromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroform | 0.10 | < 0.10 | $MG/M^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | $MG/M^3$ |
| **Benzene** | **0.10** | **0.18** | **$MG/M^3$** |
| 1,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | $MG/M^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Dibromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Toluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | $MG/M^3$ |
| 2-Hexanone | 1.0 | < 1.0 | $MG/M^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Tetrachloroethene** | **0.10** | **0.36** | **$MG/M^3$** |
| Chlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Ethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-02 | SVP-1-78 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| m&p Xylenes | 0.10 | < 0.10 | $MG/M^3$ |
| o-Xylene | 0.10 | < 0.10 | $MG/M^3$ |
| Styrene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromoform | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| **Isopropyl Benzene** | **0.10** | **0.23** | **$MG/M^3$** |
| Bromobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Naphthalene | 0.30 | < 0.30 | $MG/M^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 103<br>( 80 - 120 ) |
| Toluene-d8 | 100<br>( 81 - 117 ) |
| Bromofluorobenzene | 104<br>( 74 - 121 ) |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-03 | SVP-1-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Chloroform** | **0.10** | **0.16** | **MG/M$^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| **Benzene** | **0.10** | **0.28** | **MG/M$^3$** |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Toluene** | **0.10** | **0.20** | **MG/M$^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **0.41** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-03 | SVP-1-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M $^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M $^3$ |
| Styrene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| **Isopropyl Benzene** | **0.10** | **0.23** | **MG/M $^3$** |
| Bromobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M $^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 104<br>( 80 - 120 ) |
| Toluene-d8 | 102<br>( 81 - 117 ) |
| Bromofluorobenzene | 101<br>( 74 - 121 ) |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-04 | SVP-1-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Acetone | 1.0 | < 1.0 | MG/M $^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M $^3$ |
| **1,1-Dichloroethene** | **0.10** | **0.37** | **MG/M $^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M $^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M $^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M $^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M $^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M $^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M $^3$ |
| Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M $^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Toluene** | **0.10** | **0.24** | **MG/M $^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M $^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M $^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Tetrachloroethene** | **0.10** | **0.73** | **MG/M $^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-04 | SVP-1-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M $^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M $^3$ |
| Styrene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M $^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 100<br>( 80 - 120 ) |
| Toluene-d8 | 98<br>( 81 - 117 ) |
| Bromofluorobenzene | 95<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-05 | SVP-1-118 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| **1,1-Dichloroethene** | **0.10** | **1.8** | **MG/M$^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Chloroform** | **0.10** | **0.19** | **MG/M$^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| **Benzene** | **0.10** | **0.10** | **MG/M$^3$** |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Toluene** | **0.10** | **0.22** | **MG/M$^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **2.9** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION PINNACLE I.D. : 303028
PROJECT # : (NONE) DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-05 | SVP-1-118 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 100<br>( 80 - 120 ) |
| Toluene-d8 | 100<br>( 81 - 117 ) |
| Bromofluorobenzene | 98<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION — PINNACLE I.D. : 303028
PROJECT # : (NONE) — DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-06 | SVP-3-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Chloroform** | **0.10** | **0.28** | **MG/M$^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **0.49** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-06 | SVP-3-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M $^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M $^3$ |
| Styrene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M $^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 98<br>( 80 - 120 ) |
| Toluene-d8 | 97<br>( 81 - 117 ) |
| Bromofluorobenzene | 96<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-07 | SVP-3-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0,10 | < 0.10 | MG/M$^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M$^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **0.35** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-07 | SVP-3-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 100<br>( 80 - 120 ) |
| Toluene-d8 | 99<br>( 81 - 117 ) |
| Bromofluorobenzene | 97<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-08 | SVP-3-78 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Acetone | 1.0 | < 1.0 | MG/M $^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M $^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M $^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M $^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M $^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M $^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M $^3$ |
| **Benzene** | **0.10** | **0.22** | **MG/M $^3$** |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M $^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Toluene** | **0.10** | **0.12** | **MG/M $^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M $^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M $^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Tetrachloroethene** | **0.10** | **0.54** | **MG/M $^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-08 | SVP-3-78 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 96<br>( 80 - 120 ) |
| Toluene-d8 | 96<br>( 81 - 117 ) |
| Bromofluorobenzene | 94<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-09 | SVP-3-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| **1,1-Dichloroethene** | **0.10** | **0.28** | **MG/M$^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M$^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Toluene** | **0.10** | **0.17** | **MG/M$^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **1.1** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028-
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-09 | SVP-3-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene. | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 97<br>( 80 - 120 ) |
| Toluene-d8 | 96<br>( 81 - 117 ) |
| Bromofluorobenzene | 94<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

| | | | | |
|---|---|---|---|---|
| TEST | : | VOLATILE ORGANICS EPA METHOD 8260 | | |
| CLIENT | : | METRIC CORPORATION | PINNACLE I.D. : | 303028 |
| PROJECT # | : | (NONE) | DATE RECEIVED: | 03/11/03 |
| PROJECT NAME | : | PERSON STATION | | |

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-10 | SVP-3-118 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Acetone | 1.0 | < 1.0 | MG/M $^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M $^3$ |
| **1,1-Dichloroethene** | **0.10** | **1.6** | **MG/M $^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M $^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M $^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M $^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M $^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Chloroform** | **0.10** | **0.29** | **MG/M $^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M $^3$ |
| **1,1,1-Trichloroethane** | **0.10** | **0.11** | **MG/M $^3$** |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M $^3$ |
| Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M $^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Toluene** | **0.10** | **0.13** | **MG/M $^3$** |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M $^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M $^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Tetrachloroethene** | **0.10** | **2.9** | **MG/M $^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION PINNACLE I.D. : 303028
PROJECT # : (NONE) DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-10 | SVP-3-118 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 98<br>( 80 - 120 ) |
| Toluene-d8 | 97<br>( 81 - 117 ) |
| Bromofluorobenzene | 98<br>( 74 - 121 ) |

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-11 | SVP-2-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Bromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Acetone | 1.0 | < 1.0 | $MG/M^3$ |
| Acrolein | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Iodomethane | 0.50 | < 0.50 | $MG/M^3$ |
| Methylene Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Acrylonitrile | 0.50 | < 0.50 | $MG/M^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Butanone | 1.0 | < 1.0 | $MG/M^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | $MG/M^3$ |
| Bromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Chloroform** | **0.10** | **0.14** | **$MG/M^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | $MG/M^3$ |
| Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | $MG/M^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Dibromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Toluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | $MG/M^3$ |
| 2-Hexanone | 1.0 | < 1.0 | $MG/M^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Tetrachloroethene** | **0.10** | **0.17** | **$MG/M^3$** |
| Chlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Ethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-11 | SVP-2-38 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| m&p Xylenes | 0.10 | < 0.10 | $MG/M^3$ |
| o-Xylene | 0.10 | < 0.10 | $MG/M^3$ |
| Styrene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromoform | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Naphthalene | 0.30 | < 0.30 | $MG/M^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 104<br>( 80 - 120 ) |
| Toluene-d8 | 101<br>( 81 - 117 ) |
| Bromofluorobenzene | 100<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-12 | SVP-2-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Acetone | 1.0 | < 1.0 | MG/M $^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M $^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M $^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M $^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M $^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M $^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M $^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M $^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M $^3$ |
| Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M $^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M $^3$ |
| Toluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M $^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M $^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M $^3$ |
| **Tetrachloroethene** | **0.10** | **0.24** | **MG/M $^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-12 | SVP-2-58 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 100<br>( 80 - 120 ) |
| Toluene-d8 | 97<br>( 81 - 117 ) |
| Bromofluorobenzene | 96<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-13 | SVP-2-78 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Bromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Acetone | 1.0 | < 1.0 | $MG/M^3$ |
| Acrolein | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Iodomethane | 0.50 | < 0.50 | $MG/M^3$ |
| Methylene Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Acrylonitrile | 0.50 | < 0.50 | $MG/M^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Butanone | 1.0 | < 1.0 | $MG/M^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | $MG/M^3$ |
| Bromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Chloroform** | **0.10** | **0.12** | **$MG/M^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | $MG/M^3$ |
| Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | $MG/M^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Dibromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Toluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | $MG/M^3$ |
| 2-Hexanone | 1.0 | < 1.0 | $MG/M^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Tetrachloroethene** | **0.10** | **0.67** | **$MG/M^3$** |
| Chlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Ethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

| | | | | |
|---|---|---|---|---|
| TEST | : | VOLATILE ORGANICS EPA METHOD 8260 | | |
| CLIENT | : | METRIC CORPORATION | PINNACLE I.D. : | 303028 |
| PROJECT # | : | (NONE) | DATE RECEIVED: | 03/11/03 |
| PROJECT NAME | : | PERSON STATION | | |

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-13 | SVP-2-78 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M $^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M $^3$ |
| Styrene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M $^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 101<br>( 80 - 120 ) |
| Toluene-d8 | 97<br>( 81 - 117 ) |
| Bromofluorobenzene | 99<br>( 74 - 121 ) |

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-14 | SVP-2-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Bromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Acetone | 1.0 | < 1.0 | $MG/M^3$ |
| Acrolein | 0.50 | < 0.50 | $MG/M^3$ |
| **1,1-Dichloroethene** | **0.10** | **0.60** | **$MG/M^3$** |
| Iodomethane | 0.50 | < 0.50 | $MG/M^3$ |
| Methylene Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Acrylonitrile | 0.50 | < 0.50 | $MG/M^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Butanone | 1.0 | < 1.0 | $MG/M^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | $MG/M^3$ |
| Bromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Chloroform** | **0.10** | **0.46** | **$MG/M^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | $MG/M^3$ |
| Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | $MG/M^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Dibromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Toluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | $MG/M^3$ |
| 2-Hexanone | 1.0 | < 1.0 | $MG/M^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| **Tetrachloroethene** | **0.10** | **1.9** | **$MG/M^3$** |
| Chlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Ethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION PINNACLE I.D. : 303028
PROJECT # : (NONE) DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-14 | SVP-2-98 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M$^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M$^3$ |
| Styrene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M$^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 101 |
| | ( 80 - 120 ) |
| Toluene-d8 | 98 |
| | ( 81 - 117 ) |
| Bromofluorobenzene | 98 |
| | ( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION
PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-15 | SVP-2-118 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| **1,1-Dichloroethene** | **0.10** | **2.2** | **MG/M$^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Chloroform** | **0.10** | **0.74** | **MG/M$^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| **1,1,1-Trichloroethane** | **0.10** | **0.15** | **MG/M$^3$** |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **4.1** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-15 | SVP-2-118 | AIR | 03/11/03 | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| m&p Xylenes | 0.10 | < 0.10 | $MG/M^3$ |
| o-Xylene | 0.10 | < 0.10 | $MG/M^3$ |
| Styrene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromoform | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Naphthalene | 0.30 | < 0.30 | $MG/M^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 99<br>( 80 - 120 ) |
| Toluene-d8 | 98<br>( 81 - 117 ) |
| Bromofluorobenzene | 97<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
DATE RECEIVED: 03/11/03
PROJECT NAME : PERSON STATION

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-16 | VEW-1 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| **1,1-Dichloroethene** | **0.10** | **0.10** | **MG/M$^3$** |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Chloroform** | **0.10** | **0.10** | **MG/M$^3$** |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| **Tetrachloroethene** | **0.10** | **0.75** | **MG/M$^3$** |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE RECEIVED: 03/11/03

| SAMPLE ID # | CLIENT ID | MATRIX | DATE SAMPLED | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|---|
| 303028-16 | VEW-1 | AIR | 03/11/03 | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| m&p Xylenes | 0.10 | < 0.10 | MG/M $^3$ |
| o-Xylene | 0.10 | < 0.10 | MG/M $^3$ |
| Styrene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromoform | 0.10 | < 0.10 | MG/M $^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | MG/M $^3$ |
| Bromobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |
| Naphthalene | 0.30 | < 0.30 | MG/M $^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | MG/M $^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | MG/M $^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 105<br>( 80 - 120 ) |
| Toluene-d8 | 104<br>( 81 - 117 ) |
| Bromofluorobenzene | 105<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION PINNACLE I.D. : 303028
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

| SAMPLE ID # | BATCH | MATRIX | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|
| REAGENT BLANK | 031103A | AIR | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Bromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Acetone | 1.0 | < 1.0 | MG/M$^3$ |
| Acrolein | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Iodomethane | 0.50 | < 0.50 | MG/M$^3$ |
| Methylene Chloride | 0.10 | < 0.10 | MG/M$^3$ |
| Acrylonitrile | 0.50 | < 0.50 | MG/M$^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | MG/M$^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Butanone | 1.0 | < 1.0 | MG/M$^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | MG/M$^3$ |
| Bromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Chloroform | 0.10 | < 0.10 | MG/M$^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | MG/M$^3$ |
| Benzene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Trichloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | MG/M$^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | MG/M$^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | MG/M$^3$ |
| Dibromomethane | 0.10 | < 0.10 | MG/M$^3$ |
| Toluene | 0.10 | < 0.10 | MG/M$^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | MG/M$^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | MG/M$^3$ |
| 2-Hexanone | 1.0 | < 1.0 | MG/M$^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | MG/M$^3$ |
| Tetrachloroethene | 0.10 | < 0.10 | MG/M$^3$ |
| Chlorobenzene | 0.10 | < 0.10 | MG/M$^3$ |
| Ethylbenzene | 0.10 | < 0.10 | MG/M$^3$ |

PINNACLE LABORATORIES

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

## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

| SAMPLE ID # | BATCH | MATRIX | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|
| REAGENT BLANK | 031103A | AIR | 03/11/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| m&p Xylenes | 0.10 | < 0.10 | $MG/M^3$ |
| o-Xylene | 0.10 | < 0.10 | $MG/M^3$ |
| Styrene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromoform | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichlorobenzene | 0,10 | < 0.10 | $MG/M^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Naphthalene | 0.30 | < 0.30 | $MG/M^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |

| SURROGATE % RECOVERY | |
|---|---|
| 1,2-Dichloroethane-d4 | 106<br>( 80 - 120 ) |
| Toluene-d8 | 105<br>( 81 - 117 ) |
| Bromofluorobenzene | 108<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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

## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION PINNACLE I.D. : 303028
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

| SAMPLE ID # | BATCH | MATRIX | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|
| REAGENT BLANK | 031203A | AIR | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Bromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichlorofluoromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Acetone | 1.0 | < 1.0 | $MG/M^3$ |
| Acrolein | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Iodomethane | 0.50 | < 0.50 | $MG/M^3$ |
| Methylene Chloride | 0.10 | < 0.10 | $MG/M^3$ |
| Acrylonitrile | 0.50 | < 0.50 | $MG/M^3$ |
| cis-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Methyl-t-butyl Ether | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,1,2,2-Trichlorotrifluoroethane | 0.50 | < 0.50 | $MG/M^3$ |
| 1,1-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,2-Dichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Butanone | 1.0 | < 1.0 | $MG/M^3$ |
| Carbon Disulfide | 0.10 | < 0.10 | $MG/M^3$ |
| Bromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Chloroform | 0.10 | < 0.10 | $MG/M^3$ |
| 2,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| Vinyl Acetate | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,1-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| Carbon Tetrachloride | 0.10 | < 0.10 | $MG/M^3$ |
| Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Trichloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromodichloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chloroethyl Vinyl Ether | 1.0 | < 1.0 | $MG/M^3$ |
| cis-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,3-Dichloropropene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2-Trichloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Dibromomethane | 0.10 | < 0.10 | $MG/M^3$ |
| Toluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromoethane | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Methyl-2-Pentanone | 1.0 | < 1.0 | $MG/M^3$ |
| 2-Hexanone | 1.0 | < 1.0 | $MG/M^3$ |
| Dibromochloromethane | 0.10 | < 0.10 | $MG/M^3$ |
| Tetrachloroethene | 0.10 | < 0.10 | $MG/M^3$ |
| Chlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Ethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |

PINNACLE LABORATORIES

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

## GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
CLIENT : METRIC CORPORATION
PINNACLE I.D. : 303028
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

| SAMPLE ID # | BATCH | MATRIX | DATE ANALYZED | DIL. FACTOR |
|---|---|---|---|---|
| REAGENT BLANK | 031203A | AIR | 03/12/03 | 1 |

| PARAMETER | DET. LIMIT | | UNITS |
|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| m&p Xylenes | 0.10 | < 0.10 | $MG/M^3$ |
| o-Xylene | 0.10 | < 0.10 | $MG/M^3$ |
| Styrene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromoform | 0.10 | < 0.10 | $MG/M^3$ |
| 1,1,2,2-Tetrachloroethane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| Isopropyl Benzene | 0.10 | < 0.10 | $MG/M^3$ |
| Bromobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| trans-1,4-Dichloro-2-Butene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Propylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 2-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 4-Chlorotoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3,5-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| tert-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trimethylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| sec-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,3-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,4-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| p-Isopropyltoluene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| n-Butylbenzene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2-Dibromo-3-chloropropane | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,4-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |
| Naphthalene | 0.30 | < 0.30 | $MG/M^3$ |
| Hexachlorobutadiene | 0.10 | < 0.10 | $MG/M^3$ |
| 1,2,3-Trichlorobenzene | 0.10 | < 0.10 | $MG/M^3$ |

SURROGATE % RECOVERY

| | |
|---|---|
| 1,2-Dichloroethane-d4 | 101<br>( 80 - 120 ) |
| Toluene-d8 | 98<br>( 81 - 117 ) |
| Bromofluorobenzene | 99<br>( 74 - 121 ) |

PINNACLE LABORATORIES

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

# LABORATORY CONTROL SPIKE / SPIKE DUPLICATE RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
BATCH : 031103A
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE ANALYZED : 03/11/03
UNITS : $MG/M^3$

| COMPOUND | SAMPLE CONC. | SPIKE ADDED | LCS RESULT | LCSD RESULT | LCS %REC | LCSD %REC | RPD | QC LIMITS RPD | QC LIMITS %RECOVERY |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-DICHLOROETHENE | <0.10 | 5.00 | 4.89 | 5.02 | 98 | 100 | 3 | 14 | 61-145 |
| BENZENE | <0.10 | 5.00 | 4.88 | 4.87 | 98 | 97 | 0 | 11 | 76-127 |
| TRICHLOROETHENE | <0.10 | 5.00 | 4.86 | 4.85 | 97 | 97 | 0 | 14 | 71-120 |
| TOLUENE | <0.10 | 5.00 | 4.97 | 4.88 | 99 | 98 | 2 | 13 | 76-125 |
| CHLOROBENZENE | <0.10 | 5.00 | 5.00 | 4.90 | 100 | 98 | 2 | 13 | 75-130 |

PINNACLE LABORATORIES

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

# LABORATORY CONTROL SPIKE / SPIKE DUPLICATE RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
BATCH : 031203A
CLIENT : METRIC CORPORATION
PROJECT # : (NONE)
PROJECT NAME : PERSON STATION

PINNACLE I.D. : 303028
DATE ANALYZED : 03/12/03
UNITS : MG/M$^3$

| COMPOUND | SAMPLE CONC. | SPIKE ADDED | LCS RESULT | LCSD RESULT | LCS %REC | LCSD %REC | RPD | QC LIMITS RPD | QC LIMITS %RECOVERY |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-DICHLOROETHENE | <0.10 | 5.00 | 5.28 | 4.67 | 106 | 93 | 12 | 14 | 61-145 |
| BENZENE | <0.10 | 5.00 | 4.88 | 4.86 | 98 | 97 | 0 | 11 | 76-127 |
| TRICHLOROETHENE | <0.10 | 5.00 | 4.81 | 4.84 | 96 | 97 | 1 | 14 | 71-120 |
| TOLUENE | <0.10 | 5.00 | 4.89 | 4.94 | 98 | 99 | 1 | 13 | 76-125 |
| CHLOROBENZENE | <0.10 | 5.00 | 4.90 | 4.95 | 98 | 99 | 1 | 13 | 75-130 |

PINNACLE LABORATORIES

# Pinnacle Laboratories Inc.

# CHAIN OF CUSTODY

DATE: 3-11-03 PAGE: 1 OF 2

PLI Accession #: 303028

**SHADED AREAS ARE FOR LAB USE ONLY.**

**PLEASE FILL THIS FORM IN COMPLETELY.**

PROJECT MANAGER: Gary Richardson

COMPANY: Metric Corp
ADDRESS: 8429 Washington, Pl
Albq NM 87113
PHONE: 828-2801
FAX: 828-2803

BILL TO: Same
COMPANY:
ADDRESS:

## ANALYSIS REQUEST

| SAMPLE ID | DATE | TIME | MATRIX | LAB I.D. | Petroleum Hydrocarbons (418.1) TRPH | (MOD.8015) Diesel/Direct Inject | | (M8015) Gas/Purge & Trap | 8021 (BTEX)/8015 (Gasoline) MTBE | 8021 (BTEX) ☐MTBE ☐TMB ☐PCE | 8021 (TCL) | 8021 (EDX) | 8021 (HALO) | 8021 (CUST) | 504.1 EDB ☐ / DBCP ☐ | | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-1-58 | 3-11 | 10:12 | Air | 01 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-1-78 | 〃 | 10:35 | 〃 | 02 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-1-38 | 〃 | 10:53 | 〃 | 03 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-1-98 | 〃 | 11:15 | 〃 | 04 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-1-118 | 〃 | 11:33 | 〃 | 05 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-3-38 | 〃 | 1206 | 〃 | 06 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-3-58 | 〃 | 1224 | 〃 | 07 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-3-78 | 〃 | 1242 | 〃 | 08 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-3-98 | 〃 | 1259 | 〃 | 09 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-3-118 | 〃 | 1315 | 〃 | 10 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |

**PROJECT INFORMATION**

PROJ. NO.:
PROJ. NAME: Person Station
P.O. NO.:
SHIPPED VIA:

**SAMPLE RECEIPT**

| | |
|---|---|
| NO CONTAINERS | 10 |
| CUSTODY SEALS | Y/N/[✓ NA] |
| RECEIVED INTACT | Yes |
| BLUE ICE/ICE | |

**PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS**

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

CERTIFICATION REQUIRED ☐NM ☐SDWA ☐OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

**RELINQUISHED BY: 1**

Signature: Don Briggs Time:
Printed Name: Don Briggs Date: 3-11-03
Company: Metric
See reverse side (Force Majeure)

**RECEIVED BY: 1**

Signature: Time:
Printed Name: Date:
Company:

**RELINQUISHED BY: 2**

Signature: Time:
Printed Name: Date:
Company:

**RECEIVED BY: (LAB) 2**

Signature: Time: 1640
Printed Name: Frank Dicker Date: 3/11/03
Pinnacle Laboratories Inc.

01/01/02 PLI Inc.: Pinnacle Laboratories, Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413 • E-mail: PIN_LAB@ATT.NET

DISTRIBUTION: White - PLI, Canary - Originator

# Pinnacle Laboratories Inc.

# CHAIN OF CUSTODY

DATE: 3-11-03 PAGE: 2 OF 2

PLI Accession #: 303078

**SHADED AREAS ARE FOR LAB USE ONLY.**

PROJECT MANAGER: Gary Richardson

COMPANY: Metric Corp
ADDRESS: 8429 Washington Pl
Albuqu. NM 87113
PHONE: 828-2801
FAX: 828-2803

BILL TO:
COMPANY: Same
ADDRESS:

## ANALYSIS REQUEST

| SAMPLE ID | DATE | TIME | MATRIX | LAB I.D. | Petroleum Hydrocarbons (418.1) TRPH | (MOD.8015) Diesel/Direct Inject | | (M8015) Gas/Purge & Trap | 8021 (BTEX)/8015 (Gasoline) MTBE | 8021 (BTEX) ☐MTBE ☐TMB ☐PCE | 8021 (TCL) | 8021 (EDX) | 8021 (HALO) | 8021 (CUST) | 504.1 EDB ☐ / DBCP ☐ | | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVP-2-38 | 3-11 | 1407 | Air | 11 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-2-58 | " | 1422 | " | [illegible] | 12 | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-2-78 | " | 1447 | " | 13 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-2-98 | " | 1502 | " | 14 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| SVP-2-118 | " | 1528 | " | 15 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |
| VEW-1 | " | 1600 | " | 16 | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |

### PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME: Person Station
P.O. NO.:
SHIPPED VIA:

### SAMPLE RECEIPT

| | |
|---|---|
| NO. CONTAINERS | 6 |
| CUSTODY SEALS | Y/N/[✓ NA] |
| RECEIVED INTACT | Yes |
| BLUE ICE/ICE | — |

### PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

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

CERTIFICATION REQUIRED ☐NM ☐SDWA ☐OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

### RELINQUISHED BY: 1

Signature: Don Briggs Time:
Printed Name: Don Briggs Date: 3-11-03
Company: Metric
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: 1640
Printed Name: Frank [illegible] Date: 3/11
Pinnacle Laboratories Inc.

**PLEASE FILL THIS FORM IN COMPLETELY.**

01/01/02 PLI Inc.: Pinnacle Laboratories, Inc. • 2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413 • E-mail: PIN_LAB@ATT.NET

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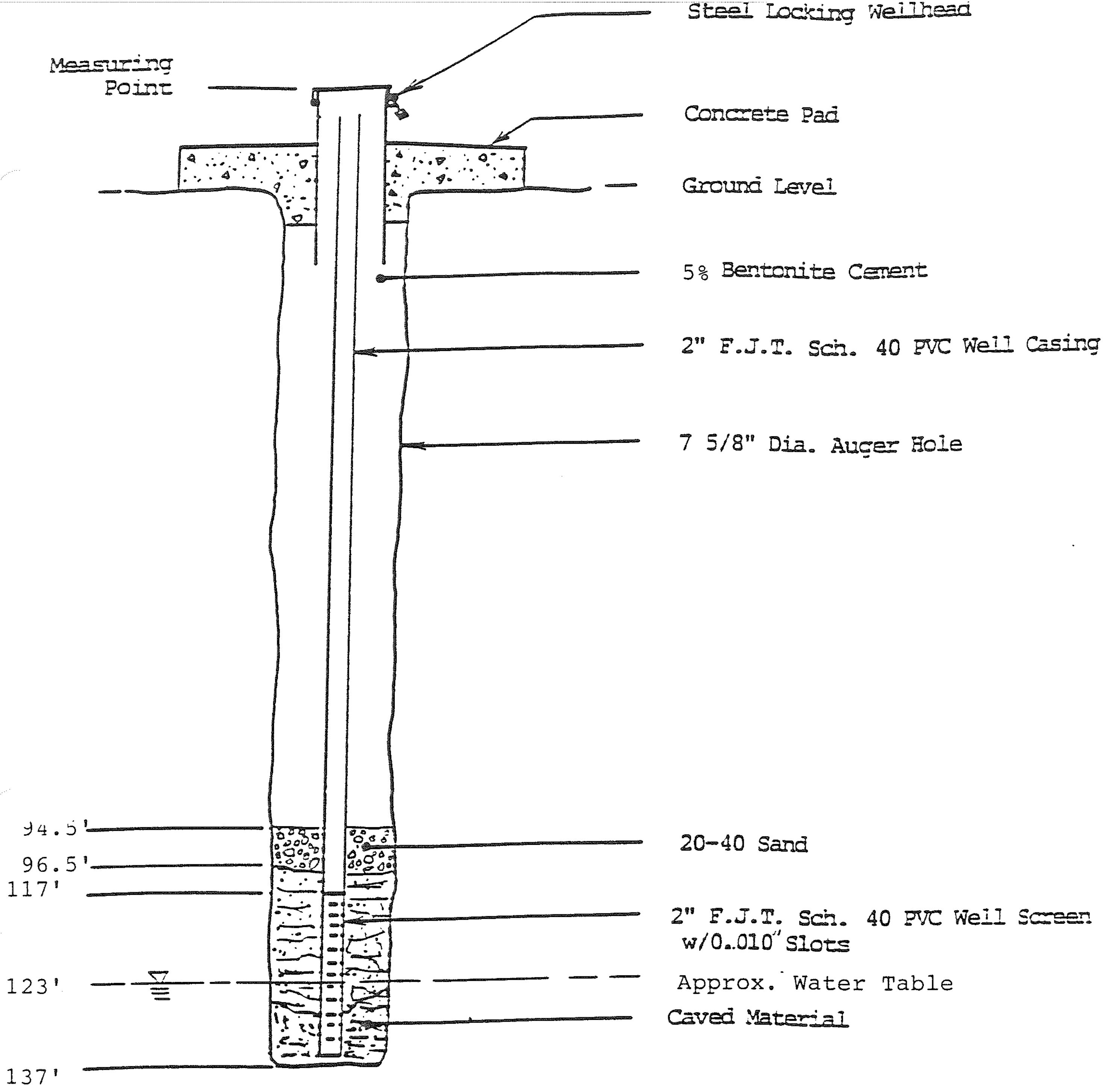
## Monitoring Well Installation Information
## Person Generating Station

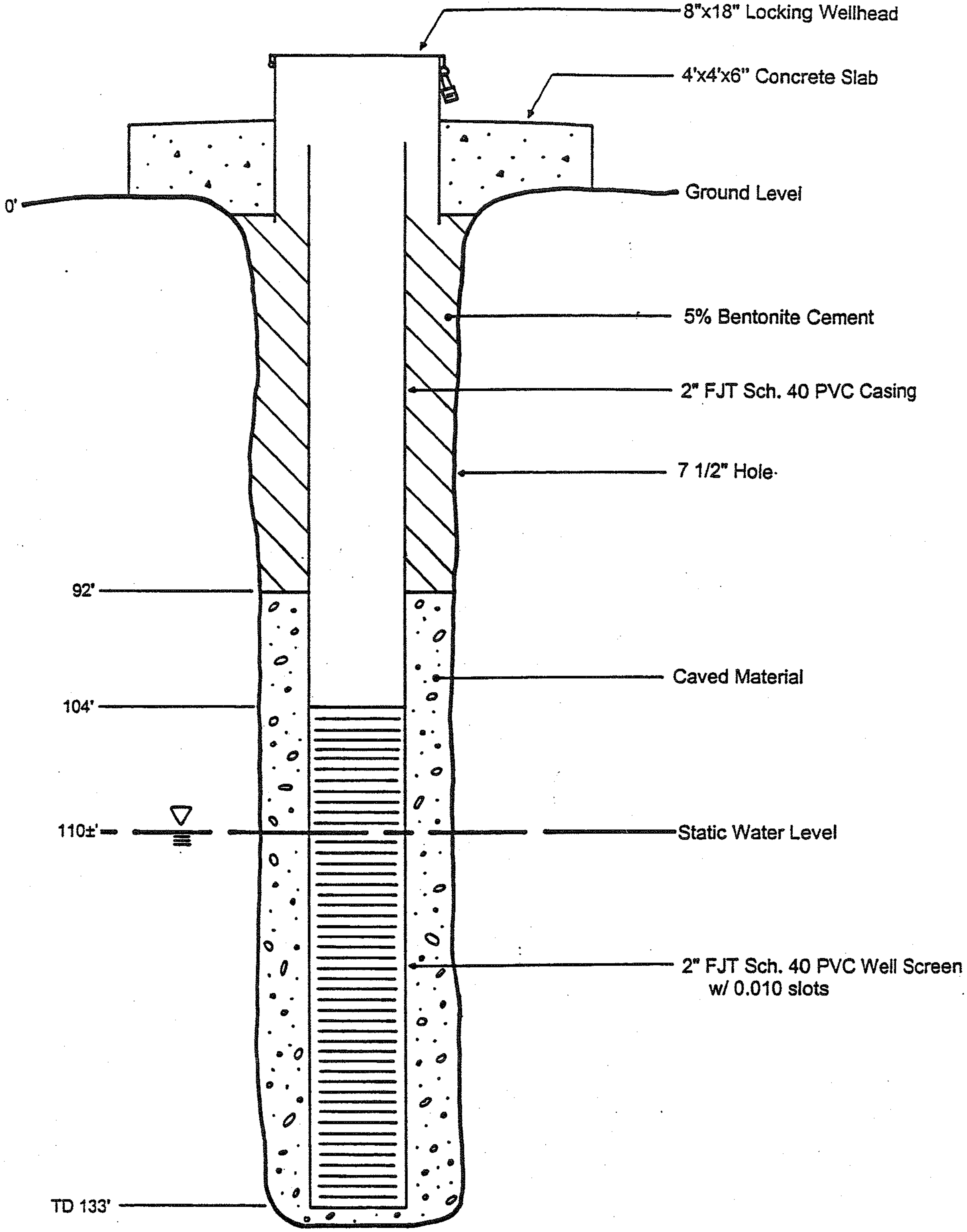
| Well ID | Well Installation Date | Well Location Coordinates | | Casing Size (in.) | Total Depth of Well (ft) | Casing Head Elevation (msl) |
|---|---|---|---|---|---|---|
| | | Northing | Easting | | | |
| PSMW-01R | January 13, 1993 | 1465669.97 | 382417.57 | 2 | 137.0 | 5029.66 |
| PSMW-07R | October 9, 1998 | 1466101.92 | 382229.51 | 2 | 133.0 | 5008.37 |
| PSMW-08A | November 14, 1984 | 1465671.41 | 382886.00 | 2 | 155.8 | 5046.29 |
| PSMW-10 | March 13, 1992 | 1465562.45 | 383103.27 | 2 | 171.0 | 5058.15 |
| PSMW-13A | February 27, 1992 | 1465461.53 | 382870.84 | 2 | 164.3 | 5052.14 |
| PSMW-17 | April 21, 1992 | 1465200.32 | 383216.06 | 4 | 191.0 | 5077.75 |
| PSMW-18 | April 23, 1992 | 1465860.38 | 383310.74 | 4 | 185.0 | 5071.26 |
| PSMW-22 | May 13, 1992 | 1465463.27 | 383719.47 | 4 | 227.0 | 5111.25 |
| PSMW-27 | December 3, 1992 | 1465488.12 | 384562.08 | 4 | 269.0 | 5150.54 |
| PSMW-VEW | August 1, 1995 | 1465684.88 | 382351.66 | 4 | 135 | 5029.55 |
| PSMW-EW1 | May 12, 1995 | 1465606.16 | 382713.71 | 4 | 158.0 | 5038.03 |
| PSMW-EW2 | May 15, 1999 | 1465591.19 | 383122.90 | 4 | 197 | 5058.04 |
| PSMW-EW3 | October 1, 1999 | 1465499.75 | 383722.37 | 4 | 253 | 5111.18 |
| PSMW-EW4 | June 2001 | 1465502.10 | 383450.05 | 4 | 231 | 5090.35 |

*ft* = *Foot (feet).*
*ID* = *Identification.*
*in.* = *Inch(es).*
*msl* = *Mean sea level.*



CONSTRUCTION DIAGRAM

PSMW- 1R



CONSTRUCTION DIAGRAM
PSMW-7R

(well completed on
10/9/98)

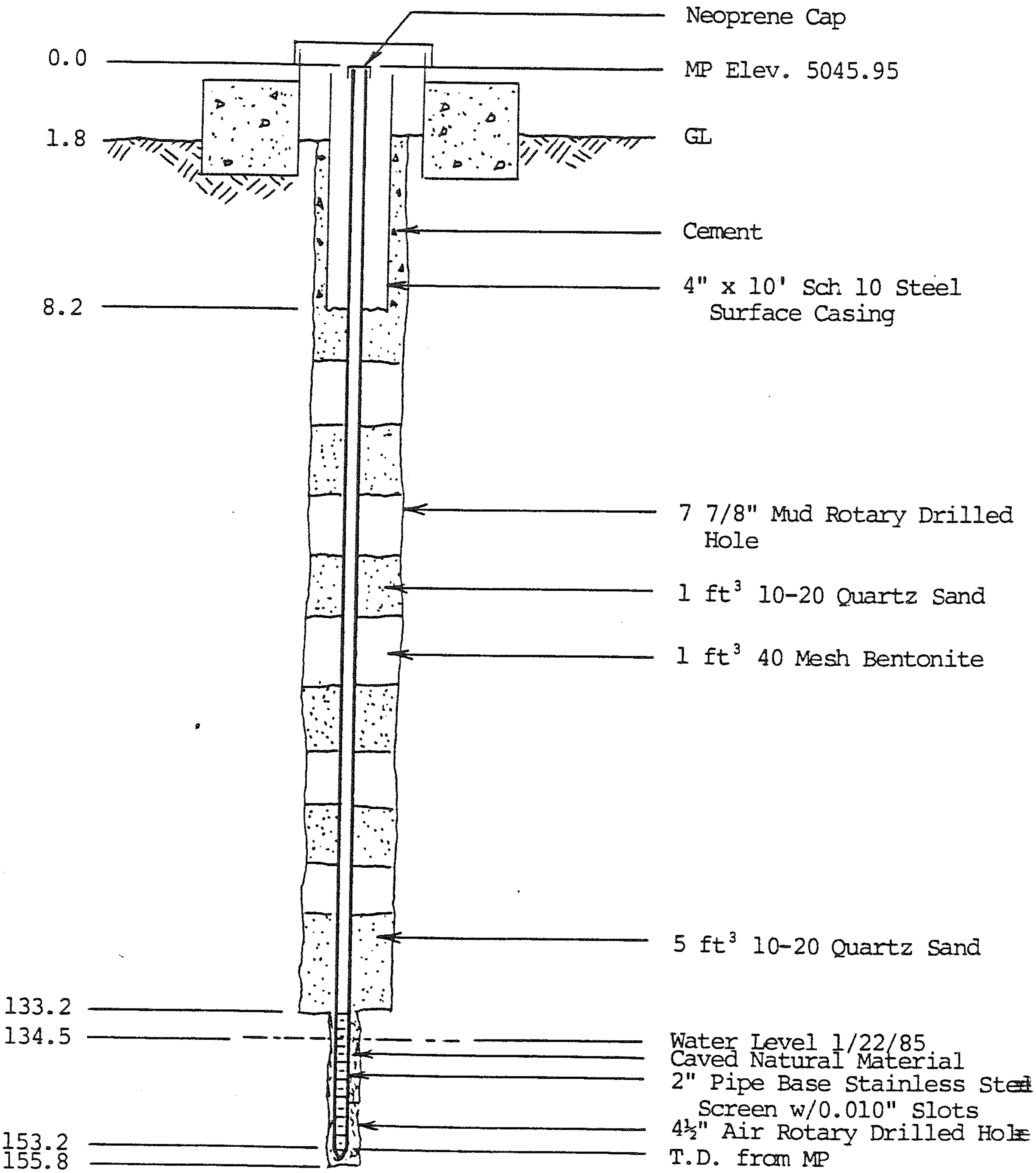
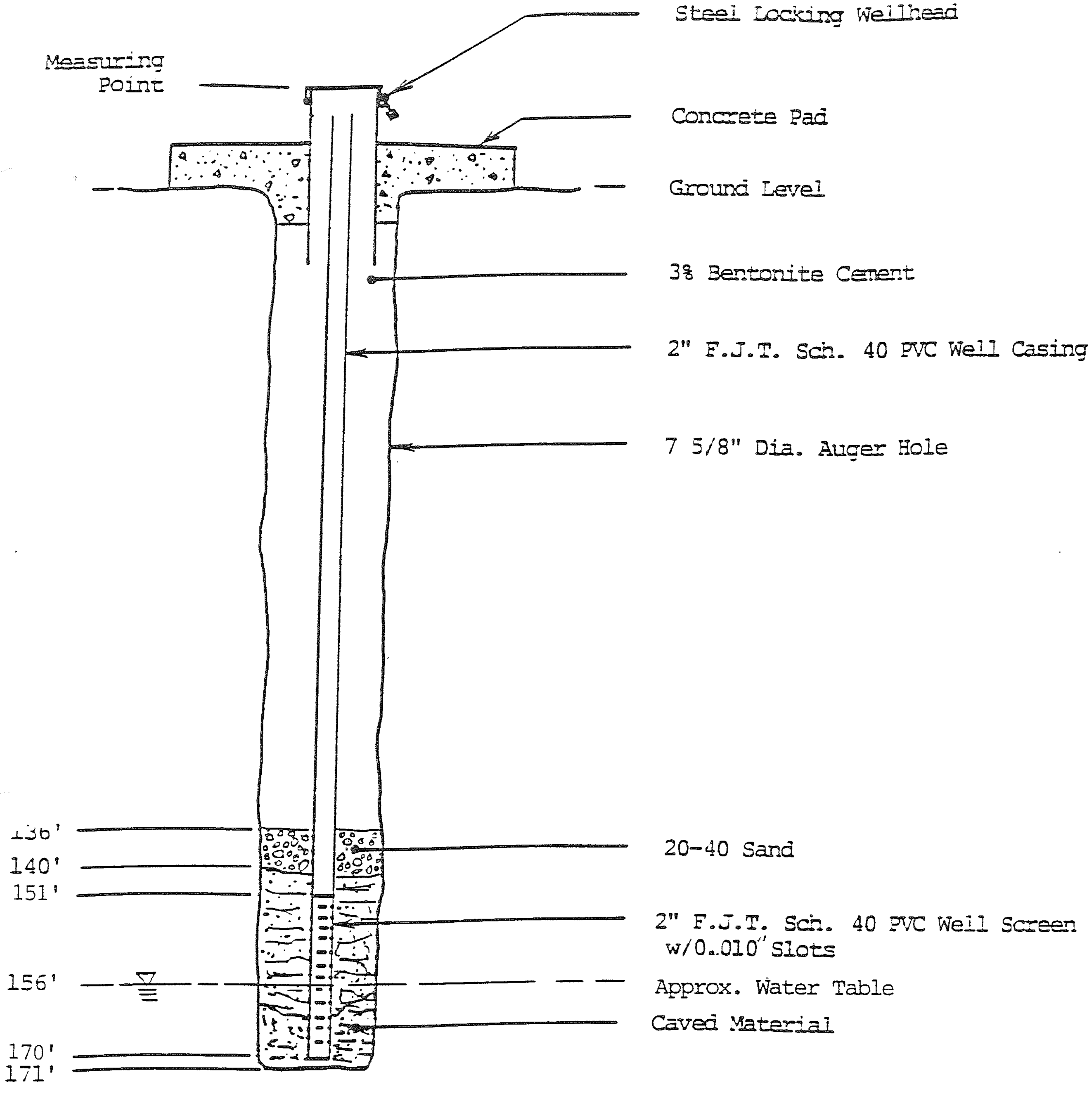
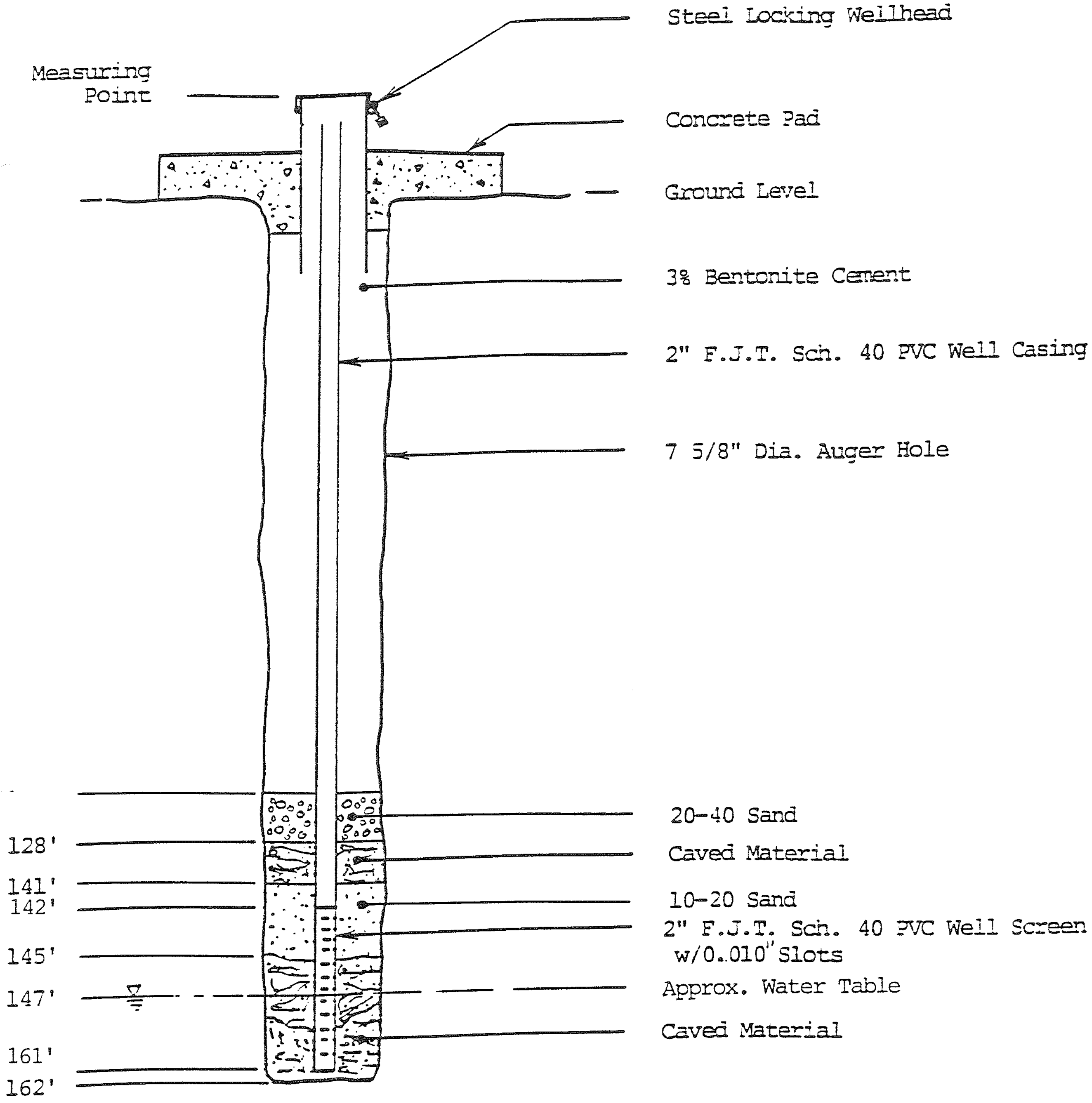


Figure 3-2

CONSTRUCTION DIAGRAM
PSMW-8A

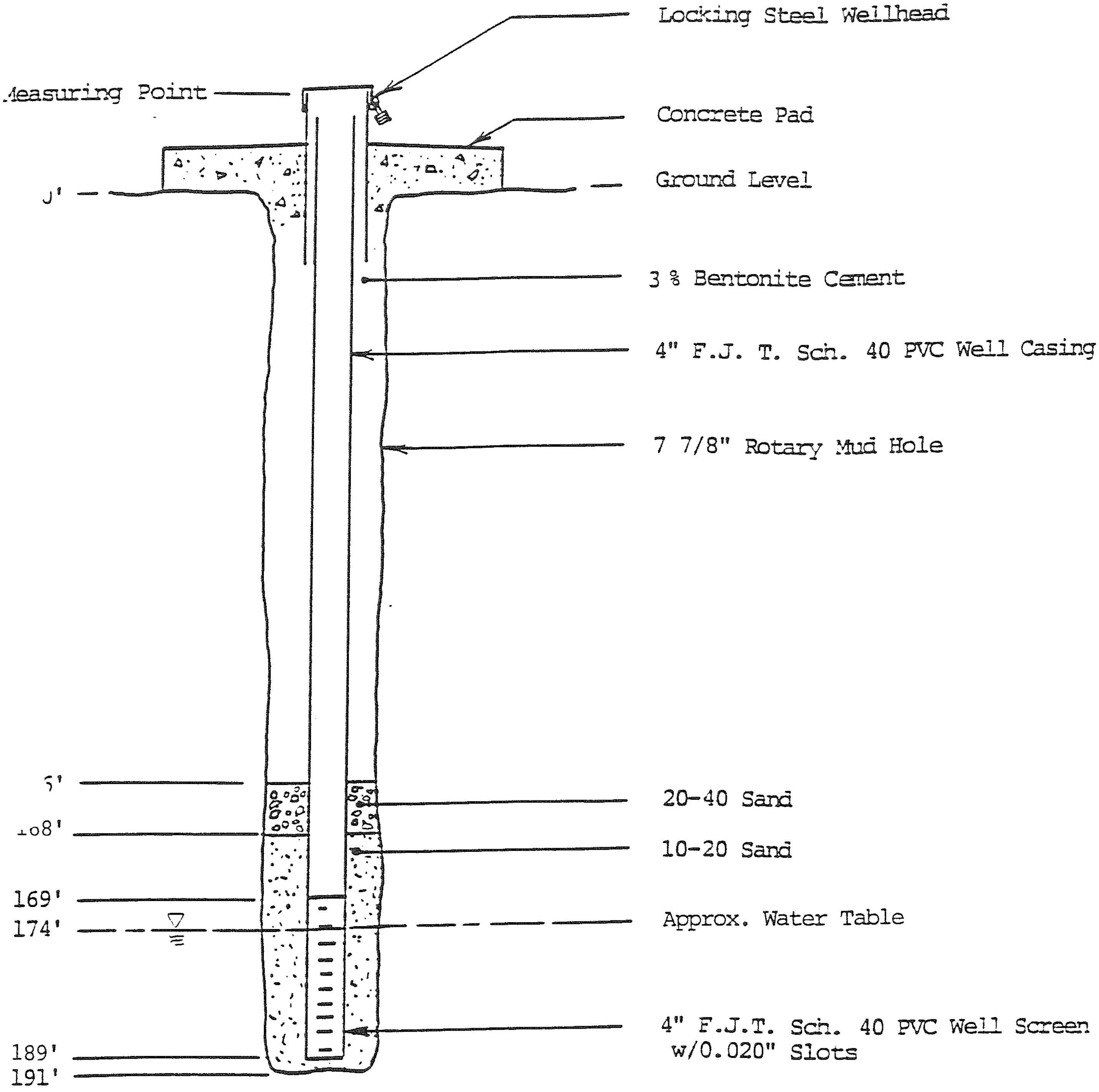


CONSTRUCTION DIAGRAM
PSMW-10



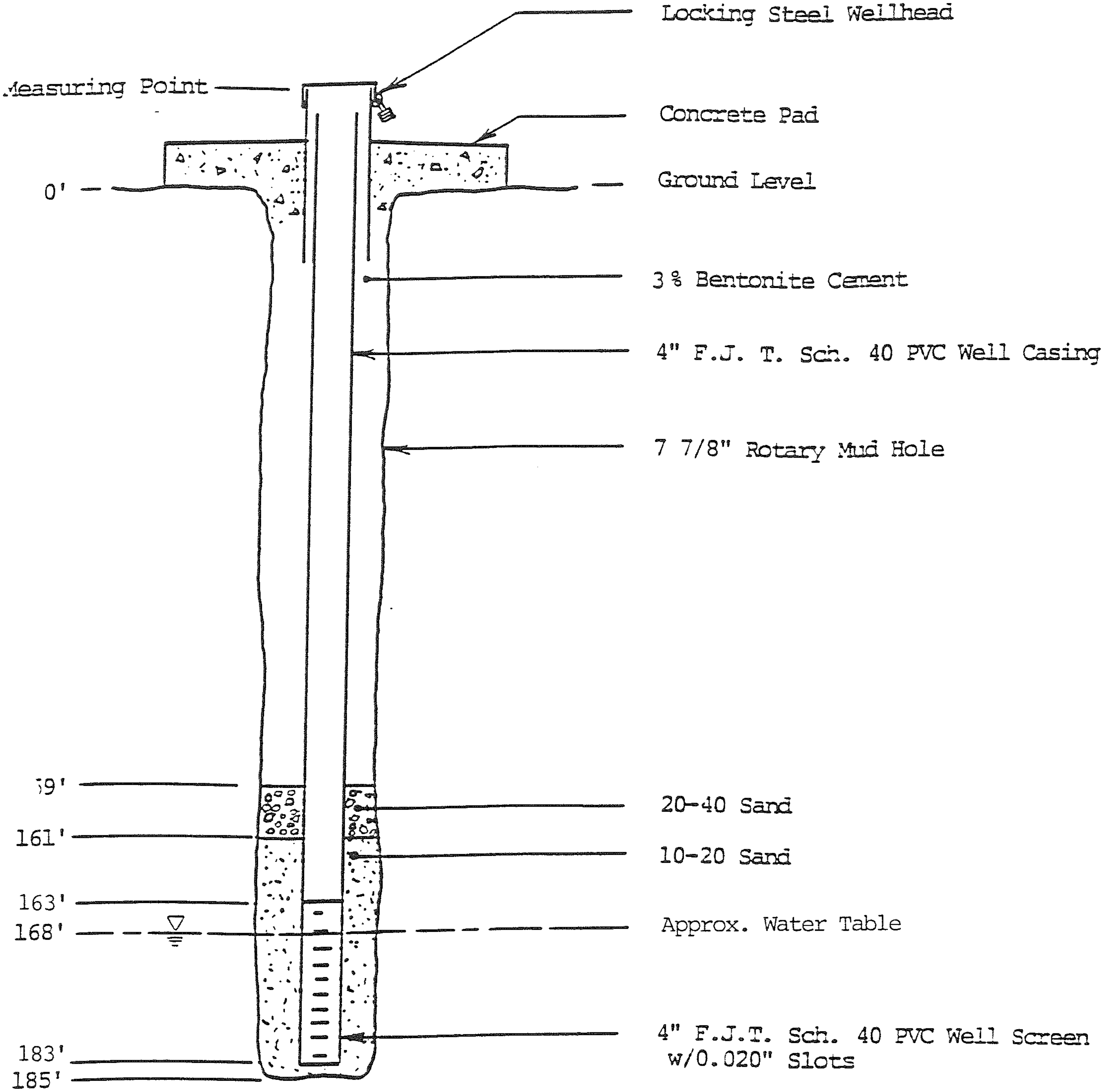
CONSTRUCTION DIAGRAM

PSMW-13A



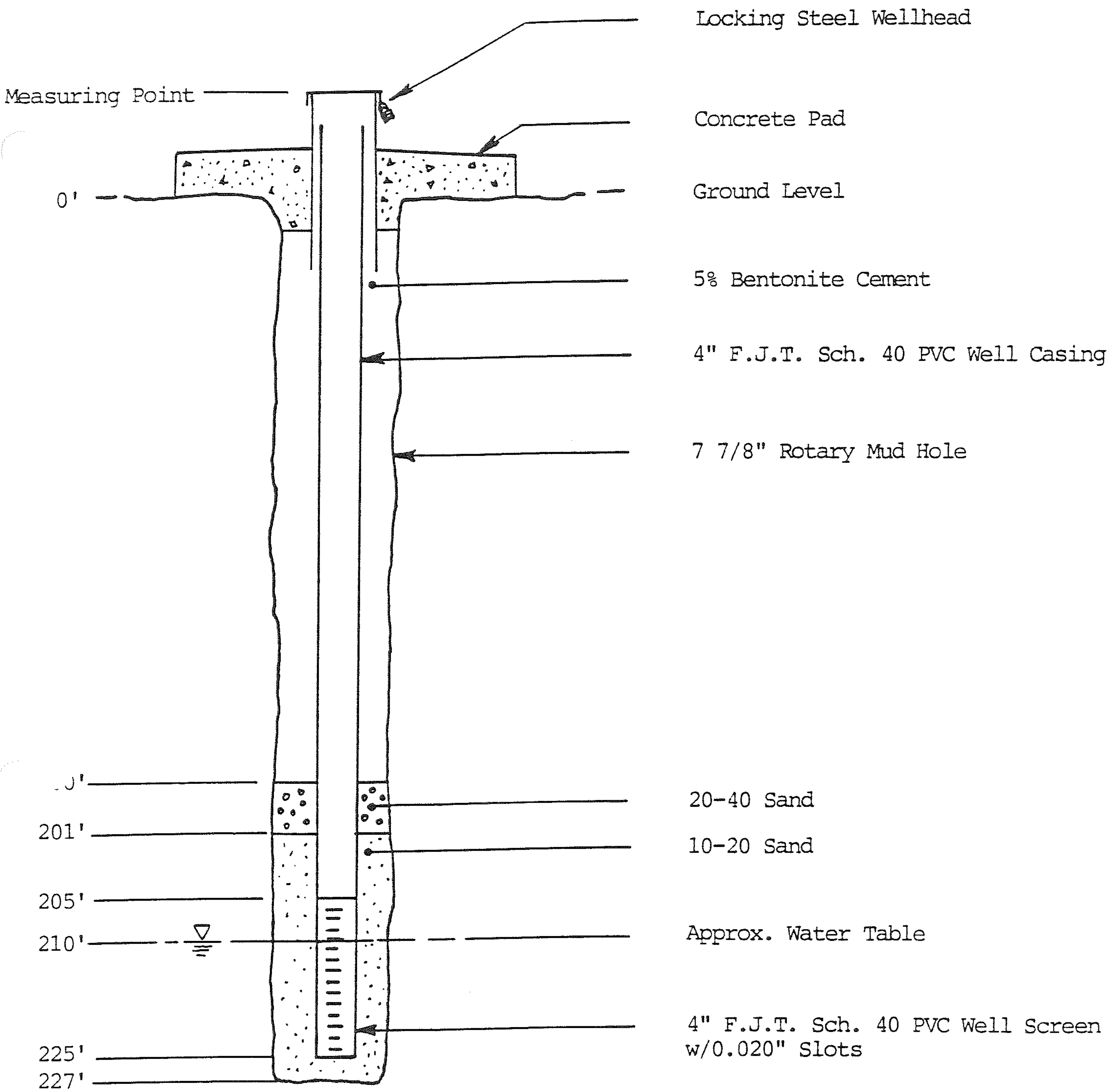
CONSTRUCTION DIAGRAM

PSMW-17



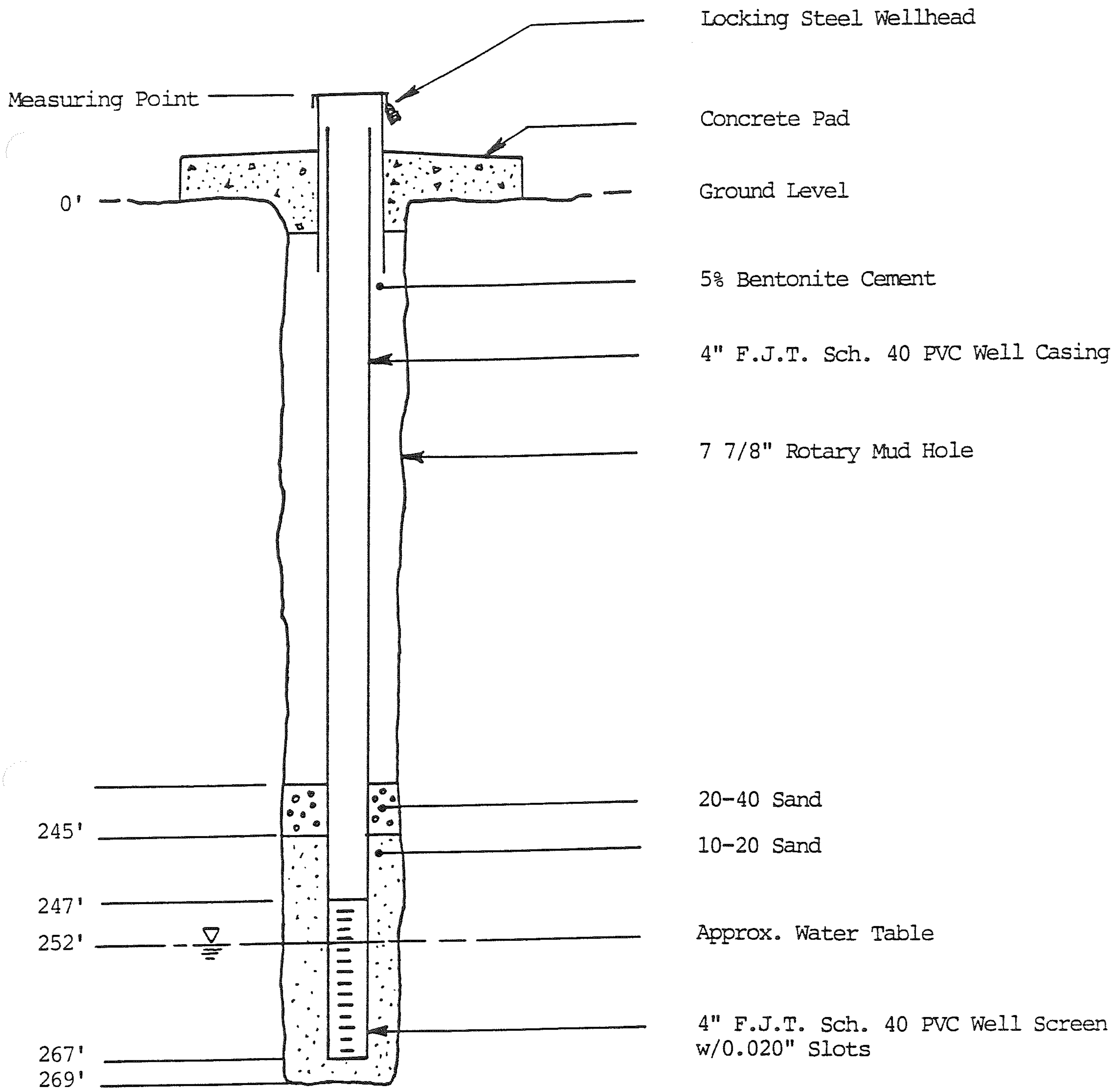
CONSTRUCTION DIAGRAM

PSMW-18



CONSTRUCTION DIAGRAM

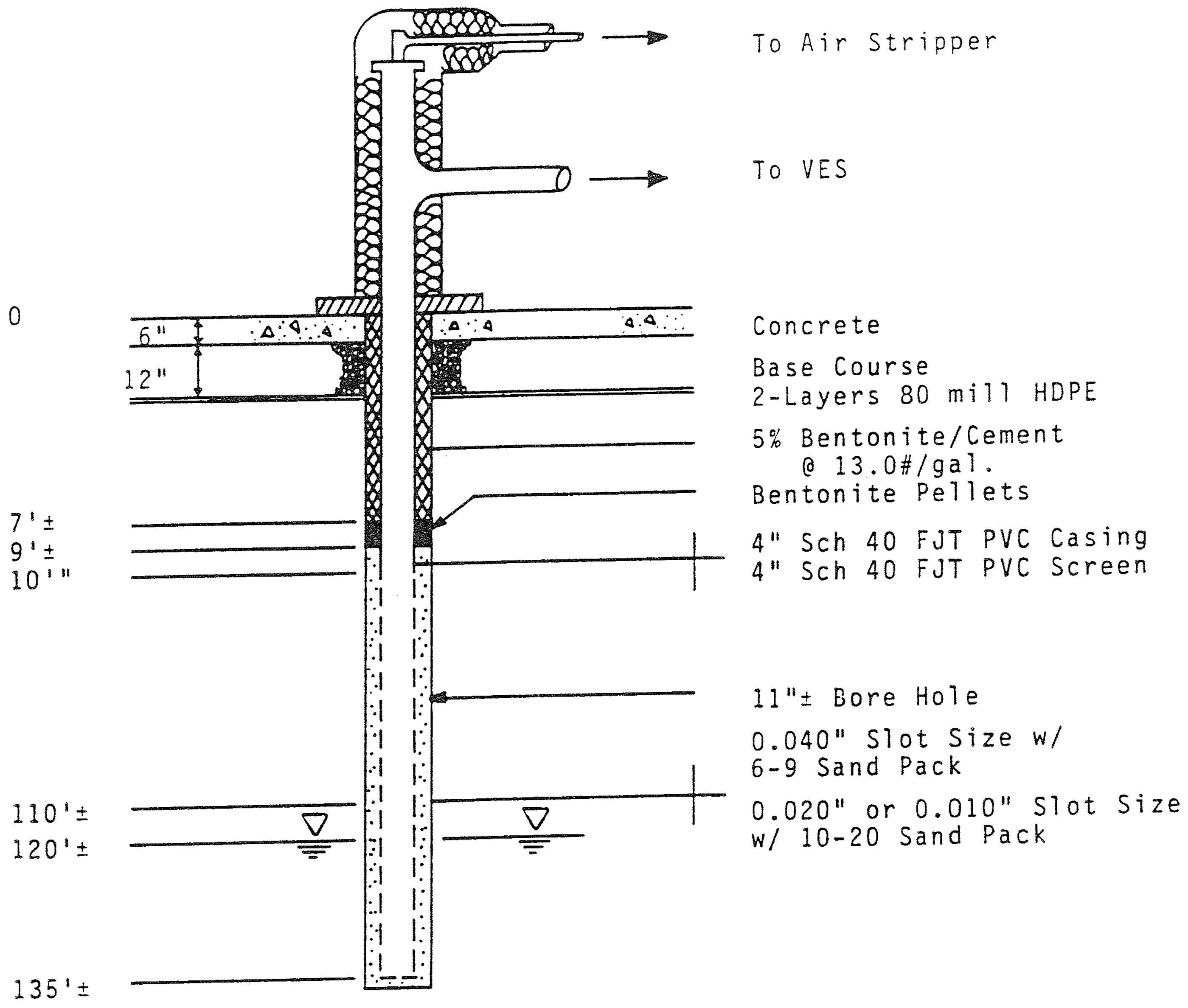
PSMW-22



CONSTRUCTION DIAGRAM

PSMW- 27

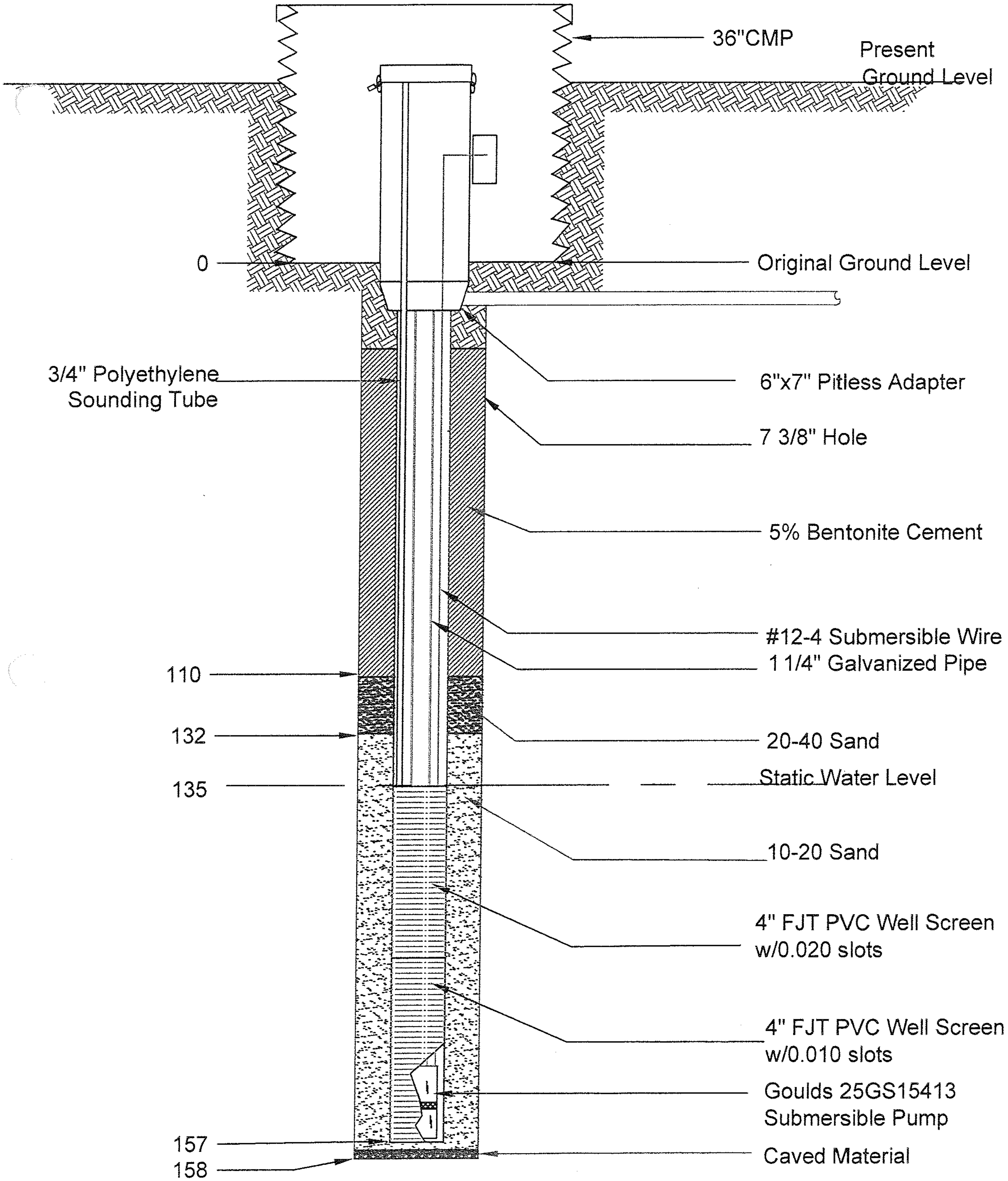
FIGURE A-1



VEW

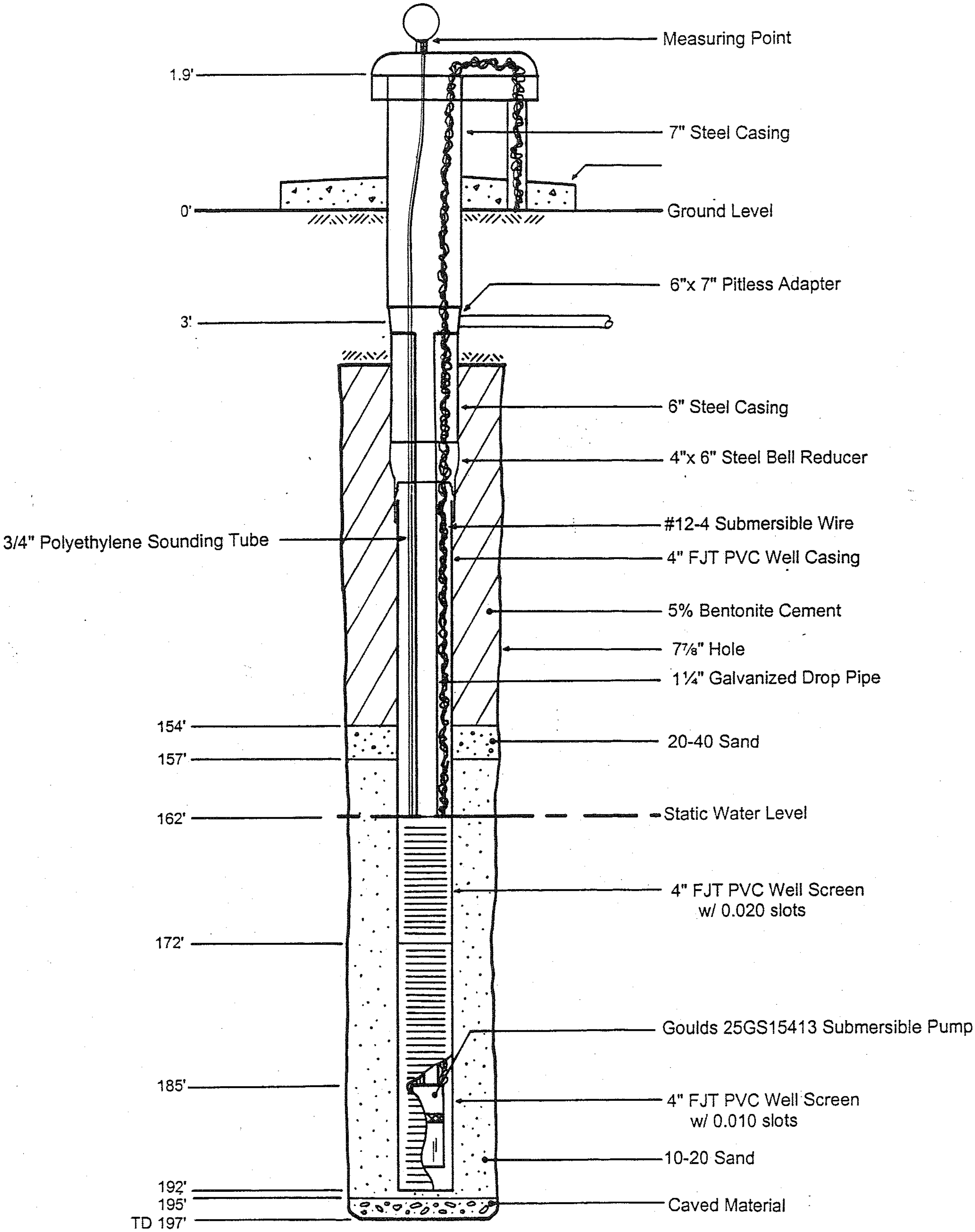
VAPOR EXTRACTION DEWATERING WELL

NOT TO SCALE



# EW-1

## CONSTRUCTION DIAGRAM



EW-2
CONSTRUCTION DIAGRAM

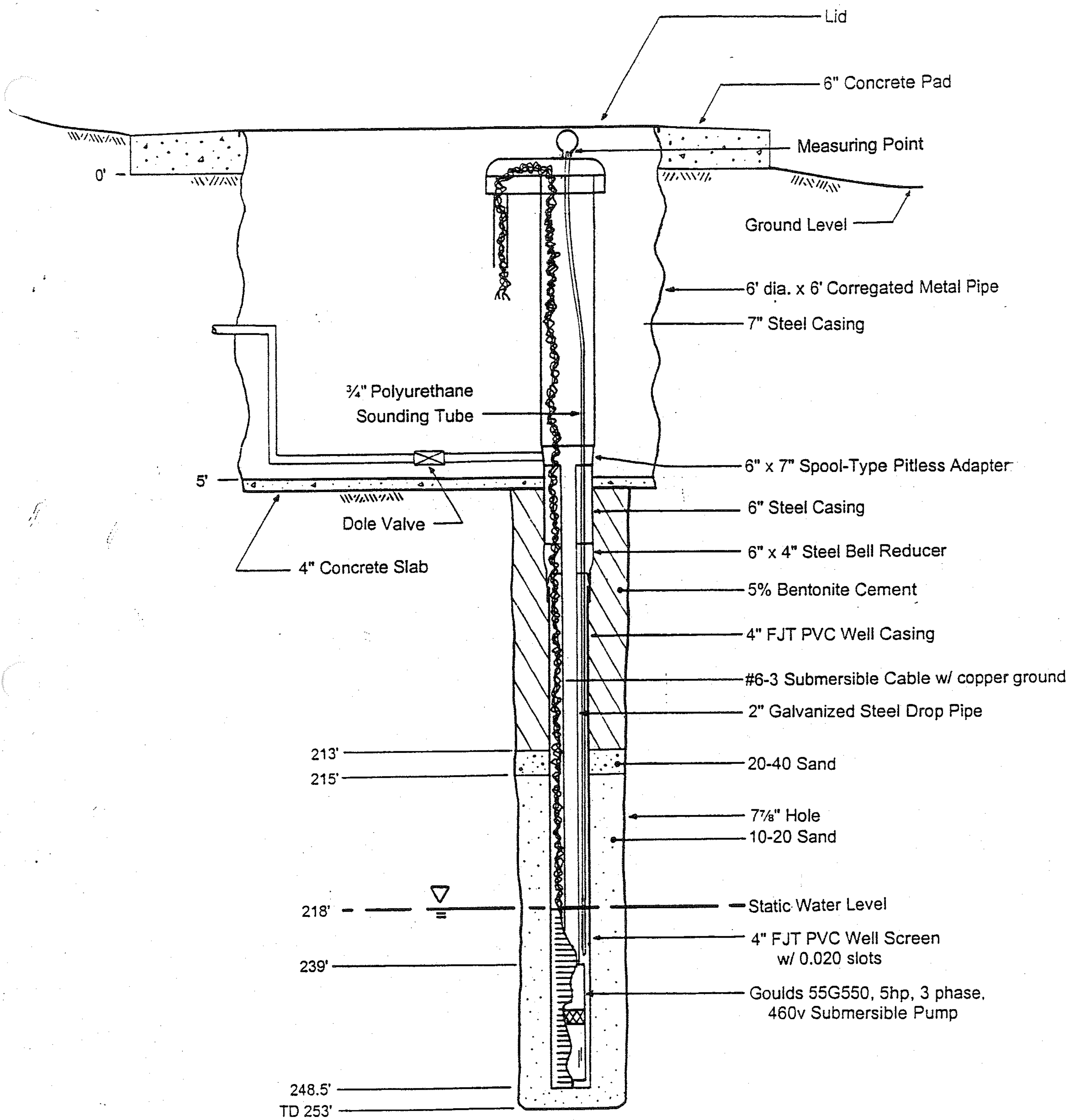
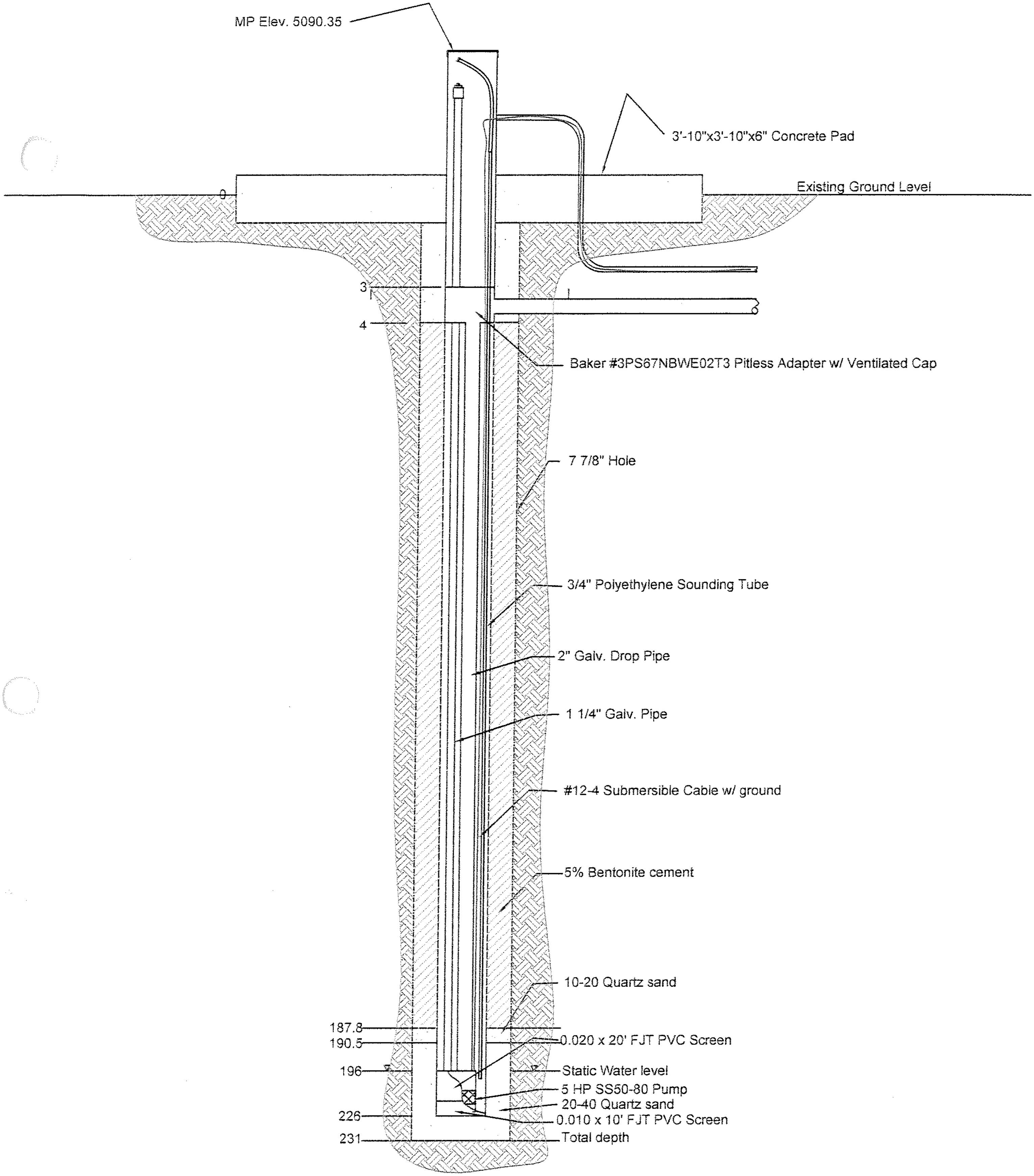


FIGURE 3

EW-3
COMPLETION DIAGRAM



# EW-4
# Completion Diagram
# PERSONS STATION

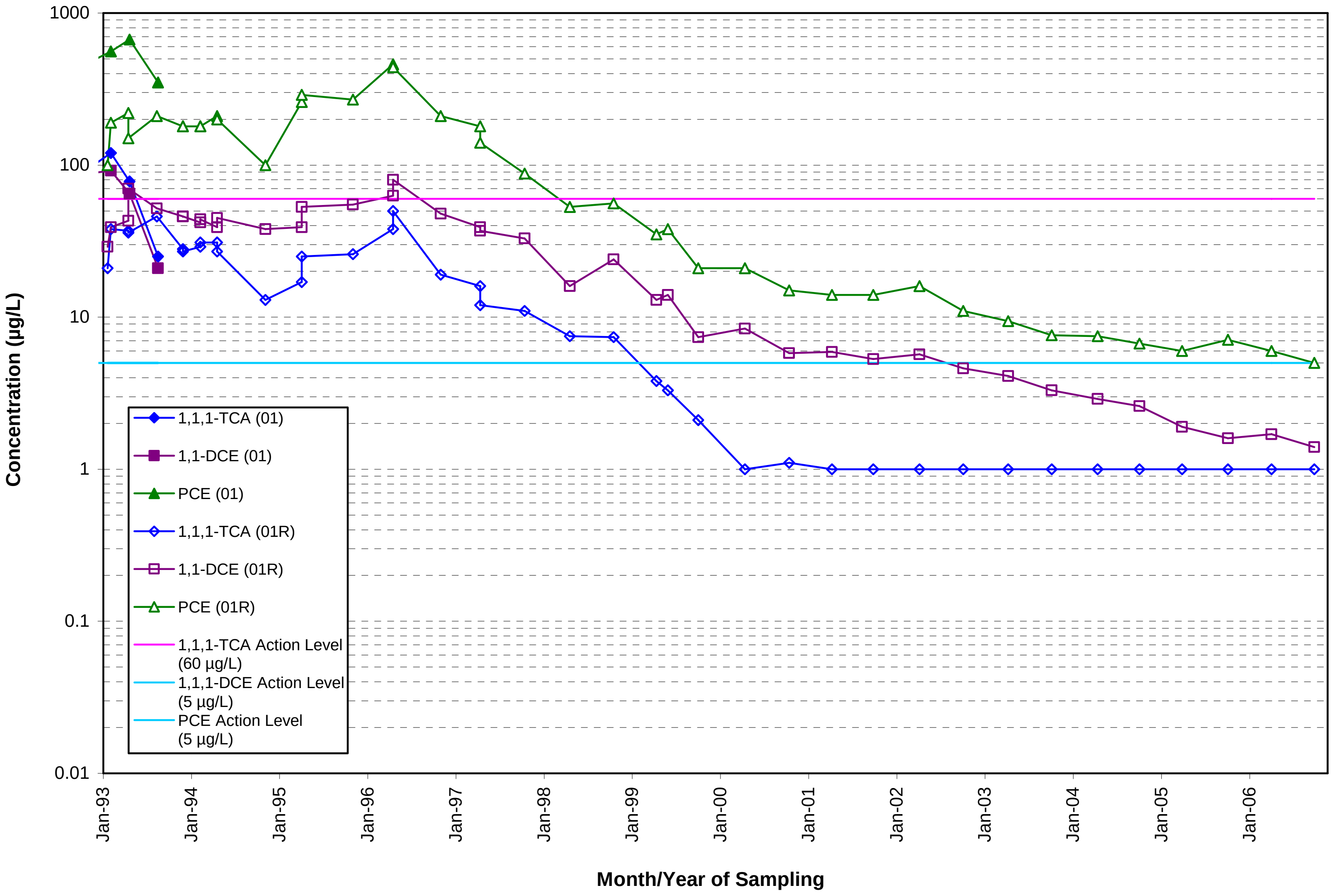


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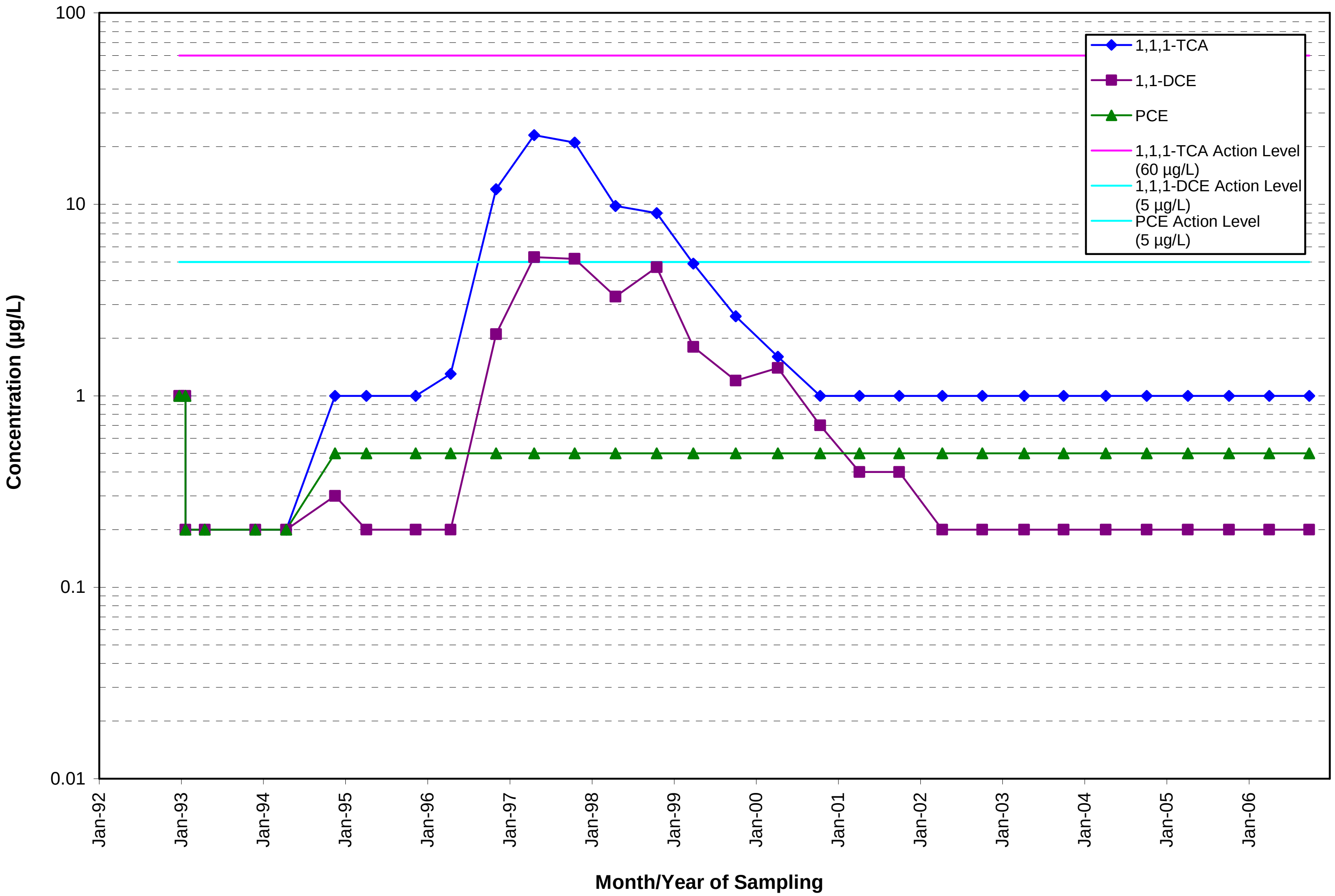
**Figure C-1**
**Groundwater Analytical Results, 1984–2006**
**Monitoring Wells PSMW-01 and 01R**
**Person Generating Station**
**Public Service Company of New Mexico**



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# Figure C-2
# Groundwater Analytical Results, 1993–2006
# Monitoring Well PSMW-01B
# Person Generating Station
# Public Service Company of New Mexico

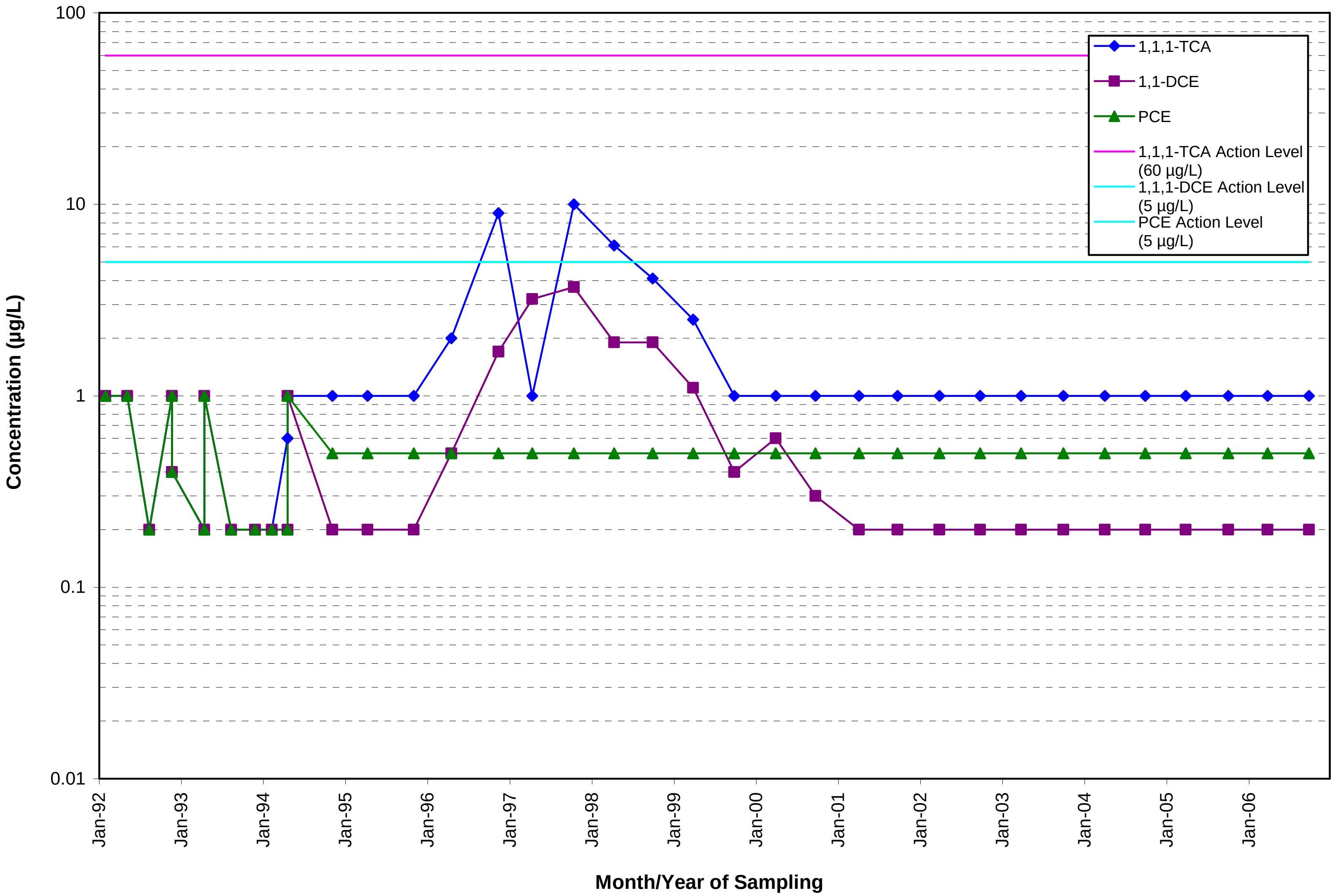

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**Figure C-3**
**Groundwater Analytical Results, 1984–2006**
**Monitoring Well PSMW-03B**
**Person Generating Station**
**Public Service Company of New Mexico**

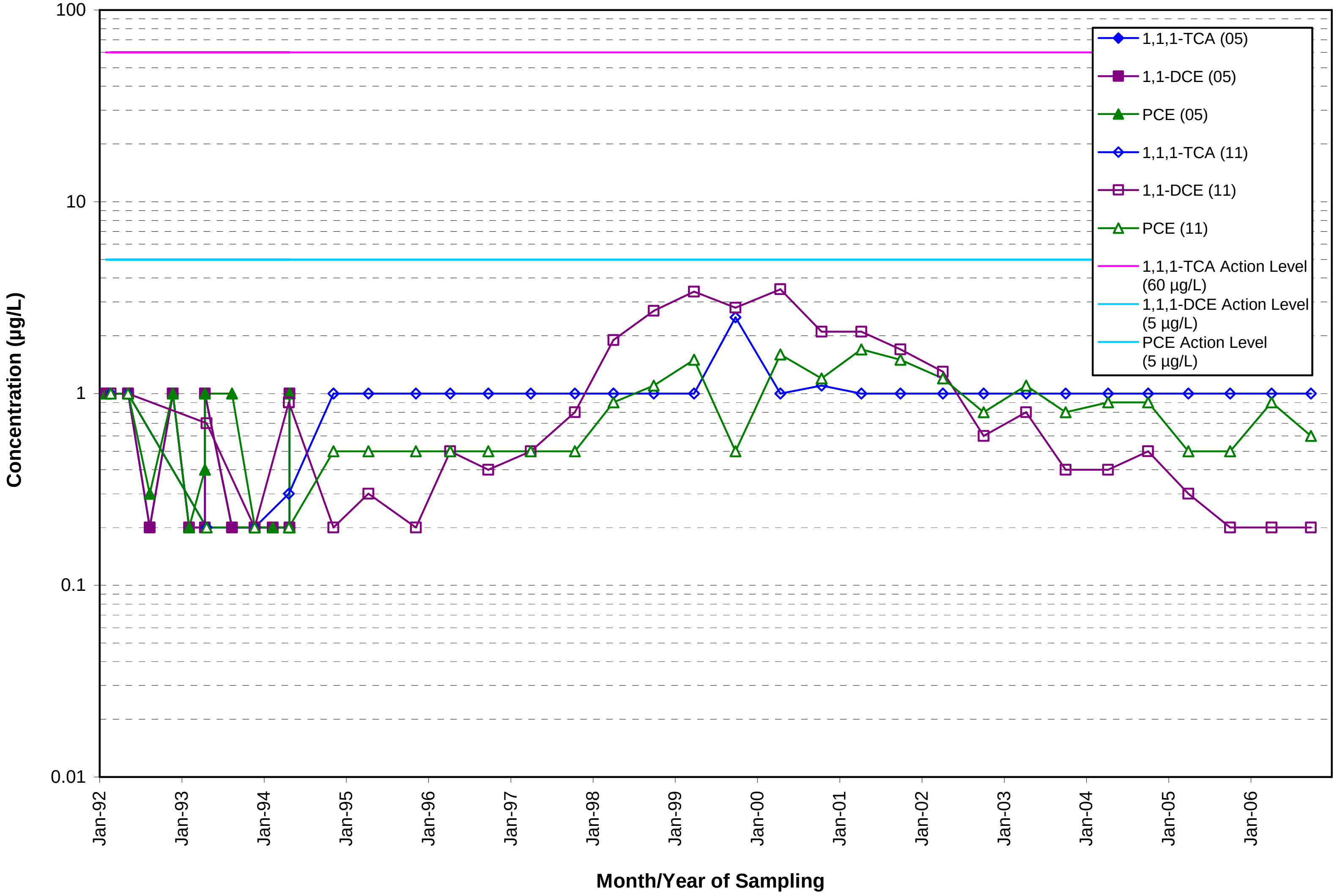

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**Figure C-4**
**Groundwater Analytical Results, 1984–2006**
**Monitoring Wells PSMW-05 and 11**
**Person Generating Station**
**Public Service Company of New Mexico**

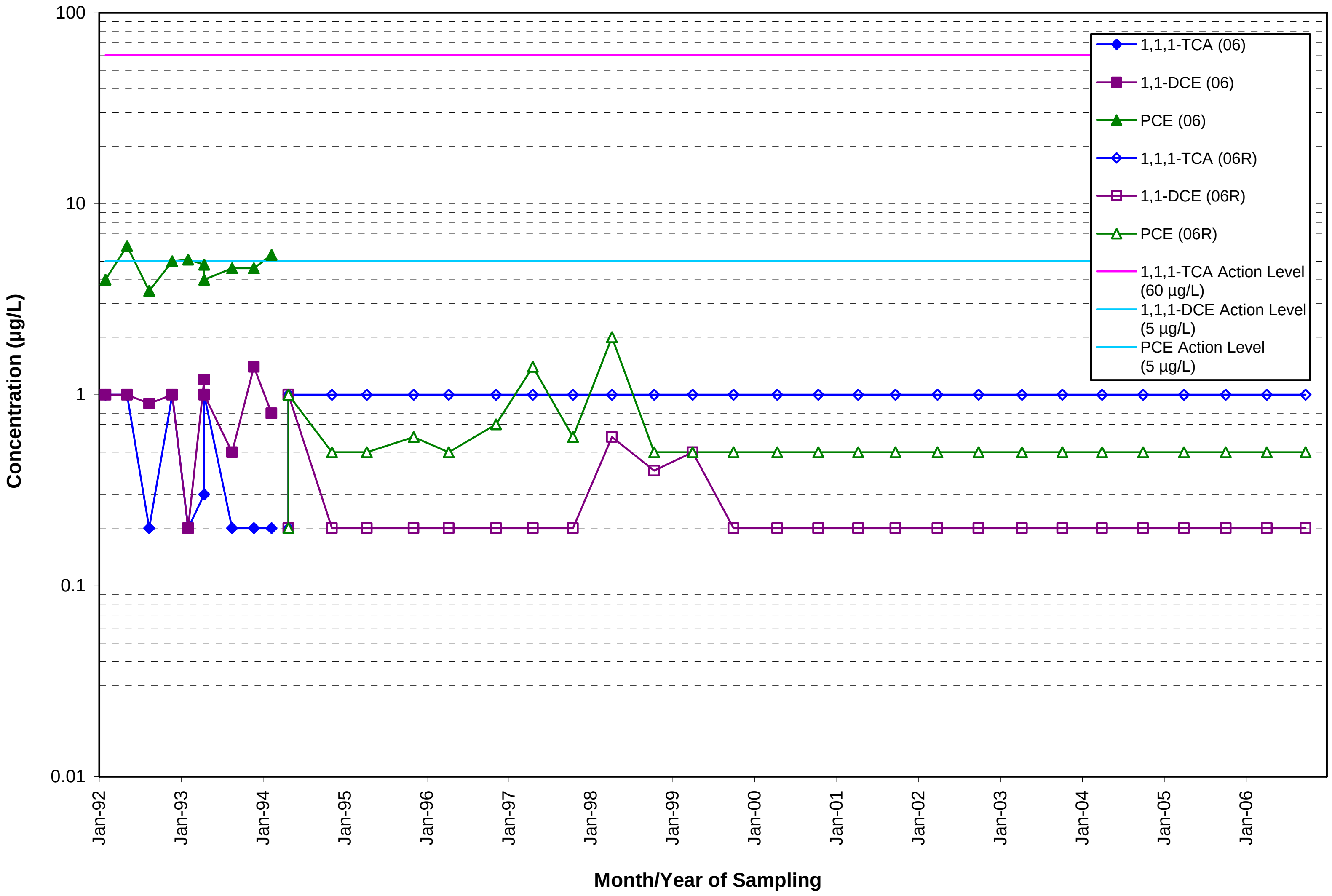

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**Figure C-5**
**Groundwater Analytical Results, 1984–2006**
**Monitoring Wells PSMW-06 and 06R**
**Person Generating Station**
**Public Service Company of New Mexico**

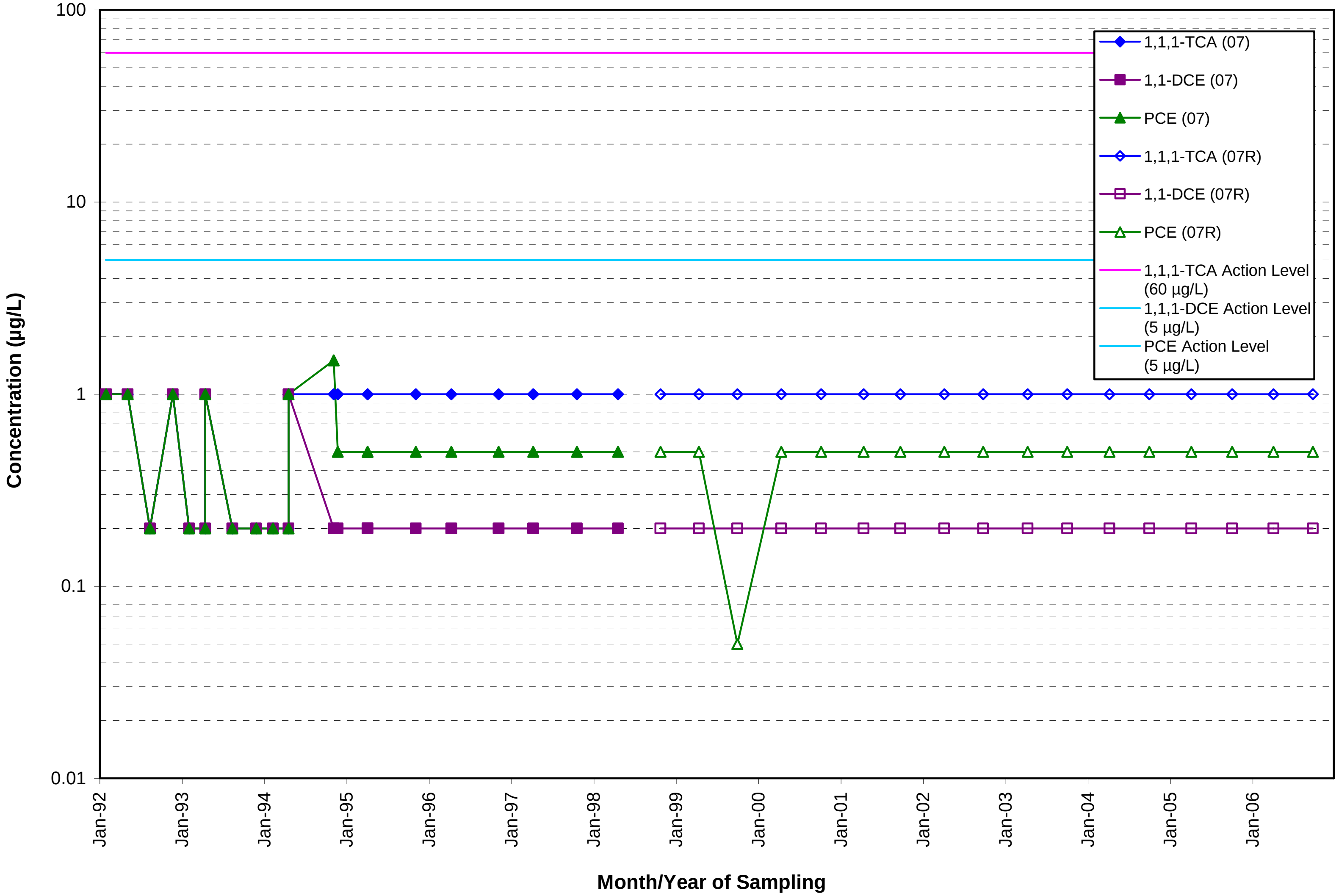

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**Figure C-6**
**Groundwater Analytical Results, 1985–2006**
**Monitoring Wells PSMW-07 and 07R**
**Person Generating Station**
**Public Service Company of New Mexico**

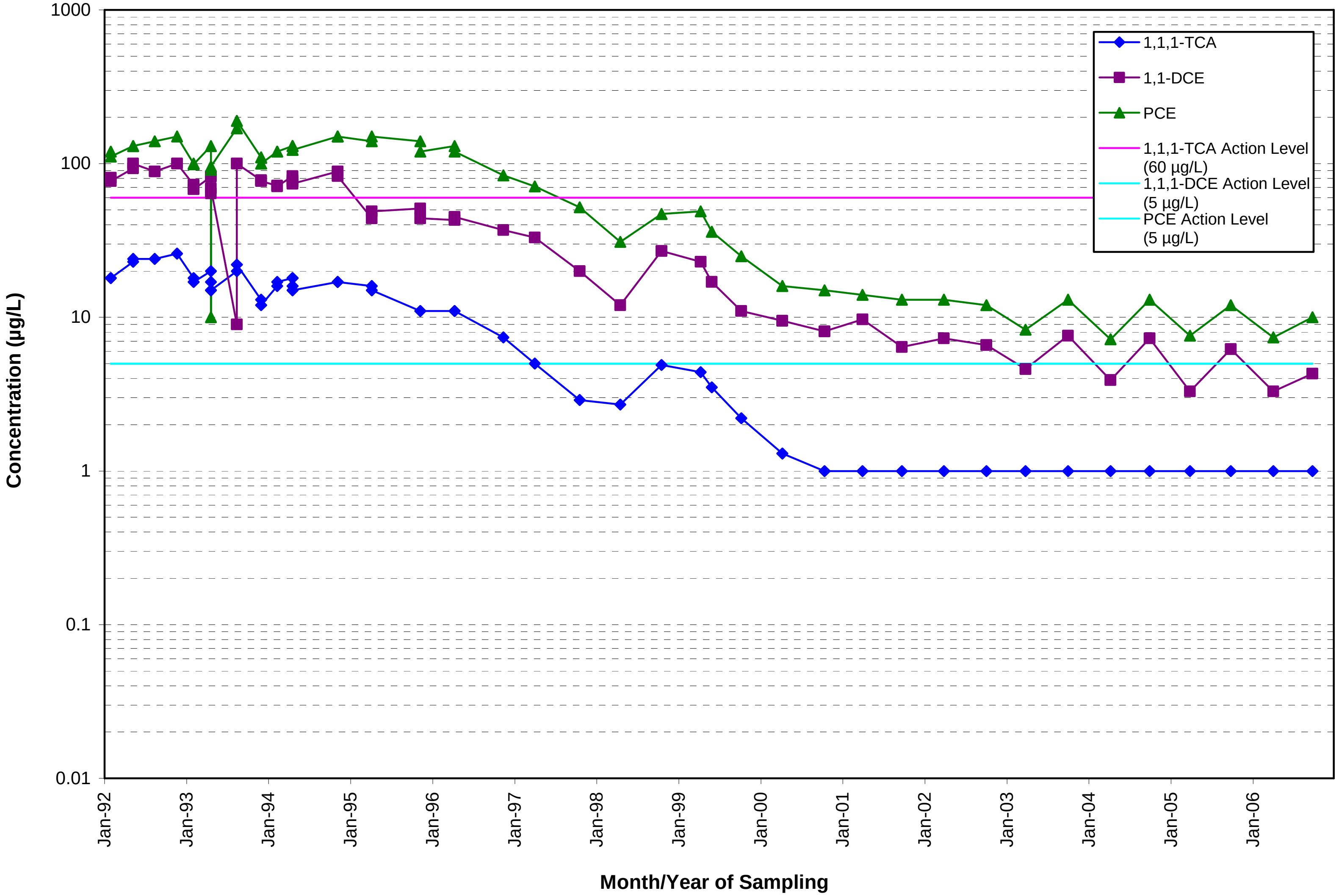

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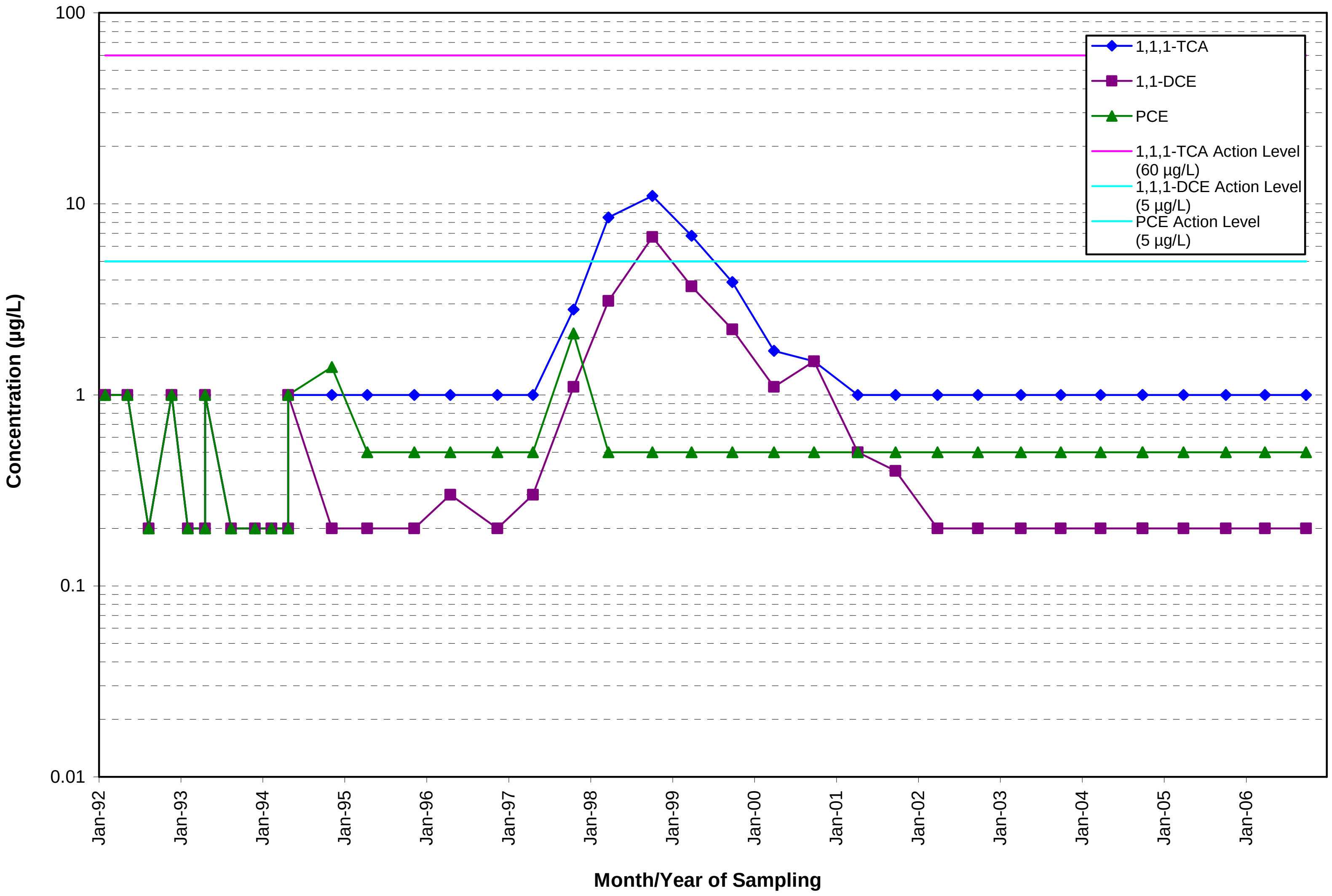
**Figure C-7**
**Groundwater Analytical Results, 1984–2006**
**Monitoring Well PSMW-08A**
**Person Generating Station**
**Public Service Company of New Mexico**



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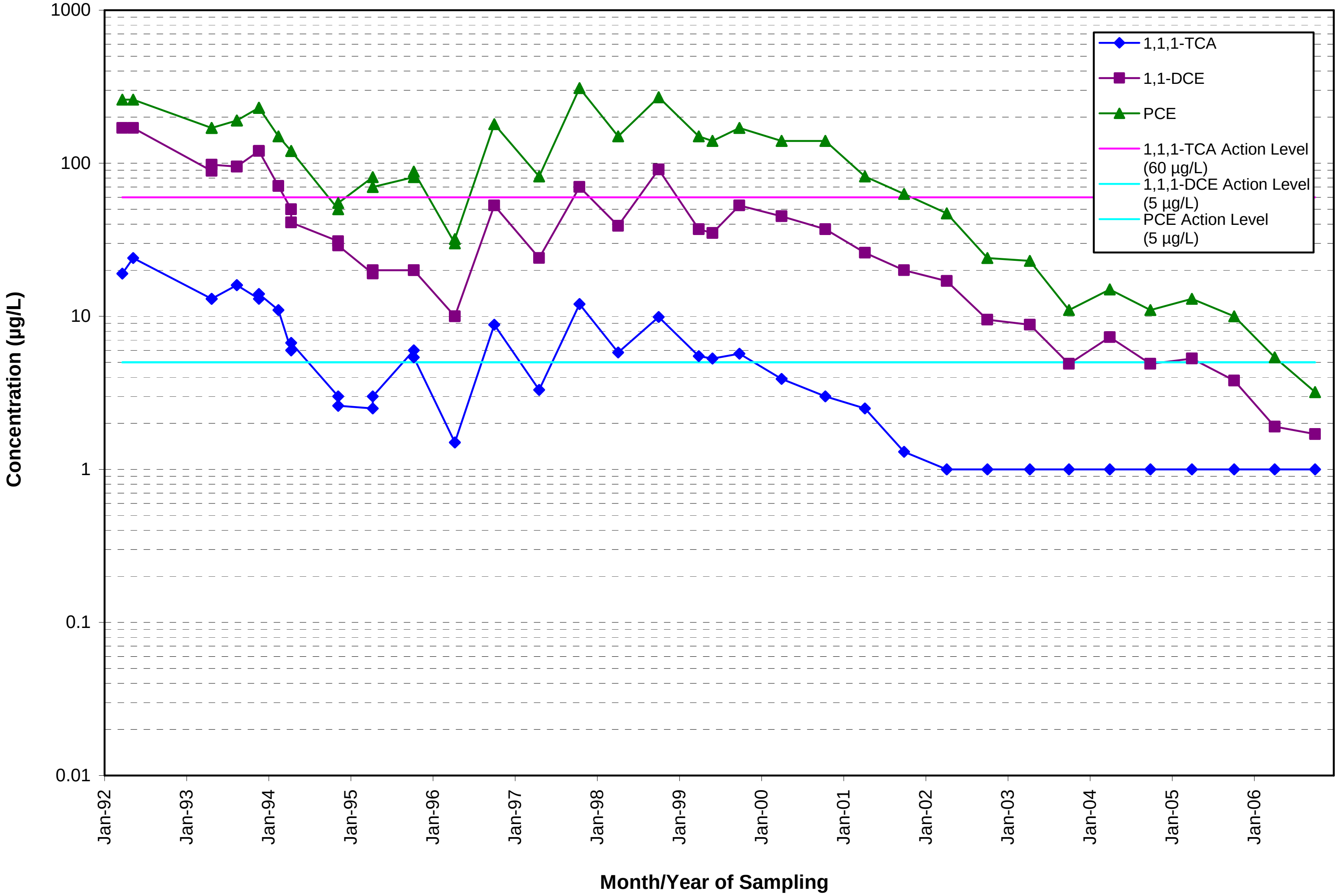
### Figure C-8
### Groundwater Analytical Results, 1984–2006
### Monitoring Well PSMW-08B
### Person Generating Station
### Public Service Company of New Mexico



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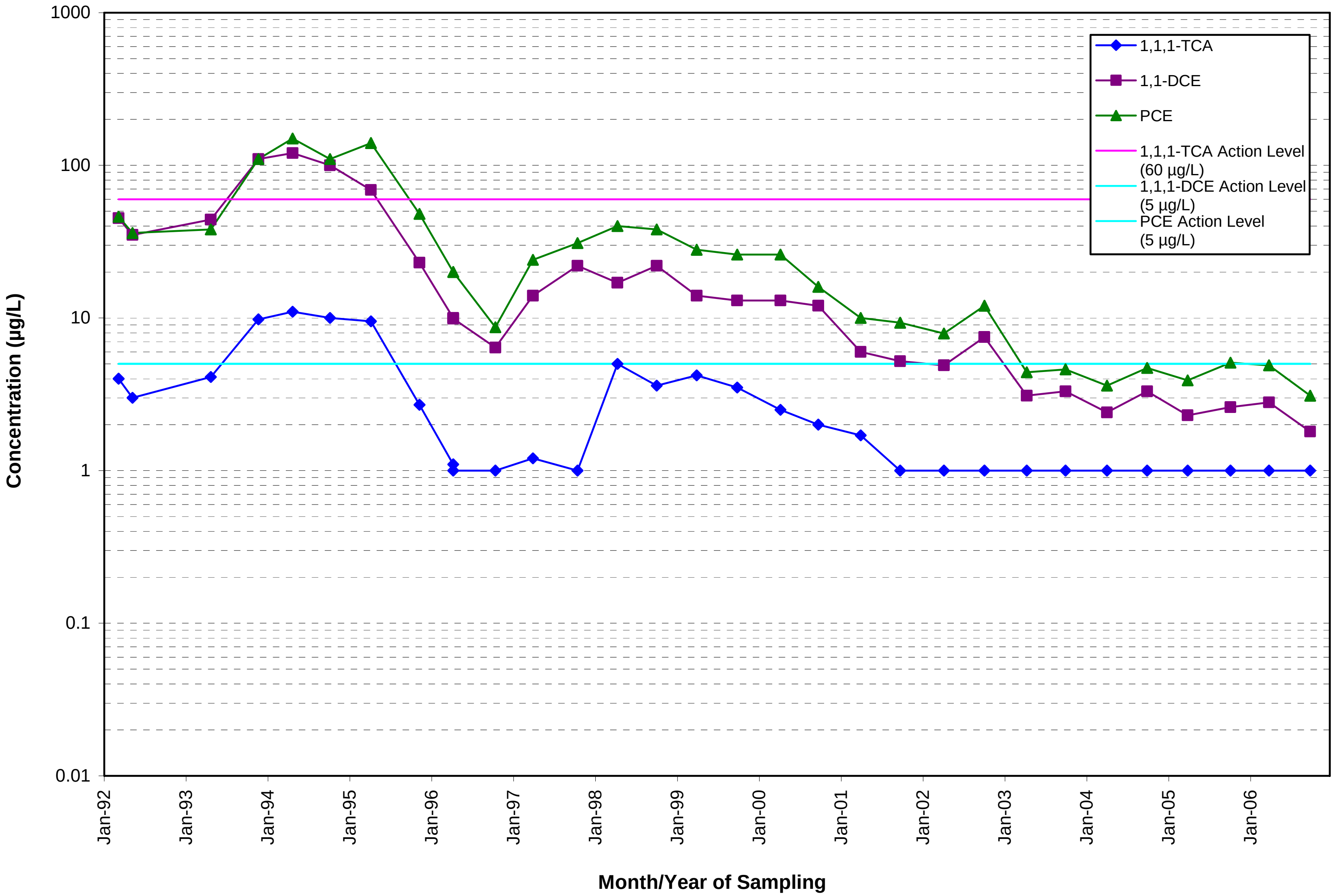
### Figure C-9
### Groundwater Analytical Results, 1992–2006
### Monitoring Well PSMW-10
### Person Generating Station
### Public Service Company of New Mexico



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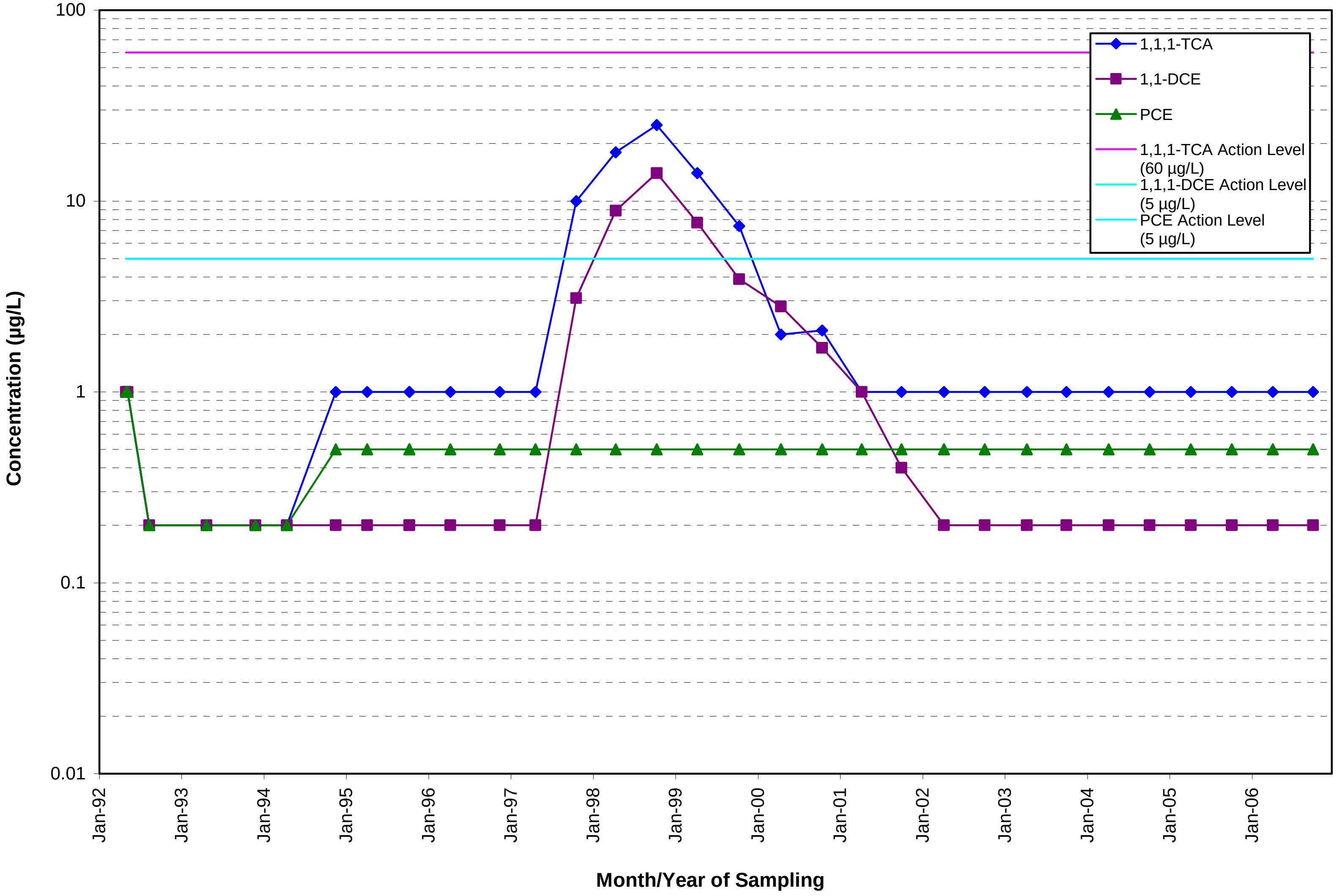
## Figure C-10
## Groundwater Analytical Results, 1992–2006
## Monitoring Well PSMW-13A
## Person Generating Station
## Public Service Company of New Mexico



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# Figure C-11
# Groundwater Analytical Results, 1992–2006
# Monitoring Well PSMW-13B
# Person Generating Station
# Public Service Company of New Mexico

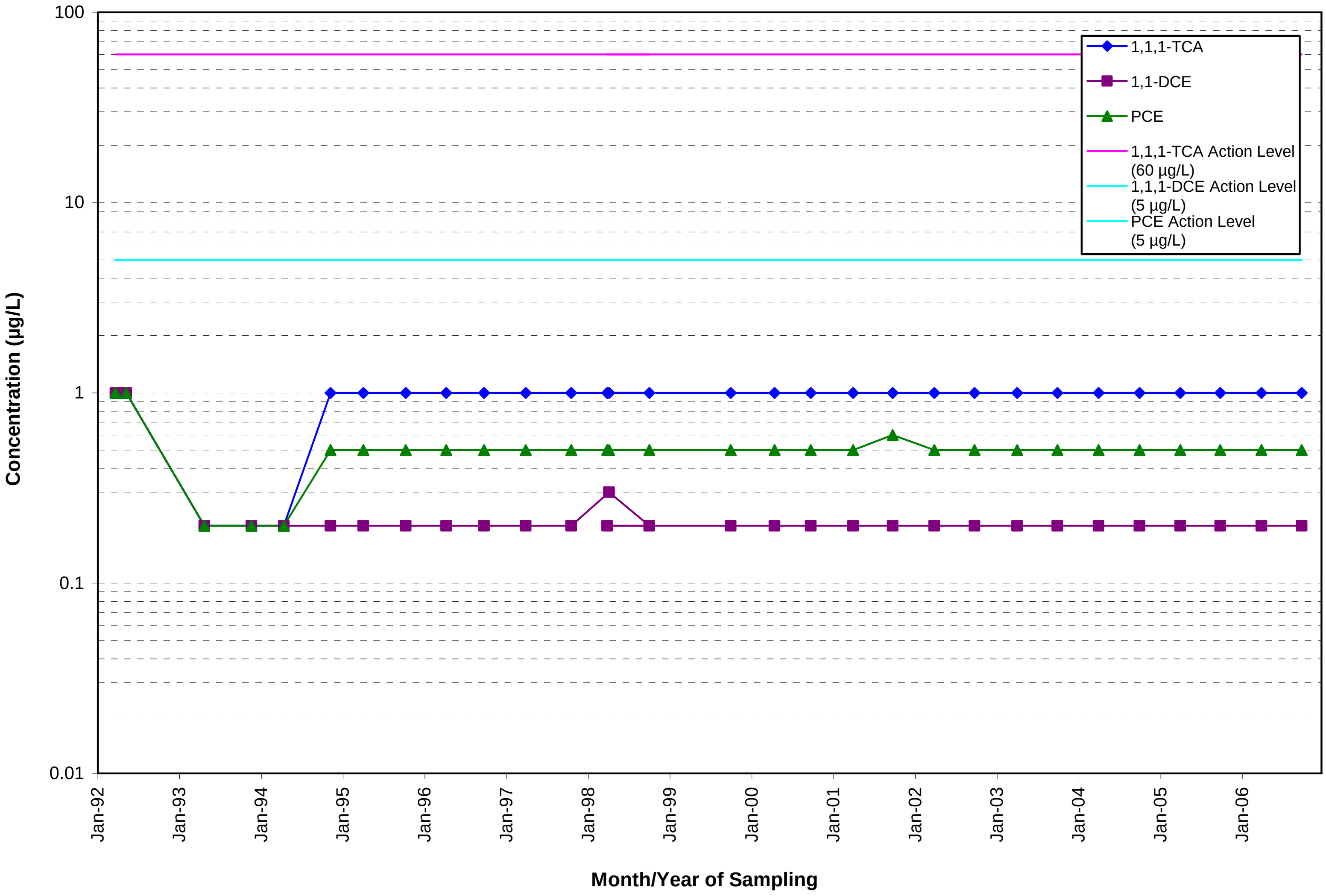

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**Figure C-12**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-14**
**Person Generating Station**
**Public Service Company of New Mexico**

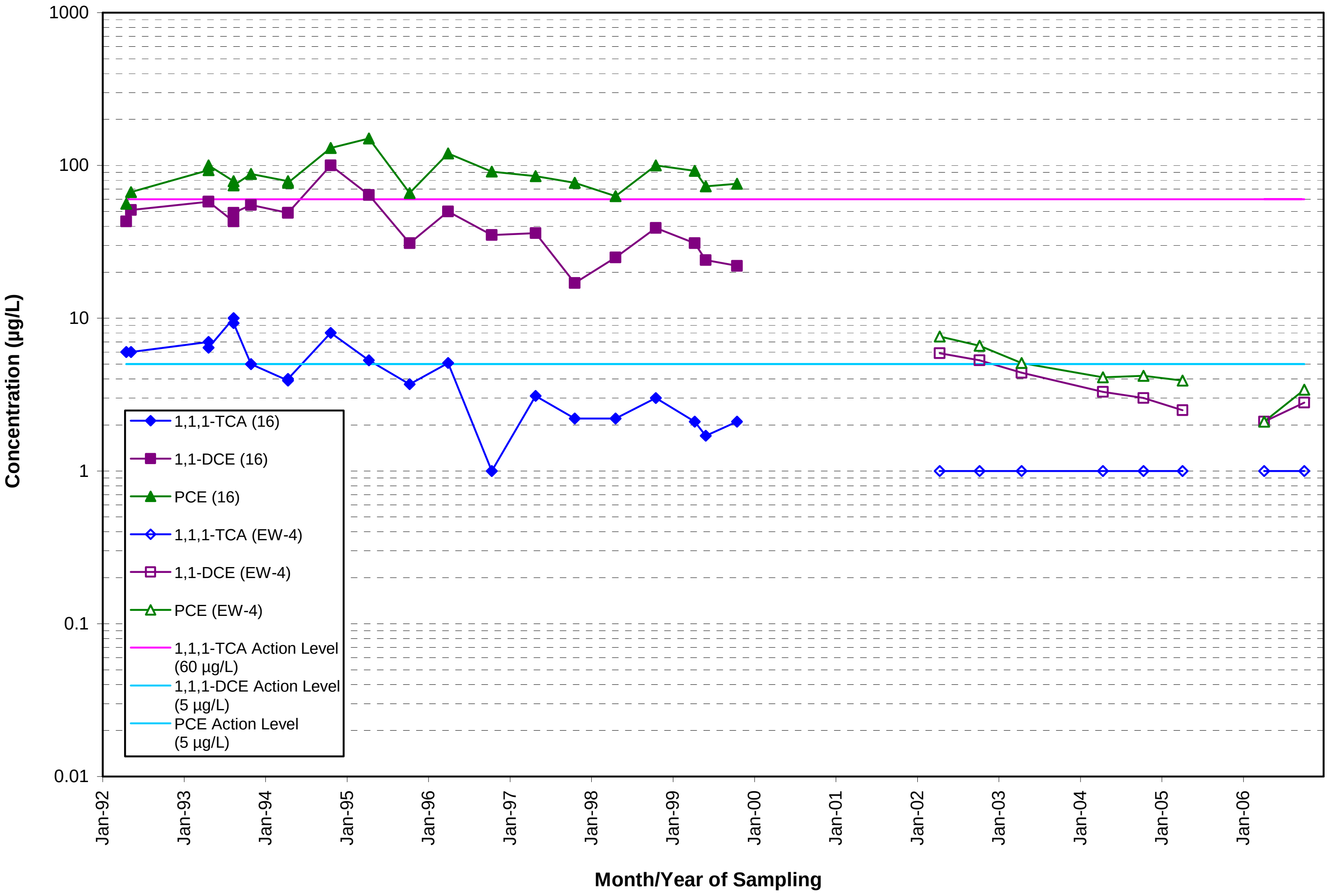

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**Figure C-13**
**Groundwater Analytical Results, 1992–2006**
**Monitoring/Extraction Wells PSMW-16 and EW-4**
**Person Generating Station**
**Public Service Company of New Mexico**

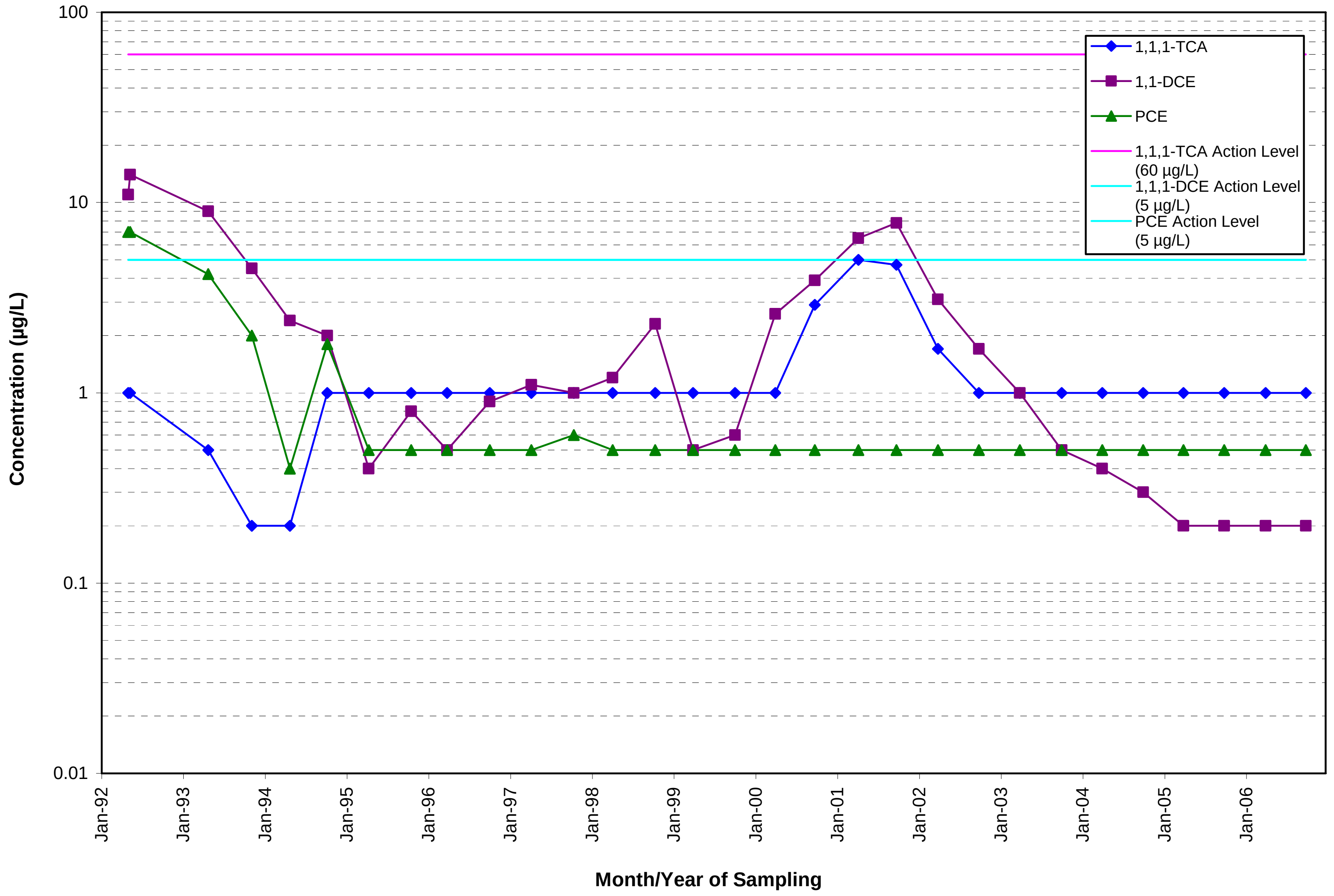

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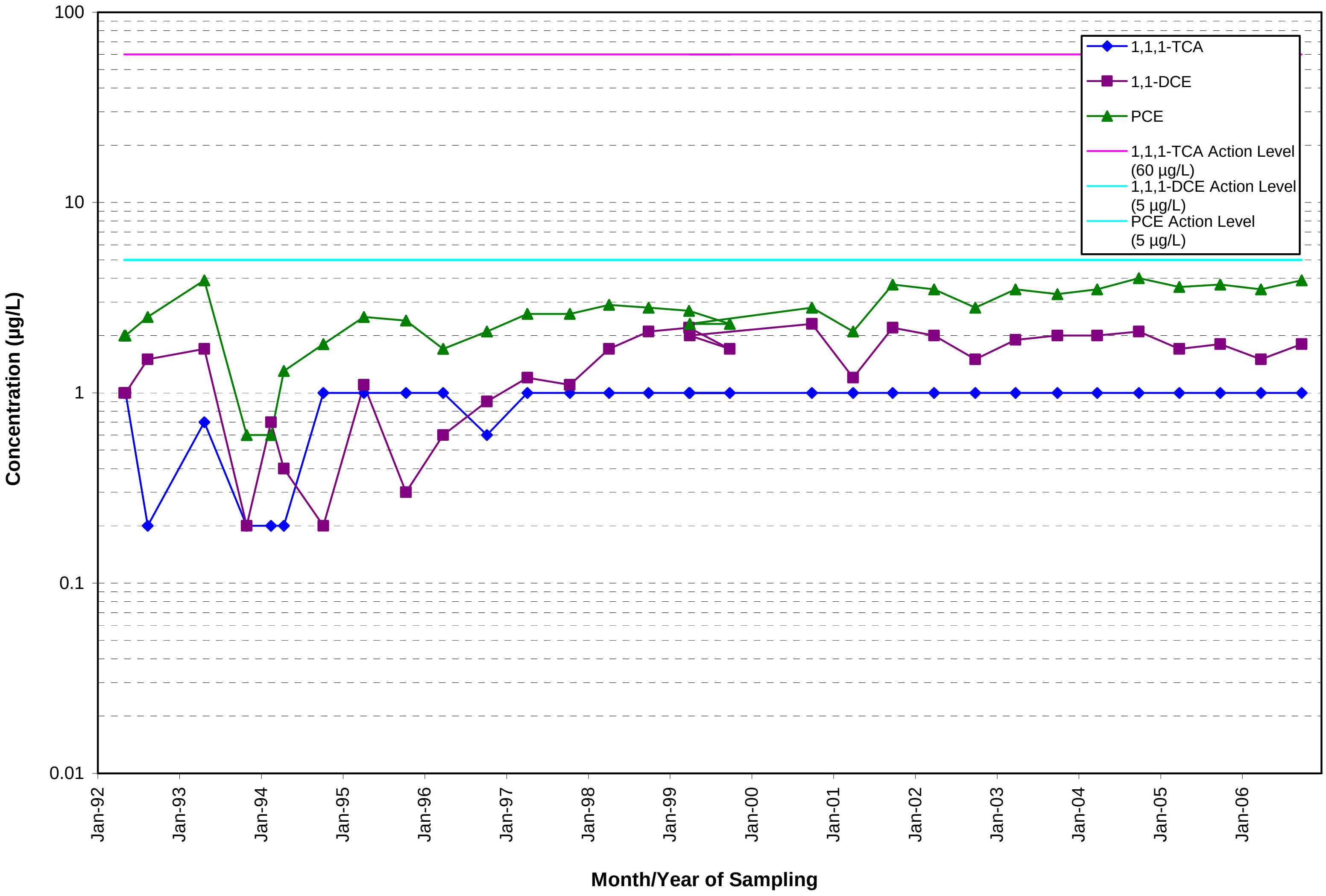
**Figure C-14**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-17**
**Person Generating Station**
**Public Service Company of New Mexico**



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## Figure C-15
## Groundwater Analytical Results, 1992–2006
## Monitoring Well PSMW-18
## Person Generating Station
## Public Service Company of New Mexico

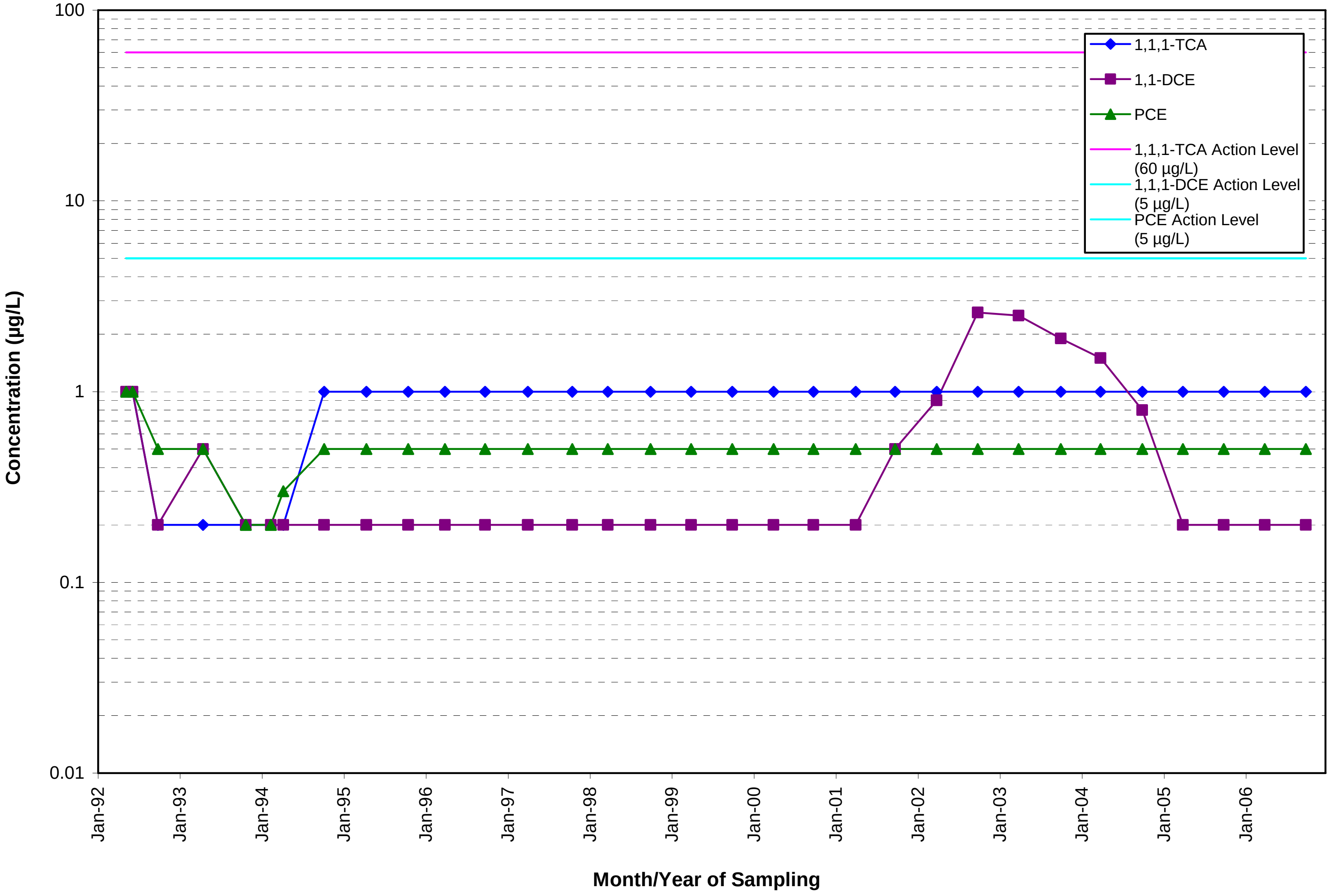

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**Figure C-16**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-19**
**Person Generating Station**
**Public Service Company of New Mexico**

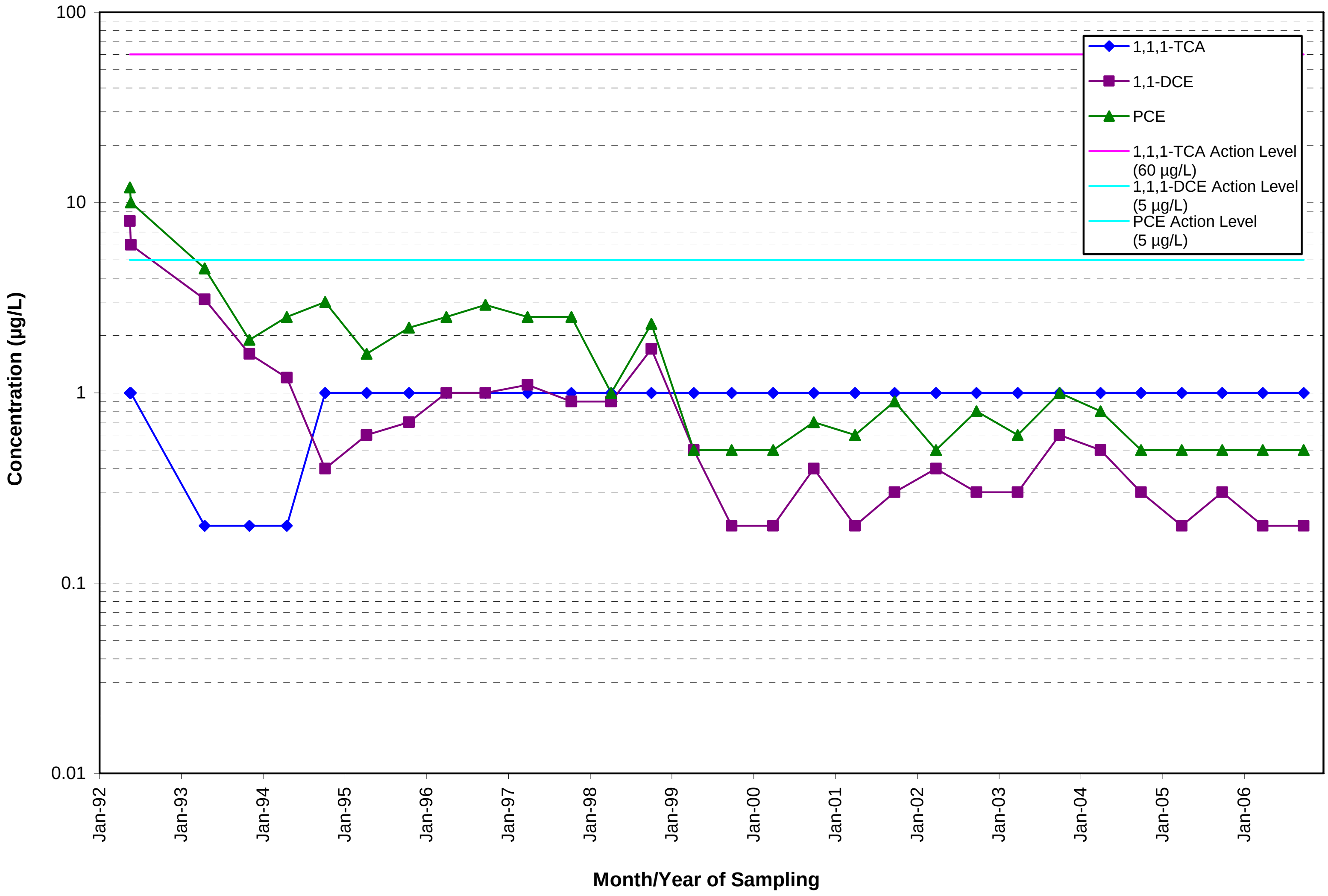

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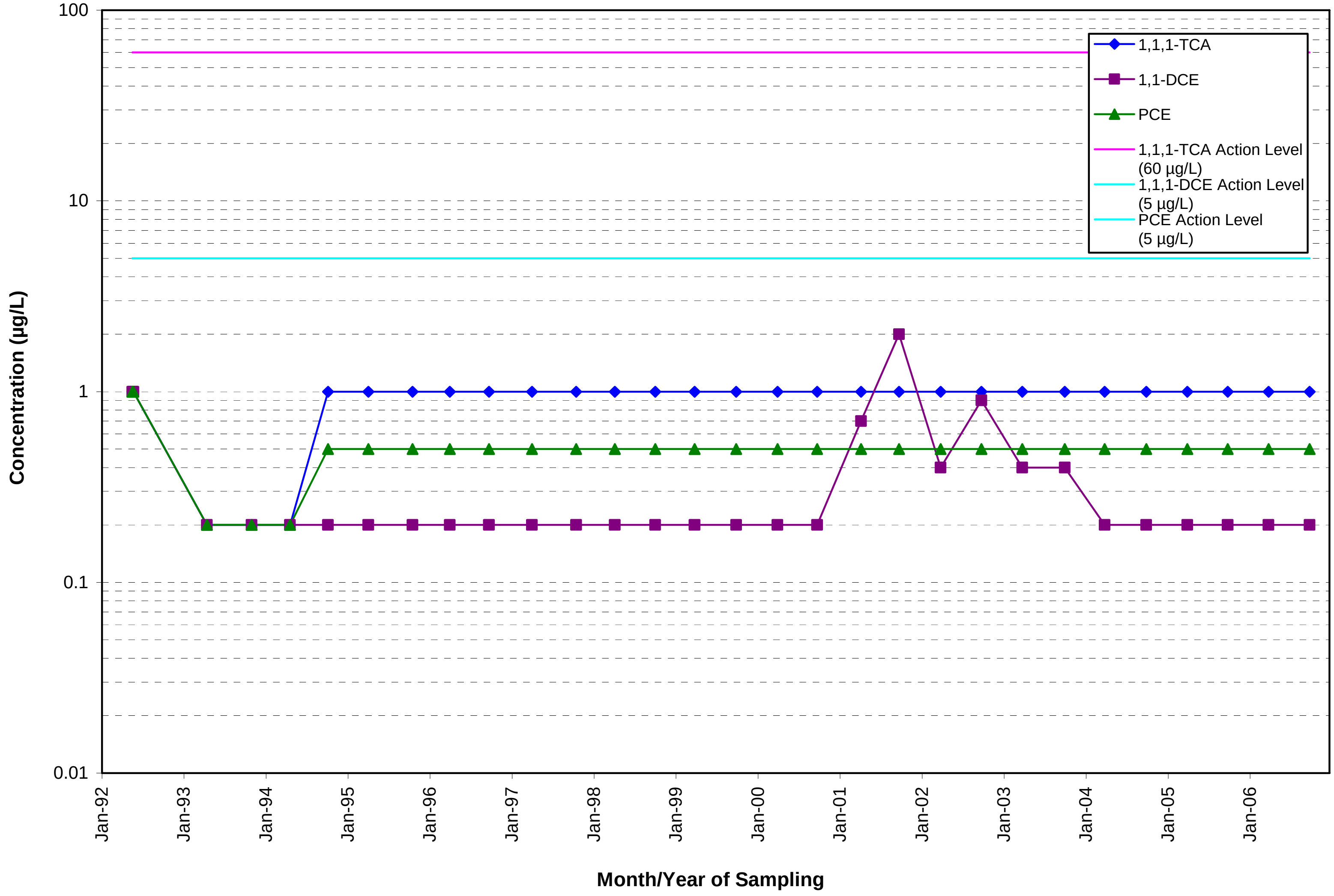
**Figure C-17**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-20**
**Person Generating Station**
**Public Service Company of New Mexico**



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## Figure C-18
## Groundwater Analytical Results, 1992–2006
## Monitoring Well PSMW-21
## Person Generating Station
## Public Service Company of New Mexico

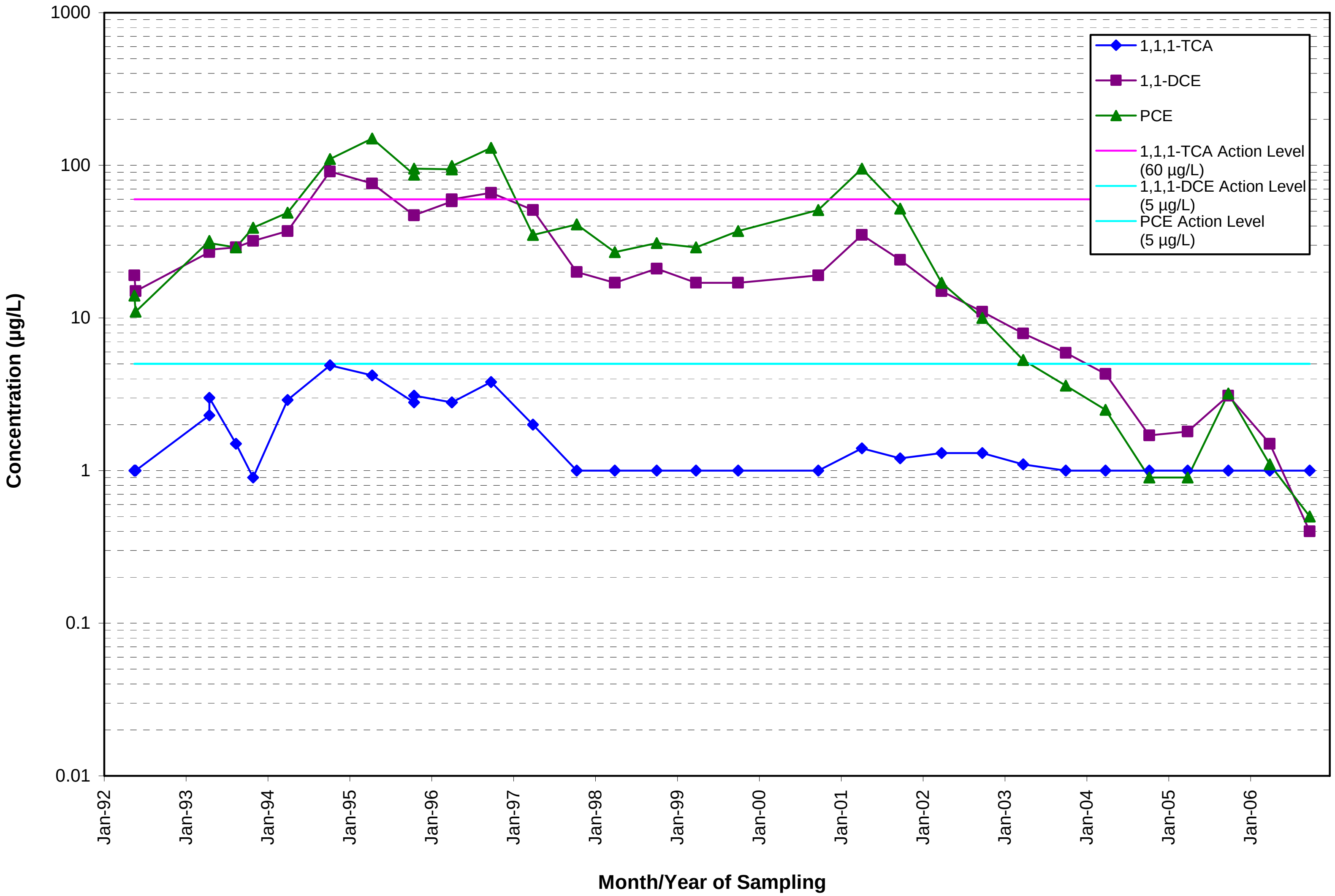

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**Figure C-19**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-22**
**Person Generating Station**
**Public Service Company of New Mexico**

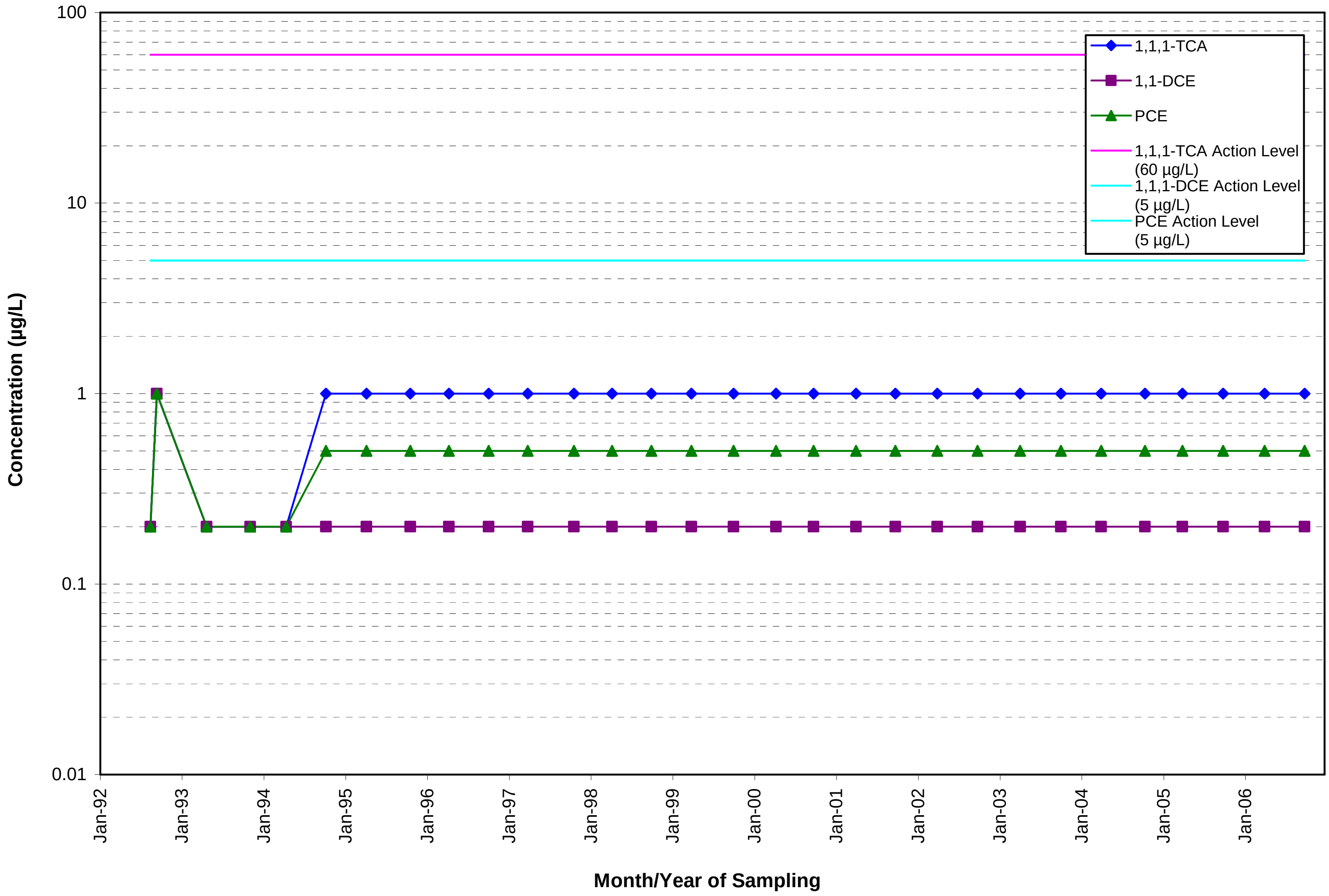

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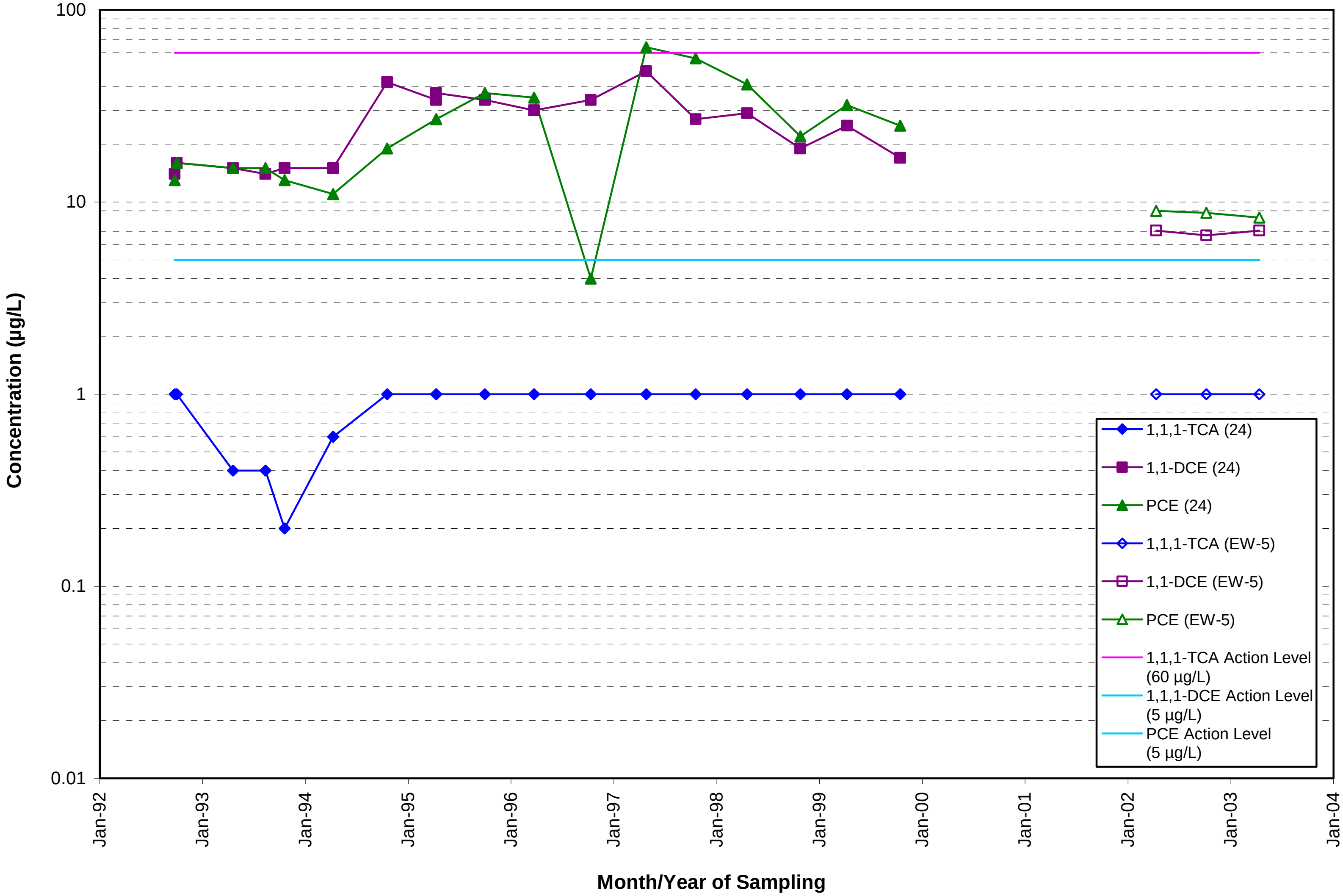
**Figure C-20**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-23**
**Person Generating Station**
**Public Service Company of New Mexico**



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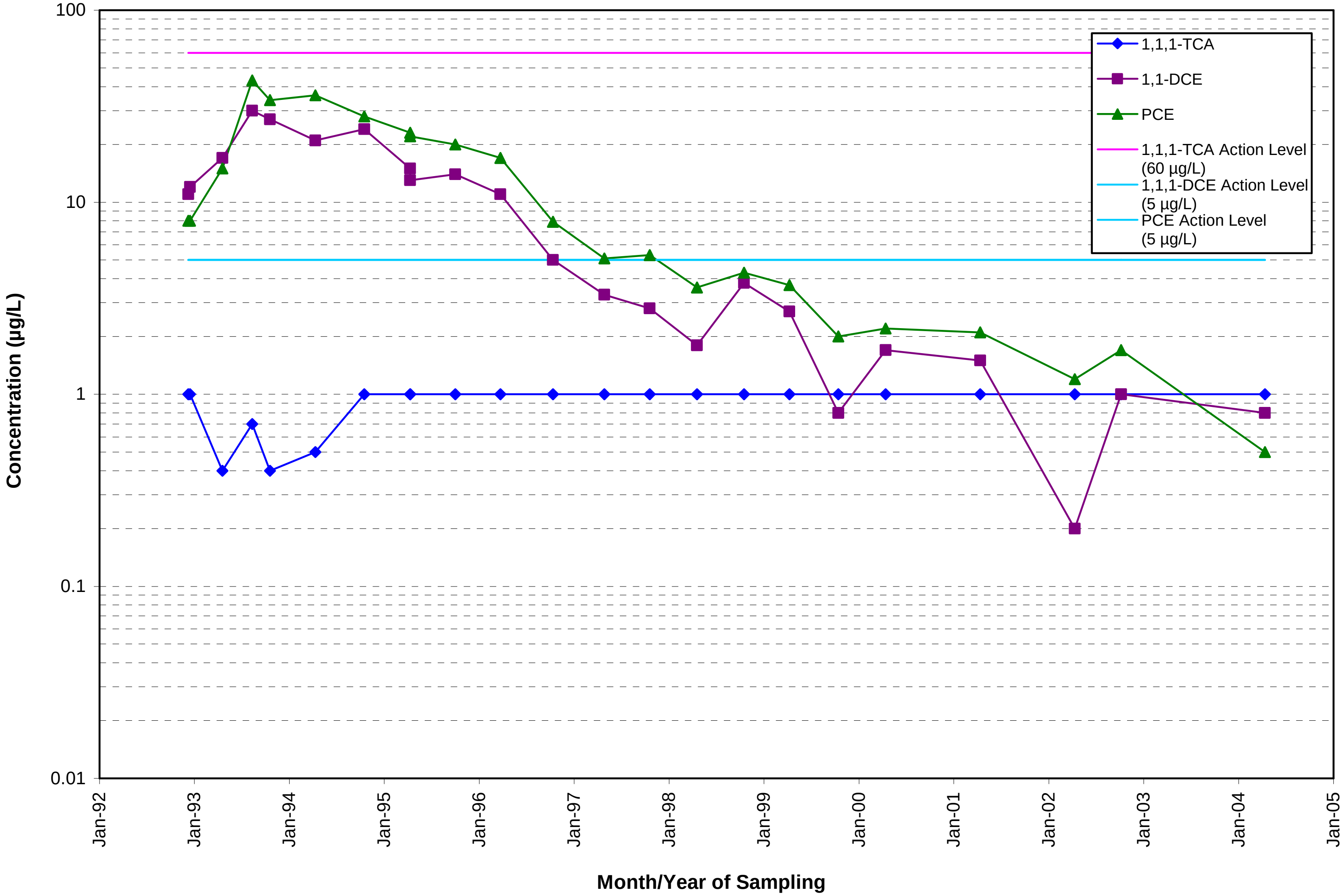
# Figure C-21
# Groundwater Analytical Results, 1992–2003
# Monitoring/Extraction Wells PSMW-24 and EW-5
# Person Generating Station
# Public Service Company of New Mexico



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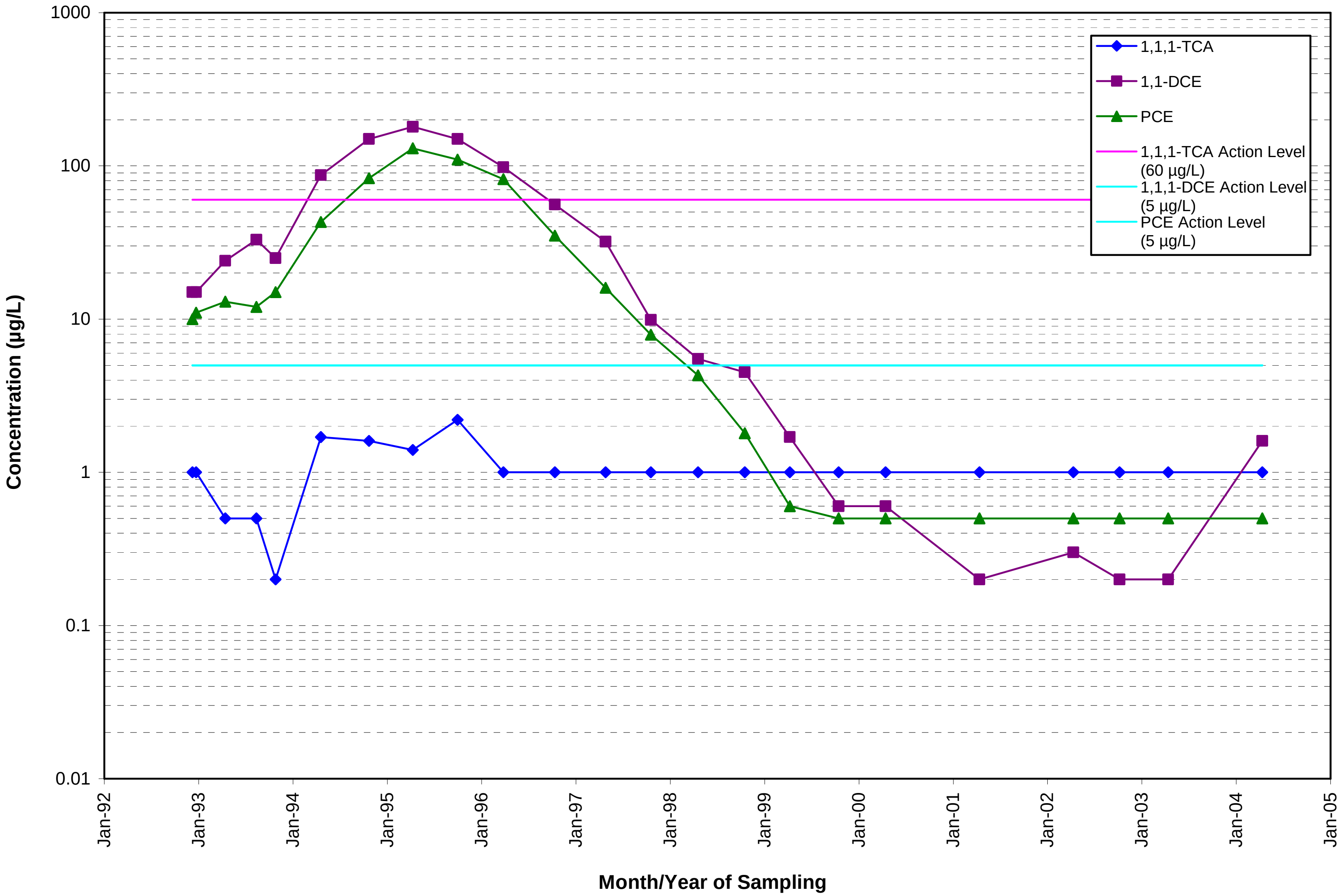
# Figure C-22
# Groundwater Analytical Results, 1992–2002
# Monitoring/Extraction Well PSMW-25
# Person Generating Station
# Public Service Company of New Mexico



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## Figure C-23
## Groundwater Analytical Results, 1992–2003
## Monitoring/Extraction Well PSMW-26
## Person Generating Station
## Public Service Company of New Mexico

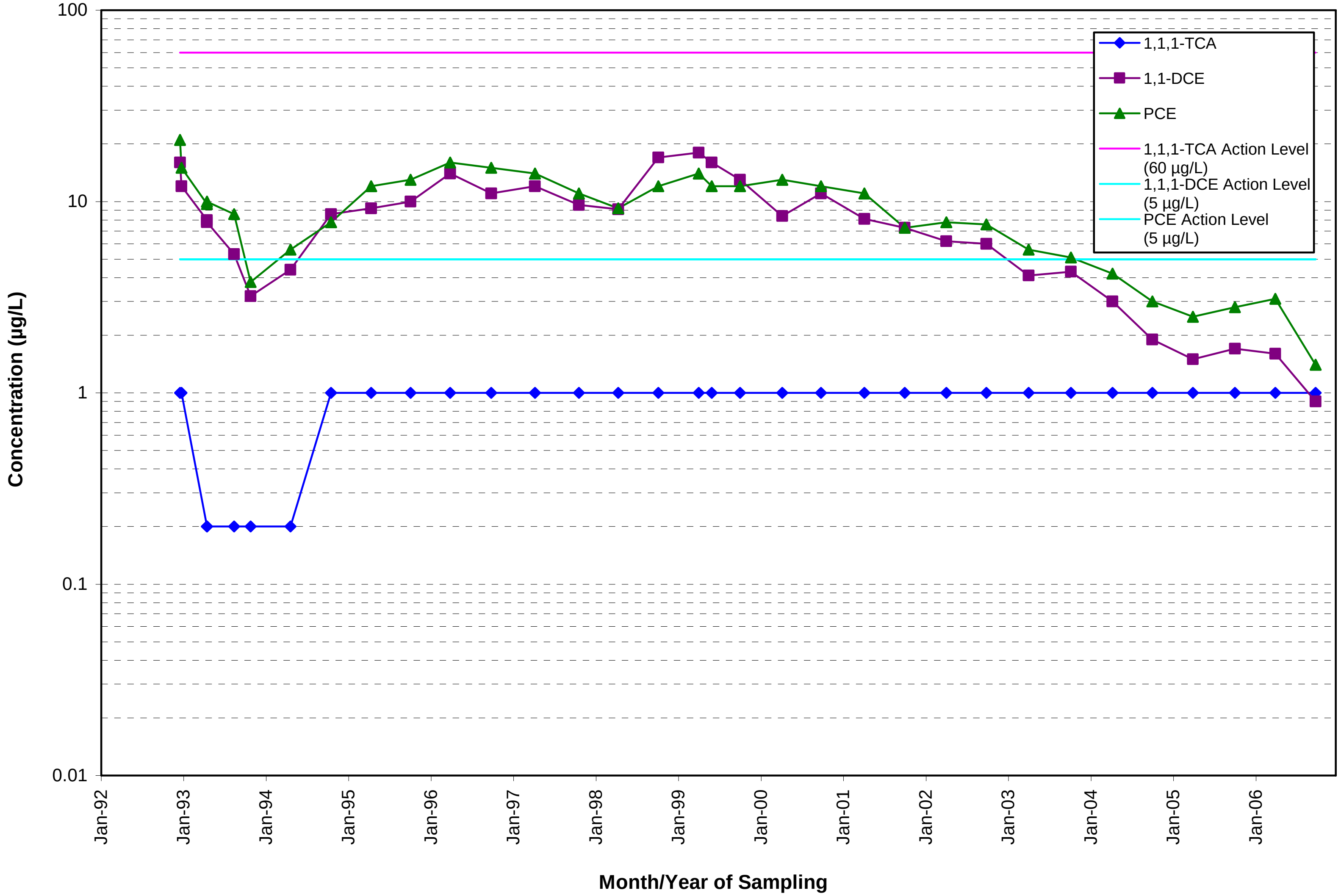

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**Figure C-24**
**Groundwater Analytical Results, 1992–2006**
**Monitoring Well PSMW-27**
**Person Generating Station**
**Public Service Company of New Mexico**

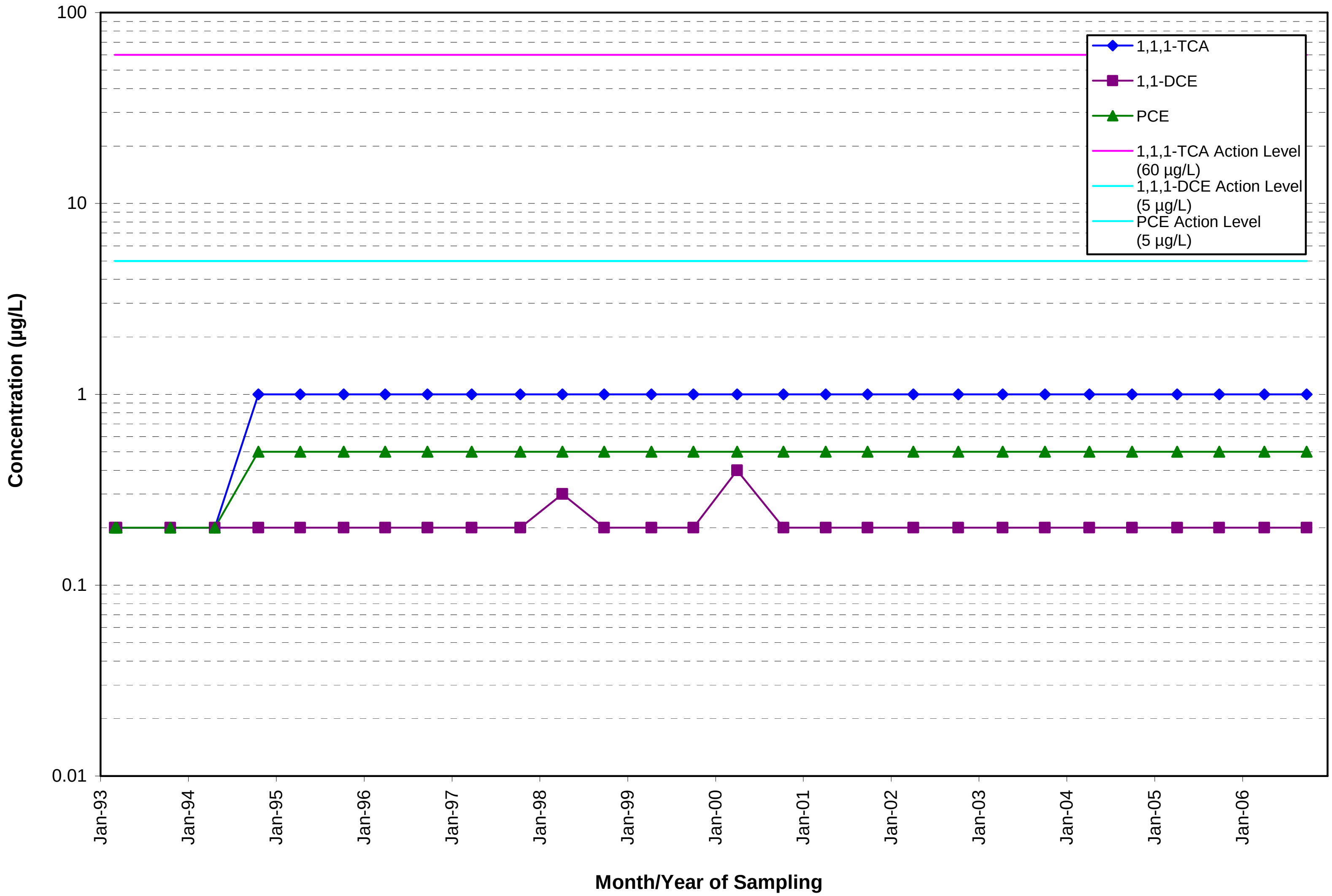

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**Figure C-25**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-28**
**Person Generating Station**
**Public Service Company of New Mexico**

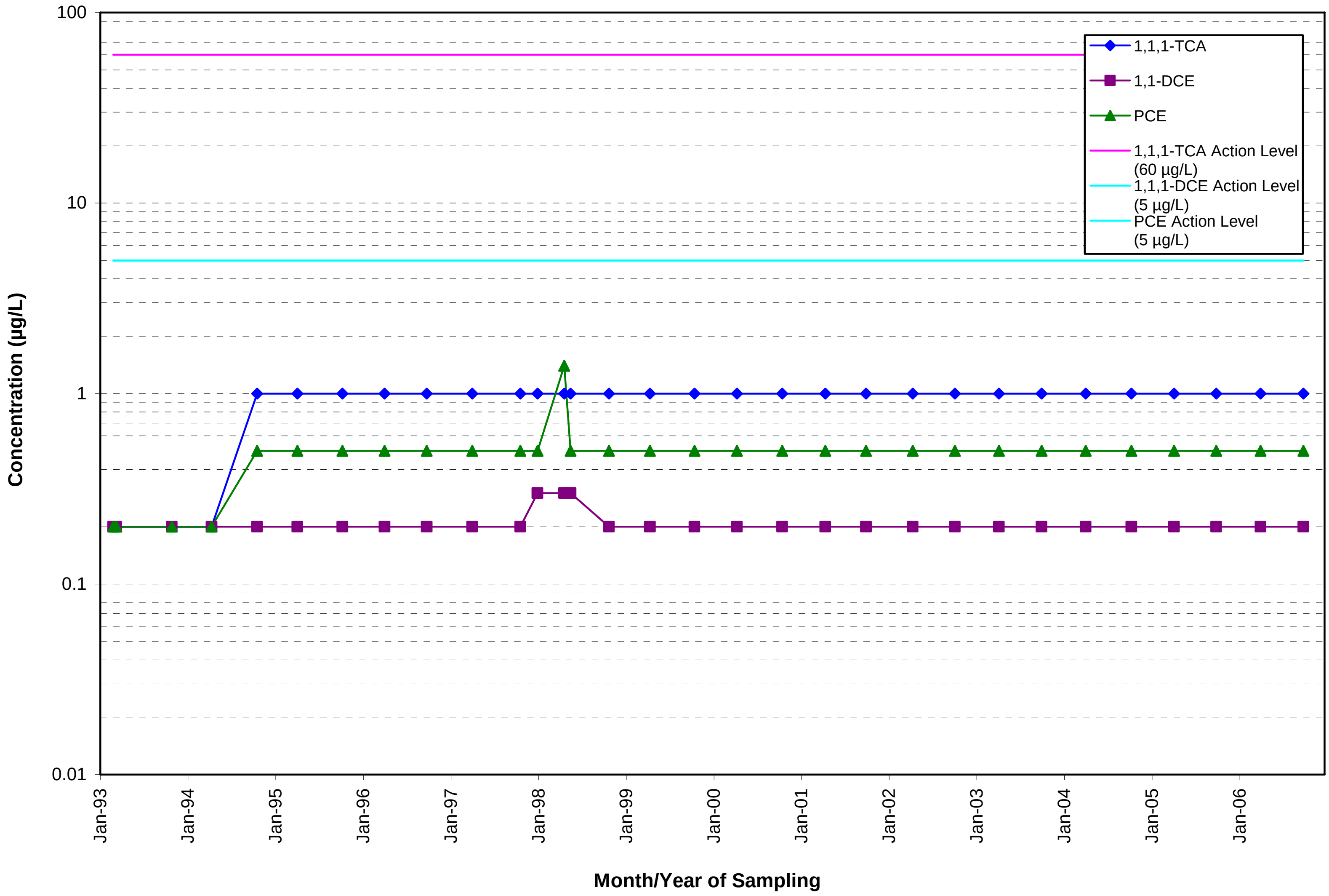

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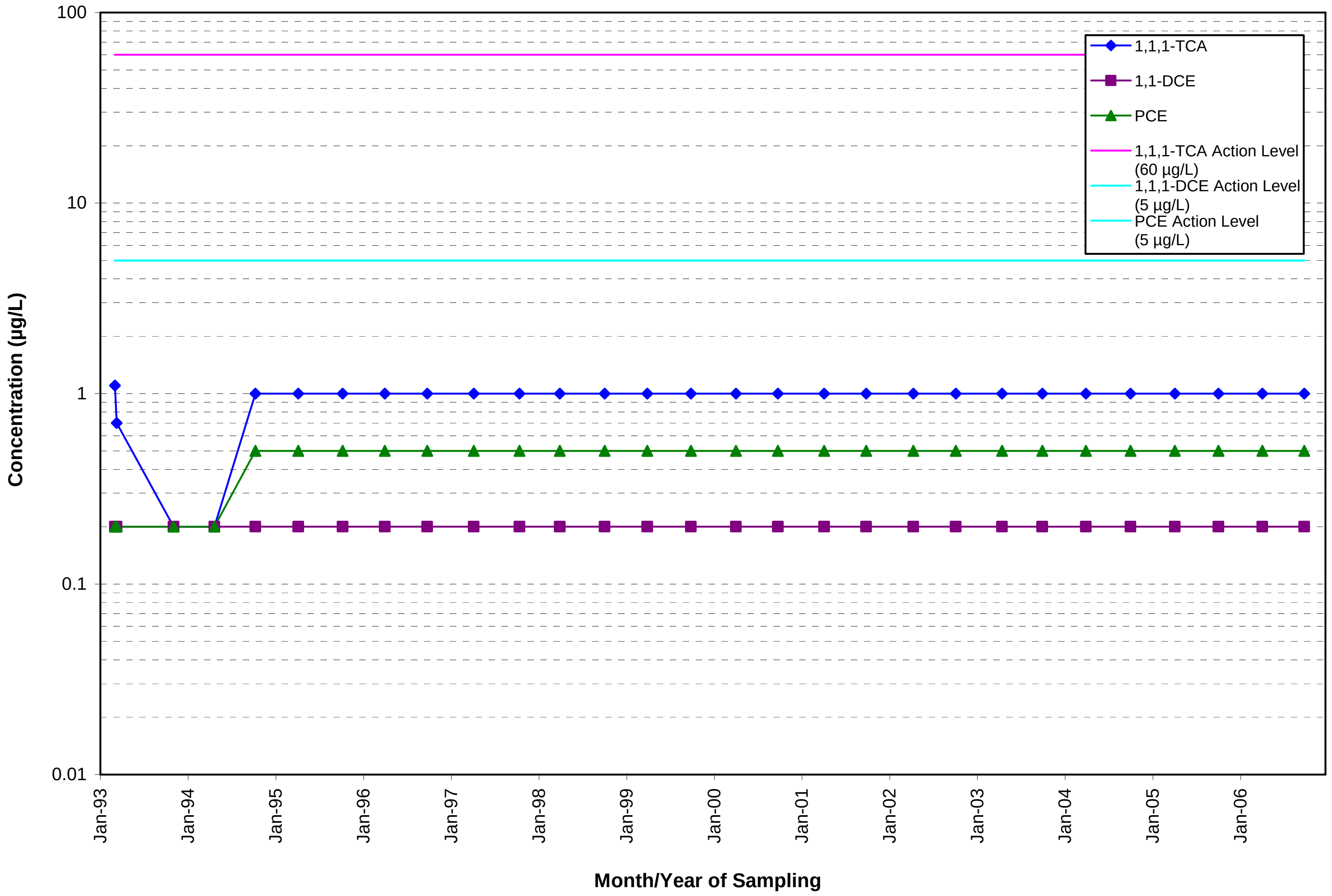
**Figure C-26**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-29**
**Person Generating Station**
**Public Service Company of New Mexico**



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# Figure C-27
# Groundwater Analytical Results, 1993–2006
# Monitoring Well PSMW-30
# Person Generating Station
# Public Service Company of New Mexico

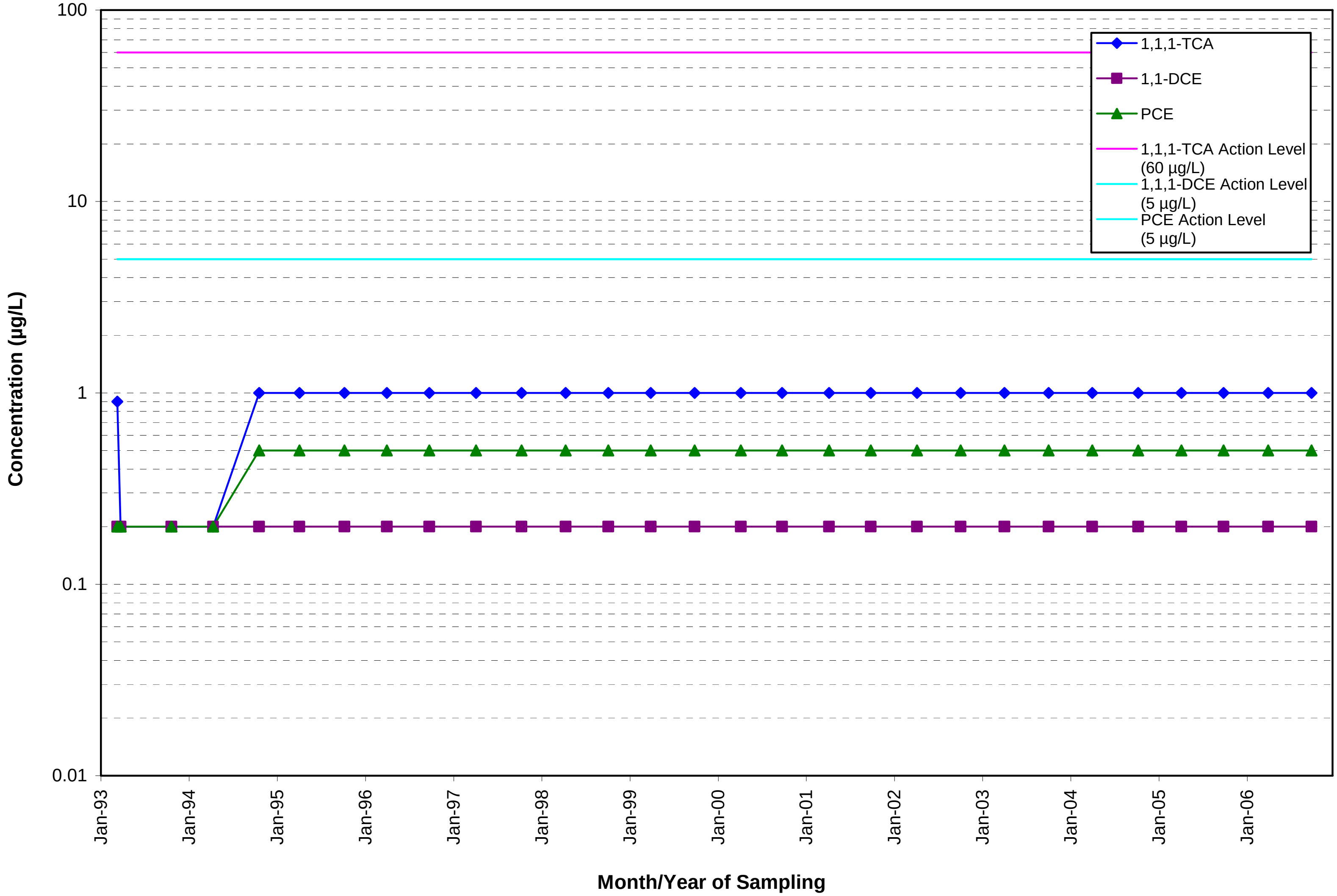

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**Figure C-28**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-31**
**Person Generating Station**
**Public Service Company of New Mexico**

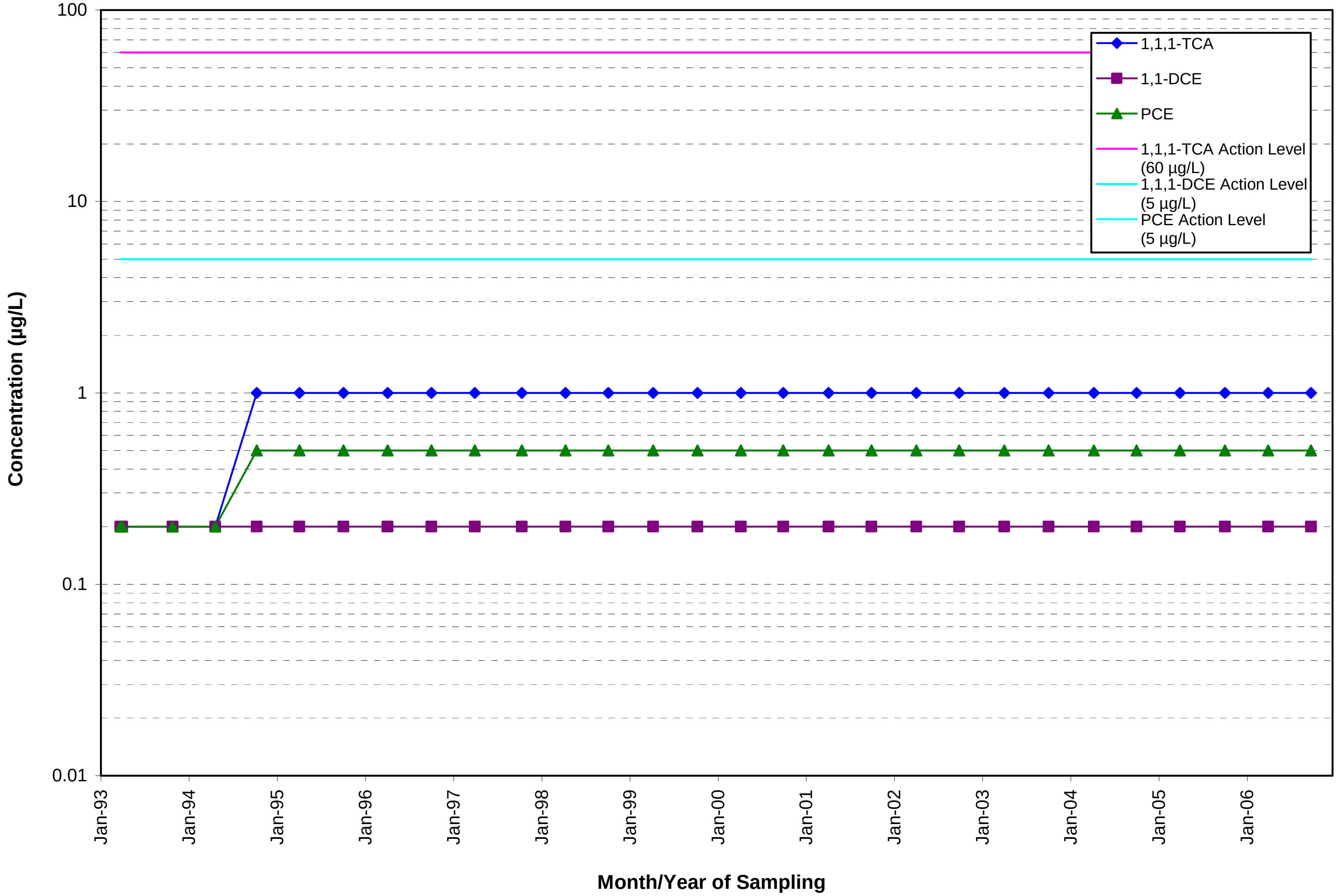

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**Figure C-29**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-32**
**Person Generating Station**
**Public Service Company of New Mexico**

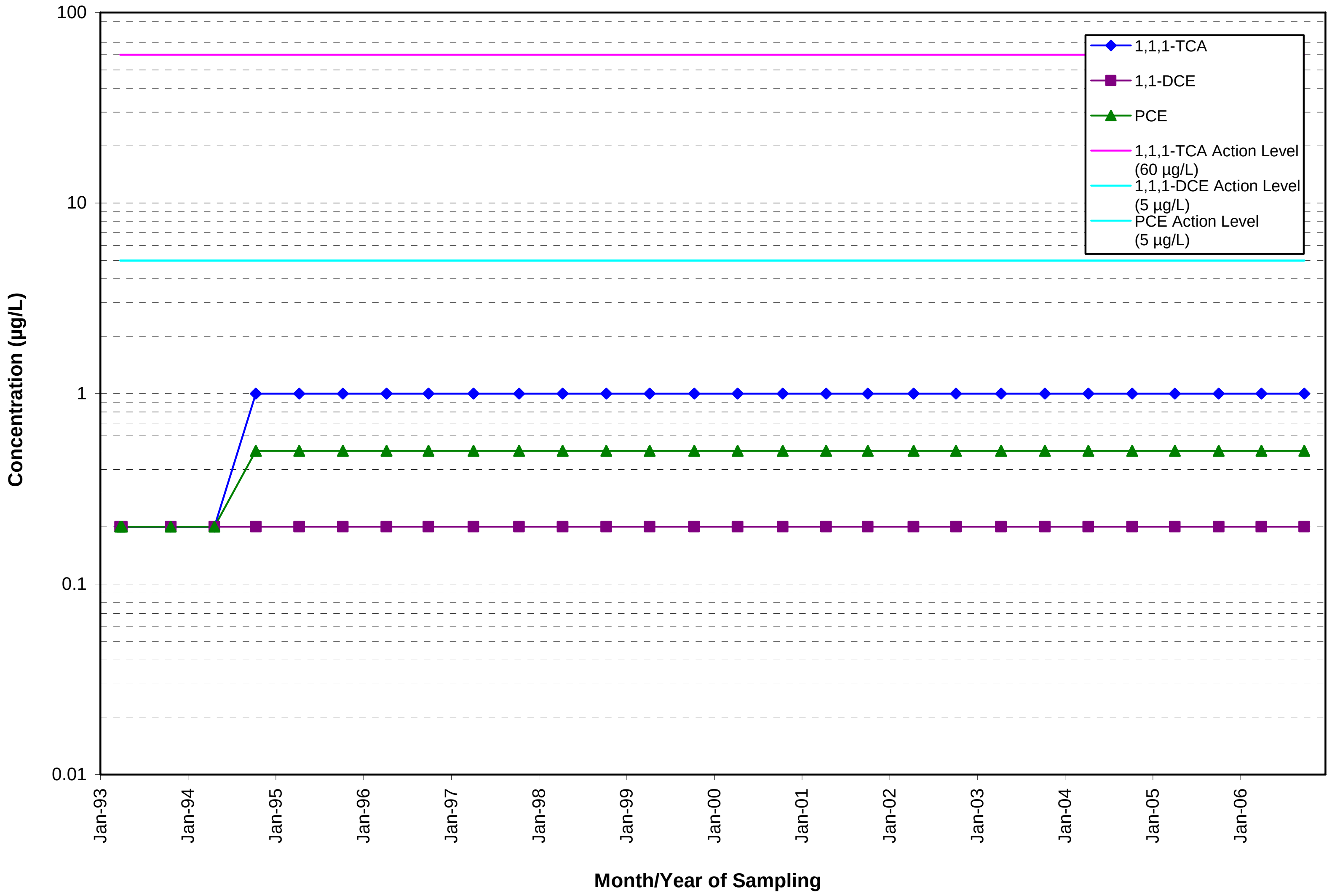

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**Figure C-30**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-33**
**Person Generating Station**
**Public Service Company of New Mexico**

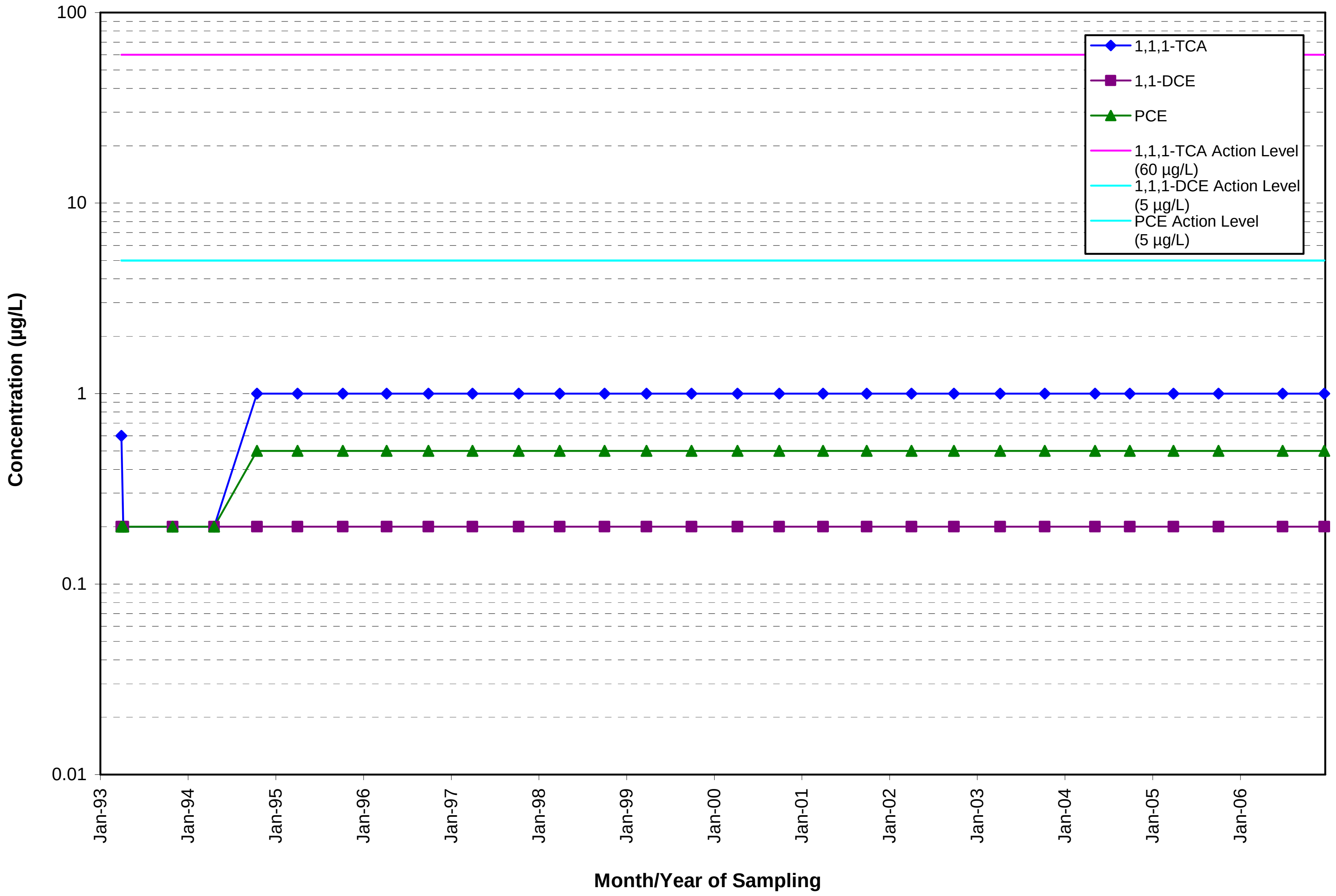

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**Figure C-31**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-34**
**Person Generating Station**
**Public Service Company of New Mexico**

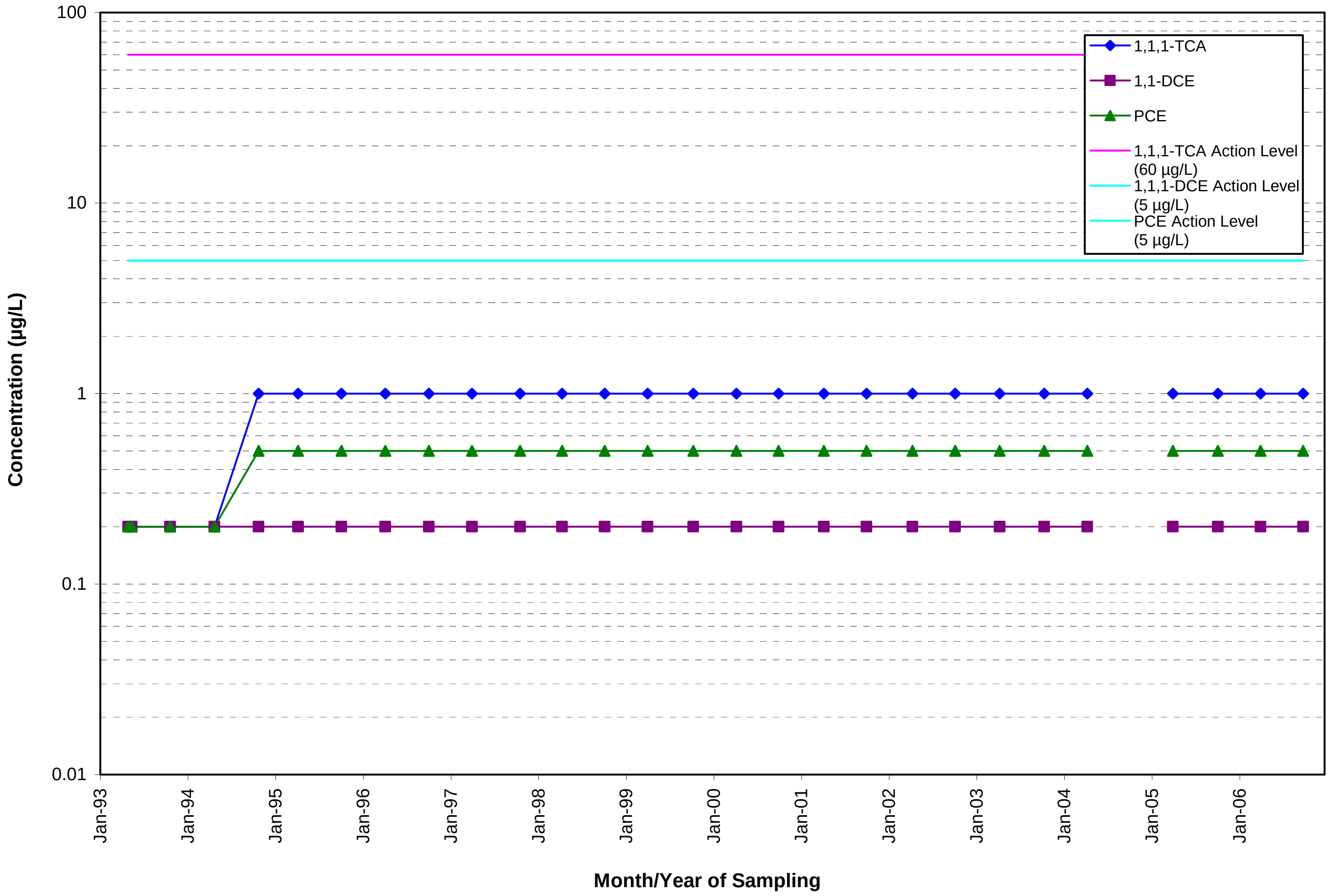

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**Figure C-32**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-35**
**Person Generating Station**
**Public Service Company of New Mexico**

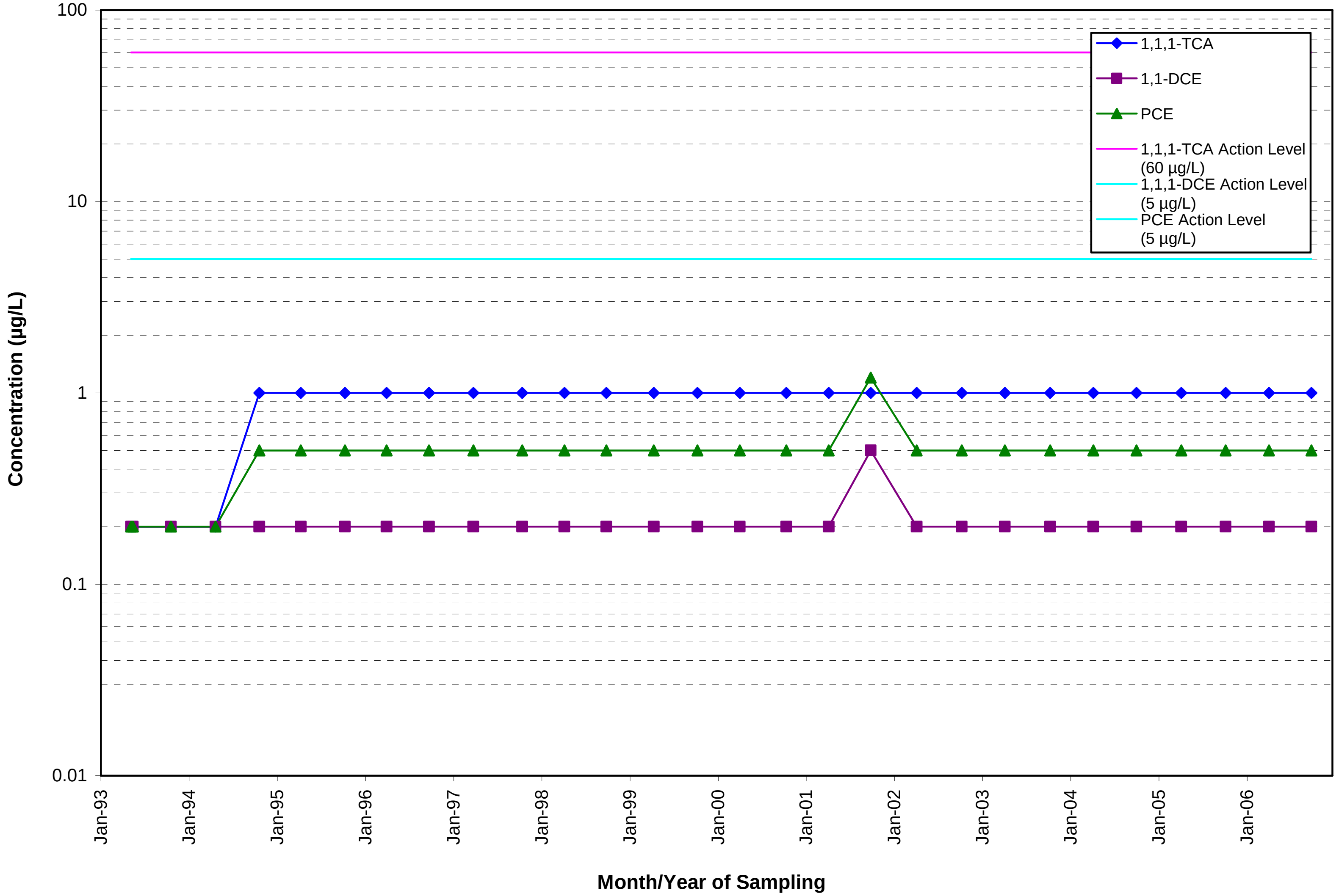

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**Figure C-33**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-36**
**Person Generating Station**
**Public Service Company of New Mexico**

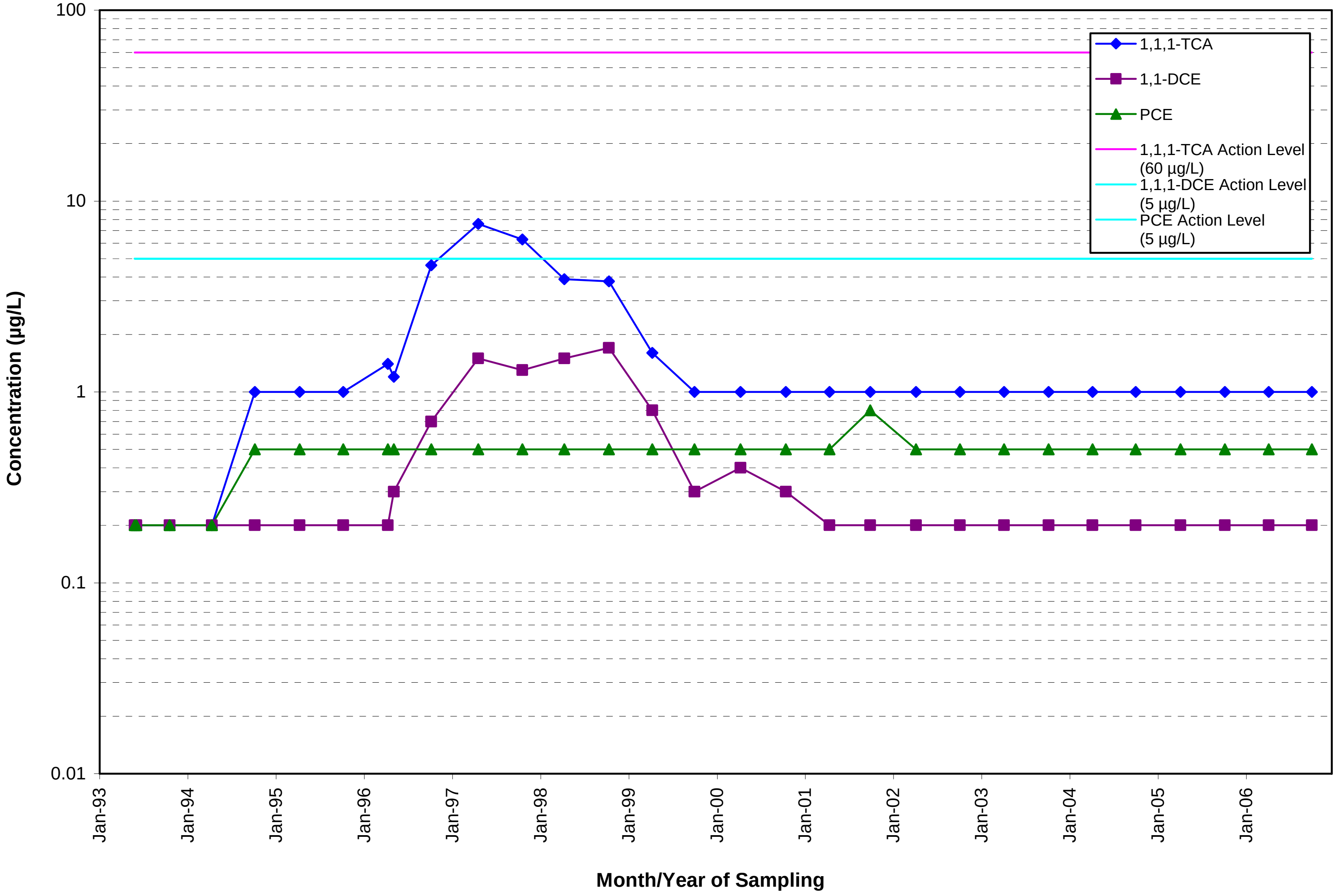

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**Figure C-34**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW-37**
**Person Generating Station**
**Public Service Company of New Mexico**

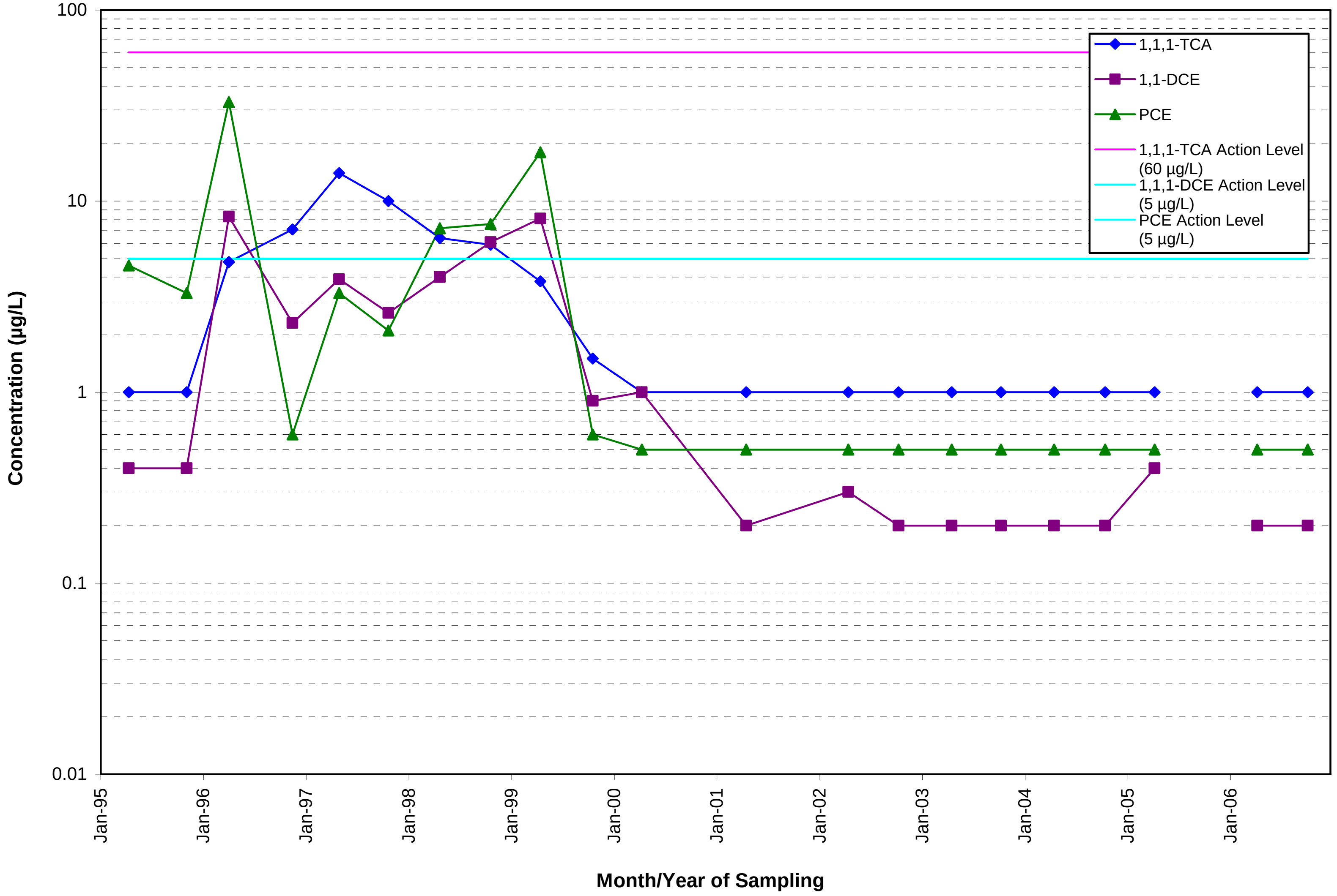

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**Figure C-35**
**Groundwater Analytical Results, 1995–2006**
**Extraction Well VEW**
**Person Generating Station**
**Public Service Company of New Mexico**

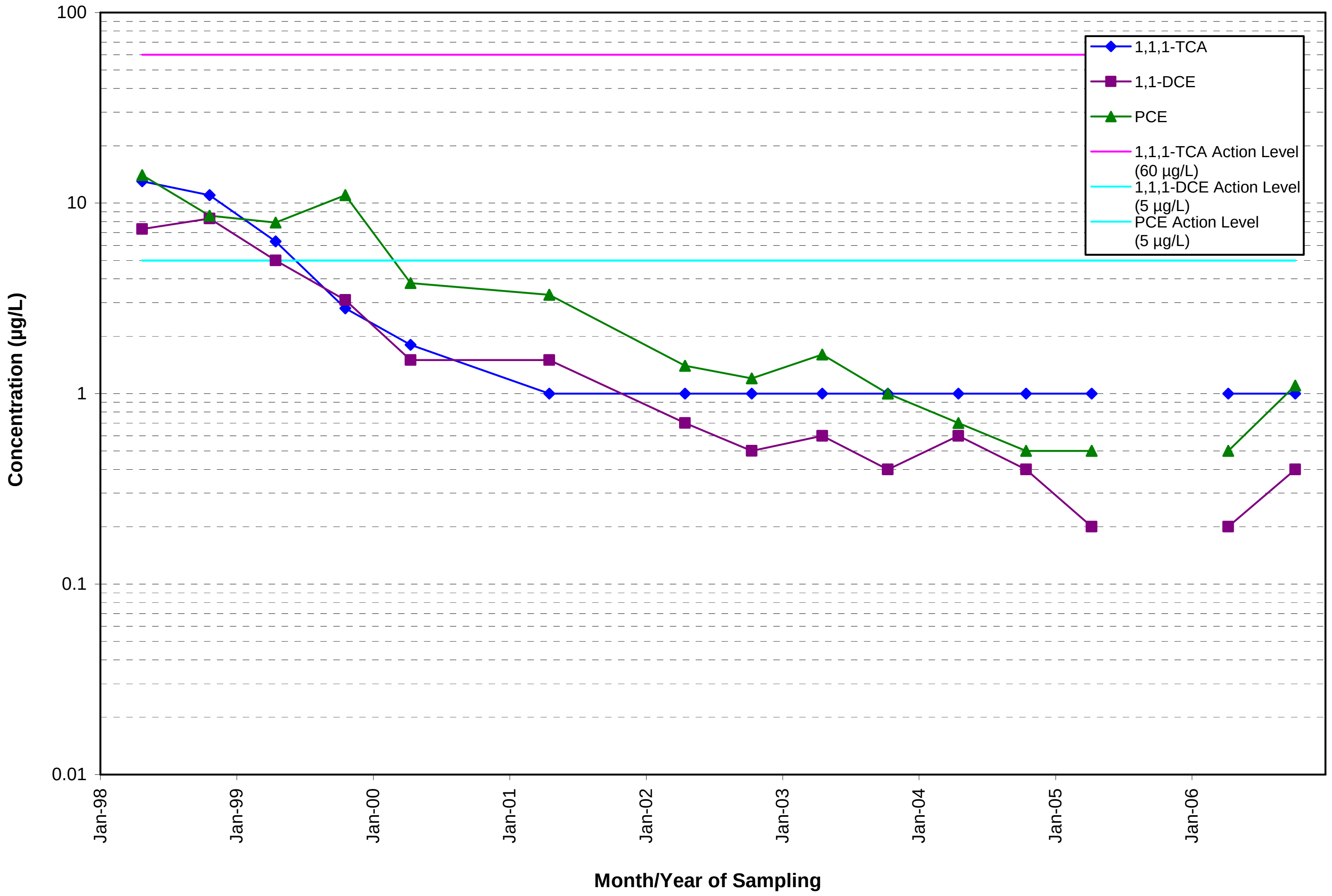

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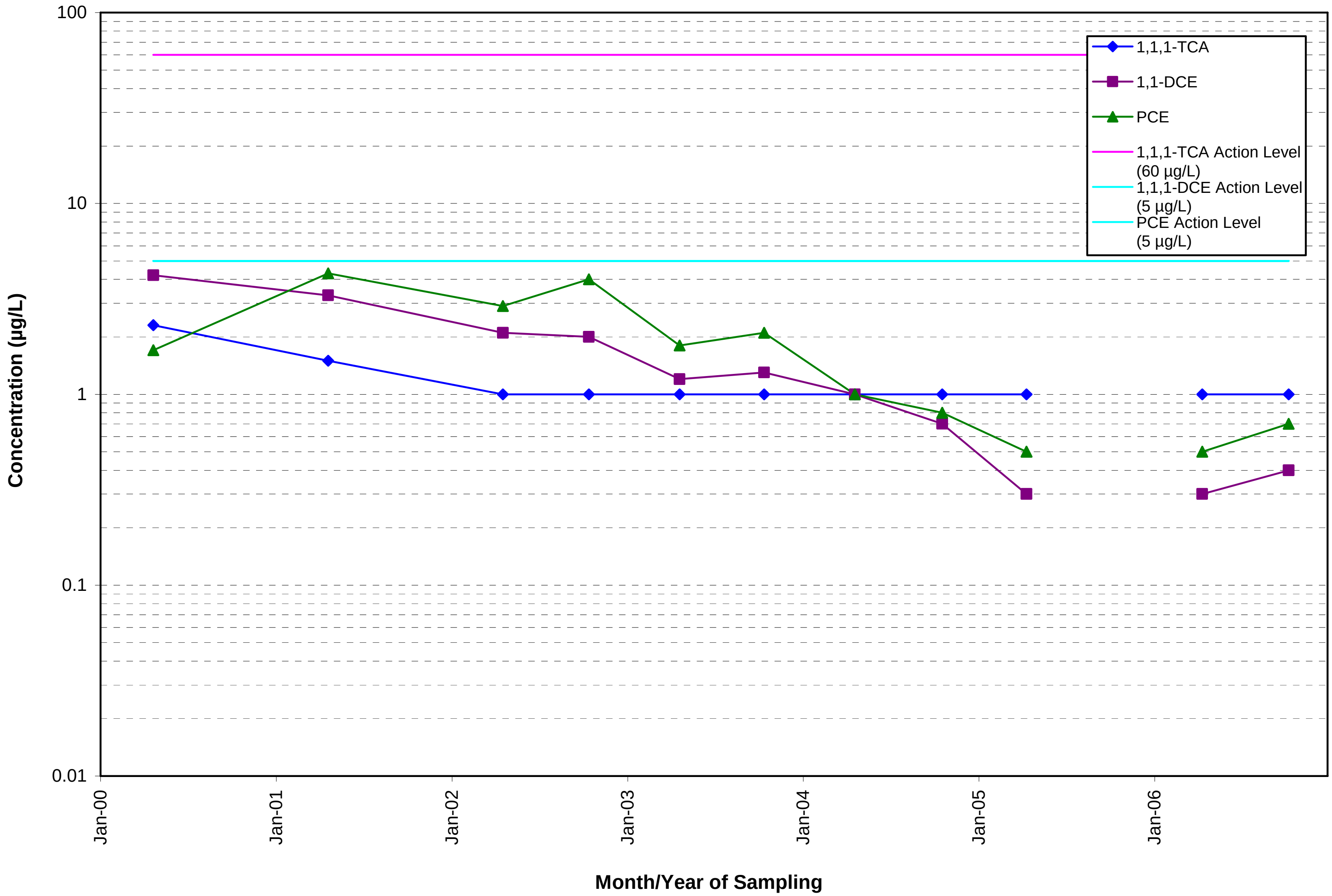
**Figure C-36**
**Groundwater Analytical Results, 1998–2006**
**Extraction Well EW-1**
**Person Generating Station**
**Public Service Company of New Mexico**



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# Figure C-37
# Groundwater Analytical Results, 2000–2006
# Extraction Well EW-2
# Person Generating Station
# Public Service Company of New Mexico

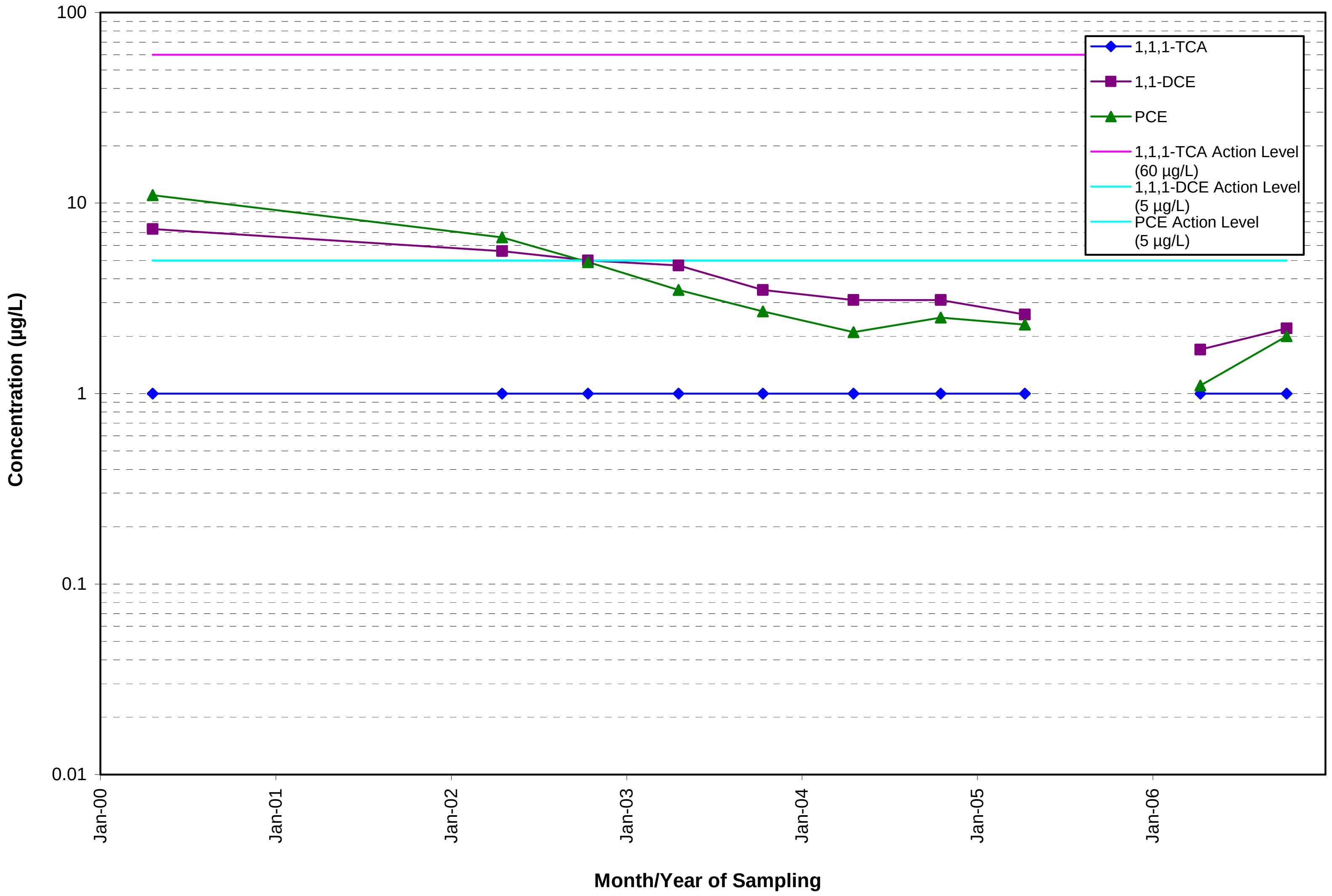

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**Figure C-38**
**Groundwater Analytical Results, 2000–2006**
**Extraction Well EW-3**
**Person Generating Station**
**Public Service Company of New Mexico**

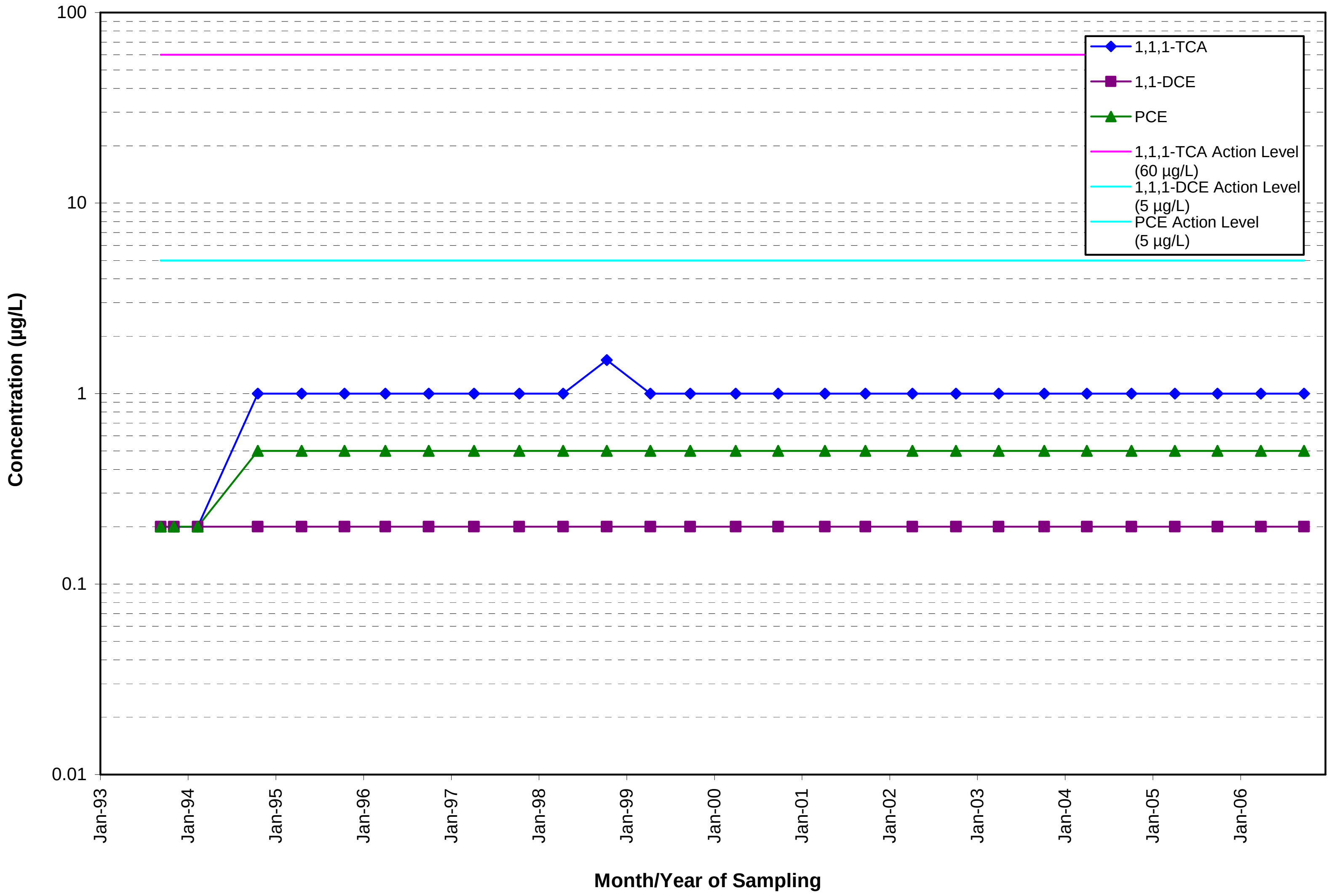

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**Figure C-39**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW17-800**
**Person Generating Station**
**Public Service Company of New Mexico**

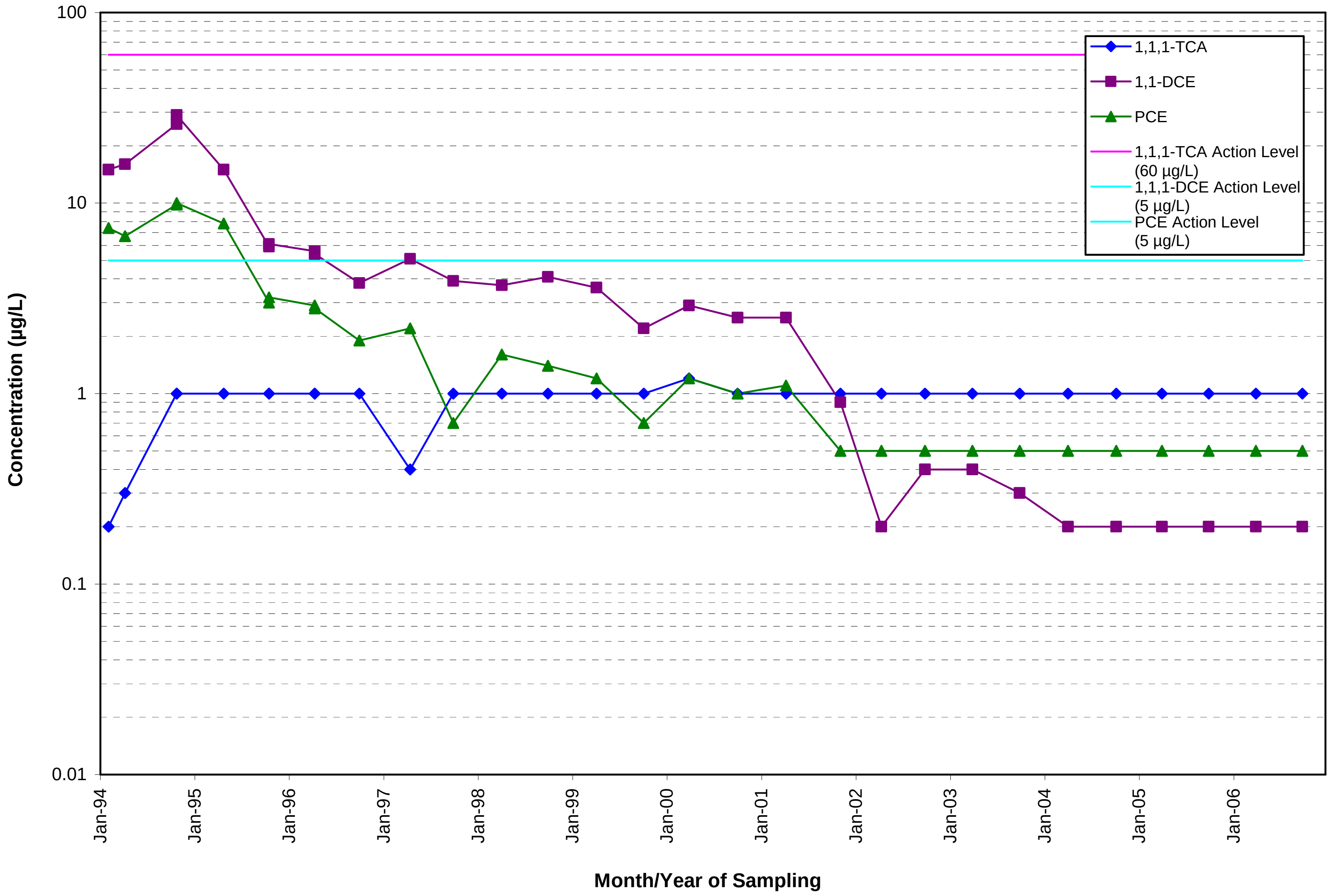

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**Figure C-40**
**Groundwater Analytical Results, 1994–2006**
**Monitoring Well PSMW19-500**
**Person Generating Station**
**Public Service Company of New Mexico**

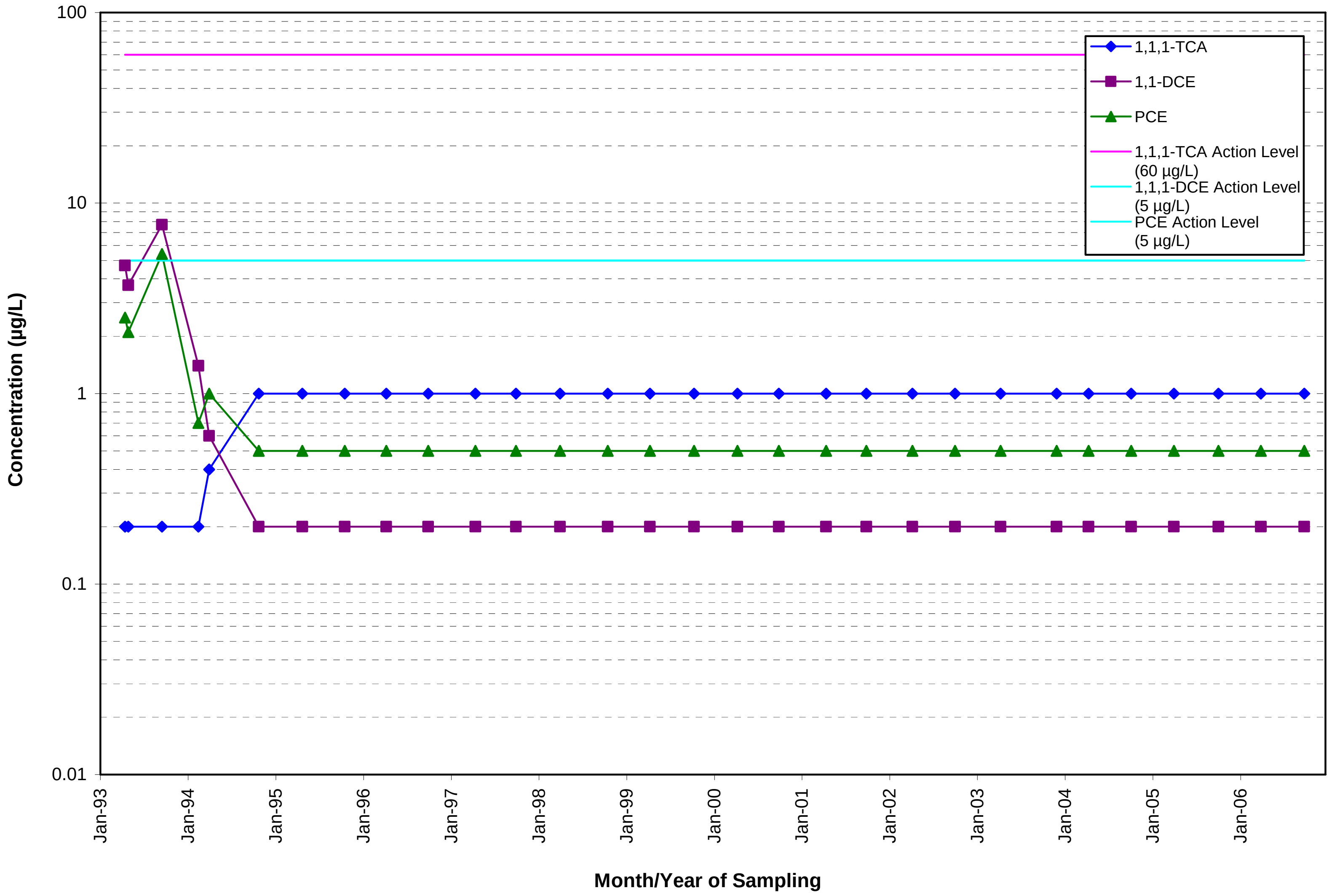

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**Figure C-41**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW19-800**
**Person Generating Station**
**Public Service Company of New Mexico**

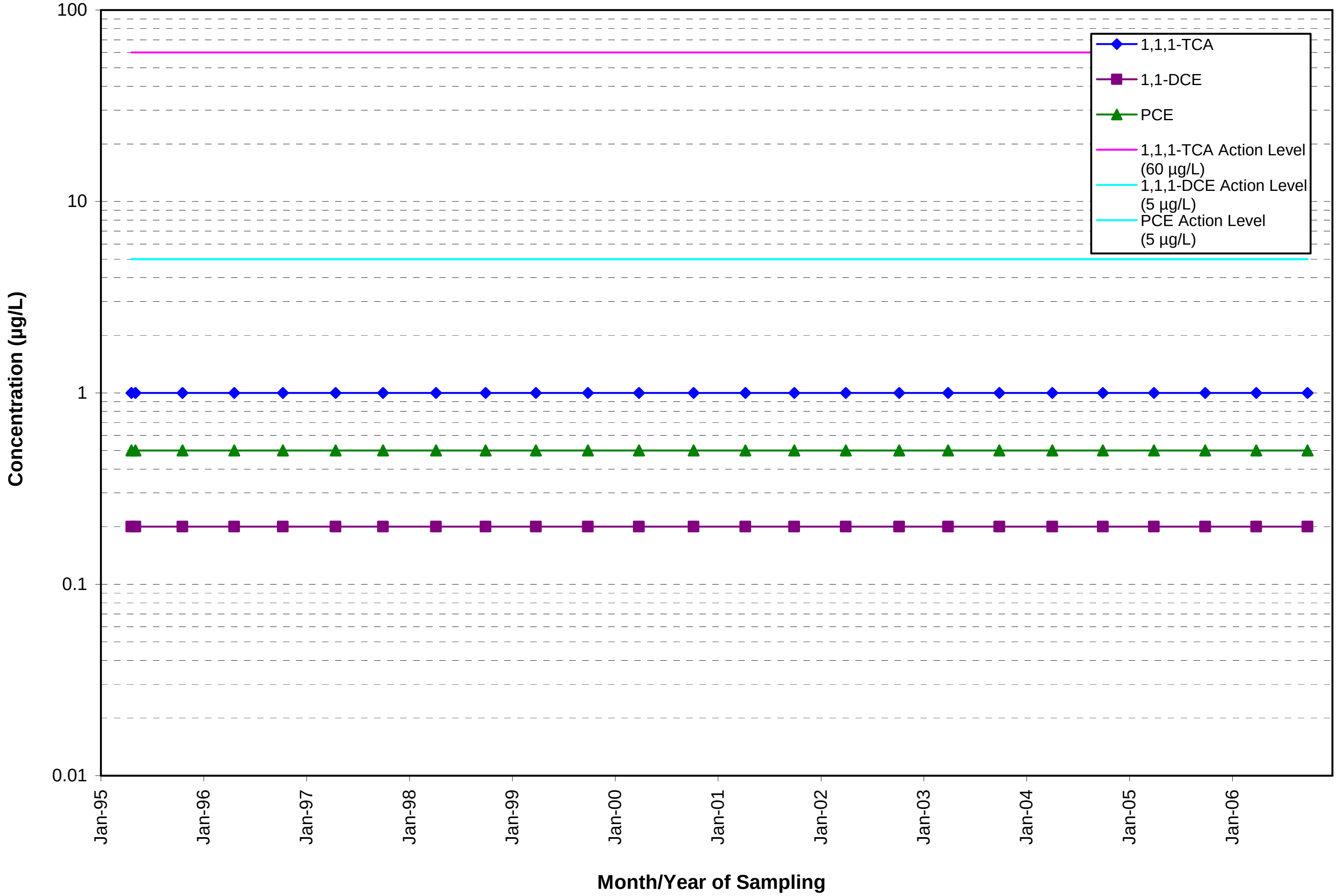

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**Figure C-42**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW21-500**
**Person Generating Station**
**Public Service Company of New Mexico**

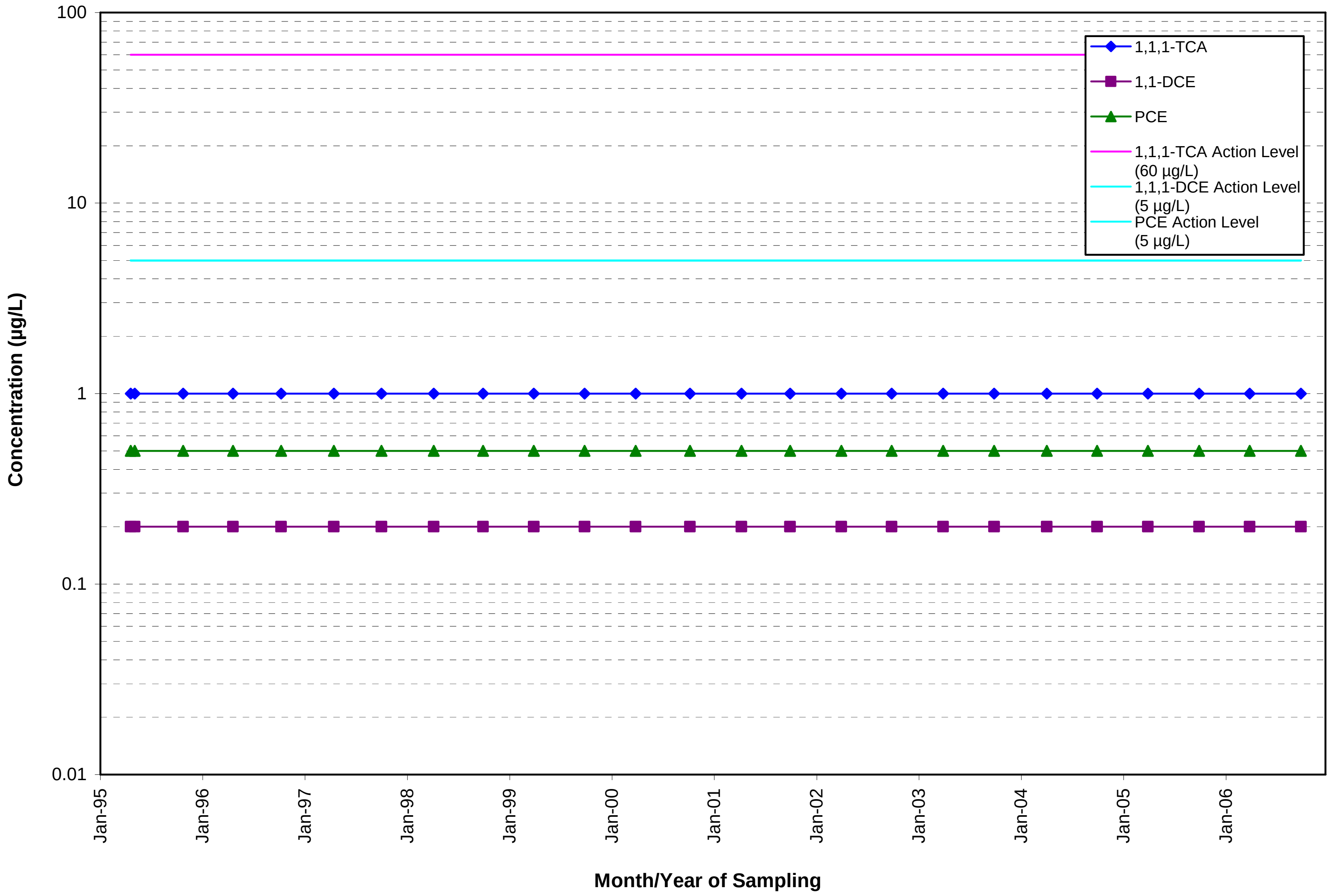

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**Figure C-43**
**Groundwater Analytical Results, 1995–2006**
**Monitoring Well PSMW21-800**
**Person Generating Station**
**Public Service Company of New Mexico**

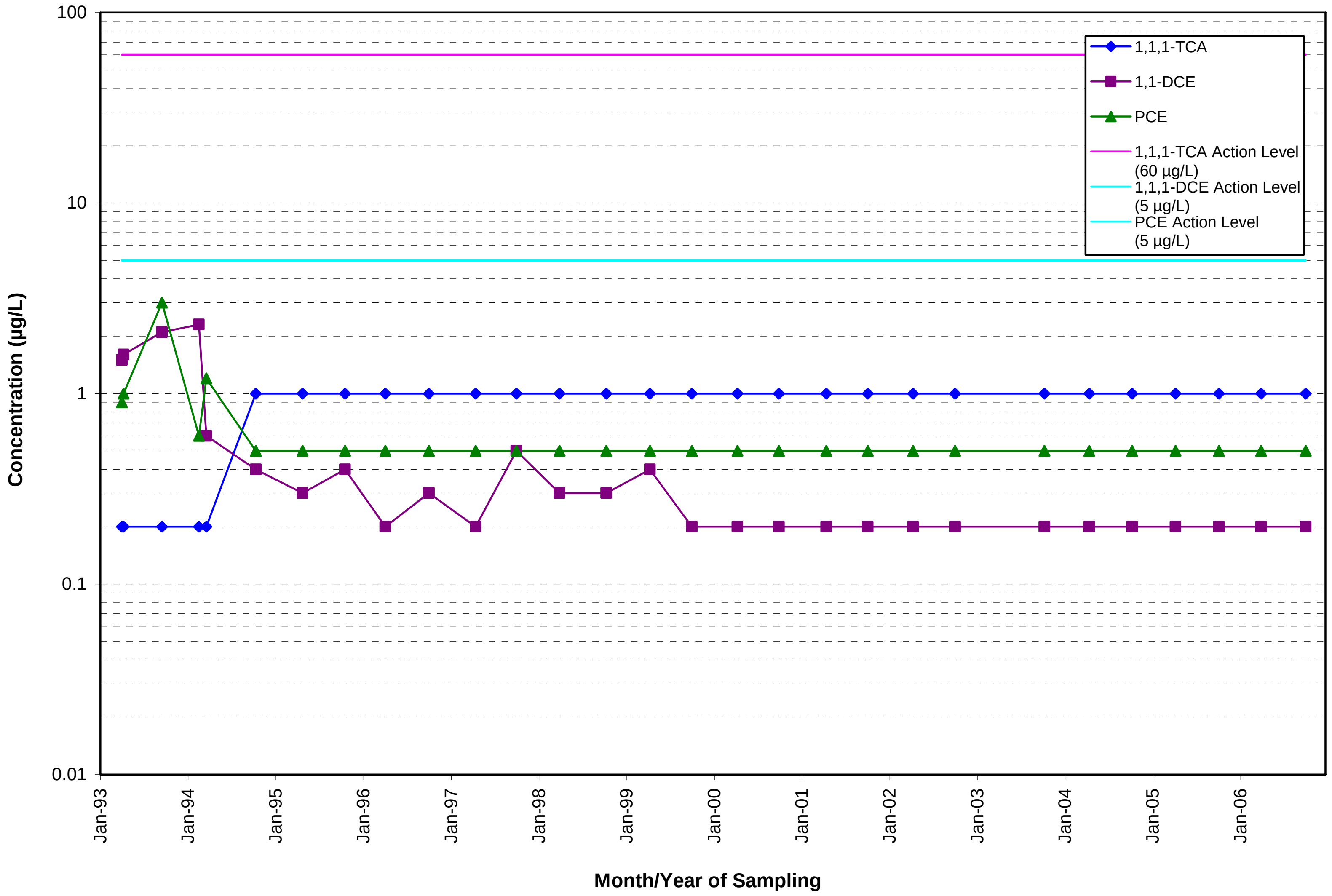

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**Figure C-44**
**Groundwater Analytical Results, 1993–2006**
**Monitoring Well PSMW22-800**
**Person Generating Station**
**Public Service Company of New Mexico**

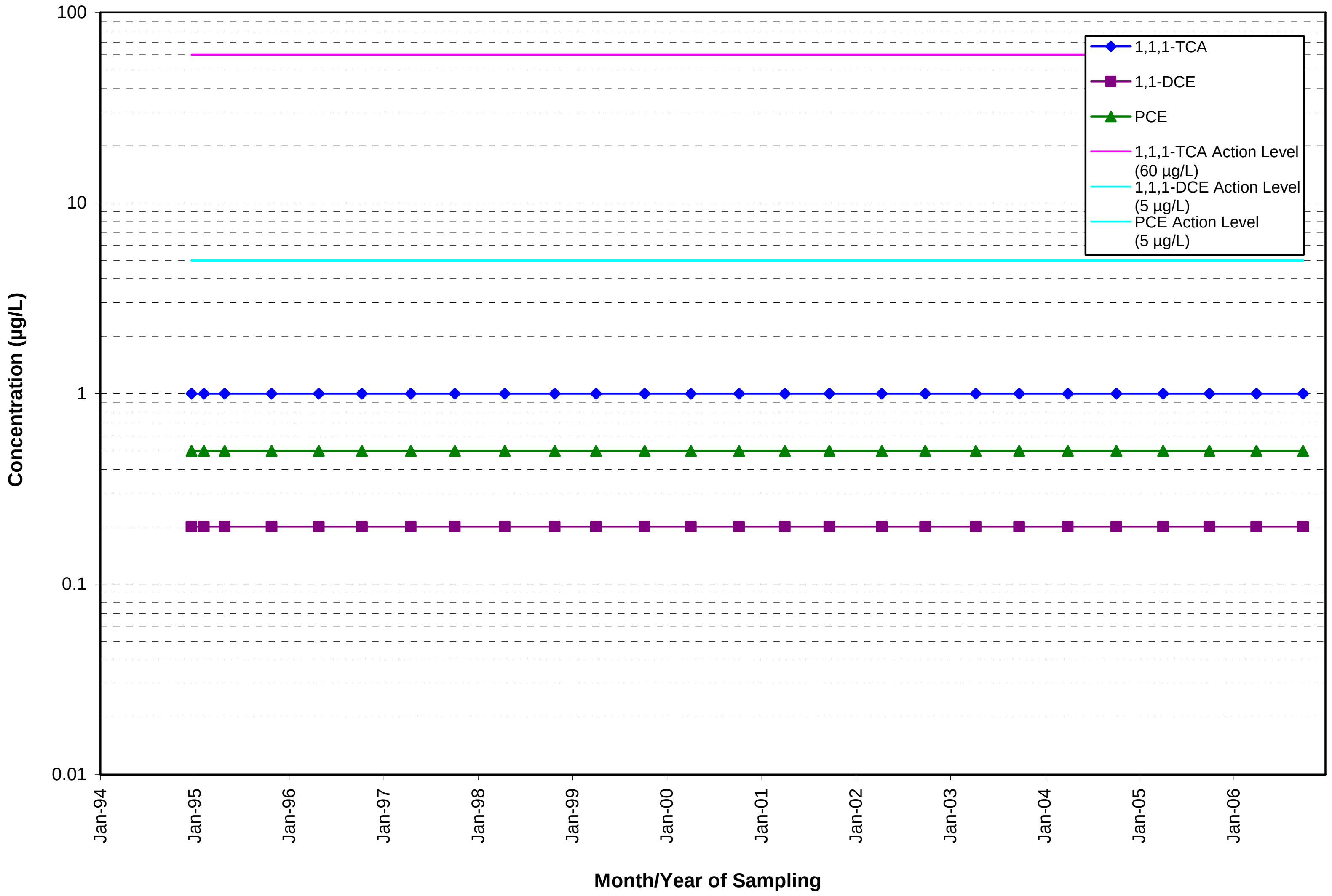

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**Figure C-45**
**Groundwater Analytical Results, 1994–2006**
**Monitoring Well PSMW24-400**
**Person Generating Station**
**Public Service Company of New Mexico**

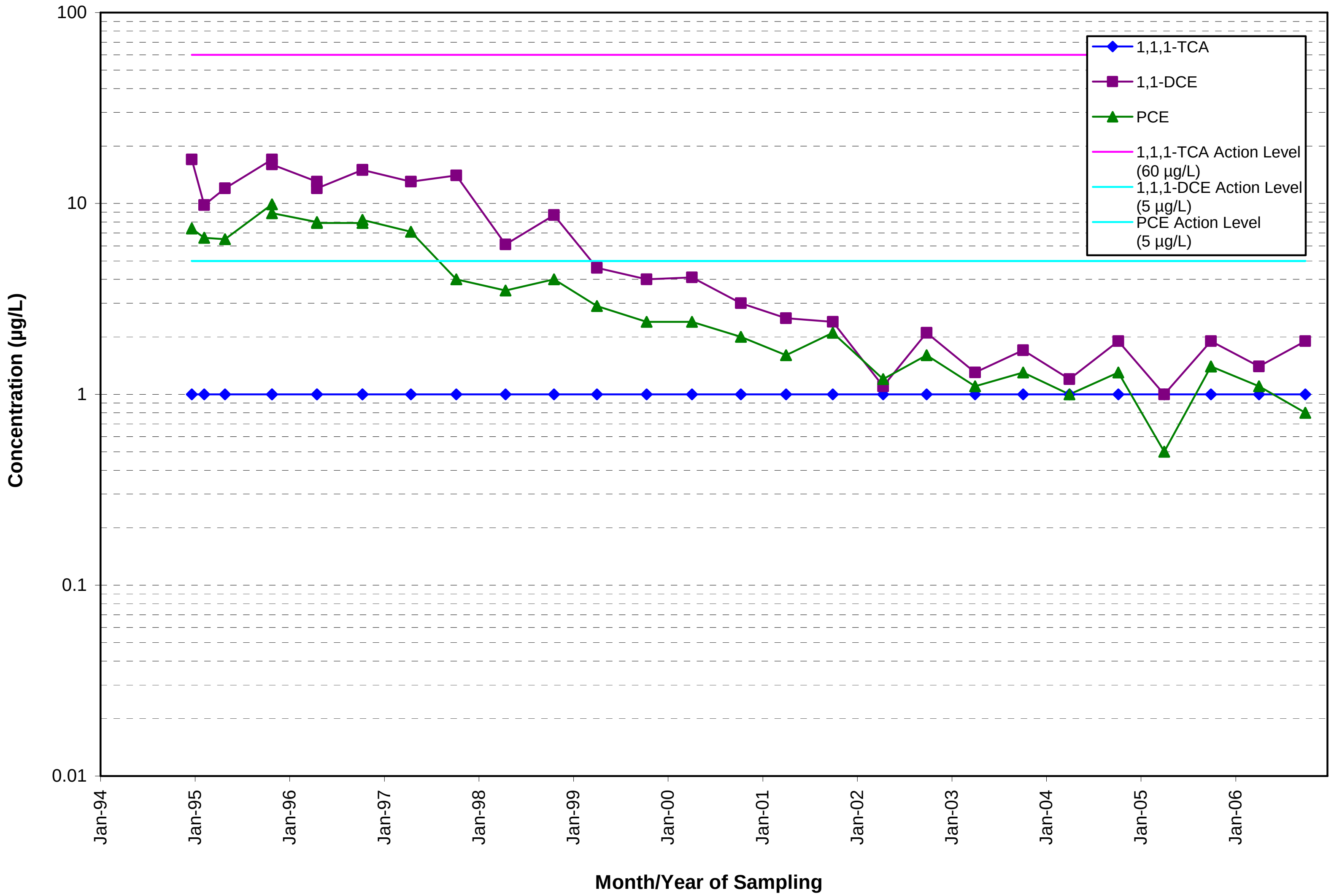

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**Figure C-46**
**Groundwater Analytical Results, 1994–2006**
**Monitoring Well PSMW24-500**
**Person Generating Station**
**Public Service Company of New Mexico**

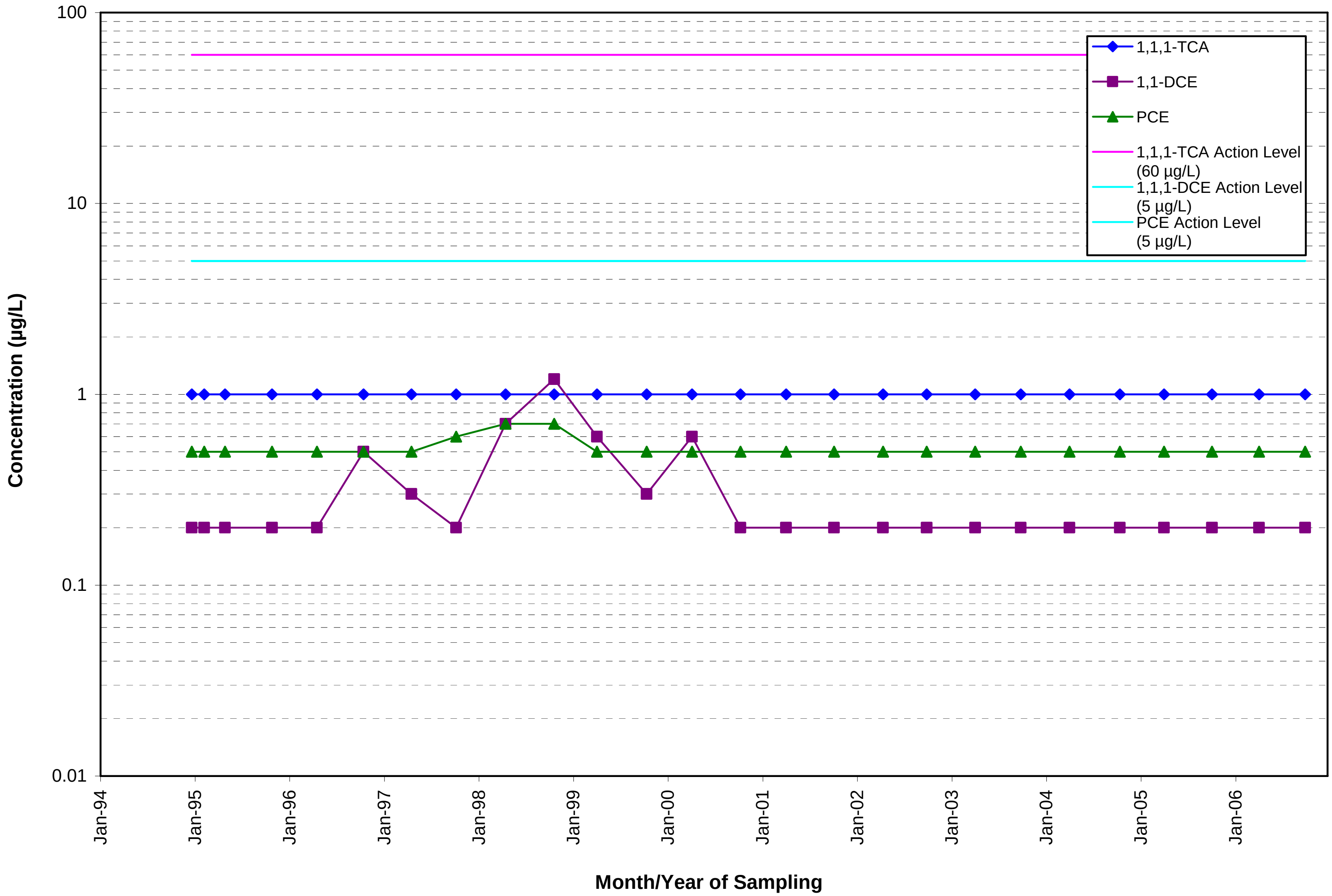

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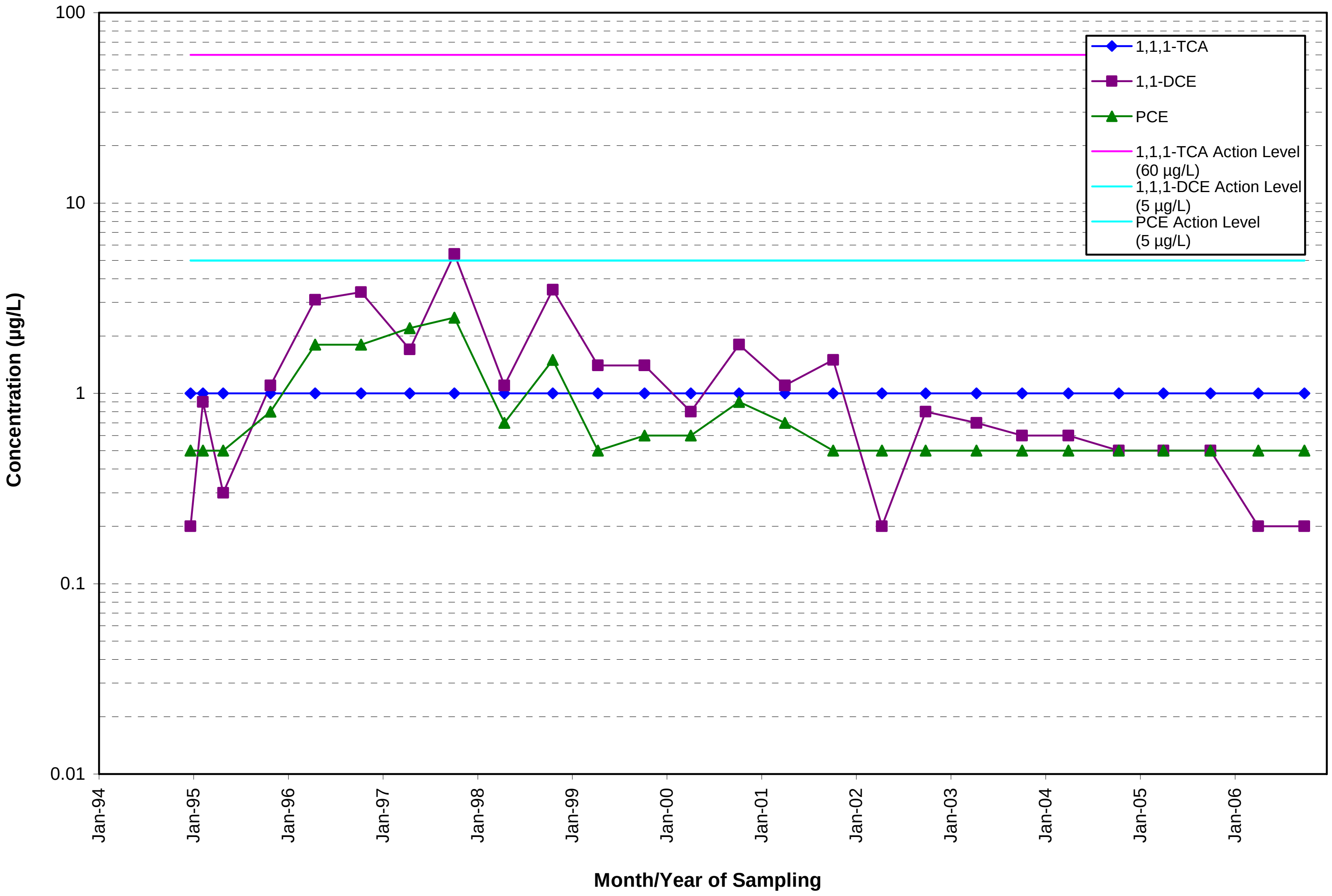
**Figure C-47**
**Groundwater Analytical Results, 1994–2006**
**Monitoring Well PSMW24-600**
**Person Generating Station**
**Public Service Company of New Mexico**



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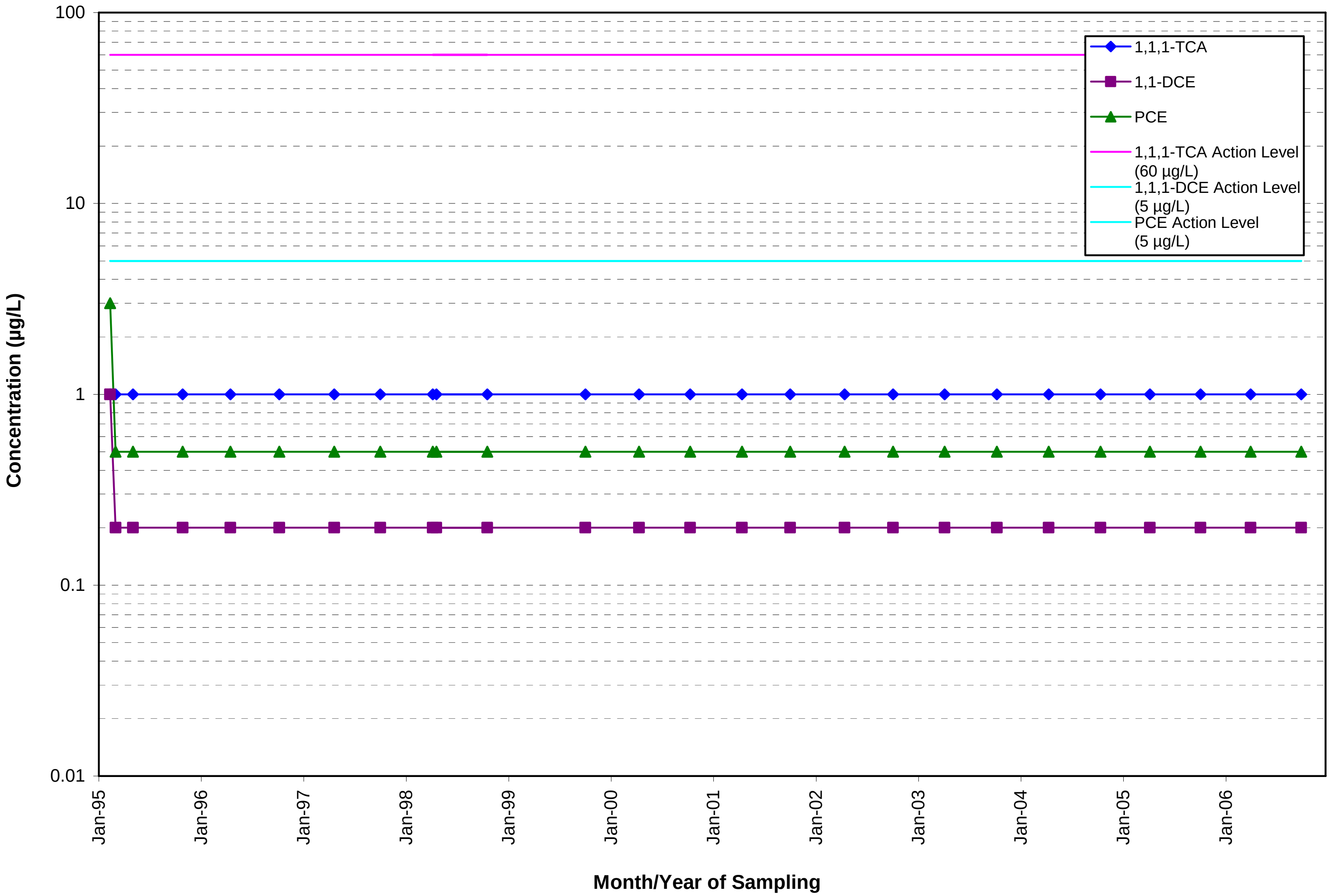
## Figure C-48
## Groundwater Analytical Results, 1994–2006
## Monitoring Well PSMW24-800
## Person Generating Station
## Public Service Company of New Mexico



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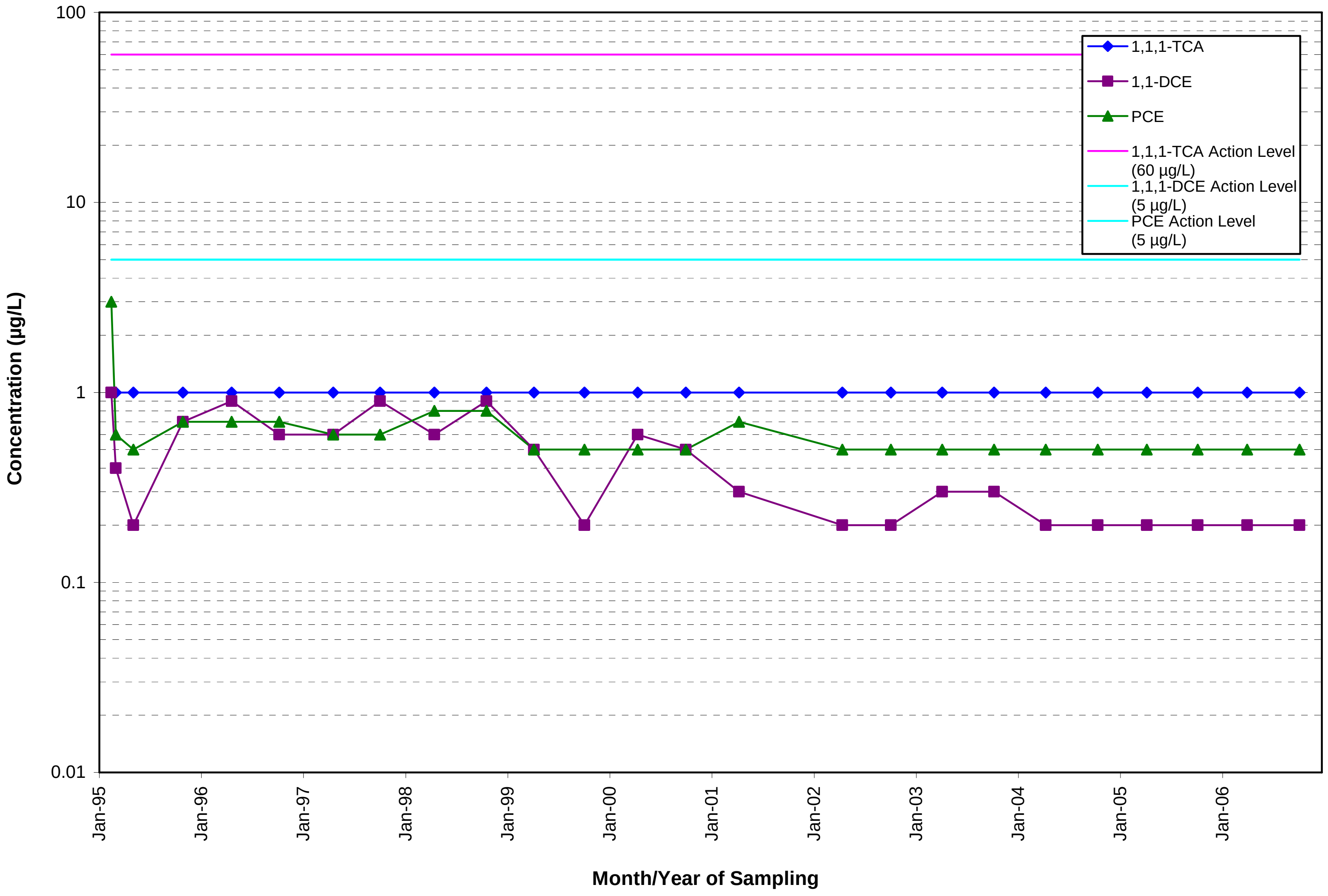
# Figure C-49
# Groundwater Analytical Results, 1995–2006
# Monitoring Well PSMW25-500
# Person Generating Station
# Public Service Company of New Mexico



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## Figure C-50
## Groundwater Analytical Results, 1995–2006
## Monitoring Well PSMW25-800
## Person Generating Station
## Public Service Company of New Mexico

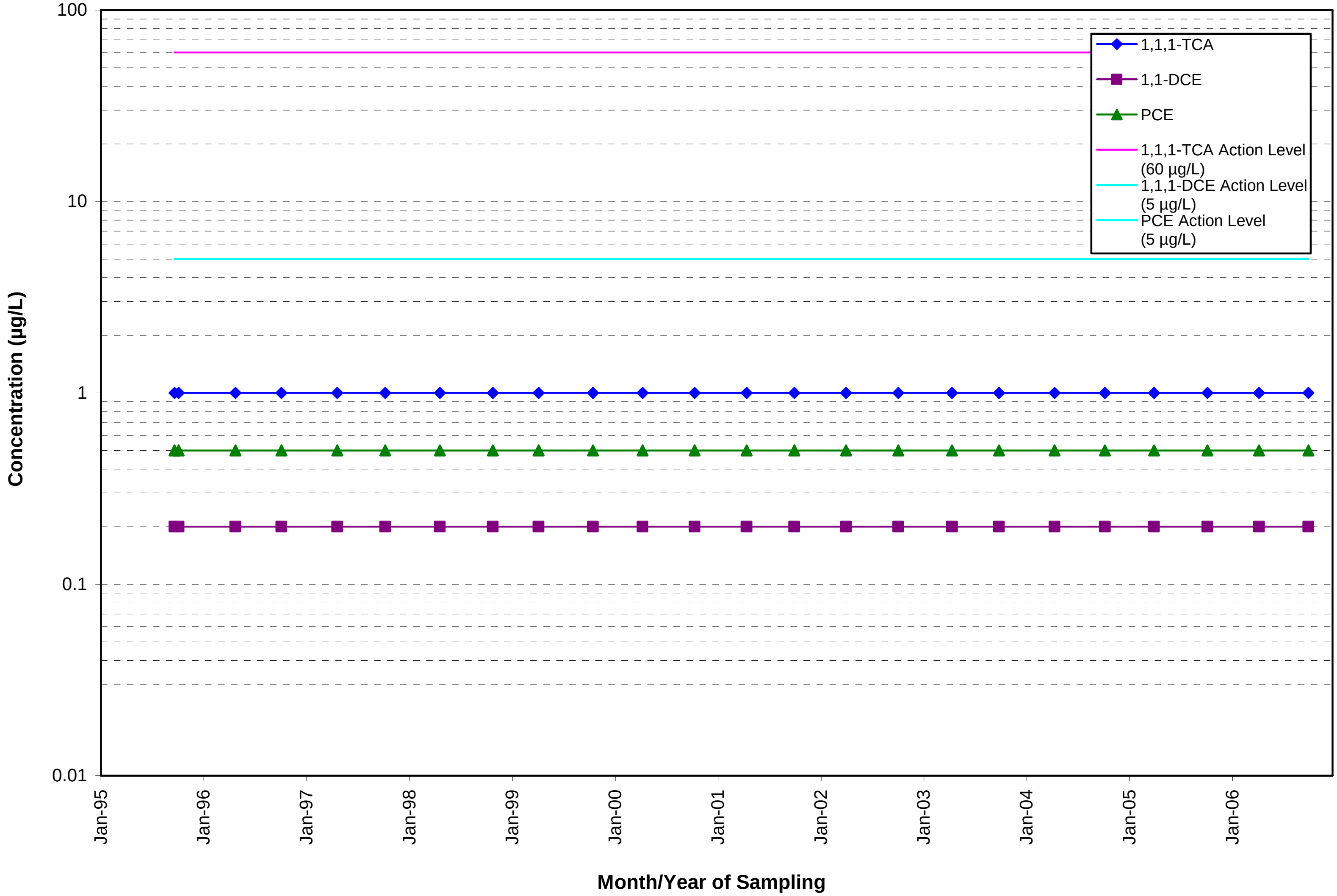

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**Figure C-51**
**Groundwater Analytical Results, 1995–2006**
**Monitoring Well PSMW27-400**
**Person Generating Station**
**Public Service Company of New Mexico**

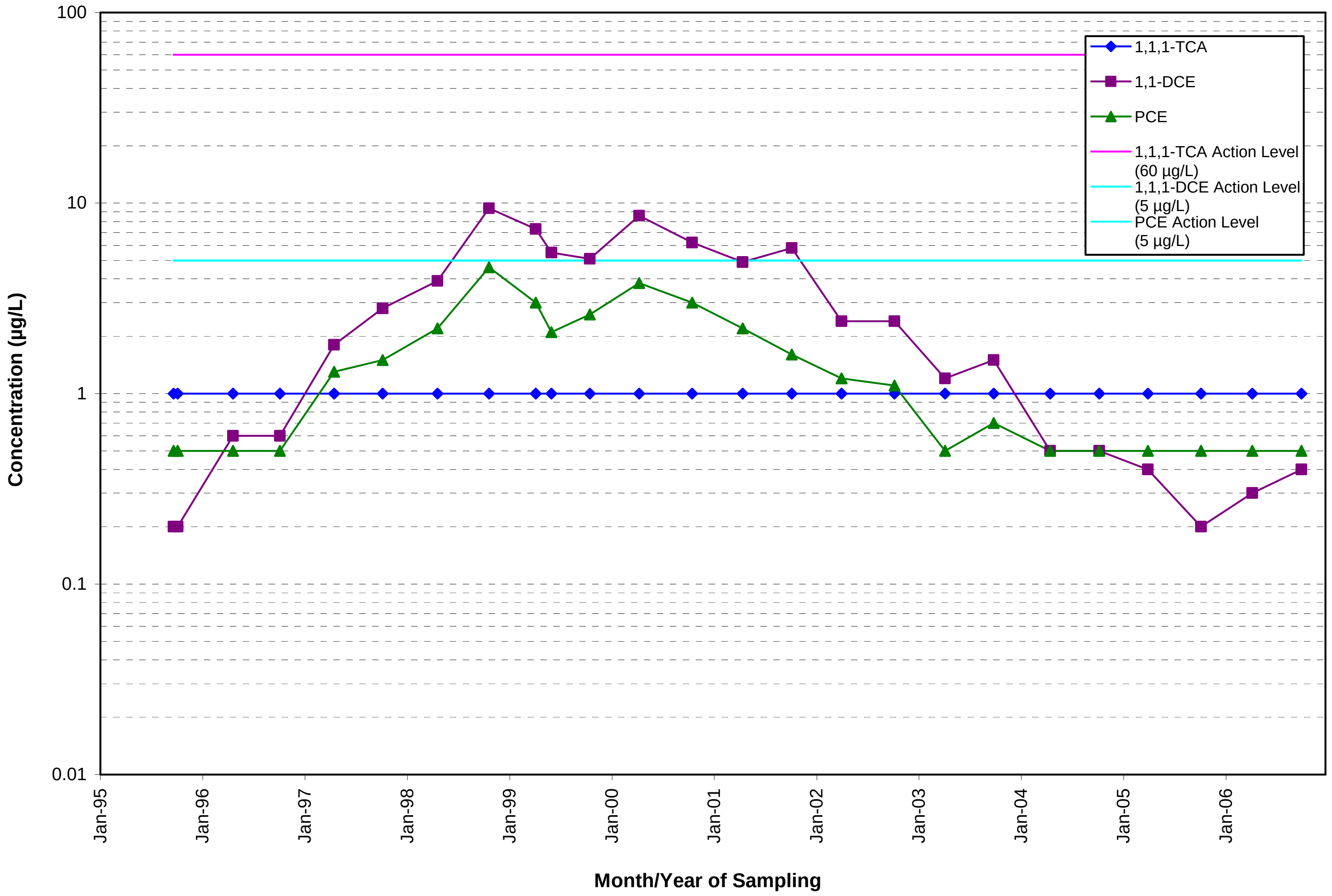

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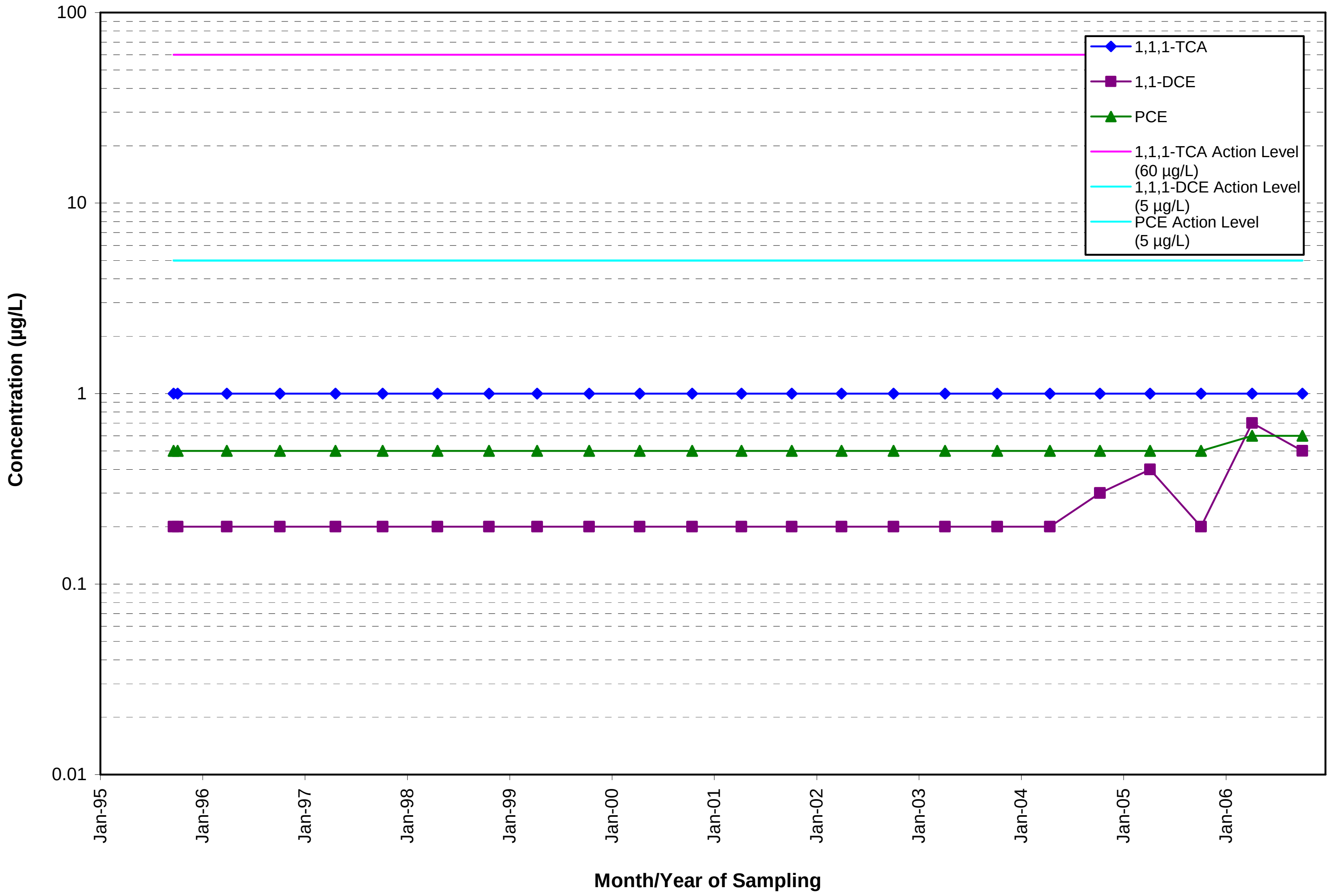
**Figure C-52**
**Groundwater Analytical Results, 1995–2006**
**Monitoring Well PSMW27-500**
**Person Generating Station**
**Public Service Company of New Mexico**



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# Figure C-53
# Groundwater Analytical Results, 1995–2006
# Monitoring Well PSMW27-600
# Person Generating Station
# Public Service Company of New Mexico

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Shaw The Shaw Group Inc.™

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# Memorandum

**Date:** **April 23, 2007**

**To:** **John Pietz**

**From:** **Jonathan Myers**

**RE:** **Time Trend Analysis of PCE Concentrations in Groundwater at the PNM Site**

---

A time-trend analysis of PCE concentrations was performed for analyses of groundwater samples from three monitoring wells.  The statistical significance of the observed time-trends of contaminant concentrations were evaluated using the Mann-Kendall test, which is a trend estimator that is specifically recommended for environmental data (Gilbert, 1987; EPA, 2000).  It is a nonparametric test, which means that distributional assumptions are not required.  The test compares concentration measurements of a constituent of interest over time, and tests the null hypothesis that the measurements exhibit no temporal trend.  To perform the test, the signs (concentration increases or decreases) of all possible pairs of data points are summed.  For instance, if there are four sequential measurements (1, 2, 3, and 4) at four different times, then the signs of 1 vs 2, 1 vs 3, 1 vs 4, 2 vs 3, 2 vs 4, and 3 vs 4 are summed.

If there is no real trend, then the number of positive and negative signs will be roughly equal, although some differences would be expected due to chance.  However, if there are many more increases between the pairs than decreases, then a real upward trend is indicated, and if there are many more decreases than increases between the pairs, then a real downward trend is indicated.  The test is performed at a 95 percent confidence level to detect the presence of an upward, downward, or indeterminate trend in concentrations over time.  At this confidence level, there is only a five percent chance of incorrectly accepting the null hypothesis (no trend is present) when a trend actually is present.

The test was performed for three wells using PCE concentration data.  The number of samples from each well varied from 13 to 20, and the observation period varied from 12 to 19 years.  Results of the Mann-Kendall test for the three wells are shown in Table 1.

Columns in the table are defined as:

| | |
|---|---|
| *Z* = | Normal *Z*-score test statistic |
| *p*-level = | Significance of test result |
| Trend = | Direction of concentration trend |
| Significance = | Significance of test results at the 95 percent confidence level |

The *Z*-scores in Table 1 indicate the direction of the trend. Negative values indicate a decreasing trend over time, and positive values indicate an increasing trend over time. The *p*-level indicates the significance of the test result. Higher *p*-levels indicate a higher probability of the null hypothesis of no trend being true. If the *p*-level is above 0.05 then the null hypothesis of no trend is accepted, and any apparent changes in concentrations between sample rounds are considered to be due to chance. If the *p*-level is below 0.05, then the null hypothesis of no trend is rejected and the trend is considered to be statistically significant.

All three wells show statistically significant downward trends. These trends are graphically shown in Figure 1. Note that a logarithmic scale is used for the vertical concentration axis. Exponentially decreasing trends appear as straight lines on a log concentration versus time plot. The three trends show good fits to exponential decay curves as shown in Figure 2.

### ***References***

EPA, 2000, *Guidance for Data Quality Assessment, Practical Methods for Data Analysis, EPA QA/G-9, QA00 Update*, Office of Environmental Information, EPA/600/R-96/084, July, 2000.

Gilbert, R. O., 1987, *Statistical Methods for Environmental Pollution Monitoring*, John Wiley & Sons, Inc., New York.

**Table 1. Mann-Kendal Test Results**

| Location | *n* | Observation Period (years) | Kendall Tau | *Z* | *p*-level | Direction | Significant |
|---|---|---|---|---|---|---|---|
| PSMW-1 | 20 | 19 | -0.916 | -5.645 | 0.00000 | Down | Yes |
| PSMW-22 | 13 | 12 | -0.718 | -3.416 | 0.00063 | Down | Yes |
| PSMW-10 | 15 | 14 | -0.663 | -3.448 | 0.00057 | Down | Yes |

**Figure 1. Time Trends of PCE Concentrations at Three Groundwater Monitoring Wells**

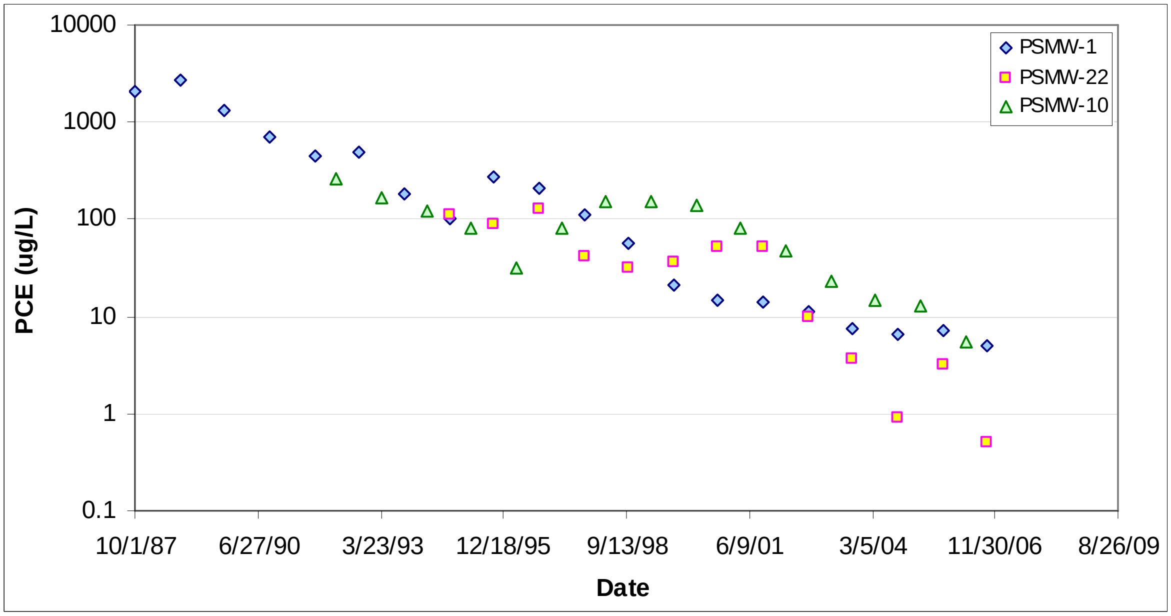
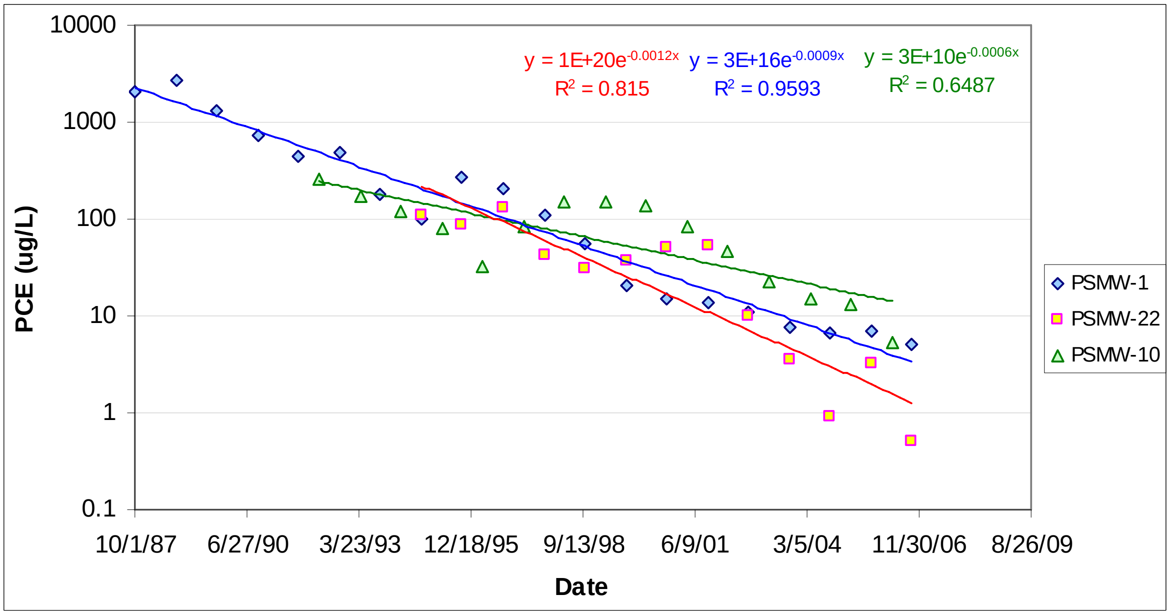


**Figure 2. Time Trends of PCE Concentrations at Three Groundwater Monitoring Wells with Exponential Curve Fits**



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## MODULE IV - CORRECTIVE ACTION

## ~~APPENDICES~~

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# MODULE I - GENERAL PERMIT CONDITIONS AND REQUIREMENTS

## I.A. EFFECT OF PERMIT

The Secretary of the New Mexico Environment Department (the Secretary) issues this Post-Closure Care Permit (the Permit) to the Public Service Company of New Mexico (PNM), the owner and operator of the Person Generating Station site (the Site) (EPA ID Number NMT 360010342). This Permit authorizes PNM (the Permittee) to perform the Corrective Action Program and to treat hazardous waste at the Site, and establishes the general and specific standards for these activities, pursuant to the New Mexico Hazardous Waste Act (HWA), NMSA 1978, Sections 74-4-1 et seq., and the New Mexico Hazardous Waste Management Regulations, 20.4.1.100 NMAC et seq.

Compliance with this Permit during its term shall constitute compliance, for purposes of enforcement, with Subtitle C of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq., the HWA, and their implementing regulations, except as otherwise specified at 20.4.1.900 NMAC (incorporating 40 CFR §270.4(a)). Compliance with this Permit shall not constitute a defense to any order issued or any action brought under Sections 74-4-10, 74-4-10.1, or 74-4-13 of the HWA; Sections 3008(a), 3008(h), 3013, 7002(a)(1)(B), or 7003 of RCRA; Sections 104, 106 (a), 107, or 196(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; or any other law providing for protection of public health or the environment. This Permit does not convey any property rights or any exclusive privilege, nor authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. [20.4.1.900 NMAC (incorporating 40 CFR 270.4 and 270.30(g))]

This Permit consists of Permit Modules I through IV and the Permit Application~~ Volumes 1 through 5~~. The Permit Application is incorporated herein by reference and made an enforceable part of this Permit. The Permittee shall comply with the post-closure care, corrective action, and other activities and standards specified in the Permit Modules and the Permit Application.

## I.B. PERMIT ACTIONS

### I.B.1. Permit Modification, Suspension, and Revocation

This Permit may be modified, suspended, and/or revoked for cause, as specified in Section 74-4-4.2 of the HWA and 20.4.1.900 and 20.4.1.901.B. NMAC (incorporating 40 CFR 270.41, 270.42, and 270.43). The filing of a request for a Permit modification, suspension, or revocation, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any Permit condition. [20.4.1.900 NMAC (incorporating 40 CFR 270.4(a) and 270.30(f))]

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### I.B.2. Permit Renewal

The Permittee may renew this Permit by submitting an application for a new permit at least 180 days before the expiration date of this Permit, in accordance with 20.4.1.900 and 20.4.1.901 NMAC (incorporating 40 CFR 270.10(h) and 270.30(b)) and Permit Condition I.E.3. In reviewing any application for a Permit renewal, the Secretary shall consider improvements in the state of control and measurement technology and changes in applicable regulations. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(b))]

## I.C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

## I.D. DEFINITIONS

Unless otherwise expressly provided herein, the terms used in this Permit shall have the meaning set forth in the HWA, RCRA, and/or their implementing regulations.

“Area of Concern (AOC)” means any area that may have a release of hazardous waste or hazardous constituents, which is not a solid waste management unit (SWMU), and which the Secretary determines may pose a threat to human health or the environment.

“Corrective Action Program” means all work undertaken to clean up and monitor ~~soil and~~ groundwater contamination at the Site, ~~including the Corrective Action Program, Plan, and requirements for soil, and the Corrective Action Programs, Plans, and requirements for groundwater specified~~included in the Permit Application ~~Volumes 3, 4, and 5~~as the post-closure care plan and these Permit modules, and the groundwater monitoring programs specified in Permit Application ~~Volumes 4 and 5~~ and Permit Modules I through IV.

“Facility” means the Person Generating Station site owned by the Public Service Company of New Mexico and located in the South Valley of Albuquerque, on approximately 22 acres northeast of Broadway Boulevard and Rio Bravo Boulevard, EPA ID No. NMT 360010342.

“Hazardous Constituent” means any constituent identified in 20.4.1.200 NMAC (incorporating 40 CFR Part 261, Appendix VIII), any constituent identified in 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Appendix IX), any constituent identified in a hazardous waste listed in 20.4.1.200 NMAC (incorporating 40 CFR Part 261, Subpart D), or any constituent identified in a toxicity characteristic waste in 20.4.1.200 NMAC (incorporating 40 CFR 261.24, Table 1).

“HWA” means the New Mexico Hazardous Waste Act, NMSA 1978, §§74-4-1 et seq. (Repl. Pamp. 1993).

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"MCLs" means Maximum Contaminant Levels under the Federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and regulations promulgated thereunder.

"Permit Application" means ~~Volume 1 through 5~~the June 2007 application submitted by PNM and all modifications or revisions received by the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) as of ~~May 30, 2000~~the date of this permit.

"Permittee" means the Public Service Company of New Mexico.

"RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq.

"Regional Administrator" means the Regional Administrator of EPA Region 6, or designee or authorized representative.

"Secretary" means the Secretary of NMED or designee.

"Site" means the land, including the subsurface and groundwater, consisting of an area including the Facility and the land, including the subsurface and groundwater, in the vicinity of the Facility, where any hazardous waste or hazardous constituents originating from the Facility come to be located.

"Solid Waste Management Unit" or "SWMU" means any discernible unit or area at which solid waste has been placed at any time, and from which the Secretary determines there may be a risk of a release of hazardous constituents, irrespective of whether the unit or area was intended for the management of solid or hazardous waste. Placement of solid waste includes one time and accidental events that were not remediated, as well as any unit or area at which solid waste has been routinely and systematically placed.

"WQCC standards" means the maximum allowable ground water contaminant concentrations listed at 20 NMAC 6.2.3103 and 6.2.4103.

## I.E. DUTIES AND REQUIREMENTS

### I.E.I. Duty to Comply

The Permittee shall comply with all conditions and requirements of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit as specified in 20.4.1.900 NMAC (incorporating 40 CFR 270.61). Any noncompliance with any condition or requirement of this Permit, other than under the terms of an emergency permit, constitutes a violation of the HWA and/or RCRA and may subject the Permittee, its successors and assigns, officers, directors, employees, parents, or subsidiaries to an administrative or civil enforcement action, including civil penalties and injunctive relief, under Sections 74-4-10 or 74-4-10.1 of the HWA or Section 3008(a) and (g) or 3013 of RCRA; Permit modification, suspension, revocation, or denial of a permit application or modification request under Section 74-4-4.2 of the HWA; citizen suit under Section 7002(a) of RCRA; criminal penalties under Section 74-4-11 of the

HWA or Section 3008(d), (e), and (f) of RCRA; or some combination of the foregoing. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(a))]

I.E.2. Permit Term

This Permit shall be effective for ten years from its effective date. [20.4.1.900 NMAC (incorporating 40 CPR 270.50(a))]

I.E.3. Duty to Reapply

If the Permittee will continue an activity allowed or required by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new Permit at least 180 days before this Permit expires, in accordance with all applicable laws, unless an extension is granted by the Secretary. [20.4.1.900 NMAC (incorporating 40 CFR 270.10(h) and 270.30(b))]

I.E.4. Permit Expiration

This Permit and all conditions herein will remain in effect beyond the Permit’s expiration date, if the Permittee has submitted a timely, complete application for renewal of this Permit 180 days prior to the expiration date of this Permit, in accordance with 20.4.1.900 NMAC (incorporating 40 CFR 270.10 and 270.13 through 270.29) and, through no fault of the Permittee, the Secretary has not issued a new Permit on or before the expiration date of this Permit. [20.4.1.900 NMAC (incorporating 40 CFR 270.10(h) and 270.51)]

I.E.5. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(d))]

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the Permittee to achieve compliance with the conditions and requirements of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions and requirements of this Permit. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(e))]

I.E.7. Duty to Provide Information

The Permittee shall furnish to the Secretary, within a reasonable time period specified by the Secretary, any relevant information which the Secretary requests to determine whether cause exists for modifying, suspending, or revoking this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Secretary, upon request, copies of any records required to be kept by this Permit. [20.4.1.500 and 20.4.1.900 NMAC (incorporating 40 CFR 264.74(a) and 270.30(h))]

I.E.8. Inspection and Entry

The Permittee shall allow the Secretary, or authorized representatives, upon the presentation of credentials:

a. Entrance to Premises - to enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

b. Access to Records - to have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

c. Inspection - to inspect, at reasonable times, any Facility equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

d. Sampling - to sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the HWA and/or RCRA, any substances or parameters at any location. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(i))]

Permit Condition I.E.8. shall not be construed to limit, in any manner, the Secretary's authority under Section 74-4-4.3. of the HWA or other applicable law.

I.E.9. Reporting Requirements

a. Reporting Planned Changes - The Permittee shall give notice to the Secretary, as soon as possible, of any planned physical alterations or additions to the Facility. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(l)(1))]

b. Reporting Anticipated Noncompliance - The Permittee shall give advance notice to the Secretary of any planned changes in the permitted Facility or activity which may result in noncompliance with Permit conditions or requirements. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(l)(2), and (10))]

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c. Other Noncompliance - The Permittee shall report all instances of noncompliance with Permit conditions and requirements not reported under Permit Conditions I.E.9.a. and b. above and II.F.2. below at the time monitoring reports are submitted under Permit Condition IV.A.2.a.iv.(h) below.

I.E.10. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in any document submitted to the Secretary, the Permittee shall promptly submit the corrected facts or information in writing to the Secretary. [20.4.1.900 NMAC (incorporating 40 CFR 270.30 (l)(11))]

I.E.11. Transfer of Permits

The Permittee shall not transfer this Permit to any person except after notice to the Secretary. The Secretary shall require modification or revocation and reissuance of this Permit, as specified by 20.4.1.900 and 20.4.1.901 NMAC (incorporating 40 CFR 270.40(b) and 270.41(b)(2)), to identify the new Permittee and incorporate such other requirements as may be necessary under the HWA and RCRA and implementing regulations. Before transferring ownership or operation of the Facility, the Permittee shall notify the new owner or operator in writing of all applicable requirements of 20 NMAC Chapter 4 and this Permit. [20.4.1.500 and 20.4.1.900 NMAC (incorporating 40 CFR 264.12(c) and 270.30(l)(3))]

## I.F. SIGNATORY REQUIREMENT

The Permittee shall sign and certify, as specified in 20.4.1.900 NMAC (incorporating 40 CFR 270.11), all applications, reports required by this Permit, or information required by the Secretary. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(k))].

## I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE SECRETARY

All reports, notifications, or other submissions which are required by this Permit to be submitted to the Secretary shall be sent by certified mail or hand delivered to:

Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2044A Galisteo Street
Santa Fe, NM 87505

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## I.H. CONFIDENTIAL INFORMATION

The Permittee may claim confidentiality for any information submitted to or requested by the Secretary or required by this Permit, to the extent authorized by Section 74-4-4.3(D) of the HWA and 20.4.1.900 NMAC (incorporating 40 CFR 270.12).

## I.I. ENFORCEMENT

### I.I.1. Waiver of Defenses

In any judicial action brought in New Mexico District Court for the First Judicial District under the HWA, or in the United States District Court for the District of New Mexico under RCRA (or under the HWA asserting supplemental jurisdiction under 28 U.S.C. § 1367), the Permittee waives all objections and defenses it may have to the jurisdiction of either such State or federal court or to venue in either such State or federal district.

### I.I.3. Admissibility of Data

In any administrative or judicial action to enforce a condition of this Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Permit.

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# MODULE II - GENERAL FACILITY CONDITIONS AND REQUIREMENTS

## II.A. DESIGN AND OPERATION OF FACILITY

The Permittee shall construct, design, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned, sudden, or non-sudden release of hazardous waste constituents to air, soil, surface water, or groundwater which could threaten human health or the environment. [20.4.1.500 NMAC (incorporating 40 CFR 264.31)]

## II.B. OFF-SITE WASTES

The Permittee shall not accept hazardous waste at the Facility from any off-site source.

## II.C. SECURITY

The Permittee shall comply with the security provisions specified in 20.4.1.500 NMAC (incorporating 40 CFR 264.14(b)(2) and (c)) and in Permit Application ~~Volume 1, ~~Section 2.2 ~~2.7.2. and Attachment 31~~, in order to prevent unknowing or unauthorized entry onto the Site by persons or livestock.

## II.D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall implement the inspection schedule specified in Permit Application Section 2.3~~Volume 2, Sections 2.3 and 2.4~~. The Permittee shall remedy any deterioration or malfunction discovered by an inspection. The Permittee shall maintain records of inspection in accordance with Permit Application Section 2.5.1~~ Volume 2, Section 2.3.~~, and Permit Condition II.F.4. below. [20.4.1.500 NMAC (incorporating 40 CFR 264.15)]

## II.E. PREPAREDNESS AND PREVENTION

### II.E.1. Required Equipment

The Permittee shall maintain, at a minimum, the emergency equipment specified in Permit Application Section 2.4.1~~ Volumes 3, 4, and 5, Sections 4~~, at the Facility. [20.4.1.500 NMAC (incorporating 40 CFR 264.32)]

### II.E.2. Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in Permit Application Sections 2.4.1 and 2.4.2 and Permit Condition II.E.1. above, on a periodic basis as necessary, to assure its proper operation in time of emergency. [20.4.1.500 NMAC (incorporating 40 CFR 264.33)]

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II.E.3. Access to Communications and Alarm System

The Permittee shall maintain access to the communications and alarm system specified in Permit Application Section 2.4.3~~ Volumes 3, 4, and 5, Sections 4~~. [20.4.1.500 NMAC (incorporating 40 CFR 264.34)]

II.E.4. Arrangements with Local Authorities

The Permittee shall maintain emergency arrangements with state and local authorities, as specified in Permit Application Section 2.4.4~~Volumes 3, 4, and 5, Sections 4.3 and 4.4~~. [20.4.1.500 NMAC (incorporating 40 CFR 264.37)]

## II.F. RECORDKEEPING AND REPORTING

In addition to the recordkeeping and reporting requirements specified elsewhere in this Permit, the Permittee shall comply with the following requirements:

II.F.1. Operating Record

The Permittee shall maintain at the Facility, until the end of the post-closure care period or completion of corrective action, whichever is later, a written record of waste, soil, and groundwater analyses. The written operating record shall include all information listed in Permit Application Section 2.5.1 as required under 20.4.1.500 NMAC (incorporating 40 CFR 264.73(b)(5), (6), and (8)) and Permit Condition II.F.4. below. [20.4.1.500 NMAC (incorporating 40 CFR 264.73)]

II.F.2. Twenty-four Hour Reporting

a. The Permittee shall report orally to the Secretary any noncompliance or incident at the Facility or Site which may endanger human health or safety or the environment. Such report shall be made within 24 hours from the time the Permittee becomes aware of the circumstances and shall include (see Permit Application Section 2.5.2):

i. Information concerning the release of any hazardous waste or hazardous constituents which may endanger public drinking water supplies;

ii. Information concerning the release or discharge of any hazardous waste or hazardous constituents, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(l)(6)(i))]

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b. The description of the occurrence and its cause shall include:

i. Name, address, and telephone number of the Permittee and the Facility;

ii. Date, time, and type of incident;

iii. Name and quantity of materials involved;

iv. The extent of injuries, if any;

v. An assessment of actual or potential hazards to the environment and human health outside the Facility; and

vi. Estimated quantity and disposition of recovered material that resulted from the incident. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(l)(6)(ii))]

c. The Permittee shall also submit a written notice to the Secretary within five calendar days of the time the Permittee becomes aware of the circumstances under Permit Condition II.F.2.a. above. The written notice shall contain the following information:

i. a description of the noncompliance or incident and its cause;

ii. the period(s) of noncompliance or incident, including exact dates and times, and, if the noncompliance or incident has not been corrected, the anticipated time it is expected to be corrected; and

iii. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, incident, or imminent hazard.

The Secretary may waive the five day written notice requirement in favor of a written report within 15 days. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(l)(6)(iii)]

## II.F.3. MONITORING RECORDS

a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports and records required by this Permit, records of all data used to complete the Permit Application, and records from all ground-water monitoring wells and associated ground-water surface elevations until, at a minimum, the later of the following dates (see Permit Application Section 2.5.1): 1) three years from the date of the sample, measurement, report, record, certification, or Permit Application, or 2) the date that post-closure care and corrective action are approved as complete by the

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Secretary. The Secretary may extend these periods at any time, and these periods shall be automatically extended during the course of any unresolved enforcement action regarding the Facility. [20.4.1.500 and 20.4.1.900 NMAC (incorporating 40 CFR 264.74(b) and 270.30(j)(2))]

b. Records of monitoring information shall include:

i. The dates, exact place, and times of sampling or measurements;

ii. The individuals who performed the sampling or measurements;

iii. The dates analyses were performed;

iv. The laboratory and individuals who performed the analyses;

v. The quality assurance and quality control procedures used;

vi. The analytical techniques or methods used; and

vii. The results of such analyses. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(j)(3))]

II.F.4. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the Facility, until post-closure care and corrective action are approved as complete by the Secretary, the following documents and all amendments, revisions, and modifications to these documents (see Permit Application Section 2.5.1):

a. This Permit and its Attachments, including Permit Application ~~Volumes 1 through 5, with the~~ Section 4 ~~Volume 2~~ Post-Closure Care Plan, as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.118(a));

b. Inspection schedules and results, for three years from the date of the inspection, as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.15(b)(2)) and this Permit (see Permit Application Sections 2.3 and 2.5.1);

c. Operating record, as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.73) and this Permit (see Permit Application Section 2.5.1);

d. Annually-adjusted post-closure cost estimate, as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.144(d)) and this Permit (see Permit Application Sections 2.5.1 and 2.8);

e. Groundwater monitoring analytical results and data contained in quarterly and annual reports required under Permit Conditions IV.A.2(~~h~~g)(ii) and (iii)

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below, for three years from the date of the report (see Permit Application Section 2.5.1);

f. Copies of manifests for any shipments off site of hazardous waste generated at the Site.

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## MODULE III - POST-CLOSURE CARE CONDITIONS AND REQUIREMENTS

### III.A. MODULE HIGHLIGHTS

This Permit implements post-closure care requirements for ~~soil and~~ groundwater contamination left in place after closure of a RCRA-regulated unit, an unlined, below-grade dry well (referred to in the Permit Application as the “Unlined Well”) used for disposal of RCRA-regulated hazardous waste. The ~~dry well~~Unlined Well was located at what is now the capped area, and consisted of a vertical, below-ground, open-ended, three and a half foot by ten foot pipe that received waste piped from a parts cleaning station. The waste consisted of waste oils and greases, kerosene, waste paint, paint thinners, turpentine, and various solvents, including a solvent with the active ingredients of 1,1,1 trichloroethane (1,1,1-TCA) and tetrachloroethene (PCE). The Unlined Well ~~dry well~~ was used from 1976 to 1983. Closure of the Unlined Well ~~dry well~~ was completed in January, 1988. A Post-Closure Care Permit, implementing post-closure care and corrective action requirements, was issued in August, ~~1988~~ 2000 and will expire~~d~~ in August, ~~1998~~2010. The terms of that Permit remain in effect until the effective date of this Permit. Post-closure care requirements shall remain in place for 30 years after closure, unless the post-closure period is shortened or lengthened pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.117(a)(2)). The Corrective Action Program, incorporated into the Permit Application as the Post-Closure Care Plan, consists of monitoring and extraction wells and a groundwater treatment system consisting of ~~a tray aeration~~an activated carbon treatment unit, and is required to remain in place until completion of corrective action~~, i.e., demonstration of attainment of cleanup standards for three years and as otherwise~~ as required by Module IV of this Permit, pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.96(c) and 264.100(f)).

### III.B. GENERAL POST-CLOSURE REQUIREMENTS

#### III.B.1. Post-Closure Care Period

The Permittee shall comply with post-closure care requirements for 30 years after completion of closure of the RCRA-regulated unit, unless the Secretary approves shortening or lengthening the post-closure care period pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.117(a)(2)). Post-closure care shall be in accordance with 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart G), and the Post-Closure Plan, Permit Application Section 4~~Volume 2~~, and shall be subject to the terms and conditions of this Permit. [20.4.1.500 NMAC (incorporating 40 CFR 264.117)]

The Permittee shall implement the Post-Closure Plan, Permit Application Section 4 ~~Volume 2~~. All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan. [20.4.1.500 NMAC (incorporating 40 CFR 264.117(d) and 264.118(b))]

### III.C. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

III.C.1. The Permittee shall operate the ground-water monitoring, extraction, and treatment ~~and corrective action~~ system of the ~~Corrective Action Program~~Post-Closure

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Care Plan (see Permit Application Section 4) and shall comply with all other applicable requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart F), during the post-closure period. [20.4.1.500 NMAC (incorporating 40 CFR 264.117(a)(1))].

~~III.C.2. The Permittee shall comply with the requirements for landfills, pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.310), and as follows:~~

~~a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion, or other events;~~

~~b. Prevent run-on and run-off from eroding or otherwise damaging the final cover; and~~

~~c. Protect and maintain surveyed benchmarks used in complying with the surveying and recordkeeping requirements of 20.4.1.500 NMAC (incorporating 40 CFR 264.309). [20.4.1.500 NMAC (incorporating 40 CFR 264.310(b))]~~

III.C.3. The Permittee shall maintain security at the Facility during the post-closure care period, in accordance with the Post-Closure Plan ~~and all~~ security requirements specified in Permit Condition II.C. and Permit Application Section 2.2~~ Volume 1, Section 2.7.2~~. ~~and Attachment 31~~, and in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.14). [20.4.1.500 NMAC (incorporating 40 CFR 264.117(b))]

III.C.4. The Permittee shall not allow any use of the Facility which will disturb the ~~integrity of the final cover or~~ the function of the Facility's monitoring or groundwater corrective action systems during the post-closure care period, in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.117(c)). [20.4.1.500 NMAC (incorporating 40 CFR 264.117(c))]

III.C.5. The Permittee shall inspect the components, structures, and equipment at the Site in accordance with the requirements specified at Permit Condition II.D. and Permit Application Section 2.3~~ Volume 2, Sections 2.3. and 2.4~~. [20.4.1.500 NMAC (incorporating 40 CFR 264.117(a)(1)(ii))]

## III.D. NOTICES AND CERTIFICATION

III.D.1. If the Permittee wishes to move off site any hazardous waste, hazardous waste residue, or contaminated soils from the RCRA-regulated unit, then the Permittee shall request a modification to this Permit in accordance with the applicable requirements at 20.4.1.900 and 20.4.1.901 NMAC (incorporating 40 CFR Part 270). The Permittee shall demonstrate that the removal of hazardous waste is in compliance with all applicable HWA and RCRA requirements for generation and transport of hazardous waste. [20.4.1.500 NMAC (incorporating 40 CFR 264.119(c))]

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III.D.2. No later than 60 days after completion of the established post-closure care period, the Permittee shall submit to the Secretary, by registered mail, a certification that post-closure care was performed in accordance with the specifications in the Post-Closure Plan. The certification must be signed by the Permittee and an independent, New Mexico registered professional engineer. Documentation supporting the independent, registered professional engineer's certification must be furnished to the Secretary upon request until the Secretary releases the Permittee from the financial assurance requirements for post-closure care under 20.4.1.500 NMAC (incorporating 40 CFR 264.145(1)). [20.4.1.500 NMAC (incorporating 40 CFR 264.120)]

## III.E. FINANCIAL ASSURANCE

The Permittee shall implement and maintain financial assurance (see Permit Application Section 2.9 and Attachment 3) and comply with all applicable requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart H), during the post-closure period. The Permittee shall demonstrate continuous compliance with financial assurance requirements by providing documentation of financial assurance in compliance with 20.4.1.500 NMAC (incorporating 40 CFR 264.145 and 264.151), in at least the amount of the cost estimate required by 20.4.1.500 NMAC (incorporating 40 CFR 264.144), and Permit Condition III.E.1. Changes in financial assurance mechanisms must be approved by the Secretary pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.145). ~~A copy of the Permittee's financial assurance instrument is attached as Permit Attachment III-2.~~

### III.E.1. Cost Estimate for Facility Post-Closure

The Permittee's most recent post-closure cost estimate, prepared in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.144), is ~~specified in Permit Attachment III-1~~addressed in Permit Application Section 2.8 and Attachment 2.

a. The Permittee shall adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument used to comply with 20.4.1.500 NMAC (incorporating 40 CFR 264.145), and Permit Condition III.E. [20.4.1.500 NMAC (incorporating 40 CFR 264.142(b))]

b. The Permittee shall revise the post-closure cost estimate whenever there is a change in the Facility's Post-Closure Plan. [20.4.1.500 NMAC (incorporating 40 CFR 264.144(c))]

c. The Permittee shall keep in the operating record at the Facility the latest post-closure cost estimate. [20.4.1.500 NMAC (incorporating 40 CFR 264.144(d))]

d. Financial assurance funds may be released, upon approval by the Secretary and in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.145(a)(10), if the value of the financial assurance mechanism exceeds the remaining cost of post-closure care. The Permittee shall demonstrate to the Secretary that the value of the financial assurance mechanism exceeds the remaining cost of post-closure care, in order for the Secretary to approve a release of funds. [20.4.1.500 NMAC (incorporating 40 CFR 264.145(a)(10))]

e. The Permittee shall submit itemized bills to the Secretary when requesting reimbursement from the trustee for post-closure care expenditures in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.145(a)(11)).

## III.F. POST-CLOSURE PERMIT MODIFICATIONS

The Permittee shall request a Permit modification to authorize a change in the approved Post-Closure Plan when a change is made in the Post Closure Plan. This request shall be in accordance with applicable requirements of 20.4.1.900 and 20.4.1.901 NMAC (incorporating 40 CFR Part 270, Subpart D), and must include a copy of the proposed amended Post-Closure Plan for approval by the Secretary. The Permittee shall request a Permit modification whenever changes in operating plans or Facility design affect the approved Post-Closure Plan, or other events occur that affect the approved Post-Closure Plan. The Permittee shall submit a written request for a Permit modification at least 60 days prior to the proposed change in Facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post Closure Plan, and in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.118(d)).

## III.G. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with 20.4.1.500 NMAC (incorporating 40 CFR 264.148), in the event of bankruptcy proceedings naming the owner or operator or bankruptcy of the financial assurance issuing institution. [20.4.1.500 NMAC (incorporating 40 CFR 264.148)]

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## ~~PERMIT ATTACHMENTS REFERENCED IN MODULE III - POST-CLOSURE CARE~~

| ~~Permit Attachment No.~~ | ~~Plan or Document~~ |
|---|---|
| ~~III-1~~ | ~~Post-Closure Cost Estimate~~ |
| ~~III-2~~ | ~~Financial Assurance Trust Agreement~~ |

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## ~~ATTACHMENT III-1~~

### ~~**Schedule A**~~
### ~~**Effective March 20, 2000**~~

| | |
|---|---|
| ~~EPA ID Number~~ | ~~NMT 360010342~~ |
| ~~Name:~~ | ~~Person Generating Station~~ |
| ~~Address:~~ | ~~Broadway Blvd. at Rio Bravo Blvd.~~<br>~~Albuquerque, NM~~ |
| ~~Current post closure cost estimate:~~ | ~~$4,417,025~~ |

# ~~ATTACHMENT III-2~~
# ~~TRUST AGREEMENT~~

~~Trust Agreement, the "Agreement," entered into as of May 27, 1993, by and between Public service Company of New Mexico, a New Mexico corporation, the "Grantor," and First National Bank in Albuquerque, N.A., the "Trustee."~~

~~Whereas, the New Mexico Environmental Improvement Division, "E.I.D.," an agency of the State of New Mexico, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility.~~

~~Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein.~~

~~Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.~~

~~Now, Therefore, the Grantor and the Trustee agree as follows:~~

~~Section 1. Definitions. As used in this Agreement:~~

~~(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.~~

~~(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.~~

~~Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.~~

~~Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EID. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B~~

~~attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibilities for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EID.~~

~~Section 4. Payment for Closure and Post Closure Care. The Trustee shall make payments from the fund as the EID Director shall direct, in writing, to provide for the payment of the costs of closure and/or post closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EID Director from the Fund for closure and post closure expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EID Director specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.~~

~~Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.~~

~~Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which~~

~~persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:~~

~~(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a 2. (a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;~~

~~(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State Government; and~~

~~(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.~~

~~Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:~~

~~(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and~~

~~(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a 1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.~~

~~Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:~~

~~(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale.~~

~~No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;~~

~~(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;~~

~~(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificate of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;~~

~~(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and~~

~~(e) To compromise or otherwise adjust all claims in favor of or against the Fund.~~

~~Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and~~

~~all other proper charges and disbursements of the Trustee shall be paid from the Fund.~~

~~Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EID Director a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EID Director shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.~~

~~Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.~~

~~Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.~~

~~Section 13. Successor Trustee. The Trustee may resign or the or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor~~

~~trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EID Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.~~

~~Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EID Director to the Trustee shall be in writing, signed by the EID Director, or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EID hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EID, except as provided for herein.~~

~~Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the EID Director, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.~~

~~Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by~~

~~the Trustee, and the EID Director if the Grantor ceases to exist.~~

~~Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EID Director, or by the Trustee and the EID Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.~~

~~Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EID Director issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.~~

~~Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of New Mexico.~~

~~Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section. of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.~~

~~In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in the New Mexico Hazardous Waste Management Regulation, Part II, 206.D.3.j.(1)(a), as such regulations were constituted on the date first above written.~~

~~Senior Vice President and~~
~~Chief Financial officer~~

~~Attest:~~

~~Financial Compliance Specialist~~
~~[Seal]~~

~~Attest:~~

~~Title~~
~~[Seal]~~

~~ATTACHMENT B~~
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## MODULE IV - CORRECTIVE ACTION CONDITIONS AND REQUIREMENTS

### IV.A. CORRECTIVE ACTION FOR RCRA-REGULATED UNITS

The Corrective Action Program addressing the release of contaminants to ~~soil and~~ groundwater from the ~~dry well~~Unlined Well RCRA-regulated unit is described in the Permit Application as the Post-Closure Care Plan (Permit Application Section 4), which is incorporated by reference into this Permit. ~~The Corrective Action Program for soil is at Permit Application Volume 3, Section 3; the~~ Corrective Action Program for shallow ~~and deeper~~ groundwater is ~~at~~ in Permit Application Section 4 ~~Volume 4, Section 3; and the Corrective Action Program for deeper groundwater is at Permit Application Volume 5, Section 3~~.

#### ~~IV.A.1 Corrective Action for Soil~~

~~a. The Permittee shall comply with the Corrective Action Program for soils, consisting of a soil vapor extraction (SVE) system, described in Permit Application Volumes 2 and 3. The cleanup standards for soil are:~~

~~i. For all soil, meaning from the ground surface to the water table, Soil Screening Levels (SSLs) for Transfers from Soil to Groundwater (DAF=20) in 1999 EPA Region 6 Human Health Medium-Specific Screening Levels. The SSLs for the Constituents of Concern (COCs) at the Site are:~~

~~PCE 0.06 mg/kg~~
~~1,1-DCE 0.06 mg/kg~~
~~1,1,1-TCA 2.0 mg/kg~~

~~ii. For surface soil, meaning from the surface of the ground to 12 feet below the ground surface, a cumulative 10-5 carcinogenic risk level for all three COCs. This risk level is calculated by multiplying by 10/3 the residential Risk-Based Screening Level in the 1999 EPA Region 6 Human Health Medium-Specific Screening Levels. The acceptable risk level for surface soil at the Site are:~~

~~PCE 16.0 mg/kg~~
~~1,1-DCE 0.18 mg/kg~~
~~1,1,1-TCA 1,400.0 mg/kg (saturation level)~~

~~b. The Permittee shall operate the SVE system to meet the following performance standards:~~

~~i. No leakage of water on the surface shall be allowed to occur around the SVE well which might serve to drive the contaminants lower in the vadose zone;~~

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~~ii. Air releases shall meet the standards of Bernalillo County air emission regulations.~~

~~c. If the Permittee demonstrates attainment of soil remediation standards under Permit Condition IV.A.l.a.i. and ii. above in accordance with this Permit and in accordance with the sampling and analysis provisions specified in Permit Application Volume 3, Section 6, then the Permittee may submit a request to the Secretary to shorten the post-closure care period for soil, in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264.117(a)(2)(i)), and to terminate the Corrective Action Program at the Site for soil.~~

### IV.A.2 Corrective Action for Groundwater

The Permittee shall comply with the Corrective Action Program for groundwater specified in Permit Application Section 4~~ Volumes 2, 4 and 5~~; with the corrective action conditions and requirements in this Permit Module; and with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart F).

a. General Requirements

i. Groundwater Protection Standard

(a) Hazardous Constituents. The Permittee shall monitor at the well locations, frequencies, and for the Hazardous Constituents specified in Permit Application Section 4~~ Volume 4, Table 3.2 and Appendix F, and Volume 5, Table 3.5 and Appendix D~~, and at other wells as may be required under IV.A.2.a.iv.(i) below. The constituents that currently exceed standards in groundwater at the Site (Chemicals of Concern or COCs) are:

tetrachloroethylene (PCE)
1,1-dichloroethylene (1,1-DCE)
1,1,1-trichloroethane (1,1,1-TCA)
[20.4.1.500 NMAC (incorporating 40 CFR 264.93)]

(b) Concentration Limits. The maximum concentrations of all Hazardous Constituents in the groundwater shall not exceed the more stringent of WQCC standards or MCLs. The concentration limits for the COCs at the Site are:

| | |
|---|---|
| PCE | 5.0 µg/L |
| 1,1-DCE | 5.0 µg/L |
| 1,1,1-TCA | 60.0 µg/L |

[20.1.500 NMAC (incorporating 40 CFR 264.94)]

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(c) Point of Compliance. The point of compliance is the vertical surface located perpendicular to the groundwater flow direction at PSMW-1R and extending into the uppermost aquifer. The concentration limits in Permit Condition IV.A.2.a.i.(b) above shall apply at all wells at and downgradient from the point of compliance. [20.4.1.500 NMAC (incorporating 40 CFR 264.95)]

ii. The Permittee shall continue the Corrective Action Program in accordance with Section 4 of the Permit Application until the groundwater protection standards set forth in Permit Conditions IV.A.2.a.i.(a), (b), and (c) above have not been exceeded for three consecutive years. [20.4.1.500 NMAC (incorporating 40 CFR 264.100(f))]

iii. If the Permittee or the Secretary determines that the Corrective Action Program established by this Permit no longer satisfies the requirements of RCRA, the HWA, regulations promulgated pursuant to RCRA and the HWA, or this Permit, then the Permittee shall, within 90 days of the determination, submit for approval by the Secretary a request for a permit modification to make any appropriate changes to the Corrective Action Program which will satisfy RCRA, the HWA, the regulations, and this Permit. [20.4.1.500 NMAC (incorporating 40 CFR 264.100(h))]

iv. Groundwater Monitoring

(a) The Permittee shall maintain the groundwater monitoring program specified in Permit Application Section 4~~Volumes 4 and 5~~ for the duration of the Corrective Action Program, as specified in Permit Application Section 4~~Volume IV, Section 3.3.2.2., Volume V, Section 3.3.3.,~~ and Permit Condition IV.A.2.a.ii. above, to demonstrate the effectiveness of the Corrective Action Program for groundwater and to meet the requirements of 20.4.1.500 NMAC (incorporating 40 CFR 264.97). [20.4.1.500 NMAC (incorporating 40 CFR 264.100(d))]

(b) The Permittee shall maintain groundwater monitoring wells at the locations specified in Permit Application Section 4 and on Figure 14 ~~Volume 4, Figure 3.3, Volume 5, Figure 3.1, and on the Detailed Site Map in Permit Application Volume 1, Attachment 3~~, subject to Permit Condition IV.A.2.a.iv.(i) below. [20.4.1.500 NMAC (incorporating 40 CFR 264.97(c) and 264.100(a)(3) and (d))]

(c) The Permittee shall monitor for the hazardous constituents and at the frequencies specified in Permit Application Section 4~~Volume 4, Table 3.2 and Appendix F, and Volume 5, Table 3.5~~

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~~and Appendix D~~, during the Corrective Action Program. [20.4.1.500 NMAC (incorporating 40 CFR 264.93)]

(d) The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually. [20.4.1.500 NMAC (incorporating 40 CFR 264.98(e))]

(e) Groundwater Surface Elevation

(i) The Permittee shall determine the groundwater surface elevation at each well each time ground water is sampled. [20.4.1.500 NMAC (incorporating 40 CFR 264.97(f))]

(f) Sampling and Analysis Procedures

(i) The Permittee shall comply with the procedures specified in Permit Application Section 4.5~~Volume 4, Section 3.6., and Volume 5, Section 3.5.~~, when obtaining and analyzing samples from all groundwater monitoring wells. [20.4.1.500 NMAC (incorporating 40 CFR 264.97(d) and (e))]

(ii) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed shall be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the Secretary. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis or an equivalent method. [20.4.1.900 NMAC (incorporating 40 CFR 270.30(j) (l))]

(g) Recordkeeping and Reporting

(i) The Permittee shall enter all monitoring, testing and analytical data obtained in the operating record. The data shall include all computations, calculated means, variances, and results of the statistical tests specified in Permit Condition IV.A.2.a.iv(g) above. [20.4.1.500 NMAC (incorporating 40 CFR 264.73(b)(6))]

(ii) The Permittee shall submit a written report semi-annually to the Secretary on the effectiveness of the

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Corrective Action Program. [20.4.1.500 NMAC (incorporating 40 CFR 264.100(g))]

(iii) The Permittee shall submit the results of all sampling and analysis under the Corrective Action Program to the Secretary annually.

(h) Well Replacement and Abandonment

(i) The Permittee shall replace any groundwater monitoring well removed from service with a monitoring well located as close to the abandoned well as practicable. The Permittee shall submit the proposed location and construction specifications for the new well to the Secretary for prior approval.

(ii) The Permittee shall record the surveyed location and elevation of a new monitoring well when the well is installed.

(iii) All wells removed from the monitoring program shall be plugged and abandoned by the Permittee so as to ensure that the abandoned well will not serve to transport contaminants to the aquifer and will be otherwise in compliance with all applicable regulations. The Permittee shall submit well plugging and abandonment specifications to the Secretary for approval prior to abandoning the well.

b. Corrective Action Program for Shallower Groundwater

The Permittee shall comply with the Corrective Action Program for the shallower groundwater, consisting of extraction wells and ~~an air stripper~~carbon treatment system, specified in Permit Application Section 4~~Volume 4~~, and conditions and requirements specified in this Permit Module. The locations of the extraction wells are specified in Figure 14~~the Detailed Site Map, Application Volume 1, Attachment 3~~. The locations of the monitoring wells for the shallower groundwater are specified in Figure 14~~the Detailed Site Map and in Application Volume 4, Figure 3.3~~.

The Permittee shall conduct the Corrective Action Program to ensure that the groundwater protection standards, as defined ~~at~~ in Permit ~~Section~~ Condition IV.A.3.a.i. above, are not exceeded at and downgradient from the compliance point, and to ensure compliance with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart F). [20.4.1.500 NMAC (incorporating 40 CFR 264.100)]

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i. Hazardous Constituents. The Permittee shall monitor at the locations, frequencies, and for the hazardous constituents specified in Permit Application Section 4~~ Volume 4, Table 3.2 and Appendix F~~. [20.4.1.500 NMAC (incorporating 40 CFR 264.93)]

ii. Sampling and Analysis Procedures. The Permittee shall comply with the procedures specified in Permit Application Section 4~~ Volume 4, Sections 3.6.3.3. and 3.6.3.4.~~, when obtaining and analyzing samples from the ground-water monitoring wells. [20.4.1.500 NMAC (incorporating 40 CFR 264.97(d) and (e))]

~~c. Corrective Action Program for Deeper Groundwater~~

~~Corrective Action for the deeper groundwater consists of monitored natural attenuation specified in Permit Application Section 4 Volume 5. The Permittee shall comply with the monitoring program specified in Permit Application Volume 5Section 4. The locations of the monitoring wells for the deeper groundwater are specified in Figures 14 and 15the Detailed Site Map, Application Volume 1, Attachment 3, and in Application Volume 5, Figure 3.1.~~

~~The Permittee shall conduct the Corrective Action Program to ensure that the groundwater protection standards, as specified in Permit Condition IV.A.2.a.i. and ii. above, are not exceeded, and to ensure compliance with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart F). [20.4.1.500 NMAC (incorporating 40 CFR 264.100)]~~

~~i. Hazardous Constituents. The Permittee shall monitor at the locations, frequencies, and for the hazardous constituents specified in Permit Application Section 4 Volume 5, Table 3.5 and Appendix D. [20.4.1.500 NMAC (incorporating 40 CFR 264.93)]~~

~~ii. Sampling and Analysis Procedures. The Permittee shall comply with the procedures specified in Permit Application Section 4.5Volume 5, Section 3.5.3., when obtaining and analyzing samples from the ground-water monitoring wells. [20.4.1.500 NMAC (incorporating40 CFR 264.97(d) and (e))]~~

## IV.B. CORRECTIVE ACTION FOR SWMU

### IV.B.1. Applicability

The Conditions of IV.B. apply to:

~~a. The SWMUs and AOCs identified in Appendices A.1 and A.2 of this Module;~~

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a~~b~~. Any additional SWMUs or AOCs that may be discovered.

IV.B.2. Notification and Assessment Requirements for Newly Identified SWMUs and AOCs

a. The Permittee shall notify the Secretary in writing, within fifteen (15) calendar days of discovery, of any suspected new SWMU or AOC. The notification shall include, at a minimum, the location of the SWMU or AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.).

b. The Permittee shall prepare and submit to the Secretary, within ninety (90) calendar days of the notification under Condition IV.B.2.a above, a SWMU Assessment Report (SAR) for each SWMU or AOC identified under Condition IV.B.2.a. above. At a minimum, the SAR shall provide the following information:

i. Location of unit(s) on a topographic map of appropriate scale;

ii. Designation of type and function of unit(s);

iii. General dimensions, capacities and structural description of unit (s) (supply any available plans/drawings);

iv. Dates that the unit(s) was operated;

v. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes;

vi. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s), including groundwater data, soil analyses, air, and surface water data;

c. Based on the results of the SAR, the Secretary shall determine the need for further investigations at the SWMUs or AOCs covered in the SAR, including the need for an RFI under Permit Condition IV.B.5. below. The Secretary will notify the Permittee in writing of the final determination of the status of the suspected SWMU or AOC. If the Secretary determines that further investigation of a SWMU or AOC is required, the Permit will be modified to include the newly discovered SWMU or AOC to ~~the~~ a list of SWMUs requiring further investigation~~ in Appendix A.1~~, in accordance with 20.4.1.900 and 20.4.1.901 NMAC (incorporating 40 CFR Part 270, Subpart D). If the Secretary determines that further investigation is needed, the Permittee shall submit a Workplan for such investigation for approval by the Secretary.

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~~IV.B.3. Reporting Planned Changes~~

~~The Permittee shall give written notice to the Secretary as soon as possible of any planned physical alterations or additions which impact known or suspected contamination at or from SWMUs or AOCs listed in Appendix A.1.~~

IV.B.4. Notification Requirements for Newly Discovered Releases from SWMUs or AOCs

a. The Permittee shall notify the Secretary in writing of any newly discovered release of hazardous waste or Hazardous Constituents from a SWMU or AOC discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within fifteen days of discovery.

b. The Secretary will notify the Permittee in writing of the final determination of the status of the newly discovered release from a SWMU or AOC. If the Secretary determines that further investigation of a SWMU or AOC is needed, the Permittee shall submit a Workplan for such investigation for approval by the Secretary.

IV.B.5. RCRA Facility Investigation (RFI)

a. RFI Work Plan

i. The Secretary may require that the further investigation under Permit Conditions IV.B.2.c. and IV.B.4.b. above be in the form of an RFI. The Permittee shall prepare and submit to the Secretary, within ninety days of receipt of notice from the Secretary that an RFI is required, an RFI Work Plan for those units requiring further investigation.

ii. The RFI Work Plan shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of contamination and the potential pathways of contaminant releases to the air, soil, surface water, and groundwater.

iii. The RFI Work Plan must be approved by the Secretary, in writing, prior to implementation. If the Secretary disapproves the RFI Work Plan, the Secretary shall notify the Permittee in writing of the RFI Work Plan's deficiencies and specify a due date for submission of a revised RFI Work Plan. Upon approval by the Secretary, the RFI Work Plan and any revisions thereto shall be incorporated by reference and made an enforceable part of this Permit.

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#### b. RFI Implementation

The Permittee shall implement the RFI in accordance with the approved RFI Work Plan. The Permittee shall notify the Secretary at least 20 days prior to any sampling activity under the RFI Workplan.

#### c. RFI Reports

i. The Permittee shall prepare and submit to the Secretary an RFI Report, prepared in accordance with HWB guidance documents, for the investigations conducted pursuant to the RFI Work Plan. The RFI Report shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination at the facility, including sources and migration pathways, identify all hazardous constituents present in all media, and describe actual or potential human and ecological receptors. The RFI Report shall also describe the extent of contamination in relation to background levels and shall include cleanup levels.

ii. The Secretary will, following review of the RFI Report, notify the Permittee of the need for further investigation, including a Corrective Measures Study, or of a no further action decision.

### IV.B.6. Interim Measures (IM)

#### a. IM Work Plan

i. If required by the Secretary, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan. Interim measures will be required if necessary to reduce or prevent migration of contaminants or human or environmental exposure to contaminants while long-term corrective action remedies are evaluated and implemented. The Permittee may initiate interim measures by submitting notification to the Secretary.

ii. The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threats to human health or the environment and are consistent with and integrated into any long-term solution at the facility.

iii. The IM Work Plan must be approved by the Secretary prior to implementation. If the Secretary disapproves the IM Work Plan, the Secretary will notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan. Upon approval by the Secretary, the IM Work Plan and any revisions thereto shall be incorporated by reference and made an enforceable part of this Permit.

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b. IM Implementation

i. The Permittee shall implement the interim measures in accordance with the approved IM Work Plan.

ii. The Permittee shall prepare and submit to the Secretary, within ninety days of completion of interim measures, an IM Report summarizing the results of the interim measures, and including copies of all relevant laboratory, monitoring, and other data.

IV.B.7. Corrective Measures Study (CMS)

a. CMS Work Plan

i. The Permittee shall submit a CMS Work Plan within ninety days of notification by the Secretary that a CMS is required. The CMS may be concurrent with the RFI.

ii. The CMS Work Plan shall include schedules of implementation and completion of specific actions necessary to complete the CMS.

iii. The Secretary will either approve or disapprove, in writing, the CMS Work Plan. If the Secretary disapproves the CMS Work Plan, the secretary will notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan. Upon approval by the Secretary, the CMS Work Plan and any revisions thereto shall be incorporated by reference and made an enforceable part of this Permit.

b. CMS Report

i. The Permittee shall submit to the Secretary a CMS Report evaluating each remedial alternative.

ii. If the Secretary disapproves the CMS Report, the Secretary will notify the Permittee in writing of deficiencies in the CMS Report and specify a due date for submittal of a revised CMS Report. The Secretary will notify the Permittee of any no further action decision.

IV.B.8. Corrective Measures Implementation

a. The Permittee shall implement the remedy chosen in the CMS Report. The Permittee shall submit a CMI completion report to the Secretary in accordance with a schedule for completion determined by the Secretary.

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## ~~APPENDIX A.1~~

~~List of SWMUs and AOCs requiring corrective action~~:

~~1. Natural pit area.~~

# ***PERSONNEL POSITIONS***

## *Person Generating Station*

- Environmental Manager – Mike Farley (PNM)
- Regulatory Coordinator – John Hale, P.E. (PNM)
- Environmental Engineer – John Hale, P.E. (PNM), Don Briggs (Metric Corporation)
- Environmental Scientist – Robin Delapp (PNM), Mark Sikelianos (Delphi, Inc.)
- Environmental Technician – Joe Sandoval (Metric Corporation)
- Professional Hydrologist – Gary Richardson, P.E. (Metric Corporation)
- Groundwater Treatment Plant Operator – Dwayne Garlington (PNM)

# Person Generating Station Job Description and Training Plan

## Environmental Manager

### *Job Requirements*

- Good working knowledge of Company policies and procedures, including the ability to interpret and administer them.
- A thorough understanding of, and appropriate training in, the functions of management: planning, organizing, staffing, directing, controlling, innovation, representation, and management development.
- Ability to clearly, concisely, and effectively communicate conceptual, technical, and administrative information to superiors and subordinates at all levels of Company management.
- Ability to effectively and efficiently manage human and physical resources.

### *Job Function*

In general, this person provides administrative supervision to personnel involved with the daily activities of the facility, and acts as management interface between these personnel and upper Company Management. The Environmental Manager is a PNM employee.

### *Educational Requirements*

There are no specific educational requirements for this position.

### *Training Plan*

This person will not be performing on-site work at the facility and, as such, is not required to participate in OSHA's "Hazardous Materials Operations and Emergency Response" Training. This training is recommended, but optional.

This person should be knowledgeable of the broad goals of RCRA, with some specific knowledge of the Environmental Protection Agency, the New Mexico Environment Department, and hazardous waste management. To achieve this level of knowledge, this person should initially attend at least one comprehensive Law and Regulations Seminar which covers RCRA as part of its curriculum. There are no annual requirements, though update seminars or refresher seminars would be appropriate, if available and convenient.

# ***Person Generating Station Job Description and Training Plan***

## *Regulatory Coordinator*
## *Environmental Engineer*
## *Environmental Scientist*

### *Job Requirements*

- Broad technical and legal knowledge with respect to permitting and operation of the hazardous waste facility.
- Working knowledge in area of groundwater monitoring, hazardous waste management, and the latest developments in the area.
- Advanced knowledge of New Mexico and Federal Hazardous Waste Regulations.
- Ability to recommend initiation of, and to then coordinate complex and sensitive projects with consultants, engineers, scientific and research contractors, and other Company departments.
- Knowledge of project management principles, contracts, and proposals.
- Effective verbal and written skills to present technical information clearly, concisely, and effectively.
- Working knowledge of Company line organization and areas of responsibility of other PNM departments.
- Working knowledge of NMED line organization and areas of regulatory responsibility for the waste facility.

### *Job Function*

This person is responsible for overall operation and maintenance of the hazardous waste facility. Specific activities include: interfacing with NMED and EPA on matters concerning the permit; coordination of annual corporate financial statement as required by the permit; coordinating all routine and non-routine groundwater sampling programs; interpreting, summarizing, and preparing reports of groundwater monitoring data for Company Management, NMED, and EPA as needed; and administration of contract with Professional Hydrologist and other consultants as needed. The Regulatory Coordinator is a PNM employee. The Environmental Engineer and Environmental Scientist positions may be held by PNM employees, Company consultants, or contractors.

### *Educational Requirements*

There are no specific education requirements for this position.

### *Training Plan*

This person carries the bulk of the responsibility for all aspects of the hazardous waste facility. This person must initially receive specific training in the areas of RCRA, groundwater hydrology, and must complete OSHA's 40-hour "Hazardous Materials Operations and Emergency Response" training course.

Annually, refresher courses and updates for RCRA and groundwater hydrology should be taken if seminar locations are convenient.

Annually, completion of the 8-hour OHSA "Hazardous Materials Operations and Emergency Response" Refresher Course is required.

# Person Generating Station Job Description and Training Plan

## Environmental Technician

### *Job Requirements*

- Thorough knowledge of Company's organizational structure and functions as related to the hazardous waste facility.
- Ability to function independently in the field when performing non-routine and complex tasks.
- Working knowledge in the area of groundwater sampling.
- Ability to clearly and concisely communicate verbally and in writing to Company personnel, consultants, and support services.

### *Job Function*

In general, this person assists the Environmental Scientist as needed in the groundwater sampling program, data reporting, and other required facility activities. The Environmental Technician position may be held by PNM employees, Company consultants, or contractors.

### *Educational Requirements*

There are no specific educational requirements for this position.

### *Training Plan*

Initially, this person should receive at least 40 hours of on-the-job training under the supervision of the Environmental Scientist, before being asked or required to conduct similar activities unsupervised.

Completion of OSHA's "Hazardous Materials Operations and Emergency Response" 40-hour training course is required.

Annual 8-hour OSHA "Hazardous Materials Operations and Emergency Response" Refresher Course is required.

General informational seminars on RCRA, groundwater hydrology, and groundwater sampling techniques should be attended, if convenient.

# Person Generating Station Job Description and Training Plan

## Professional Hydrologist

### *Job Requirements*

- Thorough knowledge of the science of groundwater hydrology.
- Ability to effectively supervise personnel in the field in the conductance of groundwater sampling activities.
- Ability to write and orally present technical reports clearly, concisely, and effectively.
- Working knowledge of contracts and proposals.

### *Job Function*

In general, this person supervises activities associated with routine and non-routine groundwater sampling programs; reviews and approves data collected during sampling activities; assesses significance of monitoring data; and acts as the Company's Groundwater Hydrology expert in discussions and negotiations with the NMED and EPA. The Professional Hydrologist position is held by a Company consultant.

### *Educational Requirements*

There are no specific educational requirements for this position. The incumbent must, however, be a practicing professional groundwater hydrologist.

### *Training Plan*

Before contractual agreement is made between PNM and the Professional Hydrologist, this person must present adequate evidence to the Company that he(she) is a practicing professional groundwater hydrologist and is competent in this field. Also, evidence of completion of OSHA's "Hazardous Materials Operations and Emergency Response" 40-hour training must be submitted to the Company.

Annually, completion of OSHA's "Hazardous Materials Operations and Emergency Response" 8-hour Refresher Course is required.

# ***Person Generating Station Job Description and Training Plan***

## ***Groundwater Treatment Plant Operator***

### *Job Requirements*

- Working knowledge in the area of groundwater sampling.
- Possession of the appropriate mechanical, electrical, and instrumentation expertise to operate and maintain the groundwater treatment system.
- Ability to clearly and concisely communicate verbally and in writing to Company personnel, consultants, and support service.

### *Job Function*

In general, this person collects samples from the groundwater treatment system and assists in data reporting. In addition, this person operates and performs repairs and routine maintenance on the groundwater treatment system. The Groundwater Treatment Plant Operator is a PNM employee.

### *Educational Requirements*

There are no specific educational requirements for this position.

### *Training Plan*

Completion of OSHA's "Hazardous Materials Operations and Emergency Response" 40-hour training course.

Completion of OSHA's "Hazardous Materials Operations and Emergency Response" annual 8-hour refresher course.

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

*Form Approved, OMB No. 2050-0034 Expires XX/XX/02*
*GSA No. 0248-EPA-OT*

**For EPA Regional Use Only**

**Date Received**
**Month** **Day** **Year**

United States Environmental Protection Agency
Washington, DC 20460

# Hazardous Waste Permit Application
# Part A

*(Read the Instructions before starting)*

## I. Facility's EPA ID Number *(Mark 'X' in the appropriate box)*

☐ **A. First Part A Submission**

☒ **B. Part A Amendment #** August 17, 2000

**C. Facility's EPA ID Number**
NMT360010342

**D. Secondary ID Number *(if applicable)***

## II. Name of Facility

PNM-PERSON GENERATING STATION

## III. Facility Location *(Physical address not P.O. Box or Route Number)*

**A. Street**
BROADWAY & RIO BRAVO ROADS SW

**Street *(Continued)***

**City or Town**
ALBUQUERQUE

**State**
NM

**Zip Code**
87105

**County Code** *(If known)*

**County Name**
BERNALILLO

**B. Land Type** (Enter code)
C

**C. Geographic Location**
LATITUDE *(Degrees, minutes, & seconds)* 35 01 50
LONGITUDE *(Degrees, minutes & seconds)* 106 38 45

**D. Facility Existence Date**
**Month** 07 **Day** 14 **Year** 1972

## IV. Facility Mailing Address

**Street or P.O. Box**
2401 AZTEC NE

**City or Town**
ALBUQUERQUE

**State**
NM

**Zip Code**
87107

## V. Facility Contact *(Person to be contacted regarding waste activities at facility)*

**Name *(Last)***
HALE

***(First)***
JOHN

**Job Title**
TECHNICAL LEAD

**Phone Number *(Area Code and Number)***
505—241—2014

## VI. Facility Contact Address *(See Instructions)*

**A. Contact Address**
Location ☐ Mailing ☒ Other ☐

**B. Street or P.O. Box**
2401 AZTEC NE

**City or Town**
ALBUQUERQUE

**State**
NM

**Zip Code**
87107

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

*Form Approved, OMB No. 2050-0034 Expires XX/XX/02*
*GSA No. 0248-EPA-OT*

**EPA ID Number** ***(Enter from page 1)***
NMT360010342

**Secondary ID Number** ***(Enter from page 1)***

## VII. Operator Information *(See Instructions)*

**A. Name of Operator**
PUBLIC SERVICE COMPANY OF NM

**Street or P.O. Box**
2401 AZTEC NE

**City or Town** ALBUQUERQUE **State** NM **Zip Code** 87107

**Phone Number** ***(Area Code and Number)***
505–241–2014

**B. Operator Type** P

**C. Change of Operator Indicator** Yes ☐ No ☒

**Date Changed** Month Day Year

## VIII. Facility Owner *(See Instructions)*

**A. Name of Facility's Legal Owner**
PUBLIC SERVICE COMPANY OF NM

**Street or P.O. Box**
2401 AZTEC NE

**City or Town** ALBUQUERQUE **State** NM **Zip Code** 87107

**Phone Number** ***(Area Code and Number)***
505–241–2014

**B. Owner Type** P

**C. Change of Owner Indicator** Yes ☐ No ☒

**Date Changed** Month Day Year

## IX. NAICS Codes *(in order of significance; start in left box)*

**First** 221112
*(Description)* Fossil Fuel Electric Power Generation

**Third**
*(Description)*

**Second**
*(Description)*

**Fourth**
*(Description)*

## X. Other Environmental Permits *(See instructions)*

| A. Permit Type *(Enter code)* | B. Permit Number | C. Description |
|---|---|---|
| E | DP-1006 | Groundwater discharge plan approval, issued by NMED-Groundwater Protection & Remediation Bureau |
| | | |
| N | NM0030384 | NPDES permit, issued by USEPA |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**EPA ID Number (*Enter from page 1*)** **Secondary ID Number *(Enter from page 1)***

N M T 3 6 0 0 1 0 3 4 2

## XI. Nature of Business *(Provide a brief description)*

The generation and sale of electricity.

## XII. Process Codes and Design Capacities

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in item XIII.*

B. PROCESS DESIGN CAPACITY - *for each code entered in column A, enter the capacity of the process.*
1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.*
2. UNIT OF MEASURE – *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units used in the corresponding process code.*

| *PROCESS CODE* | *PROCESS* | *APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY* |
|---|---|---|
| | *Disposal:* | |
| *D79* | *Underground Injection Well Disposal* | *Gallons; Liters; Gallons Per Day; or Liters Per Day* |
| *D80* | *Landfill* | *Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards* |
| *D81* | *Land Application* | *Acres or Hectares* |
| *D82* | *Ocean Disposal* | *Gallons Per Day or Liters Per Day* |
| *D83* | *Surface Impoundment Disposal* | *Gallons; Liters; Cubic Meters; or Cubic Yards* |
| *D99* | *Other Storage* | *Any Unit of Measure Listed Below* |
| | *Storage:* | |
| *S01* | *Container* | *Gallons; Liters; Cubic Meters; or Cubic Yards* |
| *S02* | *Tank Storage* | *Gallons; Liters; Cubic Meters; or Cubic Yards* |
| *S03* | *Waste Pile* | *Cubic Yards or Cubic Meters* |
| *S04* | *Surface Impoundment Storage* | *Gallons; Liters; Cubic Meters; or Cubic Yards* |
| *S05* | *Drip Pad* | *Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards* |
| *S06* | *Containment Building Storage* | *Cubic Yards or Cubic Meters* |
| *S99* | *Other Disposal* | *Any Unit Measure Listed Below* |
| | *Treatment:* | |
| *T01* | *Tank Treatment* | *Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour* |
| *T02* | *Surface Impoundment Treatment* | *Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour* |
| *T03* | *Incinerator* | *Short Tons Per Hour Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour* |
| *T04* | *Other Treatment* | *Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour* |
| *T80* | *Boiler* | *Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour* |

| *PROCESS CODE* | *PROCESS* | *APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY* |
|---|---|---|
| *T81* | *Cement Kiln* | *Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per \Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour* |
| *T82* | *Lime Kiln* | |
| *T83* | *Aggregate Kiln* | |
| *T84* | *Phosphate Kiln* | |
| *T85* | *Coke Oven* | |
| *T86* | *Blast Furnace* | |
| *T87* | *Smelting, Melting, Or Refining Furnace* | |
| *T88* | *Titanium Dioxide Chloride Oxidation Reactor* | |
| *T89* | *Methane Reforming Furnace* | *Gallons Per Day; Liters Per Day, Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day, Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour, Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour* |
| *T90* | *Pulping Liquor Recovery Furnace* | |
| *T91* | *Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid* | |
| *T92* | *Halogen Acid Furnaces* | |
| *T93* | *Other Industrial Furnaces Listed in 40 CFR §260.10* | |
| *T94* | *Containment Building - Treatment* | *Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day, Metric Tons Per Hour, or Million Btu Per Hour* |
| | *Miscellaneous (Subpart X):* | |
| *X01* | *Open Burning/Open Detonation* | *Any Unit of Measure Listed Below* |
| *X02* | *Mechanical Processing* | *Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day* |
| *X03* | *Thermal Unit* | *Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour* |
| *X04* | *Geologic Repository* | *Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters* |
| *X99* | *Other Subpart X* | *Any Unit Measure Listed Below* |

| *UNIT OF MEASURE* | *UNIT OF MEASURE CODE* |
|---|---|
| *Gallons* | *G* |
| *Gallons Per Hour* | *E* |
| *Gallons Per Day* | *U* |
| *Liters* | *L* |
| *Liters Per Hour* | *H* |
| *Liters Per Day* | *V* |

| *UNIT OF MEASURE* | *UNIT OF MEASURE CODE* |
|---|---|
| *Short Tons Per Hour* | *D* |
| *Metric Tons Per Hour* | *W* |
| *Short Tons Per Day* | *N* |
| *Metric Tons Per Day* | *S* |
| *Pounds Per Hour* | *J* |
| *Kilograms Per Hour* | *R* |
| *Million Btu Per Hour* | *X* |

| *UNIT OF MEASURE* | *UNIT OF MEASURE CODE* |
|---|---|
| *Cubic Yards* | *Y* |
| *Cubic Meters* | *C* |
| *Acres* | *B* |
| *Acre-feet* | *A* |
| *Hectares* | *Q* |
| *Hectare-meter* | *F* |
| *Btu Per Hour* | *I* |

| **EPA ID Number** (*Enter from page 1*) | | | | | | | | | | | | **Secondary ID Number** *(Enter from page 1)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | M | T | 3 | 6 | 0 | 0 | 1 | 0 | 3 | 4 | 2 | |

## XII. Process Codes and Design Capacities *(Continued)*

***EXAMPLE FOR COMPLETING ITEM XII (shown in line number X-1 below): A facility has a storage tank, which can hold 533,788 gallons***

| *Line Number* | | *A. Process Code* *(From list above)* | | | *B. PROCESS DESIGN CAPACITY* 1. Amount *(Specify)* | *B. PROCESS DESIGN CAPACITY* 2. Unit Of Measure *(Enter code)* | *C. Process Total Number Of Units* | *For Official Use Only* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *X* | *1* | *S* | *0* | *2* | *5 3 3 , 7 7 8* | *G* | *0 0 1* | | | | | | |
| | *1* | | N | A | | | | | | | | | |
| | *2* | | | | | | | | | | | | |
| | *3* | | | | . | | | | | | | | |
| | *4* | | | | . | | | | | | | | |
| | *5* | | | | . | | | | | | | | |
| | *6* | | | | . | | | | | | | | |
| | *7* | | | | . | | | | | | | | |
| | *8* | | | | . | | | | | | | | |
| | *9* | | | | . | | | | | | | | |
| *1* | *0* | | | | . | | | | | | | | |
| *1* | *1* | | | | . | | | | | | | | |

***NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, tanking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in item XIII.***

## XIII. Other Processes *(Follow instructions from item XII for D99, S99, T04 and X99 process codes)*

| *Line Number* *(Enter #s in seg w/XII)* | | *A. Process Code* *(From list above)* | | | *B. PROCESS DESIGN CAPACITY* 1. Amount *(Specify)* | *B. PROCESS DESIGN CAPACITY* 2. Unit Of Measure *(Enter code)* | *C. Process Total Number Of Units* | *D. Description Of Process* |
|---|---|---|---|---|---|---|---|---|
| *X* | *1* | *T* | *0* | *4* | . | | | *In-situ Vitrification* |
| | *1* | | N | A | . | | | |
| | *2* | | | | . | | | |
| | *3* | | | | . | | | |
| | *4* | | | | . | | | |

**EPA ID Number (*Enter from page 1*)** **Secondary ID Number *(Enter from page 1)***

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N | M | T | 3 | 6 | 0 | 0 | 1 | 0 | 3 | 4 | 2 |

## XIV. Description of Hazardous Wastes

A. **EPA HAZARDOUS WASTE NUMBER** - ***Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.***

B. **ESTIMATED ANNUAL QUANTITY** - ***For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. for each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.***

C. **UNIT OF MEASURE** - ***For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:***

| *ENGLISH UNIT OF MEASURE* | *CODE* | *METRIC UNIT OF MEASURE* | *CODE* |
|---|---|---|---|
| *POUNDS* | *P* | *KILOGRAMS* | *K* |
| *TONS* | *T* | *METRIC TONS* | *M* |

***If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.***

D. **PROCESSES**

1. **PROCESS CODES:**

***For listed hazardous waste: for each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.***

***For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.***

***NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:***

1. ***Enter the first two as described above.***
2. ***Enter “000” in the extreme right box of item XIV-D(1).***
3. ***Use additional sheet, enter line number from previous sheet, and enter additional code(s) in item XIV-E.***

2. **PROCESS DESCRIPTION:** ***If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).***

***NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:***

1. ***Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.***

2. ***In column A of the next line enter the other EPA Hazardous Waste Number that can be sued to describe the waste. In column D(2) on that line enter “included with above” and make no other entries on that line.***

3. ***Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.***

***EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.***

| ***Line Number*** | | ***A. EPA HAZARD WASTE NO. (Enter code)*** | | | | ***B. ESTIMATED ANNUAL QUANTITY OF WASTE*** | ***C. UNIT OF MEASURE (Enter code)*** | ***D. PROCESS*** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | ***(1) PROCESS CODES (Enter)*** | | | | | | | | | ***(2) PROCESS DESCRIPTION (If a code is not entered in D(1))*** |
| ***X*** | ***1*** | ***K*** | ***0*** | ***5*** | ***4*** | ***900*** | ***p*** | ***T*** | ***0*** | ***3*** | ***D*** | ***8*** | ***0*** | | | | |
| ***X*** | ***2*** | ***D*** | ***0*** | ***0*** | ***2*** | ***400*** | ***P*** | ***T*** | ***0*** | ***3*** | ***D*** | ***8*** | ***0*** | | | | |
| ***X*** | ***3*** | ***D*** | ***0*** | ***0*** | ***1*** | ***100*** | ***P*** | ***T*** | ***0*** | ***3*** | ***D*** | ***8*** | ***0*** | | | | |
| ***X*** | ***4*** | ***D*** | ***0*** | ***0*** | ***2*** | | | | | | | | | | | | **Included With Above** |

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GSA No. 0248-EPA-OT

| **EPA ID Number (*Enter from page 1*)** | **Secondary ID Number *(Enter from page 1)*** |
|---|---|
| N M T 3 6 0 0 1 0 3 4 2 | |

**XIV. Description of Hazardous Wastes *(Continued; use additional sheets as necessary)***

| *Line Number* | *A. EPA Hazard Waste No. (Enter code)* | *B. Estimated Annual Quantity of Waste* | *C. Unit of Measure (Enter code)* | *D. PROCESS* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (Enter code)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 1 | F 0 0 1 | NA | NA | N A | | | NA |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 1 0 | | | | | | | |
| 1 1 | | | | | | | |
| 1 2 | | | | | | | |
| 1 3 | | | | | | | |
| 1 4 | | | | | | | |
| 1 5 | | | | | | | |
| 1 6 | | | | | | | |
| 1 7 | | | | | | | |
| 1 8 | | | | | | | |
| 1 9 | | | | | | | |
| 2 0 | | | | | | | |
| 2 1 | | | | | | | |
| 2 2 | | | | | | | |
| 2 3 | | | | | | | |
| 2 4 | | | | | | | |
| 2 5 | | | | | | | |
| 2 6 | | | | | | | |
| 2 7 | | | | | | | |
| 2 8 | | | | | | | |
| 2 9 | | | | | | | |
| 3 0 | | | | | | | |
| 3 1 | | | | | | | |
| 3 2 | | | | | | | |

**EPA ID Number** (*Enter from page 1*)

N M T 3 6 0 0 1 0 3 4 2

**Secondary ID Number** (*Enter from page 1*)

## XV. Map

***Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.***

## XVI. Facility Drawing

***All existing facilities must include a scale drawing of the facility (See instructions for more detail).***

## XVII. Photographs

***All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).***

## XVIII. Certification(s)

***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.***

Owner Signature

Date Signed

Name and Official Title (Type or print)
John Hale, Technical Project Manager, PNM Person Generating Station

Owner Signature

Date Signed

Name and Official Title (Type or print)

Operator Signature

Date Signed

Name and Official Title (Type or print)

Operator Signature

Date Signed

Name and Official Title (Type or print)

## XIX. Comments

The topographical map and other related maps and photographs of the facility are provided with the Part B application corresponding to this Part A application.

***Note: Mail completed form to the appropriate EPA Regional or State Office. (Refer to instructions for more information)***

# Person Generating Station
## Post-Closure Care Cost Estimate for 2008

| Line Item | Description | Cost |
|---|---|---|
| 1a | Annual Inspections, Program Administration/Reporting, GW Sampling Program (through 2011)-See Detail 1a | $ 45,110.00 |
| 1b | Additional Sampling to Demonstrate Attainment of Compliance Levels - See Detail 1b | $ 48,990.00 |
| 2 | Non-Recurring Permit Related Costs for 2008 - Additional Permit Activities-See Detail 2 | $ 40,200.00 |
| 2a | Future NMED Permit Fees, Associated PNM Labor and Contractor Costs - See Detail 2a | $ 123,980.00 |
| 3 | Groundwater Remediation Program - Additional Equipment Costs - See Detail 3 | $ 20,000.00 |
| 4 | Groundwater Remediation Program - Annual Operation and Maintenance Costs - See Detail 4 | $ 60,500.00 |
| 5 | Estimated Cost for 20th Year (2008) of Permit (line items 1a+2+4) | $ 145,810.00 |
| 6 | Cost for Next 4 Years of PC Period (2008 - 2011): 3*(line 1a) + line 1b + line 2a + line 3 + 2*(line 4) + line 5 | $ 595,110.00 |

Date of Cost Estimate: 6/5/2007

Notes:
1. Estimate is based on the assumption that all key wells will achieve cleanup levels by the spring of 2008. Therefore, an additional three years of semiannual monitoring will be conducted followed by one year of semiannual monitoring with the GWTS offline.
2. Line item 2 is based on an early permit renewal application to be submitted to the NMED in 2007.
3. All labor costs are calculated at $85 per hour.

# Detail 1
# Annual Inspections, Program Administration/ Reporting, GW Sampling Program (Through 2011)

## DETAIL 1a

| Line Item | Description | Labor or Unit Rate | Hrs/Item or 1 Unit | Items Per Year | Annual Cost ($) | Group Subtotal |
|---|---|---|---|---|---|---|
| | **Inspections** | | | | | |
| 1 | Security Fence Inspection | $85.00 | 1 | 2 | $ 170.00 | |
| | | | | | | |
| | **Program Administration/Reporting** | | | | | |
| 2 | Administrative Activities, Meetings, and Regulatory Contact | $ 85.00 | 80 | 1 | $ 6,800.00 | |
| 3 | Annual Data Report and Other Reports Preparation | $ 85.00 | 120 | 1 | $ 10,200.00 | |
| 4 | Miscellaneous Costs: Copies, Supplies, Reference Materials, Etc. | $ 1,000.00 | 1 | 1 | $ 1,000.00 | |
| | Subtotal: | | | | | $ 18,170.00 |
| | | | | | | |
| | **GW Sampling Program (10 wells)** | | | | | |
| 5 | Preparation - Equipment Checkout, Planning, and Set-Up | $ 85.00 | 8 | 2 | $ 1,360.00 | |
| 6 | Water Level Measurements (2 operators, 10 wells) | $ 85.00 | 8 | 2 | $ 1,360.00 | |
| 7 | Sampling of 9 Wells (2 operators) | $ 85.00 | 13 | 2 | $ 2,210.00 | |
| 8 | Sampling of PSMW-7R for Appendix IX 1/yr (2 operators) | $ 85.00 | 2 | 1 | $ 170.00 | |
| 9 | Data Review/Evaluation | $ 85.00 | 32 | 2 | $ 5,440.00 | |
| 10 | Administration | $ 85.00 | 24 | 2 | $ 4,080.00 | |
| 11 | Well Replacement/Maintenance (assume 0.5 well replaced/yr) | $ 5,000.00 | 1 | 1 | $ 5,000.00 | |
| 12 | Sampling Supplies and Equipment | $ 500.00 | 1 | 2 | $ 1,000.00 | |
| 13 | Lab Analysis (8260 x 12) | $ 105.00 | 12 | 2 | $ 2,520.00 | |
| 14 | Lab Analysis (App. IX x 1) | $ 1,800.00 | 1 | 1 | $ 1,800.00 | |
| 15 | Non-Labor Costs: Vehicles, Gas Cylinders, and Miscellaneous | $ 1,000.00 | 1 | 2 | $ 2,000.00 | |
| | Subtotal: | | | | | $ 26,940.00 |
| | | | | | | |
| | **Detail 1a Total:** | | | | | $ 45,110.00 |

## DETAIL 1b

| Line Item | Description | Labor or Unit Rate | Hrs/item or 1 Unit | Items Per Year | Annual Cost ($) | Group Subtotal |
|---|---|---|---|---|---|---|
| | **Additional Sampling To Demonstrate Attainment** | | | | | |
| | **of Compliance Levels** | | | | | |
| | | | | | | |
| 17 | Detail 1a Total | | | | $ 45,110.00 | |
| 18 | Water Level Measurements (2 operators, 4 wells) | $ 85.00 | 4 | 2 | $ 680.00 | |
| 19 | Sampling of PSMW-17, 18, 22, and 27 (2 operators) | $ 85.00 | 8 | 2 | $ 1,360.00 | |
| | Lab Analysis (8260 X 4) | $ 105.00 | 4 | 2 | $ 840.00 | |
| 20 | Non-Labor Costs: Vehicles, Gas Cylinders, and Miscellaneous | $ 500.00 | 1 | 2 | $ 1,000.00 | |
| | | | | | | |
| | **Detail 1b Total:** | | | | | $ 48,990.00 |

Notes:

Assumed Average Labor Rate For All Hourly Activities: $85

Once the three-year compliance period has been achieved in all wells, the GWTS will be shutdown for one year. All key wells will be sampled semiannually during the one-year shutdown period (PSMW-07R will still be sampled for Appendix IX constituents once per year). Additional key wells to be sampled during this shutdown period are PSMW-17, 18, 22, and 27.

| Key Well Group | Number | Average Hr/Well | Total Hrs |
|---|---|---|---|
| 1R, 7R, 8A, 10, 13A, 17, 18, 22, 27 | 9 | 1.0 | 9.0 |
| EW-1, VEW, EW-2, EW-3, EW-4 | 5 | 0.5 | 2.5 |
| Totals: | 14 | | 11.5 |

## Detail 2

## Non-Recurring Permit Related Costs For 2008

| Line Item | Description | Labor or Unit Rate | Hrs/Item or 1 Unit | Items Per Year | Annual Cost ($) | Group Subtotal |
|---|---|---|---|---|---|---|
| | **Major Permit Activities to be Completed in 2008** | | | | | |
| 1 | NMED Permit Renewal Fee (Early Permit Renewal Application) | | 1 | 1 | $ - | |
| 2 | PNM Labor for Permit Renewal | $ 85.00 | 120 | 1 | $ 10,200.00 | |
| 3 | Contractor Labor for Permit Renewal | $ 20,000.00 | 1 | 1 | $ 20,000.00 | |
| 4 | Miscellaneous - Non-Labor Costs | $ 10,000.00 | 1 | 1 | $ 10,000.00 | |
| | | | | | | |
| | **Detail 2 Total:** | | | | | $ 40,200.00 |

Notes:
Assumed Average Labor Rate For All Hourly Activities: $85
In 2007, an early permit renewal application will be submitted to the NMED.

# Detail 2a
# Future NMED Permit Fees

The estimate below is based on the current NMED fee structure and an assumed number of actions over the life of the permit.

| Activity | Number | Fee | Total for this Activity | Group Subtotal |
|---|---|---|---|---|
| Class I Modifications | 3 | $ 2,500.00 | $ 7,500.00 | |
| Class II Modifications | 2 | $ 6,000.00 | $ 12,000.00 | |
| Class III Modifications | 1 | $ 40,000.00 | $ 40,000.00 | |
| Annual NMED PC Business Fee | 4 | $ 4,000.00 | $ 16,000.00 | |
| Hearing Fees | 1 | $ 20,000.00 | $ 20,000.00 | |
| | | | | $ 95,500.00 |

| Other Costs | Labor/Unit Rate | Hrs/Item or 1 Unit | Total for this Activity | Group Subtotal |
|---|---|---|---|---|
| Labor for Class I Mods (24hr x 3) | 85 | $ 72.00 | $ 6,120.00 | |
| Labor for Class II Mods (48hr x 2) | 85 | $ 96.00 | $ 8,160.00 | |
| Labor for Class III Mods (120hr x 1) | 85 | $ 120.00 | $ 10,200.00 | |
| Contractor Labor for PC Certification | 4000 | $ 1.00 | $ 4,000.00 | |
| | | | | 28480 |

**Detail 2a Total:** $ 123,980.00

# Detail 3

## Groundwater Remediation Program - Additional Equipment Costs

| Line Item | Description | Labor or Unit Rate | Hrs/Item or 1 Unit | Items Per Year | Annual Cost ($) |
|---|---|---|---|---|---|
| 1 | Additional/Replacement Extraction Well | $ 15,000.00 | 1 | 1 | $ 15,000.00 |
| 2 | Engineering Design/Piping and Trenching | $ 5,000.00 | 1 | 1 | $ 5,000.00 |
| | for Future Extraction Well | | | | |
| | Detail 3 Total: | | | | $ 20,000.00 |

Notes:
Assumed Average Labor Rate For All Hourly Activities: $85

# Detail 4

## Groundwater Remediation Program - Annual Operation and Maintenance Costs

| Line Item | Description | Labor or Unit Rate | Hrs/Item or 1 Unit | Items Per Year | Annual Cost ($) | Group Subtotal ($) |
|---|---|---|---|---|---|---|
| | **Groundwater Treatment System - Operation** | | | | | |
| 1 | Utilities | $ 300.00 | 1 | 12 | $ 3,600.00 | |
| 2 | Compliance Sampling - 8260 Analysis, 5/month | $ 105.00 | 5 | 12 | $ 6,300.00 | |
| 4 | Compliance Sampling - Labor | $ 85.00 | 3 | 12 | $ 3,060.00 | |
| 5 | Routine Inspections | $ 85.00 | 1 | 26 | $ 2,210.00 | |
| 6 | Data Review and Evaluation | $ 85.00 | 2 | 12 | $ 2,040.00 | |
| 7 | Compliance Reporting | $ 85.00 | 6 | 2 | $ 1,020.00 | |
| 8 | Administration | $ 85.00 | 16 | 1 | $ 1,360.00 | |
| 9 | Training | $ 1,500.00 | 1 | 1 | $ 1,500.00 | |
| 10 | Miscellaneous (carbon, chemicals, and supplies) | $ 3,500.00 | 1 | 6 | $ 21,000.00 | |
| | | | | | | $ 42,090.00 |

| Line Item | Description | Labor or Unit Rate | Hrs/Item or 1 Unit | Items Per Year | Annual Cost ($) | Group Subtotal ($) |
|---|---|---|---|---|---|---|
| | **Groundwater Treatment System - Maintenance** | | | | | |
| 11 | Routine Maintenance - Labor | $ 85.00 | 8 | 12 | $ 8,160.00 | |
| 12 | Routine Maintenance - Equipment, Parts, Etc. | $10,000.00 | 1 | 1 | $ 10,000.00 | |
| 13 | Training | $ 250.00 | 1 | 1 | $ 250.00 | |
| | | | | | | $ 18,410.00 |

**Detail 4 Total:** $ 60,500.00

Notes:
Assumed Average Labor Rate For All Hourly Activities: $85

# ASSOCIATED ELECTRIC & GAS INSURANCE SERVICES LIMITED

Endorsement No. 7 Effective Date of Endorsement June 1, 2006

Attached to and forming part of POLICY No. X2558A1A06

NAMED INSURED PNM Resources, Inc.

It is understood and agreed that this POLICY is hereby amended as indicated. All other terms and conditions of this POLICY remain unchanged.

## HAZARDOUS WASTE FACILITY LIABILITY (RCRA) ENDORSEMENT

1. This Endorsement certifies that the POLICY to which the endorsement is attached provides liability insurance covering BODILY INJURY and PROPERTY DAMAGE in connection with the INSURED'S obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at the locations identified in Section 3 for sudden and nonsudden accidental OCCURRENCE(S). The limits of liability are $4,000,000 each OCCURRENCE/$8,000,000 annual aggregate, exclusive of legal defense costs.

2. The insurance afforded with respect to such OCCURRENCE(S) is subject to all of the terms and conditions of the POLICY; provided, however, that any provisions of the POLICY inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

   (a) Bankruptcy or insolvency of the INSURED shall not relieve the Insurer of its obligations under the POLICY to which this endorsement is attached.

   (b) The Insurer is liable for the payment of amounts within any deductible applicable to the POLICY, with a right of reimbursement by the INSURED for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147 (f) or 265.147 (f).

   (c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the POLICY and all endorsements.

   (d) Cancellation of this Endorsement, whether by the Insurer, the INSURED, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) are located.

   (e) Any other termination of this Endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

3.

| Name of Covered Location | Address | EPA ID Number |
|---|---|---|
| Albuquerque Service Center | 4201 Edith – N.E.<br>Albuquerque, NM 87107 | NMD360010292 |
| Belen Service Center | 19377 Highway 314<br>Belen, NM 87002 | NMD035714989 |

# HAZARDOUS WASTE FACILITY LIABILITY (RCRA) ENDORSEMENT

| Name of Covered Location | Address | EPA ID Number |
|---|---|---|
| Bernalillo Service Center | 385 West Highway 44<br>Bernalillo Service Center<br>Bernalillo, NM 87004 | NMD073394769 |
| Clayton Service Center | 51 Santa Fe Drive<br>Clayton, NM 88415 | NMD116244187 |
| Deming Service Center | 524 North Gold<br>Deming, NM 88030 | NMD035732171 |
| Las Vegas Service Center | 420 Railroad Avenue<br>Las Vegas, NM 87701 | NMD360010318 |
| Valencia Station (L V Gas Turbine) | NW Corner Keen and<br>Valencia St.<br>Las Vegas, NM 87701 | NMD982549248 |
| Reeves Generating Station | 4400 Paseo Generating Station<br>Albuquerque, NM 87113 | NMD360010326 |
| *PCB Storage Facility<br>(40CFR761.65 (b)<br>Reeves Generating Station | 4400 Paseo Generating Station<br>Albuquerque, NM 87113 | NMD986669059<br>(PCB ID) |
| Santa Fe Electric Service Center | 4576 State Road 14<br>Santa Fe, NM 87505 | NMD981611247 |
| San Juan Generating | 6800 County Road<br>Post Office Box 227<br>Waterflow, NM 87421 | NMD069424323 |
| Baca Geothermal Power Plant | Baca Ranch near HWY NM 126<br>La Cueva, NM 87025 | NMT360010300<br>(SOLD) |

# HAZARDOUS WASTE FACILITY LIABILITY (RCRA) ENDORSEMENT

| Name of Covered Location | Address | EPA ID Number |
|---|---|---|
| Clayton Division (OLD) | 320 S. 1st Avenue<br>Clayton, NM 88415<br>(Sold 3/31/87) | NMD980874374<br>(SOLD) |
| Las Vegas Srfc Water Filter Plant | 3 Mi N. of Las Vegas Hot Springs<br>Las Vegas, NM87701<br>(sold 7/15/87) | NMD000804252<br>(SOLD) |
| Las Vegas Service Center (Old) | Twelfth & Columbia Street<br>Las Vegas, NM 87701 | NMD035764646<br>(SOLD) |
| Person Generating Stations | Broadway Blvd. & Rio Bravo Rd.<br>Albuquerque, NM 87105 | NMT360010342<br>(SHUTDOWN) |
| Prager Generating Station | N. Twelfth St. AT I-40<br>Albuquerque, NM 87102 | NMD006975395<br>(SHUTDOWN) |
| Santa Fe Service Center (Old) | Felipe St. Near Cerillos Rd.<br>Santa Fe, NM 87501 | NMD360010334<br>(SHUTDOWN) |
| Santa Fe Generating Station | Felipe St. Near Cerillos Rd.<br>Santa Fe, NM 87501 | NMD035792753<br>(SHUTDOWN) |
| Santa Fe Baca Street Well | Near Baca Street NW ¼, SE ¼<br>526 T7N R9E, Santa Fe | NM9886682185<br>(SOLD) |
| Santa Fe Surface Water Treatment Plant | End of Upper Canyon Road<br>Santa Fe, NM 87505 | NMD000804260<br>(SOLD) |
| Aztec/LaPlata Field Office | 1299 Hwy 574<br>LA Plata, NM 87410 | NMD986675379<br>(SOLD) |

# HAZARDOUS WASTE FACILITY LIABILITY (RCRA) ENDORSEMENT

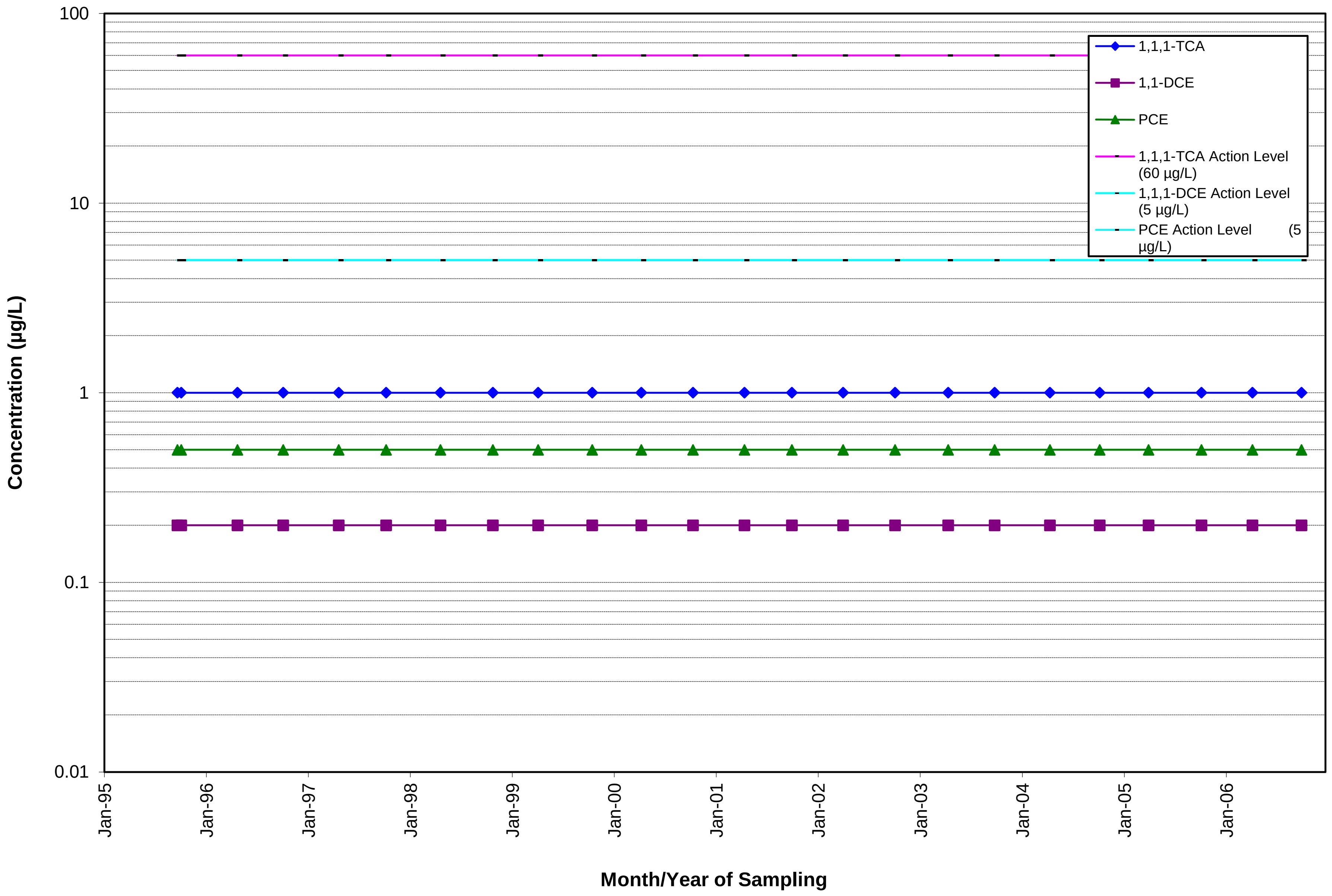
| Name of Covered Location | Address | EPA ID Number |
|---|---|---|
| Kutz Gas Processing Plant | 2.5 miles SE of Bloomfield<br>County Road 4980<br>Bloomfield, NM | NMD986676005<br>(SOLD) |
| Lybrook Gas Processing Plant | Hwy 44 Milepost 100.1<br>Lybrook, NM | NMD986675411<br>(SOLD) |
| West Kutz Gas Compressor | Highway 44 milepost 12<br>Bloomfield, NM | NMD986675379<br>(SOLD) |

Attached to and forming part of POLICY No. X2558A1A06 issued by Associated Electric & Gas Insurance Services Limited herein called the Insurer of Hamilton Bermuda to PNM Resources, Inc. this 1st day June, 2006. The effective date of said POLICY is the 1st day of June, 2006.

I hereby certify that the wording of this Endorsement is identical of the wording specified in 40 CFR 264.151 (i) as such regulation was constituted on the date first above written and the Insurer is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

AEGIS Insurance Services, Inc.,
Authorized Representative of:
Associated Electric & Gas Insurance Services Limited
1 Meadowlands Plaza
East Rutherford, New Jersey 07073

Signature of Authorized Representative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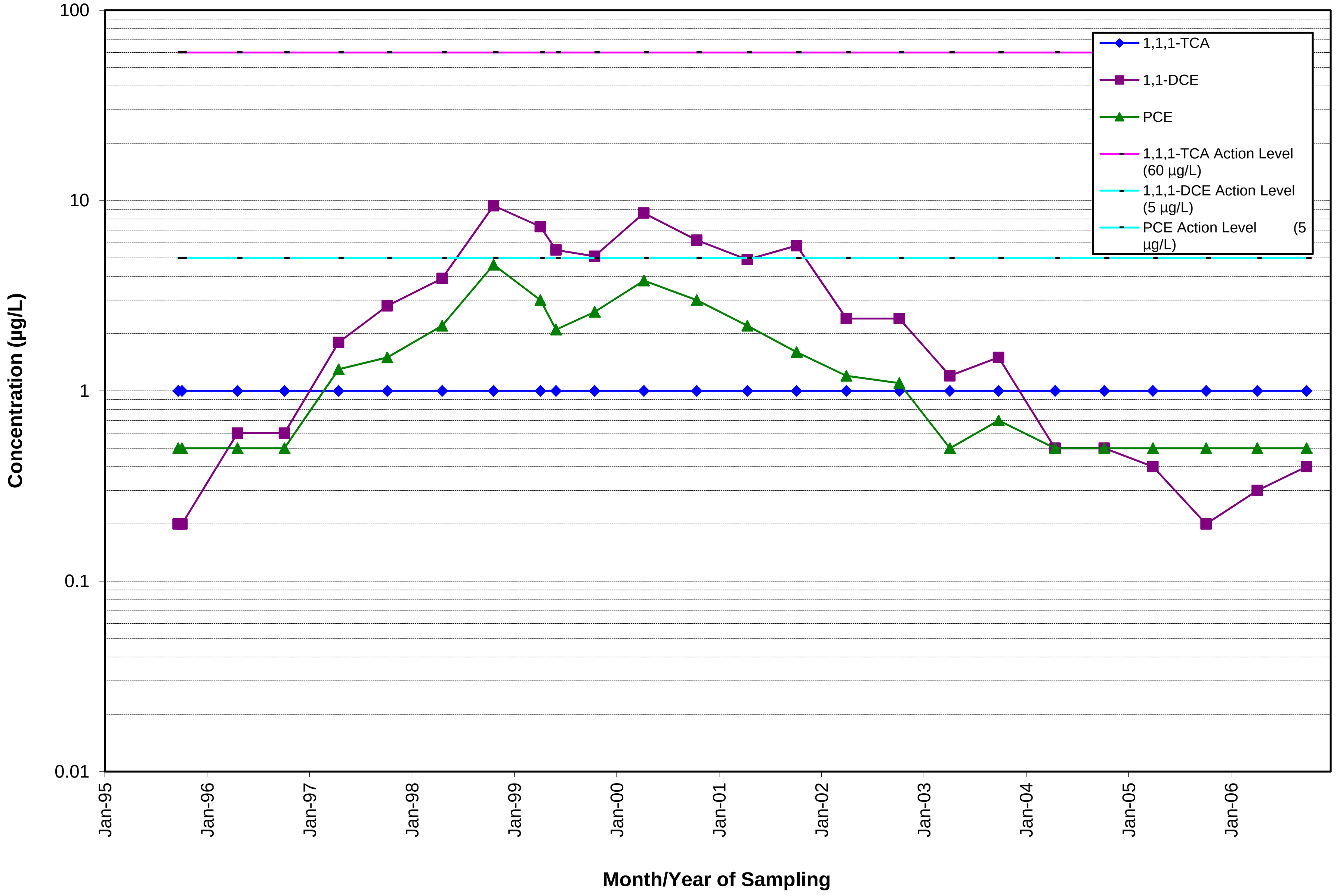
10
1
0.1
0.01
Concentration (µg/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Month/Year of Sampling
1,1,1-TCA
1,1-DCE
PCE
1,1,1-TCA Action Level (60 µg/L)
1,1,1-DCE Action Level (5 µg/L)
PCE Action Level (5 µg/L)


100
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Concentration (µg/L)
Jan-95
Jan-96
Jan-97
Jan-98
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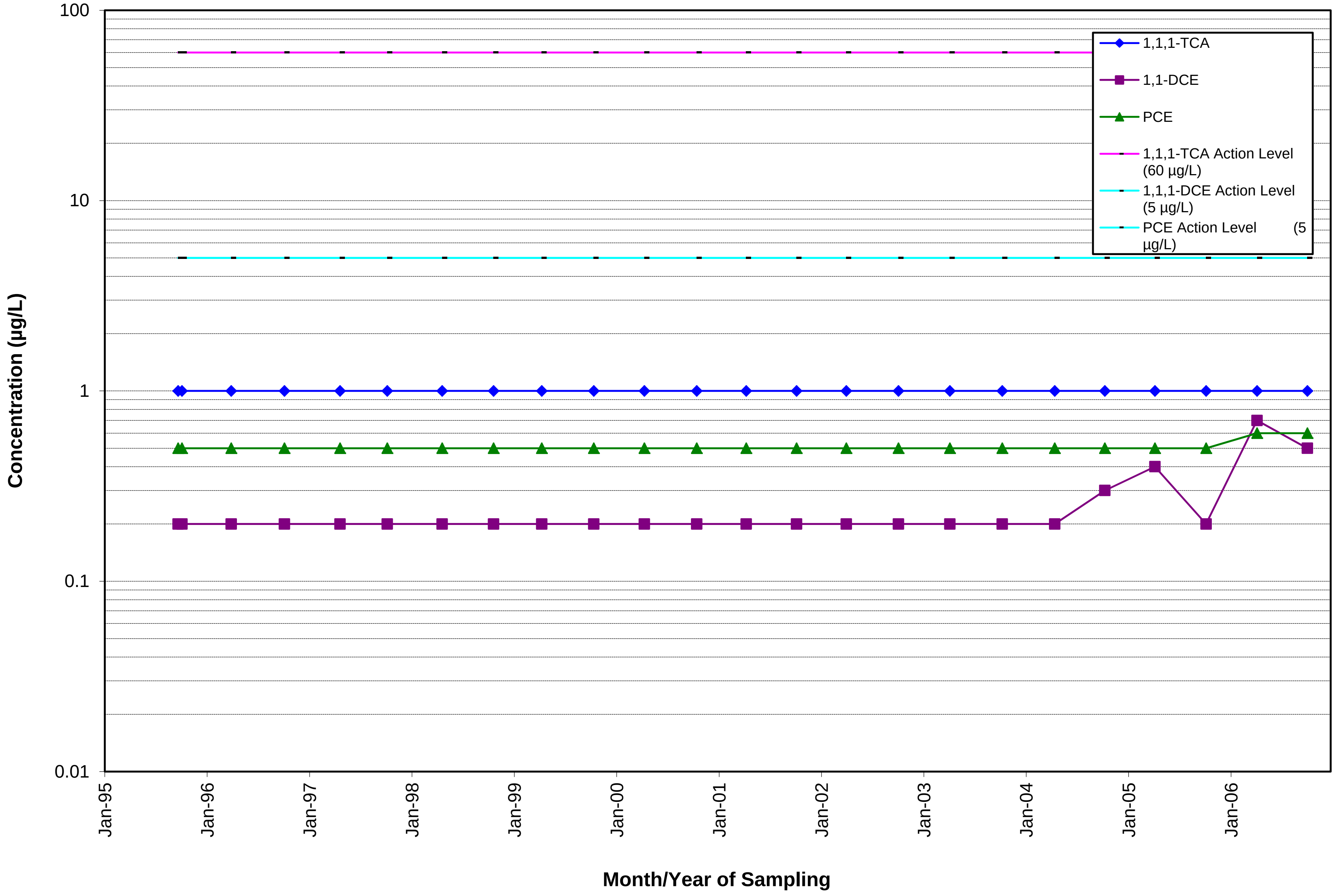
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Month/Year of Sampling
1,1,1-TCA
1,1-DCE
PCE
1,1,1-TCA Action Level (60 µg/L)
1,1,1-DCE Action Level (5 µg/L)
PCE Action Level (5 µg/L)


100
10
1
0.1
0.01
Concentration (µg/L)
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Month/Year of Sampling
1,1,1-TCA
1,1-DCE
PCE
1,1,1-TCA Action Level (60 µg/L)
1,1,1-DCE Action Level (5 µg/L)
PCE Action Level (5 µg/L)

|  | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA (Original)** | **1,1-DCE (Original)** | **PCE (Original)** | **1,1,1-TCA (R)** | **1,1-DCE (R)** | **PCE (R)** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 2 | PSMW-01 & 01R | Jan-92 | 115 | 106 | 450 |  |  |  | 60 | 5 | 5 |
| 3 | PSMW-01 & 01R | May-92 | 100 | 90 | 450 |  |  |  | 60 | 5 | 5 |
| 4 | PSMW-01 & 01R | Aug-92 | 140 | 91 | 520 |  |  |  | 60 | 5 | 5 |
| 5 | PSMW-01 & 01R | Nov-92 | 100 | 89 | 490 |  |  |  | 60 | 5 | 5 |
| 6 | PSMW-01 & 01R | Feb-93 | 120 | 92 | 560 |  |  |  | 60 | 5 | 5 |
| 7 | PSMW-01 & 01R | Apr-93 | 78 | 65 | 670 |  |  |  | 60 | 5 | 5 |
| 8 | PSMW-01 & 01R | Aug-93 | 25 | 21 | 350 |  |  |  | 60 | 5 | 5 |
| 9 | PSMW-01 & 01R | Jan-93 |  |  |  | 21 | 29 | 100 | 60 | 5 | 5 |
| 10 | PSMW-01 & 01R | Feb-93 |  |  |  | 38 | 39 | 190 | 60 | 5 | 5 |
| 11 | PSMW-01 & 01R | Apr-93 |  |  |  | 37 | 43 | 220 | 60 | 5 | 5 |
| 12 | PSMW-01 & 01R | Apr-93 |  |  |  | 36 | 70 | 150 | 60 | 5 | 5 |
| 13 | PSMW-01 & 01R | Aug-93 |  |  |  | 46 | 52 | 210 | 60 | 5 | 5 |
| 14 | PSMW-01 & 01R | Nov-93 |  |  |  | 28 | 46 | 180 | 60 | 5 | 5 |
| 15 | PSMW-01 & 01R | Nov-93 |  |  |  | 27 | 46 | 180 | 60 | 5 | 5 |
| 16 | PSMW-01 & 01R | Feb-94 |  |  |  | 29 | 42 | 180 | 60 | 5 | 5 |
| 17 | PSMW-01 & 01R | Feb-94 |  |  |  | 31 | 44 | 180 | 60 | 5 | 5 |
| 18 | PSMW-01 & 01R | Apr-94 |  |  |  | 31 | 39 | 210 | 60 | 5 | 5 |
| 19 | PSMW-01 & 01R | Apr-94 |  |  |  | 27 | 45 | 200 | 60 | 5 | 5 |
| 20 | PSMW-01 & 01R | Nov-94 |  |  |  | 13 | 38 | 100 | 60 | 5 | 5 |
| 21 | PSMW-01 & 01R | Apr-95 |  |  |  | 17 | 39 | 260 | 60 | 5 | 5 |
| 22 | PSMW-01 & 01R | Apr-95 |  |  |  | 25 | 53 | 290 | 60 | 5 | 5 |
| 23 | PSMW-01 & 01R | Nov-95 |  |  |  | 26 | 55 | 270 | 60 | 5 | 5 |
| 24 | PSMW-01 & 01R | Apr-96 |  |  |  | 38 | 63 | 460 | 60 | 5 | 5 |
| 25 | PSMW-01 & 01R | Apr-96 |  |  |  | 50 | 80 | 440 | 60 | 5 | 5 |
| 26 | PSMW-01 & 01R | Nov-96 |  |  |  | 19 | 48 | 210 | 60 | 5 | 5 |
| 27 | PSMW-01 & 01R | Apr-97 |  |  |  | 16 | 39 | 180 | 60 | 5 | 5 |
| 28 | PSMW-01 & 01R | Apr-97 |  |  |  | 12 | 37 | 140 | 60 | 5 | 5 |
| 29 | PSMW-01 & 01R | Oct-97 |  |  |  | 11 | 33 | 88 | 60 | 5 | 5 |
| 30 | PSMW-01 & 01R | Apr-98 |  |  |  | 7.5 | 16 | 53 | 60 | 5 | 5 |
| 31 | PSMW-01 & 01R | Oct-98 |  |  |  | 7.4 | 24 | 56 | 60 | 5 | 5 |
| 32 | PSMW-01 & 01R | Apr-99 |  |  |  | 3.8 | 13 | 35 | 60 | 5 | 5 |
| 33 | PSMW-01 & 01R | Jun-99 |  |  |  | 3.3 | 14 | 38 | 60 | 5 | 5 |
| 34 | PSMW-01 & 01R | Oct-99 |  |  |  | 2.1 | 7.4 | 21 | 60 | 5 | 5 |
| 35 | PSMW-01 & 01R | Apr-00 |  |  |  | 1 | 8.4 | 21 | 60 | 5 | 5 |
| 36 | PSMW-01 & 01R | Oct-00 |  |  |  | 1.1 | 5.8 | 15 | 60 | 5 | 5 |
| 37 | PSMW-01 & 01R | Apr-01 |  |  |  | 1 | 5.9 | 14 | 60 | 5 | 5 |
| 38 | PSMW-01 & 01R | Oct-01 |  |  |  | 1 | 5.3 | 14 | 60 | 5 | 5 |
| 39 | PSMW-01 & 01R | Apr-02 |  |  |  | 1 | 5.7 | 16 | 60 | 5 | 5 |
| 40 | PSMW-01 & 01R | Oct-02 |  |  |  | 1 | 4.6 | 11 | 60 | 5 | 5 |
| 41 | PSMW-01 & 01R | Apr-03 |  |  |  | 1 | 4.1 | 9.4 | 60 | 5 | 5 |
| 42 | PSMW-01 & 01R | Oct-03 |  |  |  | 1 | 3.3 | 7.6 | 60 | 5 | 5 |
| 43 | PSMW-01 & 01R | Apr-04 |  |  |  | 1 | 2.9 | 7.5 | 60 | 5 | 5 |
| 44 | PSMW-01 & 01R | Oct-04 |  |  |  | 1 | 2.6 | 6.7 | 60 | 5 | 5 |
| 45 | PSMW-01 & 01R | Apr-05 |  |  |  | 1 | 1.9 | 6 | 60 | 5 | 5 |
| 46 | PSMW-01 & 01R | Oct-05 |  |  |  | 1 | 1.6 | 7.1 | 60 | 5 | 5 |
| 47 | PSMW-01 & 01R | Apr-06 |  |  |  | 1 | 1.7 | 6 | 60 | 5 | 5 |
| 48 | PSMW-01 & 01R | Oct-06 |  |  |  | 1 | 1.4 | 5 | 60 | 5 | 5 |
| 49 | PSMW-05 & 11 | Jan-92 | 1 | 1 | 1 |  |  |  | 60 | 5 | 5 |
| 50 | PSMW-05 & 11 | May-92 | 1 | 1 | 1 |  |  |  | 60 | 5 | 5 |
| 51 | PSMW-05 & 11 | Aug-92 | 0.2 | 0.2 | 0.3 |  |  |  | 60 | 5 | 5 |
| 52 | PSMW-05 & 11 | Nov-92 | 1 | 1 | 1 |  |  |  | 60 | 5 | 5 |
| 53 | PSMW-05 & 11 | Feb-93 | 0.2 | 0.2 | 0.2 |  |  |  | 60 | 5 | 5 |
| 54 | PSMW-05 & 11 | Apr-93 | 0.2 | 0.2 | 0.4 |  |  |  | 60 | 5 | 5 |
| 55 | PSMW-05 & 11 | Apr-93 | 1 | 1 | 1 |  |  |  | 60 | 5 | 5 |
| 56 | PSMW-05 & 11 | Aug-93 | 0.2 | 0.2 | 1 |  |  |  | 60 | 5 | 5 |
| 57 | PSMW-05 & 11 | Nov-93 | 0.2 | 0.2 | 0.2 |  |  |  | 60 | 5 | 5 |
| 58 | PSMW-05 & 11 | Feb-94 | 0.2 | 0.2 | 0.2 |  |  |  | 60 | 5 | 5 |
| 59 | PSMW-05 & 11 | Apr-94 | 0.2 | 0.2 | 0.2 |  |  |  | 60 | 5 | 5 |
| 60 | PSMW-05 & 11 | Apr-94 | 1 | 1 | 1 |  |  |  | 60 | 5 | 5 |
| 61 | PSMW-05 & 11 | Feb-92 |  |  |  | 1 | 1 | 1 | 60 | 5 | 5 |
| 62 | PSMW-05 & 11 | May-92 |  |  |  | 1 | 1 | 1 | 60 | 5 | 5 |
| 63 | PSMW-05 & 11 | Apr-93 |  |  |  | 0.2 | 0.7 | 0.2 | 60 | 5 | 5 |
| 64 | PSMW-05 & 11 | Nov-93 |  |  |  | 0.2 | 0.2 | 0.2 | 60 | 5 | 5 |
| 65 | PSMW-05 & 11 | Apr-94 |  |  |  | 0.3 | 0.9 | 0.2 | 60 | 5 | 5 |
| 66 | PSMW-05 & 11 | Nov-94 |  |  |  | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 67 | PSMW-05 & 11 | Apr-95 |  |  |  | 1 | 0.3 | 0.5 | 60 | 5 | 5 |

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA (Original)** | **1,1-DCE (Original)** | **PCE (Original)** | **1,1,1-TCA (R)** | **1,1-DCE (R)** | **PCE (R)** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 68 | PSMW-05 & 11 | Nov-95 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 69 | PSMW-05 & 11 | Apr-96 | | | | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 70 | PSMW-05 & 11 | Sep-96 | | | | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 71 | PSMW-05 & 11 | Apr-97 | | | | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 72 | PSMW-05 & 11 | Oct-97 | | | | 1 | 0.8 | 0.5 | 60 | 5 | 5 |
| 73 | PSMW-05 & 11 | Apr-98 | | | | 1 | 1.9 | 0.9 | 60 | 5 | 5 |
| 74 | PSMW-05 & 11 | Oct-98 | | | | 1 | 2.7 | 1.1 | 60 | 5 | 5 |
| 75 | PSMW-05 & 11 | Mar-99 | | | | 1 | 3.4 | 1.5 | 60 | 5 | 5 |
| 76 | PSMW-05 & 11 | Oct-99 | | | | 2.5 | 2.8 | 0.5 | 60 | 5 | 5 |
| 77 | PSMW-05 & 11 | Apr-00 | | | | 1 | 3.5 | 1.6 | 60 | 5 | 5 |
| 78 | PSMW-05 & 11 | Oct-00 | | | | 1.1 | 2.1 | 1.2 | 60 | 5 | 5 |
| 79 | PSMW-05 & 11 | Apr-01 | | | | 1 | 2.1 | 1.7 | 60 | 5 | 5 |
| 80 | PSMW-05 & 11 | Oct-01 | | | | 1 | 1.7 | 1.5 | 60 | 5 | 5 |
| 81 | PSMW-05 & 11 | Apr-02 | | | | 1 | 1.3 | 1.2 | 60 | 5 | 5 |
| 82 | PSMW-05 & 11 | Oct-02 | | | | 1 | 0.6 | 0.8 | 60 | 5 | 5 |
| 83 | PSMW-05 & 11 | Apr-03 | | | | 1 | 0.8 | 1.1 | 60 | 5 | 5 |
| 84 | PSMW-05 & 11 | Oct-03 | | | | 1 | 0.4 | 0.8 | 60 | 5 | 5 |
| 85 | PSMW-05 & 11 | Apr-04 | | | | 1 | 0.4 | 0.9 | 60 | 5 | 5 |
| 86 | PSMW-05 & 11 | Oct-04 | | | | 1 | 0.5 | 0.9 | 60 | 5 | 5 |
| 87 | PSMW-05 & 11 | Apr-05 | | | | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 88 | PSMW-05 & 11 | Oct-05 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 89 | PSMW-05 & 11 | Apr-06 | | | | 1 | 0.2 | 0.9 | 60 | 5 | 5 |
| 90 | PSMW-05 & 11 | Oct-06 | | | | 1 | 0.2 | 0.6 | 60 | 5 | 5 |
| 91 | PSMW-06 & 06R | Jan-92 | 1 | 1 | 4 | | | | 60 | 5 | 5 |
| 92 | PSMW-06 & 06R | May-92 | 1 | 1 | 6 | | | | 60 | 5 | 5 |
| 93 | PSMW-06 & 06R | Aug-92 | 0.2 | 0.9 | 3.5 | | | | 60 | 5 | 5 |
| 94 | PSMW-06 & 06R | Nov-92 | 1 | 1 | 5 | | | | 60 | 5 | 5 |
| 95 | PSMW-06 & 06R | Feb-93 | 0.2 | 0.2 | 5.1 | | | | 60 | 5 | 5 |
| 96 | PSMW-06 & 06R | Apr-93 | 0.3 | 1.2 | 4.8 | | | | 60 | 5 | 5 |
| 97 | PSMW-06 & 06R | Apr-93 | 1 | 1 | 4 | | | | 60 | 5 | 5 |
| 98 | PSMW-06 & 06R | Aug-93 | 0.2 | 0.5 | 4.6 | | | | 60 | 5 | 5 |
| 99 | PSMW-06 & 06R | Nov-93 | 0.2 | 1.4 | 4.6 | | | | 60 | 5 | 5 |
| 100 | PSMW-06 & 06R | Feb-94 | 0.2 | 0.8 | 5.4 | | | | 60 | 5 | 5 |
| 101 | PSMW-06 & 06R | Apr-94 | | | | 0.2 | 0.2 | 0.2 | 60 | 5 | 5 |
| 102 | PSMW-06 & 06R | Apr-94 | | | | 1 | 1 | 1 | 60 | 5 | 5 |
| 103 | PSMW-06 & 06R | Nov-94 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 104 | PSMW-06 & 06R | Apr-95 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 105 | PSMW-06 & 06R | Nov-95 | | | | 1 | 0.2 | 0.6 | 60 | 5 | 5 |
| 106 | PSMW-06 & 06R | Apr-96 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 107 | PSMW-06 & 06R | Nov-96 | | | | 1 | 0.2 | 0.7 | 60 | 5 | 5 |
| 108 | PSMW-06 & 06R | Apr-97 | | | | 1 | 0.2 | 1.4 | 60 | 5 | 5 |
| 109 | PSMW-06 & 06R | Oct-97 | | | | 1 | 0.2 | 0.6 | 60 | 5 | 5 |
| 110 | PSMW-06 & 06R | Apr-98 | | | | 1 | 0.6 | 2 | 60 | 5 | 5 |
| 111 | PSMW-06 & 06R | Oct-98 | | | | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 112 | PSMW-06 & 06R | Apr-99 | | | | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 113 | PSMW-06 & 06R | Oct-99 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 114 | PSMW-06 & 06R | Apr-00 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 115 | PSMW-06 & 06R | Oct-00 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 116 | PSMW-06 & 06R | Apr-01 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 117 | PSMW-06 & 06R | Sep-01 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 118 | PSMW-06 & 06R | Apr-02 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 119 | PSMW-06 & 06R | Oct-02 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 120 | PSMW-06 & 06R | Apr-03 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 121 | PSMW-06 & 06R | Oct-03 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 122 | PSMW-06 & 06R | Apr-04 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 123 | PSMW-06 & 06R | Oct-04 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 124 | PSMW-06 & 06R | Apr-05 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 125 | PSMW-06 & 06R | Oct-05 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 126 | PSMW-06 & 06R | Apr-06 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 127 | PSMW-06 & 06R | Oct-06 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 128 | PSMW-07 & 07R | Jan-92 | 1 | 1 | 1 | | | | 60 | 5 | 5 |
| 129 | PSMW-07 & 07R | May-92 | 1 | 1 | 1 | | | | 60 | 5 | 5 |
| 130 | PSMW-07 & 07R | Aug-92 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |
| 131 | PSMW-07 & 07R | Nov-92 | 1 | 1 | 1 | | | | 60 | 5 | 5 |
| 132 | PSMW-07 & 07R | Feb-93 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |
| 133 | PSMW-07 & 07R | Apr-93 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA (Original)** | **1,1-DCE (Original)** | **PCE (Original)** | **1,1,1-TCA (R)** | **1,1-DCE (R)** | **PCE (R)** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 134 | PSMW-07 & 07R | Apr-93 | 1 | 1 | 1 | | | | 60 | 5 | 5 |
| 135 | PSMW-07 & 07R | Aug-93 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |
| 136 | PSMW-07 & 07R | Nov-93 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |
| 137 | PSMW-07 & 07R | Feb-94 | 0.2 | 0.2 | 1/0/1900 | | | | 60 | 5 | 5 |
| 138 | PSMW-07 & 07R | Apr-94 | 0.2 | 0.2 | 0.2 | | | | 60 | 5 | 5 |
| 139 | PSMW-07 & 07R | Apr-94 | 1 | 1 | 1 | | | | 60 | 5 | 5 |
| 140 | PSMW-07 & 07R | Nov-94 | 1 | 0.2 | 1.5 | | | | 60 | 5 | 5 |
| 141 | PSMW-07 & 07R | Nov-94 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 142 | PSMW-07 & 07R | Apr-95 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 143 | PSMW-07 & 07R | Apr-95 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 144 | PSMW-07 & 07R | Nov-95 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 145 | PSMW-07 & 07R | Apr-96 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 146 | PSMW-07 & 07R | Nov-96 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 147 | PSMW-07 & 07R | Apr-97 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 148 | PSMW-07 & 07R | Oct-97 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 149 | PSMW-07 & 07R | Apr-98 | 1 | 0.2 | 0.5 | | | | 60 | 5 | 5 |
| 150 | PSMW-07 & 07R | Oct-98 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 151 | PSMW-07 & 07R | Apr-99 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 152 | PSMW-07 & 07R | Oct-99 | | | | 1 | 0.2 | 0.05 | 60 | 5 | 5 |
| 153 | PSMW-07 & 07R | Apr-00 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 154 | PSMW-07 & 07R | Oct-00 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 155 | PSMW-07 & 07R | Apr-01 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 156 | PSMW-07 & 07R | Sep-01 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 157 | PSMW-07 & 07R | Apr-02 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 158 | PSMW-07 & 07R | Oct-02 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 159 | PSMW-07 & 07R | Apr-03 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 160 | PSMW-07 & 07R | Oct-03 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 161 | PSMW-07 & 07R | Apr-04 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 162 | PSMW-07 & 07R | Oct-04 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 163 | PSMW-07 & 07R | Apr-05 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 164 | PSMW-07 & 07R | Oct-05 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 165 | PSMW-07 & 07R | Apr-06 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 166 | PSMW-07 & 07R | Oct-06 | | | | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 167 | PSMW-16 & EW-4 | Apr-92 | 6 | 43 | 56 | | | | 60 | 5 | 5 |
| 168 | PSMW-16 & EW-4 | May-92 | 6 | 51 | 67 | | | | 60 | 5 | 5 |
| 169 | PSMW-16 & EW-4 | Apr-93 | 7 | 58 | 93 | | | | 60 | 5 | 5 |
| 170 | PSMW-16 & EW-4 | Apr-93 | 6.4 | 58 | 100 | | | | 60 | 5 | 5 |
| 171 | PSMW-16 & EW-4 | Aug-93 | 10 | 43 | 79 | | | | 60 | 5 | 5 |
| 172 | PSMW-16 & EW-4 | Aug-93 | 9.3 | 49 | 74 | | | | 60 | 5 | 5 |
| 173 | PSMW-16 & EW-4 | Oct-93 | 5 | 55 | 88 | | | | 60 | 5 | 5 |
| 174 | PSMW-16 & EW-4 | Apr-94 | 3.9 | 49 | 79 | | | | 60 | 5 | 5 |
| 175 | PSMW-16 & EW-4 | Apr-94 | 4 | 49 | 77 | | | | 60 | 5 | 5 |
| 176 | PSMW-16 & EW-4 | Oct-94 | 8 | 100 | 130 | | | | 60 | 5 | 5 |
| 177 | PSMW-16 & EW-4 | Apr-95 | 5.3 | 64 | 150 | | | | 60 | 5 | 5 |
| 178 | PSMW-16 & EW-4 | Oct-95 | 3.7 | 31 | 66 | | | | 60 | 5 | 5 |
| 179 | PSMW-16 & EW-4 | Apr-96 | 5.1 | 50 | 120 | | | | 60 | 5 | 5 |
| 180 | PSMW-16 & EW-4 | Oct-96 | 1 | 35 | 91 | | | | 60 | 5 | 5 |
| 181 | PSMW-16 & EW-4 | Apr-97 | 3.1 | 36 | 85 | | | | 60 | 5 | 5 |
| 182 | PSMW-16 & EW-4 | Oct-97 | 2.2 | 17 | 77 | | | | 60 | 5 | 5 |
| 183 | PSMW-16 & EW-4 | Apr-98 | 2.2 | 25 | 63 | | | | 60 | 5 | 5 |
| 184 | PSMW-16 & EW-4 | Oct-98 | 3 | 39 | 100 | | | | 60 | 5 | 5 |
| 185 | PSMW-16 & EW-4 | Apr-99 | 2.1 | 31 | 92 | | | | 60 | 5 | 5 |
| 186 | PSMW-16 & EW-4 | Jun-99 | 1.7 | 24 | 73 | | | | 60 | 5 | 5 |
| 187 | PSMW-16 & EW-4 | Oct-99 | 2.1 | 22 | 76 | | | | 60 | 5 | 5 |
| 188 | PSMW-16 & EW-4 | Apr-02 | | | | 1 | 5.9 | 7.6 | 60 | 5 | 5 |
| 189 | PSMW-16 & EW-4 | Oct-02 | | | | 1 | 5.3 | 6.6 | 60 | 5 | 5 |
| 190 | PSMW-16 & EW-4 | Apr-03 | | | | 1 | 4.4 | 5.1 | 60 | 5 | 5 |
| 191 | PSMW-16 & EW-4 | Apr-04 | | | | 1 | 3.3 | 4.1 | 60 | 5 | 5 |
| 192 | PSMW-16 & EW-4 | Oct-04 | | | | 1 | 3 | 4.2 | 60 | 5 | 5 |
| 193 | PSMW-16 & EW-4 | Apr-05 | | | | 1 | 2.5 | 3.9 | 60 | 5 | 5 |
| 194 | PSMW-16 & EW-4 | Oct-06 | | | | | | | 60 | 5 | 5 |
| 195 | PSMW-16 & EW-4 | Apr-06 | | | | 1 | 2.1 | 2.1 | 60 | 5 | 5 |
| 196 | PSMW-16 & EW-4 | Oct-06 | | | | 1 | 2.8 | 3.4 | 60 | 5 | 5 |
| 197 | PSMW-24 & EW-5 | Sep-92 | 1 | 14 | 13 | | | | 60 | 5 | 5 |
| 198 | PSMW-24 & EW-5 | Oct-92 | 1 | 16 | 16 | | | | 60 | 5 | 5 |
| 199 | PSMW-24 & EW-5 | Apr-93 | 0.4 | 15 | 15 | | | | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA (Original)** | **1,1-DCE (Original)** | **PCE (Original)** | **1,1,1-TCA (R)** | **1,1-DCE (R)** | **PCE (R)** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 200 | PSMW-24 & EW-5 | Aug-93 | 0.4 | 14 | 15 |  |  |  | 60 | 5 | 5 |
| 201 | PSMW-24 & EW-5 | Oct-93 | 0.2 | 15 | 13 |  |  |  | 60 | 5 | 5 |
| 202 | PSMW-24 & EW-5 | Apr-94 | 0.6 | 15 | 11 |  |  |  | 60 | 5 | 5 |
| 203 | PSMW-24 & EW-5 | Oct-94 | 1 | 42 | 19 |  |  |  | 60 | 5 | 5 |
| 204 | PSMW-24 & EW-5 | Apr-95 | 1 | 34 | 27 |  |  |  | 60 | 5 | 5 |
| 205 | PSMW-24 & EW-5 | Apr-95 | 1 | 37 | 27 |  |  |  | 60 | 5 | 5 |
| 206 | PSMW-24 & EW-5 | Oct-95 | 1 | 34 | 37 |  |  |  | 60 | 5 | 5 |
| 207 | PSMW-24 & EW-5 | Mar-96 | 1 | 30 | 35 |  |  |  | 60 | 5 | 5 |
| 208 | PSMW-24 & EW-5 | Oct-96 | 1 | 34 | 4 |  |  |  | 60 | 5 | 5 |
| 209 | PSMW-24 & EW-5 | Apr-97 | 1 | 48 | 64 |  |  |  | 60 | 5 | 5 |
| 210 | PSMW-24 & EW-5 | Oct-97 | 1 | 27 | 56 |  |  |  | 60 | 5 | 5 |
| 211 | PSMW-24 & EW-5 | Apr-98 | 1 | 29 | 41 |  |  |  | 60 | 5 | 5 |
| 212 | PSMW-24 & EW-5 | Oct-98 | 1 | 19 | 22 |  |  |  | 60 | 5 | 5 |
| 213 | PSMW-24 & EW-5 | Apr-99 | 1 | 25 | 32 |  |  |  | 60 | 5 | 5 |
| 214 | PSMW-24 & EW-5 | Oct-99 | 1 | 17 | 25 |  |  |  | 60 | 5 | 5 |
| 215 | PSMW-24 & EW-5 | Apr-02 |  |  |  | 1 | 7.1 | 9 | 60 | 5 | 5 |
| 216 | PSMW-24 & EW-5 | Oct-02 |  |  |  | 1 | 6.7 | 8.8 | 60 | 5 | 5 |
| 217 | PSMW-24 & EW-5 | Apr-03 |  |  |  | 1 | 7.1 | 8.3 | 60 | 5 | 5 |

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 2 | 17-800 | Sep-93 | 0.2 | 0.2 | 0.2 | 60 | 5 | 5 |
| 3 | 17-800 | Nov-93 | 0.2 | 0.2 | 0.2 | 60 | 5 | 5 |
| 4 | 17-800 | Feb-94 | 0.2 | 0.2 | 0.2 | 60 | 5 | 5 |
| 5 | 17-800 | Oct-94 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 6 | 17-800 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 7 | 17-800 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 8 | 17-800 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 9 | 17-800 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 10 | 17-800 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 11 | 17-800 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 12 | 17-800 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 13 | 17-800 | Oct-98 | 1.5 | 0.2 | 0.5 | 60 | 5 | 5 |
| 14 | 17-800 | Apr-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 15 | 17-800 | Sep-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 16 | 17-800 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 17 | 17-800 | Sep-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 18 | 17-800 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 19 | 17-800 | Sep-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 20 | 17-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 21 | 17-800 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 22 | 17-800 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 23 | 17-800 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 24 | 17-800 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 25 | 17-800 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 26 | 17-800 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 27 | 17-800 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 28 | 17-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 29 | 17-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 30 | 19-500 | Feb-94 | 0.2 | 15 | 7.4 | 60 | 5 | 5 |
| 31 | 19-500 | Apr-94 | 0.3 | 16 | 6.7 | 60 | 5 | 5 |
| 32 | 19-500 | Oct-94 | 1 | 26 | 9.8 | 60 | 5 | 5 |
| 33 | 19-500 | Oct-94 | 1 | 29 | 10 | 60 | 5 | 5 |
| 34 | 19-500 | Apr-95 | 1 | 15 | 7.8 | 60 | 5 | 5 |
| 35 | 19-500 | Oct-95 | 1 | 5.9 | 3 | 60 | 5 | 5 |
| 36 | 19-500 | Oct-95 | 1 | 6.1 | 3.2 | 60 | 5 | 5 |
| 37 | 19-500 | Apr-96 | 1 | 5.6 | 2.9 | 60 | 5 | 5 |
| 38 | 19-500 | Apr-96 | 1 | 5.4 | 2.8 | 60 | 5 | 5 |
| 39 | 19-500 | Sep-96 | 1 | 3.8 | 1.9 | 60 | 5 | 5 |
| 40 | 19-500 | Apr-97 | 0.4 | 5.1 | 2.2 | 60 | 5 | 5 |
| 41 | 19-500 | Sep-97 | 1 | 3.9 | 0.7 | 60 | 5 | 5 |
| 42 | 19-500 | Apr-98 | 1 | 3.7 | 1.6 | 60 | 5 | 5 |
| 43 | 19-500 | Oct-98 | 1 | 4.1 | 1.4 | 60 | 5 | 5 |
| 44 | 19-500 | Apr-99 | 1 | 3.6 | 1.2 | 60 | 5 | 5 |
| 45 | 19-500 | Oct-99 | 1 | 2.2 | 0.7 | 60 | 5 | 5 |
| 46 | 19-500 | Mar-00 | 1.2 | 2.9 | 1.2 | 60 | 5 | 5 |
| 47 | 19-500 | Oct-00 | 1 | 2.5 | 1 | 60 | 5 | 5 |
| 48 | 19-500 | Apr-01 | 1 | 2.5 | 1.1 | 60 | 5 | 5 |
| 49 | 19-500 | Nov-01 | 1 | 0.9 | 0.5 | 60 | 5 | 5 |
| 50 | 19-500 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 51 | 19-500 | Oct-02 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 52 | 19-500 | Apr-03 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 53 | 19-500 | Oct-03 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 54 | 19-500 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 55 | 19-500 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 56 | 19-500 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 57 | 19-500 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 58 | 19-500 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 59 | 19-500 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 60 | 19-800 | Apr-93 | 0.2 | 4.7 | 2.5 | 60 | 5 | 5 |
| 61 | 19-800 | Apr-93 | 0.2 | 3.7 | 2.1 | 60 | 5 | 5 |
| 62 | 19-800 | Sep-93 | 0.2 | 7.7 | 5.4 | 60 | 5 | 5 |
| 63 | 19-800 | Feb-94 | 0.2 | 1.4 | 0.7 | 60 | 5 | 5 |
| 64 | 19-800 | Mar-94 | 0.4 | 0.6 | 1 | 60 | 5 | 5 |
| 65 | 19-800 | Oct-94 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 66 | 19-800 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 67 | 19-800 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 68 | 19-800 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 69 | 19-800 | Sep-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 70 | 19-800 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 71 | 19-800 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 72 | 19-800 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 73 | 19-800 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 74 | 19-800 | Apr-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 75 | 19-800 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 76 | 19-800 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 77 | 19-800 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 78 | 19-800 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 79 | 19-800 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 80 | 19-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 81 | 19-800 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 82 | 19-800 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 83 | 19-800 | Dec-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 84 | 19-800 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 85 | 19-800 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 86 | 19-800 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 87 | 19-800 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 88 | 19-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 89 | 19-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 90 | 21-500 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 91 | 21-500 | May-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 92 | 21-500 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 93 | 21-500 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 94 | 21-500 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 95 | 21-500 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 96 | 21-500 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 97 | 21-500 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 98 | 21-500 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 99 | 21-500 | Mar-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 100 | 21-500 | Sep-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 101 | 21-500 | Mar-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 102 | 21-500 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 103 | 21-500 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 104 | 21-500 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 105 | 21-500 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 106 | 21-500 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 107 | 21-500 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 108 | 21-500 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 109 | 21-500 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 110 | 21-500 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 111 | 21-500 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 112 | 21-500 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 113 | 21-500 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 114 | 21-500 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 115 | 21-800 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 116 | 21-800 | May-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 117 | 21-800 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 118 | 21-800 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 119 | 21-800 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 120 | 21-800 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 121 | 21-800 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 122 | 21-800 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 123 | 21-800 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 124 | 21-800 | Mar-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 125 | 21-800 | Sep-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 126 | 21-800 | Mar-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 127 | 21-800 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 128 | 21-800 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 129 | 21-800 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 130 | 21-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 131 | 21-800 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 132 | 21-800 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 133 | 21-800 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 134 | 21-800 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 135 | 21-800 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 136 | 21-800 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 137 | 21-800 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 138 | 21-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 139 | 21-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 140 | 22-800 | Apr-93 | 0.2 | 1.5 | 0.9 | 60 | 5 | 5 |
| 141 | 22-800 | Apr-93 | 0.2 | 1.6 | 1 | 60 | 5 | 5 |
| 142 | 22-800 | Sep-93 | 0.2 | 2.1 | 3 | 60 | 5 | 5 |
| 143 | 22-800 | Feb-94 | 0.2 | 2.3 | 0.6 | 60 | 5 | 5 |
| 144 | 22-800 | Mar-94 | 0.2 | 0.6 | 1.2 | 60 | 5 | 5 |
| 145 | 22-800 | Oct-94 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 146 | 22-800 | Apr-95 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 147 | 22-800 | Oct-95 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 148 | 22-800 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 149 | 22-800 | Oct-96 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 150 | 22-800 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 151 | 22-800 | Oct-97 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 152 | 22-800 | Apr-98 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 153 | 22-800 | Oct-98 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 154 | 22-800 | Apr-99 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 155 | 22-800 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 156 | 22-800 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 157 | 22-800 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 158 | 22-800 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 159 | 22-800 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 160 | 22-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 161 | 22-800 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 162 | 22-800 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 163 | 22-800 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 164 | 22-800 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 165 | 22-800 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 166 | 22-800 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 167 | 22-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 168 | 22-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 169 | 24-400 | Dec-94 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 170 | 24-400 | Feb-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 171 | 24-400 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 172 | 24-400 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 173 | 24-400 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 174 | 24-400 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 175 | 24-400 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 176 | 24-400 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 177 | 24-400 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 178 | 24-400 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 179 | 24-400 | Apr-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 180 | 24-400 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 181 | 24-400 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 182 | 24-400 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 183 | 24-400 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 184 | 24-400 | Sep-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 185 | 24-400 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 186 | 24-400 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 187 | 24-400 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 188 | 24-400 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 189 | 24-400 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 190 | 24-400 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 191 | 24-400 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 192 | 24-400 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 193 | 24-400 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 194 | 24-400 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 195 | 24-500 | Dec-94 | 1 | 17 | 7.4 | 60 | 5 | 5 |
| 196 | 24-500 | Feb-95 | 1 | 9.8 | 6.6 | 60 | 5 | 5 |
| 197 | 24-500 | Apr-95 | 1 | 12 | 6.5 | 60 | 5 | 5 |
| 198 | 24-500 | Oct-95 | 1 | 17 | 9.9 | 60 | 5 | 5 |
| 199 | 24-500 | Oct-95 | 1 | 16 | 8.9 | 60 | 5 | 5 |
| 200 | 24-500 | Apr-96 | 1 | 13 | 8 | 60 | 5 | 5 |
| 201 | 24-500 | Apr-96 | 1 | 12 | 7.9 | 60 | 5 | 5 |
| 202 | 24-500 | Oct-96 | 1 | 15 | 7.9 | 60 | 5 | 5 |
| 203 | 24-500 | Oct-96 | 1 | 15 | 8.2 | 60 | 5 | 5 |
| 204 | 24-500 | Apr-97 | 1 | 13 | 7.1 | 60 | 5 | 5 |
| 205 | 24-500 | Oct-97 | 1 | 14 | 4 | 60 | 5 | 5 |
| 206 | 24-500 | Apr-98 | 1 | 6.1 | 3.5 | 60 | 5 | 5 |
| 207 | 24-500 | Oct-98 | 1 | 8.7 | 4 | 60 | 5 | 5 |
| 208 | 24-500 | Apr-99 | 1 | 4.6 | 2.9 | 60 | 5 | 5 |
| 209 | 24-500 | Oct-99 | 1 | 4 | 2.4 | 60 | 5 | 5 |
| 210 | 24-500 | Apr-00 | 1 | 4.1 | 2.4 | 60 | 5 | 5 |
| 211 | 24-500 | Oct-00 | 1 | 3 | 2 | 60 | 5 | 5 |
| 212 | 24-500 | Apr-01 | 1 | 2.5 | 1.6 | 60 | 5 | 5 |
| 213 | 24-500 | Oct-01 | 1 | 2.4 | 2.1 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 214 | 24-500 | Apr-02 | 1 | 1.1 | 1.2 | 60 | 5 | 5 |
| 215 | 24-500 | Oct-02 | 1 | 2.1 | 1.6 | 60 | 5 | 5 |
| 216 | 24-500 | Apr-03 | 1 | 1.3 | 1.1 | 60 | 5 | 5 |
| 217 | 24-500 | Oct-03 | 1 | 1.7 | 1.3 | 60 | 5 | 5 |
| 218 | 24-500 | Apr-04 | 1 | 1.2 | 1 | 60 | 5 | 5 |
| 219 | 24-500 | Oct-04 | 1 | 1.9 | 1.3 | 60 | 5 | 5 |
| 220 | 24-500 | Apr-05 | 1 | 1 | 0.5 | 60 | 5 | 5 |
| 221 | 24-500 | Oct-05 | 1 | 1.9 | 1.4 | 60 | 5 | 5 |
| 222 | 24-500 | Apr-06 | 1 | 1.4 | 1.1 | 60 | 5 | 5 |
| 223 | 24-500 | Oct-06 | 1 | 1.9 | 0.8 | 60 | 5 | 5 |
| 224 | 24-600 | Dec-94 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 225 | 24-600 | Feb-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 226 | 24-600 | Apr-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 227 | 24-600 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 228 | 24-600 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 229 | 24-600 | Oct-96 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 230 | 24-600 | Apr-97 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 231 | 24-600 | Oct-97 | 1 | 0.2 | 0.6 | 60 | 5 | 5 |
| 232 | 24-600 | Apr-98 | 1 | 0.7 | 0.7 | 60 | 5 | 5 |
| 233 | 24-600 | Oct-98 | 1 | 1.2 | 0.7 | 60 | 5 | 5 |
| 234 | 24-600 | Apr-99 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 235 | 24-600 | Oct-99 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 236 | 24-600 | Apr-00 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 237 | 24-600 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 238 | 24-600 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 239 | 24-600 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 240 | 24-600 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 241 | 24-600 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 242 | 24-600 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 243 | 24-600 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 244 | 24-600 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 245 | 24-600 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 246 | 24-600 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 247 | 24-600 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 248 | 24-600 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 249 | 24-600 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 250 | 24-800 | Dec-94 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 251 | 24-800 | Feb-95 | 1 | 0.9 | 0.5 | 60 | 5 | 5 |
| 252 | 24-800 | Apr-95 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 253 | 24-800 | Oct-95 | 1 | 1.1 | 0.8 | 60 | 5 | 5 |
| 254 | 24-800 | Apr-96 | 1 | 3.1 | 1.8 | 60 | 5 | 5 |
| 255 | 24-800 | Oct-96 | 1 | 3.4 | 1.8 | 60 | 5 | 5 |
| 256 | 24-800 | Apr-97 | 1 | 1.7 | 2.2 | 60 | 5 | 5 |
| 257 | 24-800 | Oct-97 | 1 | 5.4 | 2.5 | 60 | 5 | 5 |
| 258 | 24-800 | Apr-98 | 1 | 1.1 | 0.7 | 60 | 5 | 5 |
| 259 | 24-800 | Oct-98 | 1 | 3.5 | 1.5 | 60 | 5 | 5 |
| 260 | 24-800 | Apr-99 | 1 | 1.4 | 0.5 | 60 | 5 | 5 |
| 261 | 24-800 | Oct-99 | 1 | 1.4 | 0.6 | 60 | 5 | 5 |
| 262 | 24-800 | Apr-00 | 1 | 0.8 | 0.6 | 60 | 5 | 5 |
| 263 | 24-800 | Oct-00 | 1 | 1.8 | 0.9 | 60 | 5 | 5 |
| 264 | 24-800 | Apr-01 | 1 | 1.1 | 0.7 | 60 | 5 | 5 |
| 265 | 24-800 | Oct-01 | 1 | 1.5 | 0.5 | 60 | 5 | 5 |
| 266 | 24-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 267 | 24-800 | Oct-02 | 1 | 0.8 | 0.5 | 60 | 5 | 5 |
| 268 | 24-800 | Apr-03 | 1 | 0.7 | 0.5 | 60 | 5 | 5 |
| 269 | 24-800 | Oct-03 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 270 | 24-800 | Apr-04 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 271 | 24-800 | Oct-04 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 272 | 24-800 | Apr-05 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 273 | 24-800 | Oct-05 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 274 | 24-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 275 | 24-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 276 | 25-500 | Feb-95 | 1 | 1 | 3 | 60 | 5 | 5 |
| 277 | 25-500 | Mar-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 278 | 25-500 | May-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 279 | 25-500 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 280 | 25-500 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 281 | 25-500 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 282 | 25-500 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 283 | 25-500 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 284 | 25-500 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 285 | 25-500 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 286 | 25-500 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 287 | 25-500 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 288 | 25-500 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 289 | 25-500 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 290 | 25-500 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 291 | 25-500 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 292 | 25-500 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 293 | 25-500 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 294 | 25-500 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 295 | 25-500 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 296 | 25-500 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 297 | 25-500 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 298 | 25-500 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 299 | 25-500 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 300 | 25-500 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 301 | 25-500 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 302 | 25-800 | Feb-95 | 1 | 1 | 3 | 60 | 5 | 5 |
| 303 | 25-800 | Mar-95 | 1 | 0.4 | 0.6 | 60 | 5 | 5 |
| 304 | 25-800 | May-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 305 | 25-800 | Oct-95 | 1 | 0.7 | 0.7 | 60 | 5 | 5 |
| 306 | 25-800 | Apr-96 | 1 | 0.9 | 0.7 | 60 | 5 | 5 |
| 307 | 25-800 | Oct-96 | 1 | 0.6 | 0.7 | 60 | 5 | 5 |
| 308 | 25-800 | Apr-97 | 1 | 0.6 | 0.6 | 60 | 5 | 5 |
| 309 | 25-800 | Oct-97 | 1 | 0.9 | 0.6 | 60 | 5 | 5 |
| 310 | 25-800 | Apr-98 | 1 | 0.6 | 0.8 | 60 | 5 | 5 |
| 311 | 25-800 | Oct-98 | 1 | 0.9 | 0.8 | 60 | 5 | 5 |
| 312 | 25-800 | Apr-99 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 313 | 25-800 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 314 | 25-800 | Apr-00 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 315 | 25-800 | Oct-00 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 316 | 25-800 | Apr-01 | 1 | 0.3 | 0.7 | 60 | 5 | 5 |
| 317 | 25-800 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 318 | 25-800 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 319 | 25-800 | Apr-03 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 320 | 25-800 | Oct-03 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 321 | 25-800 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 322 | 25-800 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 323 | 25-800 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 324 | 25-800 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 325 | 25-800 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 326 | 25-800 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 327 | 27-400 | Sep-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 328 | 27-400 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 329 | 27-400 | Apr-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 330 | 27-400 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 331 | 27-400 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 332 | 27-400 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 333 | 27-400 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 334 | 27-400 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 335 | 27-400 | Apr-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 336 | 27-400 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 337 | 27-400 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 338 | 27-400 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 339 | 27-400 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 340 | 27-400 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 341 | 27-400 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 342 | 27-400 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 343 | 27-400 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 344 | 27-400 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 345 | 27-400 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 346 | 27-400 | Oct-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 347 | 27-400 | Apr-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 348 | 27-400 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 349 | 27-400 | Apr-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 350 | 27-400 | Oct-06 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 351 | 27-500 | Sep-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 352 | 27-500 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 353 | 27-500 | Apr-96 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 354 | 27-500 | Oct-96 | 1 | 0.6 | 0.5 | 60 | 5 | 5 |
| 355 | 27-500 | Apr-97 | 1 | 1.8 | 1.3 | 60 | 5 | 5 |
| 356 | 27-500 | Oct-97 | 1 | 2.8 | 1.5 | 60 | 5 | 5 |
| 357 | 27-500 | Apr-98 | 1 | 3.9 | 2.2 | 60 | 5 | 5 |
| 358 | 27-500 | Oct-98 | 1 | 9.4 | 4.6 | 60 | 5 | 5 |
| 359 | 27-500 | Apr-99 | 1 | 7.3 | 3 | 60 | 5 | 5 |
| 360 | 27-500 | Jun-99 | 1 | 5.5 | 2.1 | 60 | 5 | 5 |
| 361 | 27-500 | Oct-99 | 1 | 5.1 | 2.6 | 60 | 5 | 5 |
| 362 | 27-500 | Apr-00 | 1 | 8.6 | 3.8 | 60 | 5 | 5 |
| 363 | 27-500 | Oct-00 | 1 | 6.2 | 3 | 60 | 5 | 5 |
| 364 | 27-500 | Apr-01 | 1 | 4.9 | 2.2 | 60 | 5 | 5 |
| 365 | 27-500 | Oct-01 | 1 | 5.8 | 1.6 | 60 | 5 | 5 |
| 366 | 27-500 | Apr-02 | 1 | 2.4 | 1.2 | 60 | 5 | 5 |
| 367 | 27-500 | Oct-02 | 1 | 2.4 | 1.1 | 60 | 5 | 5 |
| 368 | 27-500 | Apr-03 | 1 | 1.2 | 0.5 | 60 | 5 | 5 |
| 369 | 27-500 | Oct-03 | 1 | 1.5 | 0.7 | 60 | 5 | 5 |
| 370 | 27-500 | Apr-04 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 371 | 27-500 | Oct-04 | 1 | 0.5 | 0.5 | 60 | 5 | 5 |
| 372 | 27-500 | Apr-05 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |

|  | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | **Well ID** | **DATE** | **1,1,1-TCA** | **1,1-DCE** | **PCE** | **1,1,1-TCA Action Level (60 µg/L)** | **1,1,1-DCE Action Level (5 µg/L)** | **PCE Action Level (5 µg/L)** |
| 373 | 27-500 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 374 | 27-500 | Apr-06 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 375 | 27-500 | Oct-06 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 376 | 27-600 | Sep-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 377 | 27-600 | Oct-95 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 378 | 27-600 | Mar-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 379 | 27-600 | Oct-96 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 380 | 27-600 | Apr-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 381 | 27-600 | Oct-97 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 382 | 27-600 | Apr-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 383 | 27-600 | Oct-98 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 384 | 27-600 | Apr-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 385 | 27-600 | Oct-99 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 386 | 27-600 | Apr-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 387 | 27-600 | Oct-00 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 388 | 27-600 | Apr-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 389 | 27-600 | Oct-01 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 390 | 27-600 | Apr-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 391 | 27-600 | Oct-02 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 392 | 27-600 | Apr-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 393 | 27-600 | Oct-03 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 394 | 27-600 | Apr-04 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 395 | 27-600 | Oct-04 | 1 | 0.3 | 0.5 | 60 | 5 | 5 |
| 396 | 27-600 | Apr-05 | 1 | 0.4 | 0.5 | 60 | 5 | 5 |
| 397 | 27-600 | Oct-05 | 1 | 0.2 | 0.5 | 60 | 5 | 5 |
| 398 | 27-600 | Apr-06 | 1 | 0.7 | 0.6 | 60 | 5 | 5 |
| 399 | 27-600 | Oct-06 | 1 | 0.5 | 0.6 | 60 | 5 | 5 |

***TO VIEW THE VIDEO THAT ACCOMPANIES THIS DOCUMENT, PLEASE CALL THE HAZARDOUS WASTE BUREAU AT 505-476-6000 TO MAKE AN APPOINTMENT***