AUSTIN COMMUNITY LANDFILL
A WASTE MANAGEMENT COMPANY

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January 15, 2001

Ms. Ada Lichaa, Team Leader
MC 124
MSW Permits Section
Waste Permits Division
Texas Natural Resource Conservation Commission
P.O. Box 13087
Austin, Texas 78711-3087

Subject: Solid Waste - Travis County
Austin Community Landfill - Permit No. MSW 249C
Response to TNRCC Comment Letter dated October 12, 2000 Regarding
Human Risk Evaluation Report, Closed Industrial Waste Unit

Dear Ms. Lichaa;

On behalf of Waste Management of Texas, Inc. (WMTX), I am pleased to submit this letter in response to a letter from the Texas Natural Resource Conservation Commission (TNRCC) dated October 12, 2000 regarding a review of a report prepared by JD Consulting, L.P., entitled *"Human Health Risk Evaluation Report, Closed Industrial Waste Unit, Austin Community Landfill"* dated July 24, 2000. This response corresponds with TNRCC Tracking Numbers 2978 and 4016. The comments provided by the TNRCC are included below followed by our response for ease of review by TNRCC staff.

TNRCC Comments, Risk Evaluation Report:

1. *Austin Community Landfill (ACL) eliminated exposure pathways to soil and groundwater beneath the industrial waste unit since the landfill itself prevents exposure to soil and to the groundwater directly beneath the landfill. A competent existing physical control which prevents the release of chemicals from soils to groundwater above the Protective Concentrations Level (PCL) is in accordance with TRRP (§ 350.71(d)). Please be aware that if it became necessary to incorporate the existing physical control as a Remedy Standard B response action, ACL would have to meet all of the associated performance, institutional control, and post-response action care requirements, including financial assurance for that physical control.*

   Response: The JDC risk assessment described in the *Human Health Risk Evaluation Report* concluded that the conditions at Austin Community Landfill (ACL) meet the

performance requirements for protection of human health and the environment under the TRRP. The risk assessment was a voluntary action and was conducted following the technical requirements for the determination of Protective Concentration Levels (PCLs) and the procedures for the comparison of chemical concentrations to PCLs that are found in the TRRP rule. The report was not intended to meet all of the administrative requirements of the TRRP rule.

2. *Although ACL did not consider the cumulative check when determining Tier 1 PCLs as in accordance with the TRRP, the reported concentrations were well below PCLs, making any cumulative effects unlikely to occur.*

Response: We agree with the TNRCC comment that cumulative effects are unlikely to occur since the reported concentrations were well below PCLs.

TNRCC Comments, Site Investigation Report:

3. *A discrepancy exists between the text, the IWU Waste Analytical Data tables (Appendix C), and Figure 2-1 Boring and Well Location Map regarding the south disposal area (SDA) sampling program. Text Section 2.2.3 Fluids Monitoring indicates that three fluid samples were collected in the SDA from three Geoprobe borings. Figure 2-1 shows fluid sample collection took place at two locations, GP99-31 and B99-33. Analytical results were not provided for one of the locations, B99-33, in the Analytical Data tables. Similarly, the tables do not include results for waste sample B99-32, also shown on Figure 2-1. Please verify the SDA industrial waste and fluid sample locations.*

Response: From the probes installed within the south disposal area (SDA), only solid waste and/or soil samples were collected for laboratory analysis from GeoProbes GP-99-29, GP-99-30, GP-99-31, and GP-99-20. One solid waste sample was collected for analysis from boring B-32. One solid waste sample and one fluid waste sample were collected for analysis from boring B-33. Therefore, only one fluid waste sample was collected from the SDA from boring B-33. The report text Section 2.2.3 has been corrected to reflect the actual analytical testing program implemented for the project. Figure 2-1 has also been corrected to reflect the collection of only one fluid sample from the SDA.

Analytical data from the solid waste sample collected from boring B-32 and the solid and fluid waste samples collected from boring B-33 were inadvertently excluded from the IWU Waste Analytical Data Table provided in Appendix C. Results from the analysis of these three samples are included in the enclosed corrected table which replaces the current IWU Waste Analytical Data Table in Appendix C.

4. *Please provide the surveyed elevations for ground surface at all geoprobes, borings, piezometers, and investigation wells, and top-of-casing elevations for any installations used for the collection of fluid-level measurements.*

Response: A copy of a site map and summary table provided by Martin Survey Associates, Inc. is attached that provides the requested survey data.

5. *Please provide one copy of the laboratory analytical sheets for all analytical results.*

Response: WMTX has requested that the laboratory produce one copy of the analytical reports for submittal to the TNRCC. This information will be forwarded to the TNRCC upon receipt from the laboratory.

I apologize for the delay in providing this response to TNRCC comments. Please do not hesitate to contact me at telephone number (512) 272-6221 in Austin or Michael Caldwell at (225) 658-7570 with any questions or comments you may have.

Sincerely,
Waste Management of Texas, Inc.

Rusty Fusilier

Rusty Fusilier, P.E.
District Engineer

RF:rf/mc
Enclosures

cc w/o enclosures: Marcos Elizondo, WMTX
Ric Green, WMTX

ATTACHMENT A

Site Investigation Report
Closed Industrial Waste Unit
Austin Community Landfill
Austin, Texas

Prepared by:

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ThermoRetec Project Number: WASMN-04198-500

Prepared for:

Waste Management of Texas
9900 Giles Lane
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July 24, 2000

WM-012985

Contents

Table of Contents

Table of Contents

List of Tables

List of Figures

Section 1

1 Introduction

This report presents the results of investigation activities conducted by ThermoRetec Consulting Corporation (ThermoRetec) on behalf of Waste Management of Texas (WM), at the Closed Industrial Waste Unit of the Austin Community Landfill (ACL).

The investigation was performed in accordance with an Investigation Work Plan prepared by ThermoRetec, dated August 4, 1999, and an Addendum to Investigation Work Plan- Closed Industrial Waste Unit of the ACL, dated November 3, 1999.

The Work Plan presented a field investigation program to gather additional information required to assess current and future risk presented by the IWU and to evaluate potential remedial options for the IWU. Preparation and revision of the Work Plan was conducted with the involvement of the Texas Natural Resource Conservation Commission (TNRCC) and the surrounding residents.

1.1 Investigation Objectives

The objectives of the field investigation were to obtain the necessary data needed to evaluate the following:

- fluids quality within the IWU;
- evaluate the limits of the waste;
- the potential for migration of constituents away from the IWU;
- potential human health risks associated with the IWU; and
- potential remedial options for the IWU.

The field investigation consisted of three components including a subsurface fluids investigation, a soil and waste investigation, and a storm water and sediments investigation. Specific activities conducted during the field investigation include:

- fluid monitoring, sampling and analysis;
- hydraulic conductivity testing;
- soil borings for evaluation of limits of the waste;
- soil boring\investigation well installation;
- waste material sampling and analysis; and
- storm water and sediment sampling and analysis.

1.2 Site Background and History

As shown on Figure 1-1, the ACL facility is located east of Austin in Travis County. The current ACL facility is a 290-acre municipal solid waste landfill. Disposal cells have been constructed on 216 acres of the facility and an additional 74 acres are permitted for future landfill expansion. Figure 1-1 also shows the layout of the landfill and the surrounding area. Two other landfills are located adjacent to the ACL, the closed Travis County landfill located south of the ACL, and a facility operated by Browning Ferris Industries located north of the ACL.

Table 1-1 presents a summary of some of the significant events in the history of the ACL. As shown on the table, a 108 acre portion of the ACL was first opened as a sanitary landfill by Universal Disposal in 1970.

Starting early in 1971, the 10.36 acre IWU, was used for the disposal of wastes reported to include spent acids, spent caustics, spent solvents, paint residues, industrial process water, and waste hydrocarbons. Figure 1-3 shows areas of known or suspected industrial waste management activities. Bulk liquids were disposed of in four, 10-foot deep, diked, in situ clay ponds. Pond No. 1, with an approximate capacity of 206,000 gallons was reportedly used for the disposal of spent solvents and paint residues. Pond No. 2, with an approximate capacity of 270,000 gallons, was reportedly used for the disposal of spent acids (principally sulfuric and hydrochloric acids) which were neutralized periodically with spent caustics or lime. Pond No. 3, with an approximate capacity of 472,000 gallons, was reported to have been the disposal site of industrial process wash water. Pond No. 4, the largest of the ponds with an approximate capacity of 840,000 gallons, was reported to have been used for the disposal of spent solvents and industrial process wash water. Bulk liquids that were disposed of in these ponds were allowed to evaporate (Wimberly, 1972).

Table 1-1 Site History Summary – Austin Community Landfill

Date	Event	Notes
Dec. 1970	Sanitary landfill approval granted to Universal Disposal for 108 acre property	• Approval contingent on construction of rip rap dikes for drainage
May 1971	Commercial industrial solid waste facility approval granted to Industrial Waste Materials Management	
May 1972	Texas Water Quality Board (TWQB) orders the end of chemical waste disposal at the IWU	
June 1972	TWQB orders closure of the IWU	
Feb. 1973	Implementation of TWQB closure requirements for IWU	• excavation of stained soil • construction of a clay cutoff wall • construction of a clay cap
July 1973	Universal Disposal sold ACL to Longhorn Disposal Service, Inc.	
Oct. 1974	Sanitary landfill approval transferred to Longhorn Disposal Service, Inc.	
March 1975	Longhorn Disposal applies for a municipal solid waste landfill permit	
Sept. 1977	Municipal solid waste landfill permit granted by Texas Department of Health (TDH)	
1978	Longhorn Disposal sold ACL to Austin Community Disposal Company, Inc. who formed Longhorn Community Disposal (LCD)	
1979	LCD applies for permit amendment to allow expansion of municipal solid waste landfill to 216 acres	
June 1980	Seepage was observed in a landfill area southwest of the IWU	
1981	LCD performs maintenance improvements in the IWU	• site grading and soil placement to promote drainage and prevent ponding • placement of additional clay on the existing cap • reseeding of portions of the existing cap
July 1981	Permit amendment to allow landfill expansion granted by TDH	
Sept. 1981	ACL sold to Waste Management of North America (presently, Waste Management of Texas)	
July 1988	Permit amendment to allow installation of a gas collection system granted	
July 1991	Permit amendment to allow additional 74 acre landfill expansion granted	
Dec. 1997	Texas Natural Resource Conservation Commission (TNRCC) approves Waste Management of Texas work plan to characterize materials stored in IWU	• Phase I study to characterize wastes for establishment of appropriate treatment and disposal options for IWU wastes
June 1998	A sampling and analysis plan and a work plan for the removal of waste from the IWU were completed	

Additionally, wastes containerized in drums were disposed of in the IWU. Once a sufficient quantity of drums had accumulated, trenches were dug, drums were stacked inside them, and these drums were covered with three feet of soil (Wimberly, 1972). An estimated 21,000 drums of waste were buried at the IWU before operation ended in May 1972 (Carter & Burgess, 1999).

In 1975, the disposal of Type I municipal solid waste (MSW) began at the ACL site. The following year, disposal of certain non-hazardous industrial wastes began. Additional landfill cells have been constructed by Waste Management since 1983 for disposal of MSW. The MSW disposal operations at the ACL site are presently active.

Industrial waste disposal in the IWU ended in early 1972. The closure activities for the unit included removal of stained soil identified in the area and installation of a clay cap overlying the IWU. In 1981, additional closure activities were performed to improve the containment of industrial wastes including site grading and soil placement to promote drainage and prevent ponding, placement of additional clay on the existing cap, installation of a clay cut-off trench, and vegetation reseeding of portions of the existing cap.

The layout of the IWU is shown in Figure 1-3.

1.2.1 Past Investigations

Table 1-2 lists past environmental and geotechnical investigations that have taken place at the ACL and a brief summary of their respective scopes.

Table 1-2 Site Investigation Summary Austin Community Landfill

Date	Investigation	Scope
1970	Proposed landfill subsurface Investigation, Trinity Engineering Testing Corporation (TETCO)	• four soil borings in proposed sanitary landfill area, • collection of soil samples, • analysis for geotechnical properties;
April 1972	Texas Water Quality Board (TWQB) Inspection	• inspection of IWU;
April 1972	IWU subsurface investigation, TETCO	• two soil borings in industrial waste landfill;
June 1974	Landfill expansion investigation	• one soil boring in area of proposed landfill extension;
1977	Environmental investigation at the IWU, TWQB	• three test borings in drum disposal Site No. 1, • collection of soil samples analysis of three soil samples for metals; • analysis of soil samples for hydraulic conductivity;

1979	Engineering investigation, TETCO	• one boring in Old Wet Weather Area, • collection of soil samples, • laboratory analysis for geotechnical properties;
May 1980	Geotechnical Investigation and Laboratory Analysis, Jack H. Holt, PhD. & Associates, Inc. (Holt)	• 17 soil borings in area of proposed landfill expansion, • collection of soil samples; • laboratory analysis for geotechnical properties and hydraulic conductivity;
July – August 1980	Unknown investigation, Holt	• installation of 14 soil borings.
1980	Environmental investigation at the IWU, Texas Department of Water Resources (TDWR)	• collection of soil and groundwater samples, • laboratory analysis for metals and organic compounds;
1981	Quarterly surface water monitoring	• collection of soil and surface water samples, • laboratory analysis for water quality parameters;
1982	Unknown investigation, Underground Resource Management, Inc.	• installation of monitoring wells MW-1 and MW-2;
Unknown	Abandonment of three monitoring wells in Site No. 1	
July 1986	Geotechnical evaluation of IWU area, July 1986, McBride-Ratcliff & Associates (McBride)	• cone penetrometer testing at 20 locations
1990 – 1992	Comprehensive Hydrogeologic Assessment - Austin Community Type I Municipal Landfill - October, 1992, McBride	• installation of five piezometers, • field permeability tests on weathered clay, • hydraulic conductivity of unweathered clay measured.
1994	Unknown investigation, Holt	• installation of 21 piezometers.
1995	Engineering evaluation of Phase I area	• installation of 30 soil borings, • installation of 5 piezometers;
1996	Groundwater monitoring system installation expanded	• installation or conversion of 11 monitoring wells throughout the landfill, • quarterly groundwater monitoring;
1998	IWU waste characterization, OHM Corporation (OHM)	• 20 soil borings, • collection of soil and waste samples, • laboratory analysis for metals, organic compounds, and pH;
Sept. 1998	IWU geophysical investigation, RUST Environmental & Infrastructure, Inc. (RUST)	• low-frequency electromagnetic induction survey.

The findings of the investigations identified in Table 1-2 are summarized in Section 3 of the ThermoRetec Investigation Work Plan, dated August 4, 1999.

1.3 Report Organization

This Site Investigation report is organized into three sections. Documentation of investigation activities is presented in Section 2 and Section 3 presents a summary of the investigation results.

Section 2

2 Investigation Activities

This investigation section documents field investigation procedures and activities conducted at the site by ThermoRetec. A representative from Carter & Burgess was on-site during the installation of all Geoprobe ™ and hollow stem auger borings, soil and fluid sampling, and storm water and sediment sampling. A representative of the TNRCC was also present on the site periodically during the field investigation. Photographic documentation of investigation activities is provided in Appendix A.

2.1 Soil and Waste Investigation

The soil and waste investigation activities began with the installation of 31 Geoprobe ™ (direct push) borings within the limits of the IWU. Six borings were completed in the bulk disposal areas, eleven borings were completed in the saddle area (between the north and south disposal areas), eight borings were completed in the north disposal area, and six borings were completed in the south disposal area. Two additional borings were completed in the south disposal area using a rotary drilling rig and hollow stem auger techniques to obtain additional data and samples.

All borings were installed by a State of Texas Licensed Monitor Well Driller, under the supervision of a ThermoRetec Geologist.

To evaluate the unweathered Taylor Clay located beneath the IWU; four deep soil borings were also installed within the boundary of the IWU, but outside of areas anticipated to contain industrial waste. These deep borings were advanced to a depth of approximately 30-feet below the weathered/ unweathered clay contact to collect a soil sample of the unweathered clay for laboratory analysis.

The location of each Geoprobe ™ and soil boring is shown in Figure 2-1.

2.1.1 Boring Installation

During the installation of Geoprobe ™ borings and two rotary rig auger borings within the IWU, soil samples were collected continuously from the land surface to the total depth of the boring using a four-foot long, two-inch diameter sampler with a clear PVC liner. During the two borings installed with a rotary rig within the IWU, samples were collected continuously from the land

surface to the total depth of the boring using a five-foot long, four-inch split barrel sampler. The soil sample lithologies were described by a geologist and recorded on a field log. Boring logs are included as Appendix B.

Selected soil and waste samples collected during boring activities were field-screened using standard headspace methods, for the presence of volatile organic compounds (VOCs). The samples collected for headspace screening were placed into properly labeled plastic storage bags and allowed to equilibrate for a minimum of 30 minutes. After the headspace samples had equilibrated, an organic vapor meter (OVM) with an 11.7 eV lamp was used to screen the sample by inserting the probe into the bag and recording the meter reading. Field OVM readings collected from each boring are provided on the soil boring logs included in Appendix B.

If evidence of liquid IW was encountered in the Geoprobe ™ borings, the borings were converted to piezometers. Geoprobe ™ borings that were not completed as piezometers as discussed in the Fluids Investigation Section 2.2, were properly plugged and abandoned. Of the nine Geoprobe ™ borings that were not completed as piezometers, two were plugged by placement of hydrated bentonite from total depth back to the surface and the remaining seven borings were plugged by pumping neat Portland cement/bentonite grout from the total depth of the boring back to the surface using a Tremie pipe.

The four deep borings installed within the boundary of the IWU were advanced to a depth approximately 30-feet below the weathered/unweathered clay contact to collect a soil sample of the unweathered clay for laboratory analysis. The four deep soil borings identified as borings DB-1, DB-2, DB-3, and DB-4, were installed using a rotary drilling rig and hollow stem auger techniques. The locations of the four deep soil borings are depicted on the Boring and Well Location Map, Figure 2-1.

The four deep borings were advanced to a depth approximately 10 feet above the estimated elevation of the contact between the weathered and unweathered clay, using a center drill plug in the hollow stem augers. The general lithology to this depth was estimated based on auger cuttings. Upon reaching a depth approximately 10 feet above the estimated elevation of the contact between the weathered and unweathered Taylor Clay, the auger center plug was removed and continuous soil samples were collected to accurately identify the top of the unweathered clay. The soil lithology observed during the installation of the deep borings was described by a Geologist and documented on the soil boring logs, included in Appendix B.

Soil samples were collected using a two-foot long, split barrel sampler for field headspace screening. The samples were collected for headspace screening as

previously described. OVM readings are presented on the boring logs included in Appendix B.

Upon confirming the depth of the weathered/unweathered clay contact, the boring was advanced approximately two to three feet into the unweathered clay using a 12.25-inch diameter hollow stem auger.

The MSW encountered in deep borings DB-1 and DB-4 was saturated with fluid. The fluid was dark gray to black in color. The MSW intervals exhibiting the presence of fluid in borings DB-1 and DB-4, are documented on the soil boring logs included in Appendix B. Fluid was not encountered during the installation of deep borings DB-2 and DB-3.

To reduce the potential of downward migration of possible contaminants encountered in shallow soils, eight-inch, schedule 80 PVC casing was placed inside the 12.25-inch hollow stem auger. A cap consisting of plaster or PVC was placed on the bottom of the casing to eliminate the infiltration of fluids and/or grout into the casing. The eight-inch casing was then grouted in place with Portland cement/bentonite grout from the bottom of the borehole to the surface using a Tremie pipe. The Tremie pipe was inserted in the annulus between the outside of the eight-inch PVC casing and the inside of the 12.25-inch hollow stem auger. As each five-foot section of 12.25-inch auger was removed, additional grout was added to the borehole to bring the grout level to ground surface. The cement grout was allowed a minimum of four days to properly cure. After allowing for the cement grout to properly cure, each of the four borings were advanced 30-feet into the unweathered clay using a four-inch diameter augers inserted inside the eight-inch casing. Samples of the dark gray, unweathered clay were collected approximately every five feet using two-foot long, split barrel samplers. These samples were collected for headspace screening as described previously.

After a soil sample was collected from the bottom of each of the deep borings, the four boreholes were abandoned by the placement of neat Portland cement grout from the total depth back to the surface. The casing remained in place after being filled with the grout from total depth to the surface.

All Geoprobe™ and hollow stem auger boring locations were surveyed for position and ground level elevations by a registered professional surveyor.

2.1.2 Health and Safety & Air Monitoring

During the installation of the Geoprobe ™ borings, the Geoprobe ™ was positioned perpendicular to the prevailing wind to allow any possible vapors emanating from the boreholes to be carried away from site personnel. The

wind direction was determined and monitored using plastic flagging as streamers. An exclusion work zone was laid out around each boring and marked with orange traffic cones. Only authorized personnel were allowed inside this area while borings were being completed. A self-contained breathing apparatus (SCBA) rescue pack was positioned up wind outside the exclusion zone at the designated meeting area. Fire extinguishers and first aid kits were positioned for quick access. Escape breathing air packs were located in each work area to allow easy access for evacuation if necessary. Personal protective equipment (PPE) was worn by all field personnel and consisted of Tyvek overalls, disposable chemical resistant boots worn over steel toe boots, inner gloves and chemical resistant outer gloves (boots and outer gloves were taped to the coveralls), hard hats, and safety glasses. Either a half-face or a full-face respirator with organic vapor/acid gas and particulate filter cartridges were available for all personnel, and were worn during the installation of some of the borings within the disposal areas that, based on previous investigations, had the potential to emit vapors. All field personnel had personal hydrogen sulfide detectors that were set to alarm at a concentration level of 5ppm hydrogen sulfide.

To ensure the safety of on-site personnel and the neighboring community, continuos air monitoring was conducted during installation of all borings within the IWU. Monitoring was conducted in the breathing zone immediately downwind of all borings, after the boring had penetrated the clay cap or encountered waste material. Air monitoring was conducted with an OVM equipped with an 11.7 eV lamp to measure organic vapor concentrations, a combustible gas indicator (CGI) to measure percent lower explosive level (LEL), hydrogen sulfide (H2S) concentration, and percent oxygen (O2), and a radiation meter capable of detecting Alpha, Beta and Gamma radiation. All air monitoring instruments were properly calibrated each day before use, and background readings were recorded each day before beginning work.

To minimize the potential of vapor emissions, open boreholes were covered with a plastic cap. This was done whenever drilling tools were not in the borehole.

During the installation of the Geoprobe ™ borings within the IWU, no detectable concentrations of VOCs, H2S, radiation, or explosive concentrations of vapor were observed in the breathing zone or downwind of the exclusion zone. Because the four deep borings locations were placed in areas of the IWU where IW was not anticipated to be encountered and hazardous conditions were not observed during the installation of the Geoprobe ™ borings within the IW, the SCBA equipment was not utilized during the installation of the four deep borings.

2.1.3 Soil Sampling and Analysis

During the Geoprobe ™ soil boring investigation, IW samples were collected for laboratory analyses. Four IW samples were collected from the bulk disposal area, one from the approximate location of each former disposal pond. Two IW samples were collected for laboratory analysis from the north disposal area and two IW samples were collected from the south disposal area.

IW samples and unweathered clay soil samples collected for laboratory analysis were placed in properly labeled laboratory supplied glassware, placed in protective plastic bags and stored in a cooler on ice pending delivery to Waste Management's contract laboratory for analysis. Samples were analyzed for Appendix IX constituents of Federal Regulation 40 CFR Part 264, Regulations for TSD Facility Standards (Appendix IX). Sample identification is provided in the analytical results tables included in Appendix C.

Fourteen soil samples were collected from Geoprobe ™ borings to be analyzed for geotechnical parameters including moisture content, dry bulk density, liquid limit, plasticity Index and coefficient of permeability, in accordance with appropriate ASTM Standards. Undisturbed samples of the clay cap located above the IW, and the weathered clay located beneath the industrial waste were collected with small diameter Shelby tubes for geotechnical analyses. The geotechnical soil samples in the Shelby tubes were properly labeled, the ends of the tubes sealed with plastic and tape to prevent moisture loss or disturbance of the sample, and were then delivered to the geotechnical laboratory for analyses.

Additionally, four unweathered clay soil samples were collected from the four deep soil borings (one sample from each deep boring). The unweathered clay samples collected from the four deep soil borings appeared dry and no evidence of groundwater or fluid was observed in borehole or in the unweathered clay samples collected during the installation of the four deep soil borings.

Upon reaching a depth approximately 30 feet below the elevation of the weathered/unweathered clay contact, one soil sample was collected from the bottom of each of the four deep borings. Sample depths are documented on the soil boring logs included in Appendix B. The soil samples were collected with a two-foot long, split barrel sampler. These samples were placed in properly labeled laboratory-supplied glassware, placed in protective plastic bags, and stored in a cooler on ice pending delivery to the laboratory for analysis for Appendix IX constituents.

For quality control purposes, the soil sample collected from deep boring DB-3 was split and half of the soil sample was submitted to the laboratory as an unidentified duplicate.

2.1.4 Decontamination and Management of Investigation Derived Waste

Prior to commencement of Geoprobe™ and hollow stem auger boring operations and subsequent to each Geoprobe™/boring, the Geoprobe™ soil samplers, drill rod, augers, split-barrel samples and other associated sampling equipment was decontaminated with a high-pressure spray washer. During sampling activities, the soil samplers and associated equipment were decontaminated in buckets using potable water and a laboratory detergent wash followed by a distilled water rinse. All decontamination fluids were collected and placed into labeled and sealed drums for temporary storage onsite pending proper disposal. Also, all soil or waste debris generated during the installation of these borings, and all used PPE was collected, placed in labeled and sealed drums and temporarily staged on-site pending proper disposal.

2.2 Fluids Investigation

The fluid investigation consisted of the installation of piezometers within the IWU, and the installation of investigation wells outside of the perimeter of the IWU. Fluid samples were collected from the piezometers located within the IWU to characterize the IW. Fluid samples were collected from the investigation wells located outside of the IWU, to evaluate groundwater quality outside of the IWU. Hydraulic conductivity testing was conducted on three of the investigation wells located outside of the IWU, to evaluate the hydraulic characteristics of shallow groundwater adjacent to the IWU.

2.2.1 Piezometer Installation

Piezometers were installed in 22 Geoprobe™ borings within the IWU. The borings were advanced to the top of the weathered clay liner or to Geoprobe refusal. After each Geoprobe™ boring had been advanced to the intended depth, the borehole was enlarged using a 3-inch probe point. A piezometer was then constructed in the boring using one-inch diameter, flush jointed, 10-foot long, Schedule 80, factory slotted (0.010-inch) PVC well screen which was set across the waste. A section of one-inch diameter, flush jointed, Schedule 80, PVC well casing extended from the top of the well screen to several feet above the ground surface. A sand pack was installed in the annulus and extended at least two-feet above the top of the well screen. A hydrated bentonite seal was then placed above the sand pack and extended to

the surface. The piezometers were gauged to evaluate fluid levels prior to the collection of fluid samples.

Piezometer construction methods are detailed on the boring logs included in Appendix B.

2.2.2 Investigation Well Installation

Eleven borings were installed outside the perimeter of the IWU in an attempt to find suitable locations for the installation of investigation wells to evaluate shallow groundwater conditions adjacent to the IWU. These soil borings are identified as MW99-23, MW99-24, MW99-25, MW99-26, MW99-26A, MW99-27, MW99-28, MW99-29, MW99-29A, MW99-30, and MW99-31. Because fluid-saturated MSW was encountered in eight of the soil borings, only soil borings MW99-23, MW99-29A, and MW99-30 were converted to investigation wells. Investigation wells were not constructed in the eight borings because the presence of fluid saturated MSW would not allow for investigation well construction that would preclude the infiltration of MSW fluid into the investigation well and shallow groundwater below. Five borings were installed along the southern boundary of the IWU, adjacent to the drainage feature south of the IWU. All five of these boring locations encountered fluid-saturated MSW; therefore, an investigation well could not be installed south of the IWU.

Soil boring locations are presented in the Boring and Well Location Map in Figure 2-1.

The 11 soil borings were installed using a rotary drill rig, and hollow stem auger techniques. During the installation of the borings, soil samples were collected continuously from the ground surface to the MSW, or to the weathered/unweathered clay contact using a five-foot long, four-inch diameter split barrel sampler. The soil sample lithologies were described by the Thermoretec Geologist and recorded on a field log. Boring logs are included as Appendix B.

Soil samples were collected for field headspace screening as previously described. If the boring encountered municipal waste it was properly plugged and abandoned buy pumping neat Portland cement/bentonite grout through a Tremie pipe placed at the bottom of the boring, back to the surface. If the boring did not encounter municipal waste, it was continued to the weathered/unweathered clay contact. A two-inch diameter, flush jointed, 10-foot long, Schedule 40, factory slotted (0.010-inch) PVC well screen was set across the weathered/unweathered clay contact. A section of two-inch diameter, flush jointed, Schedule 40 PVC well casing extended from the top of

the screen to approximately four-feet above land surface. A sand pack was installed in the annulus and extended at least two-feet above the top of the well screen. A two-foot thick hydrated bentonite seal was placed above the sand pack and the annulus was grouted with neat Portland cement/bentonite grout to the surface. The wells were capped with a locking well cap, and protected with a steel stick-up well vault with a padlock, and set in a four-foot by four-foot concrete pad. The three investigation wells constructed during this investigation are identified as MW99-23, MW99-29A, and MW99-30. These three wells were developed to remove fine sediments and correct any formation damage caused by drilling. A total of between nine to 19 well volumes of groundwater were removed from the three wells during development. All development water was collected and temporarily stored on the site as previously discussed.

To ensure the safety of on-site personnel and the neighboring community, air monitoring was conducted during installation of all borings outside the IWU as previously discussed for the borings inside the IWU.

All borings and investigation wells installed outside the IWU were surveyed by a registered professional surveyor for position, ground level and top of casing elevations if applicable.

2.2.3 Fluids Monitoring

One fluid sample was collected directly from open boring B-33 in the south disposal area, from three piezometers installed in the bulk waste area, and three piezometers installed in the north disposal area for laboratory analyses. The remaining 16 piezometers installed in IW areas did not generate a sufficient quantity of fluid to allow sampling. The fluid samples collected from the piezometers and Geoprobe ™ borings located within the IWU, were collected utilizing a small diameter bailer, placed in properly labeled laboratory supplied glassware, placed in protective plastic bags and stored in a cooler on ice pending delivery to the laboratory for analysis. Samples were analyzed for Appendix IX constituents.

The two investigation wells MW 99-29A and MW 99-30, and the existing piezometer PZ-26 located hydrogeologically down gradient from the IWU; were sampled in evaluate if chemicals of interest identified within the IWU have impacted shallow groundwater down gradient of the IWU. Investigation well and piezometer locations are presented in Figure 2-1.

Prior to sampling, water levels in wells MW 99-23, PZ-25, and the three down gradient wells were gauged using a Keck Instruments, Inc. interface probe.

Following gauging of the wells, the sampling team set up at PZ-26 to purge and sample. Low flow purging of the wells was prescribed for the IWU. In accordance with the TNRCC Guidelines for Low-Flow Purging and Sampling of Groundwater Monitor Wells, tubing for a Geopump peristaltic pump was inserted into the well in the center of the well screen. The pump was started at a 0.10 Liter sustained flow rate. A Horiba U-20 inline sampler and a closed flow-through cell were used to measure dissolved oxygen, temperature, pH, electrical conductivity, and turbidity. Following initiation of low-flow purging the water level in PZ-26 demonstrated continuous draw-down with purging. The groundwater elevation in PZ-26 continued to fall with the peristaltic pump running a minimum flow rate, and a steady state groundwater elevation could not be maintained. Accordance with TNRCC guidance, a constant groundwater elevation should be maintained during low-flow purging. Based upon discussions with TNRCC personnel, it was agreed that a minimum of one well volume would be removed from each well prior to sampling, utilizing a peristaltic pump to minimize volatilization of organic compounds and agitation of sediments within the well. Field parameters were periodically recorded during purging. Following removal of over a well volume from PZ-26 the team began sampling. Groundwater samples were placed in properly labeled laboratory supplied glassware, placed in protective plastic bags and stored in a cooler on ice pending delivery to the laboratory. Split samples were also collected by the TNRCC for Appendix IX constituents. A duplicate VOC sample was collected by ThermoRetec from PZ-26. Sampling was performed in accordance with general industry practice.

Low-flow purging then continued at MW 99-29A. Following removal of one well volume, MW 99-29A was sampled for Appendix IX constituents and the TNRCC began collecting split samples. Continuous sampling of the well decreased the water level to the maximum depth of the well screen; therefore, sampling was discontinued. Subsequently, the team began micro purging MW 99-30. A single well volume was removed from MW 99-30 and split sampling commenced but was discontinued due to the advanced time of day.

The sampling team returned to the site the following day to complete collecting groundwater samples from MW 99-29A and MW 99-30. TNRCC personnel completed sampling MW99-29A and split sampling of MW 99-30 was completed by both parties.

For QA/QC purposes, a field blank sample was collected subsequent to the completion of groundwater sampling at MW99-29A.

Investigation derived waste was collected and managed as previously described in Section 2.1.5.

2.3 Storm Water and Sediment Investigation

Storm water and sediment samples were collected from the drainage systems entering and exiting the ACL, adjacent tot the IWU, to evaluate if the IWU is affecting storm water at the site. Because the drainage features located in the vicinity of the IWU are intermittent, the storm water and sediment sampling had to be conducted subsequent to a rain event so that a sufficient quantity of storm water was available for sample collection.

2.3.1 Description of Field Activities

Four sets of storm water and sediment samples were collected from four sample locations as prescribed in the Investigation Work Plan. The first storm water (SW-1) and sediment (SED-1) samples were collected on the north boundary of the facility where storm water enters the ACL. The second set of storm water and sediment samples (SW-2 and SED-2, respectively) was collected southwest of the IWU where the drainage exits the facility. The third set of samples (SW-3 and SED-3) was collected from the drainage area adjacent to the south side of the IWU. The forth set of samples (SW-4 and SED-4) was collected where storm water enters the facility from the south boundary of the ACL. The four storm water and sediment sample locations were surveyed by a registered professional surveyor. Figure 2-2 depicts the location of the storm water and sediment samples.

2.3.2 Sampling and Analysis

Storm water and sediment samples were collected by ThermoRetec personnel on March 22, 2000. Storm water at each sample location was field screened for dissolved oxygen, pH, electrical conductivity, and temperature before samples were collected.

For QA/QC purposes, a field blank sample was collected by ThermoRetec personnel, utilizing distilled water. The field blank was collected subsequent to the completion of sampling at SW-4/SED-4 location.

Storm water, sediment samples, and field blank sample were placed in properly labeled laboratory supplied glassware, placed in protective plastic bags and stored in a cooler on ice pending delivery to Quanterra Laboratories located in Austin, Texas. All samples were analyzed for Appendix IX constituents.

Section 3

3 Investigation Results

3.1 Soil and Waste Investigation

The site investigation results are presented in this section. Data reviewed from previous investigations conducted at the site were utilized to provide additional information regarding conditions at the site.

3.1.1 Site Stratigraphy

Based on a review of pre-existing stratigraphic data collected from the ACL and evaluation of the lithology encountered during the installation of probes and soil boring as part of this investigation, a stratigraphic model was developed for the IWU.

The south disposal area of the IWU generally consists of 5 to 10 feet of clay cap overlying 10 to 20 feet of a mixture of MSW and clayey soil. Fluid was observed in the MSW and clayey soil encountered in the south disposal area. The MSW and clayey soil was underlain by 5 feet or less of clay cap. This clay cap was underlain by approximately 5 to 10 feet of IW. The base of the IW was observed approximately 30 to 42 feet below ground surface (bgs) in the south disposal area of the IWU. Approximately two to four feet of weathered native Taylor Clay was observed below the IW, underlain by the very dark gray, unweathered, dry, dense, Taylor Clay. The Taylor Clay in the vicinity of the ACL is approximately 200 to 400 feet thick, underlain by the Austin Chalk limestone.

The stratigraphy observed in the saddle area located south of the bulk disposal area and the north disposal area and north of the south disposal area, consisted of approximately two to five feet of clay cap underlain by approximately 10 to 18 feet of MSW and clayey soil. Fluid was observed in the MSW and clayey soil encountered on the central portion of the saddle area but was not observed in borings installed on the eastern portion of the saddle area. The MSW and clayey soil was underlain by weathered native Taylor Clay.

The stratigraphy observed in the bulk disposal areas located on the northern side of the IWU, generally consisted of approximately two to 10 feet of clay cap underlain by stabilized IW. The IW was observed to a depth of approximately 11 to 16 feet bgs, underlain by weathered native Taylor Clay. MSW was not observed above the IW in the bulk disposal area.

The general stratigraphy encountered in the north disposal area consisted of approximately 6 to 11 feet of clay cap underlain by approximately five to seven feet of IW. The bottom of the IW was observed at depths ranging from approximately nine to 19 feet bgs. The IW was underlain by weathered native Taylor Clay.

Based upon the stratigraphic data collected during this investigation, three cross sections were drawn through the IWU. Figure 3-1 depicts the cross section locations. Figure 3-2 (Cross Section A-A') crosses the IWU in a north-south direction and incorporates data collected from the closed Phase I disposal area located south of the IWU, crosses the drainage feature located south of the IWU, intersects the south disposal area, through the saddle area to the bulk disposal areas.

Figure 3-3 (Cross Section B-B') shows the lithology of the IWU in an east-west direction, extending from investigation well MW99-29A through the south disposal area to investigation well MW99-23.

Figure 3-4 (Cross section C-C') trends in a north-south direction, through the saddle area and the north disposal area.

As part of the Geoprobe™ boring investigation of the IWU, a total of 14 relatively undisturbed soil cores were collected for Geotechnical analysis from 11 different Geoprobe™ borings. Two soil cores were collected from three of the Geoprobe™ borings (GP-99-4, GP-99-16, and GP-99-26) and one soil core was collected from the remaining seven borings. For each boring where two soil cores were collected for Geotechnical analysis, one soil core was collected from the clay cap located above waste material, and the second soil core was collected from the native weathered, Taylor Clay located beneath the waste material. The samples collected for Geotechnical analysis were analyzed for Moisture Content, Dry Bulk Density, Liquid Limit, Plasticity Index, and Hydraulic Conductivity by Environmental Drilling Services, Inc., in Austin, Texas. The laboratory results are provided in Appendix E. Geotechnical testing results indicated the hydraulic conductivity of the clay cap samples collected from the IWU, ranged from 1.1 x 10-8 cm/s to 7.7 x 10-8 cm/s. The laboratory hydraulic conductivity of the native weathered Taylor Clay samples collected from the IWU, ranged from 1.4 x 10-8 cm/s to 4.6 x 10-8 cm/s.

To evaluate the unweathered Taylor Clay beneath the IWU. deep soil borings DB-1 through DB-4 were advanced to a depth of approximately 30 feet below the weathered clay/unweathered clay contact. The unweathered Taylor Clay samples collected from the four deep borings consisted of a very dark gray to black, dry, stiff, dense clay. Evidence of fractures was not observed in the soil cores collected from the unweathered Taylor Clay.

3.1.2 Waste Evaluation

To evaluate the waste material encountered in the IWU, numerous waste samples were collected from the borings installed within the IWU to be analyzed for Appendix IX constituents.

During the installation of the borings completed within the IWU, what appeared to be MSW-like material and IW-like material were observed. The MSW-like material appeared to consist of clayey soil mixed with paper, cardboard, wood, plastic, glass, metal, fiberglass insulation, cloth, and miscellaneous household debris. The IW-like material was variable and ranged from soil with a yellow or black discoloration, and/or a chemical odor, a very viscous dark red brown fluid, brown to red brown resinous material, white to dark brown crystals that exhibited a chemical odor, and an oily brown fluid that exhibited a petroleum hydrocarbon odor.

The types of wastes observed during the installation of soil borings varied between different areas of the IWU. During the installation of borings in the bulk disposal area, solidified IW-like material consisting of stained soil or crystals that exhibited a chemical odor was observed. IW-like material, which consisted primarily of a dark reddish brown viscous fluid was encountered during the installation of borings in the north disposal area. MSW-like material was not encountered in the bulk disposal area or the north disposal area.

Only MSW-like material was encountered during installation of borings in the saddle area between the north and south disposal areas. Borings installed within the south disposal area encountered MSW underlain by IW with a clay cap. The IW observed in the south disposal area was variable and ranged from black to dark brown very viscous, or tar like material, soils with a chemical odor, and an oily liquid exhibiting a hydrocarbon odor.

3.1.3 Constituents in Industrial Waste

The waste samples collected for laboratory analysis from the Geoprobe ™ borings installed in the IWU, were analyzed by Quanterra Laboratories located in Austin, Texas. Analytical data qualification was performed by Integrate,

Incorporated (Integrate), located in Baton Rough, Louisiana. Summary tables of analytical data are provided in Appendix C.

A review of the analytical data obtained from waste samples collected from the IWU, indicate the presence of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Pesticides, Polychlorinated Biphenyls (PCB), and metals in the soil/waste samples collected from the bulk storage area of the IWU. Waste samples collected from the north disposal area exhibited the presence of VOCs, SVOCs, Metals, and Pesticides. Waste samples collected from the south disposal area for laboratory analysis, exhibited the presence of VOCs, SVOCs, Metals, Pesticides, Dioxin/Furans, and Cyanide.

The constituents of interest identified in the waste samples collected from the IWU are consistent with the types of IW that were disposed of at the ACL IWU, based on historical information. Although analytical data identified specific compounds in the IW, the source waste products of these compounds cannot be determined.

3.2 Fluids Investigation

The fluids investigation consisted of the evaluation and characterization of waste fluids inside the IWU and evaluation of groundwater quality adjacent to and down gradient of the IWU. Additionally, hydraulic characteristics of the shallow groundwater-bearing zone in the weathered Taylor Clay, were evaluated at the perimeter of the IWU.

3.2.1 Groundwater Flow Characteristics

To evaluate shallow groundwater flow direction in the weathered Taylor Clay in the vicinity of the IWU, groundwater elevation measurements were collected from investigation wells MW99-23, MW99-29A, and MW99-30, and piezometers PZ-25 and PZ-26. Groundwater elevation measurements were collected in accordance with standard industry practice. Upon completion of the installation of investigation wells MW99-23, MW99-29A, and MW99-30 and groundwater elevations reaching apparent static levels in the three wells, groundwater elevations were subsequently measured in the three investigation wells and two piezometers on March 3, 2000, March 16, 2000, and May 10, 2000. Table 3-1 summarizes the groundwater elevation data collected during this investigation.

Table 3-1 Groundwater Elevation Data

Well No.	TOC Elevation (ft)	Sample Date	Depth to Groundwater (ft)	Groundwater Elevation Mean Sea Level (ft)
PZ-25	618.80	March 3, 2000	8.35	610.45
"	"	March 16, 2000	8.30	610.50
"	"	May 10, 2000	8.28	610.52
PZ-26	586.90	March 3, 2000	4.13	582.77
"	"	March 16, 2000	4.06	582.84
"	"	May 10, 2000	4.02	582.88
MW99-23	623.10	March 3, 2000	9.90	613.20
"	"	March 16, 2000	9.91	613.19
"	"	May 10, 2000	9.89	613.21
MW99-29A	589.67	March 3, 2000	5.86	583.81
"	"	March 16, 2000	5.85	583.82
"	"	May 10, 2000	5.83	583.84
MW99-30	597.99	March 3, 2000	12.06	585.94
"	"	March 16, 2000	8.96	589.03
"	"	May 10, 2000	8.91	589.08

Data collected during the three groundwater elevation monitoring events conducted during this investigation indicate the shallow groundwater flow direction in the vicinity of the IWU has consistently been to the west, with a gradient of approximately 0.02 feet/feet. Based upon the relatively shallow static potentiometric groundwater elevations observed in these five wells, the shallow groundwater present in the vicinity of the IWU appears to be semi-confined to confined.

3.2.2 Hydraulic Conductivity Testing

To further evaluate hydrogeoloic properties of the native weathered clay which underlies the ACL, rising and falling head slug tests were performed on four IWU perimeter investigation wells (MW 99-23, MW 99-29A, and MW 99-30), and piezometer PZ-26.

ThermoRetec personnel installed an In-Situ, Inc. TROLL 4000 Data Logger into each of the four wells. The loggers were positioned approximately 0.5 feet above the total depth and secured within the well. The loggers remained in the wells for 24 hours proceeding the slug tests to allow the well to reach static equilibrium. It should be noted that MW 99-30 had not fully recharged from

the groundwater sampling, which occurred seven days prior to initiation of the slug test.

ThermoRetec personnel returned to the site to initiate the falling head slug tests. First, the data logger was calibrated using a laptop computer and Win-Situ Instrument Control Software. The initial static water level was recorded and a depth to water measurement was verified using a Keck Instruments, Inc. interface probe. The falling head slug test was then scheduled using the laptop computer. At approximately ten seconds before the scheduled start of the test a 4.5 foot by 1.25 inch diameter Schedule 40 PVC slug was inserted into the well. The slug was inserted approximately 10 feet into the water table. After confirming the slug test was successfully initiated and data was being generated, the procedure was repeated at each subsequent well. The wells were allowed to recover for 24 hours.

ThermoRetec personnel returned to the site. The final static water level was recorded and the falling head slug test was concluded. The data from the falling head slug test was extracted from the data logger and stored onto the laptop computer. The rising head slug test was then scheduled. Approximately 10 seconds before the scheduled start of the test the PVC slug was removed. After confirming the slug test was successfully initiated and data was being generated, the procedure was repeated at each subsequent well. The wells were allowed to recover for 24 hours. It was noted that the water level in MW 99-30 had not recovered to the levels measured prior to setting the slug. It was determined that the falling head slug test data would not be valid because the well was not at static equilibrium at the beginning of the test. Approximately 4.89 gallons of water were bailed from the well and recovery data was collected for 24 hours.

ThermoRetec personnel arrived at the site and extracted the data from the rising head slug tests. The data loggers were removed from the wells and decontaminated, purge water was stored in drums, and the wells secured.

Slug Test Analysis

The rising and falling head slug test data was analyzed using AQTESOLV for Windows, utilizing the Cooper-Bredehoeft-Papadopulos (1967) Solution for a slug test in a confined aquifer. The average transmissivity and storativity calculated for MW 99-23 are 1.00 E-4 square feet per minute and 2.93 E-4, respectively. The average transmissivity and storativity determined for PZ-26 are 4.39 E-5 square feet per minute and 8.44E-4, respectively. The estimated transmissivity and storativity for MW 99-29A for the falling head slug test are 1.12 E-5 square feet per minute and 2.15 E-5, respectively. Transmissivity and

storativity estimates for MW 99-30 were not calculated due to very slow recovery rates during the 24-hour tests.

The estimated groundwater flow velocities were calculated utilizing the calculated transmissivity for each of the three investigation wells and assuming a transition zone thickness of five feet. The calculated hydraulic conductivity (K) for groundwater in the vicinity of investigation wells MW99-23, PZ-26, and MW99-29A is 0.029 feet/day (1.024×10^{-5} cm/sec), 0.013 feet/day (4.589×10^{-6} cm/sec), and 0.0032 feet/day (1.130×10^{-6} cm/sec), respectively. Flow velocities were calculated using Darcy's equation, an effective porosity of 0.05 (McBride-Ratcliff & Associates), and an estimated groundwater gradient of 0.02 ft/ft as measured during this investigation. The calculated flow velocities for groundwater in the vicinity of investigation wells MW99-23, PZ-26, and MW99-29A are 4.24 feet/year, 1.90 feet/year, and 0.47 feet/year, respectively.

Well yields were estimated using the Cooper-Jacob approximation to the Theis Equation. The estimated well yields for MW 99-23, MW 99-29A, and PZ-26 were calculated at 33.62, 3.28, 14.03 gallons per day, respectively.

The water elevation data, semi logarithmic graphs with curve fit, residual statistics for the curve fit, transmissivity, and storativity solutions for each investigation well are provided in Appendix D.

A summary of solutions for the Cooper-Jacob approximation, conductivity, and flow velocity calculations is included in Appendix D.

3.2.3 Constituents in Groundwater

To evaluate the shallow groundwater quality down gradient of the IWU for the presence of the constituents of interest, investigation wells MW99-29A, MW99-30, and piezometer PZ-26 were sampled and analyzed for the Appendix IX constituents.

The groundwater, duplicate, and blank samples were analyzed by Quanterra Laboratories located in Austin, Texas. Analytical data qualification was performed by Integrate located in Baton Rough, Louisiana. Summary tables of analytical data are provided in Appendix C.

For quality assurance purposes, a blind duplicate sample was collected from PZ-26 to be analyzed for VOCs. Trip blank samples accompanied all groundwater sampling containers from the laboratory to the field and accompanied the collected groundwater samples back to the laboratory. Additionally, one field blank sample was collected during groundwater sampling.

According to the analytical results provided by Integrate, Benzene was detected in the groundwater sample collected from PZ-26 and the blind duplicate sample at a concentration of 0.14 ug/L. 1,4-Dioxane was also detected in the groundwater sample collected from PZ-26 and blind duplicate sample at concentrations of 230 ug/L and 240 ug/L, respectively. 1,4-Dioxane was also detected in the groundwater sample collected from investigation well MW99-29A, at a concentration of 20 ug/L. According to data validation results provided by Integrate, these concentrations were denoted as J-values indicating that the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample.

According to the analytical results of the groundwater sample collected from investigation well MW99-30, 1,1-Dichloroethane, Benzene, and Tetrachloroethene were detected at concentrations of 0.24 ug/L, 0.33 ug/L, and 0.13 ug/L, respectively. These concentrations were denoted as J-values by Integrate.

The analytical data indicated that low levels metals were detected in the groundwater samples collected from PZ-26, MW99-29A, and MW99-30. The individual metals and the concentrations detected in each groundwater sample are provided in the analytical data tables included in Appendix C.

3.3 Storm Water and Sediment Results

To evaluate storm water and sediment samples collected from drainage features in the vicinity of the IWU for the presence of the constituents of interest identified in the IWU waster material, the four storm water and four sediment samples were analyzed for the Appendix IX constituents

The storm water, sediment, field blank, and trip blank samples were analyzed by Quanterra Laboratories and analytical data qualification was performed by Integrate. Summary tables of analytical data are provided in Appendix C.

The qualified analytical data indicated that 19 ug/L of N-Nitrosodimethylamine was detected in storm water sample SW-2. This concentration was denoted as a J-value by Integrate.

The analytical data indicated that 2.8 ug/L of Acetone was detected in storm water sample SW-3. Although Acetone, which is a common laboratory contaminant, was not detected in the laboratory blanks, Acetone was detected in the field blank sample collected during storm water sampling, at a concentration of 6.5 ug/L. This concentration was denoted as a J-value by Integrate.

The analytical data indicated that metals were detected in storm water samples SW-1, SW-2, SW-3, and SW-4. The individual metals and the concentrations detected in each storm water sample are provided in the analytical data tables included in Appendix C.

The analytical data indicated that low levels pesticides were detected in all four sediment samples (SED-1 through SED-4). Pesticides were detected in sediment samples collected upstream and downstream of the IWU, indicating that the presence of pesticides in the four sediment samples may be from an off-site source and/or from surface application. These concentrations were denoted as a J-value by Integrate.

Metals were also detected in the four sediment samples. The individual metals and the concentrations detected in each sediment sample are provided in the analytical data tables included in Appendix C. The metals concentrations detected in the four sediment samples do not appear to indicate an increase in metal concentrations downstream of the IWU.

3.4 Evaluation of Potential Interconnection of Groundwater and Surface Water

Based upon the results of this investigation, groundwater does not appear to be discharging into the drainage features located adjacent to the south and west of the IWU.

During the course of the investigation conducted by ThermoRetec, the drainage features adjacent to the south and west of the IWU were dry except following rain events or the periodic release of water from the off-site water tower located southeast of the ACL This indicates that the drainage features adjacent to the IWU collect storm water runoff and are not a discharge point for groundwater.

The shallowest groundwater bearing zone adjacent to the IWU is identified as the transition zone between the weathered and the underlying unweathered Taylor Clay. Static groundwater elevations in the vicinity of the IWU were observed at levels above the transition zone and above the well screen indicating that groundwater is confined. Piezometric elevations in the three wells located closest to the adjacent drainage features of the IWU (PZ-25, PZ-26, and MW99-29A), are below the elevation of the respective adjacent drainage feature, indicating that groundwater does not discharge into the drainage feature adjacent to the IWU.

3.5 Unweathered Clay Investigation Results

The depth to the top of the unweathered Taylor Clay was measured during the installation of the four deep borings DB-1, DB-2, DB-3, and DB-4. The top of the unweathered Taylor Clay depth was converted to mean sea level elevation by subtracting the measured depth from the ground surface elevation as determined by a registered surveyor. The top of the unweathered clay surface diagram as presented in Figure 3-9 of the Investigation Work Plan, was updated utilizing the elevation of the top of the unweathered Taylor Clay data collected from DB-1 through DB-4 along elevation data collected from other borings installed during this investigation. The updated Top of Unweathered Clay Surface diagram is included as Figure 3-8 of this report. The updated Top of Unweathered Clay Surface diagram indicates that the unweathered clay surface generally dips to the west across the IWU, with a slope of approximately 0.012 feet/feet. The dip of the unweathered clay surface across the IWU generally mirrors the groundwater potentiometric surface as evaluated during this investigation.

To evaluate the unweathered native Taylor Clay located beneath the IWU, soil samples were collected form each deep soil boring, from a depth of approximately 30-feet below the weathered/unweathered clay contact for laboratory analysis. The samples were analyzed for the Appendix IX constituents.

For quality assurance purposes, the soil sample collected from deep boring DB-3 was split and one of the split samples was submitted for laboratory analysis as a blind duplicate. Trip, field, and rinsate blanks were also collected during the sampling of the deep borings.

The deep boring soil samples, duplicates, and associated blank samples were analyzed by Quanterra Laboratories located in Austin, Texas. Analytical data qualification was performed by Integrate. Summary tables of analytical data are provided in Appendix C.

Analytical data indicated the presence of VOCs in the soil samples collected from DB-1, DB-2, DB-3, DB-4, and the duplicate sample; however, these concentrations were denoted as J-values by Integrate.

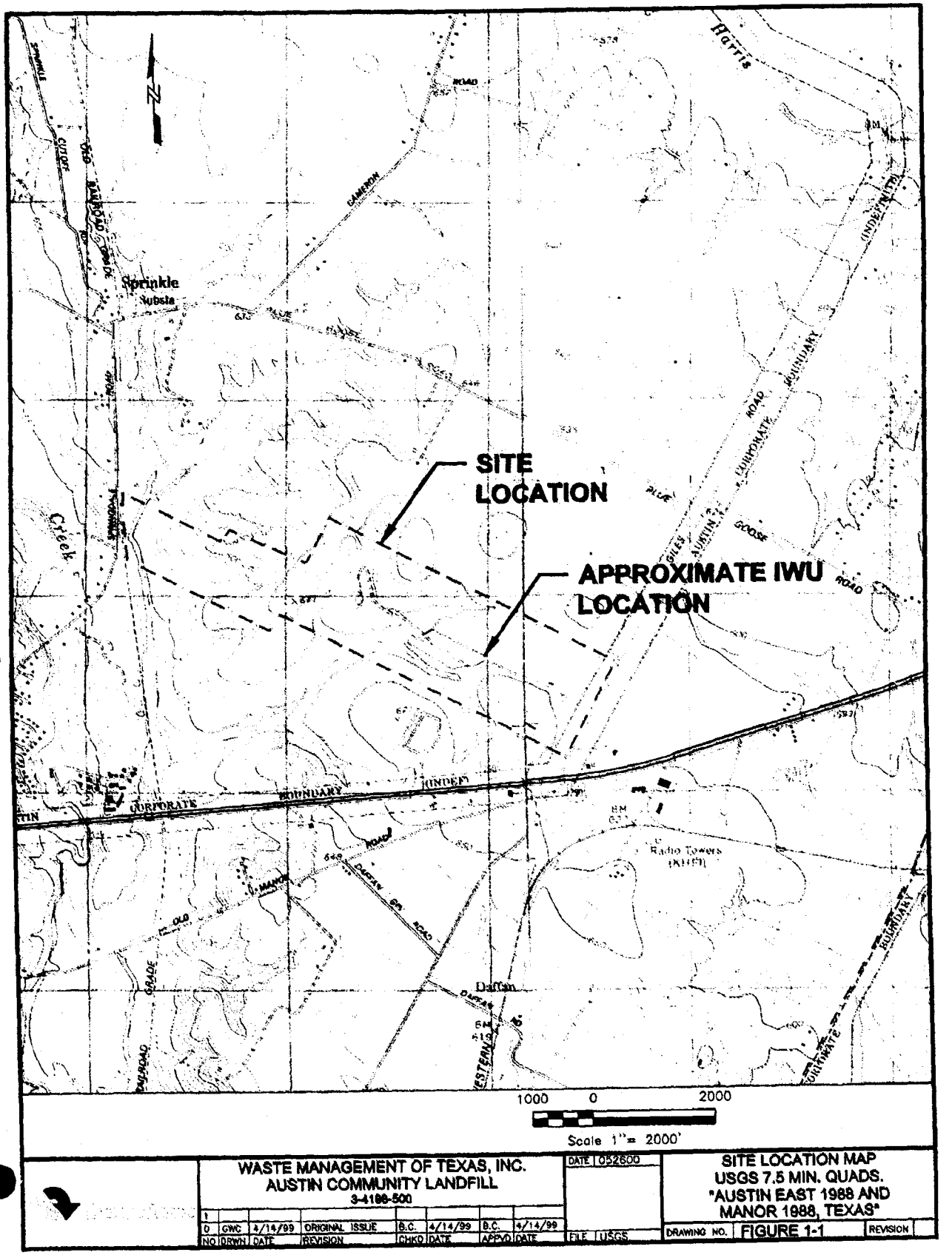
Metals were also detected in the four deep boring soil samples. The individual metals and the concentrations detected in each soil sample are provided in the analytical data tables included in Appendix C.

A total sulfide concentration of 2.8 mg/Kg was detected in the soil sample collected from deep boring DB-2; however, this concentration is less than the reporting level of 6.1 mg/kg. These concentrations were denoted as a B-value

by Integrate, indicating that the analyte was detected between the instrument detection limit and the reporting limit.

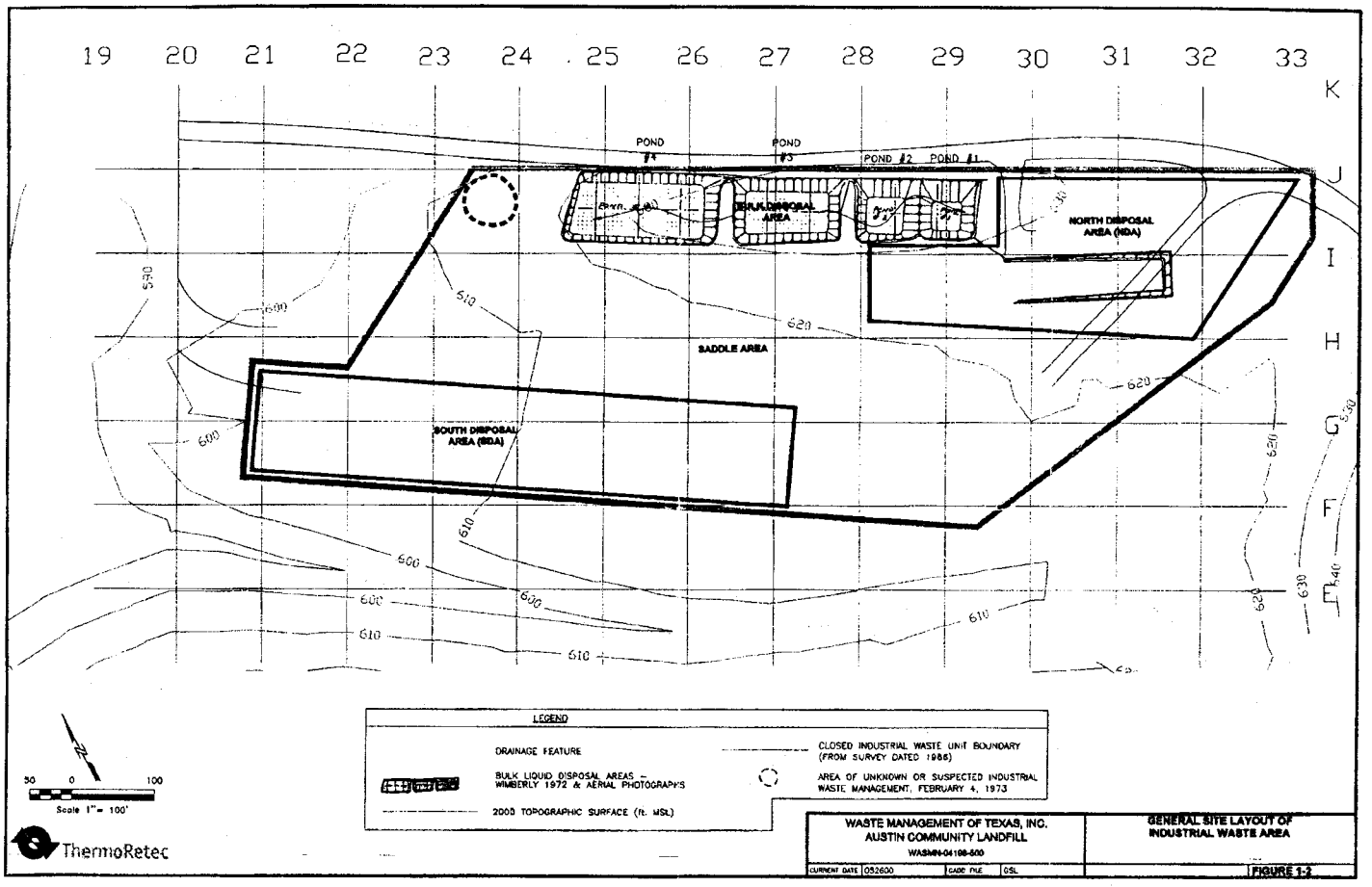
Figures

Figures



WASTE MANAGEMENT OF TEXAS, INC. AUSTIN COMMUNITY LANDFILL 3-4198-500								DATE 052600	SITE LOCATION MAP USGS 7.5 MIN. QUADS. "AUSTIN EAST 1988 AND MANOR 1988, TEXAS"
1									
0	GWC	4/14/99	ORIGINAL ISSUE	B.C.	4/14/99	B.C.	4/14/99		
NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE	FILE USGS	DRAWING NO. FIGURE 1-1 REVISION

WM-013023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K
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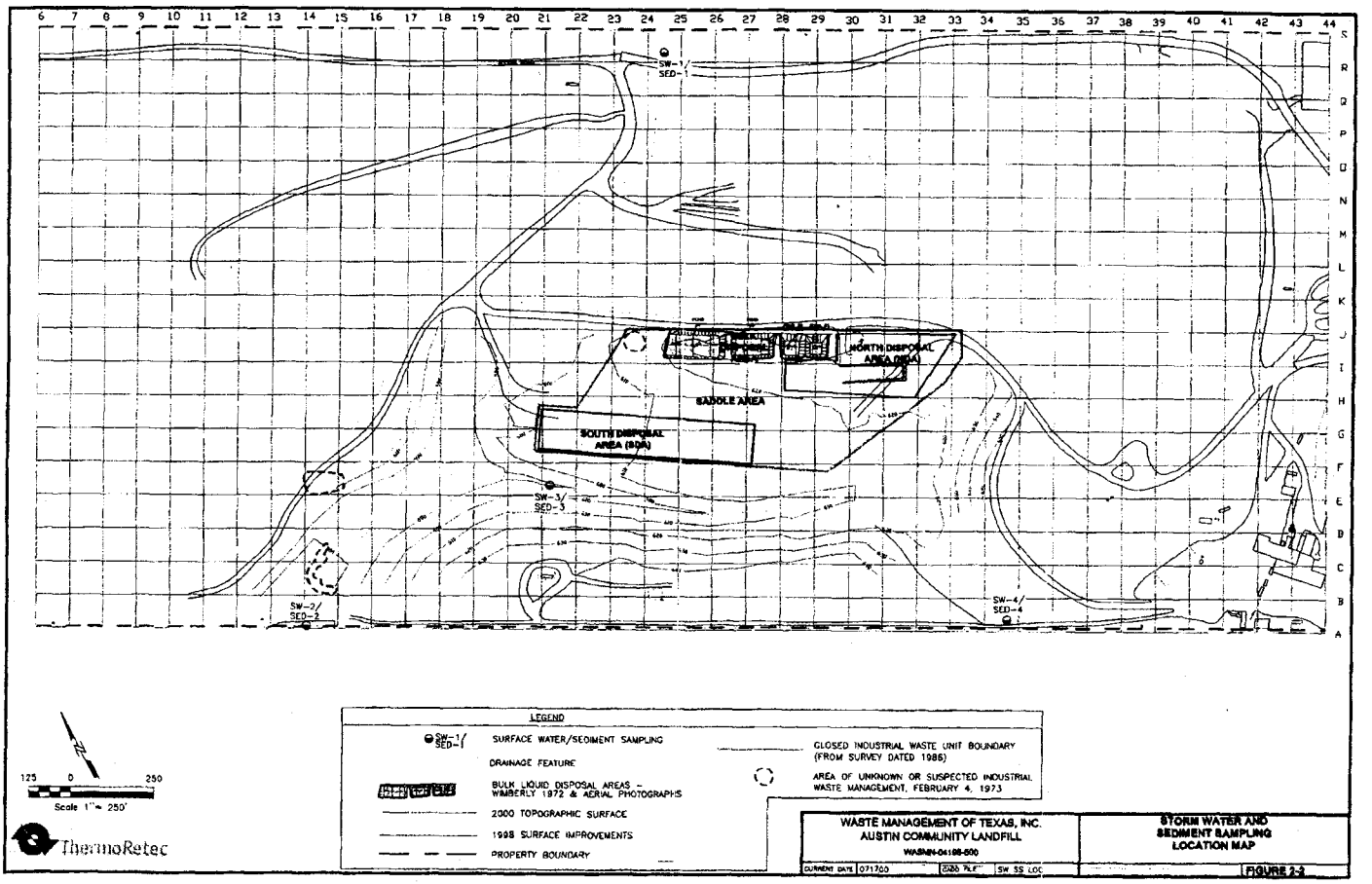
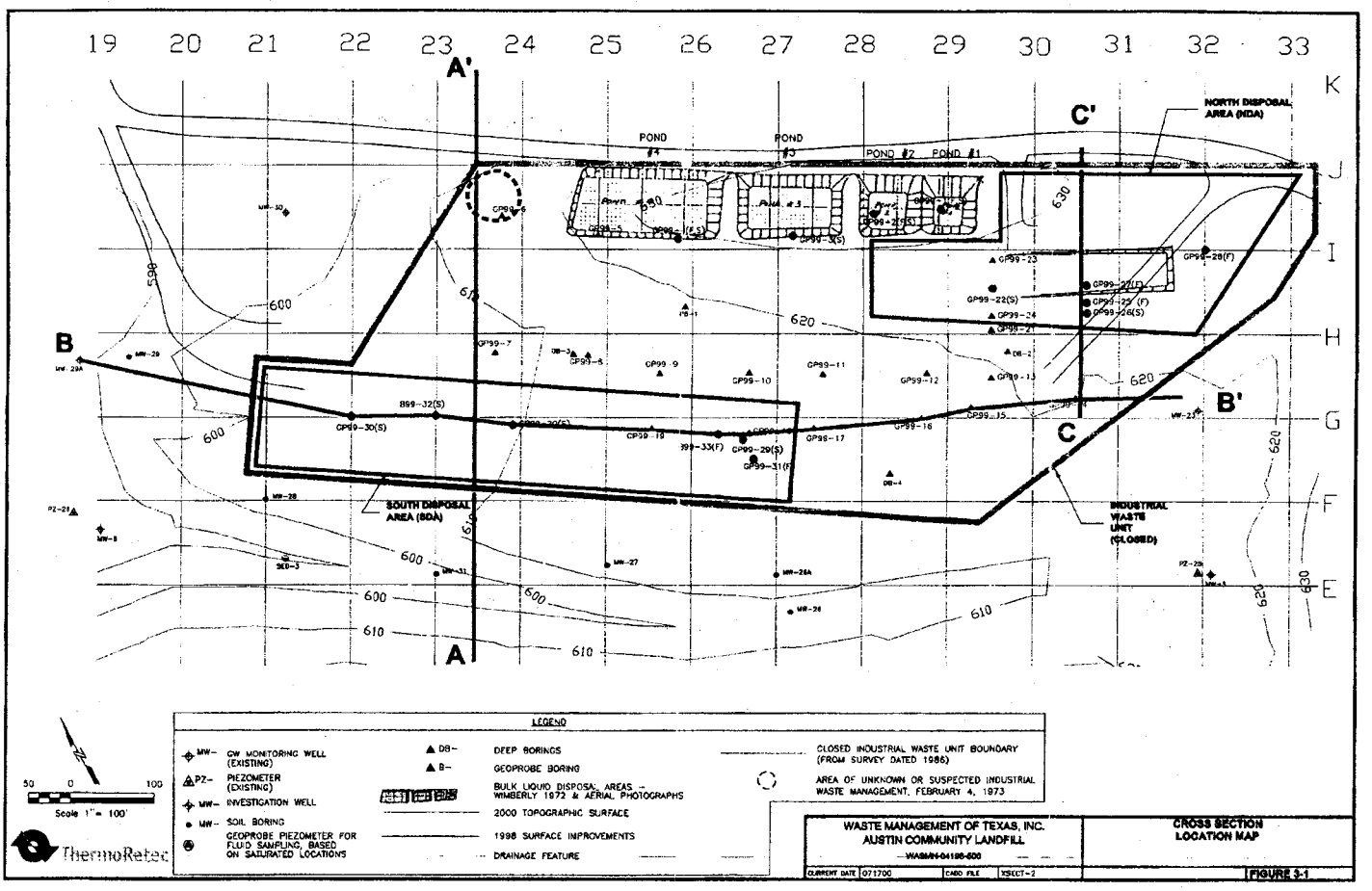
G
F
E
POND #4
POND #3
POND #2
POND #1
BULK DISPOSAL AREA
NORTH DISPOSAL AREA (NDA)
SADDLE AREA
SOUTH DISPOSAL AREA (SDA)
590
600
610
620
630
640
LEGEND
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
2000 TOPOGRAPHIC SURFACE (ft. MSL)
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
AREA OF UNKNOWN OR SUSPECTED INDUSTRIAL WASTE MANAGEMENT, FEBRUARY 4, 1973
50 0 100
Scale 1"= 100'
ThermoRetec
WASTE MANAGEMENT OF TEXAS, INC.
AUSTIN COMMUNITY LANDFILL
WASMH-04198-500
CURRENT DATE 052600
CADD FILE GSL
GENERAL SITE LAYOUT OF INDUSTRIAL WASTE AREA
FIGURE 1-2

WM-013024


SW-1/SED-1
NORTH DISPOSAL AREA (NDA)
SABOLE AREA
SOUTH DISPOSAL AREA (SDA)
SW-3/SED-3
SW-2/SED-2
SW-4/SED-4
LEGEND
SW-1/SED-1 SURFACE WATER/SEDIMENT SAMPLING
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
2000 TOPOGRAPHIC SURFACE
1998 SURFACE IMPROVEMENTS
PROPERTY BOUNDARY
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
AREA OF UNKNOWN OR SUSPECTED INDUSTRIAL WASTE MANAGEMENT, FEBRUARY 4, 1993
125 0 250
Scale 1" = 250'
ThermoRetec
WASTE MANAGEMENT OF TEXAS, INC.
AUSTIN COMMUNITY LANDFILL
WASMN-04188-600
CURRENT DATE 071700
STORM WATER AND SEDIMENT SAMPLING LOCATION MAP
FIGURE 2-2

WM-013025


19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
A
A'
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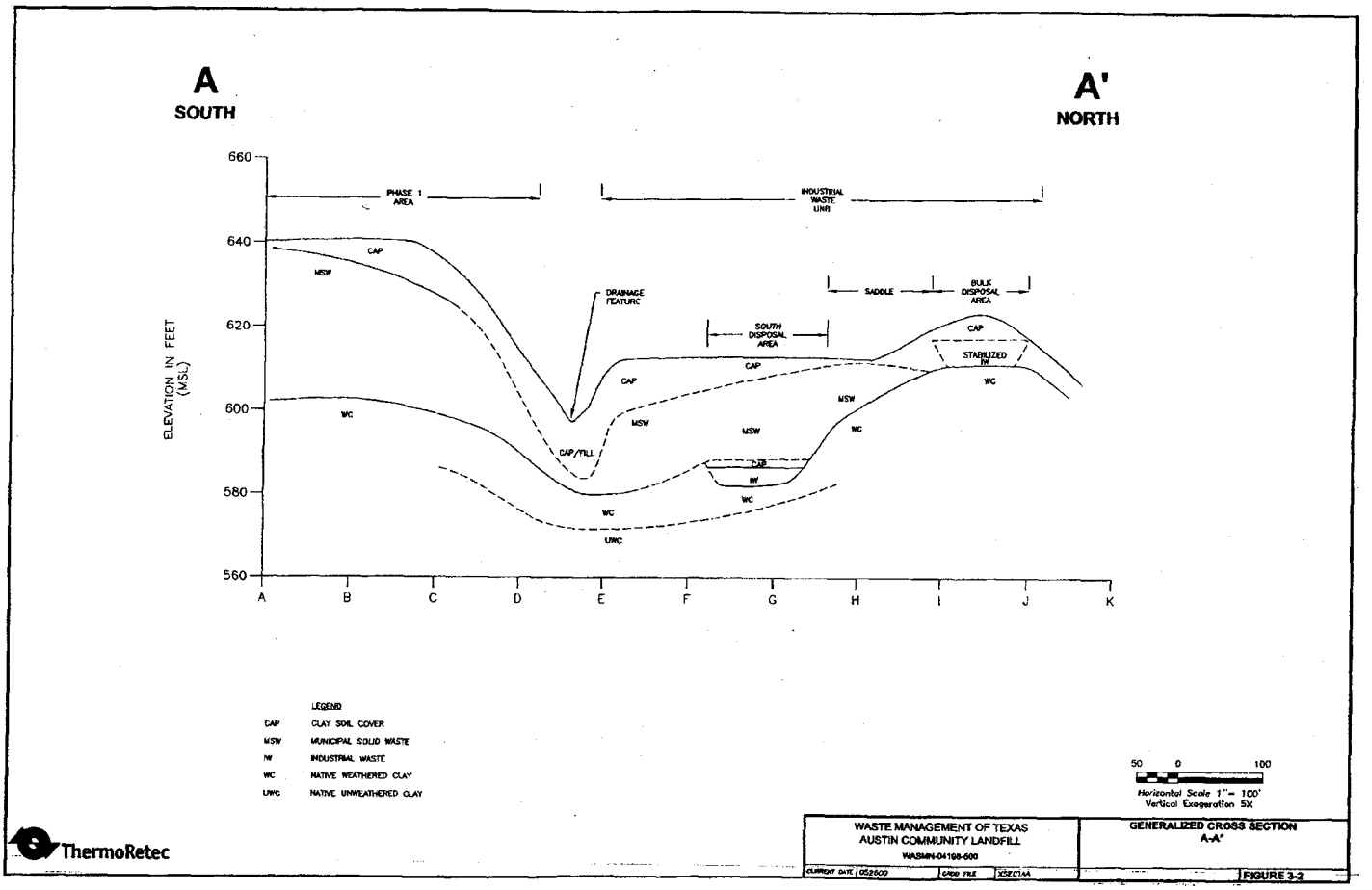
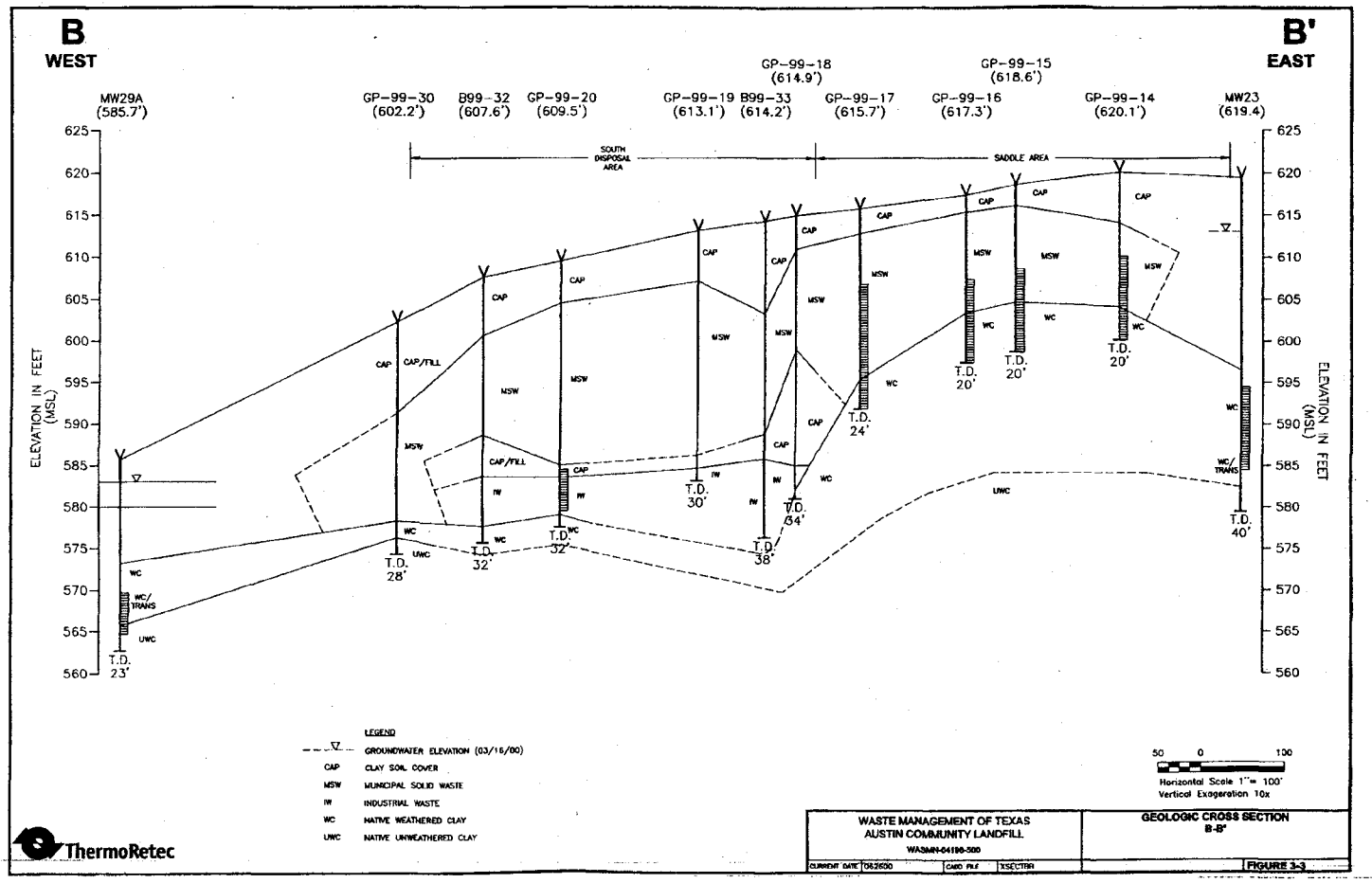
POND #4
POND #3
POND #2
POND #1
NORTH DISPOSAL AREA (NDA)
SOUTH DISPOSAL AREA (SDA)
INDUSTRIAL WASTE UNIT (CLOSED)
600
610
620
630
LEGEND
MW- GW MONITORING WELL (EXISTING)
PZ- PIEZOMETER (EXISTING)
MW- INVESTIGATION WELL
MW- SOIL BORING
GEOPROBE PIEZOMETER FOR FLUID SAMPLING, BASED ON SATURATED LOCATIONS
DB- DEEP BORINGS
B- GEOPROBE BORING
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
2000 TOPOGRAPHIC SURFACE
1998 SURFACE IMPROVEMENTS
DRAINAGE FEATURE
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
AREA OF UNKNOWN OR SUSPECTED INDUSTRIAL WASTE MANAGEMENT, FEBRUARY 4, 1973
50 0 100
Scale 1" = 100'
ThermoRetec
WASTE MANAGEMENT OF TEXAS, INC.
AUSTIN COMMUNITY LANDFILL
CROSS SECTION LOCATION MAP
CURRENT DATE 071700
CADD FILE XSECT-2
FIGURE 3-1

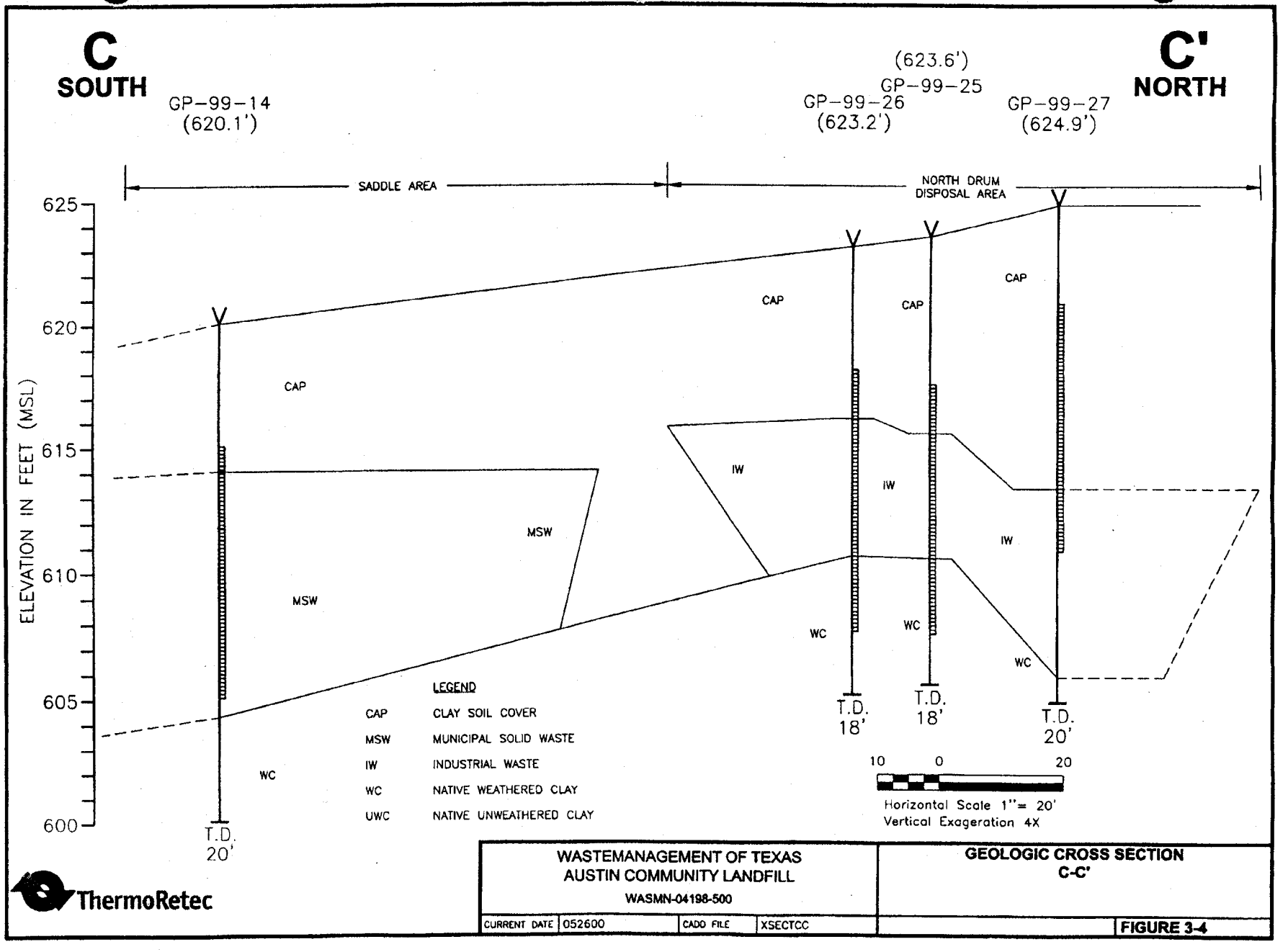
WM-013026


A
SOUTH
A'
NORTH
660
640
620
600
580
560
ELEVATION IN FEET (MSL)
PHASE 1 AREA
INDUSTRIAL WASTE UNIT
DRAINAGE FEATURE
SADDLE
BULK DISPOSAL AREA
SOUTH DISPOSAL AREA
CAP
MSW
WC
CAP/FILL
IW
UWC
STABILIZED IW
A
B
C
D
E
F
G
H
I
J
K
LEGEND
CAP CLAY SOIL COVER
MSW MUNICIPAL SOLID WASTE
IW INDUSTRIAL WASTE
WC NATIVE WEATHERED CLAY
UWC NATIVE UNWEATHERED CLAY
50 0 100
Horizontal Scale 1"= 100'
Vertical Exageration 5X
ThermoRetec
WASTE MANAGEMENT OF TEXAS
AUSTIN COMMUNITY LANDFILL
WASMN-04198-600
CURRENT DATE 052600
GRID FILE XSECTAA
GENERALIZED CROSS SECTION
A-A'
FIGURE 3-2

WM-013027

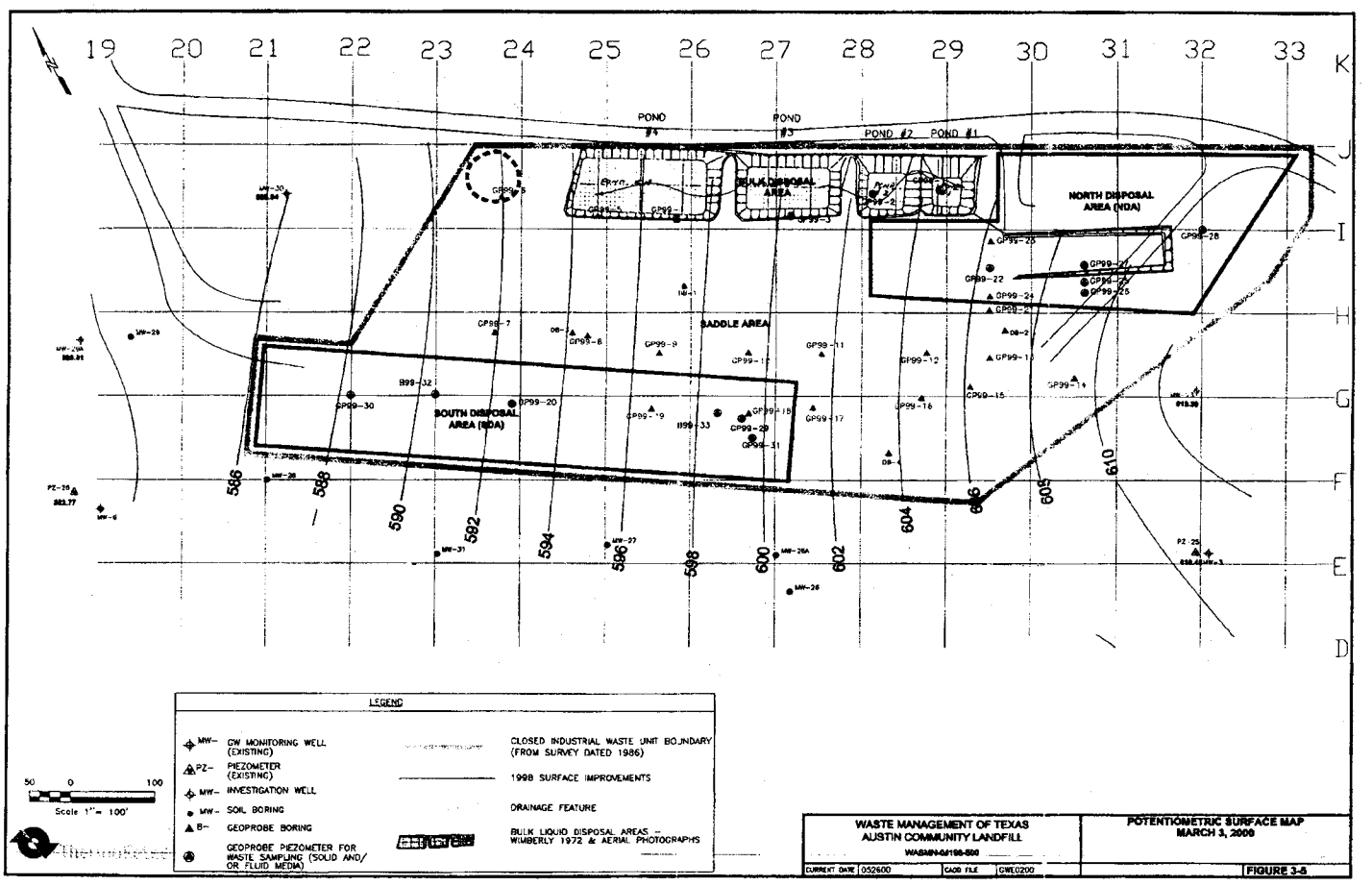

B
WEST
B'
EAST
MW29A (585.7')
GP-99-30 (602.2')
B99-32 (607.6')
GP-99-20 (609.5')
GP-99-18 (614.9')
GP-99-19 (613.1')
B99-33 (614.2')
GP-99-17 (615.7')
GP-99-15 (618.6')
GP-99-16 (617.3')
GP-99-14 (620.1')
MW23 (619.4)
SOUTH DISPOSAL AREA
SADDLE AREA
ELEVATION IN FEET (MSL)
625
620
615
610
605
600
595
590
585
580
575
570
565
560
CAP
CAP/FILL
MSW
IW
WC
UWC
WC/ TRANS
T.D. 23'
T.D. 28'
T.D. 32'
T.D. 32'
T.D. 30'
T.D. 38'
T.D. 84'
T.D. 24'
T.D. 20'
T.D. 20'
T.D. 20'
T.D. 40'
LEGEND
GROUNDWATER ELEVATION (03/15/00)
CAP CLAY SOIL COVER
MSW MUNICIPAL SOLID WASTE
IW INDUSTRIAL WASTE
WC NATIVE WEATHERED CLAY
UWC NATIVE UNWEATHERED CLAY
50 0 100
Horizontal Scale 1"= 100'
Vertical Exageration 10x
ThermoRetec
WASTE MANAGEMENT OF TEXAS
AUSTIN COMMUNITY LANDFILL
WA3MN-04198-500
CURRENT DATE 08/2000
CAD FILE
XSECTBB
GEOLOGIC CROSS SECTION
B-B'
FIGURE 3-3

WM-013028



WM-013029

TJFA 204
PAGE 055


19
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21
22
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25
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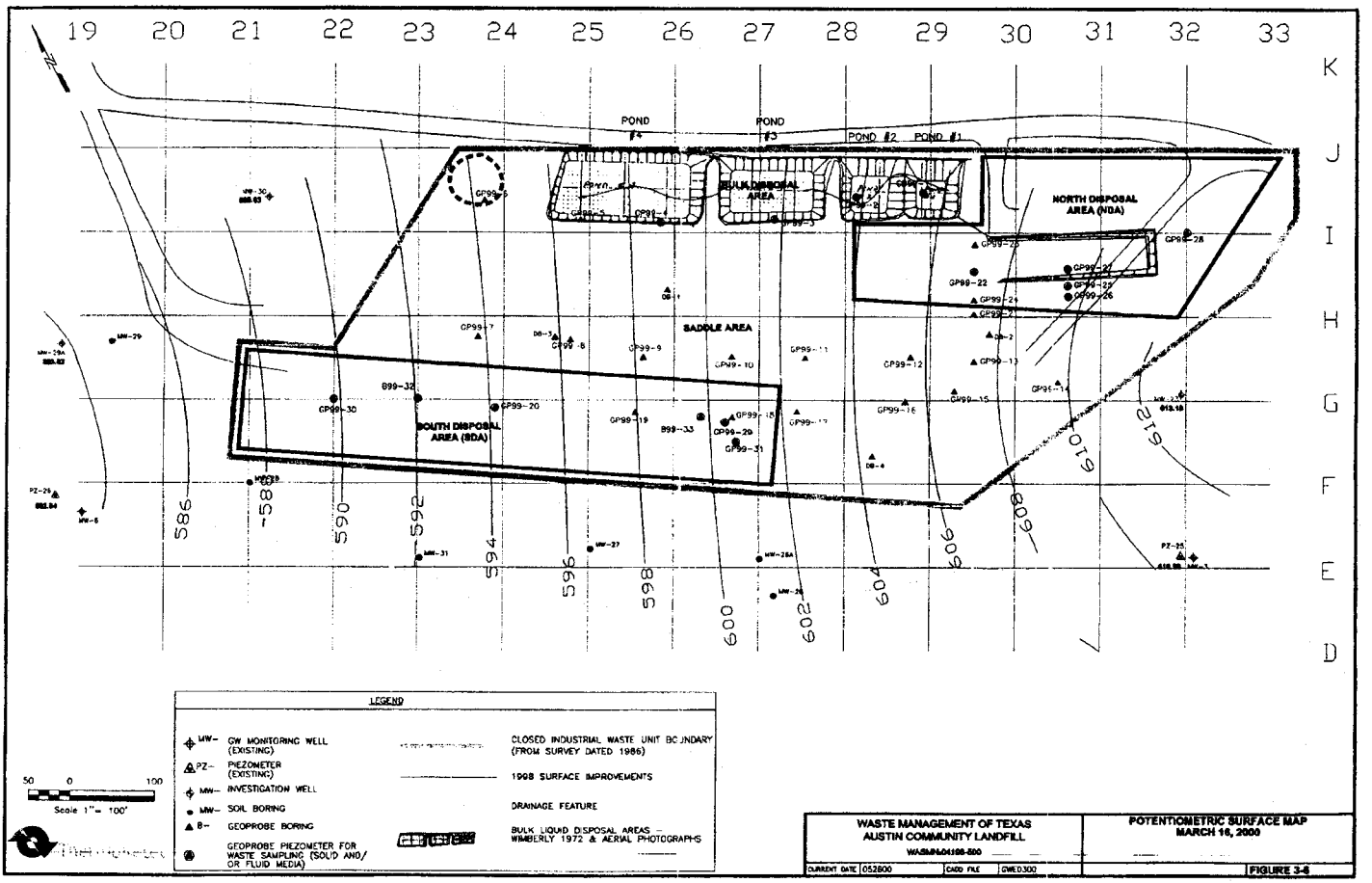
27
28
29
30
31
32
33
K
J
I
H
G
F
E
D
POND #4
POND #3
POND #2
POND #1
SEAL DISPOSAL AREA
NORTH DISPOSAL AREA (NDA)
SADDLE AREA
SOUTH DISPOSAL AREA (SDA)
586
588
590
592
594
596
598
600
602
604
606
608
610
LEGEND
MW- GW MONITORING WELL (EXISTING)
PZ- PIEZOMETER (EXISTING)
MW- INVESTIGATION WELL
MW- SOIL BORING
B- GEOPROBE BORING
GEOPROBE PIEZOMETER FOR WASTE SAMPLING (SOLID AND/OR FLUID MEDIA)
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
1998 SURFACE IMPROVEMENTS
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
50 0 100
Scale 1" = 100'
WASTE MANAGEMENT OF TEXAS
AUSTIN COMMUNITY LANDFILL
POTENTIOMETRIC SURFACE MAP
MARCH 3, 2000
CURRENT DATE 052600
CADD FILE GWE0200
FIGURE 3-8

WM-013030


19
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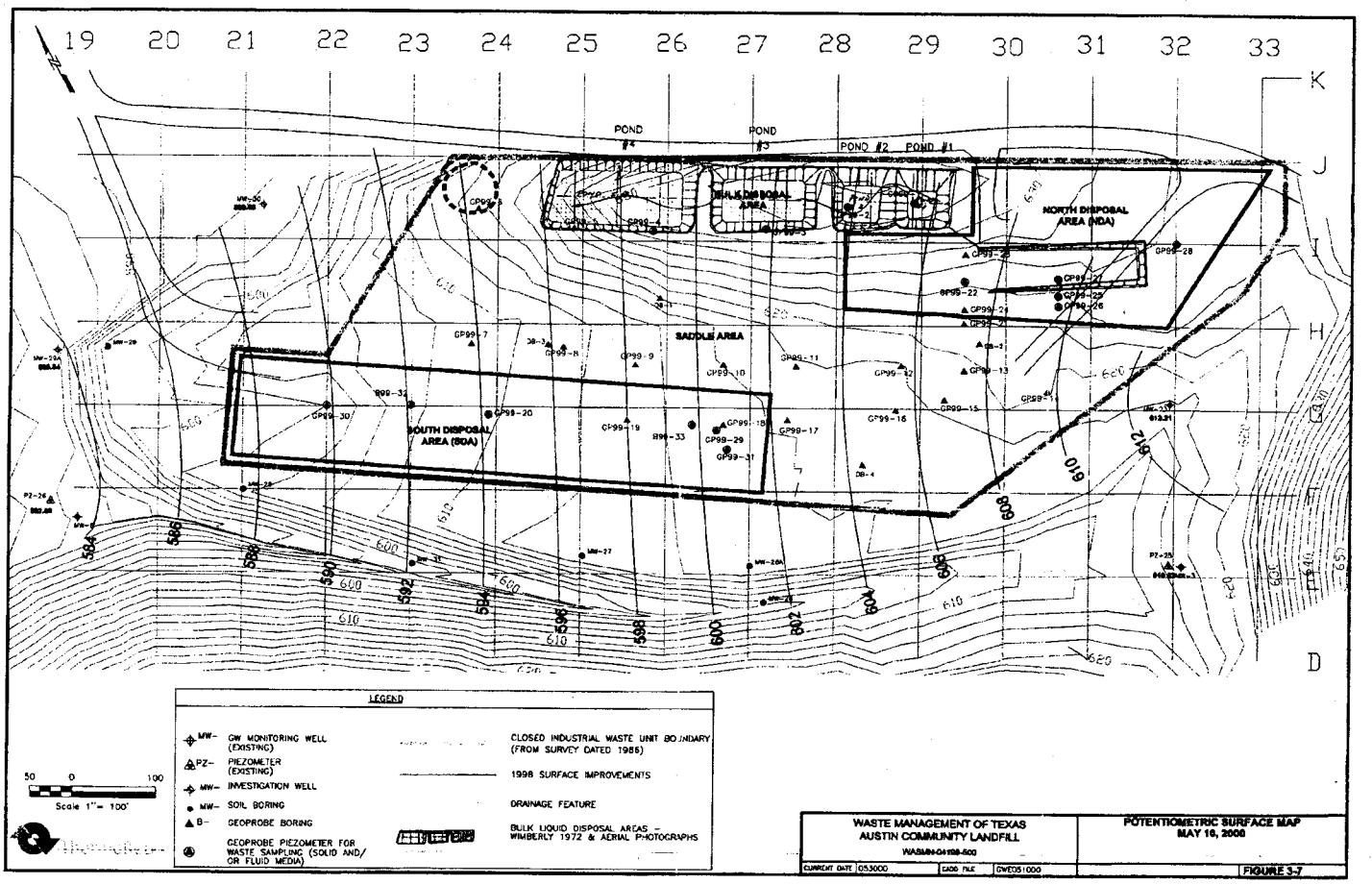
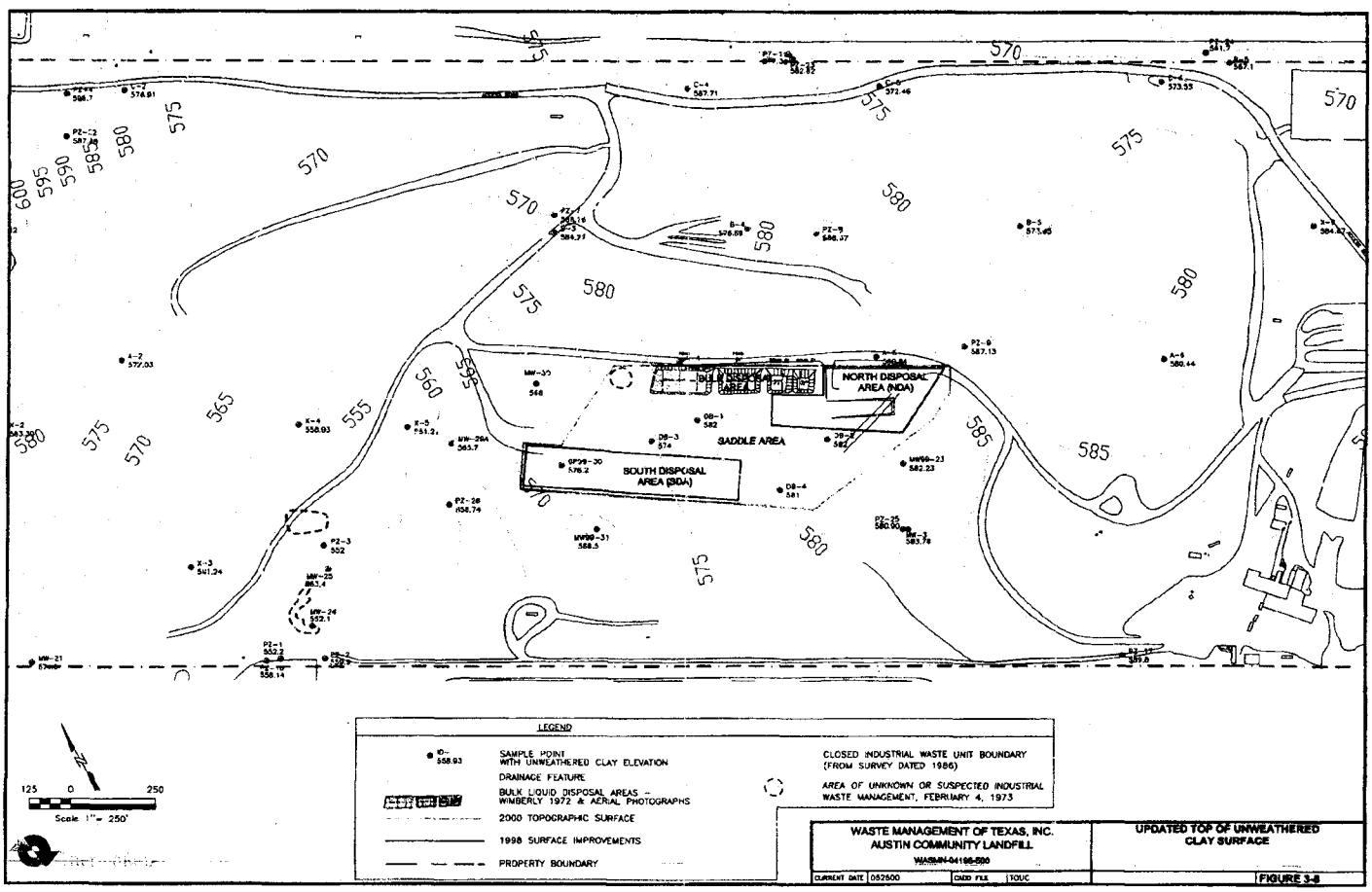
31
32
33
K
J
I
H
G
F
E
D
POND #4
POND #3
POND #2
POND #1
BULK DISPOSAL AREA
NORTH DISPOSAL AREA (NDA)
SADDLE AREA
SOUTH DISPOSAL AREA (SDA)
586
588
590
592
594
596
598
600
602
604
606
608
610
612
LEGEND
MW- GW MONITORING WELL (EXISTING)
PZ- PIEZOMETER (EXISTING)
MW- INVESTIGATION WELL
MW- SOIL BORING
B- GEOPROBE BORING
GEOPROBE PIEZOMETER FOR WASTE SAMPLING (SOLID AND/OR FLUID MEDIA)
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
1998 SURFACE IMPROVEMENTS
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS — WIMBERLY 1972 & AERIAL PHOTOGRAPHS
50 0 100
Scale 1"= 100'
WASTE MANAGEMENT OF TEXAS
AUSTIN COMMUNITY LANDFILL
POTENTIOMETRIC SURFACE MAP
MARCH 16, 2000
CURRENT DATE 052800
CADD FILE GWED300
FIGURE 3-6

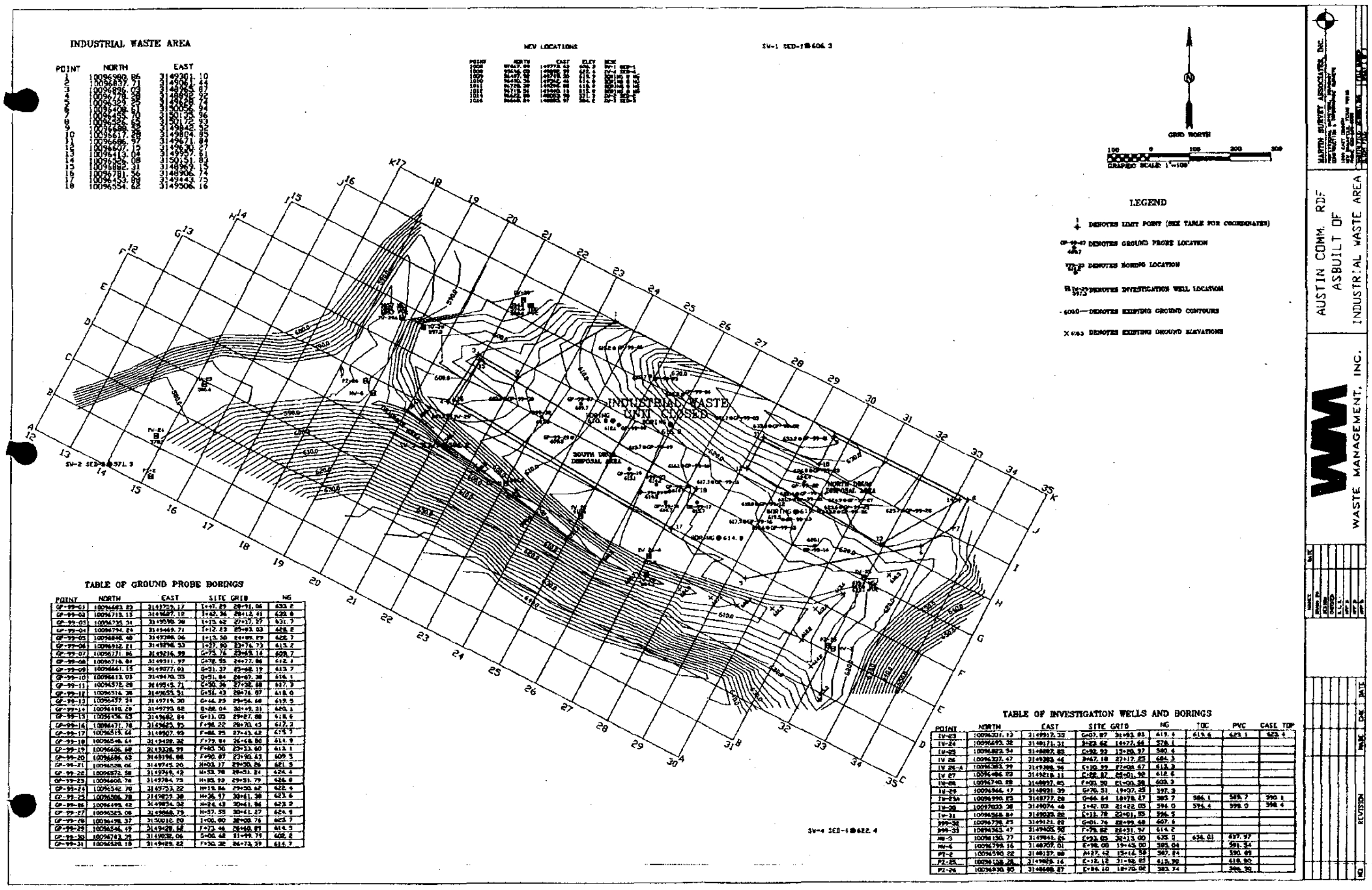
WM-013031


19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
K
J
I
H
G
F
E
D
POND #4
POND #3
POND #2
POND #1
SEAL DISPOSAL AREA
NORTH DISPOSAL AREA (NDA)
SADDLE AREA
SOUTH DISPOSAL AREA (SDA)
LEGEND
MW- GW MONITORING WELL (EXISTING)
PZ- PIEZOMETER (EXISTING)
MW- INVESTIGATION WELL
MW- SOIL BORING
B- GEOPROBE BORING
GEOPROBE PIEZOMETER FOR WASTE SAMPLING (SOLID AND/OR FLUID MEDIA)
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
1998 SURFACE IMPROVEMENTS
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
50 0 100
Scale 1" = 100'
WASTE MANAGEMENT OF TEXAS
AUSTIN COMMUNITY LANDFILL
POTENTIOMETRIC SURFACE MAP
MAY 16, 2008
FIGURE 3-7

WM-013032


NORTH DISPOSAL AREA (NDA)
SOUTH DISPOSAL AREA (SDA)
SADDLE AREA
LEGEND
SAMPLE POINT WITH UNWEATHERED CLAY ELEVATION
DRAINAGE FEATURE
BULK LIQUID DISPOSAL AREAS - WIMBERLY 1972 & AERIAL PHOTOGRAPHS
2000 TOPOGRAPHIC SURFACE
1998 SURFACE IMPROVEMENTS
PROPERTY BOUNDARY
CLOSED INDUSTRIAL WASTE UNIT BOUNDARY (FROM SURVEY DATED 1986)
AREA OF UNKNOWN OR SUSPECTED INDUSTRIAL WASTE MANAGEMENT, FEBRUARY 4, 1973
125 0 250
Scale 1" = 250'
WASTE MANAGEMENT OF TEXAS, INC.
AUSTIN COMMUNITY LANDFILL
UPDATED TOP OF UNWEATHERED CLAY SURFACE
FIGURE 3-8

WM-013033



INDUSTRIAL WASTE AREA
LEGEND
INDUSTRIAL WASTE UNIT CLOSED
SOUTH DRUM DISPOSAL AREA
NORTH DRUM DISPOSAL AREA
TABLE OF GROUND PROBE BORINGS
TABLE OF INVESTIGATION WELLS AND BORINGS
AUSTIN COMM. RDF
ASBUILT OF
INDUSTRIAL WASTE AREA
WASTE MANAGEMENT, INC.

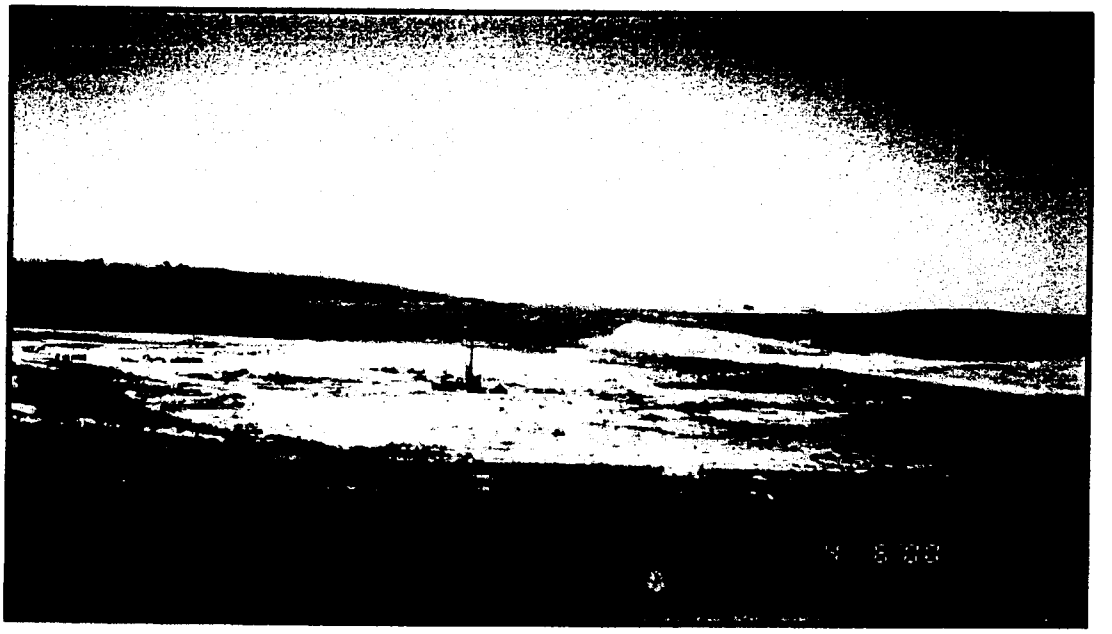
WM-013034

Appendix A

WM-013035

Appendix A

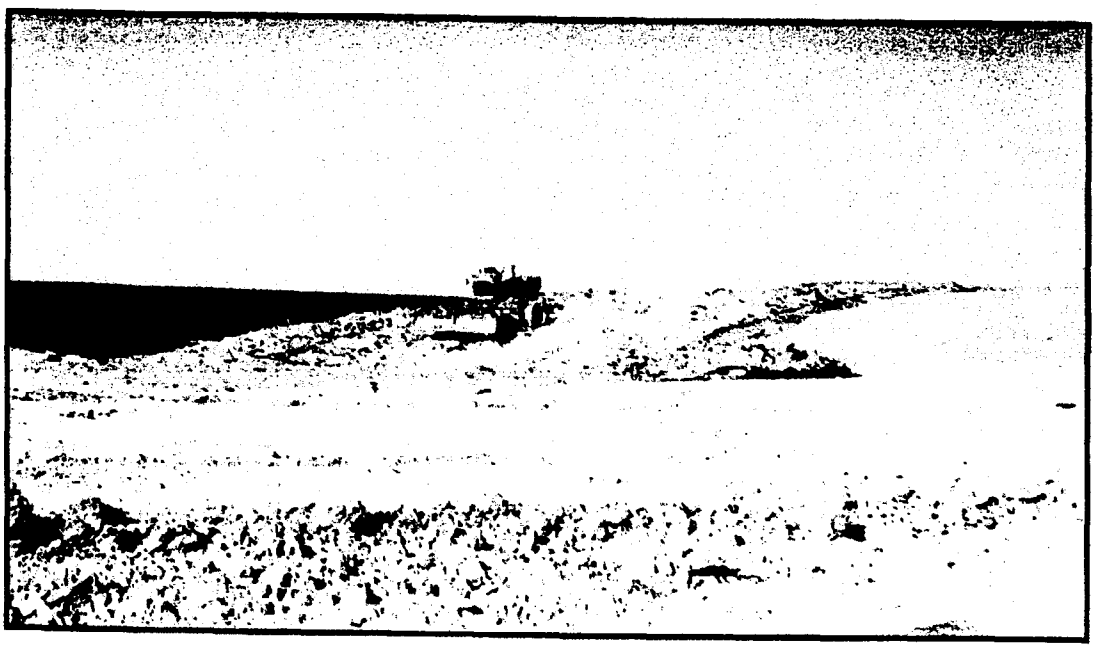
Site Photographs



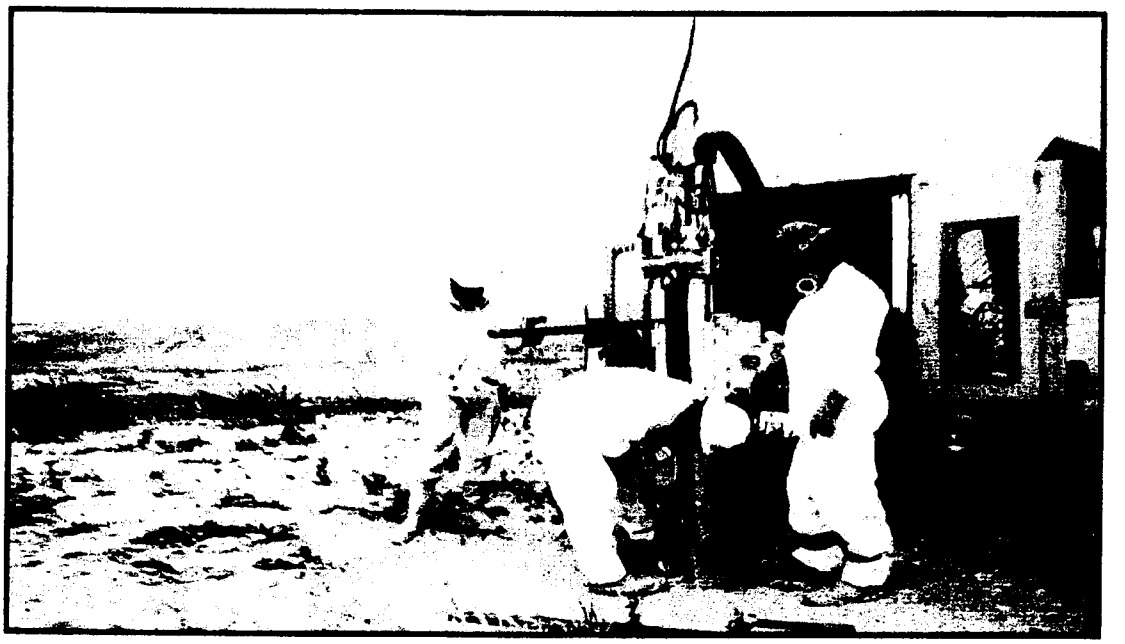
View of the IWU from the east.

IWU viewed from the bulk storage area looking south towards the Phase I area.

View looking west from the bulk storage area of the IWU.

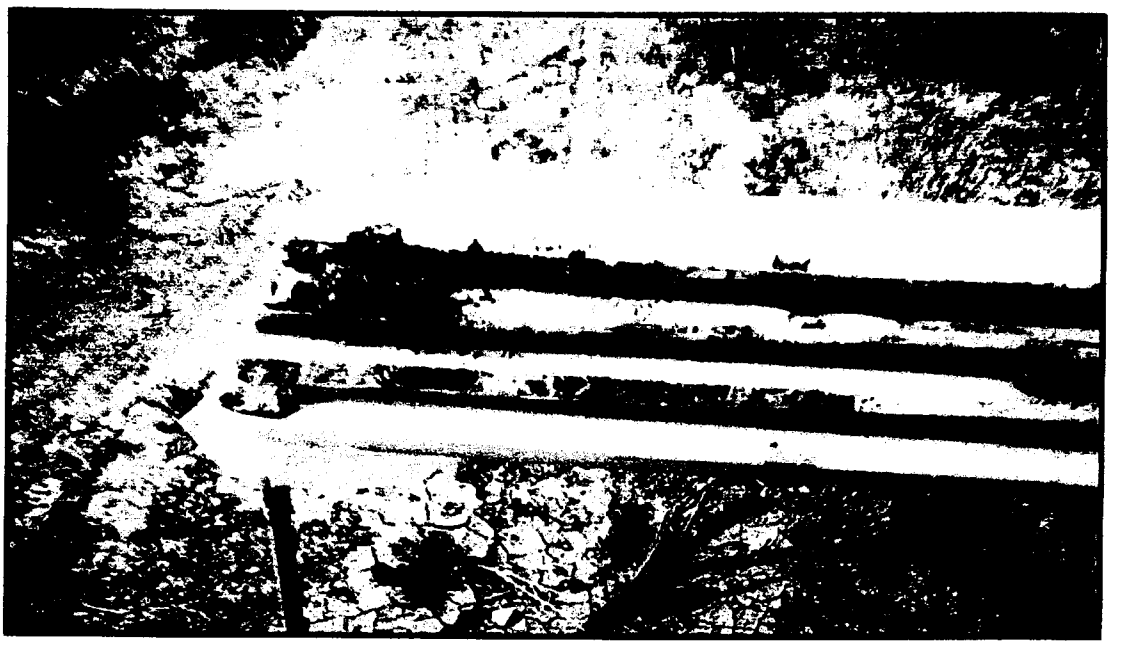


View of the active cell north of the IWU.



Installation of Geoprobe GP-99-2.

Installation of GP-99-15.



Core samples collected from GP-99-15.

Installation of piezometer GP-99-18.

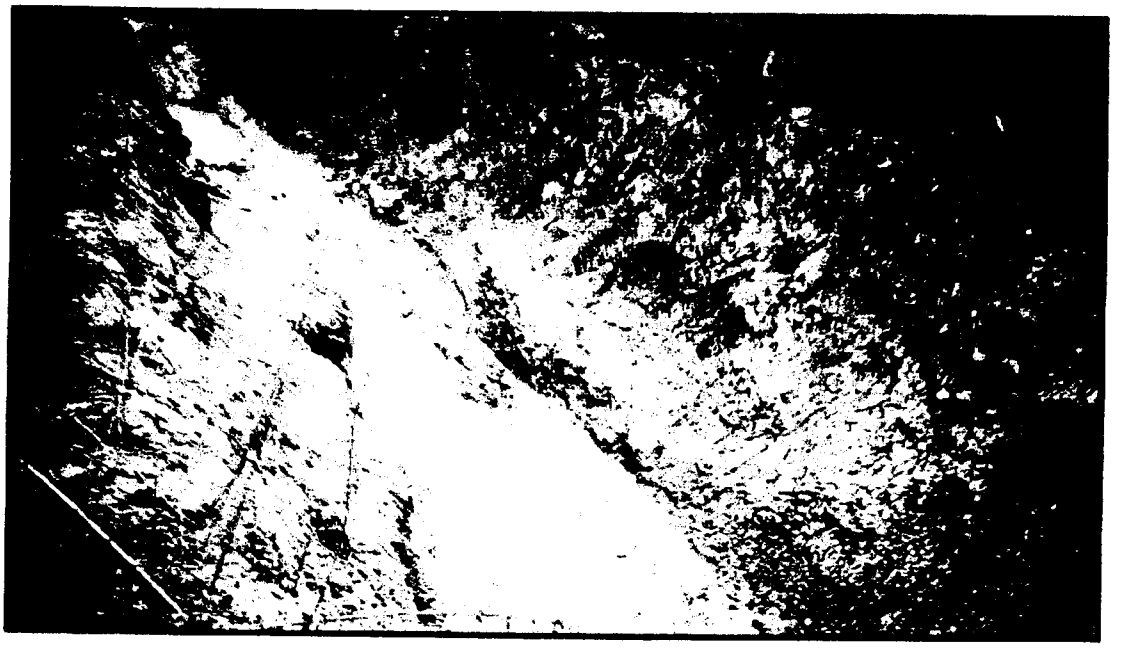
Installation of investigation well MW-23.

Unweathered Taylor Clay sample collected from MW-25.

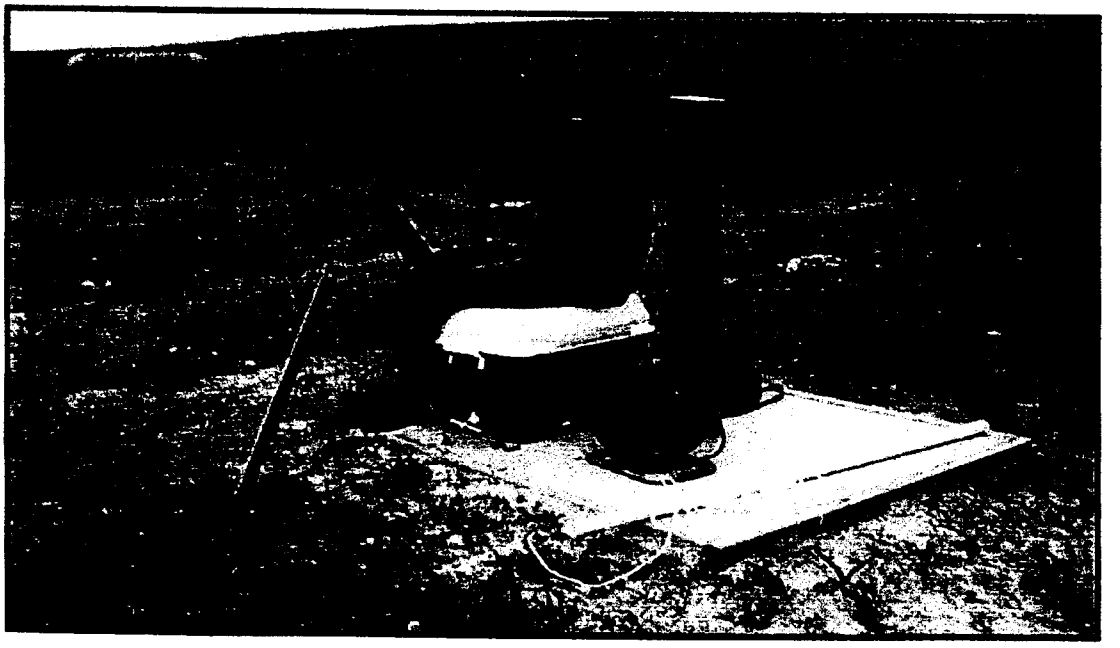
Decontamination of hollow stem augers.

Sampling surface water and sediment from location #1.

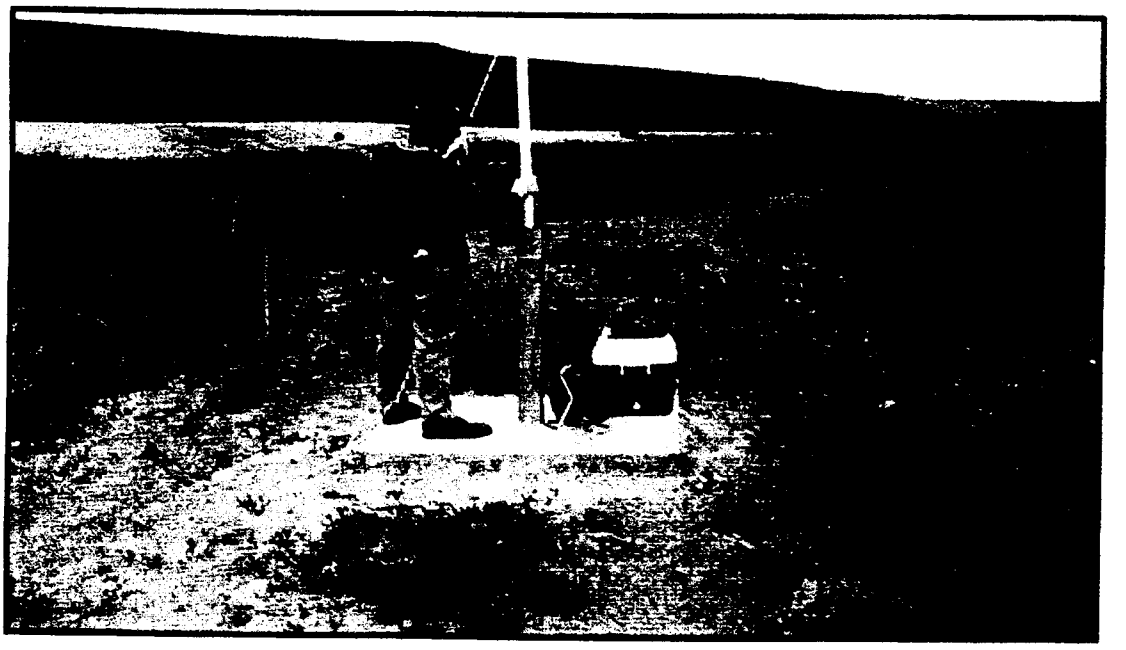
Surface water and sediment sample location #2.



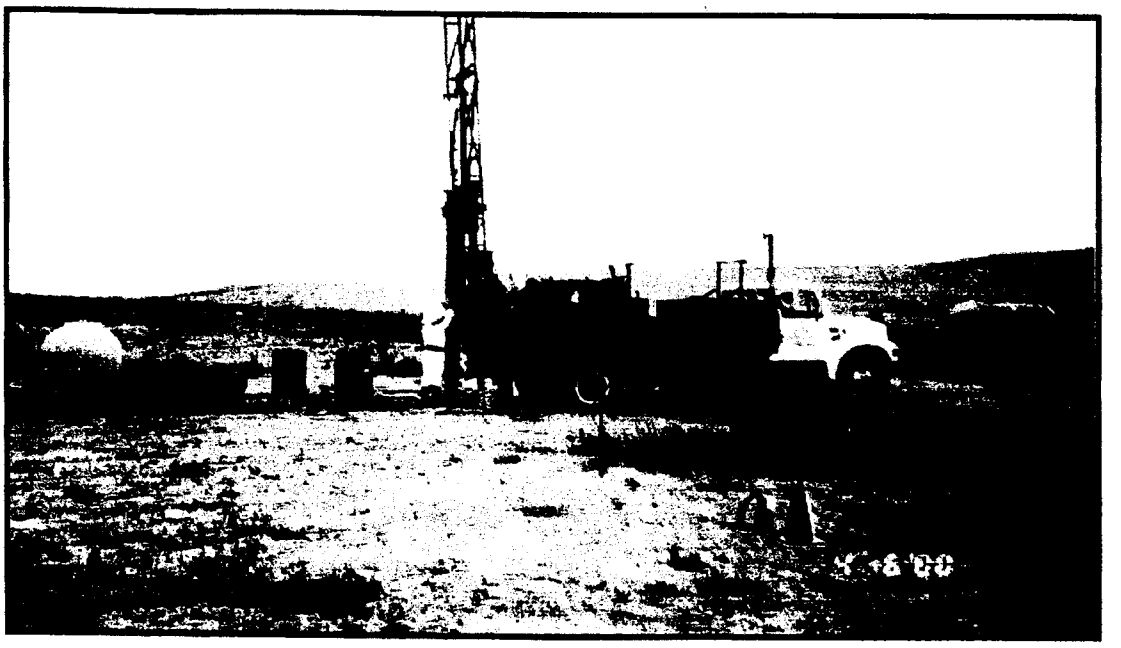
Surface water and sediment sample location #3.



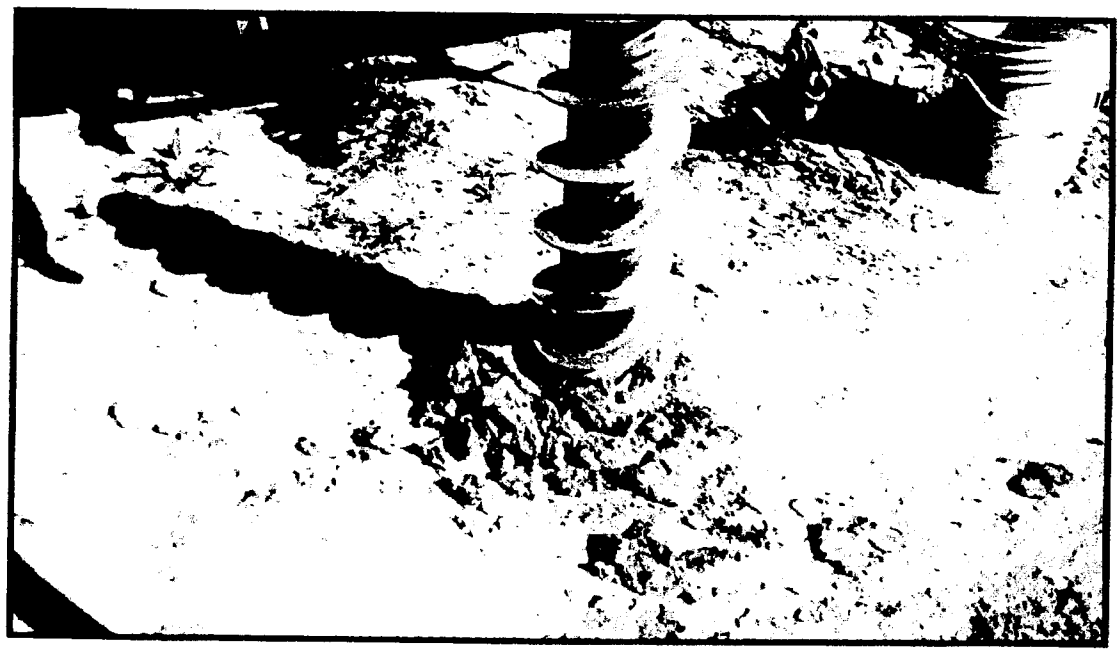
Initializing slug test at MW-23.



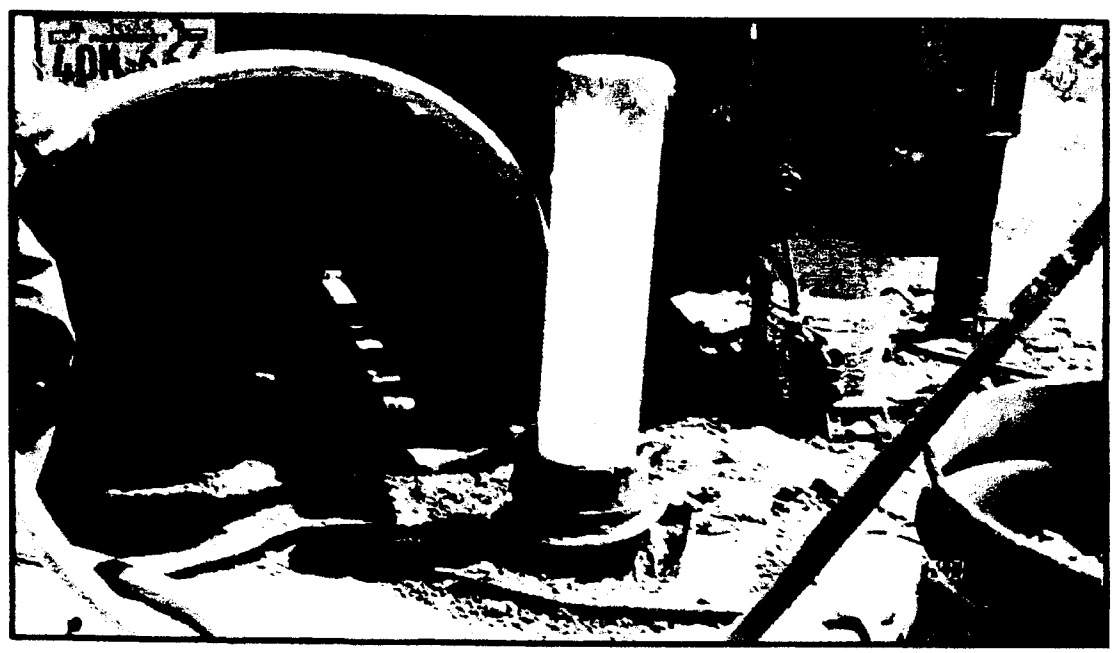
Installation of slug in MW-29A.



Installation of deep soil boring DB-2.



MSW augered to the surface during installation of deep boring DB-1.



Placement of grout using a Tremie pipe in DB-2.

Installation of auger into DB-4 casing.

Plugging of DB-3 by placement of grout to the surface.

Drum-staging area in the IWU.

Appendix B

Appendix B

Boring Logs

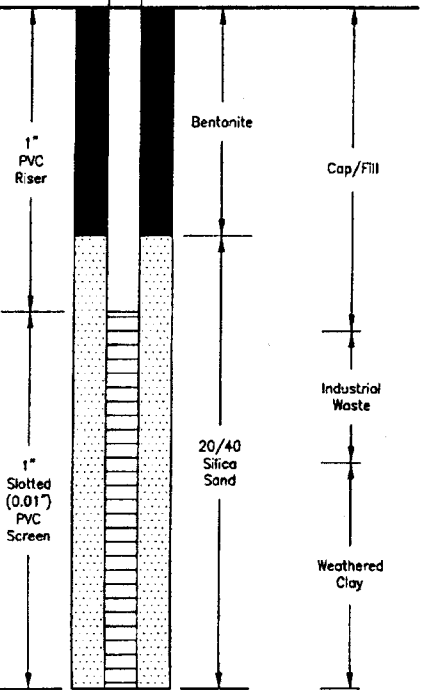
HOLE No. GP-99-1

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/2/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Bulk Storage Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, tan with orange mottling, trace silt, trace fine sand, stiff, hard, medium plasticity, dry.	CL	61	1
4–8: Top 2 feet clay, tan with orange mottling, trace silt, trace medium sand, stiff, hard, medium plasticity, dry. BTM 2 feet brown clay with trace sand, high plasticity, moist.	CH	9	2
8–12: Clay, top 8 inches tan clay with trace sand, dry, stiff. 20 feet black stained clay, trace sand, grading to tan clay with yellow staining at 3 feet, moist, high plasticity, bottom 6 inches gray clay, trace sand, dry (waste).	CH	33	3
12–16: Clay, tan, orange–tan, and gray mottled, hard, high plasticity, slightly moist. Vertical gray clay structure along long axis of sample.	CH	63	4
16–18: Shelby Tube.	-	ST	5
Total Depth = 18 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013051

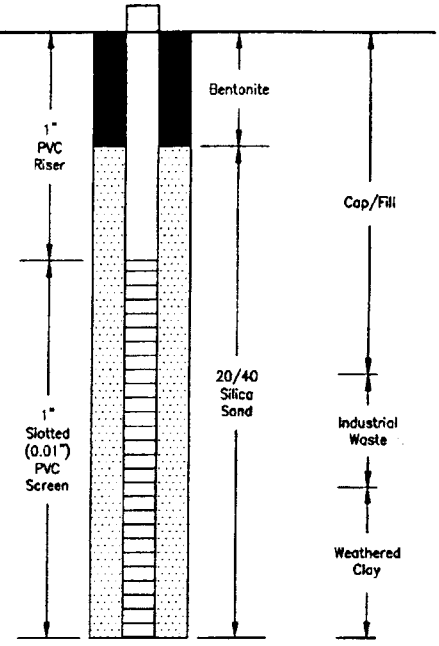
HOLE No. GP-99-2

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/2/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Bulk Storage Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.
0–4: Clay, top 2 feet tan to brown (black bottom 3 inches), hard, dry. Bottom 2 feet clay, tan, gray, and orange, trace sand, dry, hard.	CL		50	1
4–6: Shelby Tube (refusal). No sample collected.	-		-	2
6–10: Top 3 feet clay, brown, tan, and orange, trace sand, dry, highly plastic. Bottom 1 foot clay, yellow-green, moist, highly plastic (waste).	CH		5	3
10–14: Top 2 feet clay, yellow-green, moist, highly plastic (waste). Bottom 2 feet clay, tan with orange and very light tan to off-white mottling, hard, plastic, slightly moist.	CH		8	4
14–16: Shelby Tube.	-		-	5
Total Depth = 16 feet				

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013052

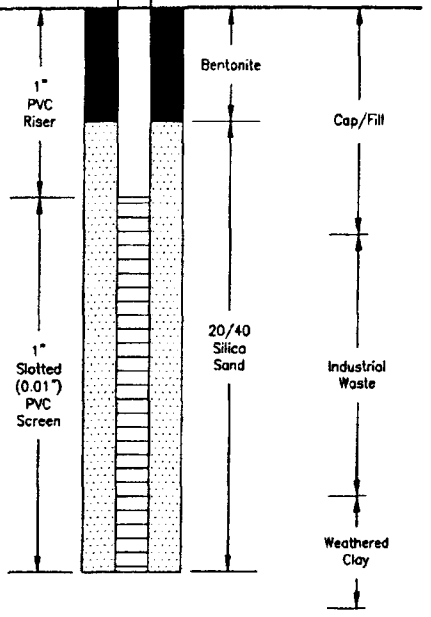
HOLE No. GP-99-3

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/2/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Bulk Storage Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, upper 2 feet brown to gray–brown, stiff, hard, dry. Bottom 2 feet clay, tan to light brown, trace sand, dry. Bottom 4 inches moist.	CL	0	1
4–6: Shelby Tube.	-	-	2
6–10: Top 4 inches clay, gray–tan, hard dry. Next 4 inches saturated, white, elongated crystal mass (size approximately similar to rice grains). Next 10 inches dark brown to brown crystal mass. Saturated crystals much smaller than white crystals above. Bottom 6 inches tan, silty clay with trace small gravel, saturated.	CL	2	3
10–14: Top 3 feet white crystals (waste) grading to pink–brown silt, trace clay saturated. Bottom 6 inches clay, tan with yellow staining, moist. Bottom 1 foot tan–orange and gray clay with filled fractures and some horizontal laminae, slightly moist, highly plastic, hard.	CL	0	4
14–16: Shelby Tube – no recovery. Fluid in hole turned Shelby Tube a purplish–pink color.	-	-	5
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013053

HOLE No. GP-99-4

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/3/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Bulk Storage Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Top 2 inches clay, red with tan and gray mottling, hard, highly plastic, dry. Middle 3 feet clay, tan with orange and gray mottling, hard, plastic, dry. Bottom 10 inches clay, brown, trace iron staining, trace silt, dry, hard.	CH	0	1
4–6: Shelby Tube.	-	-	2
6–10: Clay, tan to light brown with some orange mottling, trace sand and gravel, dry at top increasing to slightly moist at bottom, medium plasticity. Bottom 1 inch has black-filled fractures.	CH	2	3
10–14: Top 8 inches clay, tan with orange mottling, wet, soft. Middle 3 feet dark brown crystals, wet. 3 inches off-white soft clay in middle. Bottom 4 inches tan to light brown, clayey silt, moist, soft.	CH	40	4
14–18: Top 1.5 foot tan silty clay, with some dark brown staining, moist. Bottom 2.5 feet tan to orange-tan clay with gray mottling and vertical structures, trace small woody (roots) material near bottom, hard, highly plastic, slightly moist.	CH	50	4
18–20: Shelby Tube.	-	-	5
Total Depth = 20 feet			

PIEZOMETER CONSTRUCTION

1" PVC Riser

1" Slotted (0.01") PVC Screen

Bentonite

20/40 Silica Sand

Cap/Fill

Industrial Waste

Weathered Clay

4198/logs/gp1-31

WM-013054

HOLE No. GP-99-5

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/3/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Bulk Storage Arae	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	REMARKS
0–4: Clay (top 4 inches wet), tan and gray clay with orange mottling, trace iron staining, trace white crystals, trace gravel, hard, moderate plasticity, dry.	CH	0	1	Backfilled with hydrated bentonite.
4–8: Clay, top 2 feet gray to gray with orange and medium gray mottling, hard, plastic, dry. Bottom 6 inches tan to off–white silty clay. Bottom 2 feet clay, dark brown (waste), moist. Bottom 4 inches tan, silty clay, slightly moist, moderate plasticity.	CH	175	2	Industrial/ Waste
8–12: Clay, tan to light brown with sections of orange clay with tan and gray mottling, hard, dry, high plastic.	CH	120	3	Fill
12–16: Clay tan to orange–brown, hard, dry, highly plastic.	CH	105	4	Weathered Clay
Total Depth = 16 feet				

4198/logs/gp1–31

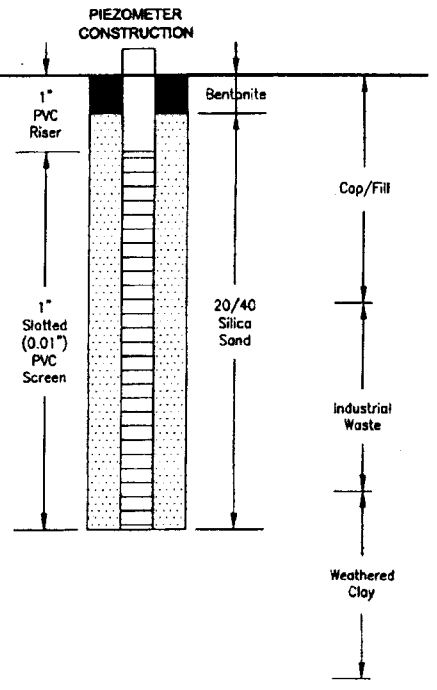
WM-013055

HOLE No. GP-99-6

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/3/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Suspected Waste Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, light brown with tan and gray and orange mottling, stiff, high plasticity, slightly moist, trace gravel, some black mottling near bottom (fill).	CH	12	1
4–6: Shelby Tube.	-	-	2
6–10: Clay, top 4 inches orange–tan with black mottling, black clay trace gravel, tan to brown clay trace orange and black mottling, slightly moist, moderate plasticity (possibly waste/fill).	CL	7	3
10–14: Clay, top 10 inches (fill), light brown with gray–brown mottling. Bottom 3 feet, 2 inches tan clay with orange and gray mottling and gray laminae to 1/4 inch dry, hard, highly plastic.	CH	9	4
14–16: Shelby Tube. Lost Shelby Tube in hole.	-	-	5
Total Depth = 16 feet			



4198/logs/gp1-31

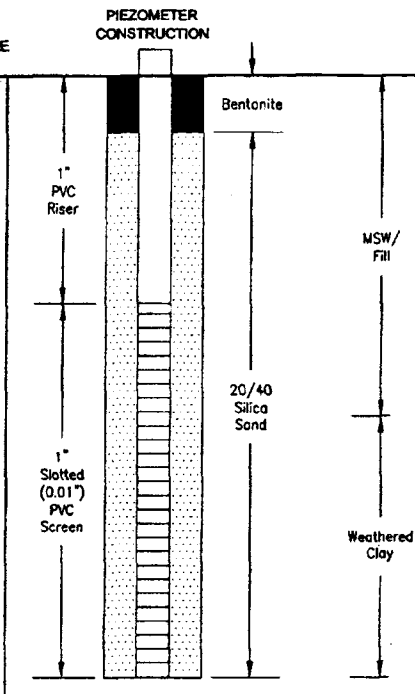
WM-013056

HOLE No. GP-99-7

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/6/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Top 6 inches clay with some plastic and insulation material, trace sand and gravel. Bottom 2.5 feet wood debris, black and red wood, trace gray–tan clay (MSW).	CH	7.6	1
4–8: Clay, gray to gray–brown clay (fill), wood at top, black interval in middle of sample with wood (MSW). Bottom 2.5 feet orange–tan clay, slightly moist, stiff, highly plastic (fill).	CH	11	2
8–12: Clay, top 1 foot tan to gray–brown clay, slightly moist, stiff, moderate plasticity (fill). Bottom 3 feet tan to orange–tan clay, trace gray mottling, slightly moist, stiff, highly plastic (WC.	CH	7	3
12–16: Clay, tan to orange–brown, trace silt, gray mottling, some horizontal laminae, hard, slightly moist (WC).	CH	6	4
Total Depth = 16 feet			



4198/logs/gp1-31

WM-013057

HOLE No. GP-99-8

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/6/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	REMARKS
0–4: Top 1 foot tan to gray–brown clay, trace orange mottling, hard, dry. Bottom 3 feet, gray–brown clay, wood, trace gravel, trace silt, slightly moist, highly plastic (MSW).	CH	17	1	Backfilled with hydrated bentonite.
4–8: Clay, top 1 foot gray–brown, stiff, slightly moist (fill). Bottom 3 feet tan to orange–brown clay, trace orange and gray, highly plastic (fill).	CH	4	2	
8–12: Clay, tan to light brown with orange and gray mottling, slightly moist, stiff, highly plastic. No horizontal structures (fill).	CH	6	3	
12–16: Clay, tan to orange–brown to gray–brown, stiff, slightly moist, highly plastic. Bottom 1 foot has trace horizontal laminations (WC).	CH	4	4	
16–20: Clay, tan to orange–brown, stiff, slightly moist, highly plastic (WC).	CH	4	5	
Total Depth = 20 feet				

Cap/Fill
Fill
Weathered Clay

4198/logs/gp1-31

WM-013058

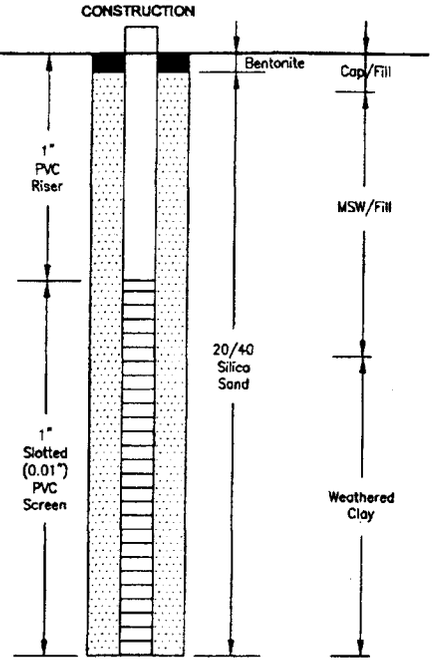
HOLE No. GP-99-9

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/6/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Top 1 foot clay, tan–orange, some black, trace silt, stiff, slightly moist, plastic (fill). Bottom 2.5 feet dark brown to gray clay, plastic, wood, and glass fragments (MSW), moist, moderate plasticity.	CL	7	1
4–8: Clay, gray–brown, trace silt, plastic bag, insulation, aluminum can fragments, moist, moderate plasticity (MSW).	CL	13	2
8–12: Clay, tan to orange–brown, with gray clay–filled fractures. Some high–angle fractures in clay, plastic to highly plastic, slightly moist contact at 8.2 feet (WC).	CH	7.5	3
12–16: Clay, tan to orange–tan, vertical fracture infilled with gray clay, high–angle fractures, slightly moist (WC).	CH	3	4
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1–31

WM-013059

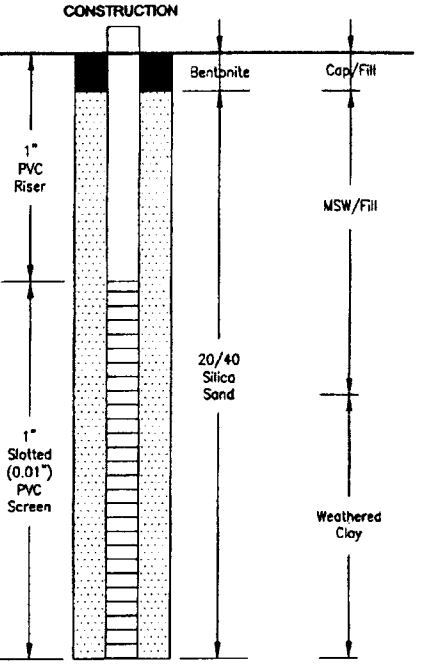
HOLE No. GP-99-10

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/6/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.
Top 1.5 foot clay, gray-brown with iron staining, stiff, slightly moist, highly plastic (fill). Bottom 1.5 foot clay, gray and tan with wood, fibers, plastic bag, and some stones (MSW). Clay, highly plastic, slightly moist (fill).	CH		8.5	1
4-8: Clay, tan to orange-brown, with gray mottling, slightly moist, highly plastic, wood, plastic, and black-stained clay, 4- inch layer in center of sample (MSW/fill).	CH		5	2
8-12: Top 1 foot tan-orange and gray clay with black mottling, highly plastic, slightly moist (fill). Bottom 3 feet tan-orange clay with high-angle fractures and gray clay-filled fractures and horizontal laminations, roots, moist, highly plastic, stiff (WC).	CH		3	3
12-16: Clay, tan to orange-tan with gray horizontal laminations and gray vertical clay-filled fractures, slightly moist, highly plastic, stiff (WC).	CH		4	4
Total Depth = 16 feet				

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013060

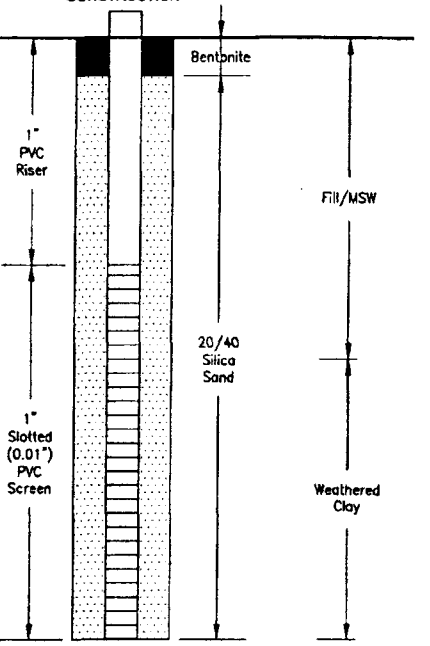
HOLE No. GP-99-11

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/6/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, gray–brown, orange, and tan with black mottling and MSW (glass, plastic, plastic bags, wood). Clay highly plastic, slightly moist, stiff (MSW/fill).	CH	2	1
4–8: Clay, gray–brown, trace silt, trace orange mottling at bottom. No structures, no laminae. Trace MSW (plastic, glass, metal), clay highly plastic, slightly moist, stiff (MSW/fill).	CH	3	2
8–12: Clay, tan to orange–tan and gray, slightly moist, highly plastic, stiff (fill/WC contact at 8.5).	CH	4.5	3
12–16: Clay, tan to orange–brown with gray clay–filled fractures and horizontal structures, high–angle fractures (WC), roots.	CH	4	4
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013061

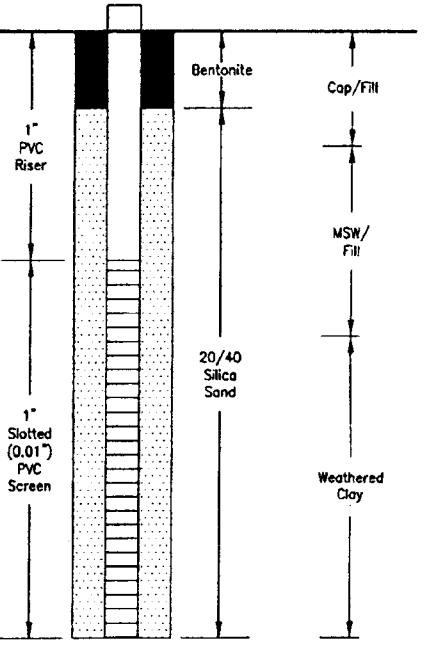
HOLE No. GP-99-12

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/7/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, top 4 inches silty clay, tan to orange–brown clay to 3 feet, becoming black with gravel paper, wood, glass, slightly moist, moderate plasticity, stiff (MSW/fill).	CL	6.5	1
4–8: Clay, brown at top to gray–brown, trace gravel, stiff, slightly moist, moderate plasticity (fill).	CL	3	2
8–12: Clay, tan to orange–brown with gray clay–filled fractures, roots and horizontal laminations, stiff, highly plastic, slightly moist (WC contact at 8 feet).	CH	1	3
12–16: Clay, orange–brown to tan, with gray clay–filled fractures and horizontal laminations. Stiff, highly plastic, slightly moist (WC).	CH	1	4
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013062

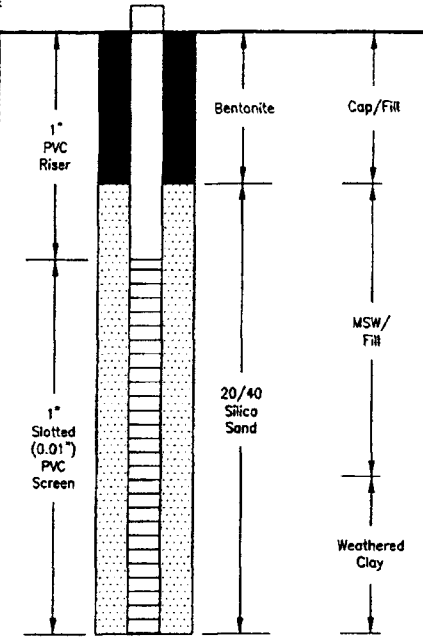
HOLE No. GP-99-13

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/7/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, tan to light orange–brown, trace gravel, trace silt, slightly moist, moderate plasticity, stiff (fill).	CL	2.5	1
4–8: Clay, top 6 inches tan to orange–brown, grading to greenish–brown and to dark brown, some metal (rusted) in middle of sample. Bottom 2 feet dark brown to black, some gravel, very stiff, plastic, slightly moist (fill/MSW).	CL	0.5	2
8–12: Clay, dark brown at top grading to tan to light brown with orange and gray mottling, with some black mottling throughout, stiff, slightly moist, moderate plasticity (Contact fill/WC at 11.8 feet).	CL	0.0	3
12–16: Clay, tan to orange–brown with tan horizontal laminae. Some vertical, gray, clay–filled fractures, trace high–angle fractures, slightly moist.	CL	0.0	4
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013063

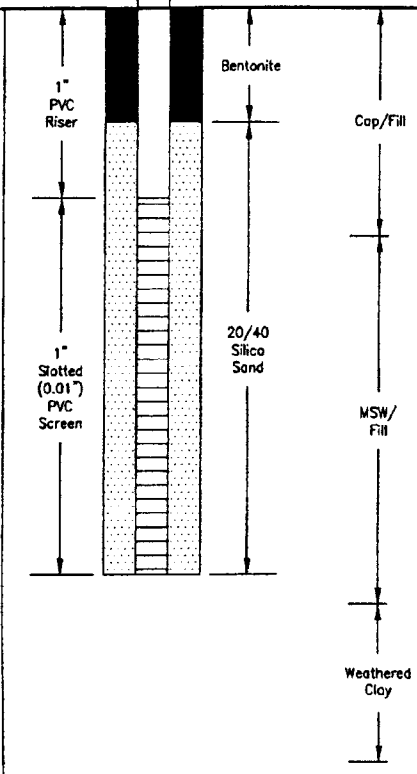
HOLE No. GP-99-14

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/7/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.
0–4: Clay, tan with orange and gray mottling, dry, friable, slightly plastic (fill).	CL		-	1
4–8: Clay, top 1 foot tan, orange and gray, grading to tan to orange with black at 2.5 feet. Bottom 1.5 foot black clay with gravel, MSW at bottom (plastic bags, glass, paper, cardboard), clay, slightly moist, stiff, moderate plasticity (fill/MSW).	CL		-	2
8–12: Clay, dark gray at top grading to tan with glass and plastic at 1.5 foot. Bottom 2.5 feet black to dark gray with white plastic, slightly, moist, stiff, highly plastic (MSW/fill).	CH		-	3
12–16: Clay, gray–brown, MSW at top (3 inches glass, plastic, and paper), trace gravel, black clay mottling to 3.5 feet. Bottom 0.5 foot clay, tan to orange–brown with gray areas, slightly moist, highly plastic, stiff (WC contact at 15.8 feet).	CH		-	4
16–20: Clay, orange with tan and gray clay–filled fractures, roots, very stiff, slightly moist, highly plastic (WC).	CH		-	5
Total Depth = 20 feet				

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013064

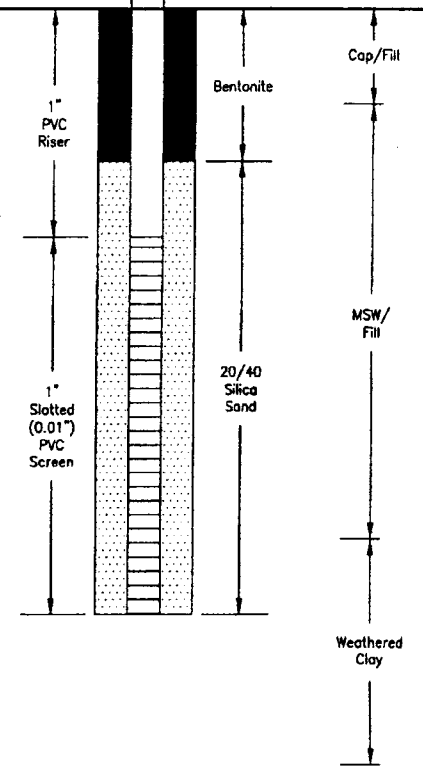
HOLE No. GP-99-15

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/7/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, 1.5 foot tan, gray and orange, dry, stiff, moderate plasticity. Bottom 2.5 feet clay, brown to tan with gray mottling, some black mottling, slightly moist, plastic, stiff, trace white plastic (fill/MSW).	CL	1.6	1
4–8: Clay, tan to orange–brown with gray mottling. Some black clay intervals in middle of sample. Bottom 8 inches of sample wood, fibers, metal, plastic and plastic bag (fill/MSW).	CL	6	2
8–12: Clay, brown to gray–brown mixed with intervals (4 – 6 inches) of MSW (paper, fiber, wood, glass, and fiberglass), slightly moist clay, plastic, stiff MSW dry (fill/MSW).	CL	7	3
12–16: Clay, top 1 foot gray–brown, grading to orange–brown with gray. Bottom 3 feet slightly moist, stiff, plastic (WC contact at 14 feet).	CL	4	4
16–20: Clay, tan to orange–brown, gray–filled fractures, slightly moist, stiff, moderate plasticity (WC).	CL	0	5
Total Depth = 20 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013065

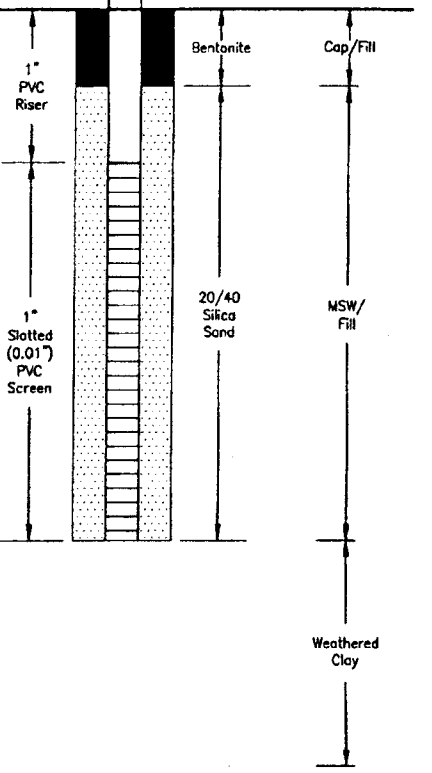
HOLE No. GP-99-16

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/8/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.
0–2: Shelby Tube.	-		-	1
2–6: Top 1.5 foot clay, tan and gray at top, grading to black, stiff, slightly moist, moderate plasticity (fill). Bottom 2.5 feet MSW (wood, plastic, styrofoam, paper, cloth), slightly moist, trace clay at bottom of sample, tan to black, slightly moist, moderate plasticity (fill).	CL		6	2
6–10: Clay, tan to gray to black with some black mottling, stiff, moist, moderate plasticity (fill).	CL		3	3
10–14: Clay, top 1 foot gray with black mottling, trace MSW (glass, plastic), moist, moderate plasticity. Bottom 3 feet tan, orange, and gray clay, stiff, moist, moderate plasticity (MSW/fill).	CL		0	4
14–18: Clay, tan to orange–tan with gray clay–filled fractures and some horizontal gray–filled fractures, slightly moist, trace white, chalky material, medium plastic, stiff (WC contact at 14 feet.	CL		0	5
18–20: Shelby Tube.	-		-	6
Total Depth = 20 feet				

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013066

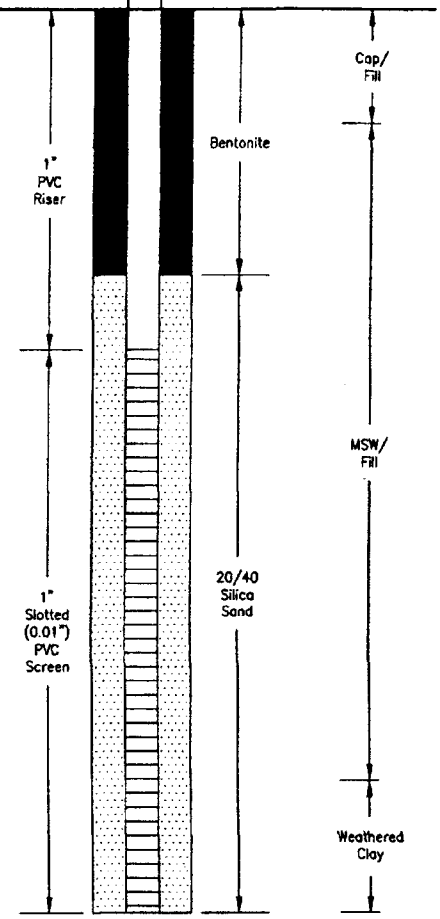
HOLE No. GP-99-17

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/8/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	24'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, tan to orange–brown with gray mottling. Wood at a 3 feet (3 inches thick). Some black clay, slightly moist, stiff, plastic clay (fill).	CL	1	1
4–8: Clay, tan, gray, black, trace orange, wood at bottom, slightly moist, plastic, dry, stiff (fill/MSW). (MSW, wood, plastic bags, paper, plastic drinking straw).	CL	2	2
8–12: Clay, top 8 inches tan, brown, gray, and black. Slightly moist. Bottom mostly wood, trace plastic, plastic bags, (MSW).	CL	5.2	3
12–16: Clay, gray–brown with wood, glass, and plastic throughout length of sample, saturated, clay wet, moderately stiff, plastic to highly plastic (MSW).	CH	1	4
16–20: Clay, tan to orange–brown, trace wood fragments throughout, wet, stiff, highly plastic clay (fill/MSW).	CH	0	5
20–24: Clay, top 0.5 foot tan to orange–brown with black, stiff, slightly moist, moderate plasticity (fill). Bottom 1.5 foot tan to orange–brown with gray clay–filled fractures, high–angle fractures, gray clay–filled horizontal structures, (WC) slightly moist, stiff, moderate plasticity (WC contact at 20.5 feet).	CL	5	6
Total Depth = 24 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013067

HOLE No. GP-99-18

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/8/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	34'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, tan, gray and trace orange color, some black colored intervals and mottling, slightly moist, stiff, medium plasticity (fill).	CL		2	1	Tremie with portland cement/grout from total depth back to surface. Cap/Fill
4–8: Clay, gray, tan, and orange mottled, black color in middle of sample, dark gray to black at bottom with MSW (plastic bags and cardboard), clay is stiff, slightly moist, medium plasticity (fill/MSW).	CL		1.6	2	
8–12: MSW top 2.5 feet (cardboard, plastic bags, wood, no soil). Bottom 0.5 foot, light gray, orange, and black clay, moist, medium soft, moderate plasticity. MSW is saturated.	CL		1.4	3	MSW/ Fill
12–16: Clay and MSW. Top 0.5 foot light gray to medium gray clay, wet. Middle 2 feet MSW (paper, cardboard, plastic, plastic bags, glass, wood). Bottom 1 foot gray–tan to gray–brown clay, moist, stiff, moderate plasticity. MSW saturated (MSW/fill).	CL		1	4	
16–20: Clay, tan and gray with wood, some MSW at top, clay, slightly moist, stiff, moderate plasticity (fill).	CL		1	5	
20–24: Clay, gray, tan, and orange–brown, moist, stiff, moderate plasticity. MSW throughout sample (wood, plastic, paper, brown glass) (fill/MSW).	CL		1	6	Fill
24–28: Clay, tan, orange, gray with some black, slightly moist, moderate plasticity, stiff (fill).	CL		1	7	
28–30: Tan, gray, and orange–brown clay, wet at top, moist at bottom, some MSW (plastic).	CL		1.2	8	
30–32: Clay, gray–brown to dark gray, soft, wet, has chemical odor (not hydrocarbon). Note: will clean out hole to remove cavings to 32 feet. Recovered 8 inches tan to light brown, clay, very soft, saturated, trace plastic bags.	CL		2	9	Industrial Waste
32–34: Top 6 inches gray saturated clay. Next 3 inches brown cardboard. Next 4 inches gray clay with black material and metal (pieces of drum ring, lid and top edge of drum, lid has seal attached). Bottom 11 inches clay, top gray–brown (1 inch). Rest of sample is tan to orange–brown clay with gray clay–filled, vertical fracture, stiff, slightly moist, medium plasticity (WC contact at 33 feet). **Total Depth = 34 feet**	CL		12	10	Weathered Clay

4198/logs/gp1-31

WM-013068

HOLE No. GP-99-19

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/10/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	30'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, tan with light–brown, orange, and gray mottling, dark brown intervals (2 – 3 inches thick) in middle of sample and at bottom, trace gravel and silt, top 2 feet dry. Bottom 2 feet slightly moist, stiff, and slightly plastic (fill).	CL		2	1	Tremie with portland cement/grout from total depth back to surface. Cap/Fill
4–8: Clay, tan to gray–brown. Bottom 4 inches darker gray–brown, some gray and orange mottling, stiff low plasticity, wood fragments in middle of sample (fill).	CL		2	2	
8–12: Clay, tan, orange, gray, and some black, MSW (plastic, glass, plastic bags). Bottom 8 inches wood and glass (no soil). Clay is stiff, moderate plasticity, slightly moist, wood at bottom is wet (MSW/fill).	CL		1.2	3	
12–16: Top 6 inches wood, some saturated gray soft clay, plastic bag. Bottom 3.5 feet tan, orange–brown, and gray clay, stiff, slightly moist, moderate plasticity (plastic bag at bottom) (MSW/fill).	CL		1	4	
16–20: Clay, gray–brown with brown, gray, orange, and black, moderately stiff, moist, moderate plasticity, intervals of wood, plastic bags, newspaper. MSW is wet to saturated (fill/MSW).	CL		1	5	MSW/ Fill
20–24: Clay/MSW, tan, orange–brown, and gray clay saturated with leacheate.	CL		1	6	
24–28: Top 1.5 foot saturated black clay with MSW plastic bags and glass (MSW/fill). Bottom 2.5 feet tan, orange, and gray mottled clay, stiff, moderate plasticity, slightly moist (fill).	CL		80	7	
28–30: Refusal at 30 feet, clay, gray–brown to orange–brown, top 6 inches saturated, soft gray–black clay with MSW (plastic, glass, wire) may be cavings. Bottom 1.5 foot clay, gray–brown to orange–brown with black very hard material, very stiff, slightly moist, slightly plastic. The sample from the cutting shoe of the sample contained a piece of steel drum and black material with a chemical odor (IW).	CL		13	8	Industrial Waste
Total Depth = 30 feet					

4198/logs/gp1-31

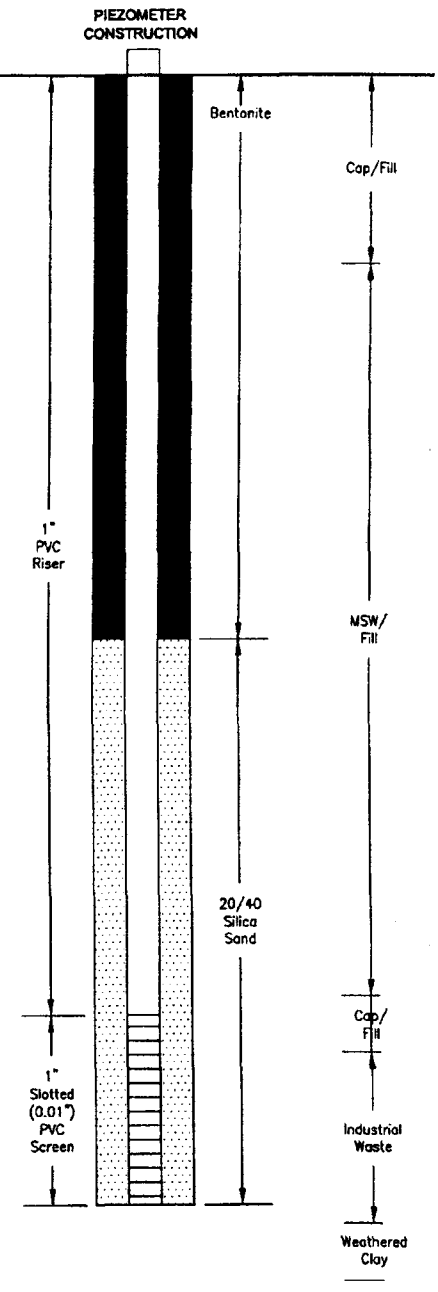
WM-013069

HOLE No. GP-99-20

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/13/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	32'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.
0-2: Shelby Tube.	-		-	1
2-6: Clay, gray, tan, and orange, some black (2-inch layer) color and black mottling throughout, moist, moderate plasticity, stiff, MSW (plastic and newspaper at bottom) (fill/MSW).	CL		1	2
6-10: Top 1 foot tan, gray, and orange, clay, moist, stiff, moderate plasticity (fill). Bottom 2.5 feet black, paper, glass, wood, plastic, rubber (MSW), wet.	CL		2	3
10-14: MSW and clay, tan, stiff, slightly moist, moderate plasticity, MSW (wood, paper, glass electrical wire, plastic), saturated black liquid (fill/MSW).	CL		2	4
14-18: Top 1 foot MSW (rubber, paper, plastic, glass), saturated. Middle 1.5 foot clay, tan, gray, and orange-brown, slightly moist, stiff, plastic, some plastic and paper. Bottom 0.5 foot cardboard, wood, paper, black liquid with leacheate odor.	CL		6	5
18-22: Clay and MSW. Clay, two intervals (4 inches thick), tan to gray-brown, slightly moist, stiff, moderate plasticity, MSW (wood, paper, plastic, glass), saturated black liquid (with leacheate odor) (fill/MSW).	CL		4	6
22-26: Top 1.5 foot black saturated, MSW, (wood, paper, plastic). bottom 2.5 feet gray to tan, orange and gray clay, slightly moist, stiff, low plasticity (MSW/fill).	CL		30	7
26-28: Refusal at 28 feet. Recovered 0.5 foot MSW (glass, plastic) cavings, piece of steel (drum) in cutter shoe.	-		80	8
28-32: Top 0.5 foot MSW (cavings), glass, paper, plastic, wood. Saturated. Bottom 3 feet clay, tan to orange-brown, slightly moist, stiff, highly plastic. Top 1 foot of this interval has black viscous (tar-like) interval (industrial waste). Contact W/WC at 30.5 feet gray clay-filled fractures and high-angle fractures.	CL		70	9
Total Depth = 32 feet				



4198/logs/gp1-31

WM-013070

HOLE No. GP-99-21

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/14/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	Saddle Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, top 1 foot dark brown to black with roots, slightly moist, plastic, stiff (fill). Bottom 3 feet tan, orange, and gray clay, slightly moist, stiff, low plasticity (fill).	CL	1.8	1	Backfilled with hydrated bentonite.
4–8: Clay, tan to gray–brown, root fragments at 2 feet, slightly moist, stiff, moderate plasticity (fill).	CL	4	2	
8–12: Clay, tan, orange, and gray, very stiff, slightly moist, trace silt, low plasticity to medium plasticity (fill).	CL	4.6	3	
12–16: Clay, tan to orange with gray clay–filled fractures, some high–angle fractures, very stiff, slightly moist (WC contact at 11 feet).	CL	3	4	
Total Depth = 16 feet				

Cap/Fill

Weathered Clay

4198/logs/gp1-31

WM-013071

HOLE No. GP-99-22

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/14/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–2: Shelby Tube.	-	-	1
2–4: Clay, tan orange and gray, trace gravel, some black color bottom 4 inches of sample, slightly moist, stiff, moderate plasticity (fill).	CL	50	2
4–8: Clay, orange, tan, and brown mottled, moist, soft to moderately soft, high plasticity, some black color top 5 inches of sample (fill).	CH	90	3
8–12: Clay, tan brown to orange–brown, slightly moist, soft to medium soft, medium plasticity. Bottom 4 inches has dark red–brown, viscous, wet material (IW).	CL	140	4
12–16: Top 1.5 foot red–brown to black viscous material, some hard pieces, some soft (IW). Bottom 2.5 feet tan to orange–brown clay, stiff to very stiff, slightly moist, gray clay–filled vertical fractures (WC contact at 13.5 feet). Note: outside surface of bottom 2.5 feet sample coated with the black sticky material, but is not within the clay when it is cut.	CL	-	5
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION

1" PVC Riser

1" Slotted (0.01") PVC Screen

Bentonite

20/40 Silica Sand

Cap/Fill

Industrial Waste

Weathered Clay

4198/logs/gp1–31

WM-013072

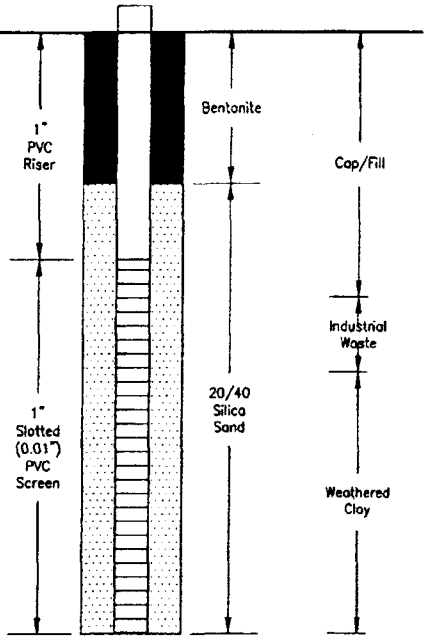
HOLE No. GP-99-23

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/14/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–2: Shelby Tube.	-	-	1
2–4: Clay, tan and light brown with orange mottling, stiff to very stiff, slightly moist, moderate plasticity (fill).	CL	12	2
4–8: Clay, tan to gray–brown with some orange and gray mottling, some black color at about 7–7.5 feet, stiff, slightly moist (fill). Apparent chemical odor.	CL	25	3
8–12: Clay, tan to orange–brown, trace black color at top, stiff, slightly must, moderate plasticity (WC contact at 9 feet).	CL	70	4
12–16: Clay, tan to orange–brown with gray clay–filled fractures and high–angle fractures, slightly moist, stiff, moderate plasticity (WC).	CL	190	5
16–18: Shelby Tube (no recovery; tube pulled out of drive head).	-	-	6
Total Depth = 16 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013073

HOLE No. GP-99-24

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/14/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	16'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	REMARKS
0–4: clay, brown, gray, orange, and black mottled clay, stiff, slightly moist, moderate plasticity. Bottom 4 inches dark gray–brown clay, soft, low to non–plastic, moist (fill).	CL		150	1	Backfilled with hydrated bentonite.
4–8: Clay, dark, gray–brown with orange mottling. Bottom 1 foot, slightly moist, stiff, moderate plasticity (fill).	CL		190	2	
8–12: Clay, tan, orange, and orange–brown, slightly moist, moderate plasticity, stiff. Black color top 0.5 feet of sample (fill).	CL		20	3	
12–15: Clay, tan to orange–brown with gray clay–filled vertical fractures, high–angle fractures and gray horizontal laminations, stiff, slightly moist (WC contact at 13.5 feet).	CL		38	4	
Total Depth = 16 feet					

Cap/Fill

Weathered Clay

4198/logs/gp1-31

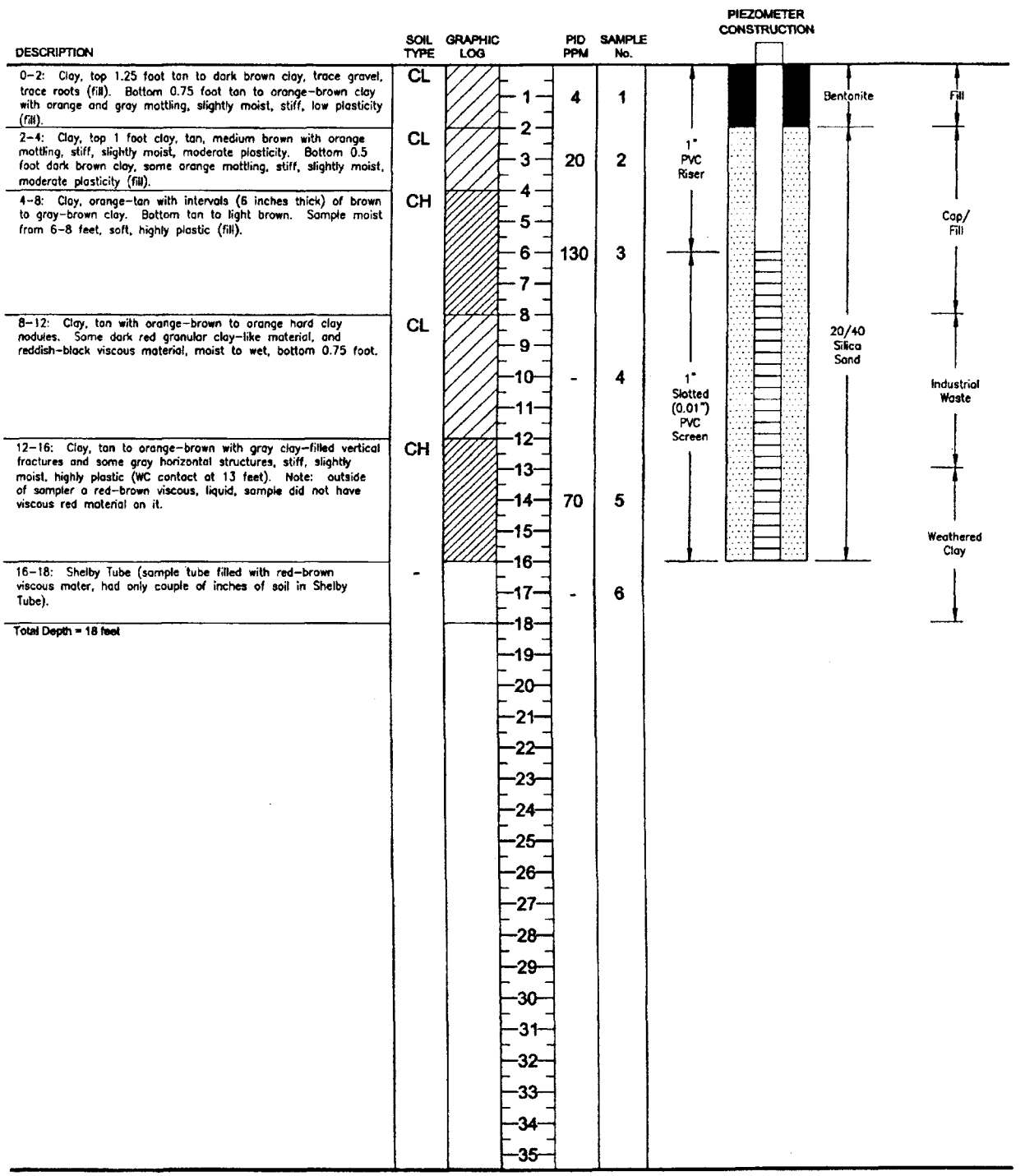
WM-013074

HOLE No. GP-99-25

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/15/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–2: Clay, top 1.25 foot tan to dark brown clay, trace gravel, trace roots (fill). Bottom 0.75 foot tan to orange–brown clay with orange and gray mottling, slightly moist, stiff, low plasticity (fill).	CL	4	1
2–4: Clay, top 1 foot clay, tan, medium brown with orange mottling, stiff, slightly moist, moderate plasticity. Bottom 0.5 foot dark brown clay, some orange mottling, stiff, slightly moist, moderate plasticity (fill).	CL	20	2
4–8: Clay, orange–tan with intervals (6 inches thick) of brown to gray–brown clay. Bottom tan to light brown. Sample moist from 6–8 feet, soft, highly plastic (fill).	CH	130	3
8–12: Clay, tan with orange–brown to orange hard clay nodules. Some dark red granular clay–like material, and reddish–black viscous material, moist to wet, bottom 0.75 foot.	CL	-	4
12–16: Clay, tan to orange–brown with gray clay–filled vertical fractures and some gray horizontal structures, stiff, slightly moist, highly plastic (WC contact at 13 feet). Note: outside of sampler a red–brown viscous, liquid, sample did not have viscous red material on it.	CH	70	5
16–18: Shelby Tube (sample tube filled with red–brown viscous mater, had only couple of inches of soil in Shelby Tube).	-	-	6
Total Depth = 18 feet			



4198/logs/gp1-31

WM-013075

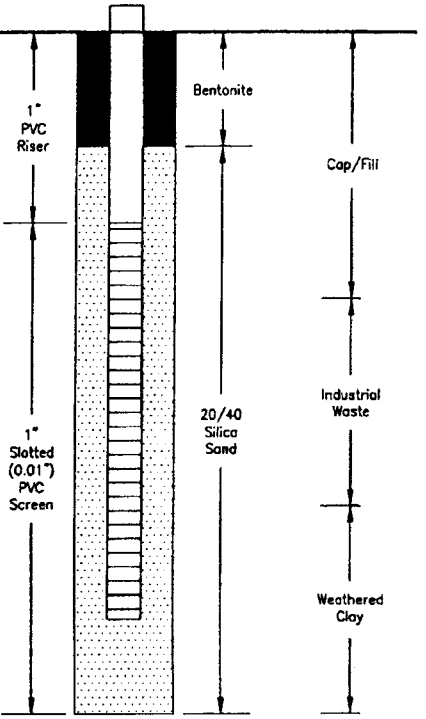
HOLE No. GP-99-26

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/15/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–2: Clay, top 1 foot brown to dark brown with orange layer in middle, very stiff, dry, no plasticity (fill). Bottom 1 foot orange, tan, and gray clay, stiff, slightly moist, moderate plasticity.	CL	2	1
2–4: Shelby Tube.	-	-	2
4–8: Clay, top 3 feet tan, gray, brown, orange, and black clay, slightly moist, moderate plasticity, stiff (fill). Bottom 1 foot clay dark gray to gray–brown, soft, moderate plasticity, wet with unknown fluid that emitted a chemical odor, trace silt (fill).	CL	170	3
8–12: Clay, top 4 inches black, silty clay, soft, wet with fluid that emitted a chemical odor. Rest of sample is clay, tan, orange, and gray with some black color throughout, slightly moist, stiff, moderate plasticity (fill).	CL	300	3
12–16: Clay, tan to orange–brown with gray clay–filled vertical and horizontal fractures, trace silt to silty clay. Top 0.5 foot slightly moist, stiff, moderate plasticity (WC contact at 12.5 feet).	CL	300	3
		-	4
		250	5
16–18: Shelby Tube	-	-	6
Total Depth = 18 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1-31

WM-013076

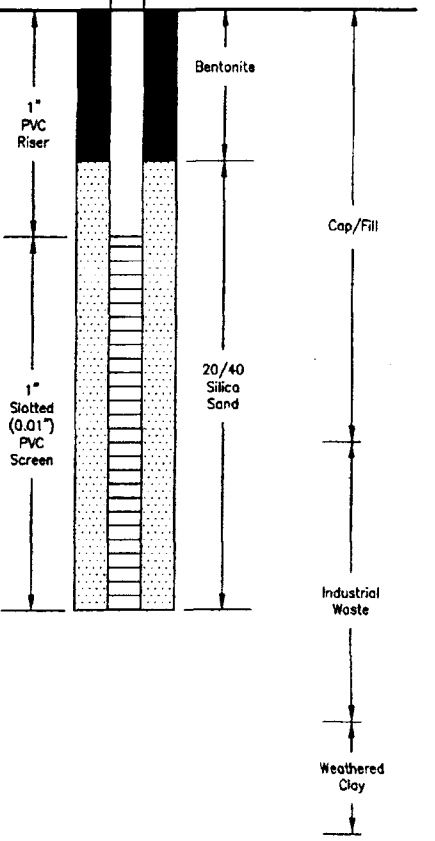
HOLE No. GP-99-27

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/15/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	20'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–2: Clay, dark, gray–brown, trace orange mottling, trace gravel, dry, stiff, non–plastic. Bottom 4 inches tan to orange–brown clay, slightly moist, moderate plasticity (fill).	CL	8	1
2–4: Shelby Tube.	-	-	2
4–8: Clay, tan to orange–brown with black color bottom 1.5 foot of sample, moderately soft, moist, moderate plasticity (fill).	CL	38	3
8–12: Top 1 foot tan to orange–brown clay, soft, moist, moderate plasticity (fill). Bottom 0.5 foot greenish–brown granular clay (will not pack together), apparent oily fluid, wet, non–plastic, soft (fill).	CL	132	4
12–16: Clay, top 1.5 foot tan to brown clay with red–brown to black, viscous material. Bottom 1 foot tan to orange–brown clay, stiff, moderate plasticity (WC).	CL	45	5
16–20: Sample and sample liner stuck in sample barrel. Bottom 1 foot of sample recovered intact (WC).	-	17	6
20–22: Shelby Tube. No recovery after pushing to refusal at 1.5 foot.	-	-	7
Total Depth = 20 feet			

PIEZOMETER CONSTRUCTION



4198/logs/gp1–31

WM-013077

HOLE No. GP-99-28

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/16/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	North Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	22'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–4: Clay, top 2 feet clay, dark brown, slightly moist to dry, stiff. Bottom 2 feet tan, orange–brown, and gray clay, crumbly, dry (fill).	CL	2	1
4–8: Clay, tan, orange–brown to brown with some black mottling, stiff, slightly moist, moderate plasticity. Bottom 3 inches gray–black to dark orange–brown, slightly moist, soft, some root hairs (fill).	CL	2	2
8–12: Clay, top 1.5 foot dark gray to black clay, moist, soft. Bottom 1.5 foot tan–gray to gray clay, moist, soft (fill).	CL	15	3
12–16: Clay, top 1.5 foot tan–gray to gray clay, loosely compacted, soft, moist, grading to tan, orange, and gray clay. Bottom 2.5 feet trace silt, slightly moist, stiff, loosely compacted (fill).	CL	30	4
16–20: Top 1 foot gray, soft, saturated clay. Bottom 3 feet tan to orange–brown clay with gray clay–filled fractures, slightly moist, stiff, moderate plasticity (WC contact at 18 feet).	CL	0	5
20–22: Shelby Tube.	-	-	6
Total Depth = 22 feet			

PIEZOMETER CONSTRUCTION

1" PVC Riser

1" Slotted (0.01") PVC Screen

Bentonite

20/40 Silica Sand

Cap/Fill

Industrial Waste/ Fill

Weathered Clay

4198/logs/gp1-31

WM-013078

HOLE No. GP-99-29

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/16/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	38'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, tan, orange, gray, and brown with some black mottling, stiff, slightly moist, moderate plasticity (fill).	CL		4	1	tremie portland cement/grout from total depth back to surface. Cap/Fill
4–8: Clay, tan–brown, orange and gray, wood fragments at 6 feet. Bottom 2 inches black clay with trace paper and plastic, slightly moist, stiff (fill/MSW).	CL		2	2	
8–12: MSW and gray to black clay, clay is wet, soft. MSW is wet paper and plastic (MSW/fill).	CL		3	3	
12–16: Clay, tan–brown to gray, wet to moist, stiff, moderate plasticity. MSW intermixed, MSW (paper, plastic, wood, glass), saturated with black liquid (MSW/fill).	CL		2	4	MSW/ Fill
16–20: MSW, very little clay material, MSW (wood, paper, plastic, glass). Pieces of steel at bottom of sample within the MSW.	CL		4	5	
20–24: Top 1 foot MSW (cavings) glass, plastic with 4 inches tan to orange–brown clay. Next 1.5 foot tan to brown clay, stiff, slightly moist. Bottom 0.5 foot gray to gray–black clay with MSW (paper, plastic, wood) (MSW/fill).	CL		2	6	
24–26: Top 1 foot saturated MSW (paper, plastic, wood). May be cavings. Bottom 1.5 foot clay, tan to orange–brown to brown slightly moist, stiff, moderate plasticity (fill). Possibly clay cap.	CL		3	7	
26–28: Shelby Tube. Top looks like MSW (plastic). Bottom of tube is solid red–brown resin–like material.	-		-	8	Cap/Fill
28–32: Saturated gray–brown clay, soft, sampler cutter shoe has 1 inch red–brown solid amorphous material, and pieces of steel.	CL		50	9	Industrial Waste
32–36: Sample stuck in sampler. Retrieved the top 2 feet intact. Top 0.5 foot brown clay with red–brown solid amorphous material. Next 1.5 foot tan and orange clay with some solid amorphous material in fractures and some black at bottom. Emitting chemical odor. Bottom 2 feet sample retrieved in pieces, tan–brown clay, stiff, slightly moist (WC).	CL		90	10	Weathered Clay

4198/logs/gp1-31

WM-013079

HOLE No. GP-99-29

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/16/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	38'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG		PID PPM	SAMPLE No.	REMARKS
	CL		36			tremie portland cement/grout from total depth back to surface.
36–38: Shelby Tube. Refusal at 37.5 feet (plastic in top of tube).	-		37	-	11	Weathered Clay
Total Depth = 38 feet			38			
			39			
			40			
			41			
			42			
			43			
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			70			

4198/logs/gp1-31

WM-013080

HOLE No. GP-99-30

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/17/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	3"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	28'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, tan, orange–brown, orange with black clay interval from 0.5 to 1.5 foot, stiff, slightly moist, moderate plasticity (fill).	CL	1	1	tremie portland cement/grout from total depth back to surface.
4–8: Clay, tan, orange–brown, and gray with some black clay layers (1–3 inches) near bottom, slightly moist, stiff, moderate plasticity, some gravel near bottom (fill).	CL	1	2	
8–12: Clay, tan, orange–brown, and gray, stiff, slightly moist, moderate plasticity, 0.5 foot of paper 11–11.5 feet. Gray–brown clay 11.5–12 feet, slightly moist, stiff, moderate plasticity (fill)(MSW).	CL	2	3	
12–16: Clay, tan to orange–brown and gray, moist, moderately hard to moderately soft. MSW (wood, paper, plastic) top 1.5 foot of sample (fill/MSW).	CL	3	4	
16–20: Clay, gray to black, saturated (very little soil, mostly MSW). MSW (paper, plastic, metal, glass, wood, leaves, grass), saturated (MSW).	CL	160	5	
20–24: Swabbed dark brown oily liquid to surface with sampler. Top 2.5 feet, MSW, saturated with brown, oily liquid. Has strong petroleum hydrocarbon odor. MSW is paper, cardboard box material, wood. Bottom 0.5 foot tan orange–brown and gray clay, slightly moist, stiff, moderate plasticity (fill).	CL	90	6	
24–28: Clay, tan to orange–brown with gray clay–filled horizontal and vertical structures top 2 feet. Bottom 2 feet dark gray–brown clay, very stiff, slightly moist, low to no plasticity. WC contact at 24 feet.	CL	110	7	
Total Depth = 28 feet				

Cap/Fill
MSW/ Fill
Weathered Clay
Unweathered Clay

4198/logs/gp1-31

WM-013081

HOLE No. GP-99-31

PROJECT:	Waste Management of Texas	DATE DRILLED:	12/17/99
DRILL RIG:	Geoprobe	LOGGED BY:	M. Riggle
HOLE DIA:	2"	SAMPLER:	M. Riggle
LOCATION:	South Drum Area	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	34'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	REMARKS
0–4: Clay, tan, brown, orange–brown, and gray, trace gravel, slightly moist, stiff, moderate plasticity (fill).	CL	2	1	tremie portland cement/grout from total depth back to surface.
4–8: Clay, tan, orange–brown, gray with some black, moist, moderately stiff, plastic (fill).	CL	1	2	
8–12: Top 3 feet clay, tan, orange–brown and gray. Black layer at 1.5 foot (4 inches thick) and at 2.5 feet. MSW from 3–4 feet (paper, glass, fiberglass insulation, metal), moist (MSW/fill).	CL	1	3	
12–16: Top 2 inches gray clay, wet. MSW below (paper, plastic bags, wood, metal, plastic, moist) (MSW).	CL	1	4	
16–20: Top 2 feet MSW (paper, plastic, rocks), saturated 8 inches tan, gray–brown clay, moist, moderately stiff. MSW (plastic, paper, wood). Next 2 inches clay, gray and black, moderately stiff, moist (MSW/fill).	CL	1	5	
20–24: MSW, saturated (paper, plastic, styrofoam, glass). Some gray clay cavings at top (MSW).	CL	1	6	
24–26: Top 1.5 foot MSW, saturated (wood, paper, plastic, glass). Some of this is probably cavings Bottom 6–8 inches tan, orange, and gray clay, moist, moderately stiff, plastic (fill).	CH	1	7	
26–28: Shelby Tube. Recovered MSW 1.25 foot and clay 0.75 foot.	-	-	8	
28–30: Shelby Tube (some MSW and clay at bottom).	-	-	9	
30–34: Clay, tan to orange–brown with gray clay–filled fractures, stiff to very stiff, slightly moist, moderate plasticity. WC contact at approximately 30 feet.	CL	90	10	
Total Depth = 34 feet				

Cap/Fill
MSW/ Fill
Cap/ Fill
Weathered Clay

4198/logs/gp1-31

WM-013082

HOLE No. MW-99-24

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/4/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	31'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–3: Silty clay, dark gray to black, some gravel (1/8 inch), white, sandy silt occasionally.	CL	1	1
3–13: MSW in clay matrix – styrofoam, gravel, wood, fiber, paper, plastic. Clay, orange, mottled, medium soft, moist.	CL	1	2
8–13: No recovery.	-	1	3
13–22: Clay, dark gray, soft, occasional gravel, occasional orange and white clay mottling. Sample twisted; only 1 foot recovery.	-	2	4
		1	5
22–26: Clay, gray–dark gray interbedded. Vertical and horizontal fractures, very hard.	CH	6	6
26–31: Clay, dark gray–black. No layering, very hard, dry.	CH	4	7
Total Depth = 31 feet			

Cap/Fill

MSW/ Fill

Transitron Zone

Unweathered Clay

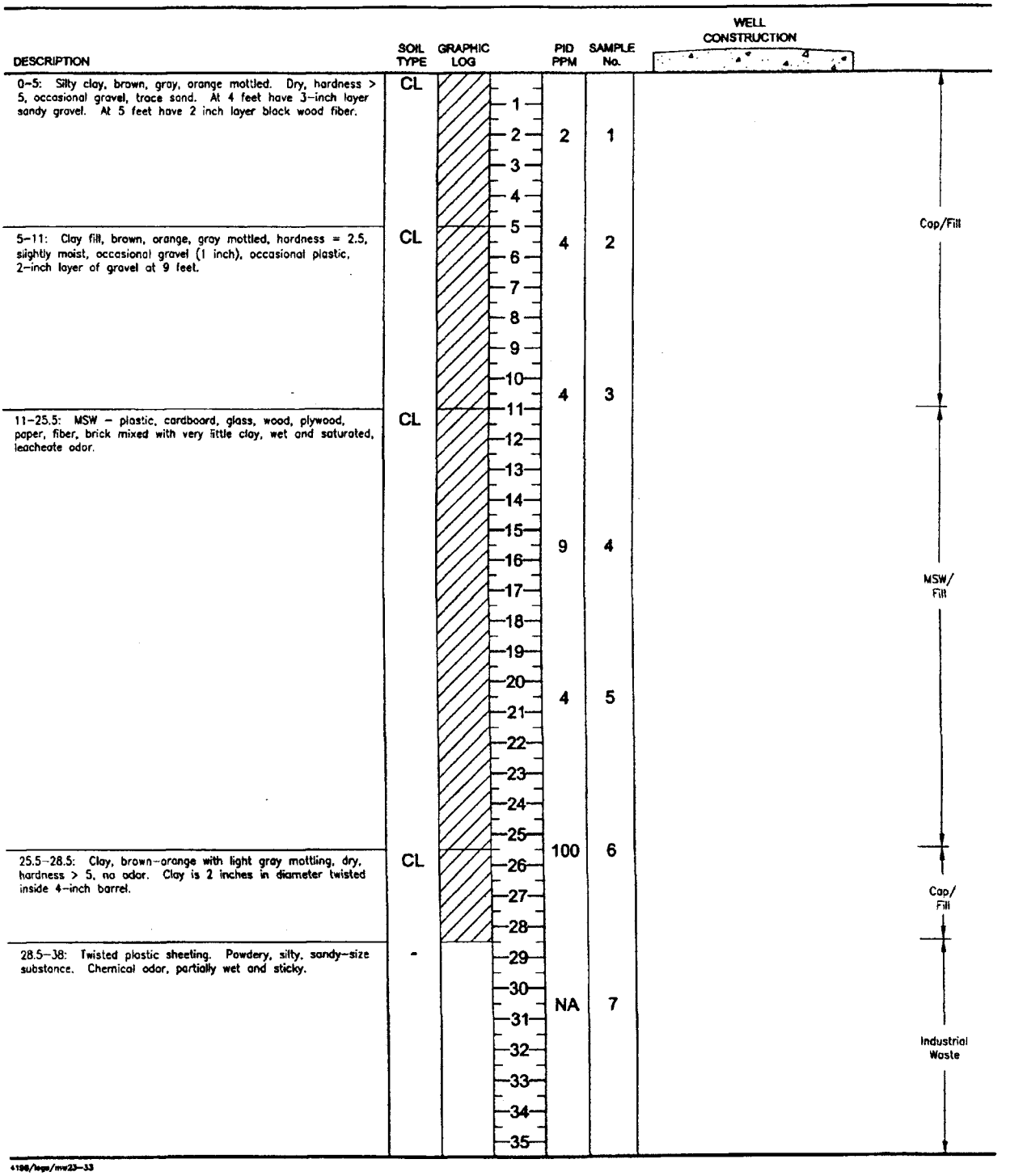
4198/logs/mw23–33

WM-013083

HOLE No. B-99-33

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/13/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	38'

ThermoRetec



4198/logs/mw23–33

WM-013084

HOLE No. B-99-33

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/13/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	38'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG		PID PPM	SAMPLE No.	WELL CONSTRUCTION
	-		36	450	8	Industrial Waste
			37			
Total Depth = 38 feet			38			
			39			
			40			
			41			
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			67			
			68			
			69			
			70			

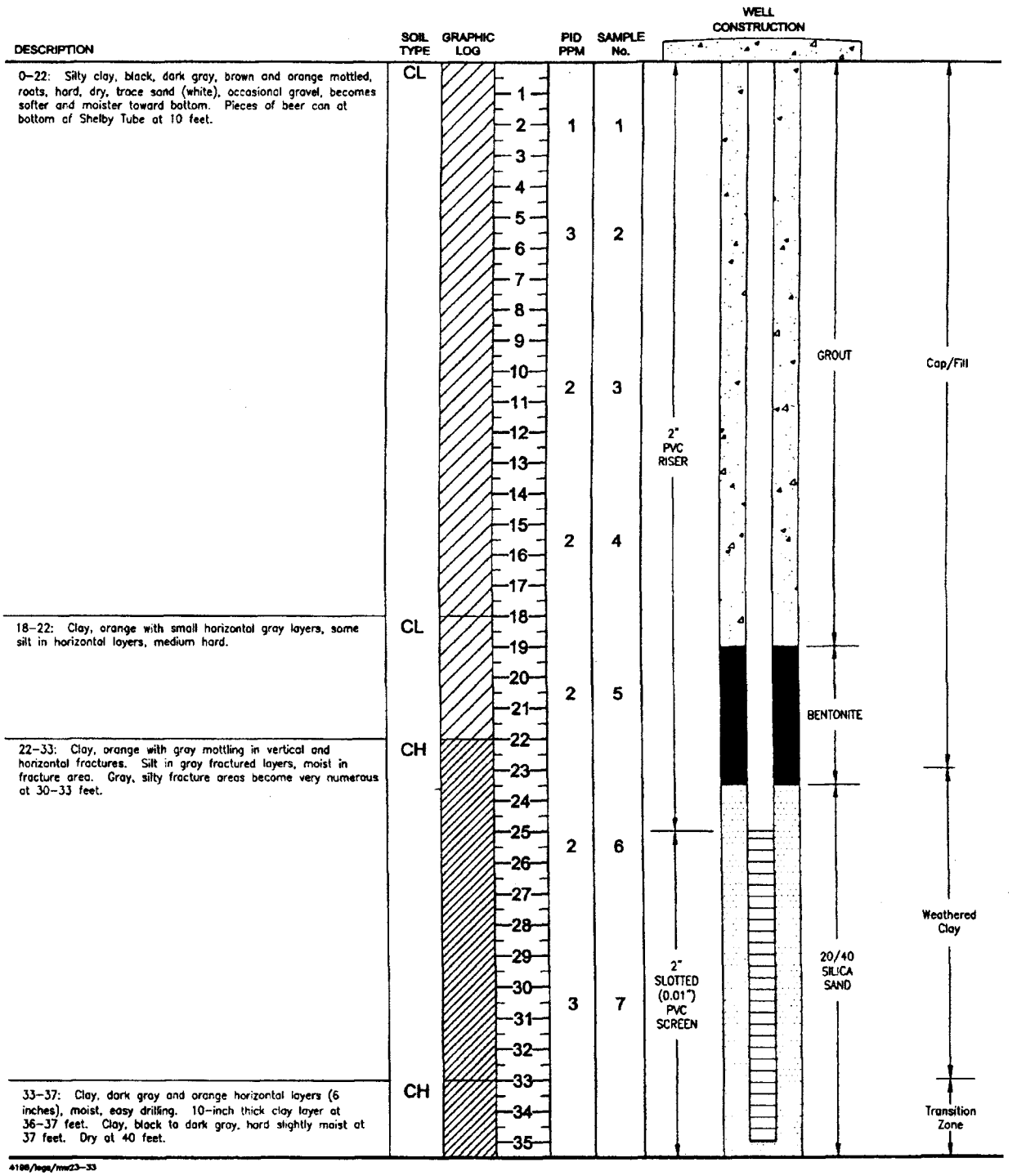
4198/logs/mw23-33

WM-013085

HOLE No. MW-99-23

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/5/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	40'

ThermoRetec



4198/logs/mw23-33

WM-013086

HOLE No. MW-99-23

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/5/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	40'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
	CH		3	7	Transition Zone
33–37: Clay, dark gray and orange horizontal layers (6 inches), moist, easy drilling. 10-inch thick clay layer at 36–37 feet. Clay, black to dark gray, hard slightly moist at 37 feet. Dry at 40 feet.	CH		2	8	20/40 SILICA SAND; Unweathered Clay
Total Depth = 40 feet					

4198/logs/mw23-33

WM-013087

HOLE No. MW-99-25

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/4/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	28'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–12: Silty clay fill, brown, orange, black, light gray mixed, occasional gravel. Apparent construction debris at 1–2 feet. Medium hard, becoming softer and more moist. Very moist and soft at 12 feet.	CL	1	1	No well, plugged and abandoned.
		2	2	Cap/Fill
		2	3	
12–13: MSW, paper, fiber, glass, gravel, black and dark gray.	-			
13–21: No recovery.	-	NA	4	MSW/ Fill
		3	5	
21–25: Clay, tan–orange, hard, vertical fractures with silt, dry.	CH			Weathered Clay
25–27: Clay, dark gray–black with some orange interlayering and vertical fractures, hard, dry.	CH	3	6	Transition Zone
27–28: Clay, dark gray–black, very thin interbedded and fractures, hard, dry.	CH			Unweathered Clay
Total Depth = 31 feet				

4198/logs/mw23-33

WM-013088

HOLE No. MW-99-26

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/6/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–12: Clay, orange, gray, and black mottling and layers. Soft, slightly moist, small roots, sandy silt in fractures.	CL		3	1	Cap/Fill
			2	2	
			2	3	
12–15 : Slight chemical odor at 12–15 feet. Pieces of wood and plastic mixed with clay (MSW).	CL				
15–18: MSW (paper, plastic, plywood, wood, fiber, cardboard, styrofoam). MSW very soft and crumbly, leachate odor, water in hole, gray, leacheate odor. Water accumulating in borehole.	CL		1	4	MSW/ Fill
Total Depth = 18 feet					

4198/logs/mw23-33

WM-013089

HOLE No. MW-99-26A

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/10/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	13'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–8: Clay, brown, dark gray, light gray, orange mottled, hard and dry at surface becoming soft and moist with depth.	CL		1	1	Cap/Fill
			1	2	
8–13: MSW with 6–inch layer of clay at 11 feet (paper, fiber, glass, rubber, cardboard, leacheate odor, water at 8 feet.	CL		4	3	MSW/ Fill
Total Depth = 13 feet					

4198/logs/mw23–33

WM-013090

HOLE No. MW-99-27

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/11/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–9: Clay, trace sand and silt, gray, dark gray, brown and orange mottled, dry at top, grading to slightly moist, occasional glass and wood pieces at 5–9 feet.	CL		2	1	Cap/Fill
			2	2	
9–18: MSW layers alternating with clay, paper, rubber, rubble, cardboard, glass, gravel, some mixed MSW and clay, soft, wet at 13 feet, water in hole.	CL		2	3	MSW/ Fill
			1	4	
Total Depth = 18 feet					

4198/logs/mw23-33

WM-013091

HOLE No. MW-99-28

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/11/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	18'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–12: Silty clay, light brown, gray to orange mixed. At 5 feet grades to clay, light gray and light brown mottled, dry, occasional roots and gravel.	CL	1	1	Cap/Fill
		1	2	
8–12: Easy drilling, water coming into hole, very moist and soft at 12 feet.		1	3	
12–18: MSW – gravel, concrete (1 inch), wood, plywood, paper, plastic, glass, tile.	CL	1	4	MSW/ Fill
Total Depth = 18 feet				

4198/logs/mw23-33

WM-013092

HOLE No. MW-99-29

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/10/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	33'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–17: Clay, brown, black, light gray, orange mottled, dry and hard at top, getting moister and softer with depth. Refusal at 17 feet. MSW (wood, glass) is end of sample.	CL		1	1	Cap/Fill
			1	2	
			1	3	
			2	4	
17–33: No recovery, water in hole at 17 feet, leacheate odor. No recovery to 33 feet.	-		1	5	MSW/ Fill
			6	6	
			4	7	
Total Depth = 33 feet					

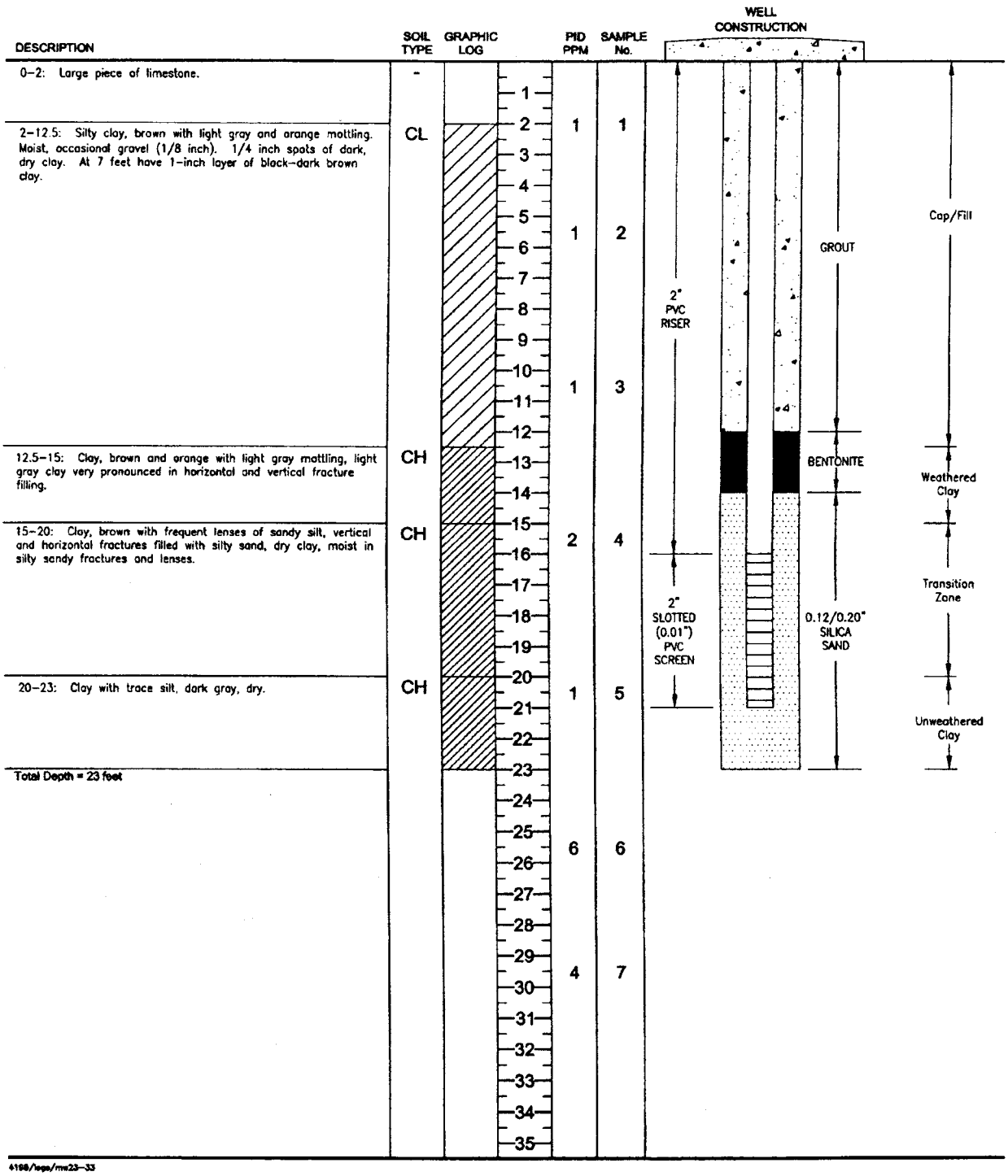
4198/logs/mw23–33

WM-013093

HOLE No. MW-99-29A

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/12/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	23'

ThermoRetec



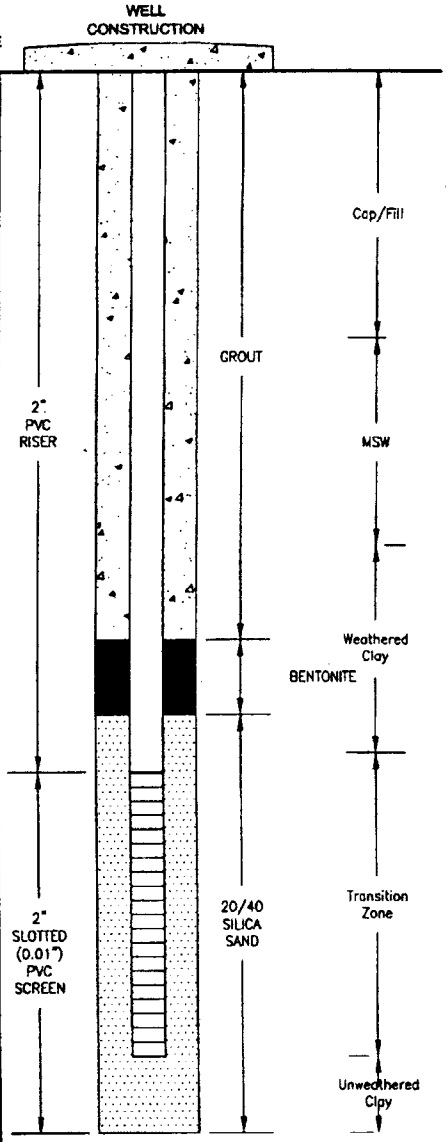
WM-013094

HOLE No. MW-99-30

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/12/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	28'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–7: Clay, trace silt, brown with light brown, gray, orange mottling, slightly moist, occasional gravel, hardness at 1 foot = 2, hardness at 3 feet = 4.5 (1–inch layer of MSW (gravel and styrofoam) at 4 feet, leacheate odor, very soft).	CL	1	1
		1	2
7–8: MSW mixed with clay, black to dark gray, paper, cardboard, wood, concrete.	CL		
8–12.5: Clay, dark gray to black with light gray and orange mottling, occasional MSW thin layers, medium soft, slightly moist.		1	3
12.5–13: Clay, light brown–dark gray with orange mottling, dry, hardness > 5.	CH		
13–18: Clay, brown to orange with gray mottling in vertical and horizontal fracture fillings.		1	4
18–26: Silty clay, orange and dark gray layers, dry, hardness > 5.	CH	1	5
		1	6
26–28: Clay, dark gray, very hard, dry, hardness > 5.	CH		
Total Depth = 28 feet			



4198/logs/mw23-33

WM-013095

HOLE No. MW-99-31

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/6/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	30'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE No.	WELL CONSTRUCTION
0–18: Silty clay to clay, brown, light gray, dark gray, orange mottled, very hard and dry at top. Becomes softer and moister with depth, slight leacheate odor at 8 feet. Black inclusions and some small gravel (1/8 inch) at 12–13 feet, leachate odor. Moist at 18 feet, slightly leacheate odor.	CL		1	1	Cap/Fill
			1	2	
			1	3	
			1	4	
18–20.5: MSW layer at 19 feet. Pieces of roofing shingles and plywood, leacheate odor, roots, moist.	CL				MSW/ Fill
20.5–23: Clay, light gray with orange mottling, moist.	CH		1	5	
23–28: No recovery till 28 feet. Clay, dark gray with orange layer 1 inch thick.	CH		1	6	Weathered Clay
28–30: Clay, dark gray, very hard and dry.	CH				Unweathered Clay
Total Depth = 30 feet					

4198/logs/mw23-33

WM-013096

HOLE No. B-99-32

PROJECT:	Waste Management of Texas	DATE DRILLED:	1/13/00
DRILL RIG:	Hollow Stem Rotary	LOGGED BY:	B. Crone
HOLE DIA:	8.25"	SAMPLER:	B. Crone
LOCATION:	-	DRILLER:	ETTL
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	32'

ThermoRetec

DESCRIPTION	SOIL TYPE	PID PPM	SAMPLE No.
0–3: Sandy, silty clay, brown, light brown with orange mottling, very hard and dry.	CL	2	1
3–7: Silty clay, light gray, dark gray, orange mottled, slightly moist.	CL	2	2
7–13: MSW mixed with clay at top grading to no clay, MSW only – paper, fiber, black to dark brown, leacheate odor, concrete (4 inches), very soft and water at 9 feet.	CL	3	3
13–18: No recovery, piece of concrete at bottom of sampler, water level up to 8 feet in hole.	-	NA	4
19–24: Clay, light brown, gray, orange mottled, piece of plastic at 22.5 feet, soft.	CL	NA	5
24–30: Apparent industrial waste, strong hydrocarbon odor, plastic, wood, paper, glass, cardboard, styrofoam, metal.	-	70	6
30–32: Clay, brown with silty, sandy fillings in fractures, dry, hardness > 5.	CH		
Total Depth = 32 feet			

WELL CONSTRUCTION

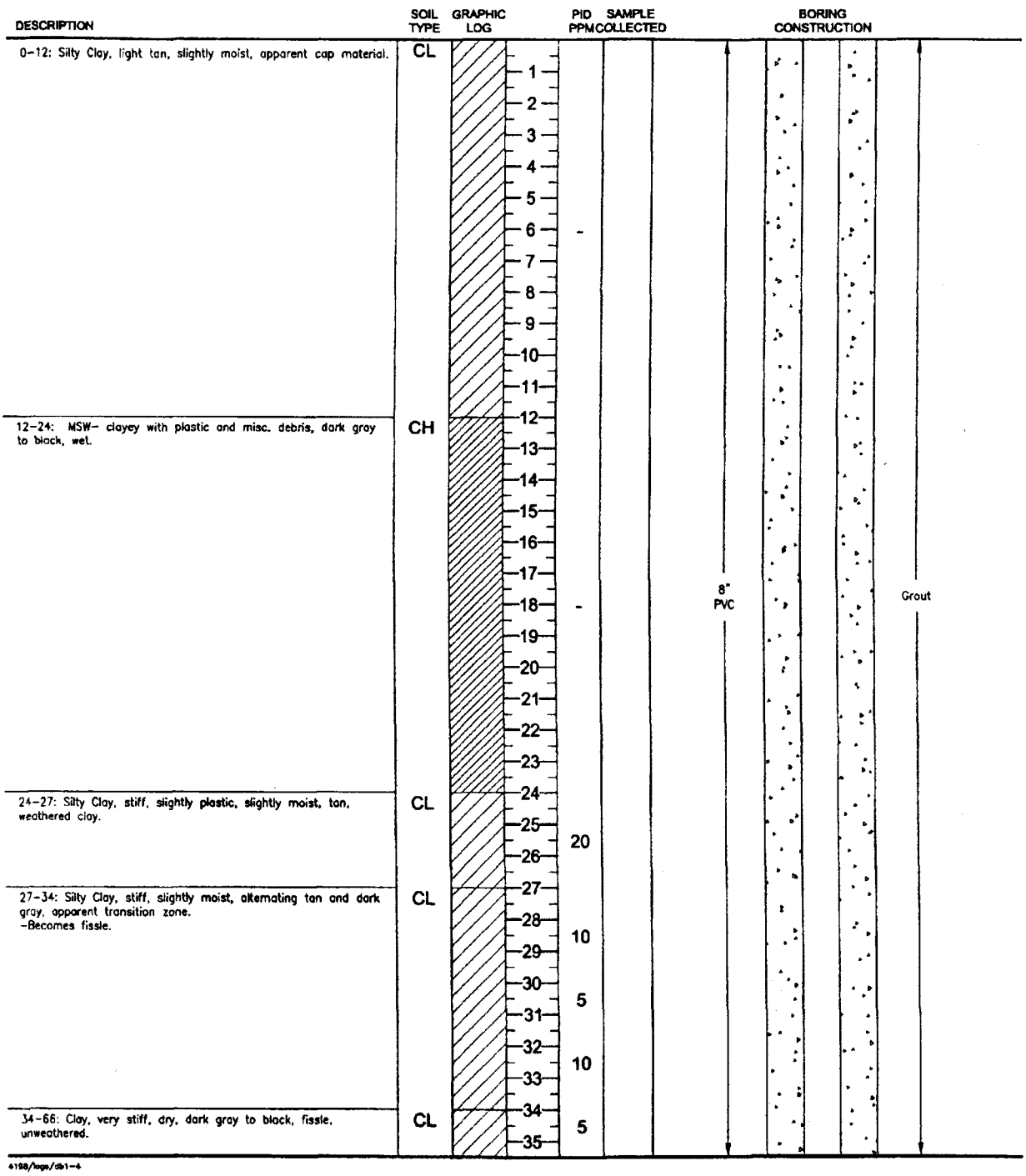
4198/logs/me23-33

WM-013097

HOLE No. DB-1

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/5,10/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec



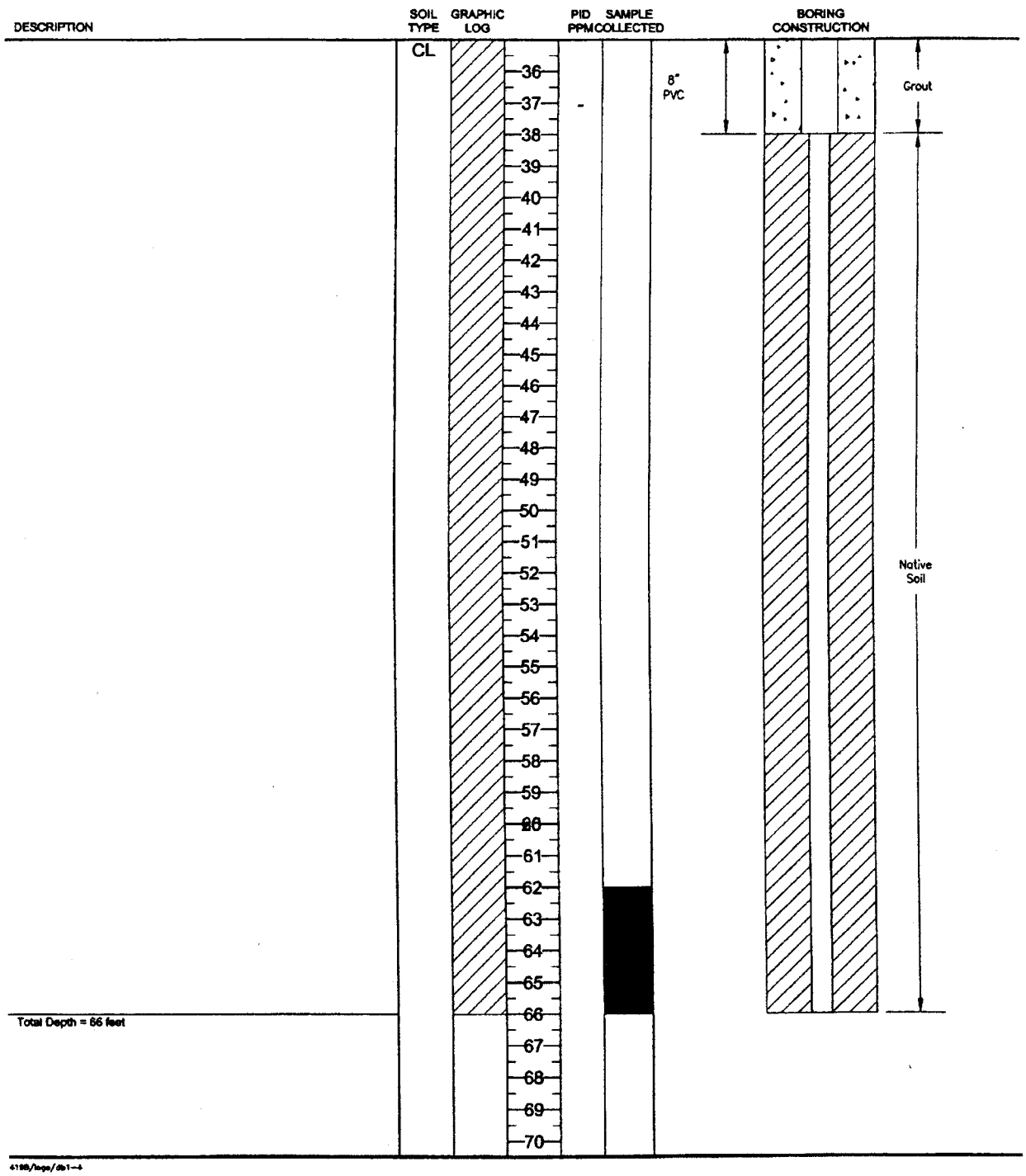
4198/logs/db1-4

WM-013098

HOLE No. DB-1

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/5,10/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec



4198/logs/db1-4

WM-013099

HOLE No. DB-2

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/6,10/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec

DESCRIPTION	SOIL TYPE	GRAPHIC LOG	PID PPM	SAMPLE COLLECTED	BORING CONSTRUCTION
0–22: Silty Clay, slightly moist, light tan.	CL		-		8" PVC; Grout
22–32.5: Silty Clay, stiff, moderately plastic, slightly moist, tan, intermittent dark gray color, sparse micro-fracture with anhydrite crystalline filling, slight chemical odor from 29' to 32', apparent transition zone.	CL		0 6 13 500 510 500		
32.5–66: Clay, very stiff, dry, dark gray to black, slight chemical odor from 32.5' to 35'.	CL		450		

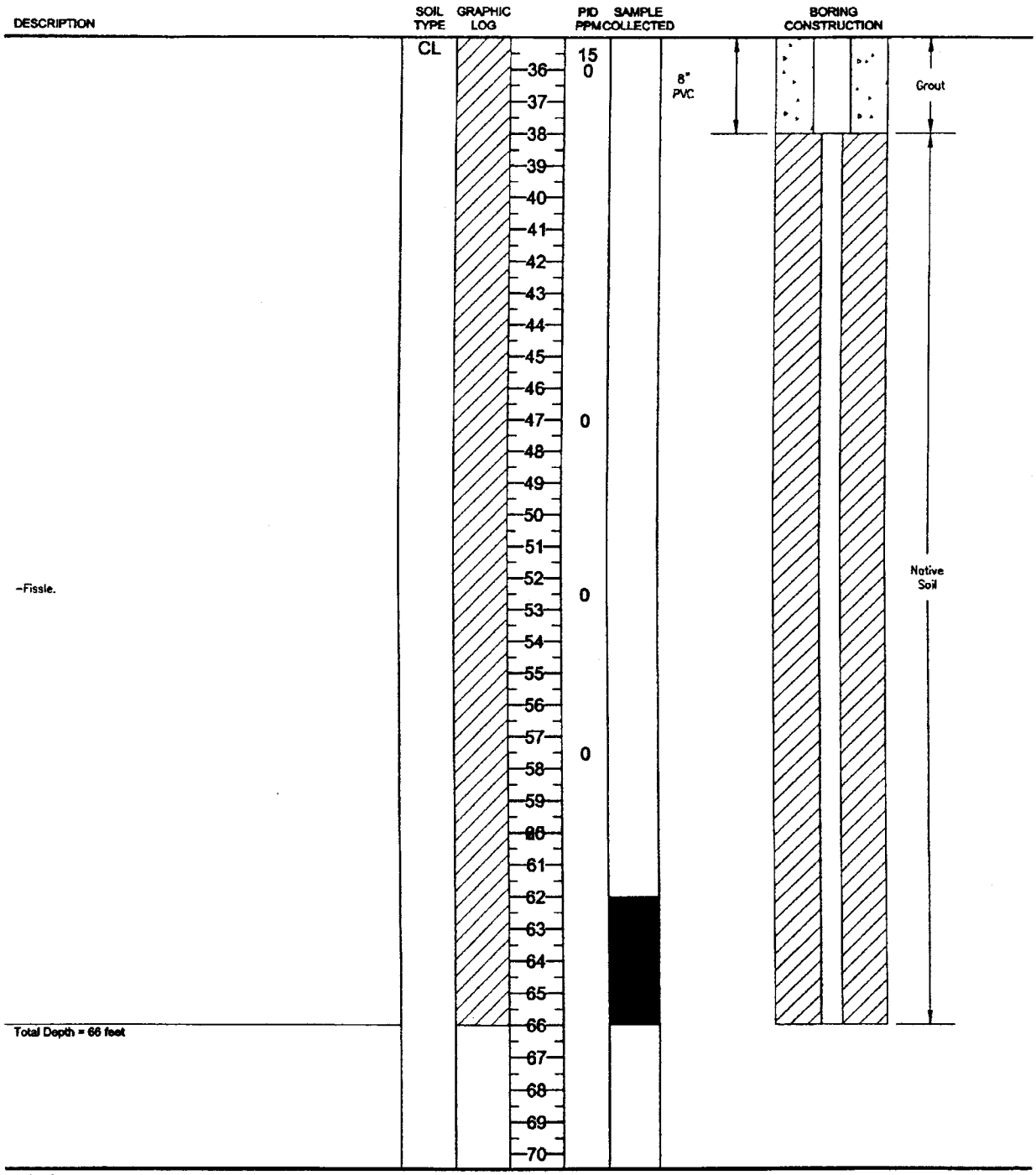
4188/logs/db1-4

WM-013100

HOLE No. DB-2

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/6,10/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec



4198/logs/db1-4

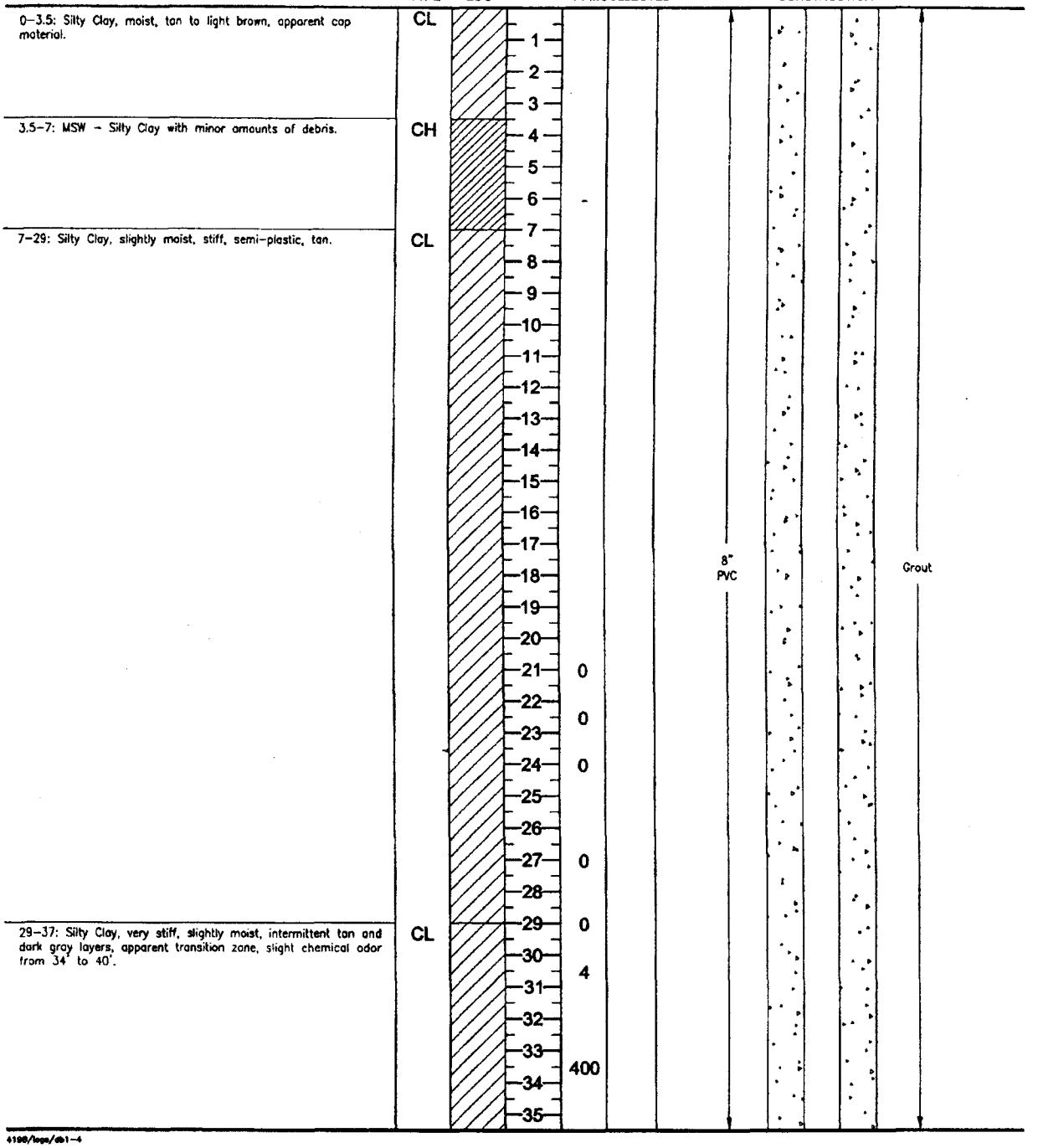
WM-013101

HOLE No. DB-3

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/7, 11/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	69'

ThermoRetec

DESCRIPTION	SOIL TYPE
0–3.5: Silty Clay, moist, tan to light brown, apparent cap material.	CL
3.5–7: MSW – Silty Clay with minor amounts of debris.	CH
7–29: Silty Clay, slightly moist, stiff, semi-plastic, tan.	CL
29–37: Silty Clay, very stiff, slightly moist, intermittent tan and dark gray layers, apparent transition zone, slight chemical odor from 34' to 40'.	CL



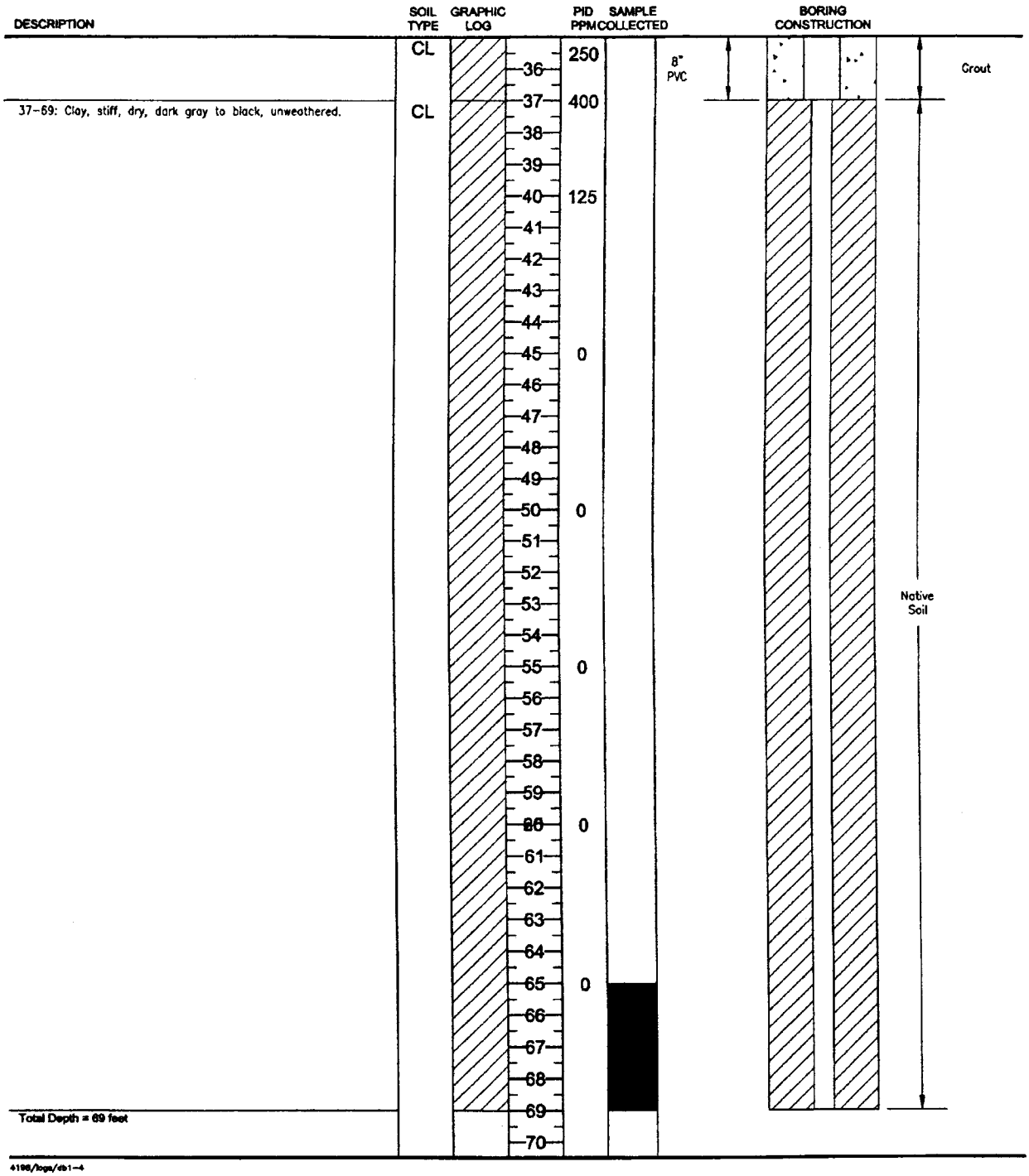
4198/logs/db1-4

WM-013102

HOLE No. DB-3

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/7, 11/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	69'

ThermoRetec



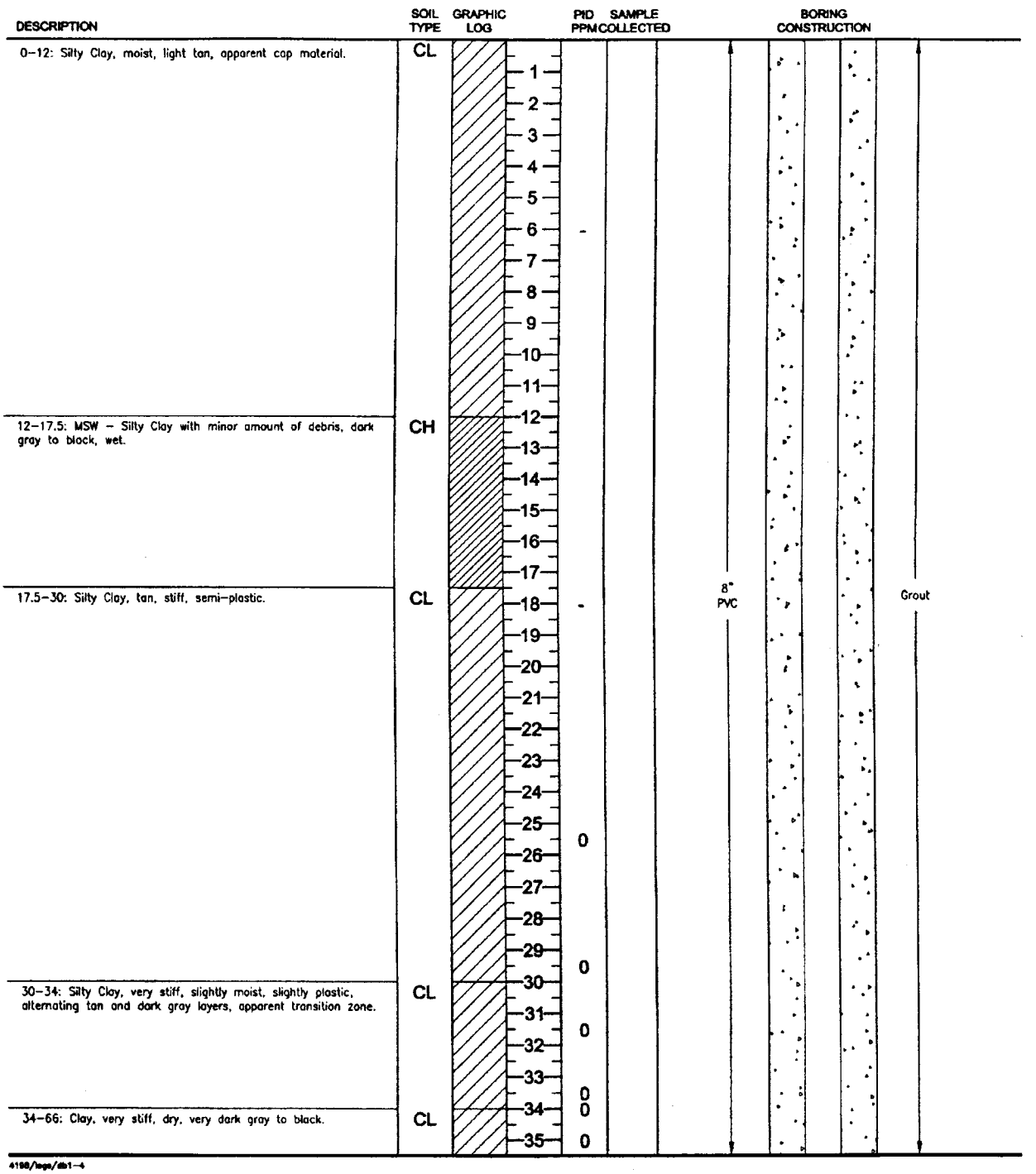
4198/logs/db1–4

WM-013103

HOLE No. DB-4

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/6,11/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec



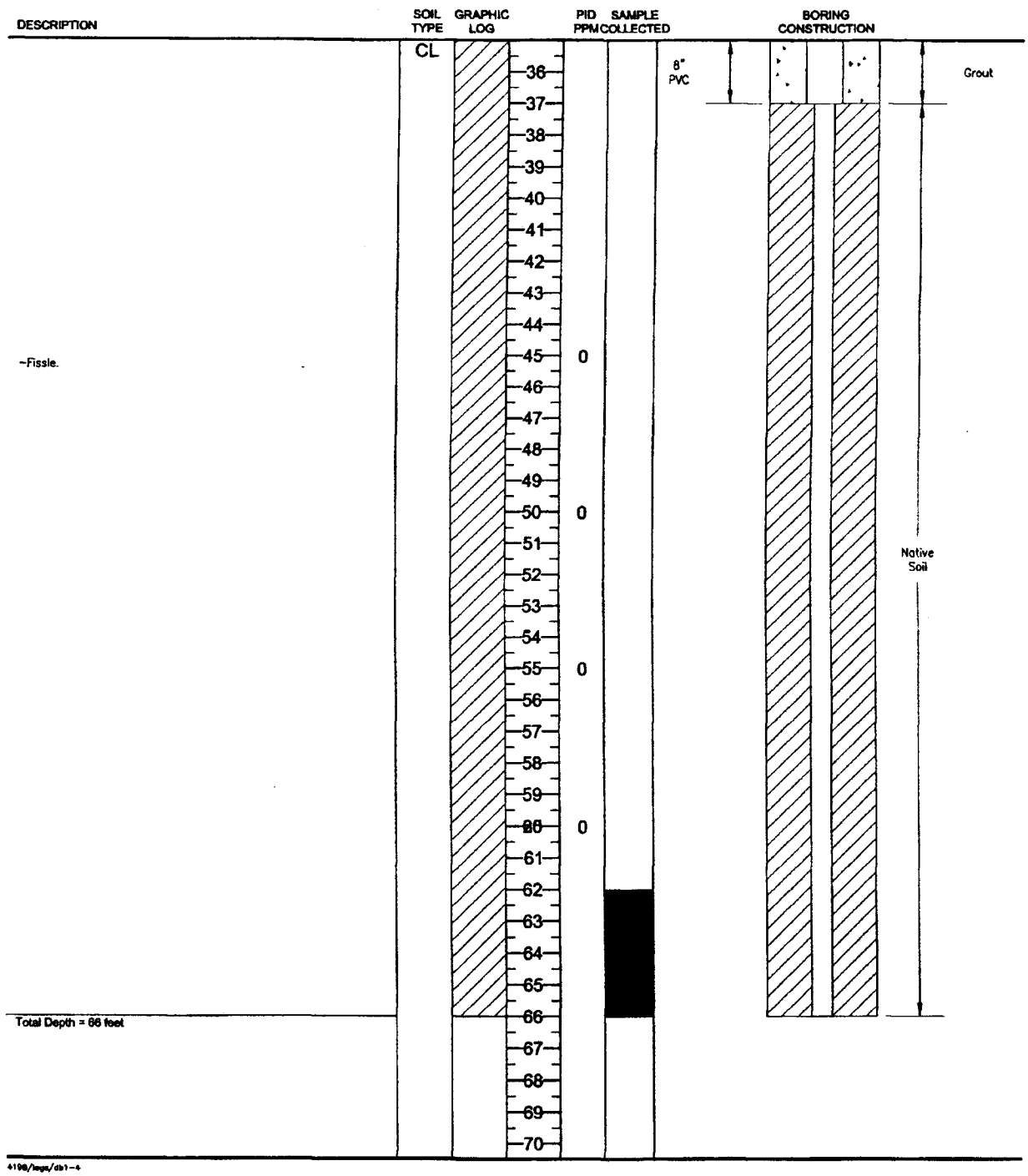
4198/logs/db1–4

WM-013104

HOLE No. DB-4

PROJECT:	Waste Management of Texas	DATE DRILLED:	4/6,11/00
DRILL RIG:	–	LOGGED BY:	C. Kopec
HOLE DIA:	8"	SAMPLER:	C. Kopec
LOCATION:	Industrial Waste Unit	DRILLER:	Best Drilling
PROJECT #:	WASMN-04198-400	TOTAL DEPTH:	66'

ThermoRetec



4198/logs/db1-4

WM-013105

Appendix C

WM-013106

Appendix C

Analytical Data

Analytical Summary Tables Legend

All analytical results in the following summary tables, are provided in parts per billion (ppb).

Data Qualifier Definitions

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- N – The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents its approximate concentration.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- B – (Organics) Found in the associated method blank
- D – Reported from a dilution
- E – Exceeds calibration range
- P – (Pesticides) Difference in column concentrations > 25%.
- B – (Inorganics) Lab qualifier – analyte detected between the instrument detection limit (IDL) and the RL.
- NA – Not analyzed

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Parameter					
Conventionals	Cyanide, Total	670 U	NA	100 U	NA
Conventionals	Ignitability	NA	NA	NA	NA
Conventionals	Percent Moisture	26	NA	NA	NA
Conventionals	pH (solid)	NA	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	6300000	NA
Conventionals	Total Sulfide	6700 U	NA	NA	1000 U
Dioxins/Furans	2,3,7,8-TCDD	0.000026 U	NA	NA	0.00025 U
Dioxins/Furans	Total HxCDD	0.000094 U	NA	NA	0.0003 U
Dioxins/Furans	Total HxCDF	0.00025 U	NA	NA	0.00026 U
Dioxins/Furans	Total PeCDD	0.00043 U	NA	NA	0.00093 U
Dioxins/Furans	Total PeCDF	0.00015 U	NA	NA	0.0011 U
Dioxins/Furans	Total TCDD	0.000026 U	NA	NA	0.00025 U
Dioxins/Furans	Total TCDF	0.000063 U	NA	NA	0.00071 U
Herbicides	2,4,5-T	27 U	NA	NA	NA
Herbicides	2,4,5-TP (Silvex)	27 U	NA	NA	NA
Herbicides	2,4-D	110 U	NA	NA	NA
Herbicides	Dinoseb	16 U	NA	NA	NA
Metals	Antimony	113 B	NA	150 U	NA
Metals	Arsenic	5260	NA	99	NA
Metals	Barium	96700	NA	232 B	NA
Metals	Beryllium	750	NA	95	NA
Metals	Cadmium	1100 B	NA	471	NA
Metals	Chromium	791000	NA	384000	NA
Metals	Cobalt	8400	NA	2490	NA
Metals	Copper	342000	NA	258000	NA
Metals	Lead	16300	NA	19 B	NA
Metals	Mercury	320	NA	2 U	NA
Metals	Nickel	14000	NA	2320	NA
Metals	Selenium	144 B	NA	30 B	NA
Metals	Silver	68 B	NA	0.58 B	NA
Metals	Thallium	242	NA	3 B	NA
Metals	Tin	13400 U	NA	1000 U	NA
Metals	Vanadium	33400	NA	500 U	NA
Metals	Zinc	296000	NA	83700	NA
Pesticides/PCBs	4,4'-DDD	240 PA	NA	NA	NA
Pesticides/PCBs	4,4'-DDE	23 U	NA	NA	NA
Pesticides/PCBs	4,4'-DDT	23 U	NA	NA	NA
Pesticides/PCBs	Aldrin	23 U	NA	NA	NA
Pesticides/PCBs	alpha-BHC	23 U	NA	NA	NA
Pesticides/PCBs	Aroclor 1016	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1232	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1242	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1248	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1254	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	890 U	NA	NA	10 U
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA
Pesticides/PCBs	beta-BHC	23 U	NA	NA	NA
Pesticides/PCBs	Chlordane (technical)	230 U	NA	NA	NA
Pesticides/PCBs	Chlorobenzilate	44 U	NA	NA	NA
Pesticides/PCBs	delta-BHC	23 U	NA	NA	NA
Pesticides/PCBs	Diallate	440 U	NA	NA	NA
Pesticides/PCBs	Dieldrin	23 U	NA	NA	NA
Pesticides/PCBs	Endosulfan I	23 U	NA	NA	NA
Pesticides/PCBs	Endosulfan II	23 U	NA	NA	NA
Pesticides/PCBs	Endosulfan sulfate	23 U	NA	NA	NA
Pesticides/PCBs	Endrin	23 U	NA	NA	NA
Pesticides/PCBs	Endrin aldehyde	23 U	NA	NA	NA
Pesticides/PCBs	gamma-BHC (Lindane)	23 U	NA	NA	NA
Pesticides/PCBs	Heptachlor	23 U	NA	NA	NA
Pesticides/PCBs	Heptachlor epoxide	90 U	NA	NA	NA
Pesticides/PCBs	Isodrin	23 U	NA	NA	NA
Pesticides/PCBs	Kepone	440 U	NA	NA	NA
Pesticides/PCBs	Methoxychlor	44 U	NA	NA	NA
Pesticides/PCBs	Toxaphene	230 U	NA	NA	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	2200 U	200 J	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	2300	10000 U	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	6700 U	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	13000 U	0.29 J	NA	NA
Semivolatiles	1,2-Dibromoethane (EDB)	6700 U	0.1 U	NA	NA
Semivolatiles	1,3,5-Trinitrobenzene	11000 U	380 J	NA	NA
Semivolatiles	1,3-Dinitrobenzene	2200 U	500 U	NA	NA
Semivolatiles	1,4-Dichlorobenzene	12000	NA	NA	NA
Semivolatiles	1,4-Dichlorobenzene	13000	10000 U	NA	NA
Semivolatiles	1,4-Naphthoquinone	11000 U	500 U	NA	NA
Semivolatiles	1-Naphthylamine	2200 U	500 U	NA	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	2200 U	500 U	NA	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	11000 U	500 U	NA	NA
Semivolatiles	2,4,5-Trichlorophenol	2200 U	500 U	NA	NA
Semivolatiles	2,4,6-Trichlorophenol	2200 U	500 U	NA	NA
Semivolatiles	2,4-Dichlorophenol	2200 U	500 U	NA	NA
Semivolatiles	2,4-Dimethylphenol	1600 J	500 U	NA	NA
Semivolatiles	2,4-Dinitrophenol	11000 U	2500 U	NA	NA
Semivolatiles	2,4-Dinitrotoluene	2200 U	500 U	NA	NA
Semivolatiles	2,6-Dichlorophenol	2200 U	500 U	NA	NA
Semivolatiles	2,6-Dinitrotoluene	2200 U	500 U	NA	NA
Semivolatiles	2-Acetylaminofluorene	22000 U	1000 U	NA	NA
Semivolatiles	2-Chloronaphthalene	2200 U	500 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	2200 U	500 U	NA	NA
Semivolatiles	2-Methylnaphthalene	17000	500 U	NA	NA
Semivolatiles	2-Methylphenol	2200 U	500 U	NA	NA
Semivolatiles	2-Naphthylamine	2200 U	500 U	NA	NA
Semivolatiles	2-Nitroaniline	11000 U	2500 U	NA	NA
Semivolatiles	2-Nitrophenol	2200 U	500 U	NA	NA
Semivolatiles	2-Picoline	4400 U	2500 U	NA	NA
Semivolatiles	3,3'-Dichlorobenzidine	11000 U	2500 U	NA	NA
Semivolatiles	3,3'-Dimethylbenzidine	4400 U	500 U	NA	NA
Semivolatiles	3-Methylcholanthrene	4400 U	500 U	NA	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	2200 U	500 U	NA	NA
Semivolatiles	3-Nitroaniline	11000 U	2500 U	NA	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	11000 U	2500 U	NA	NA
Semivolatiles	4-Aminobiphenyl	11000 U	1000 U	NA	NA
Semivolatiles	4-Bromophenyl phenyl ether	2200 U	500 U	NA	NA
Semivolatiles	4-Chloro-3-methylphenol	2200 U	1000 U	NA	NA
Semivolatiles	4-Chloroaniline	2200 U	1000 U	NA	NA
Semivolatiles	4-Chlorophenyl phenyl ether	2200 U	500 U	NA	NA
Semivolatiles	4-Nitroaniline	11000 U	2500 U	NA	NA
Semivolatiles	4-Nitrophenol	11000 U	2500 U	NA	NA
Semivolatiles	5-Nitro-o-toluidine	4400 U	500 U	NA	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	4400 U	25000 U	NA	NA
Semivolatiles	a,a-Dimethylphenethylamine	11000 U	5000 U	NA	NA
Semivolatiles	Acenaphthene	540 J	500 U	NA	NA
Semivolatiles	Acenaphthylene	2200 U	500 U	NA	NA
Semivolatiles	Acetophenone	2200 U	500 U	NA	NA
Semivolatiles	Aniline	2200 U	500 U	NA	NA
Semivolatiles	Anthracene	2200 U	500 U	NA	NA
Semivolatiles	Aramite	4400 U	500 U	NA	NA
Semivolatiles	Benzo(a)anthracene	2200 U	500 U	NA	NA
Semivolatiles	Benzo(a)pyrene	2200 U	500 U	NA	NA
Semivolatiles	Benzo(b)fluoranthene	2200 U	500 U	NA	NA
Semivolatiles	Benzo(ghi)perylene	2200 U	500 U	NA	NA
Semivolatiles	Benzo(k)fluoranthene	2200 U	500 U	NA	NA
Semivolatiles	Benzyl alcohol	2200 U	1000 U	NA	NA
Semivolatiles	bis(2-Chloroethoxy)methane	2200 U	500 U	NA	NA
Semivolatiles	bis(2-Chloroethyl) ether	2200 U	500 U	NA	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	7400	500 U	NA	NA
Semivolatiles	Butyl benzyl phthalate	1100 J	500 U	NA	NA
Semivolatiles	Chrysene	2200 U	500 U	NA	NA
Semivolatiles	Di-n-butyl phthalate	20000	500 U	NA	NA
Semivolatiles	Di-n-octyl phthalate	2200 U	500 U	NA	NA
Semivolatiles	Dibenz(a,h)anthracene	2200 U	500 U	NA	NA
Semivolatiles	Dibenzofuran	2200 U	500 U	NA	NA
Semivolatiles	Diethyl phthalate	4400 U	95 J	NA	NA
Semivolatiles	Dimethoate	4400 U	1000 U	NA	NA
Semivolatiles	Dimethyl phthalate	15000	5500	NA	NA
Semivolatiles	Diphenylamine	2200 U	500 U	NA	NA
Semivolatiles	Disulfoton	11000 U	500 U	NA	NA
Semivolatiles	Ethyl methanesulfonate	2200 U	1000 U	NA	NA
Semivolatiles	Famphur	4400 U	2500 U	NA	NA
Semivolatiles	Fluoranthene	2200 U	500 U	NA	NA
Semivolatiles	Fluorene	2200 U	500 U	NA	NA
Semivolatiles	Hexachlorobenzene	2200 U	500 U	NA	NA
Semivolatiles	Hexachlorobutadiene	2200 U	500 U	NA	NA
Semivolatiles	Hexachlorocyclopentadiene	11000 U	2500 U	NA	NA
Semivolatiles	Hexachloroethane	2200 U	500 U	NA	NA
Semivolatiles	Hexachlorophene	220 U	20000 U	NA	NA
Semivolatiles	Hexachloropropene	22000 U	500 U	NA	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	2200 U	500 U	NA	NA
Semivolatiles	Isophorone	2200 U	500 U	NA	NA
Semivolatiles	Isosafrole	4400 U	500 U	NA	NA
Semivolatiles	Methapyrilene	11000 U	5000 U	NA	NA
Semivolatiles	Methyl methanesulfonate	2200 U	500 U	NA	NA
Semivolatiles	Methyl parathion	11000 U	500 U	NA	NA
Semivolatiles	N-Nitrosodi-n-butylamine	2200 U	500 U	NA	NA
Semivolatiles	N-Nitrosodi-n-propylamine	2200 U	500 U	NA	NA
Semivolatiles	N-Nitrosodiethylamine	2200 U	1000 U	NA	NA
Semivolatiles	N-Nitrosodimethylamine	2200 U	500 U	NA	NA
Semivolatiles	N-Nitrosodiphenylamine	2200 U	500 U	NA	NA
Semivolatiles	N-Nitrosomethylethylamine	2200 U	5000 U	NA	NA
Semivolatiles	N-Nitrosomorpholine	2200 U	1000 U	NA	NA
Semivolatiles	N-Nitrosopiperidine	2200 U	1000 U	NA	NA
Semivolatiles	N-Nitrosopyrrolidine	2200 U	1000 U	NA	NA
Semivolatiles	Naphthalene	17000	500 U	NA	NA
Semivolatiles	Nitrobenzene	2200 U	500 U	NA	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	11000 U	500 U	NA	NA
Semivolatiles	o-Toluidine	4400 U	500 U	NA	NA
Semivolatiles	p-Dimethylaminoazobenzene	4400 U	500 U	NA	NA
Semivolatiles	p-Phenylene diamine	11000 U	5000 U	NA	NA
Semivolatiles	Parathion	11000 U	500 U	NA	NA
Semivolatiles	Pentachlorobenzene	2200 U	500 U	NA	NA
Semivolatiles	Pentachloroethane	11000 U	500 U	NA	NA
Semivolatiles	Pentachloronitrobenzene	11000 U	1000 U	NA	NA
Semivolatiles	Pentachlorophenol	11000 U	2500 U	NA	NA
Semivolatiles	Phenacetin	4400 U	1000 U	NA	NA
Semivolatiles	Phenanthrene	850 J	500 U	NA	NA
Semivolatiles	Phenol	38000 D	190000 D	NA	NA
Semivolatiles	Phorate	11000 U	500 U	NA	NA
Semivolatiles	Pronamide	4400 U	500 U	NA	NA
Semivolatiles	Pyrene	2200 U	500 U	NA	NA
Semivolatiles	Pyridine	4400 U	1000 U	NA	NA
Semivolatiles	Safrole	11000 U	500 U	NA	NA
Semivolatiles	Sulfotepp	6700 U	5000 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	11000 U	2500 U	NA	NA
Semivolatiles	4-Nitroquinoline-1-oxide	22000 U	5000 U	NA	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	5900	NA	NA
Total Petroleum Hydrocarbons	C6 - C10	NA	77000	NA	NA
Total Petroleum Hydrocarbons	C6 - C28	NA	83000	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	6700 U	10000 U	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	6700 U	10000 U	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	6700 U	10000 U	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	6700 U	10000 U	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1-Dichloroethane	6700 U	10000 U	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA	NA
Volatiles	1,1-Dichloroethene	6700 U	10000 U	NA	NA
Volatiles	1,1-Dichloroethene	NA	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	6700 U	10000 U	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	6700 U	10000 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	2300	NA	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	13000 U	0.29 J	NA	NA
Volatiles	1,2-Dibromoethane (EDB)	6700 U	0.1 U	NA	NA
Volatiles	1,2-Dichlorobenzene	370000 D	3100 J	NA	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dichloroethane	6700 U	10000 U	NA	NA
Volatiles	1,2-Dichloroethane	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	6700 U	10000 U	NA	NA
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	6700 U	10000 U	NA	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	12000	10000 U	NA	NA
Volatiles	1,4-Dichlorobenzene	13000	NA	NA	NA
Volatiles	1,4-Dioxane	670000 U	1000000 U	NA	NA
Volatiles	1,4-Dioxane	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	18000 J B	150000 J D	NA	NA
Volatiles	2-Hexanone	67000 U	100000 U	NA	NA
Volatiles	2-Hexanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	3600 J	9400 J	NA	NA
Volatiles	Acetone	170000 B	1100000 J D	NA	NA
Volatiles	Acetone	NA	NA	NA	NA
Volatiles	Acetonitrile	NA	NA	NA	NA
Volatiles	Acetonitrile	130000 U	200000 U	NA	NA
Volatiles	Acrolein	130000 U	200000 U	NA	NA
Volatiles	Acrolein	NA	NA	NA	NA
Volatiles	Acrylonitrile	NA	NA	NA	NA
Volatiles	Acrylonitrile	130000 U	200000 U	NA	NA
Volatiles	Allyl chloride	8000 U	10000 U	NA	NA
Volatiles	Allyl chloride	NA	NA	NA	NA
Volatiles	Benzene	NA	NA	NA	NA
Volatiles	Benzene	6700 U	10000 U	NA	NA
Volatiles	Bromodichloromethane	6700 U	10000 U	NA	NA
Volatiles	Bromodichloromethane	NA	NA	NA	NA
Volatiles	Bromoform	NA	NA	NA	NA
Volatiles	Bromoform	6700 U	10000 U	NA	NA
Volatiles	Bromomethane	13000 U	10000 U	NA	NA
Volatiles	Bromomethane	NA	NA	NA	NA
Volatiles	Carbon disulfide	NA	NA	NA	NA
Volatiles	Carbon disulfide	67000 U	100000 U	NA	NA
Volatiles	Carbon tetrachloride	6700 U	10000 U	NA	NA
Volatiles	Carbon tetrachloride	NA	NA	NA	NA
Volatiles	Chlorobenzene	NA	NA	NA	NA
Volatiles	Chlorobenzene	6700 U	10000 U	NA	NA
Volatiles	Chloroethane	6700 U	10000 U	NA	NA
Volatiles	Chloroethane	NA	NA	NA	NA
Volatiles	Chloroform	NA	NA	NA	NA
Volatiles	Chloroform	6700 U	10000 U	NA	NA
Volatiles	Chloromethane	6700 U	10000 U	NA	NA
Volatiles	Chloromethane	NA	NA	NA	NA
Volatiles	Chloroprene	NA	NA	NA	NA
Volatiles	Chloroprene	7200 U	10000 U	NA	NA
Volatiles	cis-1,3-Dichloropropene	6700 U	10000 U	NA	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	Dibromochloromethane	NA	NA	NA	NA
Volatiles	Dibromochloromethane	6700 U	10000 U	NA	NA
Volatiles	Dibromomethane	6700 U	10000 U	NA	NA
Volatiles	Dibromomethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	6700 U	10000 U	NA	NA
Volatiles	Ethyl methacrylate	6700 U	10000 U	NA	NA
Volatiles	Ethyl methacrylate	NA	NA	NA	NA
Volatiles	Ethylbenzene	NA	NA	NA	NA
Volatiles	Ethylbenzene	230000	4700 J	NA	NA
Volatiles	Iodomethane	8400 U	10000 U	NA	NA
Volatiles	Iodomethane	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	130000 U	200000 U	NA	NA
Volatiles	m-Xylene & p-Xylene	1900000 D	40000	NA	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA
Volatiles	Methacrylonitrile	NA	NA	NA	NA
Volatiles	Methacrylonitrile	130000 U	200000 U	NA	NA
Volatiles	Methyl methacrylate	6700 U	10000 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

[redacted]		[redacted]			
Volatiles	Methyl methacrylate	NA	NA	NA	NA
Volatiles	Methylene chloride	NA	NA	NA	NA
Volatiles	Methylene chloride	6700 U	20000	NA	NA
Volatiles	o-Xylene	640000 D	15000	NA	NA
Volatiles	o-Xylene	NA	NA	NA	NA
Volatiles	Propionitrile	NA	NA	NA	NA
Volatiles	Propionitrile	130000 U	200000 U	NA	NA
Volatiles	Styrene	48000	2300 J	NA	NA
Volatiles	Styrene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	25000	10000 U	NA	NA
Volatiles	Toluene	39000	4800 J	NA	NA
Volatiles	Toluene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	6700 U	10000 U	NA	NA
Volatiles	trans-1,3-Dichloropropene	6700 U	10000 U	NA	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	6700 U	10000 U	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA
Volatiles	Trichloroethene	170000	39000	NA	NA
Volatiles	Trichloroethene	NA	NA	NA	NA
Volatiles	Trichlorofluoromethane	6700 U	10000 U	NA	NA
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA
Volatiles	Vinyl acetate	67000 U	100000 U	NA	NA
Volatiles	Vinyl acetate	NA	NA	NA	NA
Volatiles	Vinyl chloride	NA	NA	NA	NA
Volatiles	Vinyl chloride	2700 U	4000 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	NA	620 U	NA
Conventionals	Ignitability	NA	NA	NA
Conventionals	Percent Moisture	NA	20	26
Conventionals	pH (solid)	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	870000 B
Conventionals	Total Sulfide	NA	6200 U	NA
Dioxins/Furans	2,3,7,8-TCDD	NA	0.000023 U	NA
Dioxins/Furans	Total HxCDD	NA	0.000048 U	NA
Dioxins/Furans	Total HxCDF	NA	0.000029 U	NA
Dioxins/Furans	Total PeCDD	NA	0.000056 U	NA
Dioxins/Furans	Total PeCDF	NA	0.00037 U	NA
Dioxins/Furans	Total TCDD	NA	0.000023 U	NA
Dioxins/Furans	Total TCDF	NA	0.000072 U	NA
Herbicides	2,4,5-T	200 U	25 U	NA
Herbicides	2,4,5-TP (Silvex)	200 U	25 U	NA
Herbicides	2,4-D	200 U	100 U	NA
Herbicides	Dinoseb	700 U	15 U	NA
Metals	Antimony	NA	3740 U	NA
Metals	Arsenic	NA	14800	NA
Metals	Barium	NA	43300	NA
Metals	Beryllium	NA	1400 B	NA
Metals	Cadmium	NA	6200 U	NA
Metals	Chromium	NA	6710000	NA
Metals	Cobalt	NA	3800 B	NA
Metals	Copper	NA	5880000	NA
Metals	Lead	NA	11300	NA
Metals	Mercury	NA	39 B	NA
Metals	Nickel	NA	44000	NA
Metals	Selenium	NA	4630	NA
Metals	Silver	NA	358 B	NA
Metals	Thallium	NA	367 B	NA
Metals	Tin	NA	62400 U	NA
Metals	Vanadium	NA	54500	NA
Metals	Zinc	NA	54200	NA
Pesticides/PCBs	4,4'-DDD	0.05 U	21 U	NA
Pesticides/PCBs	4,4'-DDE	0.05 U	21 U	NA
Pesticides/PCBs	4,4'-DDT	0.05 U	21 U	NA
Pesticides/PCBs	Aldrin	0.05 U	21 U	NA
Pesticides/PCBs	alpha-BHC	0.05 U	21 U	NA
Pesticides/PCBs	Aroclor 1016	NA	41 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	NA	41 U	NA
Pesticides/PCBs	Aroclor 1232	NA	41 U	NA
Pesticides/PCBs	Aroclor 1242	NA	41 U	NA
Pesticides/PCBs	Aroclor 1248	NA	41 U	NA
Pesticides/PCBs	Aroclor 1254	NA	41 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	41 U	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA
Pesticides/PCBs	beta-BHC	0.05 U	21 U	NA
Pesticides/PCBs	Chlordane (technical)	0.5 U	210 U	NA
Pesticides/PCBs	Chlorobenzilate	2 U	41 U	NA
Pesticides/PCBs	delta-BHC	0.05 U	21 U	NA
Pesticides/PCBs	Dietilate	1 U	410 U	NA
Pesticides/PCBs	Dieldrin	0.05 U	21 U	NA
Pesticides/PCBs	Endosulfan I	0.05 U	21 U	NA
Pesticides/PCBs	Endosulfan II	0.05 U	21 U	NA
Pesticides/PCBs	Endosulfan sulfate	0.05 U	21 U	NA
Pesticides/PCBs	Endrin	0.05 U	21 U	NA
Pesticides/PCBs	Endrin aldehyde	0.05 U	21 U	NA
Pesticides/PCBs	gamma-BHC (Lindane)	0.05 U	21 U	NA
Pesticides/PCBs	Heptachlor	0.05 U	21 U	NA
Pesticides/PCBs	Heptachlor epoxide	0.05 U	84 U	NA
Pesticides/PCBs	Isodrin	0.1 U	21 U	NA
Pesticides/PCBs	Kepone	1 U	410 U	NA
Pesticides/PCBs	Methoxychlor	0.1 U	41 U	NA
Pesticides/PCBs	Toxaphene	2 U	210 U	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	NA	2100 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	6.2 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	12 U	NA
Semivolatiles	1,2-Dibromoethane (EDB)	NA	6.2 U	NA
Semivolatiles	1,3,5-Trinitrobenzene	NA	10000 U	NA
Semivolatiles	1,3-Dinitrobenzene	NA	2100 U	NA
Semivolatiles	1,4-Dichlorobenzene	NA	6.2 U	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	NA
Semivolatiles	1,4-Naphthoquinone	NA	10000 U	NA
Semivolatiles	1-Naphthylamine	NA	2100 U	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	NA	2100 U	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	NA	10000 U	NA
Semivolatiles	2,4,5-Trichlorophenol	NA	2100 U	NA
Semivolatiles	2,4,6-Trichlorophenol	NA	2100 U	NA
Semivolatiles	2,4-Dichlorophenol	NA	2100 U	NA
Semivolatiles	2,4-Dimethylphenol	NA	2100 U	NA
Semivolatiles	2,4-Dinitrophenol	NA	10000 U	NA
Semivolatiles	2,4-Dinitrotoluene	NA	2100 U	NA
Semivolatiles	2,6-Dichlorophenol	NA	2100 U	NA
Semivolatiles	2,6-Dinitrotoluene	NA	2100 U	NA
Semivolatiles	2-Acetylaminofluorene	NA	21000 U	NA
Semivolatiles	2-Chloronaphthalene	NA	2100 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	NA	2100 U	NA
Semivolatiles	2-Methylnaphthalene	NA	2100 U	NA
Semivolatiles	2-Methylphenol	NA	2100 U	NA
Semivolatiles	2-Naphthylamine	NA	2100 U	NA
Semivolatiles	2-Nitroaniline	NA	10000 U	NA
Semivolatiles	2-Nitrophenol	NA	2100 U	NA
Semivolatiles	2-Picoline	NA	4100 U	NA
Semivolatiles	3,3'-Dichlorobenzidine	NA	10000 U	NA
Semivolatiles	3,3'-Dimethylbenzidine	NA	4100 U	NA
Semivolatiles	3-Methylcholanthrene	NA	4100 U	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	NA	2100 U	NA
Semivolatiles	3-Nitroaniline	NA	10000 U	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	NA	10000 U	NA
Semivolatiles	4-Aminobiphenyl	NA	10000 U	NA
Semivolatiles	4-Bromophenyl phenyl ether	NA	2100 U	NA
Semivolatiles	4-Chloro-3-methylphenol	NA	2100 U	NA
Semivolatiles	4-Chloroaniline	NA	2100 U	NA
Semivolatiles	4-Chlorophenyl phenyl ether	NA	2100 U	NA
Semivolatiles	4-Nitroaniline	NA	10000 U	NA
Semivolatiles	4-Nitrophenol	NA	10000 U	NA
Semivolatiles	5-Nitro-o-toluidine	NA	4100 U	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	NA	4100 U	NA
Semivolatiles	a,a-Dimethylphenethylamine	NA	10000 U	NA
Semivolatiles	Acenaphthene	NA	2100 U	NA
Semivolatiles	Acenaphthylene	NA	2100 U	NA
Semivolatiles	Acetophenone	NA	2100 U	NA
Semivolatiles	Aniline	NA	2100 U	NA
Semivolatiles	Anthracene	NA	2100 U	NA
Semivolatiles	Aramite	NA	4100 U	NA
Semivolatiles	Benzo(a)anthracene	NA	2100 U	NA
Semivolatiles	Benzo(a)pyrene	NA	2100 U	NA
Semivolatiles	Benzo(b)fluoranthene	NA	2100 U	NA
Semivolatiles	Benzo(ghi)perylene	NA	2100 U	NA
Semivolatiles	Benzo(k)fluoranthene	NA	2100 U	NA
Semivolatiles	Benzyl alcohol	NA	2100 U	NA
Semivolatiles	bis(2-Chloroethoxy)methane	NA	2100 U	NA
Semivolatiles	bis(2-Chloroethyl) ether	NA	2100 U	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	NA	740 J	NA
Semivolatiles	Butyl benzyl phthalate	NA	2100 U	NA
Semivolatiles	Chrysene	NA	2100 U	NA
Semivolatiles	Di-n-butyl phthalate	NA	2100 U	NA
Semivolatiles	Di-n-octyl phthalate	NA	2100 U	NA
Semivolatiles	Dibenz(a,h)anthracene	NA	2100 U	NA
Semivolatiles	Dibenzofuran	NA	2100 U	NA
Semivolatiles	Diethyl phthalate	NA	4100 U	NA
Semivolatiles	Dimethoate	NA	4100 U	NA
Semivolatiles	Dimethyl phthalate	NA	2100 U	NA
Semivolatiles	Diphenylamine	NA	2100 U	NA
Semivolatiles	Disulfoton	NA	10000 U	NA
Semivolatiles	Ethyl methanesulfonate	NA	2100 U	NA
Semivolatiles	Famphur	NA	4100 U	NA
Semivolatiles	Fluoranthene	NA	2100 U	NA
Semivolatiles	Fluorene	NA	2100 U	NA
Semivolatiles	Hexachlorobenzene	NA	2100 U	NA
Semivolatiles	Hexachlorobutadiene	NA	2100 U	NA
Semivolatiles	Hexachlorocyclopentadiene	NA	10000 U	NA
Semivolatiles	Hexachloroethane	NA	2100 U	NA
Semivolatiles	Hexachlorophene	NA	210 U	NA
Semivolatiles	Hexachloropropene	NA	21000 U	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	NA	2100 U	NA
Semivolatiles	Isophorone	NA	2100 U	NA
Semivolatiles	Isosafrole	NA	4100 U	NA
Semivolatiles	Methapyrilene	NA	10000 U	NA
Semivolatiles	Methyl methanesulfonate	NA	2100 U	NA
Semivolatiles	Methyl parathion	NA	10000 U	NA
Semivolatiles	N-Nitrosodi-n-butylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosodi-n-propylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosodiethylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosodimethylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosodiphenylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosomethylethylamine	NA	2100 U	NA
Semivolatiles	N-Nitrosomorpholine	NA	2100 U	NA
Semivolatiles	N-Nitrosopiperidine	NA	2100 U	NA
Semivolatiles	N-Nitrosopyrrolidine	NA	2100 U	NA
Semivolatiles	Naphthalene	NA	2100 U	NA
Semivolatiles	Nitrobenzene	NA	2100 U	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	NA	10000 U	NA
Semivolatiles	o-Toluidine	NA	4100 U	NA
Semivolatiles	p-Dimethylaminoazobenzene	NA	4100 U	NA
Semivolatiles	p-Phenylene diamine	NA	10000 U	NA
Semivolatiles	Parathion	NA	10000 U	NA
Semivolatiles	Pentachlorobenzene	NA	2100 U	NA
Semivolatiles	Pentachloroethane	NA	10000 U	NA
Semivolatiles	Pentachloronitrobenzene	NA	10000 U	NA
Semivolatiles	Pentachlorophenol	NA	10000 U	NA
Semivolatiles	Phenacetin	NA	4100 U	NA
Semivolatiles	Phenanthrene	NA	2100 U	NA
Semivolatiles	Phenol	NA	2100 U	NA
Semivolatiles	Phorate	NA	10000 U	NA
Semivolatiles	Pronamide	NA	4100 U	NA
Semivolatiles	Pyrene	NA	2100 U	NA
Semivolatiles	Pyridine	NA	4100 U	NA
Semivolatiles	Safrole	NA	10000 U	NA
Semivolatiles	Sulfotepp	NA	6200 U	NA

WM-013114

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	NA	10000 U	NA
Semivolatiles	4-Nitroquinoline-1-oxide	NA	21000 U	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	NA	68000 U
Total Petroleum Hydrocarbons	C8 - C10	NA	NA	68000 U
Total Petroleum Hydrocarbons	C6 - C28	NA	NA	68000 U
Volatiles	1,1,1,2-Tetrachloroethane	NA	6.2 U	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	6.2 U	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	6.2 U	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	6.2 U	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA
Volatiles	1,1-Dichloroethane	NA	6.2 U	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA
Volatiles	1,1-Dichloroethene	NA	6.2 U	NA
Volatiles	1,1-Dichloroethene	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	6.2 U	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	6.2 U	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	12 U	NA
Volatiles	1,2-Dibromoethane (EDB)	NA	6.2 U	NA
Volatiles	1,2-Dichlorobenzene	NA	6.2 U	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA
Volatiles	1,2-Dichloroethane	NA	6.2 U	NA
Volatiles	1,2-Dichloroethane	NA	NA	NA
Volatiles	1,2-Dichloropropane	NA	6.2 U	NA
Volatiles	1,2-Dichloropropane	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	NA	6.2 U	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	NA	6.2 U	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	NA
Volatiles	1,4-Dioxane	NA	620 U	NA
Volatiles	1,4-Dioxane	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	10 J	NA
Volatiles	2-Hexanone	NA	62 U	NA
Volatiles	2-Hexanone	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	62 U	NA
Volatiles	Acetone	NA	140	NA
Volatiles	Acetone	NA	NA	NA
Volatiles	Acetonitrile	NA	NA	NA
Volatiles	Acetonitrile	NA	120 U	NA
Volatiles	Acrolein	NA	120 U	NA
Volatiles	Acrolein	NA	NA	NA
Volatiles	Acrylonitrile	NA	NA	NA
Volatiles	Acrylonitrile	NA	120 U	NA
Volatiles	Allyl chloride	NA	7.4 U	NA
Volatiles	Allyl chloride	NA	NA	NA
Volatiles	Benzene	NA	NA	NA
Volatiles	Benzene	NA	6.2 U	NA
Volatiles	Bromodichloromethane	NA	6.2 U	NA
Volatiles	Bromodichloromethane	NA	NA	NA
Volatiles	Bromoform	NA	NA	NA
Volatiles	Bromoform	NA	6.2 U	NA
Volatiles	Bromomethane	NA	12 U	NA
Volatiles	Bromomethane	NA	NA	NA
Volatiles	Carbon disulfide	NA	NA	NA
Volatiles	Carbon disulfide	NA	62 U	NA
Volatiles	Carbon tetrachloride	NA	6.2 U	NA
Volatiles	Carbon tetrachloride	NA	NA	NA
Volatiles	Chlorobenzene	NA	NA	NA
Volatiles	Chlorobenzene	NA	6.2 U	NA
Volatiles	Chloroethane	NA	6.2 U	NA
Volatiles	Chloroethane	NA	NA	NA
Volatiles	Chloroform	NA	NA	NA
Volatiles	Chloroform	NA	0.85 J	NA
Volatiles	Chloromethane	NA	6.2 U	NA
Volatiles	Chloromethane	NA	NA	NA
Volatiles	Chloroprene	NA	NA	NA
Volatiles	Chloroprene	NA	6.7 U	NA
Volatiles	cis-1,3-Dichloropropene	NA	6.2 U	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA
Volatiles	Dibromochloromethane	NA	NA	NA
Volatiles	Dibromochloromethane	NA	6.2 U	NA
Volatiles	Dibromomethane	NA	6.2 U	NA
Volatiles	Dibromomethane	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	6.2 U	NA
Volatiles	Ethyl methacrylate	NA	6.2 U	NA
Volatiles	Ethyl methacrylate	NA	NA	NA
Volatiles	Ethylbenzene	NA	NA	NA
Volatiles	Ethylbenzene	NA	6.2 U	NA
Volatiles	Iodomethane	NA	7.8 U	NA
Volatiles	Iodomethane	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	120 U	NA
Volatiles	m-Xylene & p-Xylene	NA	6.2 U	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA
Volatiles	Methacrylonitrile	NA	NA	NA
Volatiles	Methacrylonitrile	NA	120 U	NA
Volatiles	Methyl methacrylate	NA	6.2 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA	NA	NA
Volatiles	Methylene chloride	NA	NA	NA
Volatiles	Methylene chloride	NA	2.4 J B	NA
Volatiles	o-Xylene	NA	6.2 U	NA
Volatiles	o-Xylene	NA	NA	NA
Volatiles	Propionitrile	NA	NA	NA
Volatiles	Propionitrile	NA	120 U	NA
Volatiles	Styrene	NA	6.2 U	NA
Volatiles	Styrene	NA	NA	NA
Volatiles	Tetrachloroethene	NA	NA	NA
Volatiles	Tetrachloroethene	NA	6.2 U	NA
Volatiles	Toluene	NA	6.2 U	NA
Volatiles	Toluene	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	6.2 U	NA
Volatiles	trans-1,3-Dichloropropene	NA	6.2 U	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	6.2 U	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA
Volatiles	Trichloroethene	NA	6.2 U	NA
Volatiles	Trichloroethene	NA	NA	NA
Volatiles	Trichlorofluoromethane	NA	6.2 U	NA
Volatiles	Trichlorofluoromethane	NA	NA	NA
Volatiles	Vinyl acetate	NA	62 U	NA
Volatiles	Vinyl acetate	NA	NA	NA
Volatiles	Vinyl chloride	NA	NA	NA
Volatiles	Vinyl chloride	NA	2.5 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	NA	NA	NA
Conventionals	Ignitability	NA	NA	NA
Conventionals	Percent Moisture	NA	NA	20
Conventionals	pH (solid)	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	1730000 B
Conventionals	Total Sulfide	NA	NA	NA
Dioxins/Furans	2,3,7,8-TCDD	NA	NA	NA
Dioxins/Furans	Total HxCDD	NA	NA	NA
Dioxins/Furans	Total HxCDF	NA	NA	NA
Dioxins/Furans	Total PeCDD	NA	NA	NA
Dioxins/Furans	Total PeCDF	NA	NA	NA
Dioxins/Furans	Total TCDD	NA	NA	NA
Dioxins/Furans	Total TCDF	NA	NA	NA
Herbicides	2,4,5-T	NA	NA	NA
Herbicides	2,4,5-TP (Silvex)	NA	NA	NA
Herbicides	2,4-D	NA	NA	NA
Herbicides	Dinoseb	NA	NA	NA
Metals	Antimony	NA	NA	NA
Metals	Arsenic	NA	NA	NA
Metals	Barium	NA	110 B	NA
Metals	Beryllium	NA	98 B	NA
Metals	Cadmium	NA	500 U	NA
Metals	Chromium	NA	4240000	NA
Metals	Cobalt	NA	2500 U	NA
Metals	Copper	NA	4710	NA
Metals	Lead	NA	NA	NA
Metals	Mercury	NA	6	NA
Metals	Nickel	NA	1340 B	NA
Metals	Selenium	NA	NA	NA
Metals	Silver	NA	NA	NA
Metals	Thallium	NA	NA	NA
Metals	Tin	NA	5000 U	NA
Metals	Vanadium	NA	2500 U	NA
Metals	Zinc	NA	476 B	NA
Pesticides/PCBs	4,4'-DDD	NA	NA	NA
Pesticides/PCBs	4,4'-DDE	NA	NA	NA
Pesticides/PCBs	4,4'-DDT	NA	NA	NA
Pesticides/PCBs	Aldrin	NA	NA	NA
Pesticides/PCBs	alpha-BHC	NA	NA	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	NA	NA	NA
Pesticides/PCBs	Aroclor 1232	NA	NA	NA
Pesticides/PCBs	Aroclor 1242	NA	NA	NA
Pesticides/PCBs	Aroclor 1248	NA	NA	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA
Pesticides/PCBs	beta-BHC	NA	NA	NA
Pesticides/PCBs	Chlordane (technical)	NA	NA	NA
Pesticides/PCBs	Chlorobenzilate	NA	NA	NA
Pesticides/PCBs	delta-BHC	NA	NA	NA
Pesticides/PCBs	Diallate	NA	NA	NA
Pesticides/PCBs	Dieldrin	NA	NA	NA
Pesticides/PCBs	Endosulfan I	NA	NA	NA
Pesticides/PCBs	Endosulfan II	NA	NA	NA
Pesticides/PCBs	Endosulfan sulfate	NA	NA	NA
Pesticides/PCBs	Endrin	NA	NA	NA
Pesticides/PCBs	Endrin aldehyde	NA	NA	NA
Pesticides/PCBs	gamma-BHC (Lindane)	NA	NA	NA
Pesticides/PCBs	Heptachlor	NA	NA	NA
Pesticides/PCBs	Heptachlor epoxide	NA	NA	NA
Pesticides/PCBs	Isodrin	NA	NA	NA
Pesticides/PCBs	Kepone	NA	NA	NA
Pesticides/PCBs	Methoxychlor	NA	NA	NA
Pesticides/PCBs	Toxaphene	NA	NA	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	NA	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	250 U	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	250 U	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	50 U	NA	NA
Semivolatiles	1,2-Dibromoethane (EDB)	NA	NA	NA
Semivolatiles	1,3,5-Trinitrobenzene	NA	NA	NA
Semivolatiles	1,3-Dinitrobenzene	NA	NA	NA
Semivolatiles	1,4-Dichlorobenzene	250 U	NA	NA
Semivolatiles	1,4-Dichlorobenzene	250 U	NA	NA
Semivolatiles	1,4-Naphthoquinone	NA	NA	NA
Semivolatiles	1-Naphthylamine	NA	NA	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	NA	NA	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	NA	NA	NA
Semivolatiles	2,4,5-Trichlorophenol	NA	NA	NA
Semivolatiles	2,4,6-Trichlorophenol	NA	NA	NA
Semivolatiles	2,4-Dichlorophenol	NA	NA	NA
Semivolatiles	2,4-Dimethylphenol	NA	NA	NA
Semivolatiles	2,4-Dinitrophenol	NA	NA	NA
Semivolatiles	2,4-Dinitrotoluene	NA	NA	NA
Semivolatiles	2,6-Dichlorophenol	NA	NA	NA
Semivolatiles	2,6-Dinitrotoluene	NA	NA	NA
Semivolatiles	2-Acetylaminofluorene	NA	NA	NA
Semivolatiles	2-Chloronaphthalene	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	NA	NA	NA
Semivolatiles	2-Methylnaphthalene	NA	NA	NA
Semivolatiles	2-Methylphenol	NA	NA	NA
Semivolatiles	2-Naphthylamine	NA	NA	NA
Semivolatiles	2-Nitroaniline	NA	NA	NA
Semivolatiles	2-Nitrophenol	NA	NA	NA
Semivolatiles	2-Picoline	NA	NA	NA
Semivolatiles	3,3'-Dichlorobenzidine	NA	NA	NA
Semivolatiles	3,3'-Dimethylbenzidine	NA	NA	NA
Semivolatiles	3-Methylcholanthrene	NA	NA	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	NA	NA	NA
Semivolatiles	3-Nitroaniline	NA	NA	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	NA	NA	NA
Semivolatiles	4-Aminobiphenyl	NA	NA	NA
Semivolatiles	4-Bromophenyl phenyl ether	NA	NA	NA
Semivolatiles	4-Chloro-3-methylphenol	NA	NA	NA
Semivolatiles	4-Chloroaniline	NA	NA	NA
Semivolatiles	4-Chlorophenyl phenyl ether	NA	NA	NA
Semivolatiles	4-Nitroaniline	NA	NA	NA
Semivolatiles	4-Nitrophenol	NA	NA	NA
Semivolatiles	5-Nitro-o-toluidine	NA	NA	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	NA	NA	NA
Semivolatiles	a,a-Dimethylphenethylamine	NA	NA	NA
Semivolatiles	Acenaphthene	NA	NA	NA
Semivolatiles	Acenaphthylene	NA	NA	NA
Semivolatiles	Acetophenone	NA	NA	NA
Semivolatiles	Aniline	NA	NA	NA
Semivolatiles	Anthracene	NA	NA	NA
Semivolatiles	Aramite	NA	NA	NA
Semivolatiles	Benzo(a)anthracene	NA	NA	NA
Semivolatiles	Benzo(a)pyrene	NA	NA	NA
Semivolatiles	Benzo(b)fluoranthene	NA	NA	NA
Semivolatiles	Benzo(ghi)perylene	NA	NA	NA
Semivolatiles	Benzo(k)fluoranthene	NA	NA	NA
Semivolatiles	Benzyl alcohol	NA	NA	NA
Semivolatiles	bis(2-Chloroethoxy)methane	NA	NA	NA
Semivolatiles	bis(2-Chloroethyl) ether	NA	NA	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	NA	NA	NA
Semivolatiles	Butyl benzyl phthalate	NA	NA	NA
Semivolatiles	Chrysene	NA	NA	NA
Semivolatiles	Di-n-butyl phthalate	NA	NA	NA
Semivolatiles	Di-n-octyl phthalate	NA	NA	NA
Semivolatiles	Dibenz(a,h)anthracene	NA	NA	NA
Semivolatiles	Dibenzofuran	NA	NA	NA
Semivolatiles	Diethyl phthalate	NA	NA	NA
Semivolatiles	Dimethoate	NA	NA	NA
Semivolatiles	Dimethyl phthalate	NA	NA	NA
Semivolatiles	Diphenylamine	NA	NA	NA
Semivolatiles	Disulfoton	NA	NA	NA
Semivolatiles	Ethyl methanesulfonate	NA	NA	NA
Semivolatiles	Famphur	NA	NA	NA
Semivolatiles	Fluoranthene	NA	NA	NA
Semivolatiles	Fluorene	NA	NA	NA
Semivolatiles	Hexachlorobenzene	NA	NA	NA
Semivolatiles	Hexachlorobutadiene	NA	NA	NA
Semivolatiles	Hexachlorocyclopentadiene	NA	NA	NA
Semivolatiles	Hexachloroethane	NA	NA	NA
Semivolatiles	Hexachlorophene	NA	NA	NA
Semivolatiles	Hexachloropropene	NA	NA	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	NA	NA	NA
Semivolatiles	Isophorone	NA	NA	NA
Semivolatiles	Isosafrole	NA	NA	NA
Semivolatiles	Methapyrilene	NA	NA	NA
Semivolatiles	Methyl methanesulfonate	NA	NA	NA
Semivolatiles	Methyl parathion	NA	NA	NA
Semivolatiles	N-Nitrosodi-n-butylamine	NA	NA	NA
Semivolatiles	N-Nitrosodi-n-propylamine	NA	NA	NA
Semivolatiles	N-Nitrosodiethylamine	NA	NA	NA
Semivolatiles	N-Nitrosodimethylamine	NA	NA	NA
Semivolatiles	N-Nitrosodiphenylamine	NA	NA	NA
Semivolatiles	N-Nitrosomethylethylamine	NA	NA	NA
Semivolatiles	N-Nitrosomorpholine	NA	NA	NA
Semivolatiles	N-Nitrosopiperidine	NA	NA	NA
Semivolatiles	N-Nitrosopyrrolidine	NA	NA	NA
Semivolatiles	Naphthalene	NA	NA	NA
Semivolatiles	Nitrobenzene	NA	NA	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	NA	NA	NA
Semivolatiles	o-Toluidine	NA	NA	NA
Semivolatiles	p-Dimethylaminoazobenzene	NA	NA	NA
Semivolatiles	p-Phenylene diamine	NA	NA	NA
Semivolatiles	Parathion	NA	NA	NA
Semivolatiles	Pentachlorobenzene	NA	NA	NA
Semivolatiles	Pentachloroethane	NA	NA	NA
Semivolatiles	Pentachloronitrobenzene	NA	NA	NA
Semivolatiles	Pentachlorophenol	NA	NA	NA
Semivolatiles	Phenacetin	NA	NA	NA
Semivolatiles	Phenanthrene	NA	NA	NA
Semivolatiles	Phenol	NA	NA	NA
Semivolatiles	Phorate	NA	NA	NA
Semivolatiles	Pronamide	NA	NA	NA
Semivolatiles	Pyrene	NA	NA	NA
Semivolatiles	Pyridine	NA	NA	NA
Semivolatiles	Safrole	NA	NA	NA
Semivolatiles	Sulfotepp	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	NA	NA	NA
Semivolatiles	4-Nitroquinoline-1-oxide	NA	NA	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	NA	62000 U
Total Petroleum Hydrocarbons	C6 - C10	NA	NA	62000 U
Total Petroleum Hydrocarbons	C6 - C28	NA	NA	62000 U
Volatiles	1,1,1,2-Tetrachloroethane	250 U	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	250 U	NA	NA
Volatiles	1,1,1-Trichloroethane	250 U	NA	NA
Volatiles	1,1,1-Trichloroethane	250 U	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	250 U	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	250 U	NA	NA
Volatiles	1,1,2-Trichloroethane	250 U	NA	NA
Volatiles	1,1,2-Trichloroethane	250 U	NA	NA
Volatiles	1,1-Dichloroethane	250 U	NA	NA
Volatiles	1,1-Dichloroethane	250 U	NA	NA
Volatiles	1,1-Dichloroethene	250 U	NA	NA
Volatiles	1,1-Dichloroethene	250 U	NA	NA
Volatiles	1,2,3-Trichloropropane	250 U	NA	NA
Volatiles	1,2,3-Trichloropropane	250 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	250 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	250 U	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	100 U	NA	NA
Volatiles	1,2-Dibromoethane (EDB)	50 U	NA	NA
Volatiles	1,2-Dichlorobenzene	250 U	NA	NA
Volatiles	1,2-Dichlorobenzene	250 U	NA	NA
Volatiles	1,2-Dichloroethane	250 U	NA	NA
Volatiles	1,2-Dichloroethane	250 U	NA	NA
Volatiles	1,2-Dichloropropane	250 U	NA	NA
Volatiles	1,2-Dichloropropane	250 U	NA	NA
Volatiles	1,3-Dichlorobenzene	250 U	NA	NA
Volatiles	1,3-Dichlorobenzene	250 U	NA	NA
Volatiles	1,4-Dichlorobenzene	250 U	NA	NA
Volatiles	1,4-Dichlorobenzene	250 U	NA	NA
Volatiles	1,4-Dioxane	25000 U	NA	NA
Volatiles	1,4-Dioxane	25000 U	NA	NA
Volatiles	2-Butanone (MEK)	210 J	NA	NA
Volatiles	2-Butanone (MEK)	2500 U	NA	NA
Volatiles	2-Hexanone	2500 U	NA	NA
Volatiles	2-Hexanone	2500 U	NA	NA
Volatiles	4-Methyl-2-pentanone	2500 U	NA	NA
Volatiles	4-Methyl-2-pentanone	2500 U	NA	NA
Volatiles	Acetone	1100 J	NA	NA
Volatiles	Acetone	1600 J	NA	NA
Volatiles	Acetonitrile	5000 U	NA	NA
Volatiles	Acetonitrile	5000 U	NA	NA
Volatiles	Acrolein	5000 U	NA	NA
Volatiles	Acrolein	5000 U	NA	NA
Volatiles	Acrylonitrile	5000 U	NA	NA
Volatiles	Acrylonitrile	5000 U	NA	NA
Volatiles	Allyl chloride	250 U	NA	NA
Volatiles	Allyl chloride	250 U	NA	NA
Volatiles	Benzene	250 U	NA	NA
Volatiles	Benzene	250 U	NA	NA
Volatiles	Bromodichloromethane	250 U	NA	NA
Volatiles	Bromodichloromethane	250 U	NA	NA
Volatiles	Bromoform	250 U	NA	NA
Volatiles	Bromoform	250 U	NA	NA
Volatiles	Bromomethane	250 U	NA	NA
Volatiles	Bromomethane	250 U	NA	NA
Volatiles	Carbon disulfide	2500 U	NA	NA
Volatiles	Carbon disulfide	2500 U	NA	NA
Volatiles	Carbon tetrachloride	250 U	NA	NA
Volatiles	Carbon tetrachloride	250 U	NA	NA
Volatiles	Chlorobenzene	250 U	NA	NA
Volatiles	Chlorobenzene	250 U	NA	NA
Volatiles	Chloroethane	250 U	NA	NA
Volatiles	Chloroethane	250 U	NA	NA
Volatiles	Chloroform	280	NA	NA
Volatiles	Chloroform	120 J	NA	NA
Volatiles	Chloromethane	250 U	NA	NA
Volatiles	Chloromethane	250 U	NA	NA
Volatiles	Chloroprene	250 U	NA	NA
Volatiles	Chloroprene	250 U	NA	NA
Volatiles	cis-1,3-Dichloropropene	250 U	NA	NA
Volatiles	cis-1,3-Dichloropropene	250 U	NA	NA
Volatiles	Dibromochloromethane	250 U	NA	NA
Volatiles	Dibromochloromethane	250 U	NA	NA
Volatiles	Dibromomethane	250 U	NA	NA
Volatiles	Dibromomethane	250 U	NA	NA
Volatiles	Dichlorodifluoromethane	250 U	NA	NA
Volatiles	Dichlorodifluoromethane	250 U	NA	NA
Volatiles	Ethyl methacrylate	250 U	NA	NA
Volatiles	Ethyl methacrylate	250 U	NA	NA
Volatiles	Ethylbenzene	250 U	NA	NA
Volatiles	Ethylbenzene	250 U	NA	NA
Volatiles	Iodomethane	250 U	NA	NA
Volatiles	Iodomethane	250 U	NA	NA
Volatiles	Isobutyl alcohol	5000 U	NA	NA
Volatiles	Isobutyl alcohol	5000 U	NA	NA
Volatiles	m-Xylene & p-Xylene	250 U	NA	NA
Volatiles	m-Xylene & p-Xylene	250 U	NA	NA
Volatiles	Methacrylonitrile	5000 U	NA	NA
Volatiles	Methacrylonitrile	5000 U	NA	NA
Volatiles	Methyl methacrylate	250 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	250 U	NA	NA
Volatiles	Methylene chloride	28 J	NA	NA
Volatiles	Methylene chloride	95 J	NA	NA
Volatiles	o-Xylene	250 U	NA	NA
Volatiles	o-Xylene	250 U	NA	NA
Volatiles	Propionitrile	5000 U	NA	NA
Volatiles	Propionitrile	5000 U	NA	NA
Volatiles	Styrene	250 U	NA	NA
Volatiles	Styrene	250 U	NA	NA
Volatiles	Tetrachloroethene	250 U	NA	NA
Volatiles	Tetrachloroethene	250 U	NA	NA
Volatiles	Toluene	250 U	NA	NA
Volatiles	Toluene	250 U	NA	NA
Volatiles	trans-1,2-Dichloroethene	250 U	NA	NA
Volatiles	trans-1,2-Dichloroethene	250 U	NA	NA
Volatiles	trans-1,3-Dichloropropene	250 U	NA	NA
Volatiles	trans-1,3-Dichloropropene	250 U	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	250 U	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	250 U	NA	NA
Volatiles	Trichloroethene	250 U	NA	NA
Volatiles	Trichloroethene	250 U	NA	NA
Volatiles	Trichlorofluoromethane	250 U	NA	NA
Volatiles	Trichlorofluoromethane	250 U	NA	NA
Volatiles	Vinyl acetate	2500 U	NA	NA
Volatiles	Vinyl acetate	2500 U	NA	NA
Volatiles	Vinyl chloride	100 U	NA	NA
Volatiles	Vinyl chloride	100 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	720 U	830 U	NA
Conventionals	Ignitability	NA	NA	NA
Conventionals	Percent Moisture	31	40	22
Conventionals	pH (solid)	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	1060000 B
Conventionals	Total Sulfide	7200 U	8300 U	NA
Dioxins/Furans	2,3,7,8-TCDD	0.000025 U	0.000026 U	NA
Dioxins/Furans	Total HxCDD	0.00011 U	0.000071 U	NA
Dioxins/Furans	Total HxCDF	0.000045 U	0.00023 U	NA
Dioxins/Furans	Total PeCDD	0.00044 U	0.00046 U	NA
Dioxins/Furans	Total PeCDF	0.00026 U	0.00032 U	NA
Dioxins/Furans	Total TCDD	0.000025 U	0.000026 U	NA
Dioxins/Furans	Total TCDF	0.0001 U	0.00023 U	NA
Herbicides	2,4,5-T	2900 U	330 U	NA
Herbicides	2,4,5-TP (Silvex)	2900 U	330 U	NA
Herbicides	2,4-D	12000 U	1300 U	NA
Herbicides	Dinoseb	1700 U	200 U	NA
Metals	Antimony	432 U	501 U	NA
Metals	Arsenic	1450	4840	NA
Metals	Barium	51700	104000	NA
Metals	Beryllium	260 B	190 B	NA
Metals	Cadmium	59 B	430 B	NA
Metals	Chromium	351000	315000	NA
Metals	Cobalt	1400 B	880 B	NA
Metals	Copper	147000	134000	NA
Metals	Lead	14200	19600	NA
Metals	Mercury	140 U	170	NA
Metals	Nickel	10400	6300 B	NA
Metals	Selenium	812	983	NA
Metals	Silver	65 B	139 B	NA
Metals	Thallium	164	93 B	NA
Metals	Tin	14400 U	16700 U	NA
Metals	Vanadium	11800	7300 B	NA
Metals	Zinc	14000	12500	NA
Pesticides/PCBs	4,4'-DDD	340 PA	280 U	NA
Pesticides/PCBs	4,4'-DDE	240 U	280 U	NA
Pesticides/PCBs	4,4'-DDT	240 U	280 U	NA
Pesticides/PCBs	Aldrin	240 U	280 U	NA
Pesticides/PCBs	alpha-BHC	240 U	280 U	NA
Pesticides/PCBs	Aroclor 1016	1600	550 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1232	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1242	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1248	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1254	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	950 U	550 U	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA
Pesticides/PCBs	beta-BHC	100 J PA	280 U	NA
Pesticides/PCBs	Chlordane (technical)	2400 U	2800 U	NA
Pesticides/PCBs	Chlorobenzilate	470 U	550 U	NA
Pesticides/PCBs	delta-BHC	240 U	280 U	NA
Pesticides/PCBs	Diallate	4700 U	5500 U	NA
Pesticides/PCBs	Dieldrin	240 U	280 U	NA
Pesticides/PCBs	Endosulfan I	240 U	280 U	NA
Pesticides/PCBs	Endosulfan II	240 U	280 U	NA
Pesticides/PCBs	Endosulfan sulfate	240 U	280 U	NA
Pesticides/PCBs	Endrin	240 U	280 U	NA
Pesticides/PCBs	Endrin aldehyde	240 U	280 U	NA
Pesticides/PCBs	gamma-BHC (Lindane)	240 U	280 U	NA
Pesticides/PCBs	Heptachlor	240 U	280 U	NA
Pesticides/PCBs	Heptachlor epoxide	960 U	1100 U	NA
Pesticides/PCBs	Isodrin	240 U	280 U	NA
Pesticides/PCBs	Kepone	4700 U	5500 U	NA
Pesticides/PCBs	Methoxychlor	1800 PA	750 PA	NA
Pesticides/PCBs	Toxaphene	2400 U	2800 U	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	24000 U	55000 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	44	4200 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	14 U	8300 U	NA
Semivolatiles	1,2-Dibromoethane (EDB)	7.2 U	4200 U	NA
Semivolatiles	1,3,5-Trinitrobenzene	120000 U	270000 U	NA
Semivolatiles	1,3-Dinitrobenzene	24000 U	55000 U	NA
Semivolatiles	1,4-Dichlorobenzene	27	7200	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	NA
Semivolatiles	1,4-Naphthoquinone	120000 U	270000 U	NA
Semivolatiles	1-Naphthylamine	24000 U	55000 U	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	24000 U	55000 U	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	120000 U	270000 U	NA
Semivolatiles	2,4,5-Trichlorophenol	24000 U	55000 U	NA
Semivolatiles	2,4,6-Trichlorophenol	24000 U	55000 U	NA
Semivolatiles	2,4-Dichlorophenol	24000 U	55000 U	NA
Semivolatiles	2,4-Dimethylphenol	24000 U	55000 U	NA
Semivolatiles	2,4-Dinitrophenol	120000 U	270000 U	NA
Semivolatiles	2,4-Dinitrotoluene	120000	150000	NA
Semivolatiles	2,6-Dichlorophenol	24000 U	55000 U	NA
Semivolatiles	2,6-Dinitrotoluene	22000 J	26000 J	NA
Semivolatiles	2-Acetylaminofluorene	240000 U	550000 U	NA
Semivolatiles	2-Chloronaphthalene	24000 U	55000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	24000 U	55000 U	NA
Semivolatiles	2-Methylnaphthalene	24000 U	55000 U	NA
Semivolatiles	2-Methylphenol	24000 U	55000 U	NA
Semivolatiles	2-Naphthylamine	24000 U	55000 U	NA
Semivolatiles	2-Nitroaniline	120000 U	270000 U	NA
Semivolatiles	2-Nitrophenol	24000 U	55000 U	NA
Semivolatiles	2-Picoline	47000 U	110000 U	NA
Semivolatiles	3,3'-Dichlorobenzidine	120000 U	270000 U	NA
Semivolatiles	3,3'-Dimethylbenzidine	47000 U	110000 U	NA
Semivolatiles	3-Methylcholanthrene	47000 U	110000 U	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	24000 U	55000 U	NA
Semivolatiles	3-Nitroaniline	120000 U	270000 U	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	8300 J	270000 U	NA
Semivolatiles	4-Aminobiphenyl	120000 U	270000 U	NA
Semivolatiles	4-Bromophenyl phenyl ether	24000 U	55000 U	NA
Semivolatiles	4-Chloro-3-methylphenol	24000 U	55000 U	NA
Semivolatiles	4-Chloroaniline	24000 U	55000 U	NA
Semivolatiles	4-Chlorophenyl phenyl ether	24000 U	55000 U	NA
Semivolatiles	4-Nitroaniline	120000 U	270000 U	NA
Semivolatiles	4-Nitrophenol	120000 U	15000 J	NA
Semivolatiles	5-Nitro-o-toluidine	47000 U	110000 U	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	47000 U	110000 U	NA
Semivolatiles	a,a-Dimethylphenethylamine	120000 U	270000 U	NA
Semivolatiles	Acenaphthene	24000 U	55000 U	NA
Semivolatiles	Acenaphthylene	24000 U	55000 U	NA
Semivolatiles	Acetophenone	24000 U	55000 U	NA
Semivolatiles	Aniline	24000 U	55000 U	NA
Semivolatiles	Anthracene	24000 U	55000 U	NA
Semivolatiles	Aramite	47000 U	110000 U	NA
Semivolatiles	Benzo(a)anthracene	24000 U	55000 U	NA
Semivolatiles	Benzo(a)pyrene	24000 U	55000 U	NA
Semivolatiles	Benzo(b)fluoranthene	24000 U	55000 U	NA
Semivolatiles	Benzo(ghi)perylene	24000 U	55000 U	NA
Semivolatiles	Benzo(k)fluoranthene	24000 U	55000 U	NA
Semivolatiles	Benzyl alcohol	24000 U	55000 U	NA
Semivolatiles	bis(2-Chloroethoxy)methane	24000 U	55000 U	NA
Semivolatiles	bis(2-Chloroethyl) ether	24000 U	55000 U	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	24000 U	84000	NA
Semivolatiles	Butyl benzyl phthalate	24000 U	55000 U	NA
Semivolatiles	Chrysene	24000 U	55000 U	NA
Semivolatiles	Di-n-butyl phthalate	24000 U	55000 U	NA
Semivolatiles	Di-n-octyl phthalate	24000 U	55000 U	NA
Semivolatiles	Dibenz(a,h)anthracene	24000 U	55000 U	NA
Semivolatiles	Dibenzofuran	24000 U	55000 U	NA
Semivolatiles	Diethyl phthalate	47000 U	110000 U	NA
Semivolatiles	Dimethoate	47000 U	110000 U	NA
Semivolatiles	Dimethyl phthalate	24000 U	55000 U	NA
Semivolatiles	Diphenylamine	24000 U	55000 U	NA
Semivolatiles	Disulfoton	120000 U	270000 U	NA
Semivolatiles	Ethyl methanesulfonate	24000 U	55000 U	NA
Semivolatiles	Famphur	47000 U	110000 U	NA
Semivolatiles	Fluoranthene	24000 U	55000 U	NA
Semivolatiles	Fluorene	24000 U	55000 U	NA
Semivolatiles	Hexachlorobenzene	24000 U	55000 U	NA
Semivolatiles	Hexachlorobutadiene	24000 U	55000 U	NA
Semivolatiles	Hexachlorocyclopentadiene	120000 U	270000 U	NA
Semivolatiles	Hexachloroethane	24000 U	55000 U	NA
Semivolatiles	Hexachlorophene	2400 U	5500 U	NA
Semivolatiles	Hexachloropropene	240000 U	550000 U	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	24000 U	55000 U	NA
Semivolatiles	Isophorone	24000 U	55000 U	NA
Semivolatiles	Isosafrole	47000 U	110000 U	NA
Semivolatiles	Methapyrilene	120000 U	270000 U	NA
Semivolatiles	Methyl methanesulfonate	24000 U	55000 U	NA
Semivolatiles	Methyl parathion	120000 U	270000 U	NA
Semivolatiles	N-Nitrosodi-n-butylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosodi-n-propylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosodiethylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosodimethylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosodiphenylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosomethylethylamine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosomorpholine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosopiperidine	24000 U	55000 U	NA
Semivolatiles	N-Nitrosopyrrolidine	24000 U	55000 U	NA
Semivolatiles	Naphthalene	24000 U	55000 U	NA
Semivolatiles	Nitrobenzene	24000 U	55000 U	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	120000 U	270000 U	NA
Semivolatiles	o-Toluidine	47000 U	110000 U	NA
Semivolatiles	p-Dimethylaminoazobenzene	47000 U	110000 U	NA
Semivolatiles	p-Phenylene diamine	120000 U	270000 U	NA
Semivolatiles	Parathion	120000 U	270000 U	NA
Semivolatiles	Pentachlorobenzene	24000 U	55000 U	NA
Semivolatiles	Pentachloroethane	120000 U	270000 U	NA
Semivolatiles	Pentachloronitrobenzene	120000 U	270000 U	NA
Semivolatiles	Pentachlorophenol	120000 U	270000 U	NA
Semivolatiles	Phenacetin	47000 U	110000 U	NA
Semivolatiles	Phenanthrene	24000 U	55000 U	NA
Semivolatiles	Phenol	24000 U	50000 J	NA
Semivolatiles	Phorate	120000 U	270000 U	NA
Semivolatiles	Pronamide	47000 U	110000 U	NA
Semivolatiles	Pyrene	24000 U	55000 U	NA
Semivolatiles	Pyridine	47000 U	110000 U	NA
Semivolatiles	Safrole	120000 U	270000 U	NA
Semivolatiles	Sulfotepp	72000 U	170000 U	NA

WM-013122

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	120000 U	270000 U	NA
Semivolatiles	4-Nitroquinoline-1-oxide	240000 U	550000 U	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	5200000	NA
Total Petroleum Hydrocarbons	C6 - C10	NA	8700000	NA
Total Petroleum Hydrocarbons	C6 - C28	NA	14000000	NA
Volatiles	1,1,1,2-Tetrachloroethane	7.2 U	4200 U	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	7.2 U	4200 U	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	7.2 U	4200 U	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	7.2 U	4200 U	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA
Volatiles	1,1-Dichloroethane	7.2 U	4200 U	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA
Volatiles	1,1-Dichloroethene	7.2 U	4200 U	NA
Volatiles	1,1-Dichloroethene	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	7.2 U	4200 U	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	44	4200 U	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	14 U	8300 U	NA
Volatiles	1,2-Dibromoethane (EDB)	7.2 U	4200 U	NA
Volatiles	1,2-Dichlorobenzene	24	120000	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA
Volatiles	1,2-Dichloroethane	7.2 U	4200 U	NA
Volatiles	1,2-Dichloroethane	NA	NA	NA
Volatiles	1,2-Dichloropropane	7.2 U	4200 U	NA
Volatiles	1,2-Dichloropropane	NA		NA
Volatiles	1,3-Dichlorobenzene	7.2 U	4200 U	NA
Volatiles	1,3-Dichlorobenzene	NA		NA
Volatiles	1,4-Dichlorobenzene	27	7200	NA
Volatiles	1,4-Dichlorobenzene	NA		NA
Volatiles	1,4-Dioxane	720 U	420000 U	NA
Volatiles	1,4-Dioxane	NA		NA
Volatiles	2-Butanone (MEK)	18 J	1500 J B	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA
Volatiles	2-Hexanone	72 U	42000 U	NA
Volatiles	2-Hexanone	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	72 U	42000 U	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA
Volatiles	Acetone	130 J	38000 J B	NA
Volatiles	Acetone	NA	NA	NA
Volatiles	Acetonitrile	82 J	83000 U	NA
Volatiles	Acetonitrile	NA	NA	NA
Volatiles	Acrolein	140 U	83000 U	NA
Volatiles	Acrolein	NA	NA	NA
Volatiles	Acrylonitrile	140 U	83000 U	NA
Volatiles	Acrylonitrile	NA	NA	NA
Volatiles	Allyl chloride	8.6 U	5000 U	NA
Volatiles	Allyl chloride	NA	NA	NA
Volatiles	Benzene	7.2 U	4200 U	NA
Volatiles	Benzene	NA	NA	NA
Volatiles	Bromodichloromethane	7.2 U	4200 U	NA
Volatiles	Bromodichloromethane	NA	NA	NA
Volatiles	Bromoform	7.2 U	4200 U	NA
Volatiles	Bromoform	NA	NA	NA
Volatiles	Bromomethane	14 U	8300 U	NA
Volatiles	Bromomethane	NA	NA	NA
Volatiles	Carbon disulfide	72 U	42000 U	NA
Volatiles	Carbon disulfide	NA	NA	NA
Volatiles	Carbon tetrachloride	7.2 U	4200 U	NA
Volatiles	Carbon tetrachloride	NA	NA	NA
Volatiles	Chlorobenzene	7.2 U	4200 U	NA
Volatiles	Chlorobenzene	NA	NA	NA
Volatiles	Chloroethane	7.2 U	4200 U	NA
Volatiles	Chloroethane	NA	NA	NA
Volatiles	Chloroform	2.9 J	4200 U	NA
Volatiles	Chloroform	NA	NA	NA
Volatiles	Chloromethane	7.2 U	4200 U	NA
Volatiles	Chloromethane	NA	NA	NA
Volatiles	Chloroprene	7.7 U	4500 U	NA
Volatiles	Chloroprene	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	7.2 U	4200 U	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA
Volatiles	Dibromochloromethane	7.2 U	4200 U	NA
Volatiles	Dibromochloromethane	NA	NA	NA
Volatiles	Dibromomethane	7.2 U	4200 U	NA
Volatiles	Dibromomethane	NA	NA	NA
Volatiles	Dichlorodifluoromethane	7.2 U	4200 U	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA
Volatiles	Ethyl methacrylate	7.2 U	4200 U	NA
Volatiles	Ethyl methacrylate	NA	NA	NA
Volatiles	Ethylbenzene	7.2 U	11000	NA
Volatiles	Ethylbenzene	NA	NA	NA
Volatiles	Iodomethane	9 U	5300 U	NA
Volatiles	Iodomethane	NA	NA	NA
Volatiles	Isobutyl alcohol	140 U	83000 U	NA
Volatiles	Isobutyl alcohol	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	5.8J	18000	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA
Volatiles	Methacrylonitrile	140 U	83000 U	NA
Volatiles	Methacrylonitrile	NA	NA	NA
Volatiles	Methyl methacrylate	7.2 U	4200 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA	NA	NA
Volatiles	Methylene chloride	2.8 J B	4200 U	NA
Volatiles	Methylene chloride	NA	NA	NA
Volatiles	o-Xylene	3.5 J	84000	NA
Volatiles	o-Xylene	NA	NA	NA
Volatiles	Propionitrile	140 U	83000 U	NA
Volatiles	Propionitrile	NA	NA	NA
Volatiles	Styrene	7.2 U	4200 U	NA
Volatiles	Styrene	NA	NA	NA
Volatiles	Tetrachloroethene	7.2 U	5800	NA
Volatiles	Tetrachloroethene	NA	NA	NA
Volatiles	Toluene	1.6 J	3500 J	NA
Volatiles	Toluene	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	7.2 U	4200 U	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	7.2 U	4200 U	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	7.2 U	4200 U	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA
Volatiles	Trichloroethene	7.2 U	17000	NA
Volatiles	Trichloroethene	NA	NA	NA
Volatiles	Trichlorofluoromethane	7.2 U	4200 U	NA
Volatiles	Trichlorofluoromethane	NA	NA	NA
Volatiles	Vinyl acetate	72 U	42000 U	NA
Volatiles	Vinyl acetate	NA	NA	NA
Volatiles	Vinyl chloride	2.9 U	1700 U	NA
Volatiles	Vinyl chloride	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	NA	100 U	NA	NA
Conventionals	Ignitability	NA	NA	NA	NA
Conventionals	Percent Moisture	NA	NA	NA	NA
Conventionals	pH (soil)	NA	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	2000000	NA	NA
Conventionals	Total Sulfide	NA	1000 U	NA	NA
Dioxins/Furans	2,3,7,8-TCDD	NA	NA	0.00015 U	NA
Dioxins/Furans	Total HxCDD	NA	NA	0.00031 U	NA
Dioxins/Furans	Total HxCDF	NA	NA	0.00069 U	NA
Dioxins/Furans	Total PeCDD	NA	NA	0.0021 U	NA
Dioxins/Furans	Total PeCDF	NA	NA	0.00072 U	NA
Dioxins/Furans	Total TCDD	NA	NA	0.00015 U	NA
Dioxins/Furans	Total TCDF	NA	NA	0.00045 U	NA
Herbicides	2,4,5-T	NA	NA	2000 U	NA
Herbicides	2,4,5-TP (Silvex)	NA	NA	2000 U	10 U
Herbicides	2,4-D	NA	NA	2000 U	40 U
Herbicides	Dinoseb	NA	NA	7000 U	NA
Metals	Antimony	NA	150 U	NA	NA
Metals	Arsenic	NA	777	NA	6.5 B
Metals	Barium	NA	198 B	NA	120 B
Metals	Beryllium	NA	98	NA	NA
Metals	Cadmium	NA	445	NA	3.1 B
Metals	Chromium	NA	170000	NA	36 B
Metals	Cobalt	NA	601	NA	NA
Metals	Copper	NA	90300	NA	NA
Metals	Lead	NA	173 MBB	NA	500 U
Metals	Mercury	NA	2 U	NA	0.2 U
Metals	Nickel	NA	4720	NA	NA
Metals	Selenium	NA	100 U	NA	17 B
Metals	Silver	NA	100 U	NA	500 U
Metals	Thallium	NA	36 B	NA	NA
Metals	Tin	NA	1000 U	NA	NA
Metals	Vanadium	NA	4030	NA	NA
Metals	Zinc	NA	8400	NA	NA
Pesticides/PCBs	4,4'-DDD	NA	NA	50 U	NA
Pesticides/PCBs	4,4'-DDE	NA	NA	50 U	NA
Pesticides/PCBs	4,4'-DDT	NA	NA	50 U	NA
Pesticides/PCBs	Aldrin	NA	NA	50 U	NA
Pesticides/PCBs	alpha-BHC	NA	NA	50 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1232	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1242	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1248	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	25 U	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA
Pesticides/PCBs	beta-BHC	NA	NA	50 U	NA
Pesticides/PCBs	Chlordane (technical)	NA	NA	500 U	5 U
Pesticides/PCBs	Chlorobenzilate	NA	NA	2000 U	NA
Pesticides/PCBs	delta-BHC	NA	NA	50 U	NA
Pesticides/PCBs	Diallate	NA	NA	1000 U	NA
Pesticides/PCBs	Dieldrin	NA	NA	50 U	NA
Pesticides/PCBs	Endosulfan I	NA	NA	50 U	NA
Pesticides/PCBs	Endosulfan II	NA	NA	50 U	NA
Pesticides/PCBs	Endosulfan sulfate	NA	NA	50 U	NA
Pesticides/PCBs	Endrin	NA	NA	50 U	0.5 U
Pesticides/PCBs	Endrin aldehyde	NA	NA	50 U	NA
Pesticides/PCBs	gamma-BHC (Lindane)	NA	NA	50 U	0.5
Pesticides/PCBs	Heptachlor	NA	NA	50 U	0.5 U
Pesticides/PCBs	Heptachlor epoxide	NA	NA	50 U	0.5 U
Pesticides/PCBs	Isodrin	NA	NA	100 U	NA
Pesticides/PCBs	Kepone	NA	NA	1000 U	NA
Pesticides/PCBs	Methoxychlor	NA	NA	100 U	1 U
Pesticides/PCBs	Toxaphene	NA	NA	2000 U	20 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	500 U	NA	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	5000 U	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	0.4 U	NA	NA	NA
Semivolatiles	1,2-Dibromoethane (EDB)	0.1 U	NA	NA	NA
Semivolatiles	1,3,5-Trinitrobenzene	2500 U	NA	NA	NA
Semivolatiles	1,3-Dinitrobenzene	500 U	NA	NA	NA
Semivolatiles	1,4-Dichlorobenzene	5000 U	NA	NA	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	NA	500 U
Semivolatiles	1,4-Naphthoquinone	500 U	NA	NA	NA
Semivolatiles	1-Naphthylamine	500 U	NA	NA	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	500 U	NA	NA	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	500 U	NA	NA	NA
Semivolatiles	2,4,5-Trichlorophenol	500 U	NA	NA	500 U
Semivolatiles	2,4,6-Trichlorophenol	500 U	NA	NA	500 U
Semivolatiles	2,4-Dichlorophenol	500 U	NA	NA	7.2 J
Semivolatiles	2,4-Dimethylphenol	88 J	NA	NA	NA
Semivolatiles	2,4-Dinitrophenol	2500 U	NA	NA	NA
Semivolatiles	2,4-Dinitrotoluene	6800	NA	NA	NA
Semivolatiles	2,6-Dichlorophenol	500 U	NA	NA	NA
Semivolatiles	2,6-Dinitrotoluene	870	NA	NA	NA
Semivolatiles	2-Acetylaminofluorene	1000 U	NA	NA	NA
Semivolatiles	2-Chloronaphthalene	500 U	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	500 U	NA	NA	NA
Semivolatiles	2-Methylnaphthalene	500 U	NA	NA	NA
Semivolatiles	2-Methylphenol	500 U	NA	NA	480 J
Semivolatiles	2-Naphthylamine	500 U	NA	NA	NA
Semivolatiles	2-Nitroaniline	2500 U	NA	NA	NA
Semivolatiles	2-Nitrophenol	280 J	NA	NA	NA
Semivolatiles	2-Picoline	2500 U	NA	NA	NA
Semivolatiles	3,3'-Dichlorobenzidine	2500 U	NA	NA	NA
Semivolatiles	3,3'-Dimethylbenzidine	500 U	NA	NA	NA
Semivolatiles	3-Methylcholanthrene	500 U	NA	NA	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	380 J	NA	NA	1200
Semivolatiles	3-Nitroaniline	2500 U	NA	NA	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	2500 U	NA	NA	NA
Semivolatiles	4-Aminobiphenyl	1000 U	NA	NA	NA
Semivolatiles	4-Bromophenyl phenyl ether	500 U	NA	NA	NA
Semivolatiles	4-Chloro-3-methylphenol	1000 U	NA	NA	NA
Semivolatiles	4-Chloroaniline	1000 U	NA	NA	NA
Semivolatiles	4-Chlorophenyl phenyl ether	500 U	NA	NA	NA
Semivolatiles	4-Nitroaniline	2500 U	NA	NA	NA
Semivolatiles	4-Nitrophenol	7100	NA	NA	NA
Semivolatiles	5-Nitro-o-toluidine	500 U	NA	NA	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	25000 U	NA	NA	NA
Semivolatiles	a,a-Dimethylphenethylamine	5000 U	NA	NA	NA
Semivolatiles	Acenaphthene	500 U	NA	NA	NA
Semivolatiles	Acenaphthylene	500 U	NA	NA	NA
Semivolatiles	Acetophenone	500 U	NA	NA	NA
Semivolatiles	Aniline	500 U	NA	NA	NA
Semivolatiles	Anthracene	500 U	NA	NA	NA
Semivolatiles	Aramite	500 U	NA	NA	NA
Semivolatiles	Benzo(a)anthracene	500 U	NA	NA	NA
Semivolatiles	Benzo(a)pyrene	500 U	NA	NA	NA
Semivolatiles	Benzo(b)fluoranthene	500 U	NA	NA	NA
Semivolatiles	Benzo(ghi)perylene	500 U	NA	NA	NA
Semivolatiles	Benzo(k)fluoranthene	500 U	NA	NA	NA
Semivolatiles	Benzyl alcohol	1000 U	NA	NA	NA
Semivolatiles	bis(2-Chloroethoxy)methane	500 U	NA	NA	NA
Semivolatiles	bis(2-Chloroethyl) ether	500 U	NA	NA	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	500 U	NA	NA	NA
Semivolatiles	Butyl benzyl phthalate	500 U	NA	NA	NA
Semivolatiles	Chrysene	500 U	NA	NA	NA
Semivolatiles	Di-n-butyl phthalate	500 U	NA	NA	NA
Semivolatiles	Di-n-octyl phthalate	500 U	NA	NA	NA
Semivolatiles	Dibenz(a,h)anthracene	500 U	NA	NA	NA
Semivolatiles	Dibenzofuran	500 U	NA	NA	NA
Semivolatiles	Diethyl phthalate	500 U	NA	NA	NA
Semivolatiles	Dimethoate	1000 U	NA	NA	NA
Semivolatiles	Dimethyl phthalate	500 U	NA	NA	NA
Semivolatiles	Diphenylamine	500 U	NA	NA	NA
Semivolatiles	Disulfoton	500 U	NA	NA	NA
Semivolatiles	Ethyl methanesulfonate	1000 U	NA	NA	NA
Semivolatiles	Famphur	2500 U	NA	NA	NA
Semivolatiles	Fluoranthene	500 U	NA	NA	NA
Semivolatiles	Fluorene	500 U	NA	NA	NA
Semivolatiles	Hexachlorobenzene	500 U	NA	NA	500 U
Semivolatiles	Hexachlorobutadiene	500 U	NA	NA	500 U
Semivolatiles	Hexachlorocyclopentadiene	2500 U	NA	NA	NA
Semivolatiles	Hexachloroethane	500 U	NA	NA	500 U
Semivolatiles	Hexachlorophene	20000 U	NA	NA	NA
Semivolatiles	Hexachloropropene	500 U	NA	NA	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	500 U	NA	NA	NA
Semivolatiles	Isophorone	500 U	NA	NA	NA
Semivolatiles	Isosafrole	500 U	NA	NA	NA
Semivolatiles	Methapyrilene	5000 U	NA	NA	NA
Semivolatiles	Methyl methanesulfonate	500 U	NA	NA	NA
Semivolatiles	Methyl parathion	500 U	NA	NA	NA
Semivolatiles	N-Nitrosodi-n-butylamine	500 U	NA	NA	NA
Semivolatiles	N-Nitrosodi-n-propylamine	500 U	NA	NA	NA
Semivolatiles	N-Nitrosodiethylamine	1000 U	NA	NA	NA
Semivolatiles	N-Nitrosodimethylamine	500 U	NA	NA	NA
Semivolatiles	N-Nitrosodiphenylamine	500 U	NA	NA	NA
Semivolatiles	N-Nitrosomethylethylamine	5000 U	NA	NA	NA
Semivolatiles	N-Nitrosomorpholine	1000 U	NA	NA	NA
Semivolatiles	N-Nitrosopiperidine	1000 U	NA	NA	NA
Semivolatiles	N-Nitrosopyrrolidine	1000 U	NA	NA	NA
Semivolatiles	Naphthalene	380 J	NA	NA	NA
Semivolatiles	Nitrobenzene	500 U	NA	NA	500 U
Semivolatiles	O,O,O-Triethyl phosphorothioate	500 U	NA	NA	NA
Semivolatiles	o-Toluidine	500 U	NA	NA	NA
Semivolatiles	p-Dimethylaminoazobenzene	500 U	NA	NA	NA
Semivolatiles	p-Phenylene diamine	5000 U	NA	NA	NA
Semivolatiles	Parathion	500 U	NA	NA	NA
Semivolatiles	Pentachlorobenzene	500 U	NA	NA	NA
Semivolatiles	Pentachloroethane	500 U	NA	NA	NA
Semivolatiles	Pentachloronitrobenzene	1000 U	NA	NA	NA
Semivolatiles	Pentachlorophenol	780 J	NA	NA	2500 U
Semivolatiles	Phenacetin	1000 U	NA	NA	NA
Semivolatiles	Phenanthrene	500 U	NA	NA	NA
Semivolatiles	Phenol	110000 D	NA	NA	NA
Semivolatiles	Phorate	500 U	NA	NA	NA
Semivolatiles	Pronamide	500 U	NA	NA	NA
Semivolatiles	Pyrene	500 U	NA	NA	NA
Semivolatiles	Pyridine	1000 U	NA	NA	1000 U
Semivolatiles	Safrole	500 U	NA	NA	NA
Semivolatiles	Sulfotepp	5000 U	NA	NA	NA

WM-013126

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	2500 U	NA	NA	NA
Semivolatiles	4-Nitroquinoline-1-oxide	5000 U	NA	NA	NA
Total Petroleum Hydrocarbons	>C10 - C28	10000	NA	NA	NA
Total Petroleum Hydrocarbons	C8 - C10	41000	NA	NA	NA
Total Petroleum Hydrocarbons	C8 - C28	51000	NA	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	5000 U	NA	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	5000 U	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	5000 U	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	5000 U	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1-Dichloroethane	5000 U	NA	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA	NA
Volatiles	1,1-Dichloroethene	5000 U	NA	NA	50 U
Volatiles	1,1-Dichloroethene	NA	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	5000 U	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	5000 U	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	0.4 U	NA	NA	NA
Volatiles	1,2-Dibromoethane (EDB)	0.1 U	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	3600 J	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dichloroethane	5000 U	NA	NA	50 U
Volatiles	1,2-Dichloroethane	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	5000 U	NA	NA	NA
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	5000 U	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	5000 U	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	NA	500 U
Volatiles	1,4-Dioxane	500000 U	NA	NA	NA
Volatiles	1,4-Dioxane	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	12000 J	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA	360 B
Volatiles	2-Hexanone	50000 U	NA	NA	NA
Volatiles	2-Hexanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	50000 U	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA
Volatiles	Acetone	230000 J D	NA	NA	NA
Volatiles	Acetone	NA	NA	NA	NA
Volatiles	Acetonitrile	100000 U	NA	NA	NA
Volatiles	Acetonitrile	NA	NA	NA	NA
Volatiles	Acrolein	100000 U	NA	NA	NA
Volatiles	Acrolein	NA	NA	NA	NA
Volatiles	Acrylonitrile	100000 U	NA	NA	NA
Volatiles	Acrylonitrile	NA	NA	NA	NA
Volatiles	Allyl chloride	5000 U	NA	NA	NA
Volatiles	Allyl chloride	NA	NA	NA	NA
Volatiles	Benzene	5000 U	NA	NA	NA
Volatiles	Benzene	NA	NA	NA	28 J
Volatiles	Bromodichloromethane	5000 U	NA	NA	NA
Volatiles	Bromodichloromethane	NA	NA	NA	NA
Volatiles	Bromoform	5000 U	NA	NA	NA
Volatiles	Bromoform	NA	NA	NA	NA
Volatiles	Bromomethane	5000 U	NA	NA	NA
Volatiles	Bromomethane	NA	NA	NA	NA
Volatiles	Carbon disulfide	50000 U	NA	NA	NA
Volatiles	Carbon disulfide	NA	NA	NA	NA
Volatiles	Carbon tetrachloride	5000 U	NA	NA	NA
Volatiles	Carbon tetrachloride	NA	NA	NA	50 U
Volatiles	Chlorobenzene	5000 U	NA	NA	NA
Volatiles	Chlorobenzene	NA	NA	NA	35 J
Volatiles	Chloroethane	5000 U	NA	NA	NA
Volatiles	Chloroethane	NA	NA	NA	NA
Volatiles	Chloroform	5000 U	NA	NA	NA
Volatiles	Chloroform	NA	NA	NA	50 U
Volatiles	Chloromethane	5000 U	NA	NA	NA
Volatiles	Chloromethane	NA	NA	NA	NA
Volatiles	Chloroprene	5000 U	NA	NA	NA
Volatiles	Chloroprene	NA	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	5000 U	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	Dibromochloromethane	5000 U	NA	NA	NA
Volatiles	Dibromochloromethane	NA	NA	NA	NA
Volatiles	Dibromomethane	5000 U	NA	NA	NA
Volatiles	Dibromomethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	5000 U	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA
Volatiles	Ethyl methacrylate	5000 U	NA	NA	NA
Volatiles	Ethyl methacrylate	NA	NA	NA	NA
Volatiles	Ethylbenzene	730 J	NA	NA	NA
Volatiles	Ethylbenzene	NA	NA	NA	NA
Volatiles	Iodomethane	5000 U	NA	NA	NA
Volatiles	Iodomethane	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	100000 U	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	12000	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA
Volatiles	Methacrylonitrile	100000 U	NA	NA	NA
Volatiles	Methacrylonitrile	NA	NA	NA	NA
Volatiles	Methyl methacrylate	5000 U	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA	NA	NA	NA
Volatiles	Methylene chloride	6900	NA	NA	NA
Volatiles	Methylene chloride	NA	NA	NA	NA
Volatiles	o-Xylene	6900	NA	NA	NA
Volatiles	o-Xylene	NA	NA	NA	NA
Volatiles	Propionitrile	100000 U	NA	NA	NA
Volatiles	Propionitrile	NA	NA	NA	NA
Volatiles	Styrene	5000 U	NA	NA	NA
Volatiles	Styrene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	5000 U	NA	NA	21 J
Volatiles	Tetrachloroethene	NA	NA	NA	NA
Volatiles	Toluene	940 J	NA	NA	NA
Volatiles	Toluene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	5000 U	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	5000 U	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	5000 U	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA
Volatiles	Trichloroethene	18000	NA	NA	NA
Volatiles	Trichloroethene	NA	NA	NA	120
Volatiles	Trichlorofluoromethane	5000 U	NA	NA	NA
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA
Volatiles	Vinyl acetate	50000 U	NA	NA	NA
Volatiles	Vinyl acetate	NA	NA	NA	NA
Volatiles	Vinyl chloride	2000 U	NA	NA	NA
Volatiles	Vinyl chloride	NA	NA	NA	100 U

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	840 U	NA	590 U	NA
Conventionals	Ignitability	n.v.	NA	n.v.	NA
Conventionals	Percent Moisture	22	NA	16	NA
Conventionals	pH (solid)	7.3	NA	5.6	NA
Conventionals	Reactive Cyanide	1300 U	NA	1200 U	NA
Conventionals	Reactive Sulfide	64000 U	NA	59500 U	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA
Conventionals	Total Sulfide	6400 U	NA	5900 U	NA
Dioxins/Furans	2,3,7,8-TCDD	0.00011 U	NA	0.00005 U	NA
Dioxins/Furans	Total HxCDD	0.0001 U	NA	0.00047 U	NA
Dioxins/Furans	Total HxCDF	0.000053 U	NA	0.00021 U	NA
Dioxins/Furans	Total PeCDD	0.00023 U	NA	0.00052 U	NA
Dioxins/Furans	Total PeCDF	0.000065 U	NA	0.000046 U	NA
Dioxins/Furans	Total TCDD	0.00011 U	NA	0.00005 U	NA
Dioxins/Furans	Total TCDF	0.000069 U	NA	0.00013 U	NA
Herbicides	2,4,5-T	260 U	100 U	2400 U	NA
Herbicides	2,4,5-TP (Silvex)	260 U	400 U	2400 U	NA
Herbicides	2,4-D	1000 U	NA	9500 U	NA
Herbicides	Dinoseb	150 U	NA	1400 U	NA
Metals	Antimony	453	NA	357 U	NA
Metals	Arsenic	3580	11 B	4300	NA
Metals	Barium	43000	320 B	24600	NA
Metals	Beryllium	620 B	NA	520 B	NA
Metals	Cadmium	1300 U	5.6 B	1200 U	NA
Metals	Chromium	27100	98 B	24300	NA
Metals	Cobalt	3900 B	NA	3300 B	NA
Metals	Copper	8200	NA	7900	NA
Metals	Lead	8790	100 B	39400	NA
Metals	Mercury	130 U	0.2 U	400	NA
Metals	Nickel	14700	NA	12100	NA
Metals	Selenium	962	33 B	848	NA
Metals	Silver	37 B	1000 U	32 B	NA
Metals	Thallium	150	NA	78 B	NA
Metals	Tin	12800 U	NA	11900 U	NA
Metals	Vanadium	23000	NA	22300	NA
Metals	Zinc	53400	NA	42400	NA
Pesticides/PCBs	4,4'-DDD	110 PB	NA	2000 U	NA
Pesticides/PCBs	4,4'-DDE	390	NA	2000 U	NA
Pesticides/PCBs	4,4'-DDT	110 U	NA	2000 U	NA
Pesticides/PCBs	Aldrin	100 J	NA	2000 U	NA
Pesticides/PCBs	alpha-BHC	370	NA	12000	NA
Pesticides/PCBs	Aroclor 1016	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1232	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1242	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1248	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1254	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	2100 U	NA	9800 U	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA
Pesticides/PCBs	beta-BHC	950	NA	2000 U	NA
Pesticides/PCBs	Chlordane (technical)	1100 U	5 U	20000 U	NA
Pesticides/PCBs	Chlorobenzilate	210 U	NA	3900 U	NA
Pesticides/PCBs	delta-BHC	110 U	NA	2000 U	NA
Pesticides/PCBs	Diallate	2100 U	NA	39000 U	NA
Pesticides/PCBs	Dieldrin	110 U	NA	2000 U	NA
Pesticides/PCBs	Endosulfan I	110 U	NA	2000 U	NA
Pesticides/PCBs	Endosulfan II	110 U	NA	2000 U	NA
Pesticides/PCBs	Endosulfan sulfate	110 U	NA	2000 U	NA
Pesticides/PCBs	Endrin	150 PB	0.5 U	2000 U	NA
Pesticides/PCBs	Endrin aldehyde	110 U	NA	2000 U	NA
Pesticides/PCBs	gamma-BHC (Lindane)	110 U	3.8	2000 U	NA
Pesticides/PCBs	Heptachlor	110 U	0.86	600 J	NA
Pesticides/PCBs	Heptachlor epoxide	430 U	0.5 U	8000 U	NA
Pesticides/PCBs	Isodrin	400 PB	NA	2000 U	NA
Pesticides/PCBs	Kepone	2100 U	NA	39000 U	NA
Pesticides/PCBs	Methoxychlor	210 U	1 U	3900 U	NA
Pesticides/PCBs	Toxaphene	1100 U	20 U	20000 U	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	9900	NA	200000	NA
Semivolatiles	1,2,4-Trichlorobenzene	6400 U	NA	590 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA	10000 U
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	13000 U	NA	1200 U	0.8 U
Semivolatiles	1,2-Dibromoethane (EDB)	6400 U	NA	590 U	0.2 U
Semivolatiles	1,3,5-Trinitrobenzene	20000 U	NA	190000 U	NA
Semivolatiles	1,3-Dinitrobenzene	4200 U	NA	39000 U	NA
Semivolatiles	1,4-Dichlorobenzene	6400 U	NA	480 J	NA
Semivolatiles	1,4-Dichlorobenzene	NA	2000 U	NA	10000 U
Semivolatiles	1,4-Naphthoquinone	20000 U	NA	190000 U	NA
Semivolatiles	1-Naphthylamine	4200 U	NA	39000 U	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	4200 U	NA	39000 U	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	20000 U	NA	190000 U	NA
Semivolatiles	2,4,5-Trichlorophenol	4200 U	2000 U	39000 U	NA
Semivolatiles	2,4,6-Trichlorophenol	4200 U	2000 U	39000 U	NA
Semivolatiles	2,4-Dichlorophenol	4200 U	2000 U	39000 U	NA
Semivolatiles	2,4-Dimethylphenol	11000	NA	39000 U	NA
Semivolatiles	2,4-Dinitrophenol	20000 U	NA	190000 U	NA
Semivolatiles	2,4-Dinitrotoluene	4200 U	NA	39000 U	NA
Semivolatiles	2,6-Dichlorophenol	4200 U	NA	39000 U	NA
Semivolatiles	2,6-Dinitrotoluene	4200 U	NA	39000 U	NA
Semivolatiles	2-Acetylaminofluorene	42000 U	NA	390000 U	NA
Semivolatiles	2-Chloronaphthalene	4200 U	NA	39000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	4200 U	NA	39000 U	NA
Semivolatiles	2-Methylnaphthalene	59000	NA	39000	NA
Semivolatiles	2-Methylphenol	12000	2000 U	39000 U	NA
Semivolatiles	2-Naphthylamine	4200 U	NA	39000 U	NA
Semivolatiles	2-Nitroaniline	20000 U	NA	190000 U	NA
Semivolatiles	2-Nitrophenol	4200 U	NA	39000 U	NA
Semivolatiles	2-Picoline	8400 U	NA	78000 U	NA
Semivolatiles	3,3'-Dichlorobenzidine	20000 U	NA	190000 U	NA
Semivolatiles	3,3'-Dimethylbenzidine	8400 U	NA	78000 U	NA
Semivolatiles	3-Methylcholanthrene	8400 U	NA	78000 U	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	14000	2000 U	39000 U	NA
Semivolatiles	3-Nitroaniline	20000 U	NA	190000 U	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	20000 U	NA	190000 U	NA
Semivolatiles	4-Aminobiphenyl	20000 U	NA	190000 U	NA
Semivolatiles	4-Bromophenyl phenyl ether	4200 U	NA	39000 U	NA
Semivolatiles	4-Chloro-3-methylphenol	4200 U	NA	39000 U	NA
Semivolatiles	4-Chloroaniline	4200 U	NA	39000 U	NA
Semivolatiles	4-Chlorophenyl phenyl ether	4200 U	NA	39000 U	NA
Semivolatiles	4-Nitroaniline	20000 U	NA	190000 U	NA
Semivolatiles	4-Nitrophenol	20000 U	NA	190000 U	NA
Semivolatiles	5-Nitro-o-toluidine	8400 U	NA	78000 U	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	8400 U	NA	78000 U	NA
Semivolatiles	a,a-Dimethylphenethylamine	20000 U	NA	190000 U	NA
Semivolatiles	Acenaphthene	4200 U	NA	39000 U	NA
Semivolatiles	Acenaphthylene	4200 U	NA	39000 U	NA
Semivolatiles	Acetophenone	4200 U	NA	39000 U	NA
Semivolatiles	Aniline	4200 U	NA	39000 U	NA
Semivolatiles	Anthracene	4200 U	NA	39000 U	NA
Semivolatiles	Aramite	8400 U	NA	78000 U	NA
Semivolatiles	Benzo(a)anthracene	4200 U	NA	39000 U	NA
Semivolatiles	Benzo(a)pyrene	4200 U	NA	39000 U	NA
Semivolatiles	Benzo(b)fluoranthene	4200 U	NA	39000 U	NA
Semivolatiles	Benzo(ghi)perylene	4200 U	NA	39000 U	NA
Semivolatiles	Benzo(k)fluoranthene	4200 U	NA	39000 U	NA
Semivolatiles	Benzyl alcohol	4200 U	NA	39000 U	NA
Semivolatiles	bis(2-Chloroethoxy)methane	4200 U	NA	39000 U	NA
Semivolatiles	bis(2-Chloroethyl) ether	4200 U	NA	39000 U	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	4200 U	NA	39000 U	NA
Semivolatiles	Butyl benzyl phthalate	4200 U	NA	39000 U	NA
Semivolatiles	Chrysene	4200 U	NA	39000 U	NA
Semivolatiles	Di-n-butyl phthalate	4200 U	NA	39000 U	NA
Semivolatiles	Di-n-octyl phthalate	4200 U	NA	39000 U	NA
Semivolatiles	Dibenz(a,h)anthracene	4200 U	NA	39000 U	NA
Semivolatiles	Dibenzofuran	4200 U	NA	39000 U	NA
Semivolatiles	Diethyl phthalate	8400 U	NA	78000 U	NA
Semivolatiles	Dimethoate	8400 U	NA	78000 U	NA
Semivolatiles	Dimethyl phthalate	4200 U	NA	39000 U	NA
Semivolatiles	Diphenylamine	4200 U	NA	39000 U	NA
Semivolatiles	Disulfoton	20000 U	NA	190000 U	NA
Semivolatiles	Ethyl methanesulfonate	4200 U	NA	39000 U	NA
Semivolatiles	Famphur	8400 U	NA	78000 U	NA
Semivolatiles	Fluoranthene	4200 U	NA	39000 U	NA
Semivolatiles	Fluorene	4200 U	NA	39000 U	NA
Semivolatiles	Hexachlorobenzene	4200 U	2000 U	220000	NA
Semivolatiles	Hexachlorobutadiene	4200 U	2000 U	39000 U	NA
Semivolatiles	Hexachlorocyclopentadiene	20000 U	NA	190000 U	NA
Semivolatiles	Hexachloroethane	4200 U	2000 U	39000 U	NA
Semivolatiles	Hexachlorophene	420 U	NA	3900 U	NA
Semivolatiles	Hexachloropropene	42000 U	NA	390000 U	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	4200 U	NA	39000 U	NA
Semivolatiles	Isophorone	4200 U	NA	39000 U	NA
Semivolatiles	Isosafrole	8400 U	NA	78000 U	NA
Semivolatiles	Methapyrilene	20000 U	NA	190000 U	NA
Semivolatiles	Methyl methanesulfonate	4200 U	NA	39000 U	NA
Semivolatiles	Methyl parathion	20000 U	NA	190000 U	NA
Semivolatiles	N-Nitrosodi-n-butylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosodi-n-propylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosodiethylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosodimethylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosodiphenylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosomethylethylamine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosomorpholine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosopiperidine	4200 U	NA	39000 U	NA
Semivolatiles	N-Nitrosopyrrolidine	4200 U	NA	39000 U	NA
Semivolatiles	Naphthalene	20000	NA	21000 J	NA
Semivolatiles	Nitrobenzene	4200 U	2000 U	39000 U	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	20000 U	NA	190000 U	NA
Semivolatiles	o-Toluidine	8400 U	NA	78000 U	NA
Semivolatiles	p-Dimethylaminoazobenzene	8400 U	NA	78000 U	NA
Semivolatiles	p-Phenylene diamine	20000 U	NA	190000 U	NA
Semivolatiles	Parathion	20000 U	NA	190000 U	NA
Semivolatiles	Pentachlorobenzene	4200 U	NA	80000	NA
Semivolatiles	Pentachloroethane	20000 U	NA	190000 U	NA
Semivolatiles	Pentachloronitrobenzene	20000 U	NA	190000 U	NA
Semivolatiles	Pentachlorophenol	20000 U	10000 U	190000 U	NA
Semivolatiles	Phenacetin	8400 U	NA	78000 U	NA
Semivolatiles	Phenanthrene	4200 U	NA	39000 U	NA
Semivolatiles	Phenol	35000	NA	12000 J	NA
Semivolatiles	Phorate	20000 U	NA	190000 U	NA
Semivolatiles	Pronamide	8400 U	NA	78000 U	NA
Semivolatiles	Pyrene	4200 U	NA	39000 U	NA
Semivolatiles	Pyridine	8400 U	4000 U	78000 U	NA
Semivolatiles	Safrole	20000 U	NA	190000 U	NA
Semivolatiles	Sulfotepp	13000 U	NA	120000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	20000 U	NA	190000 U	NA
Semivolatiles	4-Nitroquinoline-1-oxide	42000 U	NA	390000 U	NA
Total Petroleum Hydrocarbons	>C10 - C28	320000	NA	1600000	24000 J
Total Petroleum Hydrocarbons	C6 - C10	1000000	NA	470000	780000
Total Petroleum Hydrocarbons	C6 - C28	1400000	NA	2100000	800000
Volatiles	1,1,1,2-Tetrachloroethane	6400 U	NA	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	590 U	10000 U
Volatiles	1,1,1-Trichloroethane	6400 U	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	590 U	10000 U
Volatiles	1,1,2,2-Tetrachloroethane	6400 U	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	590 U	10000 U
Volatiles	1,1,2-Trichloroethane	6400 U	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	470 J	10000 U
Volatiles	1,1-Dichloroethane	6400 U	NA	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	2600	5400 J
Volatiles	1,1-Dichloroethene	6400 U	NA	NA	NA
Volatiles	1,1-Dichloroethene	NA	50 U	590 U	10000 U
Volatiles	1,2,3-Trichloropropane	6400 U	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	590	10000 U
Volatiles	1,2,4-Trichlorobenzene	6400 U	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	590 U	10000 U
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	13000 U	NA	1200 U	0.8 U
Volatiles	1,2-Dibromoethane (EDB)	6400 U	NA	590 U	0.2 U
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	3700 J	NA	14000	10000 U
Volatiles	1,2-Dichloroethane	NA	NA	NA	NA
Volatiles	1,2-Dichloroethane	6400 U	75	590 U	12000
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	6400 U	NA	590 U	10000 U
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	6400 U	NA	590 U	10000 U
Volatiles	1,4-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	6400 U	2000 U	480 J	10000 U
Volatiles	1,4-Dioxane	NA	NA	NA	NA
Volatiles	1,4-Dioxane	640000 U	NA	59000 U	1000000 U
Volatiles	2-Butanone (MEK)	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	17000 J	1200 B	20000	310000 J D
Volatiles	2-Hexanone	NA	NA	NA	NA
Volatiles	2-Hexanone	64000 U	NA	5900 U	100000 U
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	64000 U	NA	3000 J	38000 J
Volatiles	Acetone	NA	NA	NA	NA
Volatiles	Acetone	150000	NA	87000 D	480000 J D
Volatiles	Acetonitrile	NA	NA	NA	NA
Volatiles	Acetonitrile	130000 U	NA	12000 U	200000 U
Volatiles	Acrolein	NA	NA	NA	NA
Volatiles	Acrolein	130000 U	NA	12000 U	200000 U
Volatiles	Acrylonitrile	NA	NA	NA	NA
Volatiles	Acrylonitrile	130000 U	NA	12000 U	200000 U
Volatiles	Allyl chloride	NA	NA	NA	NA
Volatiles	Allyl chloride	7600 U	NA	710 U	10000 U
Volatiles	Benzene	NA	NA	NA	NA
Volatiles	Benzene	6400 U	150	1400	350000 D
Volatiles	Bromodichloromethane	NA	NA	NA	NA
Volatiles	Bromodichloromethane	6400 U	NA	590 U	10000 U
Volatiles	Bromoform	NA	NA	NA	NA
Volatiles	Bromoform	6400 U	NA	590 U	10000 U
Volatiles	Bromomethane	NA	NA	NA	NA
Volatiles	Bromomethane	13000 U	NA	1200 U	10000 U
Volatiles	Carbon disulfide	NA	NA	NA	NA
Volatiles	Carbon disulfide	64000 U	NA	5900 U	100000 U
Volatiles	Carbon tetrachloride	NA	NA	NA	NA
Volatiles	Carbon tetrachloride	6400 U	50 U	590 U	10000 U
Volatiles	Chlorobenzene	NA	NA	NA	NA
Volatiles	Chlorobenzene	6400 U	83	3200	22000
Volatiles	Chloroethane	NA	NA	NA	NA
Volatiles	Chloroethane	6400 U	NA	3300	6400 J
Volatiles	Chloroform	NA	NA	NA	NA
Volatiles	Chloroform	6400 U	50 U	590 U	10000 U
Volatiles	Chloromethane	NA	NA	NA	NA
Volatiles	Chloromethane	6400 U	NA	660	10000 U
Volatiles	Chloroprene	NA	NA	NA	NA
Volatiles	Chloroprene	6800 U	NA	640 U	10000 U
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	6400 U	NA	590 U	10000 U
Volatiles	Dibromochloromethane	NA	NA	NA	NA
Volatiles	Dibromochloromethane	6400 U	NA	590 U	10000 U
Volatiles	Dibromomethane	NA	NA	NA	NA
Volatiles	Dibromomethane	6400 U	NA	590 U	10000 U
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	6400 U	NA	590 U	10000 U
Volatiles	Ethyl methacrylate	NA	NA	NA	NA
Volatiles	Ethyl methacrylate	6400 U	NA	590 U	10000 U
Volatiles	Ethylbenzene	NA	NA	NA	NA
Volatiles	Ethylbenzene	150000	NA	13000	2800 J
Volatiles	Iodomethane	NA	NA	NA	NA
Volatiles	Iodomethane	8000 U	NA	750 U	10000 U
Volatiles	Isobutyl alcohol	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	130000 U	NA	12000 U	200000 U
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	550000 D	NA	78000 D	14000
Volatiles	Methacrylonitrile	NA	NA	NA	NA
Volatiles	Methacrylonitrile	130000 U	NA	12000 U	200000 U
Volatiles	Methyl methacrylate	NA	NA	NA	NA

WM-013131

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Fraction	Parameter	[illegible]	[illegible]	[illegible]	[illegible]
Volatiles	Methyl methacrylate	6400 U	NA	590 U	10000 U
Volatiles	Methylene chloride	NA	NA	NA	NA
Volatiles	Methylene chloride	11000	NA	5300	87000
Volatiles	o-Xylene	NA	NA	NA	NA
Volatiles	o-Xylene	220000 D	NA	29000 D	3900 J
Volatiles	Propionitrile	NA	NA	NA	NA
Volatiles	Propionitrile	130000 U	NA	12000 U	200000 U
Volatiles	Styrene	NA	NA	NA	NA
Volatiles	Styrene	19000	NA	990	10000 U
Volatiles	Tetrachloroethene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	6400 U	23 J	1700	10000 U
Volatiles	Toluene	NA	NA	NA	NA
Volatiles	Toluene	24000	NA	23000	14000
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	6400 U	NA	590 U	10000 U
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	6400 U	NA	590 U	10000 U
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	4500 J	NA	590 U	10000 U
Volatiles	Trichloroethene	NA	990	NA	NA
Volatiles	Trichloroethene	5200 J	NA	16000	6000 J
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA
Volatiles	Trichlorofluoromethane	6400 U	NA	590 U	10000 U
Volatiles	Vinyl acetate	NA	NA	NA	NA
Volatiles	Vinyl acetate	64000 U	NA	5900 U	100000 U
Volatiles	Vinyl chloride	NA	NA	NA	NA
Volatiles	Vinyl chloride	2600 U	100 U	240 U	4000 U

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	100 U	NA	630 U	NA	100 U
Conventionals	Ignitability	NA	NA	n.v.	NA	NA
Conventionals	Percent Moisture	NA	NA	20	NA	NA
Conventionals	pH (solid)	NA	NA	6.8	NA	NA
Conventionals	Reactive Cyanide	NA	NA	1300 U	NA	NA
Conventionals	Reactive Sulfide	NA	NA	62600 U	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA	NA
Conventionals	Total Organic Carbon	16200000	NA	NA	NA	175000
Conventionals	Total Sulfide	1000 U	NA	6300 U	NA	1000 U
Dioxins/Furans	2,3,7,8-TCDD	0.0012 U	NA	0.000043 U	NA	0.0011 U
Dioxins/Furans	Total HxCDD	0.1 U	NA	0.0013 U	NA	0.01 U
Dioxins/Furans	Total HxCDF	0.12 U	NA	0.00019 U	NA	0.016
Dioxins/Furans	Total PeCDD	0.19 U	NA	0.00042 U	NA	0.0041 U
Dioxins/Furans	Total PeCDF	0.0034 U	NA	0.0004 U	NA	0.0047
Dioxins/Furans	Total TCDD	0.0012 U	NA	0.000043 U	NA	0.0011 U
Dioxins/Furans	Total TCDF	0.0021	NA	0.00029 U	NA	0.0065
Herbicides	2,4,5-T	2000 U	NA	25 U	NA	2000 U
Herbicides	2,4,5-TP (Silvex)	2000 U	10 U	25 U	NA	2000 U
Herbicides	2,4-D	2000 U	40 U	100 U	NA	2000 U
Herbicides	Dinoseb	7000 U	NA	15 U	NA	7000 U
Metals	Antimony	150 U	NA	375 U	NA	150 U
Metals	Arsenic	137	15 B	4080	NA	120
Metals	Barium	470 B	1500 B	67400	NA	220 B
Metals	Beryllium	50 U	NA	560 B	NA	50 U
Metals	Cadmium	100 U	3.7 B	1300 U	NA	100 U
Metals	Chromium	200 B	10 B	24200	NA	847
Metals	Cobalt	305 B	NA	3000 B	NA	628
Metals	Copper	77 B	NA	5700 B	NA	83 B
Metals	Lead	123 MBB	30 B	10300	NA	636 MBB
Metals	Mercury	2 U	0.2 U	130 U	NA	2 U
Metals	Nickel	972	NA	8100	NA	1720
Metals	Selenium	201	18 B	250 U	NA	181
Metals	Silver	100 U	500 U	33 B	NA	100 U
Metals	Thallium	50 U	NA	147	NA	50 U
Metals	Tin	1000 U	NA	12500 U	NA	124 B
Metals	Vanadium	128 B	NA	21400	NA	81 B
Metals	Zinc	5550	NA	27800	NA	15800
Pesticides/PCBs	4,4'-DDD	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	4,4'-DDE	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	4,4'-DDT	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Aldrin	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	alpha-BHC	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Aroclor 1016	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA	n.v.
Pesticides/PCBs	Aroclor 1221	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1232	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1242	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1248	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1254	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA	n.v.
Pesticides/PCBs	Aroclor 1260	50 U	NA	4100 U	NA	120 U
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA	n.v.
Pesticides/PCBs	beta-BHC	50 U	NA	31 J	NA	270
Pesticides/PCBs	Chlordane (technical)	500 U	5 U	1100 U	NA	500 U
Pesticides/PCBs	Chlorobenzilate	2000 U	NA	210 U	NA	2000 U
Pesticides/PCBs	delta-BHC	87	NA	330	NA	50 U
Pesticides/PCBs	Dialfate	1000 U	NA	2100 U	NA	1000 U
Pesticides/PCBs	Dieldrin	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Endosulfan I	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Endosulfan II	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Endosulfan sulfate	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	Endrin	50 U	0.5 U	350 PB	NA	50 U
Pesticides/PCBs	Endrin aldehyde	50 U	NA	110 U	NA	50 U
Pesticides/PCBs	gamma-BHC (Lindane)	50 U	0.49 J	110 U	NA	560
Pesticides/PCBs	Heptachlor	50 U	0.5 U	110 U	NA	50 U
Pesticides/PCBs	Heptachlor epoxide	50 U	3.8	420 U	NA	50 U
Pesticides/PCBs	Isodrin	100 U	NA	110 U	NA	100 U
Pesticides/PCBs	Kepone	1000 U	NA	2100 U	NA	1000 U
Pesticides/PCBs	Methoxychlor	100 U	0.99 J	170 J PB	NA	100 U
Pesticides/PCBs	Toxaphene	2000 U	20 U	1100 U	NA	2000 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	95000 D	NA	1700	100000	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	31000 U	10000 U	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	63000 U	0.4 U	NA
Semivolatiles	1,2-Dibromoethane (EDB)	NA	NA	31000 U	0.1 U	NA
Semivolatiles	1,3,5-Trinitrobenzene	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	1,3-Dinitrobenzene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	31000 U	10000 U	NA
Semivolatiles	1,4-Dichlorobenzene	NA	11 J	NA	NA	NA
Semivolatiles	1,4-Naphthoquinone	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	1-Naphthylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	2,4,5-Trichlorophenol	4000 U	100 U	830 U	4000 J	NA
Semivolatiles	2,4,6-Trichlorophenol	4000 U	100 U	830 U	6000 U	NA
Semivolatiles	2,4-Dichlorophenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2,4-Dimethylphenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2,4-Dinitrophenol	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	2,4-Dinitrotoluene	4000 U	100 U	830 U	6000 U	NA
Semivolatiles	2,6-Dichlorophenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2,6-Dinitrotoluene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2-Acetylaminofluorene	8000 U	NA	8300 U	12000 U	NA
Semivolatiles	2-Chloronaphthalene	4000 U	NA	830 U	6000 U	NA

WM-013133

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2-Methylnaphthalene	1200 J	NA	31000 D	1800 J	NA
Semivolatiles	2-Methylphenol	4000 U	20 J	830 U	6000 U	NA
Semivolatiles	2-Naphthylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2-Nitroaniline	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	2-Nitrophenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	2-Picoline	20000 U	NA	1700 U	30000 U	NA
Semivolatiles	3,3'-Dichlorobenzidine	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	3,3'-Dimethylbenzidine	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	3-Methylcholanthrene	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	4000 U	28 J	830 U	6000 U	NA
Semivolatiles	3-Nitroaniline	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	4-Aminobiphenyl	8000 U	NA	4000 U	12000 U	NA
Semivolatiles	4-Bromophenyl phenyl ether	4000 U	NA	830 U	6000 U	NA
Semivolatiles	4-Chloro-3-methylphenol	8000 U	NA	830 U	12000 U	NA
Semivolatiles	4-Chloroaniline	8000 U	NA	830 U	12000 U	NA
Semivolatiles	4-Chlorophenyl phenyl ether	4000 U	NA	830 U	6000 U	NA
Semivolatiles	4-Nitroaniline	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	4-Nitrophenol	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	5-Nitro-o-toluidine	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	200000 U	NA	1700 U	25000 U	NA
Semivolatiles	a,a-Dimethylphenethylamine	40000 U	NA	4000 U	5000 U	NA
Semivolatiles	Acenaphthene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Acenaphthylene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Acetophenone	770 J	NA	830 U	6000 U	NA
Semivolatiles	Aniline	4000 U	NA	830 U	5600000 D	NA
Semivolatiles	Anthracene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Aramite	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	Benzo(a)anthracene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Benzo(a)pyrene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Benzo(b)fluoranthene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Benzo(ghi)perylene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Benzo(k)fluoranthene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Benzyl alcohol	8000 U	NA	830 U	12000 U	NA
Semivolatiles	bis(2-Chloroethoxy)methane	4000 U	NA	830 U	6000 U	NA
Semivolatiles	bis(2-Chloroethyl) ether	4000 U	NA	830 U	6000 U	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	2100 J	NA	34000 D	6000 U	NA
Semivolatiles	Butyl benzyl phthalate	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Chrysene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Di-n-butyl phthalate	4000 U	NA	730 J	6000 U	NA
Semivolatiles	Di-n-octyl phthalate	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Dibenz(a,h)anthracene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Dibenzofuran	4000 U	NA	920	6000 U	NA
Semivolatiles	Diethyl phthalate	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	Dimethoate	8000 U	NA	1700 U	12000 U	NA
Semivolatiles	Dimethyl phthalate	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Diphenylamine	4000 U	NA	260 J	6000 U	NA
Semivolatiles	Disulfoton	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	Ethyl methanesulfonate	8000 U	NA	830 U	12000 U	NA
Semivolatiles	Famphur	20000 U	NA	1700 U	30000 U	NA
Semivolatiles	Fluoranthene	4000 U	NA	330 J	6000 U	NA
Semivolatiles	Fluorene	4000 U	NA	640 J	6000 U	NA
Semivolatiles	Hexachlorobenzene	4000 U	100 U	1700	6000 U	NA
Semivolatiles	Hexachlorobutadiene	4000 U	100 U	830 U	6000 U	NA
Semivolatiles	Hexachlorocyclopentadiene	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	Hexachloroethane	4000 U	100 U	830 U	6000 U	NA
Semivolatiles	Hexachlorophene	160000 U	NA	83 U	240000 U	NA
Semivolatiles	Hexachloropropene	4000 U	NA	8300 U	6000 U	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Isophorone	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Isosafrole	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	Methapyrilene	40000 U	NA	4000 U	5000 U	NA
Semivolatiles	Methyl methanesulfonate	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Methyl parathion	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	N-Nitrosodi-n-butylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	N-Nitrosodi-n-propylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	N-Nitrosodiethylamine	8000 U	NA	830 U	12000 U	NA
Semivolatiles	N-Nitrosodimethylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	N-Nitrosodiphenylamine	4000 U	NA	830 U	6000 U	NA
Semivolatiles	N-Nitrosomethylethylamine	40000 U	NA	830 U	5000 U	NA
Semivolatiles	N-Nitrosomorpholine	8000 U	NA	830 U	12000 U	NA
Semivolatiles	N-Nitrosopiperidine	8000 U	NA	830 U	12000 U	NA
Semivolatiles	N-Nitrosopyrrolidine	8000 U	NA	830 U	12000 U	NA
Semivolatiles	Naphthalene	920 J	NA	21000 D	2600 J	NA
Semivolatiles	Nitrobenzene	4000 U	100 U	830 U	6000 U	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	o-Toluidine	4000 U	NA	1700 U	8800	NA
Semivolatiles	p-Dimethylaminoazobenzene	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	p-Phenylene diamine	40000 U	NA	4000 U	60000 U	NA
Semivolatiles	Parathion	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	Pentachlorobenzene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Pentachloroethane	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	Pentachloronitrobenzene	8000 U	NA	4000 U	12000 U	NA
Semivolatiles	Pentachlorophenol	20000 U	500 U	4000 U	19000 J	NA
Semivolatiles	Phenacetin	8000 U	NA	1700 U	12000 U	NA
Semivolatiles	Phenanthrene	4000 U	NA	640 J	6000 U	NA
Semivolatiles	Phenol	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Phorate	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	Pronamide	4000 U	NA	1700 U	6000 U	NA
Semivolatiles	Pyrene	4000 U	NA	830 U	6000 U	NA
Semivolatiles	Pyridine	8000 U	200 U	1700 U	12000 U	NA
Semivolatiles	Safrole	4000 U	NA	4000 U	6000 U	NA
Semivolatiles	Sulfotepp	40000 U	NA	2500 U	5000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	20000 U	NA	4000 U	30000 U	NA
Semivolatiles	4-Nitroquinoline-1-oxide	40000 U	NA	8300 U	5000 U	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	NA	1500000	190000	NA
Total Petroleum Hydrocarbons	C6 - C10	NA	NA	6000000	890000	NA
Total Petroleum Hydrocarbons	C6 - C28	NA	NA	7500000	1100000	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	31000 U	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA	10000 U	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	31000 U	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA	10000 U	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	31000 U	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA	10000 U	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	31000 U	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA	10000 U	NA
Volatiles	1,1-Dichloroethane	NA	NA	31000 U	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA	13000	NA
Volatiles	1,1-Dichloroethene	NA	NA	31000 U	NA	NA
Volatiles	1,1-Dichloroethene	NA	50 U	NA	10000 U	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	31000 U	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	NA	10000 U	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	31000 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	NA	10000 U	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	NA	63000 U	0.4 U	NA
Volatiles	1,2-Dibromoethane (EDB)	NA	NA	31000 U	0.1 U	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	48000	10000 U	NA
Volatiles	1,2-Dichloroethane	NA	NA	NA	NA	NA
Volatiles	1,2-Dichloroethane	NA	390	31000 U	3600 J	NA
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	NA	NA	31000 U	10000 U	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	31000 U	10000 U	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	31000 U	10000 U	NA
Volatiles	1,4-Dioxane	NA	NA	NA	NA	NA
Volatiles	1,4-Dioxane	NA	NA	3100000 U	1000000 U	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	250 B	11000 J	300000 J D	NA
Volatiles	2-Hexanone	NA	NA	NA	NA	NA
Volatiles	2-Hexanone	NA	NA	310000 U	100000 U	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	310000 U	77000 J	NA
Volatiles	Acetone	NA	NA	NA	NA	NA
Volatiles	Acetone	NA	NA	58000 J	440000 J D	NA
Volatiles	Acetonitrile	NA	NA	NA	NA	NA
Volatiles	Acetonitrile	NA	NA	630000 U	200000 U	NA
Volatiles	Acrolein	NA	NA	NA	NA	NA
Volatiles	Acrolein	NA	NA	630000 U	200000 U	NA
Volatiles	Acrylonitrile	NA	NA	NA	NA	NA
Volatiles	Acrylonitrile	NA	NA	630000 U	200000 U	NA
Volatiles	Allyl chloride	NA	NA	NA	NA	NA
Volatiles	Allyl chloride	NA	NA	37000 U	10000 U	NA
Volatiles	Benzene	NA	NA	NA	NA	NA
Volatiles	Benzene	NA	15000 D	520000	95000	NA
Volatiles	Bromodichloromethane	NA	NA	NA	NA	NA
Volatiles	Bromodichloromethane	NA	NA	31000 U	10000 U	NA
Volatiles	Bromoform	NA	NA	NA	NA	NA
Volatiles	Bromoform	NA	NA	31000 U	10000 U	NA
Volatiles	Bromomethane	NA	NA	NA	NA	NA
Volatiles	Bromomethane	NA	NA	63000 U	10000 U	NA
Volatiles	Carbon disulfide	NA	NA	NA	NA	NA
Volatiles	Carbon disulfide	NA	NA	310000 U	100000 U	NA
Volatiles	Carbon tetrachloride	NA	NA	NA	NA	NA
Volatiles	Carbon tetrachloride	NA	50 U	31000 U	10000 U	NA
Volatiles	Chlorobenzene	NA	NA	NA	NA	NA
Volatiles	Chlorobenzene	NA	19000 D	960000	40000	NA
Volatiles	Chloroethane	NA	NA	NA	NA	NA
Volatiles	Chloroethane	NA	NA	31000 U	11000	NA
Volatiles	Chloroform	NA	NA	NA	NA	NA
Volatiles	Chloroform	NA	50 U	31000 U	10000 U	NA
Volatiles	Chloromethane	NA	NA	NA	NA	NA
Volatiles	Chloromethane	NA	NA	31000 U	6400 J	NA
Volatiles	Chloroprene	NA	NA	NA	NA	NA
Volatiles	Chloroprene	NA	NA	33000 U	10000 U	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	31000 U	10000 U	NA
Volatiles	Dibromochloromethane	NA	NA	NA	NA	NA
Volatiles	Dibromochloromethane	NA	NA	31000 U	10000 U	NA
Volatiles	Dibromomethane	NA	NA	NA	NA	NA
Volatiles	Dibromomethane	NA	NA	31000 U	10000 U	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	NA	31000 U	10000 U	NA
Volatiles	Ethyl methacrylate	NA	NA	NA	NA	NA
Volatiles	Ethyl methacrylate	NA	NA	31000 U	10000 U	NA
Volatiles	Ethylbenzene	NA	NA	NA	NA	NA
Volatiles	Ethylbenzene	NA	NA	380000	6900 J	NA
Volatiles	Iodomethane	NA	NA	NA	NA	NA
Volatiles	Iodomethane	NA	NA	39000 U	10000 U	NA
Volatiles	Isobutyl alcohol	NA	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	NA	630000 U	200000 U	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	1700000	49000	NA
Volatiles	Methacrylonitrile	NA	NA	NA	NA	NA
Volatiles	Methacrylonitrile	NA	NA	630000 U	200000 U	NA
Volatiles	Methyl methacrylate	NA	NA	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA	NA	31000 U	10000 U	NA
Volatiles	Methylene chloride	NA	NA	NA	NA	NA
Volatiles	Methylene chloride	NA	NA	31000 U	230000 D	NA
Volatiles	o-Xylene	NA	NA	NA	NA	NA
Volatiles	o-Xylene	NA	NA	540000	15000	NA
Volatiles	Propionitrile	NA	NA	NA	NA	NA
Volatiles	Propionitrile	NA	NA	630000 U	200000 U	NA
Volatiles	Styrene	NA	NA	NA	NA	NA
Volatiles	Styrene	NA	NA	37000	10000 U	NA
Volatiles	Tetrachloroethene	NA	66	NA	NA	NA
Volatiles	Tetrachloroethene	NA	NA	31000 U	10000 U	NA
Volatiles	Toluene	NA	NA	NA	NA	NA
Volatiles	Toluene	NA	NA	320000	33000	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	31000 U	10000 U	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	31000 U	10000 U	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	18000 J	10000 U	NA
Volatiles	Trichloroethene	NA	NA	NA	NA	NA
Volatiles	Trichloroethene	NA	2000	97000	60000	NA
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA	NA
Volatiles	Trichlorofluoromethane	NA	NA	31000 U	4800 J	NA
Volatiles	Vinyl acetate	NA	NA	NA	NA	NA
Volatiles	Vinyl acetate	NA	NA	310000 U	100000 U	NA
Volatiles	Vinyl chloride	NA	NA	NA	NA	NA
Volatiles	Vinyl chloride	NA	100 U	13000 U	4000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	NA	100 U	630 U	NA
Conventionals	Ignitability	NA	NA	n.v.	NA
Conventionals	Percent Moisture	20	NA	21	NA
Conventionals	pH (solid)	NA	NA	9	NA
Conventionals	Reactive Cyanide	NA	NA	1300 U	NA
Conventionals	Reactive Sulfide	NA	NA	63000 U	NA
Conventionals	Total Organic Carbon	NA	7140000	NA	NA
Conventionals	Total Organic Carbon	1130000 B	6940000	NA	NA
Conventionals	Total Sulfide	NA	1000 U	6300 U	NA
Dioxins/Furans	2,3,7,8-TCDD	NA	0.00024 U	0.00015 U	NA
Dioxins/Furans	Total HxCDD	NA	0.0076 U	0.00032 U	NA
Dioxins/Furans	Total HxCDF	NA	0.00039 U	0.00035 U	NA
Dioxins/Furans	Total PeCDD	NA	0.061 U	0.00068 U	NA
Dioxins/Furans	Total PeCDF	NA	0.00068 U	0.00026 U	NA
Dioxins/Furans	Total TCDD	NA	0.00024 U	0.00015 U	NA
Dioxins/Furans	Total TCDF	NA	0.00042 U	0.00013 U	NA
Herbicides	2,4,5-T	NA	2000 U	2500 U	NA
Herbicides	2,4,5-TP (Silvex)	NA	2000 U	2500 U	100 U
Herbicides	2,4-D	NA	2000 U	10000 U	400 U
Herbicides	Dinoseb	NA	7000 U	1500 U	NA
Metals	Antimony	NA	150 U	378 U	NA
Metals	Arsenic	NA	265	2840	15 B
Metals	Barium	NA	3000	85100	410 B
Metals	Beryllium	NA	5 B	870 L	NA
Metals	Cadmium	NA	100 U	120 B	4.4 B
Metals	Chromium	NA	118 B	24200 L	30 B
Metals	Cobalt	NA	101 B	2000 B	NA
Metals	Copper	NA	51 B	7100	NA
Metals	Lead	NA	125 MBB	8020	500 U
Metals	Mercury	NA	2 U	130 U	0.2 U
Metals	Nickel	NA	219 B	10200 L	NA
Metals	Selenium	NA	90 B	2670	22 B
Metals	Silver	NA	100 U	49 B	500 U
Metals	Thallium	NA	1.7 B	157	NA
Metals	Tin	NA	1000 U	12600 U	NA
Metals	Vanadium	NA	193 B	21600	NA
Metals	Zinc	NA	154	42100	NA
Pesticides/PCBs	4,4'-DDD	NA	12 U	210 U	NA
Pesticides/PCBs	4,4'-DDE	NA	12 U	210 U	NA
Pesticides/PCBs	4,4'-DDT	NA	12 U	140 J	NA
Pesticides/PCBs	Aldrin	NA	12 U	210 U	NA
Pesticides/PCBs	alpha-BHC	NA	12 U	500	NA
Pesticides/PCBs	Aroclor 1016	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1232	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1242	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1248	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1254	NA	50 U	2100 U	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	50 U	2100 U	NA
Pesticides/PCBs	beta-BHC	NA	12 U	1600	NA
Pesticides/PCBs	Chlordane (technical)	NA	120 U	2100 U	5 U
Pesticides/PCBs	Chlorobenzilate	NA	500 U	420 U	NA
Pesticides/PCBs	delta-BHC	NA	12 U	210 U	NA
Pesticides/PCBs	Diallate	NA	250 U	31000 PA	NA
Pesticides/PCBs	Dieldrin	NA	12 U	210 U	NA
Pesticides/PCBs	Endosulfan I	NA	12 U	210 U	NA
Pesticides/PCBs	Endosulfan II	NA	12 U	210 U	NA
Pesticides/PCBs	Endosulfan sulfate	NA	12 U	210 U	NA
Pesticides/PCBs	Endrin	NA	12 U	210 U	0.5 U
Pesticides/PCBs	Endrin aldehyde	NA	12 U	210 U	NA
Pesticides/PCBs	gamma-BHC (Lindane)	NA	12 U	210 U	3.6
Pesticides/PCBs	Heptachlor	NA	12 U	210 U	0.89
Pesticides/PCBs	Heptachlor epoxide	NA	12 U	490 J	0.5 U
Pesticides/PCBs	Isodrin	NA	25 U	290	NA
Pesticides/PCBs	Kepone	NA	250 U	4200 U	NA
Pesticides/PCBs	Methoxychlor	NA	25 U	420 U	1 U
Pesticides/PCBs	Toxaphene	NA	500 U	2100 U	20 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	NA	15000 D	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	5000 U	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	6300 U	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	0.4 U	13000 U	NA
Semivolatiles	1,2-Dibromoethane (EDB)	NA	0.1 U	6300 U	NA
Semivolatiles	1,3,5-Trinitrobenzene	NA	5000 U	200000 U	NA
Semivolatiles	1,3-Dinitrobenzene	NA	1000 U	42000 U	NA
Semivolatiles	1,4-Dichlorobenzene	NA	5000 U	NA	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	6300 U	NA
Semivolatiles	1,4-Naphthoquinone	NA	1000 U	200000 U	NA
Semivolatiles	1-Naphthylamine	NA	1000 U	42000 U	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	NA	1000 U	42000 U	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	NA	1000 U	200000 U	NA
Semivolatiles	2,4,5-Trichlorophenol	NA	1000 U	42000 U	500 U
Semivolatiles	2,4,6-Trichlorophenol	NA	1000 U	42000 U	500 U
Semivolatiles	2,4-Dichlorophenol	NA	1000 U	42000 U	NA
Semivolatiles	2,4-Dimethylphenol	NA	1000 U	60000	NA
Semivolatiles	2,4-Dinitrophenol	NA	5000 U	200000 U	NA
Semivolatiles	2,4-Dinitrotoluene	NA	1000 U	220000	1300
Semivolatiles	2,6-Dichlorophenol	NA	1000 U	42000 U	NA
Semivolatiles	2,6-Dinitrotoluene	NA	1000 U	190000	NA
Semivolatiles	2-Acetylaminofluorene	NA	2000 U	420000 U	NA
Semivolatiles	2-Chloronaphthalene	NA	1000 U	42000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	NA	1000 U	42000 U	NA
Semivolatiles	2-Methylnaphthalene	NA	1000 U	200000	NA
Semivolatiles	2-Methylphenol	NA	1000 U	79000	1300
Semivolatiles	2-Naphthylamine	NA	1000 U	42000 U	NA
Semivolatiles	2-Nitroaniline	NA	5000 U	200000 U	NA
Semivolatiles	2-Nitrophenol	NA	1000 U	42000 U	NA
Semivolatiles	2-Picoline	NA	5000 U	83000 U	NA
Semivolatiles	3,3'-Dichlorobenzidine	NA	5000 U	200000 U	NA
Semivolatiles	3,3'-Dimethylbenzidine	NA	1000 U	83000 U	NA
Semivolatiles	3-Methylcholanthrene	NA	1000 U	83000 U	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	NA	2600	200000	3500
Semivolatiles	3-Nitroaniline	NA	5000 U	200000 U	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	NA	5000 U	200000 U	NA
Semivolatiles	4-Aminobiphenyl	NA	2000 U	200000 U	NA
Semivolatiles	4-Bromophenyl phenyl ether	NA	1000 U	42000 U	NA
Semivolatiles	4-Chloro-3-methylphenol	NA	2000 U	42000 U	NA
Semivolatiles	4-Chloroaniline	NA	2000 U	42000 U	NA
Semivolatiles	4-Chlorophenyl phenyl ether	NA	1000 U	42000 U	NA
Semivolatiles	4-Nitroaniline	NA	5000 U	200000 U	NA
Semivolatiles	4-Nitrophenol	NA	5000 U	200000 U	NA
Semivolatiles	5-Nitro-o-toluidine	NA	1000 U	79000 J	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	NA	50000 U	83000 U	NA
Semivolatiles	a,a-Dimethylphenethylamine	NA	10000 U	200000 U	NA
Semivolatiles	Acenaphthene	NA	1000 U	42000 U	NA
Semivolatiles	Acenaphthylene	NA	1000 U	42000 U	NA
Semivolatiles	Acetophenone	NA	1000 U	42000 U	NA
Semivolatiles	Aniline	NA	1000 U	42000 U	NA
Semivolatiles	Anthracene	NA	1000 U	42000 U	NA
Semivolatiles	Aramite	NA	1000 U	83000 U	NA
Semivolatiles	Benzo(a)anthracene	NA	1000 U	42000 U	NA
Semivolatiles	Benzo(a)pyrene	NA	1000 U	42000 U	NA
Semivolatiles	Benzo(b)fluoranthene	NA	1000 U	42000 U	NA
Semivolatiles	Benzo(ghi)perylene	NA	1000 U	42000 U	NA
Semivolatiles	Benzo(k)fluoranthene	NA	1000 U	22000 J	NA
Semivolatiles	Benzyl alcohol	NA	2000 U	42000 U	NA
Semivolatiles	bis(2-Chloroethoxy)methane	NA	1000 U	42000 U	NA
Semivolatiles	bis(2-Chloroethyl) ether	NA	1000 U	42000 U	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	NA	1000 U	21000 J	NA
Semivolatiles	Butyl benzyl phthalate	NA	1000 U	42000 U	NA
Semivolatiles	Chrysene	NA	1000 U	42000 U	NA
Semivolatiles	Di-n-butyl phthalate	NA	1000 U	42000 U	NA
Semivolatiles	Di-n-octyl phthalate	NA	1000 U	42000 U	NA
Semivolatiles	Dibenz(a,h)anthracene	NA	1000 U	42000 U	NA
Semivolatiles	Dibenzofuran	NA	1000 U	42000 U	NA
Semivolatiles	Diethyl phthalate	NA	1000 U	83000 U	NA
Semivolatiles	Dimethoate	NA	2000 U	83000 U	NA
Semivolatiles	Dimethyl phthalate	NA	1000 U	42000 U	NA
Semivolatiles	Diphenylamine	NA	1000 U	42000 U	NA
Semivolatiles	Disulfoton	NA	1000 U	200000 U	NA
Semivolatiles	Ethyl methanesulfonate	NA	2000 U	42000 U	NA
Semivolatiles	Famphur	NA	5000 U	83000 U	NA
Semivolatiles	Fluoranthene	NA	1000 U	42000 U	NA
Semivolatiles	Fluorene	NA	1000 U	42000 U	NA
Semivolatiles	Hexachlorobenzene	NA	1000 U	42000 U	500 U
Semivolatiles	Hexachlorobutadiene	NA	1000 U	42000 U	500 U
Semivolatiles	Hexachlorocyclopentadiene	NA	5000 U	200000 U	NA
Semivolatiles	Hexachloroethane	NA	1000 U	42000 U	500 U
Semivolatiles	Hexachlorophene	NA	40000 U	4200 U	NA
Semivolatiles	Hexachloropropene	NA	1000 U	420000 U	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	NA	1000 U	42000 U	NA
Semivolatiles	Isophorone	NA	1000 U	42000 U	NA
Semivolatiles	Isosafrole	NA	1000 U	83000 U	NA
Semivolatiles	Methapyriiene	NA	10000 U	200000 U	NA
Semivolatiles	Methyl methanesulfonate	NA	1000 U	42000 U	NA
Semivolatiles	Methyl parathion	NA	1000 U	200000 U	NA
Semivolatiles	N-Nitrosodi-n-butylamine	NA	1000 U	42000 U	NA
Semivolatiles	N-Nitrosodi-n-propylamine	NA	1000 U	42000 U	NA
Semivolatiles	N-Nitrosodiethylamine	NA	2000 U	42000 U	NA
Semivolatiles	N-Nitrosodimethylamine	NA	1000 U	42000 U	NA
Semivolatiles	N-Nitrosodiphenylamine	NA	1000 U	42000 U	NA
Semivolatiles	N-Nitrosomethylethylamine	NA	10000 U	42000 U	NA
Semivolatiles	N-Nitrosomorpholine	NA	2000 U	42000 U	NA
Semivolatiles	N-Nitrosopiperidine	NA	2000 U	42000 U	NA
Semivolatiles	N-Nitrosopyrrolidine	NA	2000 U	42000 U	NA
Semivolatiles	Naphthalene	NA	1000 U	74000	NA
Semivolatiles	Nitrobenzene	NA	1000 U	42000 U	500 U
Semivolatiles	O,O,O-Triethyl phosphorothioate	NA	1000 U	200000 U	NA
Semivolatiles	o-Toluidine	NA	1000 U	83000 U	NA
Semivolatiles	p-Dimethylaminoazobenzene	NA	1000 U	83000 U	NA
Semivolatiles	p-Phenylene diamine	NA	10000 U	200000 U	NA
Semivolatiles	Parathion	NA	1000 U	200000 U	NA
Semivolatiles	Pentachlorobenzene	NA	1000 U	42000 U	NA
Semivolatiles	Pentachloroethane	NA	1000 U	200000 U	NA
Semivolatiles	Pentachloronitrobenzene	NA	2000 U	200000 U	NA
Semivolatiles	Pentachlorophenol	NA	5000 U	200000 U	180 J
Semivolatiles	Phenacetin	NA	2000 U	83000 U	NA
Semivolatiles	Phenanthrene	NA	1000 U	42000 U	NA
Semivolatiles	Phenol	NA	43000 D	110000	NA
Semivolatiles	Phorate	NA	1000 U	200000 U	NA
Semivolatiles	Pronamide	NA	1000 U	83000 U	NA
Semivolatiles	Pyrene	NA	1000 U	42000 U	NA
Semivolatiles	Pyridine	NA	2000 U	83000 U	1000 U
Semivolatiles	Safrole	NA	1000 U	200000 U	NA
Semivolatiles	Sulfotepp	NA	10000 U	130000 U	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	NA	5000 U	200000 U	NA
Semivolatiles	4-Nitroquinoline-1-oxide	NA	10000 U	420000 U	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA	21000	1700000	NA
Total Petroleum Hydrocarbons	C6 - C10	NA	77000	690000	NA
Total Petroleum Hydrocarbons	C6 - C28	NA	99000	2400000	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	5000 U	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	6300 U	NA
Volatiles	1,1,1-Trichloroethane	NA	5000 U	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	4800 J	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	5000 U	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	6300 U	NA
Volatiles	1,1,2-Trichloroethane	NA	5000 U	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	6300 U	NA
Volatiles	1,1-Dichloroethane	NA	23000	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	6300 U	NA
Volatiles	1,1-Dichloroethene	NA	2200 J	NA	120 U
Volatiles	1,1-Dichloroethene	NA	NA	6300 U	NA
Volatiles	1,2,3-Trichloropropane	NA	5000 U	NA	NA
Volatiles	1,2,3-Trichloropropane	NA	NA	6300 U	NA
Volatiles	1,2,4-Trichlorobenzene	NA	5000 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	6300 U	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA	0.4 U	13000 U	NA
Volatiles	1,2-Dibromoethane (EDB)	NA	0.1 U	6300 U	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	NA	5000 U	52000	NA
Volatiles	1,2-Dichloroethane	NA	NA	NA	120 U
Volatiles	1,2-Dichloroethane	NA	2000 J	6300 U	NA
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	NA	5000 U	6300 U	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	NA	5000 U	6300 U	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	NA	5000 U	6300 U	NA
Volatiles	1,4-Dioxane	NA	NA	NA	NA
Volatiles	1,4-Dioxane	NA	500000 U	630000 U	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	NA	38000 J	13000 J	490
Volatiles	2-Hexanone	NA	NA	NA	NA
Volatiles	2-Hexanone	NA	50000 U	4900 J	NA
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	NA	5500 J	9800 J	NA
Volatiles	Acetone	NA	NA	NA	NA
Volatiles	Acetone	NA	270000 J D	300000 D	NA
Volatiles	Acetonitrile	NA	NA	NA	NA
Volatiles	Acetonitrile	NA	100000 U	130000 U	NA
Volatiles	Acrolein	NA	NA	NA	NA
Volatiles	Acrolein	NA	100000 U	130000 U	NA
Volatiles	Acrylonitrile	NA	NA	NA	NA
Volatiles	Acrylonitrile	NA	100000 U	130000 U	NA
Volatiles	Allyl chloride	NA	NA	NA	NA
Volatiles	Allyl chloride	NA	5000 U	7500 U	NA
Volatiles	Benzene	NA	NA	NA	NA
Volatiles	Benzene	NA	52000	25000	1900
Volatiles	Bromodichloromethane	NA	NA	NA	NA
Volatiles	Bromodichloromethane	NA	5000 U	6300 U	NA
Volatiles	Bromoform	NA	NA	NA	NA
Volatiles	Bromoform	NA	5000 U	6300 U	NA
Volatiles	Bromomethane	NA	NA	NA	NA
Volatiles	Bromomethane	NA	5000 U	13000 U	NA
Volatiles	Carbon disulfide	NA	NA	NA	NA
Volatiles	Carbon disulfide	NA	50000 U	63000 U	NA
Volatiles	Carbon tetrachloride	NA	NA	NA	NA
Volatiles	Carbon tetrachloride	NA	5000 U	6300 U	52 J
Volatiles	Chlorobenzene	NA	NA	NA	NA
Volatiles	Chlorobenzene	NA	3400 J	31000	1100
Volatiles	Chloroethane	NA	NA	NA	NA
Volatiles	Chloroethane	NA	5000 U	6300 U	NA
Volatiles	Chloroform	NA	NA	NA	NA
Volatiles	Chloroform	NA	5000 U	6300 U	120 U
Volatiles	Chloromethene	NA	NA	NA	NA
Volatiles	Chloromethane	NA	5000 U	6300 U	NA
Volatiles	Chloroprene	NA	NA	NA	NA
Volatiles	Chloroprene	NA	5000 U	6700 U	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	NA	5000 U	6300 U	NA
Volatiles	Dibromochloromethane	NA	NA	NA	NA
Volatiles	Dibromochloromethane	NA	5000 U	6300 U	NA
Volatiles	Dibromomethane	NA	NA	NA	NA
Volatiles	Dibromomethane	NA	5000 U	6300 U	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	NA	760 J	6300 U	NA
Volatiles	Ethyl methacrylate	NA	NA	NA	NA
Volatiles	Ethyl methacrylate	NA	5000 U	6300 U	NA
Volatiles	Ethylbenzene	NA	NA	NA	NA
Volatiles	Ethylbenzene	NA	320 J	31000	NA
Volatiles	Iodomethane	NA	NA	NA	NA
Volatiles	Iodomethane	NA	5000 U	7900 U	NA
Volatiles	Isobutyl alcohol	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	NA	380000 E	130000 U	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	NA	1100 J	120000	NA
Volatiles	Methacrylonitrile	NA	NA	NA	NA
Volatiles	Methacrylonitrile	NA	100000 U	130000 U	NA
Volatiles	Methyl methacrylate	NA	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA	5000 U	6300 U	NA
Volatiles	Methylene chloride	NA	NA	NA	NA
Volatiles	Methylene chloride	NA	120000 D	7800 B	NA
Volatiles	o-Xylene	NA	NA	NA	NA
Volatiles	o-Xylene	NA	5000 U	40000	NA
Volatiles	Propionitrile	NA	NA	NA	NA
Volatiles	Propionitrile	NA	100000 U	130000 U	NA
Volatiles	Styrene	NA	NA	NA	NA
Volatiles	Styrene	NA	5000 U	6300 U	NA
Volatiles	Tetrachloroethene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	NA	5000 U	6300 U	120 U
Volatiles	Toluene	NA	NA	NA	NA
Volatiles	Toluene	NA	6600	230000	NA
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	NA	5000 U	6300 U	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	NA	5000 U	6300 U	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	5000 U	6300 U	NA
Volatiles	Trichloroethene	NA	NA	NA	NA
Volatiles	Trichloroethene	NA	1900 J	6900	360
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA
Volatiles	Trichlorofluoromethane	NA	5000 U	6300 U	NA
Volatiles	Vinyl acetate	NA	NA	NA	NA
Volatiles	Vinyl acetate	NA	50000 U	63000 U	NA
Volatiles	Vinyl chloride	NA	NA	NA	NA
Volatiles	Vinyl chloride	NA	2000 U	2500 U	250 U

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	1300 U	4000	14000	3200
Conventionals	Ignitability	NA	NA	NA	NA
Conventionals	Percent Moisture	62	19	81	20
Conventionals	pH (solid)	NA	NA	NA	NA
Conventionals	Reactive Cyanide	NA	NA	NA	NA
Conventionals	Reactive Sulfide	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	NA	NA	NA
Conventionals	Total Organic Carbon	NA	3910000	NA	NA
Conventionals	Total Sulfide	13200 U	19600 U	NA	NA
Dioxins/Furans	2,3,7,8-TCDD	0.0004 U	0.0049 U	NA	NA
Dioxins/Furans	Total HxCDD	0.0022 U	0.1 U	NA	NA
Dioxins/Furans	Total HxCDF	0.0025 U	0.027 U	0.0024	NA
Dioxins/Furans	Total PeCDD	0.0029 U	0.43 U	NA	NA
Dioxins/Furans	Total PeCDF	0.011 U	0.01 U	NA	NA
Dioxins/Furans	Total TCDD	0.0004 U	0.0049 U	NA	NA
Dioxins/Furans	Total TCDF	0.003	0.0026 U	0.0011	NA
Herbicides	2,4,5-T	5300 U	7800 U	NA	NA
Herbicides	2,4,5-TP (Silvex)	5300 U	7800 U	NA	NA
Herbicides	2,4-D	21000 U	31000 U	NA	NA
Herbicides	Dinoseb	3200 U	4700 U	NA	NA
Metals	Antimony	794 U	210 B	598 B	NA
Metals	Arsenic	3820	1510	4170	4530
Metals	Barium	17100	21700	135000 J	53000 J
Metals	Beryllium	390 B	650 B	NA	580 J
Metals	Cadmium	2600 U	3900 U	NA	NA
Metals	Chromium	684000	655000	161000 J	89000 J
Metals	Cobalt	2000 B	4000 B	7100 J	4400 J
Metals	Copper	11500 B	109000	25000 J	11000 J
Metals	Lead	15100	7340	171000	10200
Metals	Mercury	260 U	390 U	1100	43 B
Metals	Nickel	6500 B	24700	36000 J	17000 J
Metals	Selenium	173 B	843	326 B	1020
Metals	Silver	3640	130 B	178 B	173 B
Metals	Thallium	27 B	41 B	29 B	186
Metals	Tin	12300 B	39200 U	28000 J	17000 J
Metals	Vanadium	7100 B	8600 B	NA	24000 J
Metals	Zinc	83100	220000	438000 J	129000 J
Pesticides/PCBs	4,4'-DDD	14000 PB	130 U	NA	NA
Pesticides/PCBs	4,4'-DDE	11000 PA	130 U	NA	3100 N,J
Pesticides/PCBs	4,4'-DDT	17000	370	NA	NA
Pesticides/PCBs	Aldrin	2300 U	130 U	7900 N,J	NA
Pesticides/PCBs	alpha-BHC	50000	870 PB	7500 N,J	4800 N,J
Pesticides/PCBs	Aroclor 1016	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1016	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1221	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1232	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1242	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1248	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1254	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1254	22000 U	13000 U	NA	NA
Pesticides/PCBs	Aroclor 1260	NA	NA	NA	NA
Pesticides/PCBs	Aroclor 1260	22000 U	13000 U	NA	NA
Pesticides/PCBs	beta-BHC	160000 PB	2500 PB	21000 N,J	11000 J
Pesticides/PCBs	Chlordane (technical)	23000 U	1300 U	NA	NA
Pesticides/PCBs	Chlorobenzilate	4400 U	260 U	NA	NA
Pesticides/PCBs	delta-BHC	2300 U	130 U	8000 J	NA
Pesticides/PCBs	Diallate	44000 U	2600 U	NA	NA
Pesticides/PCBs	Dieldrin	2300 U	130 U	NA	NA
Pesticides/PCBs	Endosulfan I	2300 U	130 U	NA	NA
Pesticides/PCBs	Endosulfan II	2300 U	130 U	NA	NA
Pesticides/PCBs	Endosulfan sulfate	2300 U	130 U	NA	NA
Pesticides/PCBs	Endrin	12000 PB	130 U	NA	NA
Pesticides/PCBs	Endrin aldehyde	2300 U	130 U	NA	NA
Pesticides/PCBs	gamma-BHC (Lindane)	2300 U	130 U	NA	NA
Pesticides/PCBs	Heptachlor	2300 U	130 U	NA	NA
Pesticides/PCBs	Heptachlor epoxide	18000	530 U	NA	NA
Pesticides/PCBs	Isodrin	60000	130 U	NA	NA
Pesticides/PCBs	Kepone	44000 U	2600 U	NA	NA
Pesticides/PCBs	Methoxychlor	4400 U	260 U	NA	NA
Pesticides/PCBs	Toxaphene	23000 U	1300 U	NA	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	NA	NA	210000 J	140000
Semivolatiles	1,2,4-Trichlorobenzene	130000 U	9800 U	NA	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA	NA	NA	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	260000 U	20000 U	NA	NA
Semivolatiles	1,2-Dibromoethane (EDB)	130000 U	9800 U	NA	NA
Semivolatiles	1,3,5-Trinitrobenzene	2500000 U	940000 U	NA	NA
Semivolatiles	1,3-Dinitrobenzene	520000 U	190000 U	NA	NA
Semivolatiles	1,4-Dichlorobenzene	350000	9800 U	NA	NA
Semivolatiles	1,4-Dichlorobenzene	NA	NA	NA	NA
Semivolatiles	1,4-Naphthoquinone	2500000 U	940000 U	NA	NA
Semivolatiles	1-Naphthylamine	520000 U	190000 U	NA	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	520000 U	190000 U	NA	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	2500000 U	940000 U	NA	NA
Semivolatiles	2,4,5-Trichlorophenol	520000 U	190000 U	NA	NA
Semivolatiles	2,4,6-Trichlorophenol	520000 U	190000 U	NA	NA
Semivolatiles	2,4-Dichlorophenol	520000 U	190000 U	NA	NA
Semivolatiles	2,4-Dimethylphenol	100000 J	190000 U	NA	NA
Semivolatiles	2,4-Dinitrophenol	2500000 U	940000 U	NA	NA
Semivolatiles	2,4-Dinitrotoluene	520000 U	190000 U	NA	NA
Semivolatiles	2,6-Dichlorophenol	520000 U	190000 U	NA	NA
Semivolatiles	2,6-Dinitrotoluene	520000 U	190000 U	NA	NA
Semivolatiles	2-Acetylaminofluorene	5200000 U	1900000 U	NA	NA
Semivolatiles	2-Chloronaphthalene	520000 U	190000 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	520000 U	190000 U	NA	NA
Semivolatiles	2-Methylnaphthalene	15000000 D	220000	3700000 D,J	460000 D
Semivolatiles	2-Methylphenol	520000 U	190000 U	NA	NA
Semivolatiles	2-Naphthylamine	520000 U	190000 U	NA	NA
Semivolatiles	2-Nitroaniline	2500000 U	940000 U	NA	NA
Semivolatiles	2-Nitrophenol	520000 U	190000 U	NA	NA
Semivolatiles	2-Picoline	1000000 U	390000 U	NA	NA
Semivolatiles	3,3'-Dichlorobenzidine	2500000 U	940000 U	NA	NA
Semivolatiles	3,3'-Dimethylbenzidine	1000000 U	380000 U	NA	NA
Semivolatiles	3-Methylcholanthrene	1000000 U	380000 U	NA	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	520000 U	190000 U	NA	NA
Semivolatiles	3-Nitroaniline	2500000 U	940000 U	NA	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	2500000 U	940000 U	NA	NA
Semivolatiles	4-Aminobiphenyl	2500000 U	940000 U	NA	NA
Semivolatiles	4-Bromophenyl phenyl ether	520000 U	190000 U	NA	NA
Semivolatiles	4-Chloro-3-methylphenol	520000 U	190000 U	NA	NA
Semivolatiles	4-Chloroaniline	520000 U	190000 U	NA	NA
Semivolatiles	4-Chlorophenyl phenyl ether	520000 U	190000 U	NA	NA
Semivolatiles	4-Nitroaniline	2500000 U	940000 U	NA	NA
Semivolatiles	4-Nitrophenol	2500000 U	940000 U	NA	NA
Semivolatiles	5-Nitro-o-toluidine	1000000 U	390000 U	NA	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	1000000 U	390000 U	NA	NA
Semivolatiles	a,a-Dimethylphenethylamine	2500000 U	940000 U	NA	NA
Semivolatiles	Acenaphthene	110000 J	190000 U	NA	NA
Semivolatiles	Acenaphthylene	520000 U	190000 U	NA	NA
Semivolatiles	Acetophenone	520000 U	190000 U	NA	NA
Semivolatiles	Aniline	520000 U	190000 U	NA	NA
Semivolatiles	Anthracene	520000 U	190000 U	NA	NA
Semivolatiles	Aramite	1000000 U	390000 U	NA	NA
Semivolatiles	Benzo(a)anthracene	520000 U	190000 U	NA	NA
Semivolatiles	Benzo(a)pyrene	520000 U	190000 U	NA	NA
Semivolatiles	Benzo(b)fluoranthene	520000 U	190000 U	NA	NA
Semivolatiles	Benzo(ghi)perylene	520000 U	190000 U	NA	NA
Semivolatiles	Benzo(k)fluoranthene	520000 U	190000 U	NA	NA
Semivolatiles	Benzyl alcohol	520000 U	190000 U	NA	NA
Semivolatiles	bis(2-Chloroethoxy)methane	520000 U	190000 U	NA	NA
Semivolatiles	bis(2-Chloroethyl) ether	520000 U	190000 U	NA	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	1500000	190000 U	300000 J	6900 J
Semivolatiles	Butyl benzyl phthalate	520000 U	190000 U	42000 J	NA
Semivolatiles	Chrysene	520000 U	190000 U	NA	NA
Semivolatiles	Di-n-butyl phthalate	520000 U	190000 U	NA	NA
Semivolatiles	Di-n-octyl phthalate	520000 U	190000 U	NA	NA
Semivolatiles	Dibenz(a,h)anthracene	520000 U	190000 U	NA	NA
Semivolatiles	Dibenzofuran	250000 J	190000 U	NA	NA
Semivolatiles	Diethyl phthalate	1000000 U	390000 U	NA	NA
Semivolatiles	Dimethoate	1000000 U	390000 U	NA	NA
Semivolatiles	Dimethyl phthalate	520000 U	190000 U	NA	NA
Semivolatiles	Diphenylamine	520000 U	190000 U	NA	NA
Semivolatiles	Disulfoton	2500000 U	940000 U	NA	NA
Semivolatiles	Ethyl methanesulfonate	520000 U	190000 U	NA	NA
Semivolatiles	Famphur	1000000 U	390000 U	NA	NA
Semivolatiles	Fluoranthene	520000 U	190000 U	NA	NA
Semivolatiles	Fluorene	140000 J	190000 U	24000 J	3300 J
Semivolatiles	Hexachlorobenzene	170000 J	190000 U	54000 J	18000 J
Semivolatiles	Hexachlorobutadiene	520000 U	190000 U	NA	NA
Semivolatiles	Hexachlorocyclopentadiene	2500000 U	940000 U	NA	NA
Semivolatiles	Hexachloroethane	520000 U	190000 U	NA	NA
Semivolatiles	Hexachlorophene	52000 U	19000 U	NA	NA
Semivolatiles	Hexachloropropene	5200000 U	1900000 U	NA	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	520000 U	190000 U	NA	NA
Semivolatiles	Isophorone	520000 U	120000 J	NA	3700 J
Semivolatiles	Isosafrole	1000000 U	390000 U	NA	NA
Semivolatiles	Methapyrilene	2500000 U	940000 U	NA	NA
Semivolatiles	Methyl methanesulfonate	520000 U	190000 U	NA	NA
Semivolatiles	Methyl parathion	2500000 U	940000 U	NA	NA
Semivolatiles	N-Nitrosodi-n-butylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosodi-n-propylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosodiethylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosodimethylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosodiphenylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosomethylethylamine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosomorpholine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosopiperidine	520000 U	190000 U	NA	NA
Semivolatiles	N-Nitrosopyrrolidine	520000 U	190000 U	NA	NA
Semivolatiles	Naphthalene	7000000	96000 J	1800000 J	200000
Semivolatiles	Nitrobenzene	520000 U	190000 U	NA	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	2500000 U	940000 U	NA	NA
Semivolatiles	o-Toluidine	1000000 U	390000 U	NA	NA
Semivolatiles	p-Dimethylaminoazobenzene	1000000 U	390000 U	NA	NA
Semivolatiles	p-Phenylene diamine	2500000 U	940000 U	NA	NA
Semivolatiles	Parathion	2500000 U	940000 U	NA	NA
Semivolatiles	Pentachlorobenzene	520000 U	190000 U	15000 J	5300 J
Semivolatiles	Pentachloroethane	2500000 U	940000 U	NA	NA
Semivolatiles	Pentachloronitrobenzene	2500000 U	940000 U	NA	NA
Semivolatiles	Pentachlorophenol	2500000 U	940000 U	NA	NA
Semivolatiles	Phenacetin	1000000 U	390000 U	NA	NA
Semivolatiles	Phenanthrene	180000 J	190000 U	39000 J	7500 J
Semivolatiles	Phenol	250000 J	190000 U	240000 J	59000
Semivolatiles	Phorate	2500000 U	940000 U	NA	NA
Semivolatiles	Pronamide	1000000 U	390000 U	NA	NA
Semivolatiles	Pyrene	520000 U	190000 U	NA	NA
Semivolatiles	Pyridine	1000000 U	390000 U	NA	NA
Semivolatiles	Safrole	2500000 U	940000 U	NA	NA
Semivolatiles	Sulfotepp	1500000 U	590000 U	NA	NA

WM-013142

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	2500000 U	940000 U	NA	NA
Semivolatiles	4-Nitroquinoline-1-oxide	5200000 U	1900000 U	NA	NA
Total Petroleum Hydrocarbons	>C10 - C28	74000000	150000 J	NA	NA
Total Petroleum Hydrocarbons	C8 - C10	22000000	200000 J	NA	NA
Total Petroleum Hydrocarbons	C8 - C28	96000000	360000 J	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,1,2-Tetrachloroethane	130000 U	9800 U	NA	NA
Volatiles	1,1,1-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1,1-Trichloroethane	130000 U	9800 U	NA	3100000 D,J
Volatiles	1,1,2,2-Tetrachloroethane	NA	NA	NA	NA
Volatiles	1,1,2,2-Tetrachloroethane	130000 U	9800 U	NA	NA
Volatiles	1,1,2-Trichloroethane	NA	NA	NA	NA
Volatiles	1,1,2-Trichloroethane	130000 U	9800 U	NA	NA
Volatiles	1,1-Dichloroethane	NA	NA	NA	NA
Volatiles	1,1-Dichloroethane	650000	9800 U	85000 J	210000 J
Volatiles	1,1-Dichloroethene	NA	NA	NA	NA
Volatiles	1,1-Dichloroethene	130000 U	9800 U	NA	120000
Volatiles	1,2,3-Trichloropropane	NA	NA	NA	NA
Volatiles	1,2,3-Trichloropropane	130000 U	9800 U	NA	NA
Volatiles	1,2,4-Trichlorobenzene	NA	NA	NA	NA
Volatiles	1,2,4-Trichlorobenzene	130000 U	9800 U	NA	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	260000 U	20000 U	NA	NA
Volatiles	1,2-Dibromoethane (EDB)	130000 U	9800 U	NA	NA
Volatiles	1,2-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,2-Dichlorobenzene	4600000	16000	480000 J	79000 J
Volatiles	1,2-Dichloroethane	NA	NA	NA	NA
Volatiles	1,2-Dichloroethane	130000 U	9800 U	NA	15000 J
Volatiles	1,2-Dichloropropane	NA	NA	NA	NA
Volatiles	1,2-Dichloropropane	130000 U	78000	31000 J	NA
Volatiles	1,3-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,3-Dichlorobenzene	150000	9800 U	NA	NA
Volatiles	1,4-Dichlorobenzene	NA	NA	NA	NA
Volatiles	1,4-Dichlorobenzene	350000	9800 U	29000 J	NA
Volatiles	1,4-Dioxane	NA	NA	NA	NA
Volatiles	1,4-Dioxane	13000000 U	980000 U	NA	NA
Volatiles	2-Butanone (MEK)	NA	NA	NA	NA
Volatiles	2-Butanone (MEK)	270000 J	360000	NA	NA
Volatiles	2-Hexanone	NA	NA	NA	NA
Volatiles	2-Hexanone	1300000 U	98000 U	37000 J	93000 J
Volatiles	4-Methyl-2-pentanone	NA	NA	NA	NA
Volatiles	4-Methyl-2-pentanone	400000 J	44000 J	77000 J	77000 J
Volatiles	Acetone	NA	NA	NA	NA
Volatiles	Acetone	850000 J	4300000 D	58000 J	330000 J
Volatiles	Acetonitrile	NA	NA	NA	NA
Volatiles	Acetonitrile	2600000 U	200000 U	NA	NA
Volatiles	Acrolein	NA	NA	NA	NA
Volatiles	Acrolein	2600000 U	200000 U	NA	NA
Volatiles	Acrylonitrile	NA	NA	NA	NA
Volatiles	Acrylonitrile	2600000 U	200000 U	NA	NA
Volatiles	Allyl chloride	NA	NA	NA	NA
Volatiles	Allyl chloride	160000 U	12000 U	NA	NA
Volatiles	Benzene	NA	NA	NA	NA
Volatiles	Benzene	3600000	770000	460000 J	270000 J
Volatiles	Bromodichloromethane	NA	NA	NA	NA
Volatiles	Bromodichloromethane	130000 U	9800 U	NA	NA
Volatiles	Bromoform	NA	NA	NA	NA
Volatiles	Bromoform	130000 U	9800 U	NA	NA
Volatiles	Bromomethane	NA	NA	NA	NA
Volatiles	Bromomethane	260000 U	20000 U	NA	NA
Volatiles	Carbon disulfide	NA	NA	NA	NA
Volatiles	Carbon disulfide	1300000 U	98000 U	NA	NA
Volatiles	Carbon tetrachloride	NA	NA	NA	NA
Volatiles	Carbon tetrachloride	130000 U	9800 U	NA	NA
Volatiles	Chlorobenzene	NA	NA	NA	NA
Volatiles	Chlorobenzene	12000000	66000	1700000 J	240000 J
Volatiles	Chloroethane	NA	NA	NA	NA
Volatiles	Chloroethane	130000 U	9800 U	NA	NA
Volatiles	Chloroform	NA	NA	NA	NA
Volatiles	Chloroform	130000 U	9800 U	NA	NA
Volatiles	Chloromethane	NA	NA	NA	NA
Volatiles	Chloromethane	130000 U	9800 U	NA	NA
Volatiles	Chloroprene	NA	NA	NA	NA
Volatiles	Chloroprene	140000 U	10000 U	NA	NA
Volatiles	cis-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	cis-1,3-Dichloropropene	130000 U	9800 U	NA	NA
Volatiles	Dibromochloromethane	NA	NA	NA	NA
Volatiles	Dibromochloromethane	130000 U	9800 U	NA	NA
Volatiles	Dibromomethane	NA	NA	NA	NA
Volatiles	Dibromomethane	130000 U	9800 U	NA	NA
Volatiles	Dichlorodifluoromethane	NA	NA	NA	NA
Volatiles	Dichlorodifluoromethane	100000 J	9800 U	NA	NA
Volatiles	Ethyl methacrylate	NA	NA	NA	NA
Volatiles	Ethyl methacrylate	130000 U	9800 U	NA	NA
Volatiles	Ethylbenzene	NA	NA	NA	NA
Volatiles	Ethylbenzene	6600000	23000	720000 J	260000 J
Volatiles	Iodomethane	NA	NA	NA	NA
Volatiles	Iodomethane	170000 U	12000 U	NA	NA
Volatiles	Isobutyl alcohol	NA	NA	NA	NA
Volatiles	Isobutyl alcohol	2600000 U	200000 U	NA	NA
Volatiles	m-Xylene & p-Xylene	NA	NA	NA	NA
Volatiles	m-Xylene & p-Xylene	23000000	80000	2500000 J	980000 J
Volatiles	Methacrylonitrile	NA	NA	NA	NA
Volatiles	Methacrylonitrile	2600000 U	200000 U	NA	NA
Volatiles	Methyl methacrylate	NA	NA	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	130000 U	9800 U	NA	NA
Volatiles	Methylene chloride	NA	NA	NA	NA
Volatiles	Methylene chloride	2500000 B	1600000 B	320000 J	93000 J
Volatiles	o-Xylene	NA	NA	NA	NA
Volatiles	o-Xylene	8000000	32000	920000 J	350000 J
Volatiles	Propionitrile	NA	NA	NA	NA
Volatiles	Propionitrile	2600000 U	200000 U	NA	NA
Volatiles	Styrene	NA	NA	NA	NA
Volatiles	Styrene	630000	9800 U	130000 J	NA
Volatiles	Tetrachloroethene	NA	NA	NA	NA
Volatiles	Tetrachloroethene	1500000	9800 U	130000 J	NA
Volatiles	Toluene	NA	NA	NA	NA
Volatiles	Toluene	70000000 D	270000	6900000 D,J	1400000 D,J
Volatiles	trans-1,2-Dichloroethene	NA	NA	NA	NA
Volatiles	trans-1,2-Dichloroethene	130000 U	9800 U	NA	NA
Volatiles	trans-1,3-Dichloropropene	NA	NA	NA	NA
Volatiles	trans-1,3-Dichloropropene	130000 U	9800 U	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA	NA	NA	NA
Volatiles	trans-1,4-Dichloro-2-butene	130000 U	9800 U	NA	NA
Volatiles	Trichloroethene	NA	NA	NA	NA
Volatiles	Trichloroethene	7300000	1500000	1200000 J	110000 J
Volatiles	Trichlorofluoromethane	NA	NA	NA	NA
Volatiles	Trichlorofluoromethane	130000 U	9900	NA	NA
Volatiles	Vinyl acetate	NA	NA	NA	NA
Volatiles	Vinyl acetate	1300000 U	98000 U	NA	NA
Volatiles	Vinyl chloride	NA	NA	NA	NA
Volatiles	Vinyl chloride	53000 U	3900 U	NA	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Conventionals	Cyanide, Total	440
Conventionals	Ignitability	NA
Conventionals	Percent Moisture	NA
Conventionals	pH (solid)	NA
Conventionals	Reactive Cyanide	NA
Conventionals	Reactive Sulfide	NA
Conventionals	Total Organic Carbon	NA
Conventionals	Total Organic Carbon	NA
Conventionals	Total Sulfide	29000
Dioxins/Furans	2,3,7,8-TCDD	NA
Dioxins/Furans	Total HxCDD	NA
Dioxins/Furans	Total HxCDF	NA
Dioxins/Furans	Total PeCDD	NA
Dioxins/Furans	Total PeCDF	NA
Dioxins/Furans	Total TCDD	NA
Dioxins/Furans	Total TCDF	NA
Herbicides	2,4,5-T	NA
Herbicides	2,4,5-TP (Silvex)	NA
Herbicides	2,4-D	NA
Herbicides	Dinoseb	NA
Metals	Antimony	198 J
Metals	Arsenic	487
Metals	Barium	8050
Metals	Beryllium	11 B
Metals	Cadmium	NA
Metals	Chromium	18200
Metals	Cobalt	756
Metals	Copper	1150
Metals	Lead	3380
Metals	Mercury	27
Metals	Nickel	1760
Metals	Selenium	70
Metals	Silver	335 J
Metals	Thallium	4
Metals	Tin	1250
Metals	Vanadium	244 B
Metals	Zinc	20500
Pesticides/PCBs	4,4'-DDD	NA
Pesticides/PCBs	4,4'-DDE	NA
Pesticides/PCBs	4,4'-DDT	NA
Pesticides/PCBs	Aldrin	NA
Pesticides/PCBs	alpha-BHC	NA
Pesticides/PCBs	Aroclor 1016	NA
Pesticides/PCBs	Aroclor 1016	NA
Pesticides/PCBs	Aroclor 1221	NA
Pesticides/PCBs	Aroclor 1232	NA
Pesticides/PCBs	Aroclor 1242	NA
Pesticides/PCBs	Aroclor 1248	NA
Pesticides/PCBs	Aroclor 1254	NA
Pesticides/PCBs	Aroclor 1254	NA
Pesticides/PCBs	Aroclor 1260	NA
Pesticides/PCBs	Aroclor 1260	NA
Pesticides/PCBs	beta-BHC	NA
Pesticides/PCBs	Chlordane (technical)	NA
Pesticides/PCBs	Chlorobenzilate	NA
Pesticides/PCBs	delta-BHC	NA
Pesticides/PCBs	Diallate	NA
Pesticides/PCBs	Dieldrin	NA
Pesticides/PCBs	Endosulfan I	NA
Pesticides/PCBs	Endosulfan II	NA
Pesticides/PCBs	Endosulfan sulfate	NA
Pesticides/PCBs	Endrin	NA
Pesticides/PCBs	Endrin aldehyde	NA
Pesticides/PCBs	gamma-BHC (Lindane)	NA
Pesticides/PCBs	Heptachlor	NA
Pesticides/PCBs	Heptachlor epoxide	NA
Pesticides/PCBs	Isodrin	NA
Pesticides/PCBs	Kepone	NA
Pesticides/PCBs	Methoxychlor	NA
Pesticides/PCBs	Toxaphene	NA
Semivolatiles	1,2,4,5-Tetrachlorobenzene	110000
Semivolatiles	1,2,4-Trichlorobenzene	NA
Semivolatiles	1,2,4-Trichlorobenzene	NA
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA
Semivolatiles	1,2-Dibromoethane (EDB)	NA
Semivolatiles	1,3,5-Trinitrobenzene	NA
Semivolatiles	1,3-Dinitrobenzene	NA
Semivolatiles	1,4-Dichlorobenzene	NA
Semivolatiles	1,4-Dichlorobenzene	NA
Semivolatiles	1,4-Naphthoquinone	NA
Semivolatiles	1-Naphthylamine	NA
Semivolatiles	2,2'-Oxybis(1-Chloropropane)	NA
Semivolatiles	2,3,4,6-Tetrachlorophenol	NA
Semivolatiles	2,4,5-Trichlorophenol	NA
Semivolatiles	2,4,6-Trichlorophenol	NA
Semivolatiles	2,4-Dichlorophenol	NA
Semivolatiles	2,4-Dimethylphenol	NA
Semivolatiles	2,4-Dinitrophenol	NA
Semivolatiles	2,4-Dinitrotoluene	NA
Semivolatiles	2,6-Dichlorophenol	NA
Semivolatiles	2,6-Dinitrotoluene	NA
Semivolatiles	2-Acetylaminofluorene	NA
Semivolatiles	2-Chloronaphthalene	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	2-Chlorophenol	NA
Semivolatiles	2-Methylnaphthalene	170000
Semivolatiles	2-Methylphenol	NA
Semivolatiles	2-Naphthylamine	NA
Semivolatiles	2-Nitroaniline	NA
Semivolatiles	2-Nitrophenol	NA
Semivolatiles	2-Picoline	NA
Semivolatiles	3,3'-Dichlorobenzidine	NA
Semivolatiles	3,3'-Dimethylbenzidine	NA
Semivolatiles	3-Methylcholanthrene	NA
Semivolatiles	3-Methylphenol & 4-Methylphenol	NA
Semivolatiles	3-Nitroaniline	NA
Semivolatiles	4,6-Dinitro-2-methylphenol	NA
Semivolatiles	4-Aminobiphenyl	NA
Semivolatiles	4-Bromophenyl phenyl ether	NA
Semivolatiles	4-Chloro-3-methylphenol	NA
Semivolatiles	4-Chloroaniline	NA
Semivolatiles	4-Chlorophenyl phenyl ether	NA
Semivolatiles	4-Nitroaniline	NA
Semivolatiles	4-Nitrophenol	NA
Semivolatiles	5-Nitro-o-toluidine	NA
Semivolatiles	7,12-Dimethylbenz(a)anthracene	NA
Semivolatiles	a,a-Dimethylphenethylamine	NA
Semivolatiles	Acenaphthene	NA
Semivolatiles	Acenaphthylene	NA
Semivolatiles	Acetophenone	NA
Semivolatiles	Aniline	NA
Semivolatiles	Anthracene	NA
Semivolatiles	Aramite	NA
Semivolatiles	Benzo(a)anthracene	NA
Semivolatiles	Benzo(a)pyrene	NA
Semivolatiles	Benzo(b)fluoranthene	NA
Semivolatiles	Benzo(ghi)perylene	NA
Semivolatiles	Benzo(k)fluoranthene	NA
Semivolatiles	Benzyl alcohol	NA
Semivolatiles	bis(2-Chloroethoxy)methane	NA
Semivolatiles	bis(2-Chloroethyl) ether	NA
Semivolatiles	bis(2-Ethylhexyl) phthalate	NA
Semivolatiles	Butyl benzyl phthalate	NA
Semivolatiles	Chrysene	NA
Semivolatiles	Di-n-butyl phthalate	NA
Semivolatiles	Di-n-octyl phthalate	NA
Semivolatiles	Dibenz(a,h)anthracene	NA
Semivolatiles	Dibenzofuran	NA
Semivolatiles	Diethyl phthalate	NA
Semivolatiles	Dimethoate	NA
Semivolatiles	Dimethyl phthalate	NA
Semivolatiles	Diphenylamine	NA
Semivolatiles	Disulfoton	NA
Semivolatiles	Ethyl methanesulfonate	NA
Semivolatiles	Famphur	NA
Semivolatiles	Fluoranthene	NA
Semivolatiles	Fluorene	NA
Semivolatiles	Hexachlorobenzene	5500 J
Semivolatiles	Hexachlorobutadiene	NA
Semivolatiles	Hexachlorocyclopentadiene	NA
Semivolatiles	Hexachloroethane	NA
Semivolatiles	Hexachlorophene	NA
Semivolatiles	Hexachloropropene	NA
Semivolatiles	Indeno(1,2,3-cd)pyrene	NA
Semivolatiles	Isophorone	NA
Semivolatiles	Isosafrole	NA
Semivolatiles	Methapyrilene	NA
Semivolatiles	Methyl methanesulfonate	NA
Semivolatiles	Methyl parathion	NA
Semivolatiles	N-Nitrosodi-n-butylamine	NA
Semivolatiles	N-Nitrosodi-n-propylamine	NA
Semivolatiles	N-Nitrosodiethylamine	NA
Semivolatiles	N-Nitrosodimethylamine	NA
Semivolatiles	N-Nitrosodiphenylamine	NA
Semivolatiles	N-Nitrosomethylethylamine	NA
Semivolatiles	N-Nitrosomorpholine	NA
Semivolatiles	N-Nitrosopiperidine	NA
Semivolatiles	N-Nitrosopyrrolidine	NA
Semivolatiles	Naphthalene	80000
Semivolatiles	Nitrobenzene	NA
Semivolatiles	O,O,O-Triethyl phosphorothioate	NA
Semivolatiles	o-Toluidine	NA
Semivolatiles	p-Dimethylaminoazobenzene	NA
Semivolatiles	p-Phenylene diamine	NA
Semivolatiles	Parathion	NA
Semivolatiles	Pentachlorobenzene	NA
Semivolatiles	Pentachloroethane	NA
Semivolatiles	Pentachloronitrobenzene	NA
Semivolatiles	Pentachlorophenol	18000 J
Semivolatiles	Phenacetin	NA
Semivolatiles	Phenanthrene	2600 J
Semivolatiles	Phenol	27000
Semivolatiles	Phorate	NA
Semivolatiles	Pronamide	NA
Semivolatiles	Pyrene	NA
Semivolatiles	Pyridine	NA
Semivolatiles	Safrole	NA
Semivolatiles	Sulfotepp	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Semivolatiles	Thionazin	NA
Semivolatiles	4-Nitroquinoline-1-oxide	NA
Total Petroleum Hydrocarbons	>C10 - C28	NA
Total Petroleum Hydrocarbons	C6 - C10	NA
Total Petroleum Hydrocarbons	C6 - C28	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA
Volatiles	1,1,1,2-Tetrachloroethane	NA
Volatiles	1,1,1-Trichloroethane	NA
Volatiles	1,1,1-Trichloroethane	1500000 D
Volatiles	1,1,2,2-Tetrachloroethane	NA
Volatiles	1,1,2,2-Tetrachloroethane	NA
Volatiles	1,1,2-Trichloroethane	NA
Volatiles	1,1,2-Trichloroethane	NA
Volatiles	1,1-Dichloroethane	NA
Volatiles	1,1-Dichloroethane	1400000
Volatiles	1,1-Dichloroethene	NA
Volatiles	1,1-Dichloroethene	NA
Volatiles	1,2,3-Trichloropropane	NA
Volatiles	1,2,3-Trichloropropane	NA
Volatiles	1,2,4-Trichlorobenzene	NA
Volatiles	1,2,4-Trichlorobenzene	NA
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	NA
Volatiles	1,2-Dibromoethane (EDB)	NA
Volatiles	1,2-Dichlorobenzene	NA
Volatiles	1,2-Dichlorobenzene	90000 J
Volatiles	1,2-Dichloroethane	NA
Volatiles	1,2-Dichloroethane	NA
Volatiles	1,2-Dichloropropane	NA
Volatiles	1,2-Dichloropropane	NA
Volatiles	1,3-Dichlorobenzene	NA
Volatiles	1,3-Dichlorobenzene	NA
Volatiles	1,4-Dichlorobenzene	NA
Volatiles	1,4-Dichlorobenzene	NA
Volatiles	1,4-Dioxane	NA
Volatiles	1,4-Dioxane	NA
Volatiles	2-Butanone (MEK)	NA
Volatiles	2-Butanone (MEK)	4300000 J
Volatiles	2-Hexanone	NA
Volatiles	2-Hexanone	920000 J
Volatiles	4-Methyl-2-pentanone	NA
Volatiles	4-Methyl-2-pentanone	550000 J
Volatiles	Acetone	NA
Volatiles	Acetone	1400000 D
Volatiles	Acetonitrile	NA
Volatiles	Acetonitrile	NA
Volatiles	Acrolein	NA
Volatiles	Acrolein	NA
Volatiles	Acrylonitrile	NA
Volatiles	Acrylonitrile	NA
Volatiles	Allyl chloride	NA
Volatiles	Allyl chloride	NA
Volatiles	Benzene	NA
Volatiles	Benzene	820000
Volatiles	Bromodichloromethane	NA
Volatiles	Bromodichloromethane	NA
Volatiles	Bromoform	NA
Volatiles	Bromoform	NA
Volatiles	Bromomethane	NA
Volatiles	Bromomethane	NA
Volatiles	Carbon disulfide	NA
Volatiles	Carbon disulfide	NA
Volatiles	Carbon tetrachloride	NA
Volatiles	Carbon tetrachloride	NA
Volatiles	Chlorobenzene	NA
Volatiles	Chlorobenzene	470000 J
Volatiles	Chloroethane	NA
Volatiles	Chloroethane	NA
Volatiles	Chloroform	NA
Volatiles	Chloroform	NA
Volatiles	Chloromethane	NA
Volatiles	Chloromethane	NA
Volatiles	Chloroprene	NA
Volatiles	Chloroprene	NA
Volatiles	cis-1,3-Dichloropropene	NA
Volatiles	cis-1,3-Dichloropropene	NA
Volatiles	Dibromochloromethane	NA
Volatiles	Dibromochloromethane	NA
Volatiles	Dibromomethane	NA
Volatiles	Dibromomethane	NA
Volatiles	Dichlorodifluoromethane	NA
Volatiles	Dichlorodifluoromethane	NA
Volatiles	Ethyl methacrylate	NA
Volatiles	Ethyl methacrylate	NA
Volatiles	Ethylbenzene	NA
Volatiles	Ethylbenzene	500000
Volatiles	Iodomethane	NA
Volatiles	Iodomethane	NA
Volatiles	Isobutyl alcohol	NA
Volatiles	Isobutyl alcohol	NA
Volatiles	m-Xylene & p-Xylene	NA
Volatiles	m-Xylene & p-Xylene	1900000
Volatiles	Methacrylonitrile	NA
Volatiles	Methacrylonitrile	NA
Volatiles	Methyl methacrylate	NA

Waste Management
Austin Community Landfill
IWU Waste Analytical Data

Volatiles	Methyl methacrylate	NA
Volatiles	Methylene chloride	NA
Volatiles	Methylene chloride	1800000 B
Volatiles	o-Xylene	NA
Volatiles	o-Xylene	650000
Volatiles	Propionitrile	NA
Volatiles	Propionitrile	NA
Volatiles	Styrene	NA
Volatiles	Styrene	NA
Volatiles	Tetrachloroethene	NA
Volatiles	Tetrachloroethene	NA
Volatiles	Toluene	NA
Volatiles	Toluene	3400000
Volatiles	trans-1,2-Dichloroethene	NA
Volatiles	trans-1,2-Dichloroethene	NA
Volatiles	trans-1,3-Dichloropropene	NA
Volatiles	trans-1,3-Dichloropropene	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA
Volatiles	trans-1,4-Dichloro-2-butene	NA
Volatiles	Trichloroethene	NA
Volatiles	Trichloroethene	320000 J
Volatiles	Trichlorofluoromethane	NA
Volatiles	Trichlorofluoromethane	NA
Volatiles	Vinyl acetate	NA
Volatiles	Vinyl acetate	NA
Volatiles	Vinyl chloride	NA
Volatiles	Vinyl chloride	NA

Waste Management
Austin Community Landfill
Soil Analytical Data

Fraction	Parameter Name	MW-29A(13-15)	MW-30(18-20)
Conventionals	Percent Moisture	19	14
Conventionals	Total Organic Carbon	1240000 B	15200000
Conventionals	Cyanide, Total	NA	NA
Conventionals	Total Sulfide	NA	NA

No additional Appendix IX analyses were conducted

Waste Management
Austin Community Landfill
Groundwater Analytical Data

Fraction	Parameter Name	PZ-26	MW-29A	MW-30
Conventionals	Percent Moisture			
Conventionals	Total Organic Carbon			
Conventionals	Cyanide, Total	20 U	20 U	20 U
Conventionals	Total Sulfide	1000 U	1000 U	1700 U
Dioxins/Furans	2,3,7,8-TCDD	0.00046 U	0.00072 U	0.00051 U
Dioxins/Furans	Total HxCDD	0.00043 U	0.0013 U	0.00054 U
Dioxins/Furans	Total HxCDF	0.00024 U	0.00068 U	0.00029 U
Dioxins/Furans	Total PeCDD	0.001 U	0.0033 U	0.00095 U
Dioxins/Furans	Total PeCDF	0.00048 U	0.0013 U	0.00066 U
Dioxins/Furans	Total TCDD	0.00046 U	0.00072 U	0.00051 U
Dioxins/Furans	Total TCDF	0.00071 U	0.00084 U	0.00045 U
Herbicides	2,4,5-T	2 U	2 U	2 U
Herbicides	2,4,5-TP (Silvex)	2 U	2 U	2 U
Herbicides	2,4-D	2 U	2 U	2 U
Herbicides	Dinoseb	7 U	7 U	7 U
Metals	Antimony	0.86 B	0.89 B	3 U
Metals	Arsenic	27	7	5.2
Metals	Barium	25	21	31
Metals	Beryllium	4 U	4 U	4 U
Metals	Cadmium	1.3 B	1.4 B	1.6 B
Metals	Chromium	50 U	50 U	50 U
Metals	Cobalt	14 B	50 U	50 U
Metals	Copper	7.2 B	7.9 B	3.9 B
Metals	Lead	0.22 B	0.099 B	0.098 B
Metals	Mercury	0.2 U	0.2 U	0.2 U
Metals	Nickel	24 B	9.3 B	18 B
Metals	Selenium	35	4.8	5.1
Metals	Silver	2 U	2 U	2 U
Metals	Thallium	0.082 B	1 U	0.14 B
Metals	Tin	100 U	100 U	100 U
Metals	Vanadium	50 U	50 U	50 U
Metals	Zinc	16	16	9.9 B
Pesticides/PCBs	4,4'-DDD	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	4,4'-DDE	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	4,4'-DDT	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Aldrin	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	alpha-BHC	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Aroclor 1016	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1221	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1232	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1242	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1248	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1254	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1260	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	beta-BHC	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Chlordane (technical)	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Chlorobenzilate	2 U	2 U	2 U
Pesticides/PCBs	delta-BHC	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Diallate	1 U	1 U	1 U
Pesticides/PCBs	Dieldrin	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan I	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan II	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan sulfate	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endrin	0.05 U	0.05 U	0.05 U

Waste Management
Austin Community Landfill
Groundwater Analytical Data

Fraction	Parameter Name	PZ-26	MW-29A	MW-30
Pesticides/PCBs	Endrin aldehyde	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Heptachlor	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Heptachlor epoxide	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Isodrin	0.1 U	0.1 U	0.1 U
Pesticides/PCBs	Kepone	1 U	1 U	1 U
Pesticides/PCBs	Methoxychlor	0.1 U	0.1 U	0.1 U
Pesticides/PCBs	Toxaphene	2 U	2 U	2 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	10 U	10 U	10 U
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	0.2 U	0.2 U	0.2 U
Semivolatiles	1,2-Dibromoethane (EDB)	0.05 U	0.05 U	0.05 U
Semivolatiles	1,3,5-Trinitrobenzene	50 U	50 U	50 U
Semivolatiles	1,3-Dinitrobenzene	10 U	10 U	10 U
Semivolatiles	1,4-Naphthoquinone	10 U	10 U	10 U
Semivolatiles	1-Naphthylamine	10 U	10 U	10 U
Semivolatiles	2,2'-oxybis(1-Chloropropane)	10 U	10 U	10 U
Semivolatiles	2,3,4,6-Tetrachlorophenol	10 U	10 U	10 U
Semivolatiles	2,4,5-Trichlorophenol	10 U	10 U	10 U
Semivolatiles	2,4,6-Trichlorophenol	10 U	10 U	10 U
Semivolatiles	2,4-Dichlorophenol	10 U	10 U	10 U
Semivolatiles	2,4-Dimethylphenol	10 U	10 U	10 U
Semivolatiles	2,4-Dinitrophenol	50 U	50 U	50 U
Semivolatiles	2,4-Dinitrotoluene	10 U	10 U	10 U
Semivolatiles	2,6-Dichlorophenol	10 U	10 U	10 U
Semivolatiles	2,6-Dinitrotoluene	10 U	10 U	10 U
Semivolatiles	2-Acetylaminofluorene	20 U	20 U	20 U
Semivolatiles	2-Chloronaphthalene	10 U	10 U	10 U
Semivolatiles	2-Chlorophenol	10 U	10 U	10 U
Semivolatiles	2-Methylnaphthalene	10 U	10 U	10 U
Semivolatiles	2-Methylphenol	10 U	10 U	10 U
Semivolatiles	2-Naphthylamine	10 U	10 U	10 U
Semivolatiles	2-Nitroaniline	50 U	50 U	50 U
Semivolatiles	2-Nitrophenol	10 U	10 U	10 U
Semivolatiles	2-Picoline	50 U	50 U	50 U
Semivolatiles	3,3'-Dichlorobenzidine	50 U	50 U	50 U
Semivolatiles	3,3'-Dimethylbenzidine	10 U	10 U	10 U
Semivolatiles	3-Methylcholanthrene	10 U	10 U	10 U
Semivolatiles	3-Methylphenol	10 U	10 U	10 U
Semivolatiles	3-Nitroaniline	50 U	50 U	50 U
Semivolatiles	4,6-Dinitro-2-methylphenol	50 U	50 U	50 U
Semivolatiles	4-Aminobiphenyl	20 U	20 U	20 U
Semivolatiles	4-Bromophenyl phenyl ether	10 U	10 U	10 U
Semivolatiles	4-Chloro-3-methylphenol	20 U	20 U	20 U
Semivolatiles	4-Chloroaniline	20 U	20 U	20 U
Semivolatiles	4-Chlorophenyl phenyl ether	10 U	10 U	10 U
Semivolatiles	4-Dimethylaminoazobenzene	10 U	10 U	10 U
Semivolatiles	4-Methylphenol	10 U	10 U	10 U
Semivolatiles	4-Nitroaniline	50 U	50 U	50 U
Semivolatiles	4-Nitrophenol	50 U	50 U	50 U
Semivolatiles	4-Phenylenediamine	100 U	100 U	100 U
Semivolatiles	5-Nitro-o-toluidine	10 U	10 U	10 U
Semivolatiles	7,12-Dimethylbenz(a)anthracene	500 U	500 U	500 U
Semivolatiles	Acenaphthene	10 U	10 U	10 U
Semivolatiles	Acenaphthylene	10 U	10 U	10 U

Waste Management
Austin Community Landfill
Groundwater Analytical Data

Fraction	Parameter Name	PZ-26	MW-29A	MW-30
Semivolatiles	Acetophenone	10 U	10 U	10 U
Semivolatiles	alpha,alpha-Dimethylphenethylamine	100 U	100 U	100 U
Semivolatiles	Aniline	10 U	10 U	10 U
Semivolatiles	Anthracene	10 U	10 U	10 U
Semivolatiles	Aramite	10 U	10 U	10 U
Semivolatiles	Benzo(a)anthracene	10 U	10 U	10 U
Semivolatiles	Benzo(a)pyrene	10 U	10 U	10 U
Semivolatiles	Benzo(b)fluoranthene	10 U	10 U	10 U
Semivolatiles	Benzo(ghi)perylene	10 U	10 U	10 U
Semivolatiles	Benzo(k)fluoranthene	10 U	10 U	10 U
Semivolatiles	Benzyl alcohol	20 U	20 U	20 U
Semivolatiles	bis(2-Chloroethoxy)methane	10 U	10 U	10 U
Semivolatiles	bis(2-Chloroethyl) ether	10 U	10 U	10 U
Semivolatiles	bis(2-Ethylhexyl) phthalate	10 U	10 U	10 U
Semivolatiles	Butyl benzyl phthalate	10 U	10 U	10 U
Semivolatiles	Chrysene	10 U	10 U	10 U
Semivolatiles	Di-n-butyl phthalate	10 U	10 U	10 U
Semivolatiles	Di-n-octyl phthalate	10 U	10 U	10 U
Semivolatiles	Dibenz(a,h)anthracene	10 U	10 U	10 U
Semivolatiles	Dibenzofuran	10 U	10 U	10 U
Semivolatiles	Diethyl phthalate	10 U	10 U	10 U
Semivolatiles	Dimethoate	20 U	20 U	20 U
Semivolatiles	Dimethyl phthalate	10 U	10 U	10 U
Semivolatiles	Diphenylamine	10 U	10 U	10 U
Semivolatiles	Disulfoton	10 U	10 U	10 U
Semivolatiles	Ethyl methanesulfonate	20 U	20 U	20 U
Semivolatiles	Famphur	50 U	50 U	50 U
Semivolatiles	Fluoranthene	10 U	10 U	10 U
Semivolatiles	Fluorene	10 U	10 U	10 U
Semivolatiles	Hexachlorobenzene	10 U	10 U	10 U
Semivolatiles	Hexachlorobutadiene	10 U	10 U	10 U
Semivolatiles	Hexachlorocyclopentadiene	50 U	50 U	50 U
Semivolatiles	Hexachloroethane	10 U	10 U	10 U
Semivolatiles	Hexachlorophene	400 U	400 U	400 U
Semivolatiles	Hexachloropropene	10 U	10 U	10 U
Semivolatiles	Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U
Semivolatiles	Isophorone	10 U	10 U	10 U
Semivolatiles	Isosafrole	10 U	10 U	10 U
Semivolatiles	Kepone	50 U	50 U	50 U
Semivolatiles	Methapyrilene	100 U	100 U	100 U
Semivolatiles	Methyl methanesulfonate	10 U	10 U	10 U
Semivolatiles	Methyl parathion	10 U	10 U	10 U
Semivolatiles	N-Nitrosodi-n-butylamine	10 U	10 U	10 U
Semivolatiles	N-Nitrosodi-n-propylamine	10 U	10 U	10 U
Semivolatiles	N-Nitrosodiethylamine	20 U	20 U	20 U
Semivolatiles	N-Nitrosodimethylamine	10 U	10 U	10 U
Semivolatiles	N-Nitrosodiphenylamine	10 U	10 U	10 U
Semivolatiles	N-Nitrosomethylethylamine	100 U	100 U	100 U
Semivolatiles	N-Nitrosomorpholine	20 U	20 U	20 U
Semivolatiles	N-Nitrosopiperidine	20 U	20 U	20 U
Semivolatiles	N-Nitrosopyrrolidine	20 U	20 U	20 U
Semivolatiles	Naphthalene	10 U	10 U	10 U
Semivolatiles	Nitrobenzene	10 U	10 U	10 U
Semivolatiles	Nitroquinoline-1-oxide	20 U	20 U	20 U

Waste Management
Austin Community Landfill
Groundwater Analytical Data

Fraction	Parameter Name	PZ-26	MW-29A	MW-30
Semivolatiles	O,O,O-Triethyl phosphorothioate	10 U	10 U	10 U
Semivolatiles	o-Toluidine	10 U	10 U	10 U
Semivolatiles	Parathion	10 U	10 U	10 U
Semivolatiles	Pentachlorobenzene	10 U	10 U	10 U
Semivolatiles	Pentachloroethane	10 U	10 U	10 U
Semivolatiles	Pentachloronitrobenzene	20 U	20 U	20 U
Semivolatiles	Pentachlorophenol	50 U	50 U	50 U
Semivolatiles	Phenacetin	20 U	20 U	20 U
Semivolatiles	Phenanthrene	10 U	10 U	10 U
Semivolatiles	Phenol	10 U	10 U	10 U
Semivolatiles	Phorate	10 U	10 U	10 U
Semivolatiles	Pronamide	10 U	10 U	10 U
Semivolatiles	Pyrene	10 U	10 U	10 U
Semivolatiles	Pyridine	20 U	20 U	20 U
Semivolatiles	Safrole	10 U	10 U	10 U
Semivolatiles	Sulfotepp	100 U	100 U	100 U
Semivolatiles	Thionazin	50 U	50 U	50 U
Volatiles	1,1,1,2-Tetrachloroethane	5 U	5 U	5 U
Volatiles	1,1,1-Trichloroethane	5 U	5 U	5 U
Volatiles	1,1,2,2-Tetrachloroethane	5 U	5 U	5 U
Volatiles	1,1,2-Trichloroethane	5 U	5 U	5 U
Volatiles	1,1-Dichloroethane	5 U	5 U	0.24 J
Volatiles	1,1-Dichloroethene	5 U	5 U	5 U
Volatiles	1,2,3-Trichloropropane	5 U	5 U	5 U
Volatiles	1,2,4-Trichlorobenzene	0.19 J	5 U	5 U
Volatiles	1,2-Dichlorobenzene	5 U	5 U	5 U
Volatiles	1,2-Dichloroethane	5 U	5 U	5 U
Volatiles	1,2-Dichloropropane	5 U	5 U	5 U
Volatiles	1,3-Dichlorobenzene	5 U	5 U	5 U
Volatiles	1,4-Dichlorobenzene	5 U	5 U	5 U
Volatiles	1,4-Dioxane	230 J	20 J	500 U
Volatiles	2-Butanone (MEK)	50 U	50 U	50 U
Volatiles	2-Hexanone	50 U	50 U	50 U
Volatiles	4-Methyl-2-pentanone	50 U	50 U	50 U
Volatiles	Acetone	100 U	100 U	100 U
Volatiles	Acetonitrile	100 U	100 U	100 U
Volatiles	Acrolein	100 U	100 U	100 U
Volatiles	Acrylonitrile	100 U	100 U	100 U
Volatiles	Allyl chloride	5 U	5 U	5 U
Volatiles	Benzene	0.14 J	5 U	0.33 J
Volatiles	Bromodichloromethane	5 U	5 U	5 U
Volatiles	Bromoform	5 U	5 U	5 U
Volatiles	Bromomethane	5 U	5 U	5 U
Volatiles	Carbon disulfide	50 U	50 U	50 U
Volatiles	Carbon tetrachloride	5 U	5 U	5 U
Volatiles	Chlorobenzene	5 U	5 U	5 U
Volatiles	Chloroethane	5 U	5 U	5 U
Volatiles	Chloroform	5 U	5 U	5 U
Volatiles	Chloromethane	5 U	5 U	5 U
Volatiles	Chloroprene	5 U	5 U	5 U
Volatiles	cis-1,3-Dichloropropene	5 U	5 U	5 U
Volatiles	Dibromochloromethane	5 U	5 U	5 U
Volatiles	Dibromomethane	5 U	5 U	5 U
Volatiles	Dichlorodifluoromethane	5 U	5 U	5 U

Waste Management
Austin Community Landfill
Groundwater Analytical Data

Fraction	Parameter Name	PZ-26	MW-29A	MW-30
Volatiles	Ethyl methacrylate	5 U	5 U	5 U
Volatiles	Ethylbenzene	5 U	5 U	5 U
Volatiles	Iodomethane	5 U	5 U	5 U
Volatiles	Isobutyl alcohol	100 U	100 U	100 U
Volatiles	m-Xylene & p-Xylene	5 U	5 U	5 U
Volatiles	Methacrylonitrile	100 U	100 U	100 U
Volatiles	Methyl methacrylate	5 U	5 U	5 U
Volatiles	Methylene chloride	5 U	5 U	0.92 J
Volatiles	o-Xylene	5 U	5 U	5 U
Volatiles	Propionitrile	100 U	100 U	100 U
Volatiles	Styrene	5 U	5 U	5 U
Volatiles	Tetrachloroethene	5 U	5 U	0.13 J
Volatiles	Toluene	5 U	5 U	5 U
Volatiles	trans-1,2-Dichloroethene	5 U	5 U	5 U
Volatiles	trans-1,3-Dichloropropene	5 U	5 U	5 U
Volatiles	trans-1,4-Dichloro-2-butene	5 U	5 U	5 U
Volatiles	Trichloroethene	5 U	5 U	5 U
Volatiles	Trichlorofluoromethane	5 U	5 U	5 U
Volatiles	Vinyl acetate	50 U	50 U	50 U
Volatiles	Vinyl chloride	2 U	2 U	2 U

Waste Management
Austin Community Landfill
Surface Water Analytical Data
March 2000

Lab Fraction	Parameter Name	SW-1	SW-2	SW-3	SW-4
Conventionals	Cyanide, Total	20 U	20 U	20 U	20 U
Conventionals	Total Sulfide	1700 U	1700 U	1700 U	1700 U
Dioxins/Furans	2,3,7,8-TCDD	0.00041 U	0.00048 U	0.00051 U	0.00061 U
Dioxins/Furans	Total HxCDD	0.00061 U	0.00085 U	0.00068 U	0.00063 U
Dioxins/Furans	Total HxCDF	0.00031 U	0.00036 U	0.00033 U	0.00043 U
Dioxins/Furans	Total PeCDD	0.00088 U	0.00088 U	0.0012 U	0.0011 U
Dioxins/Furans	Total PeCDF	0.0007 U	0.00081 U	0.00055 U	0.00069 U
Dioxins/Furans	Total TCDD	0.00041 U	0.00048 U	0.00051 U	0.00061 U
Dioxins/Furans	Total TCDF	0.00049 U	0.00045 U	0.00057 U	0.00042 U
Herbicides	2,4,5-T	2 U	2 U	2 U	2 U
Herbicides	2,4,5-TP (Silvex)	2 U	2 U	2 U	2 U
Herbicides	2,4-D	2 U	2 U	2 U	2 U
Herbicides	Dinoseb	7 U	7 U	7 U	7 U
Metals	Antimony	0.57 B	3 U	3 U	3 U
Metals	Arsenic	2.9	5.5	6.3	5.2
Metals	Barium	37	62	94	267
Metals	Beryllium	4 U	4 U	4 U	4 U
Metals	Cadmium	5 U	5 U	5 U	5 U
Metals	Chromium	50 U	50 U	50 U	50 U
Metals	Cobalt	50 U	50 U	50 U	50 U
Metals	Copper	2.6 B	2.9 B	3.6 B	2.2 B
Metals	Lead	0.32 B	0.15 B	0.66 B	0.12 B
Metals	Mercury	0.2 U	0.2 U	0.2 U	0.2 U
Metals	Nickel	50 U	50 U	50 U	50 U
Metals	Selenium	5	4.8	4.5	3
Metals	Silver	2 U	2 U	2 U	2 U
Metals	Thallium	0.053 B	0.067 B	0.074 B	0.065 B
Metals	Tin	100 U	100 U	100 U	100 U
Metals	Vanadium	3 B	50 U	3.6 B	50 U
Metals	Zinc	5.8 B	3.8 B	9.6 B	8.3 B
Pesticides/PCBs	4,4'-DDD	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	4,4'-DDE	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	4,4'-DDT	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Aldrin	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	alpha-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Aroclor 1016	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1221	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1232	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1242	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1248	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1254	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Aroclor 1260	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	beta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Chlordane (technical)	0.5 U	0.5 U	0.5 U	0.5 U
Pesticides/PCBs	Chlorobenzilate	2 U	2 U	2 U	2 U
Pesticides/PCBs	delta-BHC	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Diallate	1 U	1 U	1 U	1 U
Pesticides/PCBs	Dieldrin	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan I	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan II	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endosulfan sulfate	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endrin	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Endrin aldehyde	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Heptachlor	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Heptachlor epoxide	0.05 U	0.05 U	0.05 U	0.05 U
Pesticides/PCBs	Isodrin	0.1 U	0.1 U	0.1 U	0.1 U
Pesticides/PCBs	Kepone	1 U	1 U	1 U	1 U
Pesticides/PCBs	Methoxychlor	0.1 U	0.1 U	0.1 U	0.1 U
Pesticides/PCBs	Toxaphene	2 U	2 U	2 U	2 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	10 U	10 U	10 U	10 U
Semivolatiles	1,2-Dibromo-3-chloropropane (DBCP)	0.2 U	0.2 U	0.2 U	0.2 U
Semivolatiles	1,2-Dibromoethane (EDB)	0.05 U	0.05 U	0.05 U	0.05 U
Semivolatiles	1,3,5-Trinitrobenzene	50 U	50 U	50 U	50 U
Semivolatiles	1,3-Dinitrobenzene	10 U	10 U	10 U	10 U
Semivolatiles	1,4-Naphthoquinone	10 U	10 U	10 U	10 U
Semivolatiles	1-Naphthylamine	10 U	10 U	10 U	10 U
Semivolatiles	2,2'-oxybis(1-Chloropropane)	10 U	10 U	10 U	10 U
Semivolatiles	2,3,4,6-Tetrachlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2,4,5-Trichlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2,4-Dichlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2,4-Dimethylphenol	10 U	10 U	10 U	10 U
Semivolatiles	2,4-Dinitrophenol	50 U	50 U	50 U	50 U

Waste Management
Austin Community Landfill
Surface Water Analytical Data
March 2000

Fraction	Parameter Name	SW-1	SW-2	SW-3	SW-4
Semivolatiles	2,4-Dinitrotoluene	10 U	10 U	10 U	10 U
Semivolatiles	2,6-Dichlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
Semivolatiles	2-Acetylaminofluorene	20 U	20 U	20 U	20 U
Semivolatiles	2-Chloronaphthalene	10 U	10 U	10 U	10 U
Semivolatiles	2-Chlorophenol	10 U	10 U	10 U	10 U
Semivolatiles	2-Methylnaphthalene	10 U	10 U	10 U	10 U
Semivolatiles	2-Methylphenol	10 U	10 U	10 U	10 U
Semivolatiles	2-Naphthylamine	10 U	10 U	10 U	10 U
Semivolatiles	2-Nitroaniline	50 U	50 U	50 U	50 U
Semivolatiles	2-Nitrophenol	10 U	10 U	10 U	10 U
Semivolatiles	2-Picoline	50 U	50 U	50 U	50 U
Semivolatiles	3,3'-Dichlorobenzidine	50 U	50 U	50 U	50 U
Semivolatiles	3,3'-Dimethylbenzidine	10 U	10 U	10 U	10 U
Semivolatiles	3-Methylcholanthrene	10 U	10 U	10 U	10 U
Semivolatiles	3-Methylphenol	10 U	10 U	10 U	10 U
Semivolatiles	3-Nitroaniline	50 U	50 U	50 U	50 U
Semivolatiles	4,6-Dinitro-2-methylphenol	50 U	50 U	50 U	50 U
Semivolatiles	4-Aminobiphenyl	20 U	20 U	20 U	20 U
Semivolatiles	4-Bromophenyl phenyl ether	10 U	10 U	10 U	10 U
Semivolatiles	4-Chloro-3-methylphenol	20 U	20 U	20 U	20 U
Semivolatiles	4-Chloroaniline	20 U	20 U	20 U	20 U
Semivolatiles	4-Chlorophenyl phenyl ether	10 U	10 U	10 U	10 U
Semivolatiles	4-Dimethylaminoazobenzene	10 U	10 U	10 U	10 U
Semivolatiles	4-Methylphenol	10 U	10 U	10 U	10 U
Semivolatiles	4-Nitroaniline	50 U	50 U	50 U	50 U
Semivolatiles	4-Nitrophenol	50 U	50 U	50 U	50 U
Semivolatiles	4-Phenylenediamine	100 U	100 U	100 U	100 U
Semivolatiles	5-Nitro-o-toluidine	10 U	10 U	10 U	10 U
Semivolatiles	7,12-Dimethylbenz(a)anthracene	500 U	500 U	500 U	500 U
Semivolatiles	Acenaphthene	10 U	10 U	10 U	10 U
Semivolatiles	Acenaphthylene	10 U	10 U	10 U	10 U
Semivolatiles	Acetophenone	10 U	10 U	10 U	10 U
Semivolatiles	alpha,alpha-Dimethylphenethylamine	100 U	100 U	100 U	100 U
Semivolatiles	Aniline	10 U	10 U	10 U	10 U
Semivolatiles	Anthracene	10 U	10 U	10 U	10 U
Semivolatiles	Aramite	10 U	10 U	10 U	10 U
Semivolatiles	Benzo(a)anthracene	10 U	10 U	10 U	10 U
Semivolatiles	Benzo(a)pyrene	10 U	10 U	10 U	10 U
Semivolatiles	Benzo(b)fluoranthene	10 U	10 U	10 U	10 U
Semivolatiles	Benzo(ghi)perylene	10 U	10 U	10 U	10 U
Semivolatiles	Benzo(k)fluoranthene	10 U	10 U	10 U	10 U
Semivolatiles	Benzyl alcohol	20 U	20 U	20 U	20 U
Semivolatiles	bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U
Semivolatiles	bis(2-Chloroethyl) ether	10 U	10 U	10 U	10 U
Semivolatiles	bis(2-Ethylhexyl) phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Butyl benzyl phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Chrysene	10 U	10 U	10 U	10 U
Semivolatiles	Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U
Semivolatiles	Dibenzofuran	10 U	10 U	10 U	10 U
Semivolatiles	Diethyl phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Dimethoate	20 U	20 U	20 U	20 U
Semivolatiles	Dimethyl phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Di-n-butyl phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Di-n-octyl phthalate	10 U	10 U	10 U	10 U
Semivolatiles	Diphenylamine	10 U	10 U	10 U	10 U
Semivolatiles	Disulfoton	10 U	10 U	10 U	10 U
Semivolatiles	Ethyl methanesulfonate	20 U	20 U	20 U	20 U
Semivolatiles	Famphur	50 U	50 U	50 U	50 U
Semivolatiles	Fluoranthene	10 U	10 U	10 U	10 U
Semivolatiles	Fluorene	10 U	10 U	10 U	10 U
Semivolatiles	Hexachlorobenzene	10 U	10 U	10 U	10 U
Semivolatiles	Hexachlorobutadiene	10 U	10 U	10 U	10 U
Semivolatiles	Hexachlorocyclopentadiene	50 U	50 U	50 U	50 U
Semivolatiles	Hexachloroethane	10 U	10 U	10 U	10 U
Semivolatiles	Hexachlorophene	400 U	400 U	400 U	400 U
Semivolatiles	Hexachloropropene	10 U	10 U	10 U	10 U
Semivolatiles	Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U
Semivolatiles	Isophorone	10 U	10 U	10 U	10 U
Semivolatiles	Isosafrole	10 U	10 U	10 U	10 U
Semivolatiles	Kepone	50 U	50 U	50 U	50 U
Semivolatiles	Methapyrilene	100 U	100 U	100 U	100 U
Semivolatiles	Methyl methanesulfonate	10 U	10 U	10 U	10 U
Semivolatiles	Methyl parathion	10 U	10 U	10 U	10 U

Waste Management
Austin Community Landfill
Surface Water Analytical Data
March 2000

Fraction	Parameter Name	SW-1	SW-2	SW-3	SW-4
Semivolatiles	Naphthalene	10 U	10 U	10 U	10 U
Semivolatiles	Nitrobenzene	10 U	10 U	10 U	10 U
Semivolatiles	Nitroquinoline-1-oxide	20 U	20 U	20 U	20 U
Semivolatiles	N-Nitrosodiethylamine	20 U	20 U	20 U	20 U
Semivolatiles	N-Nitrosodimethylamine	10 U	19	10 U	10 U
Semivolatiles	N-Nitrosodi-n-butylamine	10 U	10 U	10 U	10 U
Semivolatiles	N-Nitrosodi-n-propylamine	10 U	10 U	10 U	10 U
Semivolatiles	N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
Semivolatiles	N-Nitrosomethylethylamine	100 U	100 U	100 U	100 U
Semivolatiles	N-Nitrosomorpholine	20 U	20 U	20 U	20 U
Semivolatiles	N-Nitrosopiperidine	20 U	20 U	20 U	20 U
Semivolatiles	N-Nitrosopyrrolidine	20 U	20 U	20 U	20 U
Semivolatiles	O,O,O-Triethyl phosphorothioate	10 U	10 U	10 U	10 U
Semivolatiles	o-Toluidine	10 U	10 U	10 U	10 U
Semivolatiles	Parathion	10 U	10 U	10 U	10 U
Semivolatiles	Pentachlorobenzene	10 U	10 U	10 U	10 U
Semivolatiles	Pentachloroethane	10 U	10 U	10 U	10 U
Semivolatiles	Pentachloronitrobenzene	20 U	20 U	20 U	20 U
Semivolatiles	Pentachlorophenol	50 U	50 U	50 U	50 U
Semivolatiles	Phenacetin	20 U	20 U	20 U	20 U
Semivolatiles	Phenanthrene	10 U	10 U	10 U	10 U
Semivolatiles	Phenol	10 U	10 U	10 U	10 U
Semivolatiles	Phorate	10 U	10 U	10 U	10 U
Semivolatiles	Pronamide	10 U	10 U	10 U	10 U
Semivolatiles	Pyrene	10 U	10 U	10 U	10 U
Semivolatiles	Pyridine	20 U	20 U	20 U	20 U
Semivolatiles	Safrole	10 U	10 U	10 U	10 U
Semivolatiles	Sulfotepp	100 U	100 U	100 U	100 U
Semivolatiles	Thionazin	50 U	50 U	50 U	50 U
Volatiles	1,1,1,2-Tetrachloroethane	5 U	5 U	5 U	5 U
Volatiles	1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
Volatiles	1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U
Volatiles	1,1,2-Trichloroethane	5 U	5 U	5 U	5 U
Volatiles	1,1-Dichloroethane	5 U	5 U	5 U	5 U
Volatiles	1,1-Dichloroethene	5 U	5 U	5 U	5 U
Volatiles	1,2,3-Trichloropropane	5 U	5 U	5 U	5 U
Volatiles	1,2,4-Trichlorobenzene	5 U	5 U	5 U	5 U
Volatiles	1,2-Dichlorobenzene	5 U	5 U	5 U	5 U
Volatiles	1,2-Dichloroethane	5 U	5 U	5 U	5 U
Volatiles	1,2-Dichloropropane	5 U	5 U	5 U	5 U
Volatiles	1,3-Dichlorobenzene	5 U	5 U	5 U	5 U
Volatiles	1,4-Dichlorobenzene	5 U	5 U	5 U	5 U
Volatiles	1,4-Dioxane	500 U	500 U	500 U	500 U
Volatiles	2-Butanone (MEK)	50 U	50 U	50 U	50 U
Volatiles	2-Hexanone	50 U	50 U	50 U	50 U
Volatiles	4-Methyl-2-pentanone	50 U	50 U	50 U	50 U
Volatiles	Acetone	100 U	100 U	2.8 J	100 U
Volatiles	Acetonitrile	100 U	100 U	100 U	100 U
Volatiles	Acrolein	100 U	100 U	100 U	100 U
Volatiles	Acrylonitrile	100 U	100 U	100 U	100 U
Volatiles	Allyl chloride	5 U	5 U	5 U	5 U
Volatiles	Benzene	5 U	5 U	5 U	5 U
Volatiles	Bromodichloromethane	5 U	5 U	5 U	5 U
Volatiles	Bromoform	5 U	5 U	5 U	5 U
Volatiles	Bromomethane	5 U	5 U	5 U	5 U
Volatiles	Carbon disulfide	50 U	50 U	50 U	50 U
Volatiles	Carbon tetrachloride	5 U	5 U	5 U	5 U
Volatiles	Chlorobenzene	5 U	5 U	5 U	5 U
Volatiles	Chloroethane	5 U	5 U	5 U	5 U
Volatiles	Chloroform	5 U	5 U	5 U	5 U
Volatiles	Chloromethane	5 U	5 U	5 U	5 U
Volatiles	Chloroprene	5 U	5 U	5 U	5 U
Volatiles	cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Volatiles	Dibromochloromethane	5 U	5 U	5 U	5 U
Volatiles	Dibromomethane	5 U	5 U	5 U	5 U
Volatiles	Dichlorodifluoromethane	5 U	5 U	5 U	5 U
Volatiles	Ethyl methacrylate	5 U	5 U	5 U	5 U
Volatiles	Ethylbenzene	5 U	5 U	5 U	5 U
Volatiles	Iodomethane	5 U	5 U	5 U	5 U
Volatiles	Isobutyl alcohol	100 U	100 U	100 U	100 U
Volatiles	Methacrylonitrile	100 U	100 U	100 U	100 U
Volatiles	Methyl methacrylate	5 U	5 U	5 U	5 U
Volatiles	Methylene chloride	0.88 J	0.68 J	0.94 J	0.91 J
Volatiles	m-Xylene & p-Xylene	5 U	5 U	5 U	5 U

Waste Management
Austin Community Landfill
Surface Water Analytical Data
March 2000

Fraction	Parameter Name	SW-1	SW-2	SW-3	SW-4
Volatiles	o-Xylene	5 U	5 U	5 U	5 U
Volatiles	Propionitrile	100 U	100 U	100 U	100 U
Volatiles	Styrene	5 U	5 U	5 U	5 U
Volatiles	Tetrachloroethene	5 U	5 U	5 U	5 U
Volatiles	Toluene	5 U	5 U	5 U	5 U
Volatiles	trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U
Volatiles	trans-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Volatiles	trans-1,4-Dichloro-2-butene	5 U	5 U	5 U	5 U
Volatiles	Trichloroethene	5 U	5 U	5 U	5 U
Volatiles	Trichlorofluoromethane	5 U	5 U	5 U	5 U
Volatiles	Vinyl acetate	50 U	50 U	50 U	50 U
Volatiles	Vinyl chloride	2 U	2 U	2 U	2 U

Waste Management
Austin Community Landfill
Sediment Analytical Data
March 2000

Fraction	Parameter Name	SED-1	SED-2	SED-3	SED-4
Conventionals	Cyanide, Total	790 U	760 U	920 U	790 U
Conventionals	Percent Moisture	37	34	46	37
Conventionals	Total Organic Carbon	32400000	23500000	7820000	17100000
Conventionals	Total Organic Carbon	30300000	25600000	9350000	16200000
Conventionals	Total Sulfide	7900 U	7600 U	9200 U	7900 U
Dioxins/Furans	2,3,7,8-TCDD	0.00013 U	0.00013 U	0.00017 U	0.00012 U
Dioxins/Furans	Total HxCDD	0.00016 U	0.00017 U	0.00015 U	0.00014 U
Dioxins/Furans	Total HxCDF	0.000089 U	0.0001 U	0.00012 U	0.000094 U
Dioxins/Furans	Total PeCDD	0.00025 U	0.00027 U	0.00053 U	0.00038 U
Dioxins/Furans	Total PeCDF	0.00012 U	0.00013 U	0.00025 U	0.0002 U
Dioxins/Furans	Total TCDD	0.00013 U	0.00013 U	0.00017 U	0.00012 U
Dioxins/Furans	Total TCDF	0.00011 U	0.00016 U	0.00012 U	0.00013 U
Herbicides	2,4,5-T	32 U	30 U	37 U	32 U
Herbicides	2,4,5-TP (Silvex)	32 U	30 U	37 U	32 U
Herbicides	2,4-D	130 U	120 U	150 U	130 U
Herbicides	Dinoseb	19 U	18 U	22 U	19 U
Metals	Antimony	474 U	453 U	553 U	475 U
Metals	Arsenic	8740	4740	7870	2930
Metals	Barium	161000	80900	76000	73100
Metals	Beryllium	1000	830	770 B	800
Metals	Cadmium	470 B	270 B	330 B	240 B
Metals	Chromium	19800	18300	20800	21800
Metals	Cobalt	17100	5900 B	3900 B	5900 B
Metals	Copper	8400	9200	7900 B	9900
Metals	Lead	16000	11500	9060	9800
Metals	Mercury	19 B	16 B	33 B	17 B
Metals	Nickel	24000	15400	14700	14300
Metals	Selenium	214 B	273 B	319 B	181 B
Metals	Silver	46 B	36 B	35 B	25 B
Metals	Thallium	164	133 B	169 B	118 B
Metals	Tin	15800 U	15100 U	18400 U	15800 U
Metals	Vanadium	57500	25700	25200	28500
Metals	Zinc	36000	44600	45200	43700
Pesticides/PCBs	4,4'-DDD	1 J	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	4,4'-DDE	1.6 J	0.79 J	0.67 J	0.76 J
Pesticides/PCBs	4,4'-DDT	0.29 J	0.29 J	3.1 U	2.7 U
Pesticides/PCBs	Aldrin	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	alpha-BHC	2.7 U	0.54 J	0.59 J	0.6 J
Pesticides/PCBs	Aroclor 1016	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1221	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1232	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1242	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1248	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1254	52 U	50 U	61 U	52 U
Pesticides/PCBs	Aroclor 1260	52 U	50 U	61 U	52 U
Pesticides/PCBs	beta-BHC	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Chlordane (technical)	27 U	26 U	31 U	27 U
Pesticides/PCBs	Chlorobenzilate	5.2 U	5 U	6.1 U	5.2 U
Pesticides/PCBs	delta-BHC	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Diallate	52 U	50 U	61 U	52 U
Pesticides/PCBs	Dieldrin	0.35 J	0.36 J	3.1 U	2.7 U
Pesticides/PCBs	Endosulfan I	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Endosulfan II	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Endosulfan sulfate	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Endrin	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Endrin aldehyde	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	gamma-BHC (Lindane)	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Heptachlor	2.7 U	0.46 J	3.1 U	0.55 J
Pesticides/PCBs	Heptachlor epoxide	11 U	0.27 J	12 U	11 U
Pesticides/PCBs	Isodrin	2.7 U	2.6 U	3.1 U	2.7 U
Pesticides/PCBs	Kepone	52 U	50 U	61 U	52 U
Pesticides/PCBs	Methoxychlor	5.2 U	5 U	6.1 U	5.2 U
Pesticides/PCBs	Toxaphene	27 U	26 U	31 U	27 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	520 U	500 U	610 U	520 U
Semivolatiles	1,3,5-Trinitrobenzene	2500 U	2400 U	2900 U	2500 U

Waste Management
Austin Community Landfill
Sediment Analytical Data
March 2000

Fraction	Parameter Name	SED-1	SED-2	SED-3	SED-4
Semivolatiles	1,3-Dinitrobenzene	520 U	500 U	610 U	520 U
Semivolatiles	1,4-Naphthoquinone	2500 U	2400 U	2900 U	2500 U
Semivolatiles	1-Naphthylamine	520 U	500 U	610 U	520 U
Semivolatiles	2,2'-oxybis(1-Chloropropane)	520 U	500 U	610 U	520 U
Semivolatiles	2,3,4,6-Tetrachlorophenol	2500 U	2400 U	2900 U	2500 U
Semivolatiles	2,4,5-Trichlorophenol	520 U	500 U	610 U	520 U
Semivolatiles	2,4,6-Trichlorophenol	520 U	500 U	610 U	520 U
Semivolatiles	2,4-Dichlorophenol	520 U	500 U	610 U	520 U
Semivolatiles	2,4-Dimethylphenol	520 U	500 U	610 U	520 U
Semivolatiles	2,4-Dinitrophenol	2500 U	2400 U	2900 U	2500 U
Semivolatiles	2,4-Dinitrotoluene	520 U	500 U	610 U	520 U
Semivolatiles	2,6-Dichlorophenol	520 U	500 U	610 U	520 U
Semivolatiles	2,6-Dinitrotoluene	520 U	500 U	610 U	520 U
Semivolatiles	2-Acetylaminofluorene	5200 U	5000 U	6100 U	5200 U
Semivolatiles	2-Chloronaphthalene	520 U	500 U	610 U	520 U
Semivolatiles	2-Chlorophenol	520 U	500 U	610 U	520 U
Semivolatiles	2-Methylnaphthalene	520 U	500 U	610 U	520 U
Semivolatiles	2-Methylphenol	520 U	500 U	610 U	520 U
Semivolatiles	2-Naphthylamine	520 U	500 U	610 U	520 U
Semivolatiles	2-Nitroaniline	2500 U	2400 U	2900 U	2500 U
Semivolatiles	2-Nitrophenol	520 U	500 U	610 U	520 U
Semivolatiles	2-Picoline	1000 U	1000 U	1200 U	1000 U
Semivolatiles	3,3'-Dichlorobenzidine	2500 U	2400 U	2900 U	2500 U
Semivolatiles	3,3'-Dimethylbenzidine	1000 U	1000 U	1200 U	1000 U
Semivolatiles	3-Methylcholanthrene	1000 U	1000 U	1200 U	1000 U
Semivolatiles	3-Methylphenol	520 U	500 U	610 U	520 U
Semivolatiles	3-Nitroaniline	2500 U	2400 U	2900 U	2500 U
Semivolatiles	4,6-Dinitro-2-methylphenol	2500 U	2400 U	2900 U	2500 U
Semivolatiles	4-Aminobiphenyl	2500 U	2400 U	2900 U	2500 U
Semivolatiles	4-Bromophenyl phenyl ether	520 U	500 U	610 U	520 U
Semivolatiles	4-Chloro-3-methylphenol	520 U	500 U	610 U	520 U
Semivolatiles	4-Chloroaniline	520 U	500 U	610 U	520 U
Semivolatiles	4-Chlorophenyl phenyl ether	520 U	500 U	610 U	520 U
Semivolatiles	4-Dimethylaminoazobenzene	1000 U	1000 U	1200 U	1000 U
Semivolatiles	4-Methylphenol	520 U	500 U	610 U	520 U
Semivolatiles	4-Nitroaniline	2500 U	2400 U	2900 U	2500 U
Semivolatiles	4-Nitrophenol	2500 U	2400 U	2900 U	2500 U
Semivolatiles	4-Phenylenediamine	2500 U	2400 U	2900 U	2500 U
Semivolatiles	5-Nitro-o-toluidine	1000 U	1000 U	1200 U	1000 U
Semivolatiles	7,12-Dimethylbenz(a)anthracene	1000 U	1000 U	1200 U	1000 U
Semivolatiles	a,a-Dimethylphenethylamine	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Acenaphthene	520 U	500 U	610 U	520 U
Semivolatiles	Acenaphthylene	520 U	500 U	610 U	520 U
Semivolatiles	Acetophenone	520 U	500 U	610 U	520 U
Semivolatiles	Aniline	520 U	500 U	610 U	520 U
Semivolatiles	Anthracene	520 U	500 U	610 U	520 U
Semivolatiles	Aramite	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Benzo(a)anthracene	520 U	500 U	610 U	520 U
Semivolatiles	Benzo(a)pyrene	520 U	500 U	610 U	520 U
Semivolatiles	Benzo(b)fluoranthene	520 U	500 U	610 U	520 U
Semivolatiles	Benzo(ghi)perylene	520 U	500 U	610 U	520 U
Semivolatiles	Benzo(k)fluoranthene	520 U	500 U	610 U	520 U
Semivolatiles	Benzyl alcohol	520 U	500 U	610 U	520 U
Semivolatiles	bis(2-Chloroethoxy)methane	520 U	500 U	610 U	520 U
Semivolatiles	bis(2-Chloroethyl) ether	520 U	500 U	610 U	520 U
Semivolatiles	bis(2-Ethylhexyl) phthalate	520 U	500 U	610 U	520 U
Semivolatiles	Butyl benzyl phthalate	520 U	500 U	610 U	520 U
Semivolatiles	Chrysene	520 U	500 U	610 U	520 U
Semivolatiles	Dibenz(a,h)anthracene	520 U	500 U	610 U	520 U
Semivolatiles	Dibenzofuran	520 U	500 U	610 U	520 U
Semivolatiles	Diethyl phthalate	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Dimethoate	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Dimethyl phthalate	520 U	500 U	610 U	520 U
Semivolatiles	Di-n-butyl phthalate	520 U	500 U	610 U	520 U
Semivolatiles	Di-n-octyl phthalate	520 U	500 U	610 U	520 U
Semivolatiles	Diphenylamine	520 U	500 U	610 U	520 U

Waste Management
Austin Community Landfill
Sediment Analytical Data
March 2000

Fraction	Parameter Name	SED-1	SED-2	SED-3	SED-4
Semivolatiles	Disulfoton	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Ethyl methanesulfonate	520 U	500 U	610 U	520 U
Semivolatiles	Famphur	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Fluoranthene	520 U	500 U	610 U	520 U
Semivolatiles	Fluorene	520 U	500 U	610 U	520 U
Semivolatiles	Hexachlorobenzene	520 U	500 U	610 U	520 U
Semivolatiles	Hexachlorobutadiene	520 U	500 U	610 U	520 U
Semivolatiles	Hexachlorocyclopentadiene	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Hexachloroethane	520 U	500 U	610 U	520 U
Semivolatiles	Hexachlorophene	5200 U	5000 U	6100 U	5200 U
Semivolatiles	Hexachloropropene	5200 U	5000 U	6100 U	5200 U
Semivolatiles	Indeno(1,2,3-cd)pyrene	520 U	500 U	610 U	520 U
Semivolatiles	Isophorone	520 U	500 U	610 U	520 U
Semivolatiles	Isosafrole	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Methapyrilene	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Methyl methanesulfonate	520 U	500 U	610 U	520 U
Semivolatiles	Methyl parathion	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Naphthalene	520 U	500 U	610 U	520 U
Semivolatiles	Nitrobenzene	520 U	500 U	610 U	520 U
Semivolatiles	Nitroquinoline-1-oxide	5200 U	5000 U	6100 U	5200 U
Semivolatiles	N-Nitrosodiethylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosodimethylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosodi-n-butylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosodi-n-propylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosodiphenylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosomethylethylamine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosomorpholine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosopiperidine	520 U	500 U	610 U	520 U
Semivolatiles	N-Nitrosopyrrolidine	520 U	500 U	610 U	520 U
Semivolatiles	O,O,O-Triethyl phosphorothioate	2500 U	2400 U	2900 U	2500 U
Semivolatiles	o-Toluidine	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Parathion	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Pentachlorobenzene	520 U	500 U	610 U	520 U
Semivolatiles	Pentachloroethane	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Pentachloronitrobenzene	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Pentachlorophenol	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Phenacetin	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Phenanthrene	520 U	500 U	610 U	520 U
Semivolatiles	Phenol	520 U	500 U	610 U	520 U
Semivolatiles	Phorate	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Pronamide	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Pyrene	520 U	500 U	610 U	520 U
Semivolatiles	Pyridine	1000 U	1000 U	1200 U	1000 U
Semivolatiles	Safrole	2500 U	2400 U	2900 U	2500 U
Semivolatiles	Sulfotepp	1600 U	1500 U	1800 U	1600 U
Semivolatiles	Thionazin	2500 U	2400 U	2900 U	2500 U
Total Petroleum Hydrocarbons	>C10 - C28	79000 U	76000 U	92000 U	79000 U
Total Petroleum Hydrocarbons	C6 - C10	79000 U	76000 U	92000 U	79000 U
Total Petroleum Hydrocarbons	C6 - C28	79000 U	76000 U	92000 U	79000 U
Volatiles	1,1,1,2-Tetrachloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,1,1-Trichloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,1,2,2-Tetrachloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,1,2-Trichloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,1-Dichloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,1-Dichloroethene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2,3-Trichloropropane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2,4-Trichlorobenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	16 U	15 U	18 U	16 U
Volatiles	1,2-Dibromoethane (EDB)	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2-Dichlorobenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2-Dichloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,2-Dichloropropane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,3-Dichlorobenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,4-Dichlorobenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	1,4-Dioxane	790 U	760 U	920 U	790 U
Volatiles	2-Butanone (MEK)	79 U	76 U	92 U	79 U

Waste Management
Austin Community Landfill
Sediment Analytical Data
March 2000

Fraction	Parameter Name	SED-1	SED-2	SED-3	SED-4
Volatiles	2-Hexanone	79 U	76 U	92 U	79 U
Volatiles	4-Methyl-2-pentanone	79 U	76 U	92 U	79 U
Volatiles	Acetone	160 U	150 U	180 U	8.6 J
Volatiles	Acetonitrile	160 U	150 U	180 U	160 U
Volatiles	Acrolein	160 U	150 U	180 U	160 U
Volatiles	Acrylonitrile	160 U	150 U	180 U	160 U
Volatiles	Allyl chloride	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Benzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Bromodichloromethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Bromoform	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Bromomethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Carbon disulfide	79 U	76 U	92 U	79 U
Volatiles	Carbon tetrachloride	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Chlorobenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Chloroethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Chloroform	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Chloromethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Chloroprene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	cis-1,3-Dichloropropene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Dibromochloromethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Dibromomethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Dichlorodifluoromethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Ethyl methacrylate	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Ethylbenzene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Iodomethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Isobutyl alcohol	160 U	150 U	180 U	160 U
Volatiles	Methacrylonitrile	160 U	150 U	180 U	160 U
Volatiles	Methyl methacrylate	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Methylene chloride	1.8 J	1.8 J	2.3 J	2 J
Volatiles	m-Xylene & p-Xylene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	o-Xylene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Propionitrile	160 U	150 U	180 U	160 U
Volatiles	Styrene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Tetrachloroethene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Toluene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	trans-1,2-Dichloroethene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	trans-1,3-Dichloropropene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	trans-1,4-Dichloro-2-butene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Trichloroethene	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Trichlorofluoromethane	7.9 U	7.6 U	9.2 U	7.9 U
Volatiles	Vinyl acetate	79 U	76 U	92 U	79 U
Volatiles	Vinyl chloride	3.2 U	3 U	3.7 U	3.2 U

Waste Management
Austin Community Landfill
Deep Borings Analytical Data
March 2000

Fraction	Parameter Name	DB-1 87-88	DB-2	DB-3 88/89	DB-4	DUPLICATE FD
Conventionals	Cyanide, Total	580 U	610 U	590 U	600 U	600 U
Conventionals	Percent Moisture	13	17	16	16	17
Conventionals	Total Organic Carbon	8020000	12300000	11600000	8870000	11500000
Conventionals	Total Organic Carbon	8480000	12200000	11700000	8150000	11400000
Conventionals	Total Sulfide	5800 U	2600 B	6000 U	3800 B	6000 U
Dioxins/Furans	2,3,7,8-TCDD	0.000052 U	0.000076 U	0.00009 U	0.000087 U	0.000099 U
Dioxins/Furans	Total HxCDD	0.000069 U	0.00011 U	0.00018 U	0.00017 U	0.00016 U
Dioxins/Furans	Total HxCDF	0.000046 U	0.000085 U	0.0001 U	0.00007 U	0.00015 U
Dioxins/Furans	Total PeCDD	0.00012 U	0.0002 U	0.00024 U	0.00026 U	0.00026 U
Dioxins/Furans	Total PeCDF	0.000059 U	0.000084 U	0.00014 U	0.000098 U	0.00015 U
Dioxins/Furans	Total TCDD	0.000052 U	0.000076 U	0.00009 U	0.000087 U	0.000099 U
Dioxins/Furans	Total TCDF	0.000058 U	0.000087 U	0.000072 U	0.00008 U	0.000098 U
Herbicides	2,4,5-T	23 U	24 U	24 U	24 U	24 U
Herbicides	2,4,5-TP (Silvex)	23 U	24 U	24 U	24 U	24 U
Herbicides	2,4-D	92 U	97 U	96 U	96 U	96 U
Herbicides	Dinoseb	14 U	15 U	14 U	14 U	14 U
Metals	Antimony	345 U	363 U	359 U	359 U	360 U
Metals	Arsenic	9820	8840	8290	9160	9040
Metals	Barium	17800	18600	20100	19900	22200
Metals	Beryllium	860	830	870	820	850
Metals	Cadmium	610 B	590 B	650 B	560 B	620 B
Metals	Chromium	14500	13600	13800	13800	16300
Metals	Cobalt	5100 B	4700 B	5000 B	4700 B	4500 B
Metals	Copper	11000	14000	13600	11800	12500
Metals	Lead	11800	11700	14000	11800	12200
Metals	Mercury	14 B	14 B	14 B	19 B	11 B
Metals	Nickel	15600	17000	17800	15400	17100
Metals	Selenium	858	1430	1380	1110	1260
Metals	Silver	72 B	73 B	71 B	71 B	68 B
Metals	Thallium	104 B	148	129	123	129
Metals	Tin	1300 B	1300 B	1000 B	1200 B	1200 B
Metals	Vanadium	19700	16700	16400	19900	18800
Metals	Zinc	43600	45200	75500	37400	47100
Pesticides/PCBs	4,4'-DDD	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	4,4'-DDE	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	4,4'-DDT	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Aldrin	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	alpha-BHC	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Aroclor 1016	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1221	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1232	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1242	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1248	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1254	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Aroclor 1260	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	beta-BHC	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Chlordane (technical)	20 U	21 U	20 U	20 U	20 U
Pesticides/PCBs	Chlorobenzilate	3.8 U	4 U	3.9 U	3.9 U	4 U
Pesticides/PCBs	delta-BHC	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Diallate	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Dieldrin	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Endosulfan I	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Endosulfan II	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Endosulfan sulfate	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Endrin	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Endrin aldehyde	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	gamma-BHC (Lindane)	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Heptachlor	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Heptachlor epoxide	7.7 U	8.1 U	8 U	8 U	8 U
Pesticides/PCBs	Isodrin	2 U	2.1 U	2 U	2 U	2 U
Pesticides/PCBs	Kepone	38 U	40 U	39 U	39 U	40 U
Pesticides/PCBs	Methoxychlor	3.8 U	4 U	3.9 U	3.9 U	4 U
Pesticides/PCBs	Toxaphene	20 U	21 U	20 U	20 U	20 U
Semivolatiles	1,2,4,5-Tetrachlorobenzene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	1,3,5-Trinitrobenzene	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	1,3-Dinitrobenzene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	1,4-Naphthoquinone	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	1-Naphthylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,2'-oxybis(1-Chloropropane)	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,3,4,6-Tetrachlorophenol	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	2,4,5-Trichlorophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,4,6-Trichlorophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,4-Dichlorophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,4-Dimethylphenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,4-Dinitrophenol	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	2,4-Dinitrotoluene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,6-Dichlorophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2,6-Dinitrotoluene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Acetylaminofluorene	3800 U	4000 U	3900 U	3900 U	4000 U
Semivolatiles	2-Chloronaphthalene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Chlorophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Methylnaphthalene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Methylphenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Naphthylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Nitroaniline	1800 U	1900 U	1900 U	1900 U	1900 U

Waste Management
Austin Community Landfill
Deep Borings Analytical Data
March 2000

Fraction	Parameter Name	DB-152-66'	DB-2	DB-3 66'-68'	DB-4	DUPLICATE (DB-4)
Semivolatiles	2-Nitrophenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	2-Picoline	760 U	800 U	790 U	790 U	790 U
Semivolatiles	3,3'-Dichlorobenzidine	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	3,3'-Dimethylbenzidine	760 U	800 U	790 U	790 U	790 U
Semivolatiles	3-Methylcholanthrene	760 U	800 U	790 U	790 U	790 U
Semivolatiles	3-Methylphenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	3-Nitroaniline	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	4,6-Dinitro-2-methylphenol	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	4-Aminobiphenyl	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	4-Bromophenyl phenyl ether	38[illegible]	400 U	390 U	390 U	400 U
Semivolatiles	4-Chloro-3-methylphenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	4-Chloroaniline	380 U	400 U	390 U	390 U	400 U
Semivolatiles	4-Chlorophenyl phenyl ether	380 U	400 U	390 U	390 U	400 U
Semivolatiles	4-Dimethylaminoazobenzene	760 U	800 U	790 U	790 U	790 U
Semivolatiles	4-Methylphenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	4-Nitroaniline	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	4-Nitrophenol	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	4-Phenylenediamine	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	5-Nitro-o-toluidine	760 U	800 U	790 U	790 U	790 U
Semivolatiles	7,12-Dimethylbenz(a)anthracene	760 U	800 U	790 U	790 U	790 U
Semivolatiles	a,a-Dimethylphenethylamine	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Acenaphthene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Acenaphthylene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Acetophenone	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Aniline	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Anthracene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Aramite	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Benzo(a)anthracene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Benzo(a)pyrene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Benzo(b)fluoranthene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Benzo(ghi)perylene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Benzo(k)fluoranthene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Benzyl alcohol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	bis(2-Chloroethoxy)methane	380 U	400 U	390 U	390 U	400 U
Semivolatiles	bis(2-Chloroethyl) ether	380 U	400 U	390 U	390 U	400 U
Semivolatiles	bis(2-Ethylhexyl) phthalate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Butyl benzyl phthalate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Chrysene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Dibenz(a,h)anthracene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Dibenzofuran	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Diethyl phthalate	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Dimethoate	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Dimethyl phthalate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Di-n-butyl phthalate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Di-n-octyl phthalate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Diphenylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Disulfoton	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Ethyl methanesulfonate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Fluoranthene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Fluorene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Hexachlorobenzene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Hexachlorobutadiene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Hexachlorocyclopentadiene	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Hexachloroethane	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Hexachlorophene	3800 U	4000 U	3900 U	3900 U	4000 U
Semivolatiles	Hexachloropropene	3800 U	4000 U	3900 U	3900 U	4000 U
Semivolatiles	Indeno(1,2,3-cd)pyrene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Isophorone	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Isosafrole	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Methapyrilene	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Methyl methanesulfonate	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Methyl parathion	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Naphthalene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Nitrobenzene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Nitroquinoline-1-oxide	3800 U	4000 U	3900 U	3900 U	4000 U
Semivolatiles	N-Nitrosodiethylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosodimethylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosodi-n-butylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosodi-n-propylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosodiphenylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosomethylethylamine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosomorpholine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosopiperidine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	N-Nitrosopyrrolidine	380 U	400 U	390 U	390 U	400 U
Semivolatiles	O,O,O-Triethyl phosphorothioate	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	o-Toluidine	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Parathion	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Pentachlorobenzene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Pentachloroethane	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Pentachloronitrobenzene	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Pentachlorophenol	1900 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Phenacetin	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Phenanthrene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Phenol	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Phorate	1800 U	1900 U	1900 U	1900 U	1900 U

WM-013164

Waste Management
Austin Community Landfill
Deep Borings Analytical Data
March 2000

Fraction	Parameter Name	DB-1 62'-66'	DB-2	DB-3 65'-69'	DB-4	DUPLICATE FD
Semivolatiles	Pronamide	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Pyrene	380 U	400 U	390 U	390 U	400 U
Semivolatiles	Pyridine	760 U	800 U	790 U	790 U	790 U
Semivolatiles	Safrole	1800 U	1900 U	1900 U	1900 U	1900 U
Semivolatiles	Sulfotepp	1200 U	1200 U	1200 U	1200 U	1200 U
Semivolatiles	Thionazin	1800 U	1900 U	1900 U	1900 U	1900 U
Total Petroleum Hydrocarbons	>C10 - C28	58000 U	61000 U	60000 U	60000 U	60000 U
Total Petroleum Hydrocarbons	C6 - C10	58000 U	61000 U	60000 U	60000 U	60000 U
Total Petroleum Hydrocarbons	C6 - C28	58000 U	61000 U	60000 U	60000 U	60000 U
Volatiles	1,1,1,2-Tetrachloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,1,1-Trichloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,1,2,2-Tetrachloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,1,2-Trichloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,1-Dichloroethene	2.9 J	6.1 U	2.1 J	6 U	6 U
Volatiles	1,1-Dichloroethene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2,3-Trichloropropane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2,4-Trichlorobenzene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2-Dibromo-3-chloropropane (DBCP)	12 U	12 U	12 U	12 U	12 U
Volatiles	1,2-Dibromoethane (EDB)	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2-Dichlorobenzene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2-Dichloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,2-Dichloropropane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,3-Dichlorobenzene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,4-Dichlorobenzene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	1,4-Dioxane	580 U	610 U	600 U	600 U	600 U
Volatiles	2-Butanone (MEK)	58 U	61 U	60 U	60 U	60 U
Volatiles	2-Hexanone	58 U	61 U	60 U	60 U	60 U
Volatiles	4-Methyl-2-pentanone	58 U	61 U	60 U	60 U	60 U
Volatiles	Acetone	16 J	20 J	9.2 J	17 J	14 J
Volatiles	Acetonitrile	120 U	120 U	120 U	120 U	120 U
Volatiles	Acrolein	120 U	120 U	120 U	120 U	120 U
Volatiles	Acrylonitrile	120 U	120 U	120 U	120 U	120 U
Volatiles	Allyl chloride	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Benzene	5.8 U	2.3 J	1.4 J	1.3 J	6 U
Volatiles	Bromodichloromethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Bromoform	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Bromomethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Carbon disulfide	1.7 J	2.3 J	60 U	4.2 J	60 U
Volatiles	Carbon tetrachloride	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Chlorobenzene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Chloroethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Chloroform	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Chloromethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Chloroprene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	cis-1,3-Dichloropropene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Dibromochloromethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Dibromomethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Dichlorodifluoromethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Ethyl methacrylate	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Ethylbenzene	5.2 J	14	3.5 J	24	2.6 J
Volatiles	Iodomethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Isobutyl alcohol	120 U	120 U	120 U	120 U	120 U
Volatiles	Methacrylonitrile	120 U	120 U	120 U	120 U	120 U
Volatiles	Methyl methacrylate	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Methylene chloride	1.3 J	1 J	4.9 J	1.4 J	1.1 J
Volatiles	m-Xylene & p-Xylene	7.2	15	12	40	3.4 J
Volatiles	o-Xylene	3.4 J	8.2	4 J	17	1.5 J
Volatiles	Propionitrile	120 U	120 U	120 U	120 U	120 U
Volatiles	Styrene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Tetrachloroethene	1.6 J	6.1 U	0.95 J	6 U	6 U
Volatiles	Toluene	2.5 J	9.6	38	12	3.4 J
Volatiles	trans-1,2-Dichloroethene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	trans-1,3-Dichloropropene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	trans-1,4-Dichloro-2-butene	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Trichloroethene	0.82 J	6.1 U	41	7.5	2.3 J
Volatiles	Trichlorofluoromethane	5.8 U	6.1 U	6 U	6 U	6 U
Volatiles	Vinyl acetate	58 U	61 U	60 U	60 U	60 U
Volatiles	Vinyl chloride	2.3 U	2.4 U	2.4 U	2.4 U	2.4 U

Appendix D

WM-013166

Appendix D

Hydrogeologic Test Data

WM-013167

Slug Test Analysis

The rising and falling head slug test data was analyzed using AQTESOLV for Windows, utilizing the Cooper-Bredehoeft-Papadopulos (1967) Solution for a slug test in a confined aquifer. The model has the following assumptions:

- Aquifer has infinite aerial extent
- Aquifer is homogeneous, isotropic, and uniform thickness
- Aquifer initial potentiometric surface is horizontal
- A volume of water is injected or discharged for the well instantaneously
- Test well is fully penetrating
- Aquifer is confined
- Flow is unsteady
- Water is released instantaneously from storage with decline of hydraulic head

The Cooper-Bredehoeft-Papadopulos Solution plots displacement over initial water level versus time on semi-logarithmic axis. The plot is then curve matched and solved for transmissivity (T) and storativity (S). The average transmissivity and storativity calculated for MW 99-23 are 1.00 E-4 square feet per minute and 2.93 E-4, respectively. The average transmissivity and storativity determined for PZ-26 are 4.39 E-5 square feet per minute and 8.44E-4, respectively. The estimated transmissivity and storativity for MW 99-29A for the falling head slug test are 1.12 E-5 square feet per minute and 2.15 ' E-5, respectively. The water levels measured in MW 99-29A during the rising head slug test recovered to only 50% of the initial water level over the 24-hour test period. The curve fitting solution of the plot failed to converge and thus the estimations for storativity and transmissivity were calculate using only the falling head test data for MW 99-29A. Transmissivity and storativity estimates for MW 99-30 were not calculated due to very slow recovery rates during the 24-hour tests.

Flow Velocity Estimations

Using an estimated transition zone thickness of 5 feet (b) the hydraulic conductivity (K) can be estimated using the equation K=T/b. The calculated hydraulic conductivity (K) for groundwater in the vicinity of investigation wells MW99-23, PZ-26, and MW99-29A would be 0.029 feet/day, 0.013 feet/day, and 0.0032 feet/day, respectively.

The estimated flow velocities were calculated using Darcy's equation:

$V = 1/n \; K \; (dh/dl)$

V	=	estimated flow velocity
n	=	effective porosity of 0.05 (McBride Ratcliff & Associates)
K	=	hydraulic conductivity
dh/dl	=	hydraulic gradient (0.02 ft/ft as measured during this investigation)

The calculated flow velocities for groundwater in the vicinity of investigation wells MW99-23, PZ-26, and MW99-29A are 4.24 feet/year, 1.90 feet/year, and 0.47 feet/year, respectively.

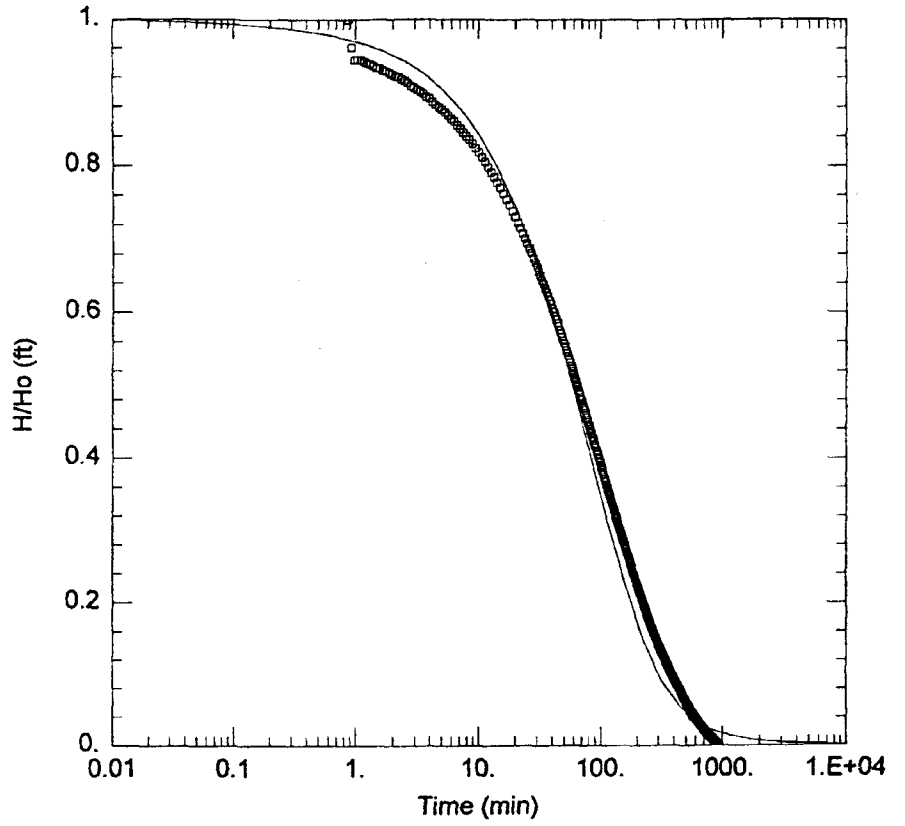
Well Yield Estimations

Well yields were estimated using the Cooper-Jacob approximation to the Theis Equation:

$$Q = \frac{4\pi Ts}{2.3\log\left[\frac{2.25Tt}{r^2S} \bullet \frac{ft^3}{7.48gal}\right]}$$

where Q = estimated well yield,
T = transmissivity,
s = drawdown,
t = time,
K = hydraulic conductivity,
b = saturated thickness of aquifer, and
S = storativity.

The estimated well yields for MW 99-23, MW 99-29A, and PZ-26 were calculated at 33.62, 3.28, 14.03 gallons per day, respectively.



MW99-23 FALLING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Mangement
Project: WASMN-04198-500
Test Location: Austin Community Landfill
Test Well: MW99-23
Test Date: 3/29/00

AQUIFER DATA

Saturated Thickness: 3.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW99-23)

Initial Displacement: 2.992 ft
Casing Radius: 0.08333 ft
Screen Length: 10. ft
Water Column Height: 3.5 ft
Wellbore Radius: 0.3438 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
$T = 0.0001355\ ft^2/min$
$S = 0.0001384$

WM-013170

Diagnostic Statistics

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

Estimated Parameters

Parameter	Estimate	Std. Error	
T	0.0001355	2.303E-06	ft^2/min
S	0.0001384	1.933E-05	

Parameter Correlations

	T	S
T	1.00	-0.96
S	-0.96	1.00

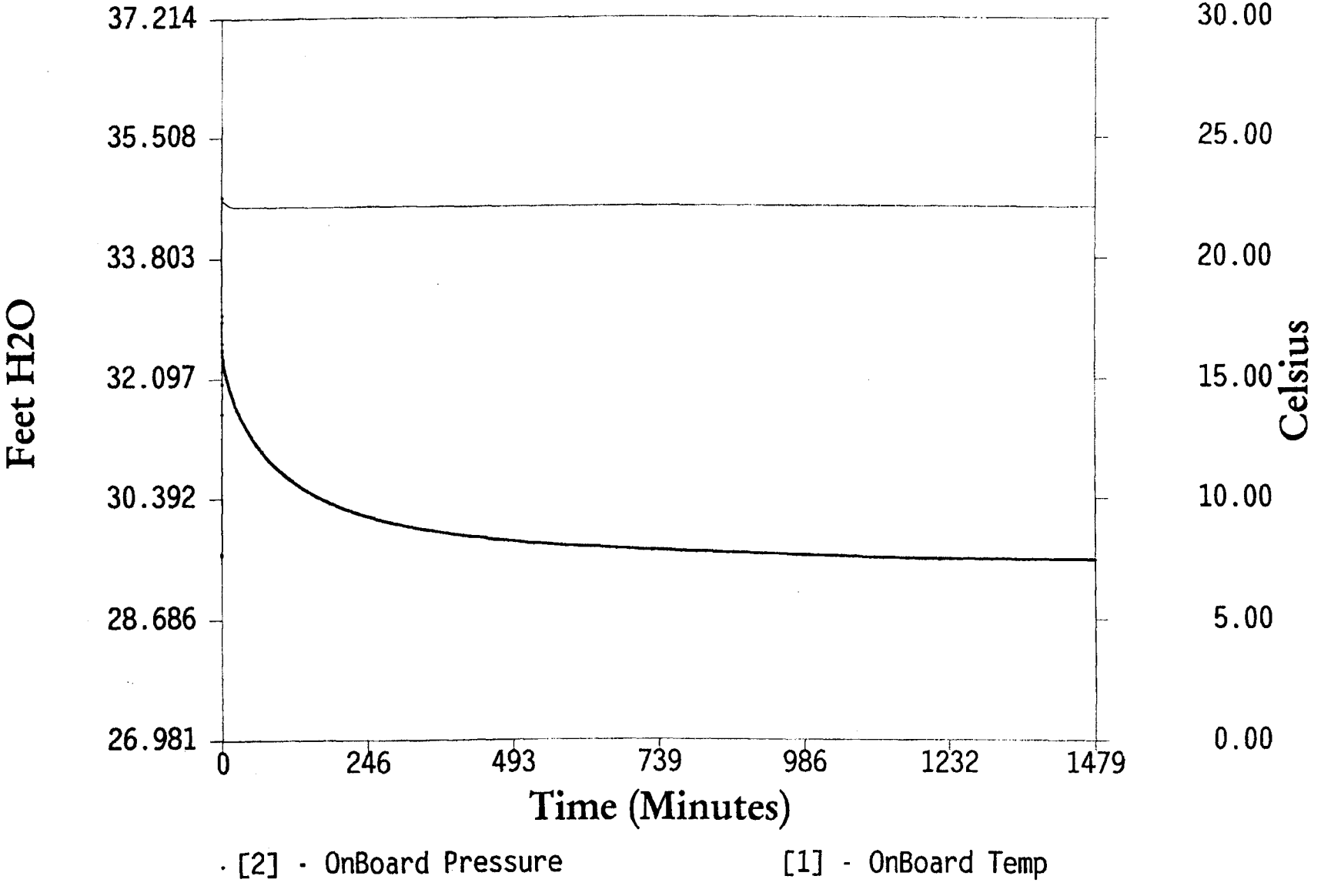
Residual Statistics

for weighted residuals

Sum of Squares ... 7.748 ft^2
Variance..... 0.005124 ft^2
Std. Deviation..... 0.07158 ft
Mean ..... -0.0402 ft
No. of Residuals ... 1514.
No. of Estimates ... 2

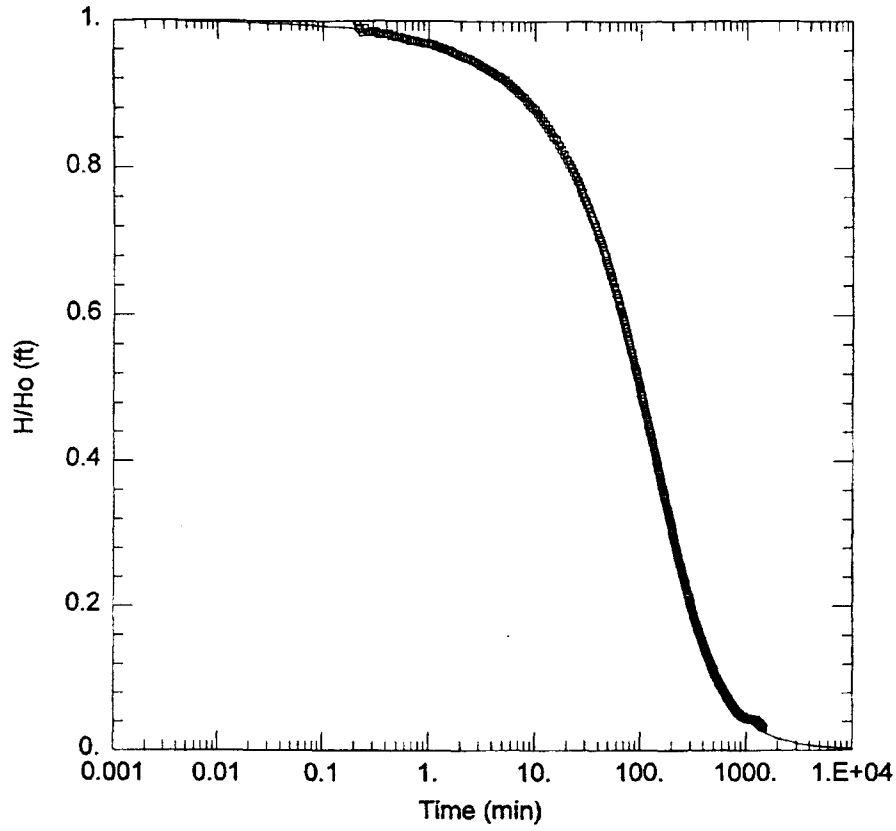
WM-013171

MW-23 Falling



WM-013172

TJFA 204
PAGE 198



MW99-23 RISING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Mangement
Project: WASMN-04198-500
Test Location: Austin Community Landfill
Test Well: MW99-23
Test Date: 3/30/00

AQUIFER DATA

Saturated Thickness: 3.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW99-23)

Initial Displacement: 2.911 ft
Casing Radius: 0.08333 ft
Screen Length: 10. ft
Water Column Height: 3.5 ft
Wellbore Radius: 0.3438 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
T = 6.529E-05 ft^2/min
S = 0.000448

WM-013173

Diagnostic Statistics

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

Estimated Parameters

Parameter	Estimate	Std. Error	
T	6.529E-05	2.169E-07	ft^2/min
S	0.000448	8.692E-06	

Parameter Correlations

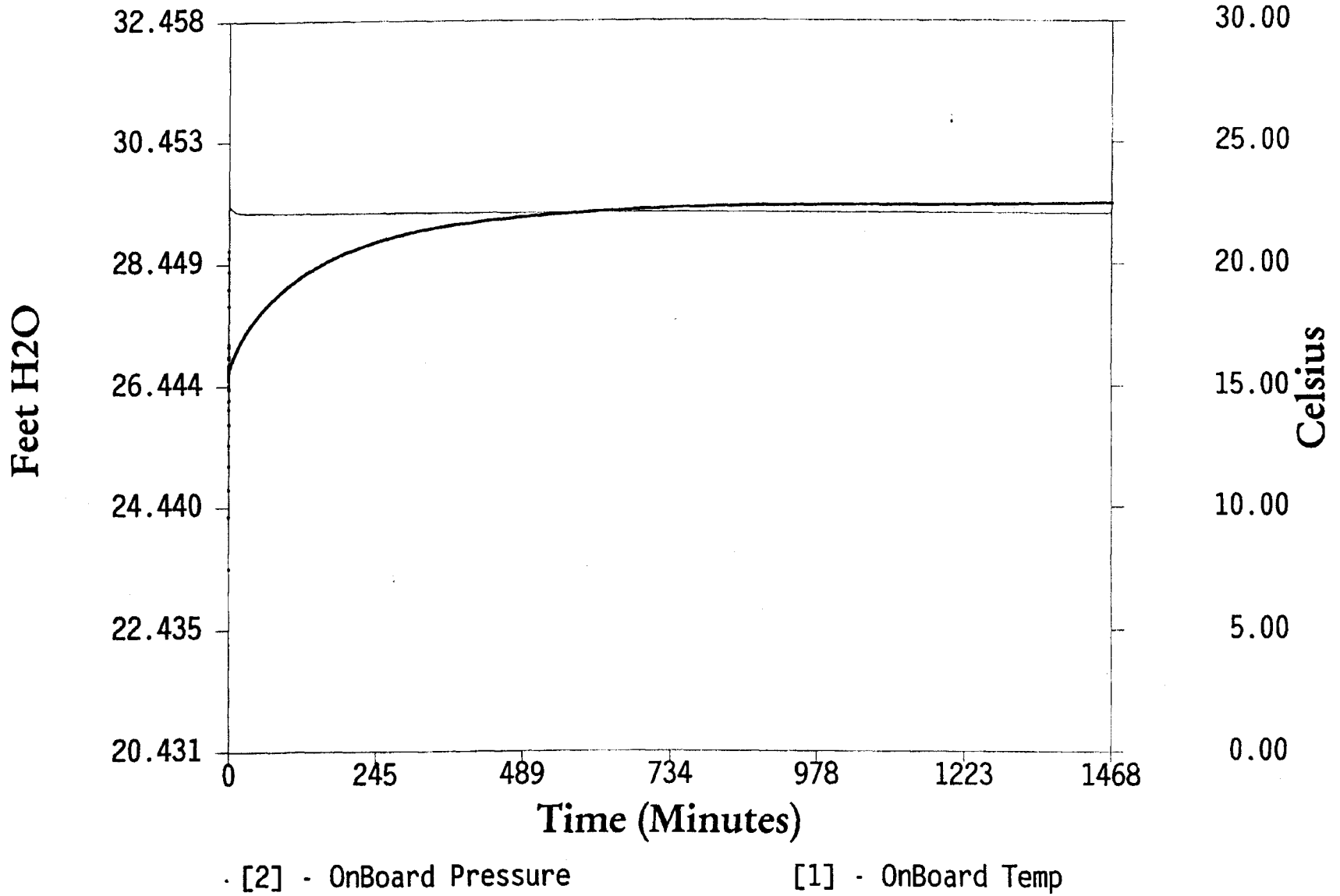
	T	S
T	1.00	-0.96
S	-0.96	1.00

Residual Statistics

for weighted residuals

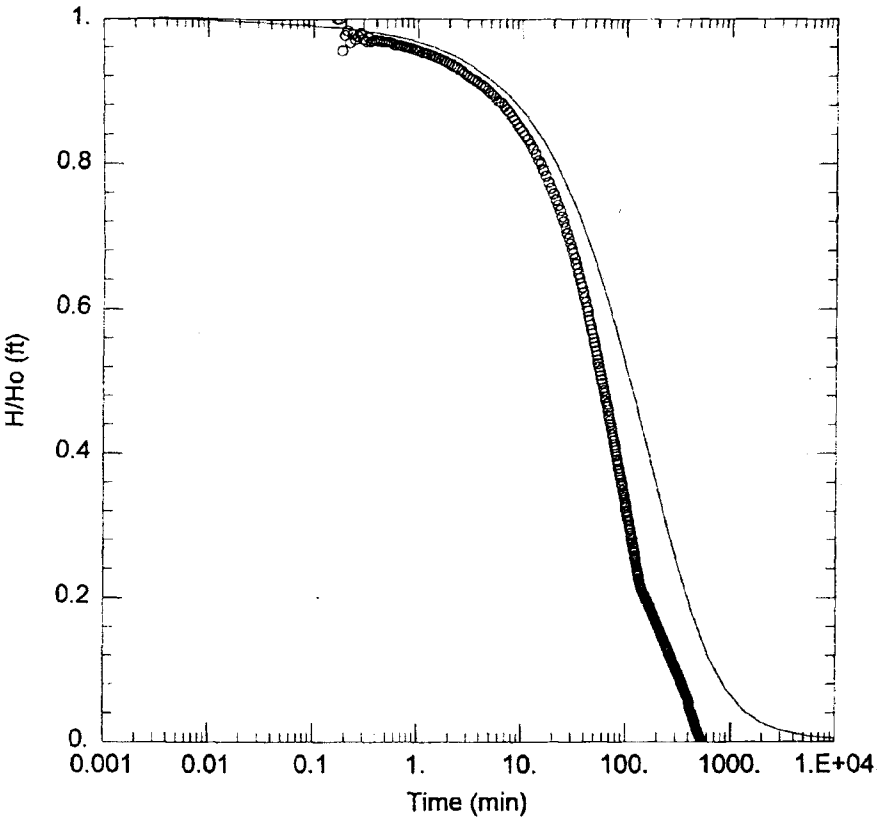
Sum of Squares ... 0.3584 ft^2
Variance..... 0.0002349 ft^2
Std. Deviation..... 0.01533 ft
Mean ..... 0.004482 ft
No. of Residuals ... 1528.
No. of Estimates ... 2

MW-23 Rising



WM-013175

TJFA 204
PAGE 201



PZ-26 FALLING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Management
Project: WASMN-04198-400
Test Location: Austin Community Landfill
Test Well: PZ-26
Test Date: 03/29/00

AQUIFER DATA

Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (PZ-26)

Initial Displacement: 2.231 ft
Casing Radius: 0.08333 ft
Screen Length: 10. ft
Water Column Height: 8. ft
Wellbore Radius: 0.401 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
$T = 4.389E\text{-}05\ ft^2/min$
S = 0.001

WM-013176

Diagnostic Statistics

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

Estimated Parameters

Parameter	Estimate	Std. Error	
T	4.389E-05	8.727E-06	ft^2/min
S	0.001	0.000476	

Parameter Correlations

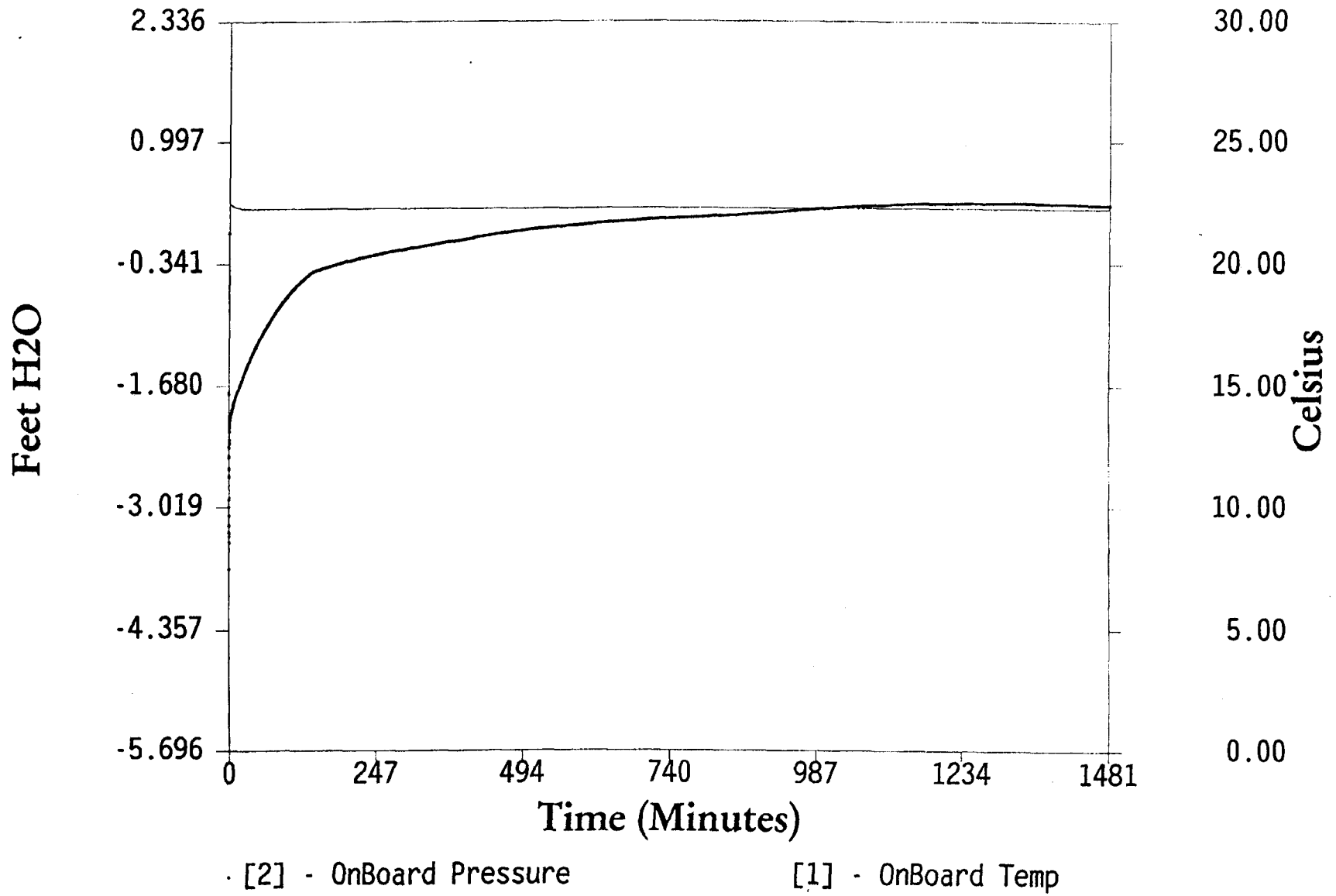
	T	S
T	1.00	-0.93
S	-0.93	1.00

Residual Statistics

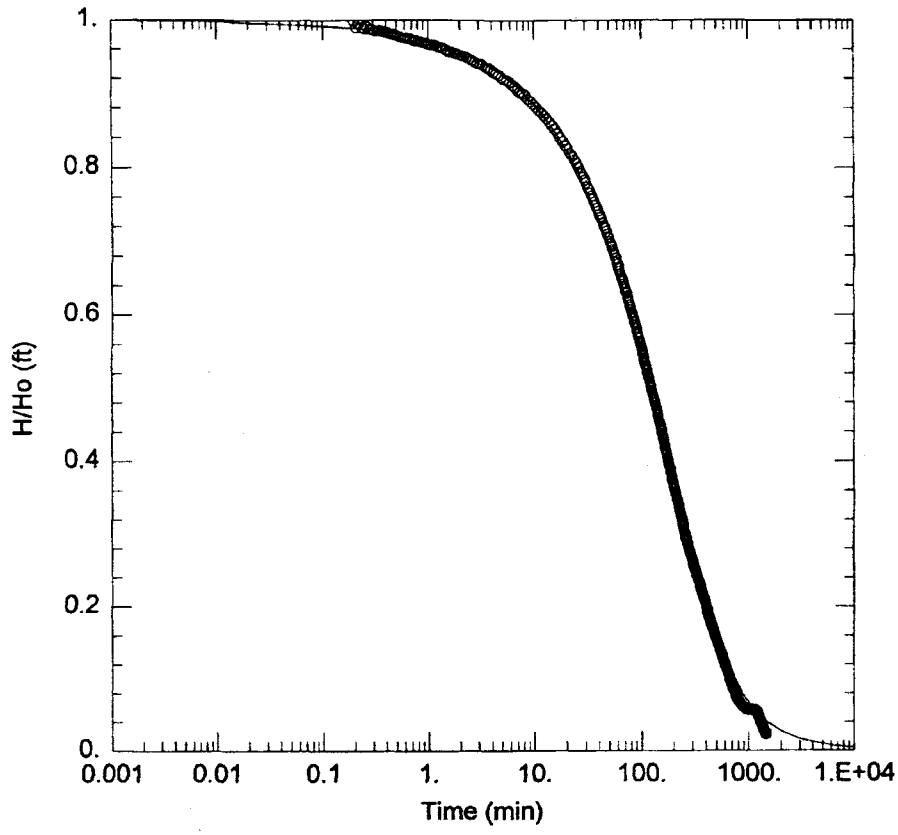
for weighted residuals

Sum of Squares ... 177.6 ft^2
Variance..... 0.1151 ft^2
Std. Deviation..... 0.3392 ft
Mean ..... -0.3283 ft
No. of Residuals ... 1545.
No. of Estimates ... 2

PZ-26 Falling



WM-013178



PZ-26 RISING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Management
Project: WASMN-04198-400
Test Location: Austin Community Landfill
Test Well: PZ-26
Test Date: 03/30/00

AQUIFER DATA

Saturated Thickness: 8. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (PZ-26)

Initial Displacement: 2.223 ft
Casing Radius: 0.08333 ft
Screen Length: 10. ft
Water Column Height: 8. ft
Wellbore Radius: 0.401 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
T = 4.389E-05 ft^2/min
S = 0.0006871

WM-013179

Diagnostic Statistics

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

Estimated Parameters

Parameter	Estimate	Std. Error	
T	4.389E-05	2.381E-07	ft^2/min
S	0.0006871	1.876E-05	

Parameter Correlations

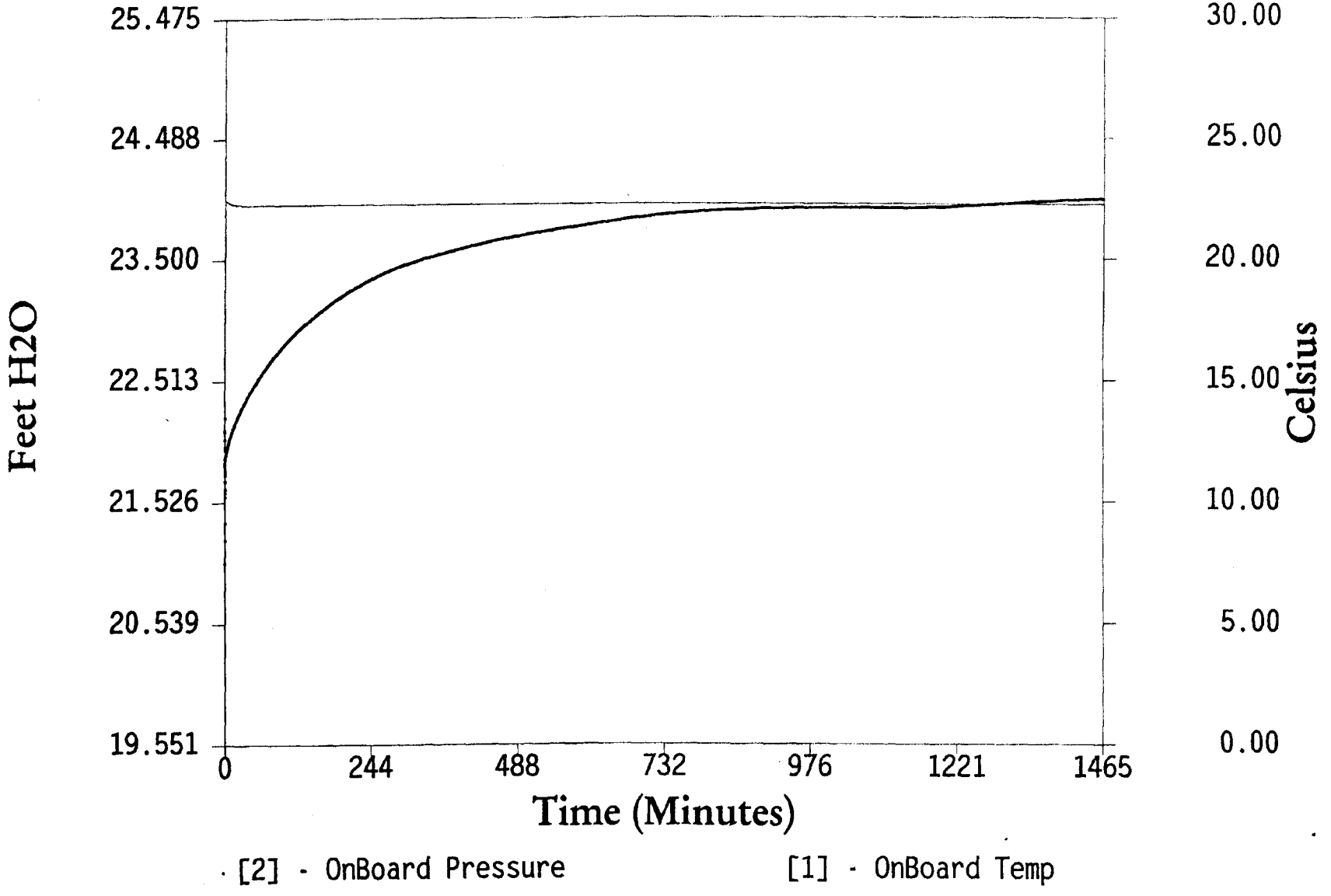
	T	S
T	1.00	-0.95
S	-0.95	1.00

Residual Statistics

for weighted residuals

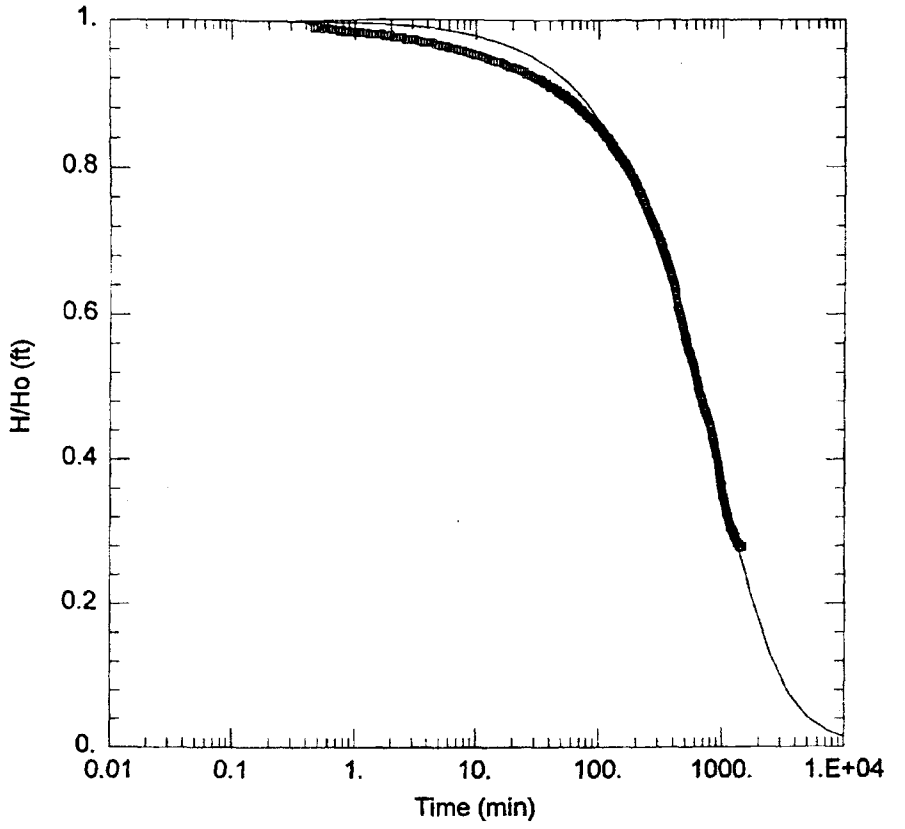
Sum of Squares ... 0.7214 ft^2
Variance..... 0.0004734 ft^2
Std. Deviation..... 0.02176 ft
Mean ..... -0.01351 ft
No. of Residuals ... 1526.
No. of Estimates ... 2

PZ-26 Rising



WM-013181

TJFA 204
PAGE 207



MW99-29A FALLING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Management
Project: WASMN-04198-500
Test Location: Austin Community Landfill
Test Well: MW99-29A
Test Date: 3/29/00

AQUIFER DATA

Saturated Thickness: 5. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW99-29A)

Initial Displacement: 1.516 ft
Casing Radius: 0.08333 ft
Screen Length: 5. ft
Water Column Height: 4. ft
Wellbore Radius: 0.3438 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
T = 1.617E-05 ft^2/min
S = 2.149E-05

WM-013182

Diagnostic Statistics

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

Estimated Parameters

Parameter	Estimate	Std. Error	
T	1.617E-05	1.751E-07	ft^2/min
S	2.149E-05	1.877E-06	

Parameter Correlations

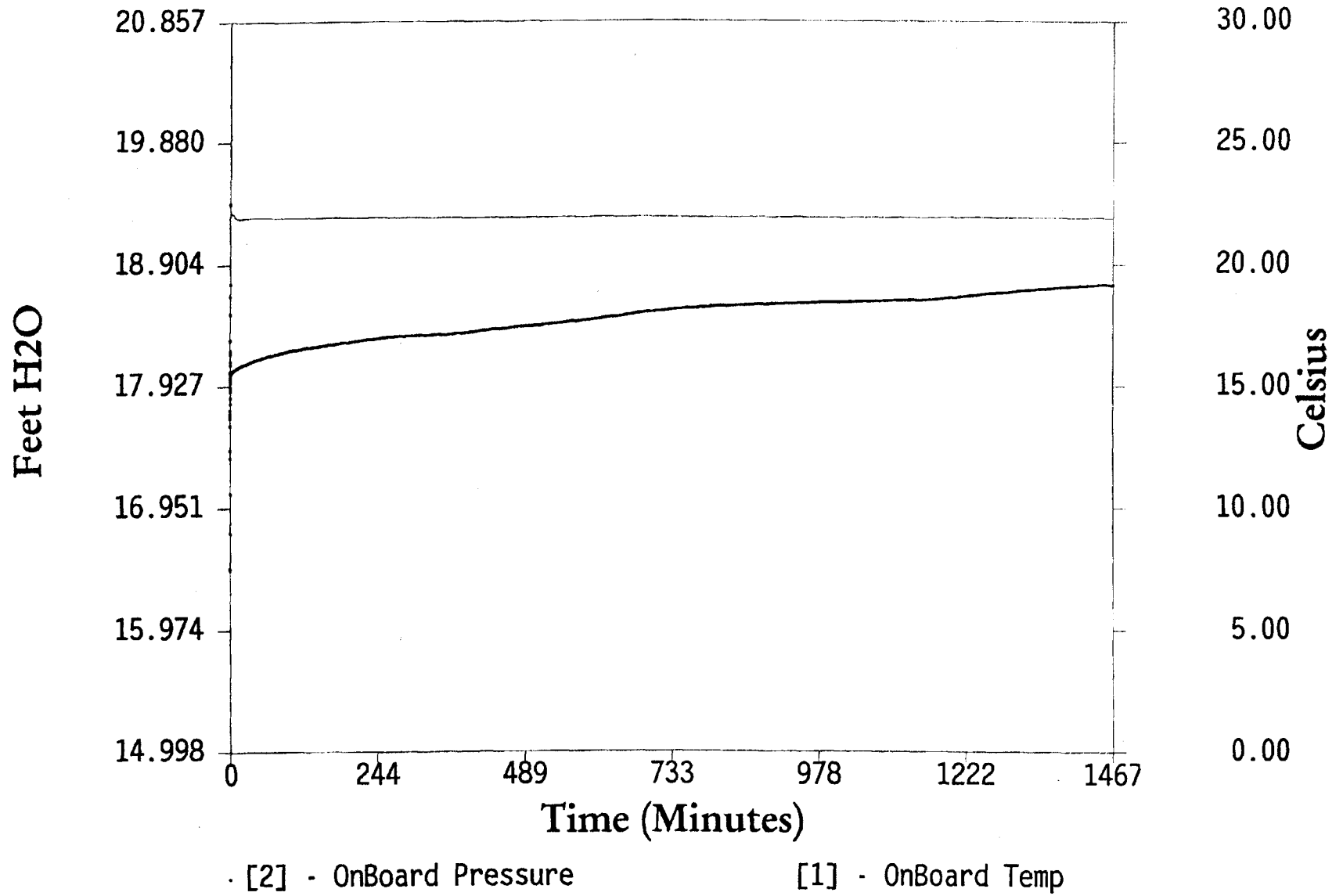
	T	S
T	1.00	-0.99
S	-0.99	1.00

Residual Statistics

for weighted residuals

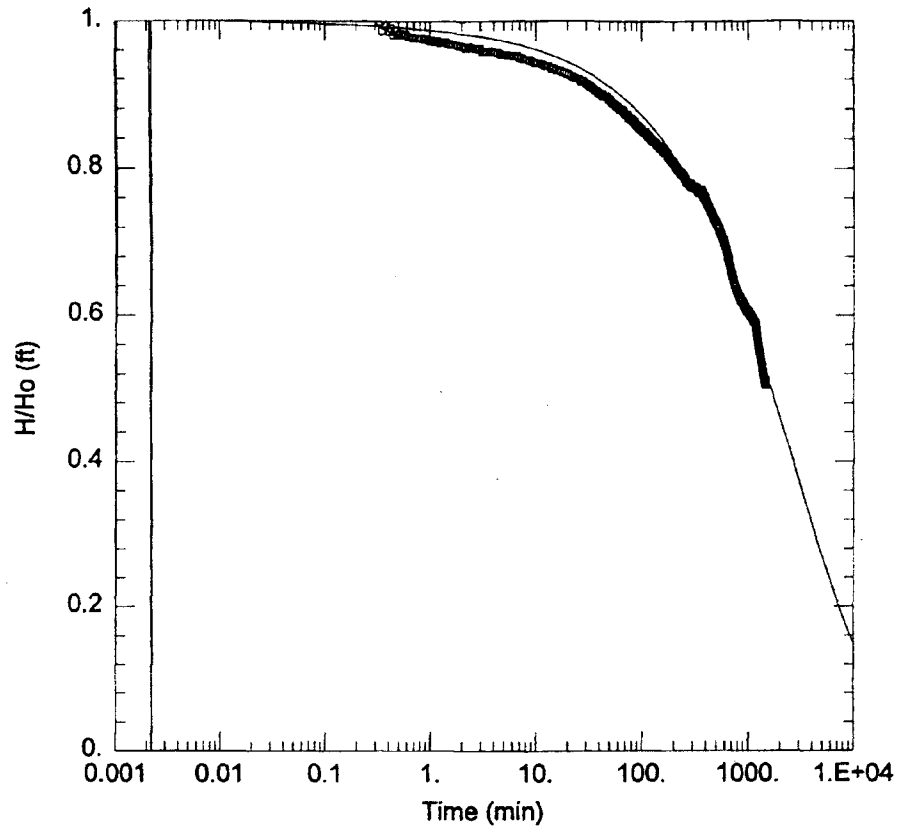
Sum of Squares ... 0.4444 ft^2
Variance ..... 0.000291 ft^2
Std. Deviation..... 0.01706 ft
Mean ..... -0.002042 ft
No. of Residuals ... 1529.
No. of Estimates ... 2

MW-29A Rising



WM-013184

TJFA 204
PAGE 210



MW99-29A RISING HEAD

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Management
Project: WASMN-04198-500
Test Location: Austin Community Landfill
Test Well: MW99-29A
Test Date: 3/30/00

AQUIFER DATA

Saturated Thickness: 5. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW99-29A)

Initial Displacement: 1.539 ft
Casing Radius: 0.08333 ft
Screen Length: 5. ft
Water Column Height: 4. ft
Wellbore Radius: 0.3438 ft
Gravel Pack Porosity: 0.46

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos
T = 1.621E-06 ft^2/min
S = 0.00697

WM-013185

Data Set: D:\PROJECTS\Waste Management\Slug Tests\MW 29\MW29rise.aqt
Title: MW99-29A Rising Head
Date: 04/26/00
Time: 14:41:49

PROJECT INFORMATION

Company: ThermoRetec
Client: Waste Management
Project: WASMN-04198-500
Location: Austin Community Landfill
Test Date: 3/30/00
Test Well: MW99-29A

AQUIFER DATA

Saturated Thickness: 5. ft
Anisotropy Ratio (Kz/Kr): 1.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW99-29A

X Location: 0. ft
Y Location: 0. ft

No. of observations: 1519

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.3333	1.539	455.7	1.135	962.7	0.934
0.3532	1.518	456.7	1.137	963.7	0.937
0.3742	1.529	457.7	1.135	964.7	0.934
0.3963	1.518	458.7	1.135	965.7	0.934
0.4198	1.525	459.7	1.135	966.7	0.932
0.4447	1.511	460.7	1.135	967.7	0.934
0.4697	1.518	461.7	1.135	968.7	0.934
0.4963	1.511	462.7	1.133	969.7	0.937
0.5247	1.513	463.7	1.133	970.7	0.934
0.5547	1.511	464.7	1.13	971.7	0.934
0.5863	1.511	465.7	1.13	972.7	0.934
0.6213	1.506	466.7	1.128	973.7	0.934
0.658	1.506	467.7	1.13	974.7	0.934
0.6963	1.504	468.7	1.13	975.7	0.934
0.738	1.504	469.7	1.128	976.7	0.932
0.7813	1.504	470.7	1.128	977.7	0.932
0.828	1.504	471.7	1.128	978.7	0.93

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.8763	1.502	472.7	1.126	979.7	0.932
0.928	1.502	473.7	1.126	980.7	0.932
0.983	1.499	474.7	1.126	981.7	0.93
1.041	1.499	475.7	1.126	982.7	0.93
1.103	1.497	476.7	1.126	983.7	0.93
1.168	1.497	477.7	1.123	984.7	0.93
1.238	1.495	478.7	1.123	985.7	0.93
1.311	1.495	479.7	1.123	986.7	0.93
1.39	1.495	480.7	1.123	987.7	0.93
1.473	1.492	481.7	1.123	988.7	0.93
1.561	1.49	482.7	1.121	989.7	0.932
1.655	1.49	483.7	1.123	990.7	0.93
1.753	1.49	484.7	1.123	991.7	0.932
1.858	1.488	485.7	1.123	992.7	0.932
1.968	1.488	486.7	1.123	993.7	0.93
2.085	1.486	487.7	1.121	994.7	0.932
2.21	1.483	488.7	1.121	995.7	0.932
2.341	1.486	489.7	1.119	996.7	0.932
2.481	1.483	490.7	1.121	997.7	0.932
2.63	1.483	491.7	1.121	998.7	0.932
2.786	1.481	492.7	1.119	999.7	0.93
2.953	1.481	493.7	1.119	1000.7	0.932
3.13	1.476	494.7	1.119	1001.7	0.932
3.316	1.476	495.7	1.119	1002.7	0.93
3.515	1.474	496.7	1.119	1003.7	0.93
3.725	1.476	497.7	1.119	1004.7	0.93
3.946	1.474	498.7	1.119	1005.7	0.932
4.181	1.474	499.7	1.119	1006.7	0.93
4.43	1.472	500.7	1.119	1007.7	0.932
4.693	1.469	501.7	1.119	1008.7	0.932
4.973	1.469	502.7	1.116	1009.7	0.932
5.27	1.469	503.7	1.116	1010.7	0.932
5.583	1.467	504.7	1.114	1011.7	0.93
5.915	1.467	505.7	1.114	1012.7	0.93
6.266	1.465	506.7	1.114	1013.7	0.93
6.64	1.465	507.7	1.114	1014.7	0.927
7.035	1.462	508.7	1.114	1015.7	0.93
7.453	1.46	509.7	1.114	1016.7	0.93
7.896	1.458	510.7	1.114	1017.7	0.927
8.366	1.458	511.7	1.114	1018.7	0.927
8.865	1.456	512.7	1.112	1019.7	0.927
9.391	1.453	513.7	1.112	1020.7	0.927
9.95	1.451	514.7	1.11	1021.7	0.927
10.54	1.451	515.7	1.11	1022.7	0.925
11.17	1.449	516.7	1.112	1023.7	0.925
11.83	1.446	517.7	1.11	1024.7	0.927
12.53	1.444	518.7	1.107	1025.7	0.925
13.28	1.444	519.7	1.11	1026.7	0.925

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
14.07	1.439	520.7	1.11	1027.7	0.925
14.91	1.439	521.7	1.107	1028.7	0.923
15.79	1.435	522.7	1.107	1029.7	0.927
16.73	1.435	523.7	1.107	1030.7	0.923
17.72	1.432	524.7	1.107	1031.7	0.925
18.72	1.43	525.7	1.105	1032.7	0.925
19.72	1.428	526.7	1.105	1033.7	0.925
20.72	1.426	527.7	1.105	1034.7	0.925
21.72	1.423	528.7	1.105	1035.7	0.925
22.72	1.421	529.7	1.105	1036.7	0.925
23.72	1.419	530.7	1.103	1037.7	0.925
24.72	1.419	531.7	1.1	1038.7	0.925
25.72	1.416	532.7	1.103	1039.7	0.923
26.72	1.412	533.7	1.1	1040.7	0.923
27.72	1.412	534.7	1.1	1041.7	0.925
28.72	1.412	535.7	1.1	1042.7	0.923
29.72	1.407	536.7	1.1	1043.7	0.923
30.72	1.407	537.7	1.1	1044.7	0.923
31.72	1.405	538.7	1.1	1045.7	0.923
32.72	1.4	539.7	1.1	1046.7	0.923
33.72	1.402	540.7	1.1	1047.7	0.925
34.72	1.398	541.7	1.1	1048.7	0.925
35.72	1.396	542.7	1.098	1049.7	0.923
36.72	1.393	543.7	1.098	1050.7	0.923
37.72	1.393	544.7	1.098	1051.7	0.923
38.72	1.391	545.7	1.098	1052.7	0.923
39.72	1.389	546.7	1.096	1053.7	0.923
40.72	1.386	547.7	1.096	1054.7	0.92
41.72	1.384	548.7	1.096	1055.7	0.923
42.72	1.386	549.7	1.096	1056.7	0.923
43.72	1.382	550.7	1.096	1057.7	0.923
44.72	1.382	551.7	1.093	1058.7	0.923
45.72	1.382	552.7	1.091	1059.7	0.923
46.72	1.382	553.7	1.093	1060.7	0.925
47.72	1.379	554.7	1.093	1061.7	0.925
48.72	1.375	555.7	1.091	1062.7	0.92
49.72	1.375	556.7	1.091	1063.7	0.923
50.72	1.375	557.7	1.091	1064.7	0.923
51.72	1.37	558.7	1.089	1065.7	0.923
52.72	1.368	559.7	1.089	1066.7	0.923
53.72	1.368	560.7	1.089	1067.7	0.92
54.72	1.366	561.7	1.086	1068.7	0.923
55.72	1.366	562.7	1.086	1069.7	0.92
56.72	1.363	563.7	1.086	1070.7	0.92
57.72	1.361	564.7	1.084	1071.7	0.92
58.72	1.361	565.7	1.084	1072.7	0.92
59.72	1.359	566.7	1.084	1073.7	0.918
60.72	1.356	567.7	1.082	1074.7	0.918

WM-013188

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
61.72	1.356	568.7	1.082	1075.7	0.918
62.72	1.356	569.7	1.082	1076.7	0.918
63.72	1.354	570.7	1.084	1077.7	0.918
64.72	1.354	571.7	1.084	1078.7	0.918
65.72	1.354	572.7	1.084	1079.7	0.918
66.72	1.352	573.7	1.084	1080.7	0.918
67.72	1.349	574.7	1.084	1081.7	0.918
68.72	1.347	575.7	1.082	1082.7	0.918
69.72	1.345	576.7	1.082	1083.7	0.918
70.72	1.345	577.7	1.082	1084.7	0.918
71.72	1.345	578.7	1.08	1085.7	0.916
72.72	1.343	579.7	1.082	1086.7	0.916
73.72	1.343	580.7	1.082	1087.7	0.916
74.72	1.338	581.7	1.077	1088.7	0.918
75.72	1.338	582.7	1.077	1089.7	0.916
76.72	1.338	583.7	1.077	1090.7	0.916
77.72	1.336	584.7	1.077	1091.7	0.918
78.72	1.336	585.7	1.075	1092.7	0.916
79.72	1.336	586.7	1.077	1093.7	0.916
80.72	1.333	587.7	1.077	1094.7	0.918
81.72	1.333	588.7	1.075	1095.7	0.918
82.72	1.331	589.7	1.075	1096.7	0.918
83.72	1.331	590.7	1.075	1097.7	0.916
84.72	1.329	591.7	1.075	1098.7	0.916
85.72	1.329	592.7	1.075	1099.7	0.916
86.72	1.326	593.7	1.073	1100.7	0.916
87.72	1.324	594.7	1.073	1101.7	0.916
88.72	1.322	595.7	1.073	1102.7	0.916
89.72	1.322	596.7	1.07	1103.7	0.916
90.72	1.322	597.7	1.07	1104.7	0.913
91.72	1.319	598.7	1.07	1105.7	0.916
92.72	1.319	599.7	1.07	1106.7	0.913
93.72	1.319	600.7	1.07	1107.7	0.913
94.72	1.315	601.7	1.068	1108.7	0.913
95.72	1.317	602.7	1.068	1109.7	0.913
96.72	1.315	603.7	1.068	1110.7	0.913
97.72	1.313	604.7	1.066	1111.7	0.913
98.72	1.313	605.7	1.066	1112.7	0.913
99.72	1.31	606.7	1.063	1113.7	0.913
100.7	1.31	607.7	1.066	1114.7	0.913
101.7	1.313	608.7	1.063	1115.7	0.916
102.7	1.308	609.7	1.063	1116.7	0.916
103.7	1.308	610.7	1.063	1117.7	0.913
104.7	1.308	611.7	1.063	1118.7	0.913
105.7	1.306	612.7	1.063	1119.7	0.913
106.7	1.308	613.7	1.061	1120.7	0.913
107.7	1.306	614.7	1.059	1121.7	0.916
108.7	1.308	615.7	1.059	1122.7	0.913

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
109.7	1.303	616.7	1.059	1123.7	0.913
110.7	1.303	617.7	1.059	1124.7	0.913
111.7	1.303	618.7	1.056	1125.7	0.913
112.7	1.301	619.7	1.054	1126.7	0.913
113.7	1.301	620.7	1.054	1127.7	0.911
114.7	1.299	621.7	1.056	1128.7	0.913
115.7	1.299	622.7	1.054	1129.7	0.911
116.7	1.296	623.7	1.054	1130.7	0.911
117.7	1.299	624.7	1.052	1131.7	0.911
118.7	1.294	625.7	1.052	1132.7	0.911
119.7	1.294	626.7	1.052	1133.7	0.911
120.7	1.294	627.7	1.052	1134.7	0.911
121.7	1.292	628.7	1.05	1135.7	0.911
122.7	1.292	629.7	1.05	1136.7	0.911
123.7	1.292	630.7	1.05	1137.7	0.911
124.7	1.292	631.7	1.05	1138.7	0.911
125.7	1.289	632.7	1.047	1139.7	0.911
126.7	1.289	633.7	1.05	1140.7	0.911
127.7	1.289	634.7	1.047	1141.7	0.909
128.7	1.287	635.7	1.047	1142.7	0.909
129.7	1.287	636.7	1.047	1143.7	0.911
130.7	1.287	637.7	1.047	1144.7	0.909
131.7	1.287	638.7	1.047	1145.7	0.909
132.7	1.287	639.7	1.045	1146.7	0.911
133.7	1.285	640.7	1.045	1147.7	0.911
134.7	1.285	641.7	1.045	1148.7	0.909
135.7	1.283	642.7	1.045	1149.7	0.911
136.7	1.283	643.7	1.043	1150.7	0.909
137.7	1.28	644.7	1.043	1151.7	0.909
138.7	1.28	645.7	1.043	1152.7	0.909
139.7	1.278	646.7	1.043	1153.7	0.909
140.7	1.278	647.7	1.04	1154.7	0.907
141.7	1.278	648.7	1.04	1155.7	0.907
142.7	1.278	649.7	1.04	1156.7	0.907
143.7	1.278	650.7	1.038	1157.7	0.907
144.7	1.276	651.7	1.038	1158.7	0.907
145.7	1.278	652.7	1.038	1159.7	0.907
146.7	1.273	653.7	1.036	1160.7	0.907
147.7	1.276	654.7	1.036	1161.7	0.907
148.7	1.276	655.7	1.033	1162.7	0.907
149.7	1.273	656.7	1.036	1163.7	0.904
150.7	1.273	657.7	1.033	1164.7	0.904
151.7	1.273	658.7	1.031	1165.7	0.907
152.7	1.271	659.7	1.031	1166.7	0.907
153.7	1.271	660.7	1.031	1167.7	0.904
154.7	1.271	661.7	1.031	1168.7	0.904
155.7	1.271	662.7	1.031	1169.7	0.904
156.7	1.269	663.7	1.031	1170.7	0.904

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
157.7	1.266	664.7	1.029	1171.7	0.904
158.7	1.269	665.7	1.029	1172.7	0.902
159.7	1.269	666.7	1.027	1173.7	0.904
160.7	1.266	667.7	1.027	1174.7	0.902
161.7	1.266	668.7	1.027	1175.7	0.902
162.7	1.266	669.7	1.027	1176.7	0.902
163.7	1.266	670.7	1.024	1177.7	0.902
164.7	1.262	671.7	1.024	1178.7	0.902
165.7	1.264	672.7	1.024	1179.7	0.9
166.7	1.264	673.7	1.022	1180.7	0.9
167.7	1.262	674.7	1.022	1181.7	0.897
168.7	1.262	675.7	1.022	1182.7	0.9
169.7	1.262	676.7	1.017	1183.7	0.897
170.7	1.262	677.7	1.017	1184.7	0.897
171.7	1.259	678.7	1.017	1185.7	0.897
172.7	1.262	679.7	1.02	1186.7	0.897
173.7	1.262	680.7	1.017	1187.7	0.895
174.7	1.257	681.7	1.015	1188.7	0.897
175.7	1.257	682.7	1.015	1189.7	0.895
176.7	1.255	683.7	1.015	1190.7	0.895
177.7	1.255	684.7	1.015	1191.7	0.895
178.7	1.255	685.7	1.015	1192.7	0.895
179.7	1.255	686.7	1.015	1193.7	0.895
180.7	1.255	687.7	1.013	1194.7	0.893
181.7	1.253	688.7	1.015	1195.7	0.893
182.7	1.253	689.7	1.015	1196.7	0.89
183.7	1.25	690.7	1.013	1197.7	0.89
184.7	1.25	691.7	1.013	1198.7	0.89
185.7	1.248	692.7	1.01	1199.7	0.89
186.7	1.248	693.7	1.01	1200.7	0.89
187.7	1.248	694.7	1.013	1201.7	0.89
188.7	1.248	695.7	1.008	1202.7	0.888
189.7	1.248	696.7	1.01	1203.7	0.89
190.7	1.246	697.7	1.008	1204.7	0.89
191.7	1.246	698.7	1.008	1205.7	0.888
192.7	1.246	699.7	1.008	1206.7	0.89
193.7	1.246	700.7	1.008	1207.7	0.888
194.7	1.246	701.7	1.008	1208.7	0.888
195.7	1.246	702.7	1.008	1209.7	0.886
196.7	1.243	703.7	1.008	1210.7	0.886
197.7	1.243	704.7	1.006	1211.7	0.886
198.7	1.243	705.7	1.006	1212.7	0.883
199.7	1.241	706.7	1.003	1213.7	0.886
200.7	1.241	707.7	1.003	1214.7	0.883
201.7	1.239	708.7	1.003	1215.7	0.883
202.7	1.239	709.7	1.003	1216.7	0.883
203.7	1.236	710.7	1.003	1217.7	0.883
204.7	1.236	711.7	1.003	1218.7	0.883

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
205.7	1.236	712.7	1.003	1219.7	0.881
206.7	1.236	713.7	1.003	1220.7	0.881
207.7	1.236	714.7	1.003	1221.7	0.881
208.7	1.234	715.7	1.003	1222.7	0.879
209.7	1.234	716.7	1.001	1223.7	0.879
210.7	1.232	717.7	1.001	1224.7	0.879
211.7	1.234	718.7	0.999	1225.7	0.877
212.7	1.234	719.7	0.999	1226.7	0.877
213.7	1.232	720.7	0.999	1227.7	0.877
214.7	1.229	721.7	0.999	1228.7	0.874
215.7	1.229	722.7	0.997	1229.7	0.874
216.7	1.229	723.7	0.997	1230.7	0.874
217.7	1.229	724.7	0.994	1231.7	0.872
218.7	1.229	725.7	0.997	1232.7	0.874
219.7	1.227	726.7	0.997	1233.7	0.874
220.7	1.227	727.7	0.994	1234.7	0.872
221.7	1.225	728.7	0.994	1235.7	0.872
222.7	1.227	729.7	0.992	1236.7	0.87
223.7	1.227	730.7	0.992	1237.7	0.87
224.7	1.225	731.7	0.99	1238.7	0.87
225.7	1.225	732.7	0.992	1239.7	0.87
226.7	1.225	733.7	0.99	1240.7	0.872
227.7	1.225	734.7	0.992	1241.7	0.87
228.7	1.22	735.7	0.99	1242.7	0.867
229.7	1.223	736.7	0.99	1243.7	0.867
230.7	1.223	737.7	0.987	1244.7	0.867
231.7	1.223	738.7	0.987	1245.7	0.867
232.7	1.223	739.7	0.99	1246.7	0.865
233.7	1.22	740.7	0.987	1247.7	0.867
234.7	1.223	741.7	0.987	1248.7	0.865
235.7	1.22	742.7	0.987	1249.7	0.865
236.7	1.22	743.7	0.987	1250.7	0.865
237.7	1.22	744.7	0.987	1251.7	0.865
238.7	1.22	745.7	0.987	1252.7	0.863
239.7	1.218	746.7	0.987	1253.7	0.863
240.7	1.218	747.7	0.987	1254.7	0.865
241.7	1.218	748.7	0.987	1255.7	0.86
242.7	1.216	749.7	0.987	1256.7	0.86
243.7	1.216	750.7	0.985	1257.7	0.86
244.7	1.216	751.7	0.985	1258.7	0.86
245.7	1.216	752.7	0.983	1259.7	0.86
246.7	1.216	753.7	0.983	1260.7	0.86
247.7	1.216	754.7	0.983	1261.7	0.86
248.7	1.213	755.7	0.985	1262.7	0.858
249.7	1.213	756.7	0.983	1263.7	0.858
250.7	1.211	757.7	0.983	1264.7	0.858
251.7	1.211	758.7	0.98	1265.7	0.856
252.7	1.211	759.7	0.98	1266.7	0.856

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
253.7	1.209	760.7	0.98	1267.7	0.856
254.7	1.211	761.7	0.978	1268.7	0.856
255.7	1.209	762.7	0.978	1269.7	0.856
256.7	1.206	763.7	0.98	1270.7	0.856
257.7	1.206	764.7	0.98	1271.7	0.856
258.7	1.206	765.7	0.98	1272.7	0.854
259.7	1.204	766.7	0.98	1273.7	0.851
260.7	1.204	767.7	0.978	1274.7	0.851
261.7	1.202	768.7	0.978	1275.7	0.851
262.7	1.204	769.7	0.978	1276.7	0.851
263.7	1.204	770.7	0.978	1277.7	0.851
264.7	1.204	771.7	0.978	1278.7	0.851
265.7	1.204	772.7	0.978	1279.7	0.851
266.7	1.202	773.7	0.976	1280.7	0.854
267.7	1.204	774.7	0.976	1281.7	0.851
268.7	1.202	775.7	0.976	1282.7	0.847
269.7	1.202	776.7	0.976	1283.7	0.849
270.7	1.202	777.7	0.973	1284.7	0.849
271.7	1.202	778.7	0.973	1285.7	0.849
272.7	1.2	779.7	0.973	1286.7	0.849
273.7	1.2	780.7	0.973	1287.7	0.849
274.7	1.2	781.7	0.971	1288.7	0.849
275.7	1.2	782.7	0.973	1289.7	0.847
276.7	1.2	783.7	0.973	1290.7	0.847
277.7	1.197	784.7	0.973	1291.7	0.847
278.7	1.197	785.7	0.971	1292.7	0.847
279.7	1.197	786.7	0.971	1293.7	0.844
280.7	1.197	787.7	0.971	1294.7	0.844
281.7	1.195	788.7	0.971	1295.7	0.844
282.7	1.197	789.7	0.971	1296.7	0.842
283.7	1.195	790.7	0.971	1297.7	0.844
284.7	1.197	791.7	0.971	1298.7	0.842
285.7	1.197	792.7	0.971	1299.7	0.842
286.7	1.197	793.7	0.971	1300.7	0.84
287.7	1.197	794.7	0.971	1301.7	0.842
288.7	1.197	795.7	0.969	1302.7	0.84
289.7	1.2	796.7	0.969	1303.7	0.84
290.7	1.197	797.7	0.969	1304.7	0.84
291.7	1.195	798.7	0.967	1305.7	0.84
292.7	1.195	799.7	0.967	1306.7	0.837
293.7	1.193	800.7	0.967	1307.7	0.835
294.7	1.193	801.7	0.967	1308.7	0.837
295.7	1.193	802.7	0.967	1309.7	0.835
296.7	1.195	803.7	0.964	1310.7	0.833
297.7	1.193	804.7	0.964	1311.7	0.835
298.7	1.193	805.7	0.967	1312.7	0.833
299.7	1.193	806.7	0.964	1313.7	0.833
300.7	1.195	807.7	0.964	1314.7	0.833

WM-013193

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
301.7	1.193	808.7	0.964	1315.7	0.833
302.7	1.193	809.7	0.964	1316.7	0.83
303.7	1.193	810.7	0.964	1317.7	0.83
304.7	1.193	811.7	0.964	1318.7	0.83
305.7	1.193	812.7	0.964	1319.7	0.83
306.7	1.195	813.7	0.964	1320.7	0.83
307.7	1.193	814.7	0.962	1321.7	0.828
308.7	1.193	815.7	0.962	1322.7	0.828
309.7	1.19	816.7	0.964	1323.7	0.828
310.7	1.19	817.7	0.962	1324.7	0.828
311.7	1.19	818.7	0.962	1325.7	0.828
312.7	1.19	819.7	0.962	1326.7	0.828
313.7	1.19	820.7	0.964	1327.7	0.828
314.7	1.193	821.7	0.962	1328.7	0.824
315.7	1.193	822.7	0.964	1329.7	0.826
316.7	1.19	823.7	0.962	1330.7	0.824
317.7	1.19	824.7	0.962	1331.7	0.824
318.7	1.19	825.7	0.962	1332.7	0.824
319.7	1.19	826.7	0.962	1333.7	0.824
320.7	1.19	827.7	0.962	1334.7	0.824
321.7	1.19	828.7	0.96	1335.7	0.824
322.7	1.19	829.7	0.96	1336.7	0.824
323.7	1.19	830.7	0.96	1337.7	0.821
324.7	1.193	831.7	0.96	1338.7	0.821
325.7	1.19	832.7	0.96	1339.7	0.819
326.7	1.188	833.7	0.96	1340.7	0.819
327.7	1.188	834.7	0.96	1341.7	0.819
328.7	1.188	835.7	0.96	1342.7	0.819
329.7	1.188	836.7	0.957	1343.7	0.817
330.7	1.188	837.7	0.955	1344.7	0.814
331.7	1.188	838.7	0.957	1345.7	0.817
332.7	1.188	839.7	0.957	1346.7	0.814
333.7	1.188	840.7	0.955	1347.7	0.817
334.7	1.186	841.7	0.955	1348.7	0.817
335.7	1.186	842.7	0.955	1349.7	0.817
336.7	1.186	843.7	0.955	1350.7	0.817
337.7	1.183	844.7	0.955	1351.7	0.817
338.7	1.186	845.7	0.955	1352.7	0.814
339.7	1.183	846.7	0.955	1353.7	0.817
340.7	1.186	847.7	0.955	1354.7	0.817
341.7	1.183	848.7	0.955	1355.7	0.817
342.7	1.183	849.7	0.953	1356.7	0.817
343.7	1.183	850.7	0.955	1357.7	0.814
344.7	1.183	851.7	0.955	1358.7	0.812
345.7	1.181	852.7	0.955	1359.7	0.814
346.7	1.183	853.7	0.955	1360.7	0.814
347.7	1.181	854.7	0.955	1361.7	0.814
348.7	1.183	855.7	0.953	1362.7	0.812

WM-013194

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
349.7	1.183	856.7	0.953	1363.7	0.812
350.7	1.183	857.7	0.955	1364.7	0.812
351.7	1.183	858.7	0.955	1365.7	0.812
352.7	1.186	859.7	0.955	1366.7	0.812
353.7	1.183	860.7	0.955	1367.7	0.81
354.7	1.186	861.7	0.953	1368.7	0.81
355.7	1.186	862.7	0.953	1369.7	0.807
356.7	1.186	863.7	0.953	1370.7	0.807
357.7	1.186	864.7	0.953	1371.7	0.807
358.7	1.188	865.7	0.953	1372.7	0.807
359.7	1.186	866.7	0.953	1373.7	0.807
360.7	1.186	867.7	0.95	1374.7	0.807
361.7	1.186	868.7	0.953	1375.7	0.805
362.7	1.183	869.7	0.95	1376.7	0.805
363.7	1.183	870.7	0.953	1377.7	0.805
364.7	1.183	871.7	0.953	1378.7	0.805
365.7	1.183	872.7	0.95	1379.7	0.805
366.7	1.183	873.7	0.95	1380.7	0.803
367.7	1.183	874.7	0.95	1381.7	0.805
368.7	1.181	875.7	0.95	1382.7	0.803
369.7	1.181	876.7	0.95	1383.7	0.803
370.7	1.181	877.7	0.95	1384.7	0.803
371.7	1.179	878.7	0.95	1385.7	0.803
372.7	1.179	879.7	0.95	1386.7	0.803
373.7	1.179	880.7	0.95	1387.7	0.803
374.7	1.176	881.7	0.95	1388.7	0.803
375.7	1.176	882.7	0.95	1389.7	0.8
376.7	1.176	883.7	0.95	1390.7	0.803
377.7	1.176	884.7	0.953	1391.7	0.798
378.7	1.174	885.7	0.953	1392.7	0.798
379.7	1.174	886.7	0.95	1393.7	0.796
380.7	1.174	887.7	0.95	1394.7	0.796
381.7	1.174	888.7	0.95	1395.7	0.798
382.7	1.174	889.7	0.95	1396.7	0.796
383.7	1.174	890.7	0.95	1397.7	0.796
384.7	1.174	891.7	0.95	1398.7	0.796
385.7	1.172	892.7	0.948	1399.7	0.796
386.7	1.172	893.7	0.95	1400.7	0.796
387.7	1.172	894.7	0.948	1401.7	0.796
388.7	1.172	895.7	0.948	1402.7	0.796
389.7	1.174	896.7	0.948	1403.7	0.796
390.7	1.172	897.7	0.948	1404.7	0.794
391.7	1.172	898.7	0.948	1405.7	0.794
392.7	1.172	899.7	0.946	1406.7	0.794
393.7	1.172	900.7	0.946	1407.7	0.794
394.7	1.17	901.7	0.943	1408.7	0.791
395.7	1.17	902.7	0.943	1409.7	0.791
396.7	1.17	903.7	0.946	1410.7	0.789

WM-013195

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
397.7	1.165	904.7	0.943	1411.7	0.789
398.7	1.165	905.7	0.943	1412.7	0.789
399.7	1.165	906.7	0.943	1413.7	0.787
400.7	1.165	907.7	0.943	1414.7	0.789
401.7	1.165	908.7	0.943	1415.7	0.789
402.7	1.163	909.7	0.943	1416.7	0.791
403.7	1.163	910.7	0.943	1417.7	0.789
404.7	1.163	911.7	0.943	1418.7	0.789
405.7	1.16	912.7	0.943	1419.7	0.791
406.7	1.16	913.7	0.943	1420.7	0.789
407.7	1.16	914.7	0.943	1421.7	0.791
408.7	1.158	915.7	0.943	1422.7	0.789
409.7	1.158	916.7	0.943	1423.7	0.789
410.7	1.158	917.7	0.941	1424.7	0.787
411.7	1.158	918.7	0.941	1425.7	0.787
412.7	1.156	919.7	0.941	1426.7	0.787
413.7	1.156	920.7	0.941	1427.7	0.787
414.7	1.156	921.7	0.941	1428.7	0.787
415.7	1.156	922.7	0.941	1429.7	0.787
416.7	1.153	923.7	0.939	1430.7	0.787
417.7	1.153	924.7	0.941	1431.7	0.789
418.7	1.153	925.7	0.941	1432.7	0.787
419.7	1.153	926.7	0.939	1433.7	0.787
420.7	1.151	927.7	0.941	1434.7	0.787
421.7	1.151	928.7	0.941	1435.7	0.787
422.7	1.153	929.7	0.941	1436.7	0.787
423.7	1.151	930.7	0.941	1437.7	0.787
424.7	1.151	931.7	0.941	1438.7	0.787
425.7	1.151	932.7	0.941	1439.7	0.787
426.7	1.151	933.7	0.941	1440.7	0.787
427.7	1.151	934.7	0.941	1441.7	0.787
428.7	1.149	935.7	0.939	1442.7	0.782
429.7	1.149	936.7	0.941	1443.7	0.782
430.7	1.149	937.7	0.941	1444.7	0.782
431.7	1.146	938.7	0.941	1445.7	0.782
432.7	1.146	939.7	0.939	1446.7	0.782
433.7	1.146	940.7	0.939	1447.7	0.782
434.7	1.146	941.7	0.939	1448.7	0.782
435.7	1.144	942.7	0.939	1449.7	0.782
436.7	1.144	943.7	0.939	1450.7	0.78
437.7	1.144	944.7	0.937	1451.7	0.78
438.7	1.144	945.7	0.937	1452.7	0.777
439.7	1.142	946.7	0.937	1453.7	0.78
440.7	1.142	947.7	0.937	1454.7	0.78
441.7	1.142	948.7	0.937	1455.7	0.777
442.7	1.142	949.7	0.937	1456.7	0.78
443.7	1.142	950.7	0.937	1457.7	0.78
444.7	1.142	951.7	0.934	1458.7	0.78

WM-013196

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
445.7	1.14	952.7	0.934	1459.7	0.782
446.7	1.142	953.7	0.934	1460.7	0.782
447.7	1.14	954.7	0.934	1461.7	0.784
448.7	1.14	955.7	0.937	1462.7	0.784
449.7	1.14	956.7	0.934	1463.7	0.787
450.7	1.137	957.7	0.937	1464.7	0.784
451.7	1.137	958.7	0.934	1465.7	0.784
452.7	1.137	959.7	0.937	1466.7	0.782
453.7	1.137	960.7	0.934		
454.7	1.137	961.7	0.934		

SOLUTION

Aquifer Model: Confined
Solution Method: Cooper-Bredehoeft-Papadopulos

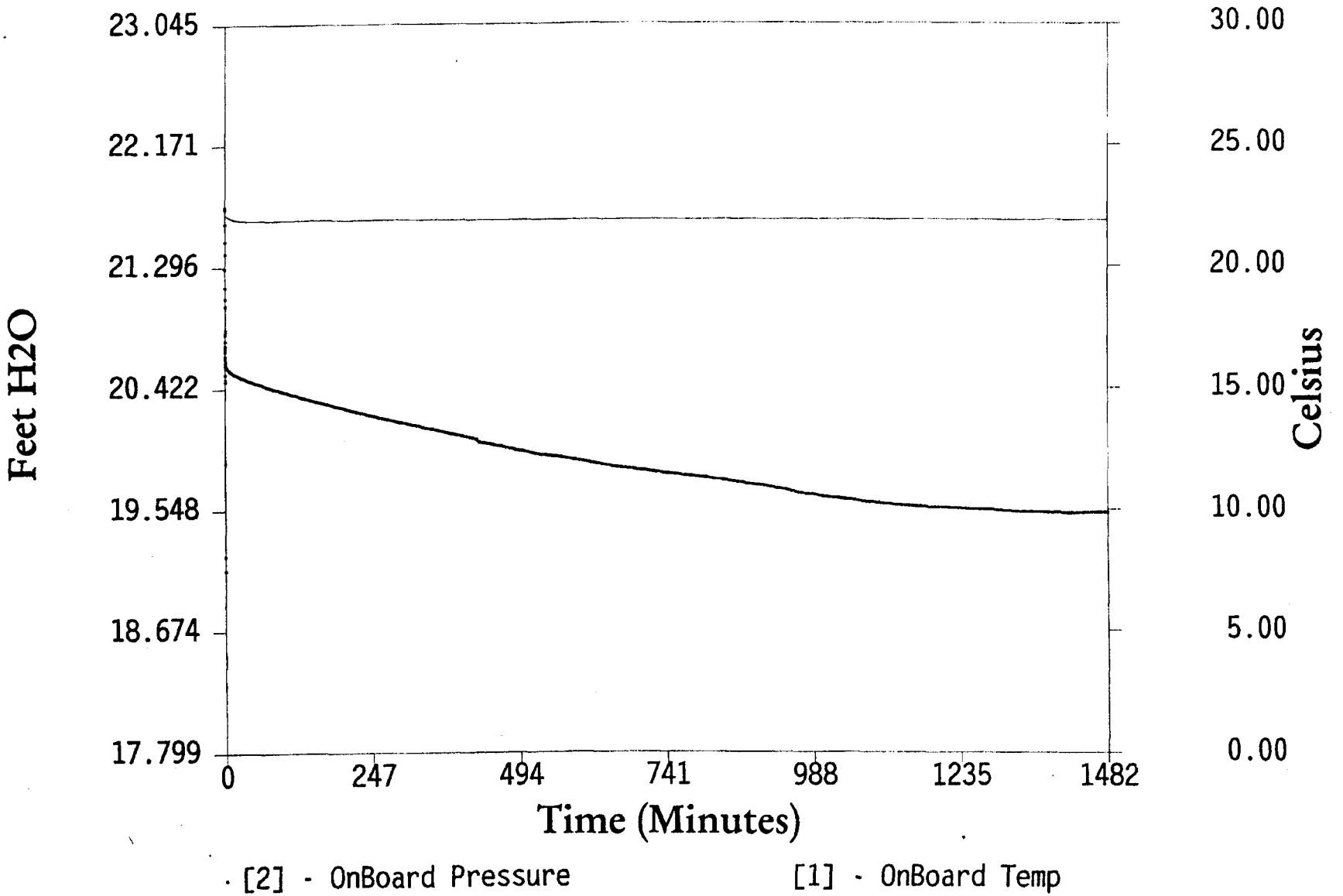
VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
T	1.621E-06	ft^2/min
S	0.00697	

WM-013197

MW-29A Falling



WM-013198

WM-013199

Appendix E

Geotechnical Analytical Data

ENVIRONMENTAL DRILLING SERVICES, INC.
2112 RUTLAND DRIVE, SUITE 160
AUSTIN, TEXAS 78758
512-833-5007 / 512-833-5709 FAX

To: Mark Riggle
Thermo Retec
1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-1

Project: WASMN-04198-400

Project No.: 17701

SUMMARY OF LABORATORY TESTING

Boring	Depth, ft	Moisture Content, %	Bulk Dry Density, pcf	Liquid Limit	Plasticity Index	Hydraulic Conductivity, cm/s
GP-99-1	16-18	24.0	102.7	74	54	2.9×10^{-8}
GP-99-2	14-16	28.5	94.5	80	57	2.7×10^{-8}
GP-99-3	4-6	31.0	93.3	70	45	2.3×10^{-8}
GP-99-4	4-6	20.3	104.6	49	27	7.7×10^{-8}
GP-99-4	18-20	24.5	100.5	73	52	1.7×10^{-8}
GP-99-6	4-4.5	30.2	89.3	71	48	3.2×10^{-8}
GP-99-16	0-2	17.3	108.4	63	45	1.7×10^{-8}
GP-99-16	18-20	26.2	97.9	77	53	3.3×10^{-8}
GP-99-26	2-4	21.6	103.3	64	45	3.1×10^{-8}
GP-99-26	16-18	21.7	104.4	67	48	2.6×10^{-8}
GP-99-27	2-4	23.8	100.7	80	59	1.1×10^{-8}
GP-99-28	20-22	29.0	95.3	77	53	2.5×10^{-8}
GP-99-29	36-38	23.7	101.8	78	55	4.6×10^{-8}
GP-99-31	26-28	32.8	88.9	80	57	1.4×10^{-8}
MW-23C	25-27	21.5	103.7	-	-	-
MW-29A	13-15	21.3	105.0	-	-	-
MW-30	18-20	25.5	99.0	-	-	-

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-2

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-1	REMOLD PARAMETERS	
DEPTH, ft.	16-18	DRY DENSITY (pcf)	-
SAMPLE NUMBER	1-18	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.89
MOISTURE CONTENT (%)	24.0
DRY DENSITY (pcf)	102.7

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**2.9×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	7620	0.25	2.0×10^{-7}
2	76620	0.44	3.6×10^{-8}
3	238200	1.06	2.9×10^{-8}
4	29100	0.13	2.8×10^{-8}
5	57180	0.25	2.9×10^{-8}
6	28140	0.13	3.0×10^{-8}
7	57660	0.25	2.9×10^{-8}

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-3

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-2	REMOLD PARAMETERS	
DEPTH, ft.	14-16	DRY DENSITY (pcf)	-
SAMPLE NUMBER	2-16	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.86
MOISTURE CONTENT (%)	28.5
DRY DENSITY (pcf)	94.5

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**2.7×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	9720	1.19	7.4×10^{-7}
2	76620	0.19	1.5×10^{-8}
3	238200	0.81	2.2×10^{-8}
4	29100	0.13	2.8×10^{-8}
5	57180	0.19	2.1×10^{-8}
6	28140	0.13	2.9×10^{-8}
7	57660	0.25	2.9×10^{-8}

ENVIRONMENTAL DRILLING SERVICES, INC.
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512-833-5007 / 512-833-5709 FAX

To:	Mark Riggle Thermo Retec 1301 W. 25th Street, Suite 406 Austin, Texas 78705	Date:	1/21/00
		Report No.:	17701-11-4
Project:	WASMN-04198-400	Project No.:	17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-3	REMOLD PARAMETERS	
DEPTH, ft.	4-6	DRY DENSITY (pcf)	-
SAMPLE NUMBER	3-6	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.88
MOISTURE CONTENT (%)	31.0
DRY DENSITY (pcf)	93.3

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.97
HYDRAULIC CONDUCTIVITY (cm/s)	**2.3×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	8700	0.19	1.2×10^{-7}
2	229200	0.81	2.1×10^{-8}
3	29100	0.13	2.5×10^{-8}
4	57180	0.19	1.9×10^{-8}
5	28140	0.13	2.6×10^{-8}
6	57660	0.19	1.9×10^{-8}

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To: Mark Riggle
Thermo Retec
1301 W. 25th Street, Suite 406
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Date: 1/21/00

Report No.: 17701-11-5

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-4	REMOLD PARAMETERS	
DEPTH, ft.	4-6	DRY DENSITY (pcf)	-
SAMPLE NUMBER	4-6	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.88
MOISTURE CONTENT (%)	20.3
DRY DENSITY (pcf)	104.6

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**7.7×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	8220	1.44	1.0×10^{-6}
2	229200	6.00	1.8×10^{-7}
3	29100	0.31	8.2×10^{-8}
4	57180	0.63	8.5×10^{-8}
5	28140	0.25	7.1×10^{-8}
6	57660	0.50	7.0×10^{-8}

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-6

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-4	REMOLD PARAMETERS	
DEPTH, ft.	18-20	DRY DENSITY (pcf)	-
SAMPLE NUMBER	4-20	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.89
MOISTURE CONTENT (%)	24.5
DRY DENSITY (pcf)	100.5

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.96
HYDRAULIC CONDUCTIVITY (cm/s)	**1.7×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	6720	0.31	2.7×10^{-7}
2	76560	0.25	1.9×10^{-8}
3	238260	0.50	1.3×10^{-8}
4	29040	0.06	1.3×10^{-8}
5	57120	0.19	2.0×10^{-8}
6	28260	0.06	1.4×10^{-8}
7	57660	0.19	2.0×10^{-8}

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-7

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-6	REMOLD PARAMETERS	
DEPTH, ft.	4-4.5	DRY DENSITY (pcf)	-
SAMPLE NUMBER	6-4	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.88
MOISTURE CONTENT (%)	30.2
DRY DENSITY (pcf)	89.3

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**3.2×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	5820	0.44	4.4×10^{-7}
2	76560	0.50	3.9×10^{-8}
3	238260	0.94	2.4×10^{-8}
4	29040	0.19	4.0×10^{-8}
5	57120	0.31	3.4×10^{-8}
6	28260	0.13	2.8×10^{-8}
7	57660	0.25	2.8×10^{-8}

ENVIRONMENTAL DRILLING SERVICES, INC.
2112 RUTLAND DRIVE, SUITE 160
AUSTIN, TEXAS 78758
512-833-5007 / 512-833-5709 FAX

To: Mark Riggle
Thermo Retec
1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-8

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-16	REMOLD PARAMETERS	
DEPTH, ft.	0-2	DRY DENSITY (pcf)	-
SAMPLE NUMBER	16-2	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.90
MOISTURE CONTENT (%)	17.3
DRY DENSITY (pcf)	108.4

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**1.7×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	9360	0.81	5.3×10^{-7}
2	17280	0.06	2.2×10^{-8}
3	64620	0.13	1.2×10^{-8}
4	82860	0.31	2.4×10^{-8}
5	361920	0.81	1.4×10^{-8}
6	69360	0.19	1.8×10^{-8}

ENVIRONMENTAL DRILLING SERVICES, INC.

2112 RUTLAND DRIVE, SUITE 160
AUSTIN, TEXAS 78758
512-833-5007 / 512-833-5709 FAX

To:	Mark Riggle Thermo Retec 1301 W. 25th Street, Suite 406 Austin, Texas 78705	Date:	1/21/00
		Report No.:	17701-11-9
Project:	WASMN-04198-400	Project No.:	17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-16	REMOLD PARAMETERS	
DEPTH, ft.	18-20	DRY DENSITY (pcf)	-
SAMPLE NUMBER	16-20	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.89
MOISTURE CONTENT (%)	26.2
DRY DENSITY (pcf)	97.9

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**3.3×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	9060	0.50	3.3×10^{-7}
2	17280	0.44	1.5×10^{-7}
3	64680	0.38	3.6×10^{-8}
4	82860	0.44	3.3×10^{-8}
5	361920	1.88	3.4×10^{-8}
6	69360	0.31	3.1×10^{-8}

ENVIRONMENTAL DRILLING SERVICES, INC.

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AUSTIN, TEXAS 78758
512-833-5007 / 512-833-5709 FAX

To:	Mark Riggle Thermo Retec 1301 W. 25th Street, Suite 406 Austin, Texas 78705	Date:	1/21/00
		Report No.:	17701-11-10
Project:	WASMN-04198-400	Project No.:	17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-26	REMOLD PARAMETERS	
DEPTH, ft.	2-4	DRY DENSITY (pcf)	-
SAMPLE NUMBER	26-4	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.89
MOISTURE CONTENT (%)	21.6
DRY DENSITY (pcf)	103.3

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.97
HYDRAULIC CONDUCTIVITY (cm/s)	**3.1×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	16200	0.44	1.5×10^{-7}
2	56220	0.38	3.9×10^{-8}
3	30720	0.13	2.4×10^{-8}
4	57720	0.31	3.2×10^{-8}
5	25980	0.13	2.9×10^{-8}
6	58020	0.25	2.6×10^{-8}
7	18960	0.13	4.0×10^{-8}

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Project: WASMN-04198-400

Date: 1/21/00

Report No.: 17701-11-11

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-26	REMOLD PARAMETERS	
DEPTH, ft.	16-18	DRY DENSITY (pcf)	-
SAMPLE NUMBER	26-18	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.90
MOISTURE CONTENT (%)	21.7
DRY DENSITY (pcf)	104.4

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.96
HYDRAULIC CONDUCTIVITY (cm/s)	**2.6×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	10080	0.50	2.9×10^{-7}
2	17280	0.13	4.3×10^{-8}
3	64620	0.25	2.3×10^{-8}
4	82860	0.31	2.3×10^{-8}
5	361920	1.88	3.3×10^{-8}
6	69360	0.25	2.4×10^{-8}

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512-833-5007 / 512-833-5709 FAX

To: Mark Riggle
Thermo Retec
1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00
Report No.: 17701-11-12
Project: WASMN-04198-400
Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-27	REMOLD PARAMETERS	
DEPTH, ft.	2-4	DRY DENSITY (pcf)	-
SAMPLE NUMBER	27-4	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.87
MOISTURE CONTENT (%)	23.8
DRY DENSITY (pcf)	100.7

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.95
HYDRAULIC CONDUCTIVITY (cm/s)	**1.1×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	8820	0.50	3.7×10^{-7}
2	17280	0.13	4.3×10^{-8}
3	64680	0.13	1.2×10^{-8}
4	82920	0.19	1.4×10^{-8}
5	361800	0.50	8.7×10^{-9}
6	69420	0.13	1.1×10^{-8}

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1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-13

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-28	REMOLD PARAMETERS	
DEPTH, ft.	20-22	DRY DENSITY (pcf)	-
SAMPLE NUMBER	28-22	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.89
MOISTURE CONTENT (%)	29.0
DRY DENSITY (pcf)	95.3

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.97
HYDRAULIC CONDUCTIVITY (cm/s)	**2.5×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	15120	0.31	1.2×10^{-7}
2	56280	0.25	2.6×10^{-8}
3	30660	0.13	2.4×10^{-8}
4	57720	0.25	2.6×10^{-8}
5	25920	0.13	2.9×10^{-8}
6	58080	0.25	2.6×10^{-8}
7	18840	0.06	2.0×10^{-8}

ENVIRONMENTAL DRILLING SERVICES, INC.

2112 RUTLAND DRIVE, SUITE 160
AUSTIN, TEXAS 78758
512-833-5007 / 512-833-5709 FAX

To:	Mark Riggle Thermo Retec 1301 W. 25th Street, Suite 406 Austin, Texas 78705	Date:	1/21/00
		Report No.:	17701-11-14
Project:	WASMN-04198-400	Project No.:	17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-29	REMOLD PARAMETERS	
DEPTH, ft.	36-38	DRY DENSITY (pcf)	-
SAMPLE NUMBER	29-38	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.88
MOISTURE CONTENT (%)	23.7
DRY DENSITY (pcf)	101.8

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.96
HYDRAULIC CONDUCTIVITY (cm/s)	**2.0×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	9600	0.31	1.8×10^{-7}
2	17280	0.06	2.0×10^{-8}
3	64560	0.25	2.2×10^{-8}
4	82920	0.25	1.7×10^{-8}
5	361920	1.31	2.1×10^{-8}
6	69420	0.25	2.1×10^{-8}

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To: Mark Riggle
Thermo Retec
1301 W. 25th Street, Suite 406
Austin, Texas 78705

Date: 1/21/00

Report No.: 17701-11-15

Project: WASMN-04198-400

Project No.: 17701

HYDRAULIC CONDUCTIVITY TEST RESULT

TEST STANDARD	ASTM D5084

BORING NUMBER	GP-99-31	REMOLD PARAMETERS	
DEPTH, ft.	26-28	DRY DENSITY (pcf)	-
SAMPLE NUMBER	31-28	MOISTURE CONTENT (%)	-
MATERIAL	Clay	PERCENT COMPACTION	-
PERMEANT	Water	RELATIVE MOISTURE (%)	-

CONDITIONS	INITIAL
HEIGHT (in)	0.97
DIAMETER (in)	1.90
MOISTURE CONTENT (%)	32.8
DRY DENSITY (pcf)	88.9

GRADIENT	30
BACK PRESSURE (psi)	40
EFFECTIVE CONSOLIDATION STRESS (psi)	5
FINAL "B" PARAMETER	.98
HYDRAULIC CONDUCTIVITY (cm/s)	**1.4×10^{-8}**

INTERVAL NO.	DELTA TIME (sec)	AVG. FLOW (cc)	HYDRAULIC CONDUCTIVITY (cm/s)
1	8640	0.13	8.1×10^{-8}
2	81960	0.25	1.7×10^{-8}
3	82920	0.19	1.3×10^{-8}
4	361800	0.75	1.2×10^{-8}
5	69420	0.19	1.6×10^{-8}

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