Final

POL Hill AST-2 Area Corrective Action Plan

Prepared for

U.S. Army Corps of Engineers

February 2004

CH2MHILL
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833-2937

DEPARTMENT OF THE ARMY
BASE REALIGNMENT AND CLOSURE
ATLANTA FIELD OFFICE
BRAC ENVIRONMENTAL COORDINATOR
HAMILTON ARMY AIRFIELD
1 BURMA ROAD
NOVATO, CALIFORNIA 94949

February 20, 2004

DAIM-BO-A-HA

Subject: Forwarding the *POL Hill AST-2 Area Corrective Action Plan* for Hamilton Army Airfield; Novato, CA.

Ms. Naomi Feger
S.F. Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear Naomi,

The Army is pleased to provide the *POL Hill AST-2 Area Corrective Action Plan* for Hamilton Army Airfield; Novato, CA for your files.

If you have any questions, please contact me at (415) 883-6386.

Sincerely,

Edward Keller, P.E.
BRAC Environmental Coordinator
Hamilton Army Airfield

Enclosure

Copies Furnished

R. Seraydarian (EPA)
D. Diebert (DTSC)
L. McMahan (DTSC)
M. Neilan (City of Novato)
D. Doak (USACE SF)
T. Gandesbery (CSCC)
Novato Library
BRAC Files

Final

POL Hill AST-2 Area Corrective Action Plan

Submitted to

U.S. Army Corps of Engineers

February 2004

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Acronyms and Abbreviations

µg/L	micrograms per liter
Army	U.S. Department of the Army
AST	aboveground storage tank
ASTM	American Society of testing and Materials
bgs	below ground surface
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylene
^{o}C	degrees Celsius
CAP	corrective action plan
cm/sec	centimeters per second
COC	chemical of concern
CQC	Contractor Quality Control
DO	dissolved oxygen
DTSC	Department of Toxic Substances Control
EI	environmental investigation
EPA	U.S. Environmental Protection Agency
ESI	Engineering-Science, Inc.
gal	gallon
GC	gas chromatography
GSA	General Services Administration
HAAF	Hamilton Army Airfield
IR	infrared spectroscopy
JP-4	Jet Propellant 4
mL/min	milliliters per minute
MNA	monitored natural attenuation
NCP	National Contingency Plan
ND	nondetect

NHP	New Hamilton Partnership
PCB	polychlorinated biphenyls
PCOC	potential contaminants of concern
PNA	polynuclear aromatic hydrocarbon
POL	petroleum, oil, and lubricant
PQL	practical quantitation limits
RAO	remedial action objectives
RCG	residential cleanup goal
RI	remedial investigation
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
TPH	total petroleum hydrocarbon
TRPH	total recoverable petroleum hydrocarbons
URC	unit risk concentration
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
UST	underground storage tank
VOC	volatile organic compound
Weston	Roy F. Weston, Inc.

Executive Summary

This Corrective Action Plan (CAP) was prepared for the U.S. Army Corp of Engineers, Sacramento District, to address the former 850,000-gallon (gal) aboveground storage tank (AST-2) located on the Petroleum, Oil, and Lubricant (POL) Hill Outparcel at Hamilton Army Airfield (HAAF) in Novato, California.

This CAP presents the results of previous environmental investigations and characterizes environmental conditions at the POL Hill AST-2 Area. This information is used to identify the chemicals of concern, develop corrective action objectives, identify appropriate corrective action technologies, and develop corrective action alternatives. The CAP also recommends and justifies the preferred corrective action alternative that will take the site to regulatory closure.

The POL Hill Outparcel operated as the Base fuel-storage center from 1942 until prior to May 1986, when the storage tanks were removed. AST-2 stood on the hillside bench within the POL Hill Outparcel and supplied jet propellant fuel (i.e., jet-propellant 4 [JP-4]) for aircraft operations to the former tank-farm area by gravity feed through a pipeline. Discharges of unknown quantities of jet fuel over the years of operation have impacted the soil and groundwater beneath the former AST-2.

When the tank was removed in 1986, the soils containing petroleum hydrocarbons in excess of 1,000 milligrams per kilogram (mg/kg) on the AST-2 hillside bench area were excavated and replaced with clean backfill. In 1990, the pipeline that supplied the lower tank farm was removed. At this time, further soil removal (to 100 mg/kg) and replacement with clean fill was conducted (IT, 1991). These remedial activities addressed all the impacted soils that could be practically removed beneath AST-2.

During the tank and soil excavation activities, a rock outcrop, which surrounds the southern area immediately behind the former AST-2 location, had an area of visible staining. A composite sample of the rock outcrop was collected and analyzed. It was determined that the outcrop staining did not represent a significant environmental concern and that there were no associated assumed human health or ecological risks (IT, 1999).

The remedial investigation (RI) activities established that petroleum hydrocarbons were the sole chemicals of concern for the POL Hill AST-2 Area (IT, 1999). Groundwater samples were collected beneath the former POL Hill AST-2 Area in March 1994, February 1997, March/April 1998, June/July 1998, August/September 1998, January 1999, September 2001, February 2002, and August 2002 to characterize the environmental impacts. Among constituents detected in groundwater samples from the POL Hill AST-2 Area, only total petroleum hydrocarbon (TPH) concentration measured as gasoline (purgeable) and TPH measured as diesel (extractable) exceeded General Services Administration (GSA) Phase 1 residential cleanup goals (RCGs).

The results of the historical investigations indicate that petroleum-hydrocarbon contamination is present in groundwater within discontinuous bedrock fractures beneath the location of former AST-2, but that the extent of impact appears to be limited to the

vicinity of former AST-2 as shown on Figures 2-1 through 2-4. Monitoring well PL-MW-101, constructed immediately east of the former tank location, accounted for the maximum concentrations of TPH among the AST-2 area monitoring wells.

The highest concentration of TPH measured as diesel (9,800 μg/L) and TPH measured as gasoline (6,200 μg/L) was detected in groundwater samples from monitoring well PL-MW-101 during the February 2002 sample round. This well also exhibited the only benzene concentrations in the former POL Hill AST-2 Area; however, benzene was not detected in any samples collected after August 1992 . The detections of TPH measured as diesel and gasoline are consistent with the expected nature of the petroleum-hydrocarbon chemical constituents in this area, since AST-2 was known to be a JP-4 storage tank.

Analyses of groundwater samples from AST-2 Area wells between March 1994 and January 1999 have shown a consistent pattern of decrease in all wells except PL-MW-101. TPH concentrations in well PL-MW-101 have fluctuated somewhat during this period with concentration spikes observed in February 1997 and February 2002. Overall, these data still support the conclusion that the hydrocarbon-contaminated groundwater in bedrock is stable and shrinking. Other groundwater-monitoring results indicate that natural attenuation has been occurring at the site (IT, 1999; SOTA, 2002).

The results of previous environmental investigations and evaluation of remedial alternatives for the POL Hill AST-2 Area were presented in a meeting on May 2, 2001 between California Regional Water Quality Control Board (RWQCB) regulators and U.S. Army Corps of Engineers (USACE). It was decided at that meeting that monitored natural attenuation (MNA) was an appropriate remedial alternative for contaminated groundwater at the POL Hill AST-2 Area and that three semi-annual rounds of groundwater analysis would be collected to confirm the viability of MNA as the chosen remedial alternative.

Since that meeting, three additional rounds of groundwater sampling have been conducted between September 2001 and August 2002 in the AST-2 Area. The results of that groundwater sampling program are provided in Appendix I (SOTA, 2002) and summarized in Table 4-1 of this report. In general, the results support the argument that MNA is a viable remedial alternative for the site. The results of the recent sampling provide the basis for further discussions with regulators on the viability of MNA as the remedial option for this site and the implications for long-term monitoring and ultimate closure of this site.

An interim monitoring program is proposed for existing groundwater wells. This CAP also proposes a decision rationale for evaluating the ongoing groundwater-monitoring data to determine when the site is ready for closure. Basically, the site will be considered ready for closure once the interim groundwater-monitoring data indicate that residual petroleum-hydrocarbon contamination in groundwater has been reduced to levels below the RCGs and that rebound of the contaminant concentrations will not occur. The historical and interim groundwater-sampling data will then be integrated into a POL Hill AST-2 Area closure report for review and acceptance by regulatory authorities.

SECTION 1

Introduction

This CAP was prepared for the former AST-2 located on the POL Hill Outparcel at HAAF, Novato, California (Figure 1-1). This CAP was prepared for the U.S. Army through the USACE, Sacramento District and accomplishes the following:

- Presents the results of an RI conducted for AST-2 within the POL Hill Outparcel from 1996 to 1997
- Evaluates the findings of the recent RI, along with results of previous soil and groundwater characterization activities at the POL Hill AST-2 Area
- Develops corrective actions capable of obtaining site closure for the POL Hill AST-2 Area
- Evaluates these corrective actions to identify the preferred remedy

The POL Hill Outparcel is located within the HAAF Base Realignment and Closure (BRAC) property (Figure 1-2) in Novato, California. Features of the POL Hill Outparcel include the location of the former AST-2 on the north end of Reservoir Hill and a former below ground tank farm on the lowlands adjacent to Reservoir Hill (Figure 1-3). This CAP addresses only the former POL Hill AST-2 Area. The former tank farm area is addressed separately in the Closure Report—POL Hill Outparcel—Tank Farm (CH2M HILL).

For purposes of this CAP evaluation, the POL Hill AST-2 Area was divided into two media of interest, soil and groundwater, in the vicinity of the former AST-2. Petroleum hydrocarbons are present in the soil and groundwater, and are associated with site use and storage of the fuel JP-4. Through individual analyses of both media, a preferred corrective action is selected that collectively addresses the physical and environmental impacts to both the soil and groundwater at the site.

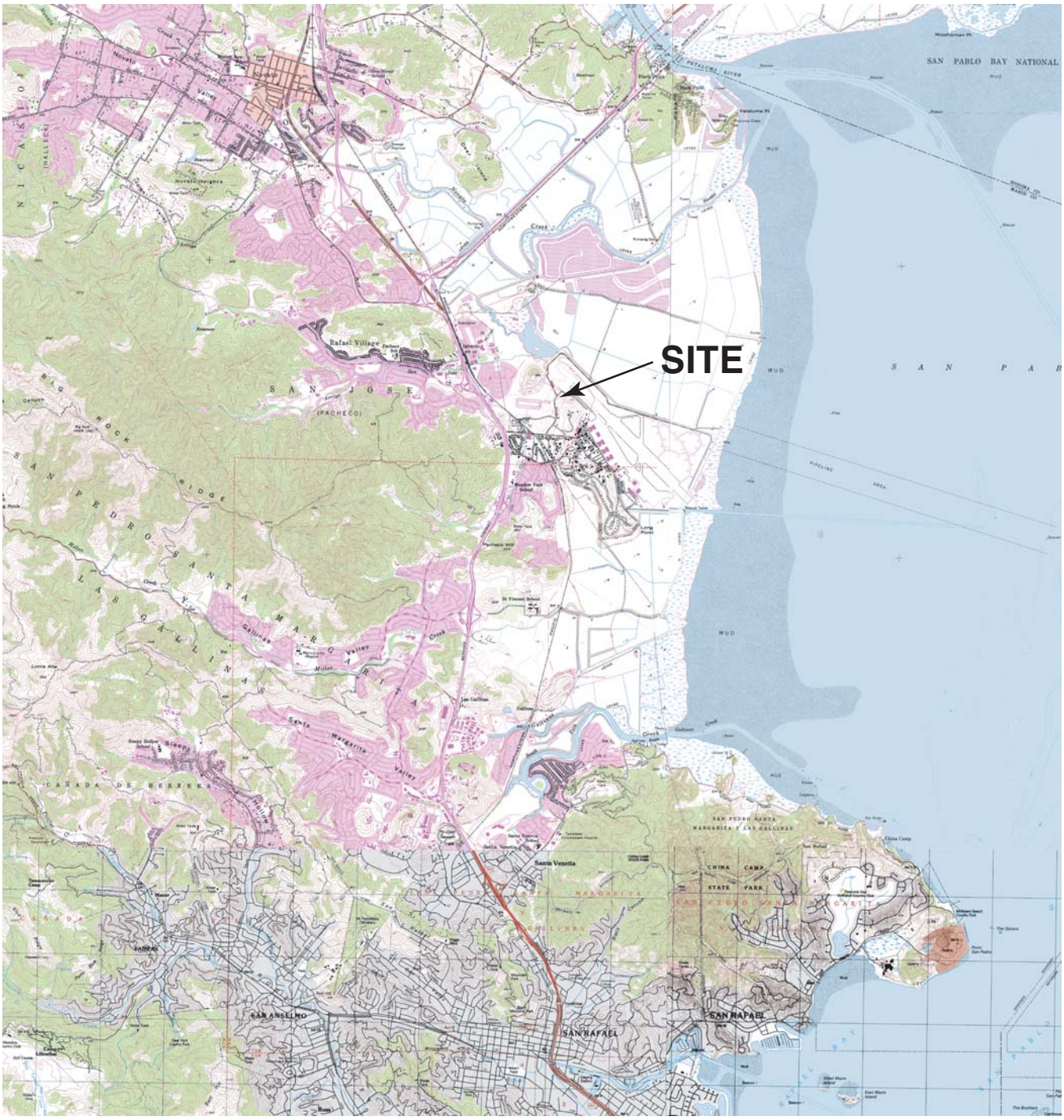
1.1 Site History and Problem Statement

The POL Hill Outparcel is separated from the Main BRAC Property by approximately 200 feet (ft) and is surrounded by the GSA Phase II Sale Area (Figure 1-2). The POL Hill Outparcel contained two main features:

- The site of a former large aboveground storage tank and associated piping (AST-2)
- The site of a former underground tank farm

As previously mentioned, this CAP only addresses the POL Hill AST-2 Area.

A former 850,000-gal AST (AST-2) was located at POL Hill. AST-2 previously stood on a graded bench on the north side of Reservoir Hill and supplied the lower tank farm by gravity feed through a pipeline system. AST-2 stored JP-4 for aircraft operations and was removed in 1986.



0 1 2

SCALE IN MILES

N

Figure 1-1
Site Location Map
POL Hill
Hamilton Army Airfield
Novato, California

Source: USGS Novato, Petaluma Point, San Rafael, and San Quentin Quadrangles - July 1983

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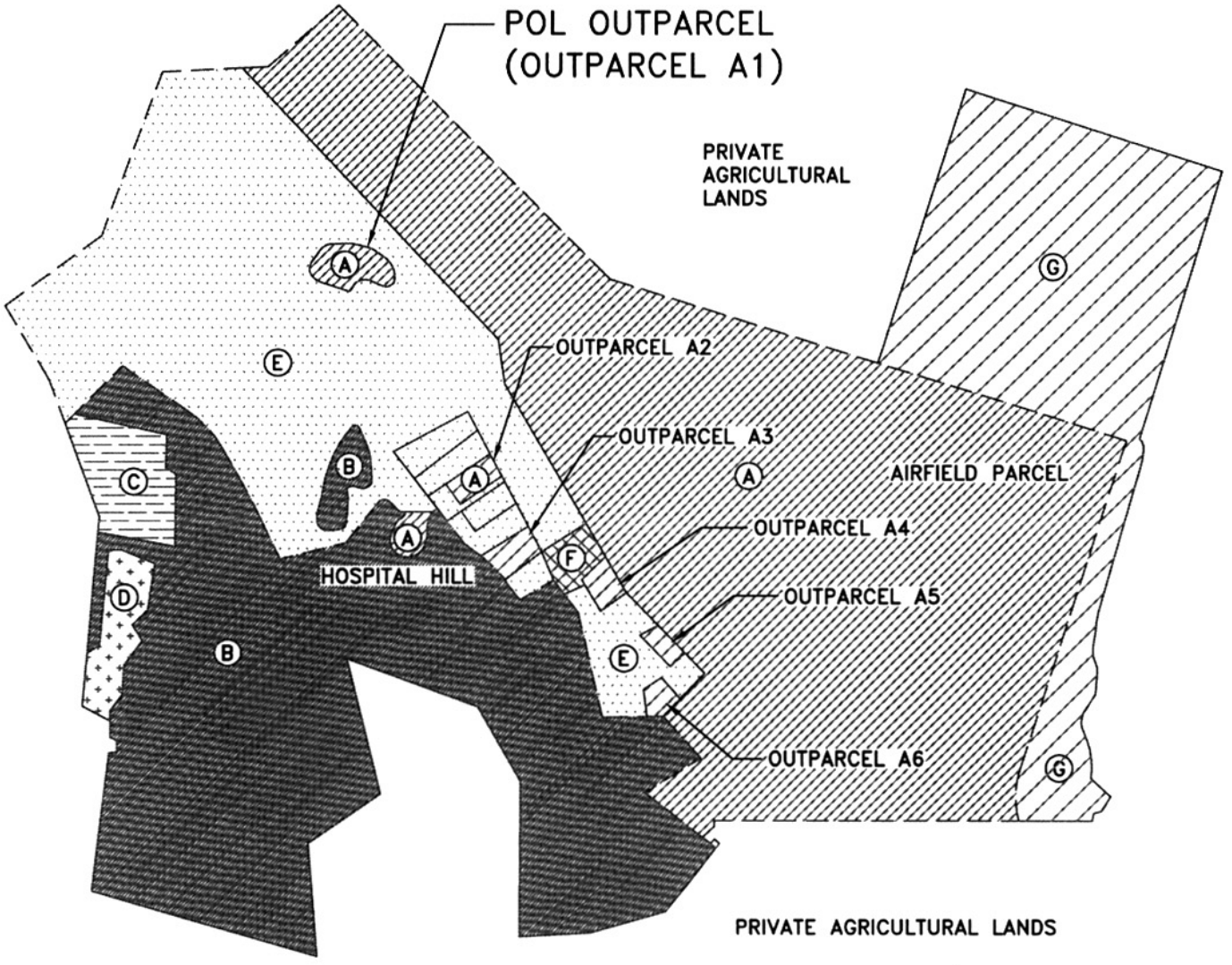

LEGEND:

- ARMY–OWNED PROPERTY BOUNDARY
- (A) BRAC PROPERTY
- (B) NAVY HOUSING
- (C) LANHAM HOUSING
- (D) NOVATO SCHOOL DISTRICT
- (E) GSA SALE PARCEL
- (F) US COAST GUARD
- (G) STATE OF CALIFORNIA

N

APPROXIMATE SCALE

0 1000 2000 FEET

SOURCES:

Woodward–Clyde Federal Services Drawing SK9469

International Technology Corporation Drawing 762538–A315

BRAC PROPERTY LOCATION MAP
POL HILL
HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 1-2

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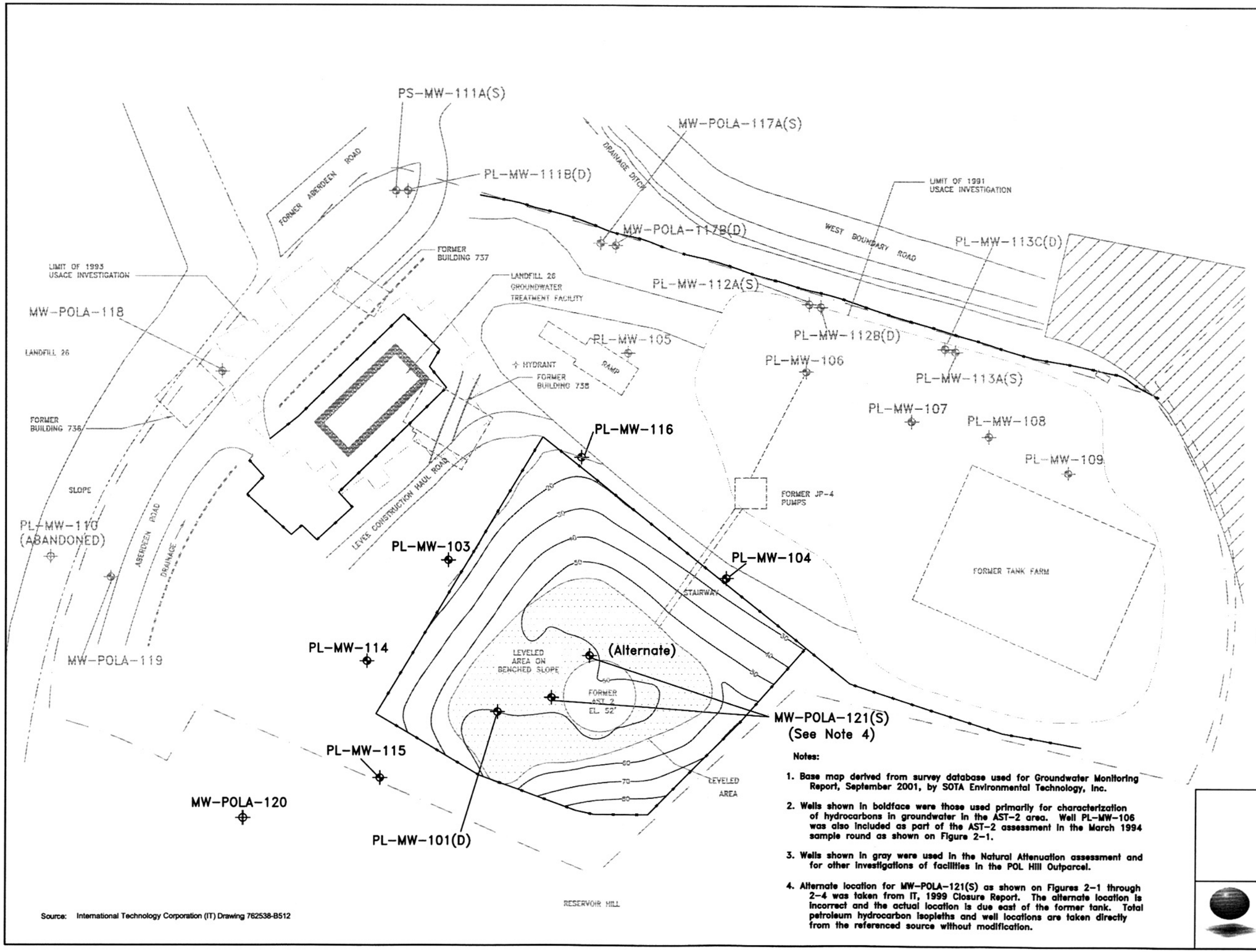
April 2003



LEGEND:

- FENCE
- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- (S) SHALLOW MONITORING WELL
- (D) DEEPER MONITORING WELL
- FORMER STRUCTURES
- APPROXIMATE LIMITS OF USACE EXCAVATION
- NHP LEVEE AND EASEMENT
- POL OUTPARCEL BRAC PROPERTY BOUNDARY
- GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
- LANDFILL 26 BOUNDARY

Source: International Technology Corporation (IT) Drawing 762538-B512

Notes:

1. Base map derived from survey database used for Groundwater Monitoring Report, September 2001, by SOTA Environmental Technology, Inc.
2. Wells shown in boldface were those used primarily for characterization of hydrocarbons in groundwater in the AST-2 area. Well PL-MW-106 was also included as part of the AST-2 assessment in the March 1994 sample round as shown on Figure 2-1.
3. Wells shown in gray were used in the Natural Attenuation assessment and for other investigations of facilities in the POL Hill Outparcel.
4. Alternate location for MW-POLA-121(S) as shown on Figures 2-1 through 2-4 was taken from IT, 1999 Closure Report. The alternate location is incorrect and the actual location is due east of the former tank. Total petroleum hydrocarbon isopleths and well locations are taken directly from the referenced source without modification.

WELL LOCATION MAP
POL HILL OUTPARCEL
HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 1-3

159892.08.PL.CR

SEPTEMBER 2002

Over the years, unknown amounts of JP-4 fuel were released from AST-2 and piping appurtenances and contaminated the surrounding soils and underlying groundwater. During removal of AST-2, known and suspected impacted soils were excavated if TPH concentrations exceeded 1,000 mg/kg. Following excavation and removal activities, soil sampling was conducted along the periphery of the excavation to confirm contaminant removal (IT, 1987). Subsequent excavation activities were conducted to remove, to the extent possible (i.e., down to bedrock), impacted soils where TPH concentrations exceeded 100 mg/kg (IT, 1991). The excavation area was backfilled with clean material. Groundwater samples were collected beneath the former AST-2 Area in March 1994, February 1997, March/April 1998, June/July 1998, August/September 1998, January 1999, September 2001, February 2002, and August 2002 to characterize the environmental impacts. These data support the conclusion that that the hydrocarbon-contaminated groundwater in the bedrock fissures is stable and shrinking. Other groundwater monitoring results indicate that natural attenuation has been occurring at the site (IT, 1999; SOTA, 2002).

During the tank and soil excavation activities, a rock outcrop, which surrounds the southern area immediately behind the former AST-2 location, had an area of visible staining. A composite sample of the rock outcrop was collected and analyzed to assess the staining. The rock staining is not considered to be environmentally significant and there are no associated assumed human health or ecological risks (IT, 1999).

1.2 Purpose and Objective

The purpose of this CAP is to plan and document corrective actions for groundwater contamination at the POL Hill AST-2 Area. The objectives of the CAP process are: to provide documentation of releases of petroleum or hazardous substances at the site; to delineate the general extent of any known contamination; to identify potential corrective actions; to provide rationale for the selection of a recommended corrective action; and to propose a rationale for determining when the POL Hill AST-2 Area is ready for closure. This effort is based on process knowledge and investigative activities conducted by the U.S. Army.

To accomplish the purpose and objectives, the scope of work associated with this effort and documented in this CAP includes:

- Review and discussion of the current condition of the POL Hill AST-2 Area
- Identification of chemicals of concern
- Development of corrective action objectives
- Identification of appropriate corrective action technologies
- Development of corrective action alternatives
- Recommendation and justification of a preferred corrective action alternative.

The results of these tasks are presented in this document as discussed in Section 1.4.

1.3 Regulatory Authority, Guidance, and Current Regulatory Status

The U.S. Army is the lead agency involved in the BRAC Closure process at HAAF. The RWQCB is the lead regulatory agency for the POL Hill Outparcel. The RWQCB's status as the lead regulatory agency is formally documented in a letter from the Department of Toxic Substances Control (DTSC) to the Army which indicates that petroleum hydrocarbons are not regulated as hazardous substances in the California Health and Safety Code (DSTC, July 3, 1998).

In addition, the U.S. Environmental Protection Agency (EPA) is an oversight agency for closure of sites within the POL Hill Outparcel.

The work described in this report was performed pursuant to the Comprehensive Remedial Investigation/Feasibility Study Work Plan (IT, 1997a) and the Contractor Quality Control/Sampling and Analysis Plan (CQC/SAP) (IT, 1997b), which was approved by the regulatory agencies. Additionally, the remedial investigation activities were conducted in accordance with the statutory requirements defined in the California Code of Regulations Title 23, Division 3, Chapter 16, Article 11 (Underground Storage Tanks) (1994). The recent groundwater monitoring activities (i.e., after January 1999) were completed in accordance with the approved workplan dated October 31, 2001 (SOTA, 2001).

Other guidance documents used in preparation of this closure report include the *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites* (TRWQCB, 1990), *the Supplemental Instructions to State Water Board, December 8, 1995, Interim Guidance on Required Cleanup at Low Risk Fuel Sites* (RWQCB, 1996), the risk-based corrective action approach documented in the American Society of Testing and Materials (ASTM) *Standard Guide for Risk Based Corrective Action Applied at Petroleum Release Sites* (1995), and ASTM *Standard Guidance for Remediation of Groundwater by Natural Attenuation at Petroleum Release Sites* (1998).

These regulatory requirements not only drive the generation of this CAP but are also considered in the identification of corrective action objectives and in the evaluation and analysis of corrective action alternatives (both of which are discussed in subsequent sections of the text).

The results of previous environmental investigations and evaluation of remedial alternatives for the POL Hill AST-2 Area were presented in a meeting on May 2, 2001 between RWQCB regulators and USACE personnel. It was decided at that meeting that monitored natural attenuation (MNA) is a potentially appropriate remedial alternative for contaminated groundwater at the POL Hill AST-2 Area pending the acquisition of additional data. It was agreed to collect an additional three rounds of groundwater samples to confirm the viability of MNA as the chosen remedial alternative. Following the three rounds of sampling to support the MNA alternative, talks with the RWQCB would be held to discuss the results of the MNA analytical testing and the implications for long-term monitoring and ultimate closure of the site.

This CAP documents the data that were collected prior to the May 2, 2001 meeting and the subsequent three rounds of groundwater sampling and analysis by SOTA (2002). It also identifies a decision rationale for evaluating the ongoing groundwater monitoring data to determine when the site is ready for closure. The results of the MNA analytical testing prior

to May 2, 2001 are provided in Appendix H. Results from additional MNA analytical testing are included in the report by SOTA (2002) included in Appendix I.

1.4 Report Organization

This CAP has been divided into the following sections:

- **Section 1—Introduction**
  Summarizes the objectives/scope, site history, and regulatory authority for development of this CAP
- **Section 2—Description of Current Conditions**
  Provides a brief summary of the results of the previous and recent investigative activities conducted at the POL Hill AST-2 area
- **Section 3—Corrective Action Objective Development**
  Documents the steps taken in identifying corrective action technologies and developing corrective action alternatives
- **Section 4—Identification of Corrective Action Technologies**
  Presents corrective action technologies applicable to site-specific conditions and the media and contaminants present at the site
- **Section 5—Development of Corrective Action Alternatives**
  Presents corrective action alternatives developed from the applicable technologies which will achieve the stated corrective action objectives
- **Section 6—Recommended Corrective Action Alternative**
  Presents the preferred corrective action alternative and the rationale for its selection
- **Section 7—Proposed Interim Monitoring and Site Closure Plan**
  Presents a plan for interim monitoring and determining when the site can be closed
- **Section 8—References**
  Presents a list of all referenced documents and figures
- **Appendix A—Recent Remedial Investigation Results**
  Presents the results of the 1996-1997 remedial investigation activities at the POL Hill AST-2 Area; these activities included: installing and sampling additional groundwater monitoring wells, conducting specific capacity and slug testing to evaluate stability of the contaminants in the groundwater within bedrock fractures, and assessing the presence or absence of soil and groundwater contamination near the groundwater treatment facility
- **Appendix B—Boring Logs and Well Construction Diagrams**
  Presents boring logs for the recently drilled soil borings and groundwater-monitoring wells; also presents construction details and diagrams of the groundwater-monitoring wells
- **Appendix C—Well Development and Well Survey Data**

Presents well development data for the groundwater monitoring wells associated with AST-2, as well as location survey data for those wells

- **Appendix D—Field Documentation**
  Presents sample collection logs and analytical request/chain of custody forms for the soil and groundwater samples
- **Appendix E—Validated Analytical Data**
  Presents validated analytical data for the analyzed soil and groundwater samples
- **Appendix F—Aquifer Test Data**
  Presents the results of the slug and pump tests conducted on the recently installed groundwater-monitoring wells
- **Appendix G—Cost Estimates**
  Presents detailed and present-worth calculations for each of the corrective action alternatives
- **Appendix H—Monitored Natural Attenuation Summary**
  Provides background information on MNA and summarizes site-specific information
- **Appendix I—Groundwater Monitoring Report**
  Text, tables, and figures from Draft report by SOTA Environmental Technology, Inc. dated August 2002.

SECTION 2

Description of Site Conditions

The following section discusses the results of previous investigations and the recent remedial investigation conducted at the POL Hill AST-2 Area. This information forms the baseline from which the corrective action alternatives were developed and evaluated in subsequent sections of the text. This section provides descriptions of conditions and physical characteristics of the POL Hill AST-2 Area, including:

- HAAF background and history
- POL Hill AST-2 Area description
- Geology and hydrogeology
- Field investigations and environmental studies prior to the RI
- Remedial investigations and actions
- Nature and extent of contamination
- Data comparability

2.1 HAAF Background and History

HAAF was a 1,600-acre military installation located approximately 22 miles north of San Francisco on San Pablo Bay in Marin County, California (see Figure 1-1). The military installation was bounded on the north by the North Antenna Field (a formerly-used defense site), private agricultural lands, and a private residential community (Bel Marin Keys); on the east by state-owned land and San Pablo Bay; on the south by private agricultural fields; and on the west by Nave Drive, which parallels State Highway 101.

HAAF was constructed on reclaimed tidal mud flats by the Army Air Corps in 1932. The site, previously known as Marin Meadows, had been used as ranch and farm land since the Mexican Land Grant (USACE, undated). Military operations began in December 1932, first as a Base for bombers, and later as a Base for transport and fighter aircraft. The Base played a major role during World War II as a training field and staging area for Pacific operations. During the war (i.e., early- and mid-1940s), the Base hospital served as an acute-care and rehabilitation facility for thousands of war casualties per month.

The Base was renamed Hamilton Air Force Base in 1947 when it was transferred to the newly created U.S. Air Force (USAF). The USAF used the Base primarily as a training and fighter installation until 1975. In 1976, the USAF ended military operations at the Base and the U.S. Department of the Army (Army) began aircraft operations at the airfield and supporting facilities with permission from the USAF (Hamilton Field Association, Inc., 1988). In 1984, the airfield property was officially transferred back to the Army and renamed Hamilton Army Airfield. The Base was declared surplus under the Base Realignment and Closure Act of 1988. The Army continued to use the airfield primarily for Army Reserve aircraft operations until March 1994. The BRAC Property is currently managed by the Department of the Army, I Corps, at Fort Lewis, Washington.

The Main BRAC Property encompasses approximately 644 acres located primarily within the northeastern portion of the HAAF. The Main BRAC Property is bounded on the southwest by the GSA Phase II Sale Area and U.S. Coast Guard-administered military housing, both of which are located within the current Base limits. The 7.84-acre POL Hill Outparcel has been addressed by the Army together with other BRAC sites; however, the outparcel is separate from the contiguous Main BRAC Property (see Figure 1-2). The POL Hill Outparcel is located on the north side of a ridge known as Reservoir Hill, and the adjacent lowlands southwest of West Boundary Road. The Outparcel is bounded by the GSA Phase II Sale Area (see Figure 1-3). The POL Hill AST-2 is located in the south-central portion of the POL Hill Outparcel.

2.2 POL Hill AST-2 Area Description

The POL Hill Outparcel lies within the upland portion of HAAF, on the north side of a ridge known as Reservoir Hill and southwest of West Boundary Road (see Figure 1-3). The POL Hill Outparcel operated as the Base fuel-storage center from 1942 until prior to May 1986, when the storage tanks were removed. AST-2 stood on the hillside bench and supplied JP-4 for aircraft operations to the former tank-farm area by gravity feed through a pipeline. Discharges of jet fuel have impacted the soil and groundwater beneath the former AST-2. Since AST-2 was removed in 1986, the following wells have been used to assess environmental conditions in this area: PL-MW-101 (D) and MW-POLA-121(S) in the source area and PL-MW-103, PL-MW-104, PL-MW-114, PL-MW-115, PL-MW-116, and MW-POLA-120 in downgradient areas around former AST-2 (see Figure 1-3). Another well, PL-MW-106, was used to assess conditions associated with the AST-2 in the March 1994 sample round but was non-detect for petroleum hydrocarbons and so was not included in subsequent sample rounds. Monitoring well PL-MW-107 was sampled for BTEX and TPH between February 1997 and September 1998 and for TPH between September 2001 and August 2002. All of the above-listed wells were also sampled for geochemical parameters to support the natural attenuation study between September 2001 and August 2002 (SOTA, 2002).

The POL Hill Outparcel formerly contained a variety of fuel-storage facilities, including several ASTs, underground storage tanks (USTs), and associated fuel lines and pumping systems which were removed between 1986 and 1990. In 1986, AST-2 and the twenty USTs, associated with the former underground tank-farm area, were removed. At this time, the soils containing petroleum hydrocarbons in excess of 1,000 mg/kg were excavated and replaced with clean backfill including the soil from the AST-2 hillside bench area. In 1990, the pipeline that supplied the lower tank farm was removed, along with additional items from the lower tank farm. At this time, there was further removal of soils with concentrations above 100 mg/kg and the excavated soils were replaced with clean fill.

2.3 Geology and Hydrogeology

Reservoir Hill lies within the San Francisco-Marin structural block of the Northern Coast Range geomorphic province of California. The higher-relief areas to the west and south of HAAF are generally underlain by serpentine and sandstone bedrock from the Franciscan Complex of Jurassic to Cretaceous age. The bedrock is locally overlain by Tertiary alluvium and colluvium deposits.

Five distinct geologic units were identified in the POL Hill Area from well-boring logs: two bedrock units, Bay Mud, and two artificial-fill units (ESI, 1993). The lower bedrock unit is a gray, highly indurated, fractured Franciscan sandstone that was encountered to the total depth of the borings. The upper bedrock unit is described as friable, yellow-to-buff colored, interbedded sandstone, siltstone, and shale. In areas not disturbed by excavation and fill activities, a thin layer of Bay Mud overlies the upper-bedrock unit along the northeastern perimeter of the site. An older fill unit of pebbly, sandy clay is present to a depth of approximately 7 ft below ground surface (bgs) along the northern boundary of the POL Hill Area (WCC, 1987). A younger fill, typically less than 10 ft thick, consisting of clayey, sandy gravel is present in the former tank-farm area and at the bench where AST-2 was located.

Groundwater occurs in the weathered bedrock along the flanks of Reservoir Hill. Recharge occurs from rainfall on the top and slopes of the hill, with groundwater percolating into the weathered material and fractures in the bedrock. Flow within the bedrock is controlled by fractures and also follows topography. A representative groundwater-elevation contour map is provided in Figure A-7 of the POL Hill Outparcel RI (IT, 1999), included in Appendix A of this CAP.

Groundwater in the vicinity of the former AST-2 occurs in the bedrock at approximately 15 to 25 ft bgs and in the fill material at increasingly shallower depths away from the hill (Figure 2-2). Groundwater data near the drainage ditch suggest that an upward hydraulic gradient exists between the shallow and deeper units of the area (ESI, 1993).

Groundwater at the POL Hill Outparcel and GSA Properties was determined to occur in a low-flow fractured-bedrock layer and to have low aquifer production rates. The RWQCB is responsible for enforcement of State Water Resource Control Board Policy 88-63 (RWQCB, 1992), which specifies several criteria for determining whether groundwater is suitable for municipal or domestic water supply (i.e., drinking water). One of the criteria for suitability is recovery rate. During the investigation, the groundwater within the POL Hill Outparcel was recovered at an average of approximately 5 gal per day, which is below the minimum recovery rate for beneficial-use designation for drinking water of 200 gal per day.

Given the low groundwater yield based on testing (see Appendix F), the primary use of the groundwater (i.e., recharge to San Francisco Bay) from the POL Hill Outparcel is the same as the GSA properties, and suggests that GSA Phase I residential cleanup goals (RCGs) for groundwater also apply at the POL Hill AST-2 Area.

The only perennial surface-water feature in the area is a drainage ditch that lies outside the northern boundary of the POL Hill Outparcel (Figure 2-1). It originates east of the POL Hill AST-2 Area and drains westward under Aberdeen Road.

2.4 Field Investigations and Environmental Studies Prior to the RI

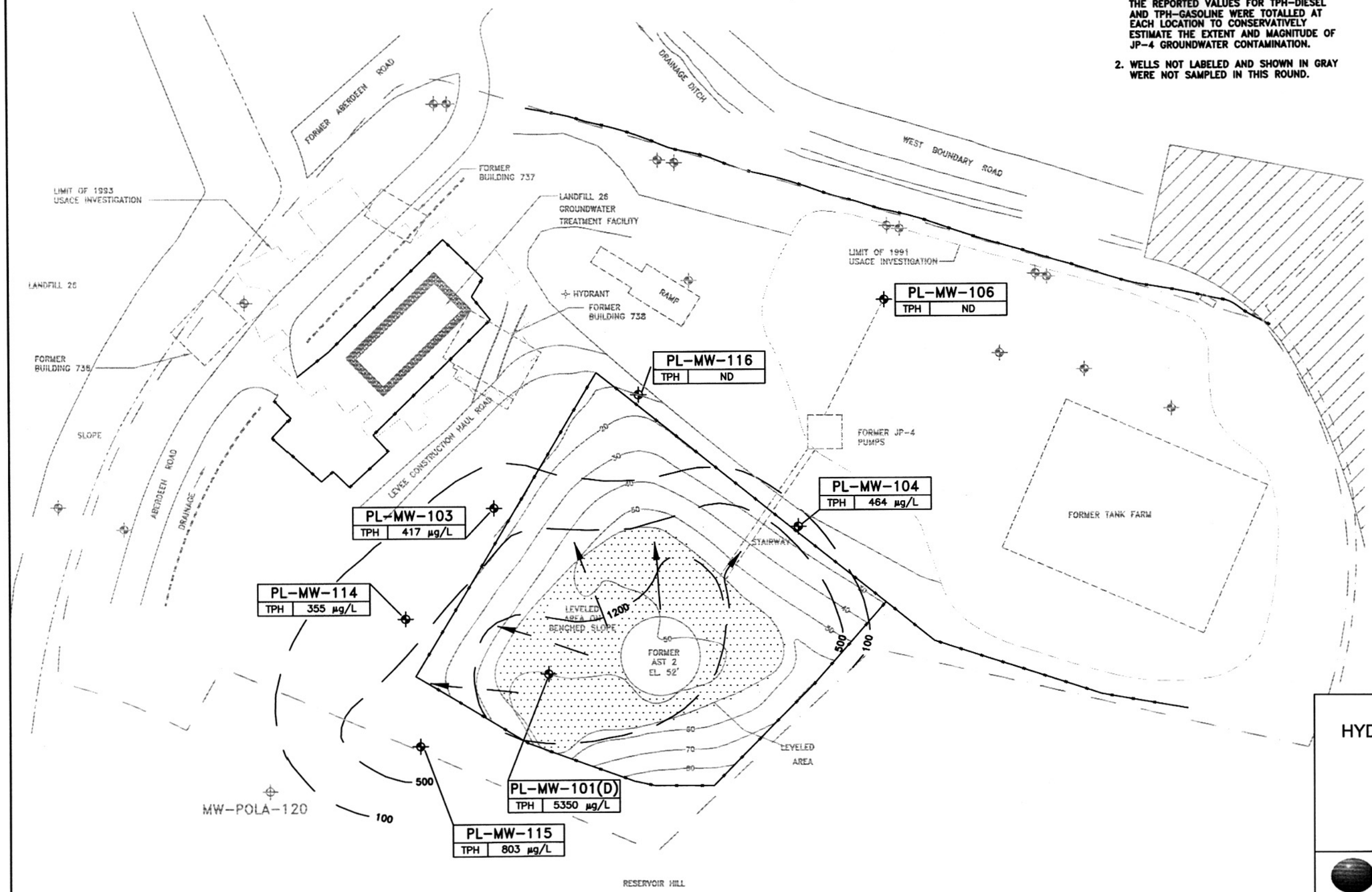
The Army conducted several field investigations and environmental studies for the POL Hill Outparcel between 1986 and 1994, prior to the RI that was initiated in 1996 and completed in February 1999 (IT, 1999). Earlier remedial activities conducted during the investigations and studies included AST and UST decommissioning and removal, contaminated-soil removal, contaminated-soil aeration, and investigations of soil and groundwater to identify the nature and extent of contamination resulting from site activities. Most of the previous studies evaluated both the AST-2 and Tank Farm areas of the POL Hill Outparcel.

NOTE:

1. BASED ON PROCESS KNOWLEDGE, JP-4 WAS STORED IN THE TANKS, HOWEVER, BASED ON CHEMICAL INTERFERENCES AND DEGRADATION RESULTING IN THE QUANITIFICATION OF JP-4 AGAINST DIESEL AND GASOLINE STANDARDS, THE REPORTED VALUES FOR TPH-DIESEL AND TPH-GASOLINE WERE TOTALLED AT EACH LOCATION TO CONSERVATIVELY ESTIMATE THE EXTENT AND MAGNITUDE OF JP-4 GROUNDWATER CONTAMINATION.
2. WELLS NOT LABELED AND SHOWN IN GRAY WERE NOT SAMPLED IN THIS ROUND.

LEGEND:

- FENCE
- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- INFERRED GROUNDWATER FLOW DIRECTION
- 100 — CONTOURS REPRESENT COMBINED TPH-DIESEL, TPH-GASOLINE, AND TPH-JP4 DETECTIONS. CONCENTRATIONS ARE IN µG/L
- ND — NOT DETECTED (DETECTION LIMIT=50µG/L FOR TPH COMPOUNDS AND 1µG/L FOR BTEX)
- (S) SHALLOW MONITORING WELL
- (D) DEEPER MONITORING WELL
- FORMER STRUCTURES
- APPROXIMATE LIMITS OF USACE EXCAVATION
- NHP LEVEE AND EASEMENT
- POL OUTPARCEL BRAC PROPERTY BOUNDARY
- GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
- LANDFILL 26 BOUNDARY



SCALE

0 80 160 FEET

Source: International Technology Corporation (IT) Drawing 762538-B512

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER POL HILL AST-2 AREA MARCH 1994

HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 2-1

159892.08.PL.CR

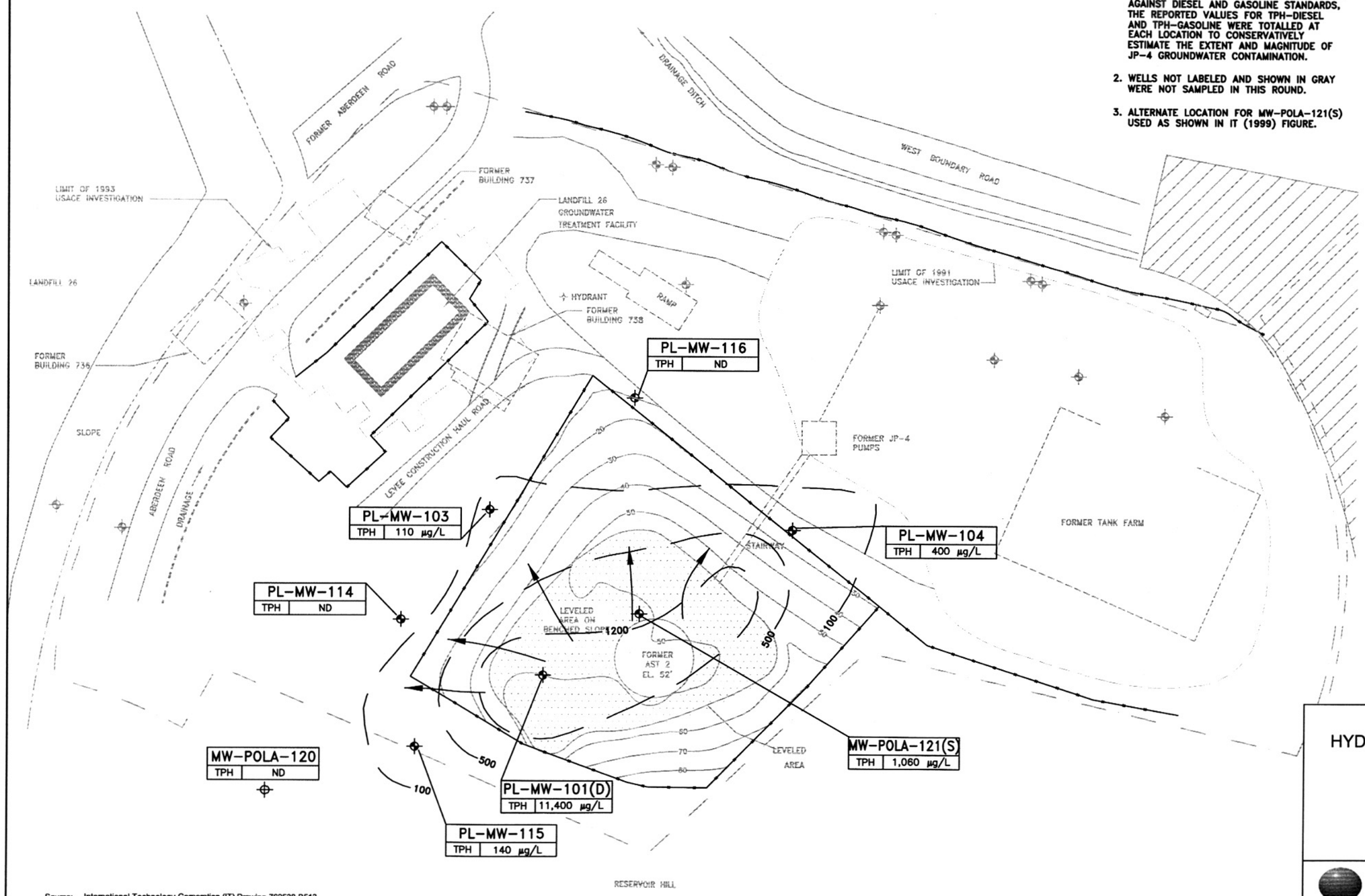
SEPTEMBER 2002

NOTE:

1. BASED ON PROCESS KNOWLEDGE, JP-4 WAS STORED IN THE TANKS, HOWEVER, BASED ON CHEMICAL INTERFERENCES AND DEGRADATION RESULTING IN THE QUANITIFICATION OF JP-4 AGAINST DIESEL AND GASOLINE STANDARDS, THE REPORTED VALUES FOR TPH-DIESEL AND TPH-GASOLINE WERE TOTALLED AT EACH LOCATION TO CONSERVATIVELY ESTIMATE THE EXTENT AND MAGNITUDE OF JP-4 GROUNDWATER CONTAMINATION.
2. WELLS NOT LABELED AND SHOWN IN GRAY WERE NOT SAMPLED IN THIS ROUND.
3. ALTERNATE LOCATION FOR MW-POLA-121(S) USED AS SHOWN IN IT (1999) FIGURE.

LEGEND:

- FENCE
- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- INFERRED GROUNDWATER FLOW DIRECTION
- 100 — CONTOURS REPRESENT COMBINED TPH-DIESEL, TPH-GASOLINE, AND TPH-JP4 DETECTIONS. CONCENTRATIONS ARE IN µG/L
- ND — NOT DETECTED (DETECTION LIMIT=50µG/L FOR TPH COMPOUNDS AND 1µG/L FOR BTEX)
- (S) SHALLOW MONITORING WELL
- (D) DEEPER MONITORING WELL
- FORMER STRUCTURES
- APPROXIMATE LIMITS OF USACE EXCAVATION
- NHP LEVEE AND EASEMENT
- POL OUTPARCEL BRAC PROPERTY BOUNDARY
- GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
- LANDFILL 26 BOUNDARY



SCALE

0 80 160 FEET

Source: International Technology Corporation (IT) Drawing 762538-B513

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER POL HILL AST-2 AREA

FEBRUARY 1997

HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 2-2

159892.08.PL.CR

SEPTEMBER 2002

Descriptions of site histories, test boring logs, subsurface characterizations, and analytical results from previous investigations for the POL Hill AST-2 Area were used to provide background information for this CAP and are listed below:

- In 1986, IT removed and disposed of fuel-storage tanks and associated equipment at HAAF, including AST-2 and the tank farm at the POL Hill Outparcel. Sampling and analysis of soil and water were performed beneath and around the former tank locations as documented in their Hamilton Air Force Base-Storage Tank Removal Project report (IT, 1987).
- An enhanced Preliminary Assessment of the BRAC Property was conducted by Roy F. Weston, Inc. (Weston) in 1990. This investigation included reconnaissance-level site assessments. The investigation identified locations of known and suspected USTs (Weston, 1990).
- A Remedial Action Plan prepared by IT in 1990 provided information regarding remediation of contaminated soil at three sites at HAAF, including the POL Hill Outparcel within the BRAC Property. The plan outlined proposed cleanup levels and remedial options (IT, 1990). The remedial work, which included removal of fuel pipelines and excavation and treatment of contaminated soils, was performed the following year (IT, 1991).
- Engineering-Science, Inc. (ESI) conducted an environmental investigation (EI) for the BRAC Property at HAAF in 1993. The investigation defined the distribution, type, and concentrations of contaminants at the base, and provided a risk assessment of those contaminants (ESI, 1993).
- In 1994, a supplementary environmental report by the Army provided additional information in preparation for remedial activities at HAAF. The scope of the investigation included the collection and analysis of soil, sediment, and groundwater samples from six areas within the BRAC Property, including the POL Hill Outparcel that required additional investigation (USACE, 1994).

The summary provided below focuses on the portions of investigation and results for the POL Hill AST-2 Area. Results of the previous investigations confirmed or suggested the presence of petroleum hydrocarbons in the soil and groundwater at the POL Hill AST-2 Area. This information was used to scope the remedial investigation activities summarized in Section 3.0 and detailed in Appendix A. Details of the individual work efforts and investigations that were conducted at the POL Hill AST-2 Area prior to the RI (IT, 1999) and the results of each are summarized in Table 2-1.

2.4.1 Excavation and Sampling

The 850,000-gal AST-2 and associated piping was removed by IT in 1986 (IT, 1987). Prior to excavation activities, the valves and equipment associated with the tanks were demolished and removed. Following the tank removal, IT excavated the soil beneath the tank until the level of the original grade was reached. Additionally, soils samples were collected from beneath the removed tank and from trenches in and around the tank-removal area. Groundwater samples were collected from 11 monitoring wells, which were previously installed by Woodward Clyde in 1985, located downgradient of the investigative area. Both soil- and groundwater-sample analytical results indicated elevated levels of volatile-fuel

TABLE 2-1
Previous Field Investigations and Engineering Studies Related to POL Hill AST-2

Source	Soil Investigation and Significant Analytical Results	Groundwater Investigation and Significant Analytical Results	Remedial Activities	References
Hamiliton AFB[a] Storage Tank Removal Project—IT Corporation	None	None	Removed one 850,000-gallon AST[b] (AST-2) and associated fuel lines and pumping systems. Excavated soil with TPH[c] concentrations greater than 1,000 milligrams per kilogram (mg/kg) from the area around the removed tank and piping system.	IT, 1987[d]
Final Engineering Report, Miscellaneous Contaminated Sites—IT Corporation	None	None	Additional investigation of soil from the tank/piping system area resulted in the removal of contaminated soil exceeding TPH concentrations of 100 mg/kg.	IT, 1991[e]
Final Investigation Report—Engineering Science, Inc.	Phase I: Thirteen composite soil samples were collected from the drill cuttings during construction of 13 of 15 monitoring wells. Concentrations of contaminants detected include: bis(2-ethylhexyl)phthalate (7 detects ranging from 0.82-3.02 mg/kg) 2-methylnaphthalene (1 detect at 0.3 mg/kg) lead (13 detects ranging 5.94-15.2 mg/kg)	Phase I: Fifteen groundwater samples and 3 duplicates were collected from 15 monitoring wells. Monitoring well PL-MW-101 was the only well with consistent contaminant detections: benzene (9.69 μg/L), ethylbenzene (210 μg/L), xylene (371 μg/L), 1,3-dimethylbenzene (479 μg/L), bis(2-ethylhexyl)phthalate (14.7 μg/L), and 2-methylnapthalene (89 μg/L). Bis(2-ethylhexyl)phthalate was also detected in well PL-MW-103 at 29.3 μg/L.	None	ESI, 1993[g]

TABLE 2-1
Previous Field Investigations and Engineering Studies Related to POL Hill AST-2

Source	Soil Investigation and Significant Analytical Results	Groundwater Investigation and Significant Analytical Results	Remedial Activities	References
Final Investigation Report—Engineering Science, Inc.	Phase II: Two composite soil samples were collected from the drill cuttings of two additional monitoring wells. Lead was detected at 8.7 and 16 mg/kg. BTEX[f] was analyzed for but not detected. Thirty soil borings and 1 duplicate were collected from 16 shallow auger borings. No contaminants were detected.	Phase II: Seventeen groundwater samples were collected from 17 monitoring wells during 2 sampling rounds. Monitoring well PL-MW-101 was the only well with consistent contaminant detection during both rounds with maximum detections: benzene (6.05 μg/L), toluene (10.0 μg/L), ethylbenzene (110 μg/L), xylenes (290 μg/L), and 1,3-dimethylbenzene (280 μg/L). During Round 1, no other wells detected contaminants. However, lead was detected in Round 2 in two wells (6.4 μg/L in PL-MW-114 and 6.13 μg/L in PL-MW-115).	None	ESI, 1993[g]
Supplement to the Final Environmental Investigation Report—USACE	Two soil samples were collected during drilling of monitoring well PL-MW-116 to determine if the contaminants had migrated downgradient of former AST-2. No contaminants were detected.	Investigations included installation of monitoring well PL-MW-116 and collection of groundwater samples from the new well in addition to wells PL-MW-101, -103, -104, -114, and -115. Detections in wells included PL-MW-101 (TPH measured as diesel 5,350 μg/L, ethylbenzene 129 μg/L, and xylenes 405 μg/L), while TPH measured as diesel was the only contaminant detected in PL-MW-103 (417 μg/L), PL-MW-104 (464 μg/L), PL-MW-114 (355 μg/L), and PL-MW-115 (803 μg/L).	None	USACE, 1994[h]

Source: IT, 1997c.

[a] Air Force Base
[b] Aboveground storage tank.
[c] Total petroleum hydrocarbons
[d] IT Corporation (IT), 1987. Hamilton AFB Storage Tank Removal Project, Martinez, CA.
[e] IT, 1991. Final Engineering Report, Miscellaneous Contaminated Sites, Hamilton Army Airfield, Novato, CA, Martinez, CA.
[f] Benzene, toluene, ethylbenzene, and xylenes
[g] Engineering Science, Inc. (ESI), 1993. Final Environmental Investigation Report, Hamilton Army Airfield, Volumes I and II, Alameda, CA.
[h] USACE, 1994. Supplement to the Final Environmental Investigation Report, Hamilton Army Airfield, CA, Sacramento, CA.

hydrocarbon. Soil with TPH concentrations greater than 1,000 mg/kg were removed from the area around the tank. Excavation activities were conducted by IT in 1990 to further remove the impacted soils with TPH concentrations greater than 100 mg/kg. Following removal of impacted soil, the excavations were backfilled with clean fill. As a result of the 1986 activities, over 13,000 cubic yards of impacted soil from the POL Hill Outparcel was disposed off-site at a Class I landfill (IT, 1987), while approximately 4,000 cubic yards of material was aerated and reused as non-contaminated backfill. This amount includes soils from the former UST areas as well as the AST-2 Area.

2.4.2 Phase I and II Environmental Investigations

From 1990 to 1992, ESI conducted a Phase I and Phase II EI (ESI, 1993). The investigation included the installation and sampling of 14 shallow (PL-MW-101, PL-MW-103 through -110, -111 A, -112A, -113A, -114, and -115) and 3 deeper (PL-MW-101, -112B, and -113C) groundwater-monitoring wells and the sampling of 16 shallow-soil borings. Results of the investigation indicated that groundwater in the former location of AST-2 had TPH concentrations up to 14,000 µg/L and benzene concentrations up to 9.7 µg/L. Additionally, concentrations greater than 100 mg/kg were detected in the soil and rock in the vicinity of former AST-2 and its associated piping. However, all soil and groundwater samples in these investigations were analyzed for TPH by EPA Method 418. 1. The documentation of validation has not been found for ESI data and the data are of unknown quality.

2.4.3 Supplemental Investigation

In 1994, the Army conducted a supplemental investigation to determine whether groundwater contaminants had migrated downgradient from the hillside bench where AST-2 was located (USACE, 1994). The investigation included the installation of a new monitoring well (PL-MW-116), and the collection of groundwater samples from the new well and six existing wells (PL-MW-101, -103, -104, -106, -114, and -115). Groundwater samples were analyzed for both TPH measured as gasoline/diesel/JP-4 by modified EPA Method 8015 and total recoverable petroleum hydrocarbons (TRPH) by EPA Method 418. 1. The results of the USACE investigation are summarized as follows:

- Potential hydrocarbon contamination was detected in soil samples from PL-MW-116 (2.5 and 7.5 feet bgs) at concentrations of 24 and 33 mg/kg, respectively. No hydrocarbon contamination was detected in groundwater from this well.
- TPH measured as JP-4, ethylbenzene, and xylenes were detected in well PL-MW-101 at concentrations of 5,350 µg/L, 129 µg/L, and 405 µg/L, respectively.
- TPH measured as diesel was detected in wells PL-MW-103, -104, -114, and -115 at concentrations ranging from 355 to 803 µg/L.

In summary, the results of the investigations prior to the RI indicated that residual petroleum hydrocarbons were present in the unsaturated rock and groundwater in the vicinity of the former location of AST-2. The extent of impact appeared to be limited to the vicinity of former AST-2. There was no evidence of contamination along the former AST-2 fuel-supply lines. The highest concentrations in groundwater (TPH measured as diesel at 6,600 µg/L) were reported in samples collected from monitoring well PL-MW-101, located immediately adjacent to the former location of AST-2. This well also exhibited the highest

benzene (9.7 μg/L) detection in the former AST-2 Area. The detection of JP-4 is consistent with the expected nature of the petroleum hydrocarbon chemical constituents in this area, given that AST-2 was known to be a JP-4 storage tank. The source of the diesel detections reported in wells downgradient of PL-MW-101 is not known; however, it may represent weathered JP-4.

2.5 Remedial Investigations and Actions

The following subsections describe and summarize the results of the remedial investigation activities conducted at the POL Hill Outparcel. For detailed results of these activities, refer to the Remedial Investigation Report for the POL Hill Outparcel, which is included as Appendix A of this document. The following summary focuses on investigation activities and results related to AST-2.

On behalf of the USACE, IT conducted remedial investigation activities at the POL Hill Outparcel commencing in the winter of 1996. The activities were conducted per the Remedial Investigation/Feasibility Study Work Plan (IT, 1997a) and the CQC/SAP (IT, 1997b). The objectives of the investigative activities related to AST-2 included:

- Improve groundwater-monitoring coverage
- Perform groundwater monitoring, sampling, and slug or specific capacity testing to evaluate stability of groundwater contaminants in the bedrock fissures and the potential for migration
- Perform groundwater sampling to evaluate evidence of natural attenuation
- Determine the extent of TPH impact at the rock outcrop located on Reservoir Hill.

In order to achieve the objectives, the following tasks for AST-2 were completed during the field activities:

- Drilling two new borings and installing monitoring wells at MW-POLA-120 and -121
- Identifying the extent of Potential Contaminants of Concern (PCOCs)
- Collecting groundwater samples from the newly installed and existing wells to evaluate the extent of PCOCs
- Collecting groundwater samples from the newly installed and existing wells to evaluate if natural attenuation is occurring
- Measuring water levels in the monitoring wells to evaluate groundwater-flow patterns and rates
- Collecting samples of the rock outcrop surrounding the AST-2 Area to evaluate the absence or presence of petroleum-hydrocarbon contamination

A summary of the results of the remedial investigation activities pertaining to AST-2 is presented below. Details regarding the investigation activities and analytical results used to identify the PCOCs are presented in Appendix A**.** Additional discussions and summaries of groundwater monitoring and natural attenuation sampling are presented in Appendix H.

During the RI (IT, 1999), a composite-rock sample was collected from the area of visible staining of the rock outcrop near the former location of AST-2. The sample was analyzed for TPH, polynuclear aromatic hydrocarbons (PNAs), and polychlorinated biphenyls (PCBs). Only chrysene (960 µg/kg) and TPH measured as diesel (1,800 mg/kg) were detected. Additionally, the rock outcrop was visually inspected to evaluate the extent of TPH-impacted rock, the extent of impact was mapped, and a rough volume of TPH-impacted rock was estimated at 65 cubic yards.

Two additional monitoring wells (MW-POLA-120 and -121) were installed in the POL Hill AST-2 Area and six rounds of groundwater sampling were conducted (February 1997, March 1997, March/April 1998, June/July 1988, September/October 1998, and January 1999). Wells PL-MW-101 and MW-POLA-121 (both located near former AST-2) were the only wells with consistent contaminant detections during all rounds. Additionally, groundwater samples were collected in March/April 1998 and September/October 1998 and analyzed for hydrogeologic chemical indicators of biodegradation of petroleum hydrocarbons. A summary of the results of the groundwater chemical and natural attenuation monitoring program are presented in Appendix H.

Slug tests were performed in wells MW-POLA-121 and PL-MW-101, -103, -104, -106 to provide estimates of hydraulic conductivity and a better understanding of the hydrogeologic system for the POL Hill AST-2 Area. Specific capacity and single-well pumping tests were performed in well MW-POLA-120. Hydraulic conductivity at the site was estimated at 7.4×10^{-4} ft/day in MW-POLA-121. The highest estimate of hydraulic conductivity in the POL Hill Outparcel was 5.3 ft/day in well PL-MW-108. Details of aquifer test results are presented in Appendix F.

After the May 2, 2001 meeting, an additional three rounds of groundwater sampling and analysis were completed by SOTA as documented in their report (SOTA, 2002) included in Appendix I. Groundwater samples were collected from AST-2 area wells in September 2001, February 2002, and August 2002 and were analyzed for TPH-purgeable and TPH-extractable. In addition, various geochemical parameters were also quantified for the groundwater by analytical testing or field measurements to develop additional information about the site's ability to support the MNA remedial alternative. The geochemical parameters for MNA included dissolved oxygen, redox, ferrous iron, methane, sulfate, total sulfide, nitrate, total alkalinity as $CaCO_3$, pH, turbidity, and temperature.

The SOTA (2002) report concluded that the decreases of extractable and purgeable TPH concentrations in groundwater correlated directly with the decrease in groundwater elevations at the site and with the indicators of natural attenuation. Their results suggest that a decrease in residual soil contamination dissolution near the capillary fringe resulting from the drop in the water table and/or the degrading of dissolved TPH in groundwater through natural attenuation processes is occurring during the dry season. SOTA also concluded that the TPH-contaminated groundwater appears to be relatively stable within bedrock fractures in the area of the former AST-2.

2.6 Nature and Extent of Contamination

The following subsections describe the PCOCs associated with POL Hill AST-2 area and their extent at the site.

2.6.1 Evaluation of Potential Chemicals of Concern

Because TPH measured as diesel and gasoline was the only PCOC suspected to be present at elevated levels at the POL Hill AST-2 Area, the following discussion focuses on the derivation of the RCGs for TPH. In 1995, Woodward-Clyde Federal Services established cleanup goals for TPH contaminants in soil and groundwater at HAAF GSA Phase I Sale Property (WCFS, 1995a). The GSA Phase I RCGs for each medium (i.e., soil and groundwater) were developed based upon site conditions and suspected analytes to be encountered in the comprehensive remedial investigation. The POL Hill AST 2 Area is planned to be used for recreational open space in the future. The use of the GSA Phase I RCGs (see Table 2-2) is conservative for the site because these goals are based on residential reuse.

Typically, cleanup levels are derived from an appropriate risk-based method. However, contaminant cleanup levels were already identified for unrestricted land use within the GSA Phase I Sale Area (WCFS, 1995b). Because these cleanup criteria (i.e., GSA RCGs) were previously developed and used for evaluation of other nearby portions of the HAAF with similar site conditions, these levels are being used as the basis for all closure evaluations and the POL Hill AST-2 Area.

TABLE 2-2
GSA Phase I Residential Cleanup Goals for Analytes Detected in Groundwater beneath AST-2 Area

Analyte	Maximum Contaminant Concentration (μg/L)	GSA Phase I Residential Cleanup Goal(μg/L)
Benzene	9.69[a]	350
Toluene	10.0[a]	835,000
Ethylbenzene	210[a]	1,924,000
Xylenes	405[b]	20,299,000
Lead (total)	6.4[a]	2,300
Bis (2-ethylhexyl) phthalate	14.7[a]	not available
2-methylnaphthalene	89[a]	not available
TPH as gasoline (purgeable)	4,800[c]	600
TPH as diesel (extractable)	6,600[c]	1,200

Notes:
All the maximum detected concentrations (except for lead) reported in this table were collected from well PL-MW-101. The reported maximum value for lead was collected from PL-MW-114.

[a] Source: ESI, 1993.
[b] Source: USACE, 1994.
[c] Source: IT, 1999.

The GSA Phase I Sale Area RCGs were developed using a series of risk-based assessments and risk-management evaluations (WCFS, 1995b). The RCG selection process included the following steps:

- Quantitative human-health-risk assessments and ecological risk assessments were performed in which uncertainty in each step of the evaluation process (i.e., selection of PCOCs, exposure assumptions, toxicity assessment, and risk characterization) was addressed by assuming the most conservative "worst case" situation.
- Results of the human-health-risk assessments and ecological-risk assessments were used to generate risk-based remedial action objectives (RAOs) for both the residential and commercial land-use scenarios. Assuming that the conservative assumptions made during the risk assessments were valid, the RAO was the concentration of a chemical that could be present at a site and not pose an unacceptable risk to receptors.
- Unless an RAO was greater than a chemical's background concentration, or significantly different from a benchmark, the background concentration was adopted as the RCG since it would be impractical to remediate a site to below background concentrations.
- Analyte background concentrations, analytical method practical quantification limits, and other benchmarks were compared to each RAO to assess the viability of the RAO. A benchmark is a promulgated regulatory standard, such as acceptable TPH concentration based on Marin County UST regulations, or a toxicity-based screening value, such as EPA Region IX Preliminary Remediation Goals.

The remainder of this discussion focuses on the derivation of the RCG for TPH measured as diesel and gasoline because they were the only PCOCs suspected to be present at elevated levels at the former AST-2 site. In 1995, Woodward-Clyde Federal Services reviewed the established limits for diesel constituents to determine applicable TPH cleanup levels for the GSA Property. The results of this study are presented in *Groundwater TPH Cleanup Levels for GSA Sale Property* (WCFS, 1995c). This study established cleanup levels for TPH in the groundwater for the GSA Phase I Sale Property.

As part of this study, each of the diesel constituents was evaluated with respect to chemical risk and percent of diesel composition. PNAs were determined to be the primary risk drivers for diesel fuel. Typical diesel fuel contains between 0.7- and 2-percent total PNAs. Using the conservative estimate of 2-percent total PNAs in diesel and an aquatic maximum-contaminant level of 50 µg/L, a cleanup level for diesel of 2,500 µg/L was established for groundwater. However, during GSA RCG negotiations with the regulatory agencies, an additional degree of conservatism was introduced by reducing the RCG for TPH measured as diesel from the calculated value of 2,500 µg/L to 1,200 µg/L. The GSA RCG of 1,200 µg/L will be used in evaluation of the groundwater results in this CAP to determine if remedial action needs to be implemented.

While gasoline was not stored in AST-2 (or other POL Hill Outparcel storage facilities), this parameter was measured in groundwater samples to assess potential volatile organic compounds (VOCs) such as benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX compounds) that could be present in JP-4. The GSA RCG for TPH measured as gasoline in groundwater is 600 µg/L (WCFS, 1995c).

The soil GSA RCG is 200 mg/kg for TPH measured as diesel and is 100 mg/kg for TPH measured as gasoline. Previous soil remedial activities have already removed the soils beneath AST-2 that were above 100 mg/kg and were feasible to remove, therefore the RCGs for soil have been met for the POL Hill AST-2 Area. All excavated soils beneath AST-2 were replaced with clean fill.

2.6.2 Extent of Contamination

The results of the historical investigations indicate that petroleum-hydrocarbon contaminants in the groundwater within bedrock fractures beneath the location of former AST-2 but that the extent of impact appears to be limited to the vicinity of former AST-2 (see Figures 2-1 through 2-4). The highest concentration of TPH measured as diesel (9,800 µg/L) and TPH measured as gasoline at (6,200 µg/L) was detected in groundwater samples from monitoring well PL-MW-101 during the February 2002 sample round. This well is located immediately adjacent (east) of the former AST-2 location. This well also exhibited the only benzene concentrations in the former AST-2 Area; however, benzene was not detected in any samples collected after August 1992. The detections of TPH measured as diesel and gasoline are consistent with the expected nature of the petroleum-hydrocarbon chemical constituents in this area since AST-2 was known to be a JP-4 storage tank.

The contamination identified in the soil and groundwater at the POL AST-2 Area consists of light- and medium-weight hydrocarbons found in JP-4 and gasoline and their decomposition products; however, the contaminated soil was removed to the bedrock surface and replaced with clean-fill material during previous remedial activities. A composite sample of the rock outcrop indicated that elevated concentrations of TPH measured as diesel were detected. However, remediation of the rock outcrop is not proposed, since the asphaltic material which covers the outcrop is bound within the bedrock fractures, is not mobile, and is bound in such a manner that removal by hand is virtually impossible.

The extent of TPH contamination in groundwater associated with JP-4 releases from AST-2 was evaluated during ten separate sampling events between March 1994 and August 2002. The contaminant isopleths indicating the location, concentration, and extent of the groundwater contamination were completed for the March 1994, February 1997, March/April 1998, and January 1999 sampling events and are presented along with analytical results in Figures 2-1 through 2-4. The TPH values reported on these figures are actually the sum of TPH as diesel and TPH as gasoline analytical results at each location. The TPH values were reported in this way because of chemical interferences.

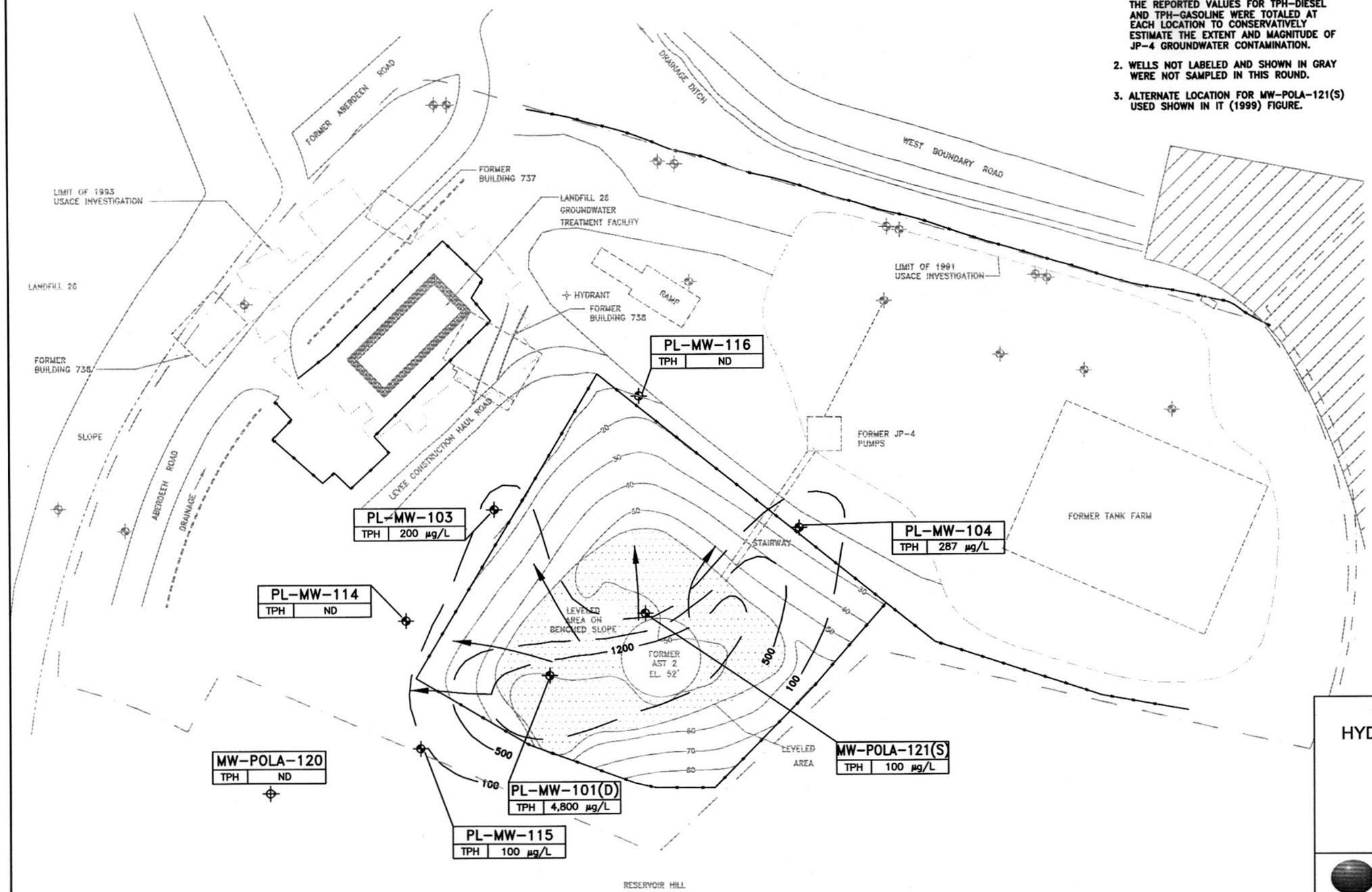
Additional testing of AST-2 area groundwater samples collected by SOTA in September 2001, February 2002, and August 2002 supports the conclusion that the TPH-contaminated groundwater is relatively stable and that natural attenuation of the contaminants is occurring. Data and graphical representations of the contaminant isopleths from these more recent sampling rounds are included in Appendix I.

NOTE:

1. BASED ON PROCESS KNOWLEDGE, JP-4 WAS STORED IN THE TANKS, HOWEVER, BASED ON CHEMICAL INTERFERENCES AND DEGRADATION RESULTING IN THE QUANTIFICATION OF JP-4 AGAINST DIESEL AND GASOLINE STANDARDS, THE REPORTED VALUES FOR TPH-DIESEL AND TPH-GASOLINE WERE TOTALED AT EACH LOCATION TO CONSERVATIVELY ESTIMATE THE EXTENT AND MAGNITUDE OF JP-4 GROUNDWATER CONTAMINATION.
2. WELLS NOT LABELED AND SHOWN IN GRAY WERE NOT SAMPLED IN THIS ROUND.
3. ALTERNATE LOCATION FOR MW-POLA-121(S) USED SHOWN IN IT (1999) FIGURE.

LEGEND:

- FENCE
- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- INFERRED GROUNDWATER FLOW DIRECTION
- 100 — CONTOURS REPRESENT COMBINED TPH-DIESEL, TPH-GASOLINE, AND TPH-JP4 DETECTIONS. CONCENTRATIONS ARE IN µG/L
- ND — NOT DETECTED (DETECTION LIMIT=50µG/L FOR TPH COMPOUNDS AND 1µG/L FOR BTEX)
- (S) SHALLOW MONITORING WELL
- (D) DEEPER MONITORING WELL
- FORMER STRUCTURES
- APPROXIMATE LIMITS OF USACE EXCAVATION
- NHP LEVEE AND EASEMENT
- POL OUTPARCEL BRAC PROPERTY BOUNDARY
- GSA PHASE 1 TRANSFERRED PROPERTY BOUNDARY
- LANDFILL 26 BOUNDARY



SCALE

0 80 160 FEET

Source: International Technology Corporation (IT) Drawing 762538-B514

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER POL HILL AST-2 AREA

MARCH/APRIL 1998

HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 2-3

159892.08.PL.CR

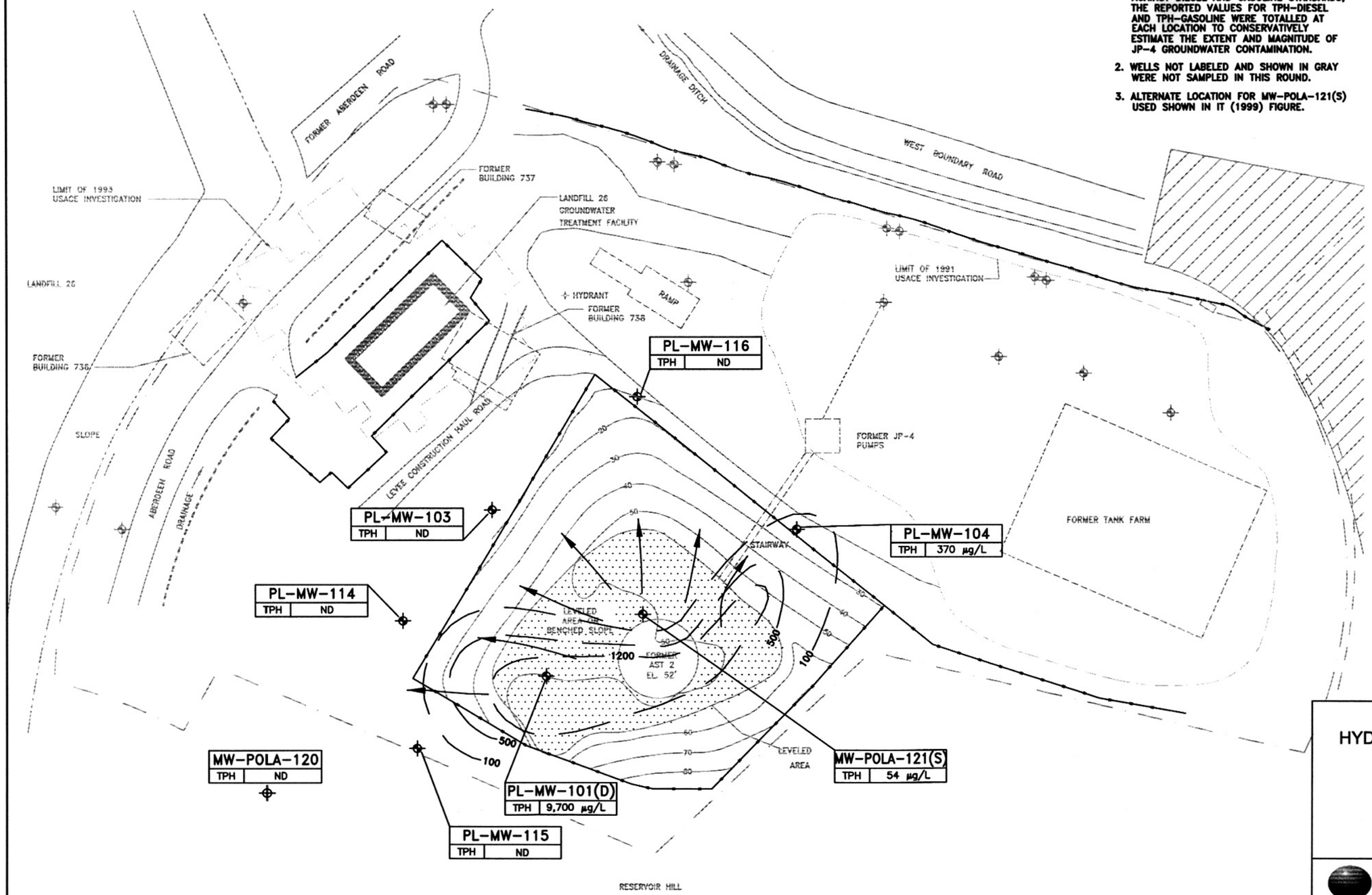
SEPTEMBER 2002

NOTE:

1. BASED ON PROCESS KNOWLEDGE, JP-4 WAS STORED IN THE TANKS, HOWEVER, BASED ON CHEMICAL INTERFERENCES AND DEGRADATION RESULTING IN THE QUANITIFICATION OF JP-4 AGAINST DIESEL AND GASOLINE STANDARDS, THE REPORTED VALUES FOR TPH-DIESEL AND TPH-GASOLINE WERE TOTALLED AT EACH LOCATION TO CONSERVATIVELY ESTIMATE THE EXTENT AND MAGNITUDE OF JP-4 GROUNDWATER CONTAMINATION.
2. WELLS NOT LABELED AND SHOWN IN GRAY WERE NOT SAMPLED IN THIS ROUND.
3. ALTERNATE LOCATION FOR MW-POLA-121(S) USED SHOWN IN IT (1999) FIGURE.

LEGEND:

- FENCE
- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- INFERRED GROUNDWATER FLOW DIRECTION
- 100 — CONTOURS REPRESENT COMBINED TPH-DIESEL, TPH-GASOLINE, AND TPH-JP4 DETECTIONS. CONCENTRATIONS ARE IN µG/L
- ND — NOT DETECTED (DETECTION LIMIT=50µG/L FOR TPH COMPOUNDS AND 1µG/L FOR BTEX)
- (S) SHALLOW MONITORING WELL
- (D) DEEPER MONITORING WELL
- FORMER STRUCTURES
- APPROXIMATE LIMITS OF USACE EXCAVATION
- NHP LEVEE AND EASEMENT
- POL OUTPARCEL BRAC PROPERTY BOUNDARY
- GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
- LANDFILL 26 BOUNDARY



Source: International Technology Corporation (IT) Drawing 762538-B515

TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER POL HILL AST-2 AREA

JANUARY 1999

HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CH2MHILL

FIGURE 2-4

159892.08.PL.CR

SEPTEMBER 2002

2.7 Data Comparability

Environmental investigations at HAAF have included both non-specific TPH analyses that utilize infrared spectroscopy (IR), and partially-specific TPH analysis methods that utilize gas chromatography (GC). Infrared Spectroscopy methods are subject to interference from naturally-occurring organic matter (i.e., Bay Muds). EPA Method 418.1 (1995) is an IR method that was used at the HAAF during the 1992 investigation to quantify TRPH. Because of the problems with interferences, there is an uncertainty for using the TRPH data as an indicator of "true" hydrocarbon contamination. For this reason, TRPH data will not be used or referenced in this document.

On the other hand, GC methods (modified EPA Method 8015) can be used to distinguish between naturally occurring hydrocarbons and refined petroleum hydrocarbons, products of contaminants. Two versions of modified EPA Method 8015, purgeable and extractable TPH fractions, have been used to analyze samples collected at HAAF. In this document, GC results are reported as specific TPH fractions (i.e., TPH measured as diesel, TPH measured as JP-4, TPH measured as motor oil, and TPH measured as gasoline).

Although speciation of gasoline, diesel, and JP-4 is possible analytically, end users of the data must recognize that chemical interferences and degradation phenomena will influence quantities reported for each species. For example, higher levels of heavier petroleum products such as diesel and JP-4 may contain some volatile components that produce a response when measuring TPH as gasoline. Similarly, the heavy ends of gasoline and JP-4 chains may also produce a response when measuring TPH as diesel. Furthermore, petroleum constituents may undergo varying degrees of weathering and degradation during the period between release and sample collection. Consequently, chromatogram signatures from investigative samples often do not match those associated with calibration standards. When the sample chromatogram does not match that of the fuel standard used for calibration, the contaminant is reported by the laboratory as "unknown hydrocarbon." When the unknown falls in the gasoline range (C_7 to C_{12}), the result will be quantitated against the gasoline standard. When the unknown falls in the diesel (C_{10} to C_{24}), JP-4 (C_8 to C_{13}), or motor oil (C_{24} to C_{36}) range, the result will be quantitated against the diesel standard.

Given data limitations associated with historic methods (EPA 418. 1) and speciation uncertainties, this report presents the type and likely range of contaminant levels derived from correlating the investigative results with process knowledge. For example, soil and groundwater contamination attributed to releases from AST-2 and its appurtenances will be evaluated as JP-4 (see Section 2.1), even though contaminant concentrations may have been reported as TRPH or gasoline/diesel.

SECTION 3

Corrective Action Objective Developments

This section presents the development of the corrective action objectives for impacted soils and groundwater beneath the POL Hill AST-2 Area. Within this section, chemicals of concern (COCs) (petroleum hydrocarbon contamination related to past base operations) and applicable regulations specific to the POL Hill AST-2 Area are identified. Subsequently, corrective action objectives are derived, potential exposure pathways are identified, and cleanup criteria are presented. Finally, areas and volumes of impacted media are estimated based upon the extent of contamination exceeding the GSA Phase I residential cleanup goals (WCFS, 1995c).

Based on the corrective action development process, a baseline of proven, viable corrective-action technologies are identified and assembled into corrective action alternatives which are capable of meeting the stated objectives and achieving site closure. The corrective action technologies are identified in Section 4 and are used to develop the corrective action alternatives described in Section 5. The recommended corrective action alternative is discussed in Section 6. The results of the natural attenuation monitoring are discussed in Appendix H.

3.1 COCs

COCs for POL Hill AST-2 Area were identified by comparing the concentrations of detected analytes against their cleanup levels in groundwater. As previously explained, contaminant cleanup levels were already identified for the GSA Phase I Sale Area (WCFS, 1995c). Because these cleanup levels (i.e., GSA RCGs) have previously been developed to be protective of human receptors and used for evaluation of other nearby portions of the HAAF, these levels were also used for an evaluation-basis in this CAP (see Section 2.6.1).

Comparing the unrestricted land-use GSA Phase I Sale Area RCGs to the analyte levels in soil and groundwater investigation at the POL Hill AST-2 area, the following COCs were identified:

- **Soil**—TPH measured as diesel
- **Groundwater**—TPH measured as JP-4[1]

All impacted soil materials below and adjacent to the former AST-2 were previously removed if they had TPH concentrations above 100 mg/kg. Excavated soils were replaced with clean fill. Although a composite sample of the rock outcrop on POL Hill indicated that TPH measured as diesel is a COC at concentrations exceeding the cleanup goal for soil, the exposure pathway is not complete because the impacted materials are contained within the bedrock fractures and are relatively immobile. All impacted soils that could be feasibly removed by hand were removed from the top of the bedrock outcrop. For these reasons, no further soil remediation activities are planned in the POL Hill AST-2 Area.

[1] Chemical interferences and degradation phenomena result in the quantitation of JP-4 against diesel and gasoline standards (see Section 2.8). Process knowledge suggests JP-4 is the COC.

3.2 Applicable Regulations

A review of federal, state, and local regulations was conducted to determine applicable regulations for the POL Hill AST-2 area. Three types of regulation applicability were evaluated: chemical-specific, location-specific, and action-specific. Accordingly, applicable regulations for each of the three requirement types are presented in Sections 3.2.1 through 3.2.3, respectively.

3.2.1 Chemical-Specific Applicable Requirements

Chemical-specific applicable regulations are numerical standards that protect the environment and human health. These requirements regulate releases or establish cleanup standards for air, soil, and water quality. There are no sources of air contamination at the POL Hill AST-2 Area; therefore, there are no chemical-specific applicable regulations for air.

Soil contamination was caused by releases of petroleum products during past site activities. The contaminated soils were removed under previous remedial actions (see Section 2 and Table 2-1) and clean fill material was used to backfill the excavated areas. TPHs measured as diesel were identified as a COC. However, there are no chemical-specific applicable regulations for TPH in soils.

Chemical-specific applicable regulations for water quality address surface water and groundwater. There is no impacted surface water in the POL Hill AST-2 Area; therefore, there are no chemical-specific applicable requirements for surface water. Groundwater contaminants consist of TPH measured as JP-4; however, there are no chemical-specific standards for TPH. In addition, the groundwater beneath this site is currently not considered to be a source of drinking water because of its location in a low-flow fractured bedrock layer and its low aquifer production rates. Other detected groundwater analytes were not observed above the GSA Phase 1 RCGs (IT, 1997).

3.2.2 Location-Specific Applicable Regulations

Location-specific applicable regulations address impacts to environmental resources (e.g., floodplains, wetlands, historic places, and sensitive ecosystems or habitats). The POL Hill AST-2 Area has no association with any of the mentioned environmental resources; therefore, there are no location-specific applicable regulations.

3.2.3 Action-Specific Applicable Regulations

Action-specific applicable regulations evaluate the actions, technologies, and treatment processes used to remediate any contamination at the site. This POL Hill AST-2 Area CAP only addresses contaminated groundwater. Based on the information in the CAP, the following action-specific applicable regulations should be considered:

> *Title 23, Division 3,* Chapter 16—Underground Storage Tanks, Article 11—Corrective Action Requirements (CCR, 1994): The regulations set the requirements for the investigation and documents needed to ensure the proper corrective action for a release from USTs. As listed in Section 1.4, Section 2725 of Article 11 is being used to develop the CAP for the POL Hill AST-2 Area.

San Francisco Bay Basin Water Quality Control Plan (RWQCB, 1995): This document is used to define any beneficial uses of the groundwater under the POL Hill AST-2 Area. Potential beneficial uses of groundwater in the San Francisco Bay Basin include municipal, industrial, and agricultural supplies; therefore, the *Water Quality Control Plan* will be used to establish water-quality objectives by providing two types of objectives: narrative and numerical.

There may be other regulations applicable to the POL Hill AST-2 Area; however, based on information contained in this CAP, only the regulations listed in this section are considered applicable at this time. Because the alternatives and cleanup processes developed in the alternatives section do not impact air quality or surface water, do not generate any waste, and do not physically treat the groundwater, there are no other action-specific applicable regulations.

3.2.4 Other Guidance Documents

In addition to the applicable regulations, guidance documents are used to assist in the development of remedial activities. The following guidance documents will be used to support the remedial efforts at the POL Hill AST-2 Area:

Preliminary Endangerment Assessment Guidance Manual (DTSC, 1994), California State Department of Toxic Substances Control. This guidance document covers the development of the preliminary endangerment assessment report and assists in the investigation, particularly in the human-health and ecological-screening evaluations.

California Well Standards (California Department of Water Resources Bulletin *74-90,* June *1991)* requires the Department of Water Resources to establish standards for the construction, operation, and abandonment of water wells, monitoring wells, and cathodic protection wells.

3.3 Corrective Action Objective Development

The identification of corrective action objectives is necessary for the development of corrective action alternatives. Corrective action objectives are specific goals aimed to protect human health and the environment and constitute the basis for developing corrective action alternatives.

The objective of the corrective action is to provide a remedy that is technically sound and permanent, cost-effective, and acceptable to the Army, the regulators, and the public.

Assuming unrestricted future land use (i.e., a residential scenario), the following corrective action objectives are identified for the POL Hill AST-2 Area:

- Prevent human exposure through ingestion of impacted groundwater
- Prevent further migration of contaminants in the aquifer.

3.3.1 Potential Exposure Pathways

An exposure pathway describes the course an analyte takes from the source to the receptor. Sources identified at the POL Hill AST-2 Area consist of impacted soil and groundwater. The contamination associated with the rock outcrop on Reservoir Hill is not considered a source of contamination. Though analysis of the stained rock indicates contamination above cleanup criteria, no apparent pathway exists, as even direct contact does not allow for exposure.

Because of the low level of contamination present in the surface soil and inaccessibility of the groundwater in the discontinuous bedrock fractures, no risks are anticipated for future ecological receptors. Therefore, the only potential receptor identified for the POL Hill AST-2 Area is human contact through residential development of land or through groundwater use; the site will not be used for residential or drinking water purposes, the planned reuse for the site is recreational open space. The resulting potential exposure pathways for human receptors are:

- Dermal contact with impacted soils
- Ingestion of impacted soils
- Ingestion of impacted groundwater

3.3.2 Cleanup Criteria

The RCG development process involved arraying a range of concentrations that could be used as cleanup goals. For soils, these included unit risk concentrations (URCs) representing a chemical concentration that will produce an excess cancer risk of one in a million (10^{-6}) and a hazard quotient equal to 1, background concentrations, and practical quantitation limits (PQLs). For groundwater, the list of potential goals included URCs, PQLs, and levels protective of aquatic receptors.

Once the range of concentrations was compiled for each medium, selection of cleanup goals for a residential receptor was based on the most stringent goal for each medium (i.e., soil and groundwater). The cleanup goals are 200 mg/kg (TPH measured as diesel) for soil and 1,200 µg/L (TPH measured as JP-4[2]) and 600 µg/L (TPH measured as gasoline) for groundwater.

3.3.3 Impacted Areas and Volumes

Calculation of impacted areas and volumes is an integral part in the development of appropriate remedial alternative components and their respective costs. Impacted areas and volumes were determined for the POL Hill AST-2 Area by comparing the results of field investigations and applicable cleanup criteria. However, IR hydrocarbon analyses (denoted as total recoverable petroleum hydrocarbons [TRPH] detections in this report) were used during some of the previous POL Hill AST-2 Area investigations. As a result, these investigations may not be representative of contamination because of the potential for detection of naturally occurring hydrocarbons. Such detections would skew the sampling results. Therefore, TRPH data were not used in the determination of impacted areas and volumes in this document.

[2] Because no numerical value existed for TPH measured as JP-4, the cleanup goal for TPH measured as diesel was used.

A definable area of contaminated groundwater in bedrock fractures was determined using site groundwater-elevation contours (Figure 2-1 through 2-4) and groundwater-monitoring data. Given the quantitation problems associated with TPH measured as JP-4, the reported values for TPH measured as gasoline and diesel were totaled at each location to conservatively estimate the extent and magnitude of TPH measured as JP-4 groundwater contamination.

As previously stated, impacted media associated with the site are soil and groundwater. Because COCs detected in the soil are not present in large volumes (i.e., detected in one sample) and are not found at excessive concentrations (maximum concentration essentially equivalent to the RCG)(IT, 1997c), impacted soil volumes are considered negligible at the POL Hill AST-2 Area and are not defined in this report.

SECTION 4

Identification of Corrective Action Technologies

This section presents corrective action technologies identified to address groundwater contamination for the POL Hill AST-2 Area. Only those technologies that are deemed implementable, based on site-specific conditions and COCs, are identified and described. Section 4.1 presents the technologies applicable for impacted soil and Section 4.2 presents the technologies applicable for impacted groundwater.

4.1 Soil Technologies

No remedial technologies were identified for soil. Screening of soil-sample analytical results indicates that contamination by TPH (measured as diesel) in the AST-2 Area exists primarily at levels below the RCG (200 mg/kg). The only sample that contained TPH (measured as diesel) at levels above the RCG was taken from within fractures in the bedrock beneath the former AST-2. Given the overall low levels and limited extent of the diesel contamination in the soil and the impracticability of excavating the bedrock, no further soil remediation will be conducted.

4.2 Groundwater Technologies

Site-specific conditions indicate that the impacted groundwater is isolated within fractured bedrock that has low hydraulic conductivities. As a result, technologies that use pump and treat methods were categorically excluded from consideration. Technologies that are considered applicable for remediation of the POL Hill AST-2 Area groundwater are institutional controls, in situ biodegradation, and MNA. These baseline technologies were selected as implementable because they are appropriate given site-specific conditions, use standard equipment, are available locally, and are frequently used in the remediation of hydrocarbon contamination. Descriptions of each technology with regard to site-specific information are presented in the following subsections.

4.2.1 Institutional Controls

Institutional controls considered applicable to groundwater contamination include:

- Physical barriers (e.g., fence installation) and deed restrictions (e.g., covenants restricting future use) can be used to aid in deterring unauthorized site access or usage.
- Groundwater monitoring is performed in conjunction with institutional controls to verify that contaminants are not migrating at unacceptable levels from the source and that the institutional controls are protective of human health and the environment.

- In this case, institutional controls can be used to limit the risk to receptors by limiting access to the contaminated site and the contaminant monitoring is used to ensure that migration is not occurring beyond the controlled area.

4.2.2 In Situ Biodegradation

In situ biological treatment utilizes native microorganisms (e.g., bacteria, actinomycetes, and fungi) to break down organic contaminants into benign compounds (e.g., biomass, water, and carbon dioxide). Treatment generally consists of optimizing conditions of pH, temperature, oxygen content, and nutrient concentration to stimulate the growth of microorganisms that will feed on the contaminants. Optimization usually is performed by adding liquid nutrient solutions to the groundwater. These solutions contain the required minerals and chemical agents to bring the pH, oxygen, and nutrient levels into the required ranges for microorganisms to feed on the contaminant.

The optimum pH for bacterial growth is near 7. This pH is generally maintained by adding lime to the soil to promote microbial activity. Some fungi have a competitive advantage under slightly acidic conditions, whereas actinomycetes flourish at slightly alkaline pH (Alexander, 1977).

However, near-neutral pH is most favorable to microbial functioning in general (Chambers et al., 1991). Groundwater samples from the POL Hill AST-2 Area show groundwater pH between 7.0 and 7.5, which is nearly optimum for microbial functioning.

Temperature is one of the most important factors controlling microbiological activity and the rate of decomposition of organic matter. Bachmann et al. (1988) reported that temperatures in the 20° to 30°C range were the most favorable. Microbial activity has been shown to decrease greatly at 10°C and essentially cease at 5°C for most organic materials. Groundwater samples from the POL Hill AST-2 Area show groundwater temperature between 16° and 20°C, which is in the favorable to most-favorable range for microbial growth.

During the decomposition of organic contaminants, inorganic nitrogen is rapidly consumed by the microorganisms, eventually resulting in slowdown of the degradation rate. Additional nitrogen must be supplied to attain optimum waste-decomposition rates. Other nutrients such as phosphorous, potassium, sulfur, and trace elements are usually present in adequate quantities in most organic wastes or groundwater to satisfy the needs of the majority of soil microorganisms. Additional nitrogen is typically supplied to attain optimum waste-decomposition rates.

Biological treatment can also be performed by increasing the oxygen levels in the soil through air injection (also known as bio-sparging). However, this method is generally less effective as the nutrient and pH levels may not be optimum for microorganisms to destroy the contaminant. Therefore, for this plan, biological treatment is assumed to consist of liquid addition to the contaminated groundwater to optimize oxygen, pH, and nutrient levels.

4.2.3 Monitored Natural Attenuation

MNA relies on natural processes to remove contaminants from the groundwater. The only remedial activity conducted is monitoring to evaluate the effectiveness of the natural

remediation process. Natural processes that are capable of reducing hydrocarbon concentrations include (API, 1989):

- **Biodegradation**—Microorganisms convert the hydrocarbons to carbon dioxide and water.
- **Volatilization**—Volatile components vaporize and migrate to the atmosphere.
- **Adsorption**—Hydrocarbons may adhere to the soil particles and become immobile. Only water-soluble components contacted by infiltrating groundwater will become mobile. In general, heavier hydrocarbons have lower water solubilities and tend to be retained in the soil.
- **Dispersion/Dilution**—The rate of flux of the soluble components may be non detectable in the impacted groundwater. Simple dispersion and dilution of the constituents may reduce levels to acceptable standards.

The primary mechanism for contaminant remediation via natural attenuation is biodegradation. Biodegradation is the primary natural process which results in the destruction of the contaminants. Accordingly, successful application of natural attenuation as a treatment process generally requires demonstrating that intrinsic biodegradation is effecting mass reduction at acceptable rates.

As previously discussed in Section 2.7 and specific to the POL Hill AST-2 Area groundwater contamination, no direct correlation can be derived between TRPH data collected during investigations prior to the RI and TPH groundwater sample results collected during the IR and subsequent monitoring events. Therefore, assessments regarding intrinsic biodegradation of petroleum hydrocarbons cannot be directly correlated. However, hydrocarbons that result from water solubilization of petroleum products, namely benzene, toluene, ethylbenzene, and xylene (BTEX), were analyzed for during both previous and recent investigations using EPA Method 8020. Comparison of these data is appropriate and demonstrates that natural attenuation processes are occurring at the site.

Table 4-1 presents a summary of TPH and BTEX analyses for POL Hill AST-2 Area wells between July 1992 and August 2002. This summary is taken from previous work by IT Corp (1999). Validated data supporting the summary from February 1997 onward are provided in Appendix E. Table 4-1 indicates that BTEX concentrations are consistently lower in monitoring well PL-MW-101 throughout the years sampled and suggest that natural attenuation is contributing to groundwater restoration.

An additional three rounds of groundwater sampling have been completed by SOTA as documented in its August 2002 draft report. In addition to testing for extractable and purgeable TPH, geochemical parameters were also recorded during the three sampling rounds to provide additional information on the viability of the MNA remedial alternative. The additional natural attenuation data are included in Table 5 of the SOTA (2002) report, which is included in Appendix I.

The preliminary natural attenuation rate calculations assumed steady-state recharge of dissolved hydrocarbons into the well and that concentrations changes in the same well over time were reliable indicators of natural attenuation. Based on the observed concentration changes over time, the results suggest that natural attenuation is reducing the concentration

of dissolved hydrocarbons in the groundwater within bedrock fractures (IT, 1997c). While the expected rate of natural attenuation is based on a variety of site- and contaminant-specific factors, other case studies with JP-4 fuel contamination have shown approximate biodegradation rate constants (based on total BTEX) to range from 0.012 to 0.003 day^{-1} (Weidemeier et al., 1999).

TABLE 4-1
Historical Groundwater Organic Chemical Data Summary

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH[a] (µg/L)	TPH-P[b] (µg/L)	TPH-E[c] (µg/L)
PL-MW-101	Jul-92	**6**	**10**	**110**	**290**	[d]	[d]	[d]
	Aug-92	**6**	**4.3**	**94**	**260**	[d]	[d]	[d]
	Mar-94	<5	<5	**129**	**405**	**5350**	[e]	**5350**
	Feb-97	<10	<10	**78**	**140**	**11400**	**4800**	**6600**
	Mar-97	<1	<1	**77**	**120**	**8500**	**4600**	**3900**
	Apr-98	<1	<1	**46**	**52**	**4800**	**2700**	**2100**
	Jul-98	<1	<1	**42**	**34**	**3900**	**2300**	**1600**
	Oct-98	<1	<1	**39**	**47**	**7600**	**2900**	**4700**
	Jan-99	NA	NA	NA	NA	**9700**	**4400**	**5300**
	Sep-01	NA	NA	NA	NA	**6200**	**3300**	**2900**
	Feb-02	NA	NA	NA	NA	**16000**	**6200**	**9800**
	Aug-02	NA	NA	NA	NA	**5300**	**2600**	**2700**
PL-MW-103	Jul-92	<1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Aug-92	<1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Mar-94	<0.5	<0.5	<0.5	<0.5	**417**	[e]	**417**
	Feb-97	<1	<1	<1	<1	**110**	<50	**110**
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	**200**	[e]	**200**
	Jul-98	<1	<1	<1	<1	**76**	**76**	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	**320**	<50	**320**
	Feb-02	NA	NA	NA	NA	**570**	<50	**570**
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-104	Jul-92	<1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Aug-92	<1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Mar-94	<0.5	<0.5	<0.5	<0.5	**464**	[e]	**464**
	Feb-97	<1	<1	<1	<1	**400**	**130**	**270**
	Mar-97	<1	<1	<1	<1	**410**	**180**	**230**
	Apr-98	<1	<1	<1	<1	**287**	**67**	**220**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	**263**	**83**	**180**
	Jan-99	NA	NA	NA	NA	**370**	**200**	**170**
	Sep-01	NA	NA	NA	NA	**655**	**95**	**560**

TABLE 4-1
Historical Groundwater Organic Chemical Data Summary

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH[a] (µg/L)	TPH-P[b] (µg/L)	TPH-E[c] (µg/L)
	Feb-02	NA	NA	NA	NA	**890**	**110**	**780**
	Aug-02	NA	NA	NA	NA	**568**	**78**	**490**
PL-MW-106	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	NA	NA	NA	NA	NA	NA	NA
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	NA	NA	NA
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	<250	<50	<250
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-107	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	NA	NA	NA
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	<250	<50	<250
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-114	Jul-92	<1.1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Aug-92	<1.1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Mar-94	<0.5	<0.5	<0.5	<0.5	**355**	[e]	**355**
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**570**	<50	**570**
	Aug-02	NA	NA	NA	NA	<250	<50	<250

TABLE 4-1
Historical Groundwater Organic Chemical Data Summary

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH[a] (µg/L)	TPH-P[b] (µg/L)	TPH-E[c] (µg/L)
PL-MW-115	Jul-92	<1.1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Aug-92	<1.1	<1.5	<1.4	<1.4	[d]	[d]	[d]
	Mar-94	<0.5	<0.5	<0.5	<0.5	**803**	[e]	**803**
	Feb-97	<1	<1	<1	<1	**140**	<50	**140**
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	**100**	<50	**100**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**250**	<50	**250**
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-116	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	NA	NA	NA	NA	NA	NA	NA
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**330**[f]	<50	**330**[f]
	Aug-02	NA	NA	NA	NA	<250	<50	<250
MW-POLA-120	Jul-92	NS	NS	NS	NS	NS	NS	NS
	Aug-92	NS	NS	NS	NS	NS	NS	NS
	Mar-94	NS	NS	NS	NS	NS	NS	NS
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<53	<53
	Sep-01	NS	NS	NS	NS	NS	NS	NS
	Feb-02	NS	NS	NS	NS	NS	NS	NS
	Aug-02	NS	NS	NS	NS	NS	NS	NS

TABLE 4-1
Historical Groundwater Organic Chemical Data Summary

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH[a] (µg/L)	TPH-P[b] (µg/L)	TPH-E[c] (µg/L)
MW-POLA-121	Jul-92	NS[g]	NS	NS	NS	NS	NS	NS
	Aug-92	NS	NS	NS	NS	NS	NS	NS
	Mar-94	NS	NS	NS	NS	NS	NS	NS
	Feb-97	**2.7**	<1	**7.3**	**7.7**	**1060**	**480**	**580**
	Mar-97	**4.6**	<1	**10**	**13**	**1360**	**630**	**730**
	Apr-98	<1	<1	<1	<1	**100**	<50	**100**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	**54**	**54**	<50
	Sep-01	NA	NA	NA	NA	**640**	<50	**640**
	Feb-02	NA	NA	NA	NA	**530**	<50	**530**
	Aug-02	NA	NA	NA	NA	**360**	<50	**360**

Notes:

Source: SOTA (2002) with historical data are extracted from IT report (IT, 1999).
All detected analytes are shown in bold.

NA Not analyzed.
NS Not sampled.
[a] Total petroleum hydrocarbons (extractable and purgeable). The extractable and purgeable hydrocarbons results were added together and followed the IT's method to provide an estimate of the residual hydrocarbon contamination.
[b] Total petroleum hydrocarbons measured as purgeable.
[c] Total petroleum hydrocarbons measured as extractable.
[d] Total petroleum hydrocarbons were quantified using EPA Method 418.1. These results were not considered equivalent to the EPA Method 8015M results obtained from the March 1994 and later monitoring events. The data were not available in IT report.
[e] No associated result.
[f] Result from duplicate sample.
[g] Not sampled, well was not installed until January 1997.

This technology would require monitoring and a decision process to determine site closure has been achieved. A proposed interim monitoring program and strategy for determining site closure is presented in Section 7.

SECTION 5

Development of Corrective Action Alternatives

The technologies presented in Section 4.2 are viable for use in the remediation and/or closure of the POL Hill AST-2 Area, and have been proven effective at sites with similar site-specific conditions and contaminants. The purpose of this section is to present the combinations of candidate technologies which were assembled into specific corrective action alternatives to provide integrated solutions for remediation to meet the stated corrective action objectives for the POL Hill AST-2 Area. The following sub-sections present the alternatives for contaminated soil and groundwater sites.

5.1 Corrective Action Alternatives for Soil

The sole alternative proposed for soil is the no further action alternative. This alternative entails leaving the site in its current condition. As identified in Section 4.1, contaminant concentrations in the soil at the POL Hill AST-2 Area are essentially below required the cleanup goals, except for soils within shallow bedrock fractures beneath the former AST-2.

Because no other alternatives are developed for the soil, further discussion or analysis using the evaluation criteria will not be conducted in this report.

5.2 Corrective Action Alternatives for Groundwater

The POL Hill AST-2 Area groundwater was extensively sampled during previous and current investigations (as described in Section 2.0 and summarized in Table 2-1). Based on these investigative results, TPH measured as JP-4 was detected at concentrations above its associated cleanup goal in one well. Consequently, JP-4 has been established as a COC for groundwater.

Petroleum hydrocarbons are present in the groundwater in the POL Hill AST-2 Area but appear to be limited to the vicinity of the former location of AST-2. The highest concentrations in groundwater were reported in samples collected from well PL-MW-101, located immediately adjacent to the location of former AST-2. Additionally, evidence supports the conclusion that the area of petroleum-hydrocarbon contamination in the groundwater within bedrock fractures at the POL Hill AST-2 Area is static or is shrinking, and that natural attenuation is occurring.

Corrective action technologies identified in Section 4.2 are refined into corrective action alternatives specific to the POL Hill AST-2 Area groundwater in the following subsections.

5.2.1 No Action

The National Contingency Plan (NCP) (USEPA, 1990) requires retaining a no action alternative to serve as a baseline for evaluating remedial action measures. Under the no action alternative, no corrective or monitoring actions would be implemented. Because the no action alternative entails leaving the site in its current condition, no cost is associated with this alternative.

5.2.2 Institutional Controls

Access restrictions and land-use controls could be implemented for the POL Hill AST-2 Area. Deed restrictions that limit the kind of future development that can take place or that prevent groundwater use are other types of institutional controls.

This alternative can be used to complement the chosen groundwater remediation strategy. It is anticipated that a deed restriction will be put in place to preclude the use of groundwater at the site and to prevent the property from being developed for residential purposes. Institutional controls alone were not considered a reasonable long-term solution for the POL Hill AST-2 Area because of the potential future development restrictions for the property. From this standpoint, it was considered more advantageous to seek an alternative that leads to attainment of the RCGs for groundwater and permits development of the site once closure status with regulatory agencies has been achieved.

5.2.3 In Situ Biodegradation

The in situ biodegradation alternative involves remediation of the contaminated groundwater by the addition of nutrients and oxygen to stimulate microorganisms that destroy the contaminants. Under this alternative, a system consisting of approximately 400 ft. of infiltration trenches would be installed at the upgradient periphery of the contaminated groundwater area. These trenches would be used to apply nutrients by infiltration into the subsurface and the groundwater. Because of the low hydraulic conductivity (approximately 2.6×10^{-7} centimeters per second [cm/sec]), the infiltration rate would likely be low. The infiltration trenches would be piped to a 50-gal holding tank and a 0.3-milliliter per minute (ml/min) injection pump[1]. A fence would be erected around the site to preclude inadvertent trespass onto the site and to protect equipment from vandalism.

Seven monitoring wells would be sampled semi-annually (PL-MW-101, -103, -104, -114, -115, and -116, and MW-POLA-121) to monitor the groundwater for contaminant migration and concentration changes. When the concentration of JP-4 is reduced to the cleanup goal (i.e., 1,200 µg/L), treatment would be considered complete. Compliance with corrective action objectives would be demonstrated before the system operation is terminated.

Once contaminant concentrations have been reduced to the corrective action objectives, treatment would be terminated. The treatment system (i.e., fencing, tank, pump, and piping) would be removed and the infiltration trenches would be abandoned in-place by backfilling with clean fill to the ground surface.

The in situ biodegradation alternative was excluded due to the following considerations:

- The alternative was not likely to address suspended/trapped JP-4 contamination in the discontinuous bedrock fractures due to very low permeability.
- Uncertainties are high and effects are dubious without extensive and costly studies.

[1] Calculations of the infiltration rate result in a rate of approximately 1.95×10^{-3} gallons per day. Adjusting the calculation for a 10-ft-wide interface between the soil and bedrock leads to an application rate of 1.7×10^{-2} gallons per day. Because it is impossible to estimate the actual interface width, the larger width will be assumed with the understanding that the actual width, and thus the application rate, may be much smaller.

- The addition of nutrient would require adding fluids that have the potential to mobilize contamination and potentially lead to slope stability problems.
- A review of the geochemical parameters indicate that site conditions are favorable for biodegradation.
- This option would require additional permitting and monitoring, thereby increasing project costs.
- The need to exclude the public from infiltration trenches and equipment would preclude development of the site for open space.

5.2.4 Monitored Natural Attenuation

Under the natural attenuation alternative, no active remediation would be implemented; however, institutional controls (deed restrictions) and a groundwater-monitoring program would be instituted until natural attenuation reduces groundwater contamination to acceptable levels.

A preliminary field test was conducted to confirm that biodegradation is occurring and to try to estimate biodegradation rates (SOTA, 2002). Groundwater samples were collected and analyzed to quantify the natural-attenuation indicator parameters and determine the contribution of intrinsic biodegradation to the attenuation process. Additionally, the groundwater geochemistry, specifically respiratory substrates and products, were examined in contaminated and uncontaminated areas to confirm the occurrence of intrinsic biodegradation. The TPH contamination in bedrock fractures appears to be relatively stable in the area of the former AST-2 and geochemical parameters indicate natural attenuation is occurring at the site (SOTA, 2002).

An annual groundwater-sampling program has been initiated to collect samples from selected existing monitoring wells (PL-MW-101, -103, -104, -106, -107, -114, -115, and -116, and MW-POLA-121). The data from the monitoring wells would be used to delineate contaminant migration and concentration changes within the impacted area.

Deed restrictions would be used to ensure that unauthorized use of the groundwater does not occur prior to completion of remedial actions. Because the groundwater contaminants occur at approximately 25 ft bgs and are located in bedrock, inadvertent access to the contaminants is judged to be unlikely.

When monitoring data indicate that groundwater contamination is below the TPH measured as JP-4 cleanup goal (i.e., 1,200 μg/L) deed restrictions would be removed, and the monitoring wells would be abandoned in compliance with applicable State of California requirements.

5.3 Analysis of Alternatives

Three criteria, effectiveness, implementability, and cost, were used to conduct an evaluation of the corrective action alternatives for the impacted groundwater. The analysis compared the corrective action alternatives to one another to assess the advantages and disadvantages relative to each alternative and to select a preferred alternative. The evaluation criteria are described in further detail below.

- **Effectiveness**—each corrective action alternative was evaluated with respect to its ability to protect human health and the environment and to reduce contaminant toxicity, mobility, and volume. More specifically, the following factors were addressed:
  - Protection of workers during implementation
  - Environmental impacts that may result from implementation
  - Protection of the public from any potential risk resulting from implementation
  - How well the alternative achieves the corrective action objectives
- **Implementability**—this criteria addresses the technical and administrative feasibility of implementing a corrective action alternative and the availability of various services and materials needed during implementation.
- **Cost**—cost estimates include both direct and indirect costs. Direct costs consist of the following:
  - Materials
  - Labor
  - Equipment purchase or rental
  - Health and safety measures
  - Sampling and analysis.

  Indirect costs included the following items:
  - Engineering studies
  - Permits/deed restrictions
  - Startup costs
  - Contingency allowances.

A detailed cost analysis of both capital costs and annual operation and maintenance costs, which presents the estimated expenditures required to complete each interim measure, is presented in Appendix G. The cost estimates were prepared based on a conceptual design for the alternatives and are expected to be accurate within +50 percent and -30 percent.

Table 5-1 presents a summary of the alternatives evaluation relative to the three criteria. Based on this evaluation, the recommended corrective action alternative is selected and presented in Section 6.

TABLE 5-1
Corrective Action Alternative Analysis

Evaluation Criteria	No Action	Monitored/Natural Attenuation	In Situ Biodegradation
Effectiveness	The no action alternative currently meets the corrective action objective of preventing human exposure through ingestion of groundwater since the groundwater contamination is essentially inaccessible and groundwater at the site does not meet the recovery rate requirement for designation as a drinking water source per California State Water Resources Board Resolution 88-63. This alternative is the least effective alternative since it does not provide a means for remediation of the present contamination and does not prevent further migration of contaminants or a monitoring program to delineate future contaminant migration or contaminant concentration increases. In addition, this alternative does not effectively prevent unauthorized use of the groundwater in the future (i.e., no deed restrictions).	Natural attenuation, dependent upon time and conditions, effectively reduces hydrocarbon contamination to acceptable levels; however, this alternative is not as effective in achieving the stated objective (based on time to achieve cleanup goals) as in situ biodegradation. Groundwater monitoring is required for delineating contaminant extent, migration, or concentration changes. Current estimates using half-life calculations suggest that cleanup goals would be achieved within 4 to 10 years. In addition, obtaining a deed restriction reduces the potential risk of unauthorized use of the groundwater in the future. Such activities, when coupled together, effectively provide protection of human health and the environment from contact with contaminants while contaminants are attenuating. However, if contaminant migration is discovered, development of an applicable remedial action may be warranted.	In situ biodegradation is a proven technology that has been implemented at sites with hydrocarbon-contaminated groundwater. This alternative would be the most effective to reduce toxicity, mobility, and volume of the contaminants because the addition of nutrients would accelerate natural degradation of the contaminants, expediting the process of contaminant reduction to acceptable levels and thus mitigating risk of potential exposure. However, due to the low hydraulic conductivity of the contaminated aquifer, injection of the liquid nutrients may cause mounding that would promote contaminant migration, rather than reduce contaminant levels. The low flow rates may also promote microbial accumulation directly along the infiltration pipe, which may result in fouling of the line and a decrease in infiltration effectiveness.
Implementability	Acceptance may not be expected since the groundwater may be inadvertently accessed by unauthorized users in the future, contaminants are not reduced, and migration of contaminant would potentially occur. Therefore, this alternative is the least implementable.	This alternative is the easiest to implement as groundwater monitoring was previously conducted at the existing monitoring wells on site. In addition, deed restrictions to prevent groundwater usage may be necessary. No adverse effects are anticipated to human health or the environment during implementation.	This alternative is not as implementable as the monitored/natural attenuation alternative. An in-situ system could be implemented using existing resources and technologies. However, site characteristics (i.e., bedrock layer) may affect implementability due to the length of and depth at which an infiltration trench would be required to meet design objectives. In addition, due to the low hydraulic conductivity of the contaminated aquifer, application of the liquid nutrients may not be easily implemented. It is also possible that addition of liquid nutrients could mobilize contaminants in groundwater within bedrock fractures or lead to slope instability.
Present Worth Cost[a]	$0	$174,613	$383,015

[a] Present worth is calculated using a discount rate of 5 percent.

Source: IT, 1997c.

SECTION 6

Recommended Corrective Action Alternatives

6.1 Corrective Action for Soil

As discussed in Section 5.1, no further action is necessary to remediate the soil.

6.2 Corrective Action for Groundwater

The corrective action alternative recommended for the contaminants in the groundwater within bedrock fractures is MNA. The preferred corrective action alternative was selected for the following reasons:

- Natural attenuation, implementing a groundwater-monitoring program, and obtaining a deed restriction are proven technologies.
- Preliminary estimates indicate natural attenuation is currently degrading the contaminants.
- The contaminated groundwater does not meet the recovery rate requirement for designation as a drinking water source per the California State Water Quality Resources Control Board Resolution 88-63.
- Site work or construction is not necessary because existing groundwater monitoring wells are adequately located for delineation of contaminated groundwater.
- Site maintenance is not required because no active treatment system would be operated.
- No potential exists for mounding and resulting contamination spread because no liquids are injected into the groundwater.
- Groundwater monitoring provides flexibility because, should substantial migration or contaminant concentration increases occur, a decision could be made in the future to implement a more active remedial technology.
- Contamination occurs primarily within the fractured bedrock layer.
- Based on hydraulic conductivity testing, the groundwater is estimated to be moving at a seepage velocity of approximately 0.029 ft/day (between wells MW-POLA- 121 and PL-MW- 104).
- Conservative seepage velocity estimates indicate that contamination would take 13 years to move the 140 ft from well MW-POLA- 121 to well PL-MW- 104 (not including natural attenuation or adsorption).
- While a planned wetland restoration project on the nearby BRAC property (Main Airfield) is anticipated to raise groundwater levels,this is not anticipated to have any influence on the contamination in bedrock fractures at the POL Hill AST-2 area because of the elevation difference and lack of hydraulic connectivity. Similarly, there is no

anticipated off-site groundwater impacts from the POL Hill AST-2 area since no contaminant migration is occurring.

The preferred corrective action alternative was evaluated on its technical merits, focusing on effectiveness, implementability, and cost. This alternative meets all applicable state and federal regulations and would meet the corrective action objectives for mitigating the potential for inadvertent receptor exposure. Furthermore, this remedial alternative was tentatively agreed upon pending additional data at the meeting held between the Army and San Francisco RWQCB personnel on May 2, 2001.

To evaluate the natural attenuation alternative, groundwater-monitoring data was collected and analyzed for TPH, BTEX, lead, and PNAs. Additionally, in March/April 1998, September/October 1998, September 2001, February 2002, and August 2002 samples were analyzed for hydrogeochemical indicators of biodegradation; methane, ferrous iron, oxidation/reduction potential, and dissolved oxygen (DO). This information is provided in Appendices H and I.

An interim groundwater-monitoring program for the POL Hill AST-2 Area is proposed in the following section of this report (Section 7). Furthermore, a strategy for determining suitability for site closure is also proposed. A meeting will be held with regulators to discuss the groundwater-monitoring results and the implications for ongoing monitoring efforts or site closure.

SECTION 7

Interim Monitoring Program and Strategy for Determining Suitability for Site Closure

This section provides a short summary of previous groundwater-monitoring results and proposes an interim monitoring program to assess the effectiveness of the chosen remedial alternative, MNA. In addition, a strategy to determine when the POL Hill AST-2 Area is suitable for closure is proposed.

7.1 Groundwater Monitoring Summary

Groundwater monitoring associated with the POL Hill AST-2 Area was first completed in 1992 (IT, 1999). However, the results of the 1992 sampling event are not discussed in this report because TPH was measured by EPA Method 418.1 and so are not comparable to the analytical results completed after 1992, which were completed with the more accurate EPA Method 8015M. For this reason, the March 1994 sampling event (IT, 1997) is considered as the initial groundwater monitoring event for the POL Hill AST-2 Area as shown on Figure 2-1. While this round of sampling did not include all wells (MW-POLA-120 and MW-POLA-121[Shallow(S)] were installed at a later date), this sampling round represents a useful baseline for groundwater conditions in the AST-2 Area.

A comprehensive groundwater-monitoring and sampling program including quarterly, semiannual, and annual sampling schedules was developed for the POL Hill Outparcel (including the AST-2 Area) in 1997 (IT, 1999). Due to delays in the installation of new wells for the RI, the first sampling round of all POL Hill AST-2 Area wells (i.e., previously existing and newly installed) was not completed until February 1997 and represents the second groundwater monitoring event (see Figure 2-2). A third monitoring event was conducted in March 1997. After receiving a regulatory decision on further environmental activities at the POL Hill Outparcel, the quarterly groundwater monitoring program was restarted in March 1998. The fourth groundwater monitoring event was performed in April 1998. The results of this fourth monitoring event are presented on Figure 2-3.

The fifth and sixth groundwater monitoring events were conducted in June/July 1998 and September/October 1998. The seventh groundwater monitoring event associated with the AST-2 wells was collected during January 1999 as presented in Figure 2-4. Three additional groundwater monitoring events were completed by SOTA in September 2001, February 2002, and August 2002 (SOTA, 2002).

All groundwater samples were analyzed for TPH-purgeable, TPH-extractable, BTEX, lead, and PNAs. However, the only constituent consistently detected above the cleanup level (i.e., GSA Phase I RCGs) was TPH analytes. The BTEX, lead, and PNA concentrations were either not detected or were below RCGs. Beginning with the January 1999 monitoring event, the samples were analyzed only for TPH-purgeable and TPH-extractable. Analytical results from these sampling episodes are presented in Appendix E for the eight wells that encompass the petroleum-hydrocarbon contaminants in the groundwater within bedrock fractures beneath the former location of AST-2.

The TPH contamination, which is located in the vicinity of the former AST-2, is depicted for the March 1994, February 1997, March/April 1998, and January 1999 sampling episodes on Figures 2-1 through 2-4, respectively. The area of contamination shown on these figures is defined by TPH-concentration isopleths representing combined TPH (i.e., total of TPH measured as diesel and TPH measured as gasoline) concentrations of 100 μg/L, 500 μg/L, and 1,200 μg/L.

The GSA Phase I RCG for TPH (measured as diesel) is 1,200 μg/L. The boundary of the contamination shown on Figures 2-1 through 2-4 was drawn primarily based on detected TPH concentrations, taking into consideration the location of former AST-2 and the groundwater-flow directions. The only wells with combined TPH detections exceeding the GSA Phase I RCG of 1,200 μg/L were PL-MW-101 (RCG exceeded in all sampling rounds) and MW-POLA-121 (RCG exceeded in March 1997 sample only). Each of these wells is located within approximately 80 ft of the former AST-2 location.

An additional three rounds of groundwater sampling has been completed by SOTA as documented in their August 2002 draft report. Analytical testing of these groundwater samples included extractable and purgeable TPH. The latest analytical data are included in Table of 4-1 of this report. Figures representing the contaminant isopleths of these data are presented in the SOTA (2002) report, which is included in Appendix I. The SOTA results support the conclusion that the TPH-contaminated groundwater in bedrock fractures is relatively stable in the area of the former AST-2 and that natural attenuation is occurring.

7.2 Interim Groundwater Monitoring Plan

Investigations in the POL Hill AST-2 Area have shown that natural attenuation is a viable remedial alternative for petroleum-hydrocarbon contamination in groundwater. In particular, overall contaminant concentrations appear to be declining or stable while the horizontal extent of the contaminants is also shrinking. The following interim groundwater-monitoring plan is proposed for tracking the progress of natural attenuation processes until such time as the site is deemed ready for closure. The additional data collected from this interim monitoring plan will assure that no further contaminant migration is taking place and that natural-attenuation processes are adequately addressing residual petroleum-hydrocarbon contamination in groundwater in the POL Hill AST-2 Area.

The nine groundwater monitoring wells used to assess environmental conditions in the POL Hill AST-2 Area include the following: PL-MW-101(Deep [D]), PL-MW-103, PL-MW-104, PL-MW-106, PL-MW-107, PL-MW-114, PL-MW-115, PL-MW-116, and MW-POLA-121(S). These monitoring wells can be placed in three different categories designated as trigger wells, point-of-compliance wells, and guard wells:

- Trigger wells are data-collection points located in the downgradient portion of the contaminated groundwater area where concentrations exceed the Phase 1 RCG for TPH as diesel (1,200 μg/L). These wells could provide an early indication that the contaminants may be migrating if contaminant concentrations are observed to increase over time.

- Point-of-compliance wells are data-collection points located at or near the portion of the area where the groundwater contaminant concentration is above the method detection limit (i.e., above nondetect [ND]), but below the Phase 1 RCG for TPH. Point-of-compliance wells could provide an early indication of horizontal contaminant migration. Increasing concentrations in point-of-compliance wells could indicate that guard wells might become contaminated over time.
- Guard wells are data-collection points located cross-gradient or downgradient from the point at which contaminant concentrations are nondetect. If possible, guard wells are located approximately 1 year's travel time from the point-of-compliance wells. Guard wells are used to detect movement of the contaminants outside of the perimeter of containment and identify the need to manage potential expansion of the contaminated groundwater area. Formerly contaminated wells will only be considered as guard wells when they have at least three sampling rounds where the COC concentration has been nondetect.

The baseline condition has already been established by previous sampling that followed the AST and contaminated soil removals. From this baseline condition (i.e., March 1994 round), the COC (i.e., TPH) data trends can be used to establish the basis for ongoing monitoring. If the COC concentration appeared to have an increasing trend, trigger wells, point-of-compliance wells, and guard wells would have been sampled more frequently (e.g., quarterly) to monitor changes in the contaminant distribution and provide enough lead time to adjust the site management strategy. If the groundwater data indicated no trend or stable concentrations, trigger wells, point-of-compliance wells, and guard wells could be sampled at an extended frequency (e.g., semi-annually or annually). If the groundwater data indicated a decreasing trend for COC concentrations, trigger wells, point-of-compliance wells, and guard wells could be sampled at an even more extended frequency (e.g., annually). The sampling frequency for stable or decreasing COC data trends can also be modified if changes in the data trends are observed. Based on the observed data trends in TPH concentrations for the AST-2 wells, the annual sampling frequency used to this point appears to be appropriate.

In the POL Hill AST-2 Area, wells PL-MW-101(D) and MW-POLA-121(S) were considered as the trigger wells. While well PL-MW-101(D) has had COC concentrations consistently over the Phase 1 RCG for TPH during the monitoring period, well MW-POLA-121(S) only exceeded the RCG level in the 1997 monitoring event and has been below that level in the last three sampling events. For this reason, the category of well MW-POLA-121(S) should be changed from trigger well to point-of-compliance well.

In addition to MW-POLA-121(S), other point-of-compliance wells in the AST-2 Area include PL-MW-103, PL-MW-104, and PL-MW-115, which all showed levels of TPH, but at concentrations below the RCG.

Another well, PL-MW-114, had TPH contamination in the March 1994 sampling round but has been nondetect in the last four sampling events. For this reason, the category of well PL-MW-114 should be changed from point-of-compliance well to guard well. Wells PL-MW-114 and PL-MW-116 are considered to be the guard wells at the POL Hill AST-2 Area. MW-POLA-120 is a previous guard well that was abandoned in 1999.

For the interim period until the POL Hill AST-2 Area is deemed ready for closure, it is proposed that the AST-2 wells continue with an annual sampling frequency. The samples should be analyzed for TPH measured as diesel and TPH measured as gasoline in order for the results (i.e., total of both analyses) to be directly comparable to the previous sample rounds. Because the POL Hill AST-2 Area has already been shown to be suited for the MNA remedial alternative, further sampling for natural attenuation parameters is not proposed. If changes in COC trends from future groundwater samples indicate that the contaminant concentrations may be increasing, it may be necessary to alter the interim monitoring plan to include the natural attenuation parameters.

It is proposed that wells PL-MW-106 and PL-MW-107 be excluded from future sampling events. No TPH has been detected in PL-MW-106 or PL-MW-107 in the last 4 groundwater sampling events (September/October 1998, September 2001, February 2002, and August 2002). These two wells will be added back into the interim monitoring program if evidence of contaminated groundwater expansion is indicated by the data in the remaining seven POL Hill AST-2 Area wells.

7.3 Strategy for Determining Suitability for Site Closure

The following strategy is proposed for determining when the POL Hill AST-2 Area will be considered ready for closure. This strategy is intended to identify the conditions where the interim groundwater-monitoring data indicate that residual petroleum-hydrocarbon contamination has been reduced to levels below the GSA Phase 1 RCG by natural attenuation and shows no risk for future rebound. At that time, the AST-2 Area will be considered suitable for closure. The historical and interim groundwater-sampling data will then be integrated into a closure report for review and acceptance by regulatory authorities.

As indicated in the previous section, annual sampling will continue on seven of the original nine AST-2 Area wells. These groundwater samples will be analyzed for TPH measured as diesel and TPH measured as gasoline and the total of these two values will be calculated for each well and each sampling round. By tracking COC levels as the sum of these two analyses, this provides a conservative estimate of the TPH levels with respect to the GSA Phase 1 RCG, which is based solely on TPH measured as diesel. The calculated TPH information will be used to follow data trends from the previously completed sampling rounds. The groundwater data trends must support the hypothesis that TPH levels are decreasing in groundwater over time because of natural attenuation processes.

In order for the POL Hill AST-2 Area to be considered ready for closure, all groundwater samples must be below the GSA Phase 1 RCG level for TPH. In particular, TPH concentrations must fall below this level (i.e., 1,200 µg/L TPH measured as diesel) in the POL Hill AST-2 Area trigger well, PL-MW-101(D). At the same time, TPH levels can not be shown to increase above the GSA Phase 1 RCG level in any of the point-of-compliance wells.

TPH levels in guard wells should remain as nondetect; however, if TPH 'hits' are observed in a guard well, then the monitoring frequency for that well should go from annual to quarterly. If the TPH 'hits' are observed in the next three consecutive quarterly sample rounds, then a meeting with the RWQCB will be initiated to discuss an appropriate response. The point-of-compliance wells should not indicate any increasing trends for

TPH contamination during this period. An increasing trend would be defined as a 50-percent (relative percent difference) increase in TPH concentrations in each of three consecutive sampling events.

Because it is recognized that contaminant levels may fluctuate over time, it will be necessary for the interim monitoring data to demonstrate that TPH concentrations will not be likely to rebound after the monitoring program is considered complete. For this reason, it is proposed that three rounds of groundwater samples in a row with no exceedances of the TPH RCG level in any of the AST-2 wells be required.

If needed to speed the site-closure process, it is proposed that monitoring-well sampling and analysis be shortened to a quarterly frequency once initial attainment of the Phase 1 RCG has been demonstrated. In this way, the required monitoring period to attain the compliance with three straight rounds of groundwater results can be shortened from three years to 1 year, provided all wells in all of these final rounds have TPH levels below the RCG concentration. If the GSA Phase 1 RCG TPH value is exceeded in the trigger or point-of-compliance wells in the final three sampling rounds, unless the RWQCB directs otherwise, the sampling and analysis program should continue until three straight sampling rounds are completed that demonstrate that TPH concentrations have fallen below the GSA Phase 1 RCG concentration.

Final site closure will be completed in accordance with the Interim Guidance on Required Cleanup at Low Risk Fuel Sites (RWQCB, 1996). This guidance defines low risk groundwater sites according to six conditions, as follows:

1. The leak has been stopped and ongoing sources, including free product, have been removed or remediated.
2. The site has been adequately characterized.
3. The dissolved hydrocarbon plume is not migrating.
4. No water wells, deeper drinking water supply aquifers, surface water, or other sensitive receptors are likely to be impacted.
5. The site presents no significant risk to human health.
6. The site presents no significant risk to the environment.

When groundwater monitoring results meet the requirements proposed in this section, the case for site closure will be discussed with regulatory agencies. Once agreement about closure for the site is reached, the Closure Report will be prepared, incorporating information from this Corrective Action Plan with subsequent monitoring data. The Closure Report will also discuss how the POL Hill AST-2 Area satisfies the six conditions noted above.

SECTION 8

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APPENDIX A

Recent Remedial Investigation Results

Source: IT, 1999 (Appendix A)

Appendix A
Remedial Investigation Report
for the Petroleum, Oil, and Lubricant Outparcel

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List of Acronyms

AST	aboveground storage tank
bgs	below ground surface
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
D.O.	dissolved solids
ESI	Engineering-Science, Inc.
ft	feet (foot)
gal	gallon
GSA	General Services Administration
HAAF	Hamilton Army Airfield
JP-4	jet propellant
in.	inches
mg/kg	milligram(s) per kilogram
PCOC	potential contaminant(s) of concern
PNA	polynuclear aromatics
POL	Petroleum, Oil, and Lubricant
RCG	Residential Cleanup Goal(s)
TPH	total petroleum hydrocarbon(s)
USAF	U.S. Air Force
UST	underground storage tank
WCC	Woodward-Clyde Consultants
WCFS	Woodward-Clyde Federal Services
°F	degrees Fahrenheit
µg/kg	microgram(s) per kilogram

A.1 Introduction

This appendix presents the investigative activities and analytical results from the remedial investigation conducted at the Petroleum, Oil, and Lubricant (POL) Outparcel. The POL Outparcel was comprised of three main features (see Figure 1-3 in precious section):

- A former tank farm containing twenty 25,000-gallon (gal) underground storage tanks (USTs), one 25,000-gal aboveground storage tank (AST), and one 750-gal UST
- A former 850,000-gal AST and associated piping
- The Landfill 26 groundwater treatment facility.

The POL Outparcel lies within the upland portion of the Base Realignment and Closure (BRAC) Property at Hamilton Army Airfield (HAAF) on the a ridge known as Reservoir Hill and the immediate lowlands surrounding the hill. The investigation was conducted pursuant to the requirements set forth in the Comprehensive Remedial Investigation/Feasibility Study Work Plan (IT, 1997a) and the Comprehensive Remedial Investigation/Feasibility Study Work Plan Contractor Quality Control/Sampling and Analysis Plan (IT, 1997a). Previous remedial activities and investigations conducted at the POL Outparcel established that the area was impacted by the release of petroleum-hydrocarbons and related constituents from ASTs and USTs. Previous corrective actions performed at the POL Outparcel included the removal of all storage tanks and soil which exceeds total petroleum hydrocarbon (TPH) levels of 100 milligrams per kilogram (mg/kg). However, additional data were needed to assess the extent of residual contamination at the site and to support the selection of the most appropriate remedial action for the site. Therefore, additional remedial investigation activities were conducted at the site. The recent remedial investigation activities included

- Drilling five soil borings and collecting soil samples around the groundwater treatment facility to evaluate the extent of petroleum-hydrocarbon contamination previously detected during plant construction.
- Drilling six monitoring well borings and installing new monitoring wells in the borings, and coring two well borings.

- Collecting groundwater samples from the newly installed and existing wells to evaluate the extent of potential contaminants of concern (PCOCs) and if natural attenuation is occurring.

- Measuring water levels in the monitoring wells to evaluate groundwater flow patterns and rates.

- Sampling the rock outcrop to evaluate potential petroleum hydrocarbon contamination.

The remedial investigation was initiated in 1996 and much of the work was completed by mid-1997; however, additional groundwater sampling was undertaken starting in March 1998 and ended in January 1999. A summary of the objectives, activities, and results of the remedial investigation are presented in the following sections.

A.2 Site Background and Environmental Setting

The following subsections present relevant background information, describe the general climatic, geologic, and hydrogeologic conditions, and summarize the results of investigations for the POL Outparcel.

A.2.1 Hamilton Army Airfield Property Description

Hamilton Army Airfield is a 1,600-acre former military installation located approximately 22 miles north of San Francisco on San Pablo Bay in Marin County, California (see Figure 1-1). The HAAF is bounded on the north by state-owned open land, private agricultural lands, and a private residential community (Bel Marin Keys); on the east by state-owned land and San Pablo Bay; on the south by private agricultural lands; and on the west by Nave Drive.

The BRAC Property encompasses approximately 710 acres and is located primarily within the north and eastern portion of the HAAF (see Figure 1-2). To the southwest, the BRAC Property is bounded by the General Services Administration (GSA) Sale Areas and the U.S. Coast Guard-administered military housing, both of which are located within the current Base limits.

A.2.2 Facility Background and History

Hamilton Army Airfield was constructed on reclaimed tidal mud flats by the Army Air Corps in 1932. The site, previously known as Marin Meadows, had been used as ranch and farm land since the Mexican Land Grant (USACE, undated). Military operations began in December 1932, first as a Base for bombers and later as a Base for transport and fighter aircraft. The Base played

a major role in World War II as a training field and staging area for Pacific operations. During the war, the Base hospital (i.e., Building No. 515 at Hospital Hill) served as an acute care and rehabilitation facility for thousands of war casualties per month.

The Base was renamed Hamilton Air Force Base in 1947 when it was transferred to the newly created U.S. Air Force (USAF). The USAF used the Base primarily as a training and fighter installation until 1975. The USAF ended military operations at the Base in 1976, and the property was declared surplus by the Department of Defense (Hamilton Field Association, Inc., 1988) as part of the Base Realignment and Closure Act of 1988. In 1976, the U.S. Department of the Army (Army) began aircraft operations at the airfield and supporting facilities with permission from the USAF. In 1984, the airfield property was officially transferred back to the Army and renamed Hamilton Army Airfield. The Army continued to use the airfield primarily for Army Reserve aircraft operations until March 1994 (USACE, 1994). Currently, the BRAC Property is managed by the Department of the Army, I Corps, at Fort Lewis, Washington.

A.2.3 Petroleum, Oil, and Lubricant Outparcel Description

The POL Outparcel lies within the upland portion of HAAF, on the north side of a ridge known as Reservoir Hill and southwest of West Boundary Road (see Figure 1-3 in previous section). The POL Outparcel is separated from the main portion of the BRAC Property by approximately 200 feet (ft) and is bounded by the GSA Phase II Sale Area. The POL Outparcel contained three main environmental features (see Figure 1-2 in previous section):

- A former tank farm, which contained twenty 25,000-gal steel USTs, one 25,000-gal AST, and one 750-gal storage tank (Figure A-1)
- A former 850,000-gal AST and associated piping (i.e., AST-2) (Figure A-2)
- The Landfill 26 groundwater treatment facility.

Former AST-2

The POL Outparcel operated as the Base fuel-storage center from 1942 until prior to May 1986, when the storage tanks were removed. Aboveground Storage Tank-2 stood on the hillside bench (i.e., Reservoir Hill) and supplied the former tank farm area by gravity feed through a pipeline to a pump station located below the ridge. All tanks, except possibly the 750-gal storage tank, stored jet propellant (JP-4) fuel. The 25,000-gal AST was used to store JP-4; however, the age of

the tank is unknown. Discharges of jet fuel and other petroleum products may have impacted the soil and groundwater at the POL Outparcel.

Former Tank Farm

The former tank was located adjacent to West Boundary Road near the west end of the runway (Figure A-1). The twenty 25,000-gal tanks had been used to store JP-4 jet fuel for aircraft operations. The original use of the 750-gal storage tank is unknown.

The 20 USTs were located in the active fuel storage area (Figure A-1). The USTs were arranged in two rows of ten tanks each and were supported by four 3-ft high concrete strip footings built on the original grade. The USTs had been covered with approximately 20 ft of soil which totally buried the tanks and formed a hill that blended into a natural rock outcrop on both the southeast and southwest sides of the site. A water control pit and a water separator house (Building No. 717) were located above the buried tanks.

Following tank removal in 1987, each tank was transported to the on-site cutting area. The tanks showed no signs of rusting, corrosion, or penetrations. However, the bottom of each of the tanks' external tar coatings had deteriorated. The tanks were cut into sections and removed from the site to a scrap metal recycler.

To determine the extent of the soil contamination beneath the original grade, an investigative trenching program was undertaken.

The investigative trenching program indicated some lenses of stained soil in the removed tank area with concentrations of fuel hydrocarbons greater than 1,000 mk/kg. It also identified several areas along the west boundary fence and adjacent to the drainage ditch in which soil contained fueled hydrocarbons at levels greater than 1,000 mg/kg. The contamination in these areas appears to be due to pipe leaks or spills and not to be directly related to any leaks from the removed tanks. Soils with hydrocarbon concentrations greater than 1,000 mg/kg were excavated and transported to a Class I landfill for disposal. Subsequently, an additional investigation was conducted in 1991 in which the contaminated soil was further removed if it exceeded the 100 mg/kg concentration. All excavated areas were backfilled with clean fill.

The former AST was a steel 850,000-gal bulk storage tank with a floating cover. The AST, which was located on a ridge overlooking the tank farm area, had been used to store JP-4 fuel (Figure A-2). The AST was supplied fuel by pipes and a pump station located below the ridge at the tank farm area.

The AST was surrounded with an earthen berm which was covered with a thin layer of asphalt. The surface area between the tank and the berm did not indicate evidence of soil discoloration or petroleum hydrocarbons.

Northwest of the tank, the ground sloped 4 ft to a low area near the base of the berm where a concrete drain box, approximately 3 ft square and 4 ft deep, was located. The drain box contained a heavy steel grate which was built on top of the box. A 4-inch (in.) diameter asbestos cement pipe ran from the drain box, through the berm, to the outer edge of the berm. At the end of the pipe was a gate valve, which when opened could be used to drain any liquids collected in the berm.

Inspection of the outside of the AST and its foundation showed no signs of failure or leaks. The ASTs interior showed no substantial rusting, pitting, or corrosion.

Following tank removal, soil samples were collected to determine if any contamination existed around the removed AST. Trenches were dug to bedrock north and west of where tank had been located. These were the only areas where the depth to rock was greater than 1 ft.

Based on the subsurface investigation soil contaminated with hydrocarbons at levels greater than 1,000 mg/kg were removed. A subsequent investigation removed soils which exceeded 100 mg/kg or to the extent practicable. All excavations were backfilled with clean material.

A pilot aeration program was conducted during the soil removal activities to determine if petroleum hydrocarbons in the soils could be reduced to the required cleanup level by aeration. The aviation gasoline contaminated soils proved to aerate readily; however, the soils contaminated with JP-4, diesel, kerosene, or oil resulted in unfavorable results.

Since JP-4 is the main contaminant of concern at the POL Outparcel and the JP-4 does not aerate easily, approximately 13,000 cubic yards of impacted soil had to be disposed at a Class I landfill

and 4,000 cubic yards of material was aerated and re-used as non-contaminated backfill (IT, 1987).

Several small buildings (Building Nos. 736, 737, and 738) existed at the POL Outparcel and were last used for temporary storage of waste oil (see Figure 1-3). These buildings were demolished prior to construction of the Landfill 26 groundwater treatment facility. The groundwater treatment facility was constructed northwest of Reservoir Hill in a low-relief area that is partially paved with asphalt. The facility was to provide service for Landfill 26, but has never been used. Construction activities at the groundwater treatment facility revealed that contamination existed. Therefore, soil samples were collected along a grid system surrounding the facility footprint. Soil in excess of 100 mg/kg was removed to the extent practicable (i.e., to bedrock).

A.2.4 Climate

The climate at HAAF and the surrounding area is Mediterranean, which is characterized by warm, dry summers and cool, wet winters. The temperature is moderated by HAAF's proximity to San Pablo Bay and the Pacific Ocean. The deflection of the sea breeze and fog by coastal mountains gives the region an entirely different temperature regime from areas west of the mountains and in San Francisco. Daily variation in temperature is relatively small. Daytime temperatures are more moderate than those of most Bay Area cities (January and July mean maximum temperatures are 56 degrees Fahrenheit [°F] and 80°F, respectively); however, 100°F days occur occasionally in late summer. The frequent clear skies (40 percent of the days over the course of a year) and light winds of the area enhance radiative cooling at night. Thus, nighttime temperatures are relatively low (January and July mean minimum temperatures are 36°F and 50°F, respectively). The average maximum temperature is 72°F, and the average minimum temperature is 47°F.

The rainy season extends from roughly November through March; during these months, rainfall averages between 4 to 7 in. per month. The mean annual precipitation is 28 in. The winter influx of rain has a dramatic effect upon this area, resulting in an elevated groundwater table and some surface flooding. During summer months, rainfall averages less than 0.1 in. per month. This results in the evaporation of surface waters, a drop in the groundwater table, and extensive desiccation of shallow soil horizons (WCFS, 1996).

A.2.5 Geology

Reservoir Hill lies within the San Francisco-Marin structural block of the northern Coast Range geomorphic province of California. The Coast Range province is characterized by a series of nearly parallel mountain ranges and intermountain alluvial valleys that trend obliquely to the coastline in a northwesterly direction. The higher relief areas to the west and south of HAAF are generally underlain by serpentinite and sandstone bedrock from the Franciscan Complex of Jurassic to Cretaceous age. The hills surrounding the airfield are composed primarily of sandstone, which exhibits varying degrees of tectonic deformation. This bedrock is locally overlain by Tertiary alluvium and colluvium deposits.

Five distinct geologic units have been identified in the POL Outparcel from well boring logs: two bedrock units, Bay Mud, and two artificial fill units (ESI, 1993). The lower bedrock unit is a grey, highly indurated, fractured Franciscan sandstone that was encountered to the total depth of the borings. The upper bedrock unit is described as a friable, yellow-to-buff colored, interbedded sandstone, siltstone, and shale. An older fill unit of pebbly, sandy clay is present to a depth of approximately 7 ft below ground surface (bgs) along the northern boundary of the POL Outparcel (WCC, 1987). Where not disturbed by excavation and fill activities, a thin layer of Bay Mud overlies the upper bedrock unit along the northeastern perimeter of the site. A younger fill consisting of clayey, sand gravel is present in the former tank farm area and at the bench where AST-2 was located. It is typically less than 10 ft thick.

A geologic cross section for the POL Outparcel is presented in Figure A-3. The cross section is based on excavation logs and the geologic logs for six monitoring wells installed as part of the remedial investigation. The logs are contained in Appendix B.

A.2.6 Hydrogeology

Groundwater occurs in the weathered bedrock along the flanks of Reservoir Hill. Recharge occurs from rainfall on the top and slopes of the hill with groundwater percolating into the weathered material and into fractures in the bedrock. Flow within the bedrock is assumed to be controlled by fractures similar to conditions. Production rates are generally less than 2 gal/day (see Appendix F).

Groundwater in the vicinity of AST-2 occurs in the bedrock at approximately 25 ft bgs and in the fill material at increasingly shallower depths away from Reservoir Hill. Groundwater data near

the drainage ditch suggest that an upward hydraulic gradient exists between the shallower and deeper units of the area (ESI, 1993).

A.2.7 Surface Water Hydrology

Hamilton Army Airfield is situated within the Novato Creek drainage basin, which is comprised of an area of about 44 square miles. This basin is bounded by the Petaluma River basin to the north, San Pablo Bay to the east, the Coast Range hills to the west and southwest, and the Las Gallinas Creek drainage system to the south. The Coast Range hills act as the principal source of groundwater recharge and surface water drainage for the basin.

Prior to the construction of the perimeter levees, the airfield area was part of the Novato Creek flood plain. Much of the area is topographically below mean sea level due to subsidence, which may be due to drainage and loading by structures. The POL Outparcel is drained by a storm drain network that discharges to San Pablo Bay.

The only perennial surface water feature in the area is the drainage ditch that lies outside the northern boundary of the POL Outparcel. It originated east of the POL Outparcel and drains toward the northwest under Aberdeen Road.

A.3 Remedial Investigation Field Activities and Results

This section describes the results of field investigation and sampling activities implemented by IT Corporation and its subcontractors during the remedial investigation at the POL Outparcel. For this investigation, quantitation of TPH contaminants identified by the laboratory as "unknown hydrocarbon" was performed using the following convention. If the unknown fell in the gasoline range (C_7 to C_{12}), the result was quantitated against the gasoline standard. If the unknown fell in the ranges for diesel (C_{10} to C_{24}), JP-4 (C_8 to C_{13}), or motor oil (C_{24} to C_{36}), the result was quantitated against the diesel standard. The primary objective of the POL Outparcel remedial investigation is to obtain data supporting site closure. Specific objectives of the recent remedial investigation activities at the POL Outparcel were to

- Improve groundwater monitoring coverage
- Evaluate the extent of TPH contamination in soil and groundwater near the Landfill 26 groundwater treatment facility

- Determine the nature and extent of petroleum contamination observed in fractures in the bedrock in the immediate vicinity of the former AST-2 location

- Perform slug or specific capacity testing to evaluate groundwater plume stability and the potential for TPH plume migration

- Perform groundwater monitoring and sampling to assess concentrations of TPH and related constituents and the current size of the plume and determine if the concentrations and mass of the TPH plume are being reduced through natural attenuation

- Perform groundwater monitoring to evaluate if intrinsic bioremediation is occurring.

The field activities supporting these objectives and their results are summarized below.

A.3.1 Soil Investigation

Five soil borings (SB-POLA-101 through -104 and SB-POLA-118) were drilled around the perimeter of the groundwater treatment facility for Landfill 26 to assess the extent of petroleum hydrocarbons detected in soils during construction of the facility (Figure A-4). The borehole coordinate locations are presented on the boring logs in Appendix B. Contingent soil boring locations identified in the work plan were determined to be unnecessary based on the analytical results from the five primary borings and were not drilled. The five soil borings were drilled to the water table or bedrock refusal. A total of 12 soil samples were collected from the soil boring at approximately 2.5-ft intervals at depths ranging from 1.5 to 10.5 ft bgs; however, the presence of weathered bedrock resulted in poor sample recovery in SB-POLA-102, -103, and -118. As many as four samples per boring were collected and analyzed for extractable (diesel-range) and purgeable (gasoline-range) TPH; benzene, toluene, ethylbenzene, and xylenes (BTEX); polynuclear aromatics (PNA) compounds; and lead.

With one exception, all soil sample results for TPH compounds were below the GSA Phase I Residential Cleanup Goal (RCG) for TPH measured as diesel of 200 mg/kg. The analytical results are presented in Table A-1. One sample, HB-4071, collected from a depth of 2 ft in boring SB-POLA-101, yielded an estimated unknown hydrocarbon concentration of 260 mg/kg. A soil action level has not been established for unknown hydrocarbons, but this concentration slightly exceeded the RCG for TPH measured as diesel. Total petroleum hydrocarbon compounds were not detected in the sample collected from the 6.5-ft depth in this boring, indicating that the unknown hydrocarbon contamination detected at the 2-ft depth did not extend downward significantly.

Several PNA compounds were detected at low levels in sample HB-4061, collected from a depth of 1.5 ft in soil boring SB-POLA-104. Only one of these compounds (dibenz(a,h)anthracene) was detected at a concentration (0.041 mg/kg) that exceeded the GSA Phase I RCG (0.037 mg/kg). Neither dibenz(a,h)anthracene nor any of the other PNAs detected in sample HB-4061 were detected at depths of 6 and 8.5 ft from this boring. Polynuclear aromatic compounds were not detected in any of the other soil borings.

The levels of lead (5.4 to 16.6 mg/kg) detected in all soil samples were below applicable soil action level (190 mg/kg).

A.3.2 Bedrock Investigation

In June 1996, during a site visit conducted by IT Corporation as part of the Comprehensive Remedial Investigation/Feasibility Study scoping effort, an oil coating was observed in fractures within the bedrock exposed adjacent to the location of former AST-2. The nature and origin of the oil was not known, but it was suspected to be related to an asphalt berm that was constructed around AST-2. A thin (1- to 2-in.) asphaltic crust was also observed to cover a portion of the ground in the vicinity of AST-2. This crust appeared to be the erosional remnant of the berm that was constructed around the AST.

A composite rock sample (Figure A-5) was collected and analyzed to assess the oil coating. Two locations along the outcrop approximately 20 ft apart were chosen for sampling. At one sample location, a black coating was observed within fractures in the bedrock. At the other location, a black, earthy coating was present on the exposed face of the outcrop. The samples were collected in 4-ounce glass jars, which were composited by the laboratory. The composite sample was analyzed for extractable TPH, PNAs, and polychlorinated biphenyls.

The composite rock sample yielded a detection of 1,800 mg/kg (estimated) for TPH measured as diesel (above the RCG of 200 mg/kg) and 0.96 mg/kg for chrysene (below the GSA Phase I RCG of 1.1 mg/kg) (Table A-2). When TPH was detected, mapping the TPH-impacted rock and estimating the volume was added to scope of work for the remedial investigation. The lateral extent of affected rock was measured and mapped ,and limited hand excavation was performed to assess the depth of impact (Figure A-5). The area of TPH-impacted rock and earthy coatings was determined to be approximately 3,500 square feet. The maximum depth of impact in fractures within the bedrock, noted from hand excavations, was 6 in. From these measurements, a rough

volume estimate of TPH-impacted rock and earthy coating was determined, using the maximum depth of 6 in., to be approximately 1,750 cubic feet (65 cubic yards).

A.3.3 Groundwater Investigation

Because TPH and fuel-related constituents were detected in the POL Outparcel groundwater samples collected in 1992 and 1994, additional data were required to further define the lateral and vertical extent of the petroleum-hydrocarbon plume. Evaluation of the groundwater monitoring program is presented in Section 4.0 of the main portion of this report. Data on TPH concentrations and other hydrogeochemical parameters were also necessary to determine if natural attenuation of the petroleum-hydrocarbon plume is occurring. The evaluation of natural attenuation at the POL Outparcel is presented in Section 5.0 of the main portion of this report.

A.3.3.1 Monitoring Well Installation

To improve the coverage of the monitoring well network, six new monitoring wells (MW-POLA-117A, -117B, -118, -119, -120, and -121) were installed at the locations shown on Figure A-6. Well construction details, including total depths of borings and screen intervals, are provided in Appendix B. The rationale for the well locations was as follows:

- Two nested wells, MW-POLA-117A and -117B, were installed along the drainage ditch between PL-MW-111 A/B and -112 A/B to provide additional well coverage along the northern edge of the area. MW-POLA-117A was screened across the water table whereas MW-POLA-117B was screened to monitor for the presence of TPH in slightly deeper groundwater.

- MW-POLA-118 was installed on the northwest side of the groundwater treatment facility and screened across the water table. This well location was selected to determine if petroleum hydrocarbons, detected in soil during construction of the facility, were also present in the groundwater in that vicinity.

- The location of water table well MW-POLA-119 was selected to replace PL-MW-110, which was abandoned in approximately 1994 to accommodate construction of Landfill 26.

- Water table well MW-POLA-120 was located to the southwest of Well PL-MW-115 to provide additional lateral definition of the TPH plume.

- Water table well MW-POLA-121 was located near existing well PL-MW-101 to assess contaminant levels across the water table. Existing well PL-MW-101 is screened below the water table.

The borings for wells MW-POLA-120 and -121 were cored to provide information on the fracture density of the bedrock in the POL Outparcel. The borings were cored using a split tube, single-wall core barrel to preserve the fracture pattern. The core was photographed and stored in labeled core boxes.

A.3.3.2 Groundwater Monitoring

A groundwater monitoring and sampling program, including quarterly, semiannual, and annual sampling schedules, was developed for the POL Outparcel in 1997 (IT, 1999). Due to delays in the installation of the new wells for remedial investigation, the initial sampling round of all POL Outparcel wells (new and existing) was not completed until February 1997; and a second round was performed as scheduled in March 1997. Table A-3 presents the results of the initial remedial investigation sampling effort. Following consensus on a decision for additional activities at the POL Outparcel, the monitoring program was resumed in March 1998 and subsequent rounds of samples were collected during September/October 1998 and January 1999.

All groundwater samples were analyzed for TPH measured as purgeable and extractable, BTEX, lead, and PNAs. However, the January 1999 samples were only analyzed for TPH since that was the only constituent detected above GSA Phase I RCGs. An additional suite of samples was collected in March/April 1998 and September/October 1998 and analyzed for hydrogeochemical indicators of biodegradation of petroleum hydrocarbons.

Water-level measurements were taken from new and previously existing wells during February, March, and May 1997; March/April and September/October 1998; and January 1999. A typical groundwater elevation contour map is presented as Figure A-7. Monitoring was conducted for immiscible phases, but none was observed in any well.

A.4 Conclusions

Soil, bedrock, and groundwater media at the POL Outparcel were investigated to assess the extent of contamination from petroleum hydrocarbons released to the area from fuel storage tanks that formerly existed at the site. The following tasks were completed as part of the remedial investigation:

- Drilling five soil borings and collecting soil samples around the groundwater treatment facility to evaluate the extent of petroleum-hydrocarbon contamination previously detected during facility installation

- Drilling six monitoring well borings and coring two of the borings
- Installing new monitoring wells in the six borings (MW-POLA-117A, -117B, -118, -119, -120, and -121)
- Collecting groundwater samples from the newly installed and existing wells to evaluate the extent of PCOCs
- Collecting groundwater samples from the newly installed and existing wells to evaluate if natural attenuation is occurring
- Measuring water levels in the monitoring wells to evaluate groundwater flow patterns and rates
- Collecting samples of the rock outcrop surrounding Reservoir Hill to evaluate the absence or presence of petroleum-hydrocarbon contamination.

The results of these activities are summarized below.

Results of 12 soil samples collected from the perimeter of the Landfill 26 groundwater treatment facility indicated that, with one exception, all soil sample results for TPH compounds were below the GSA Phase I RCG for TPH measured as diesel of 200 mg/kg. One sample, collected from a depth of 2 ft, yielded an estimated unknown TPH concentration of 260 mg/kg. One PNA compound, dibenz(a,h)anthracene, was detected in one sample (41 micrograms per kilogram [μg/kg]) at a concentration slightly above the GSA Phase I RCG (37 μg/kg). Total petroleum hydrocarbon and PNA compounds were not detected in samples collected from greater depths in these borings, indicating that the hydrocarbon contamination does not extend downward significantly.

One composite rock sample was collected to assess the composition of a black, oily substance that was observed in fractures in the bedrock exposed near the location of the former AST-2. This sample yielded a detection of 1,800 mg/kg TPH measured as diesel, which exceeded the RCG of 200 mg/kg. As a result of this TPH detection, the lateral extent and depth of contamination was measured and the volume of contaminated rock estimated. Based on visual examination, it appears that the oily substance has penetrated down to a depth of approximately 6 in., resulting in an estimated 1,750 cubic feet (65 cubic yards) of contaminated rock. The oily substance contained in the fractures is believed to be related to an asphalt berm that once covered the pad around and beneath AST-2. The environmental impact of this asphaltic crust is probably

comparable to that of any of the paved surfaces (i.e., roads, parking lots, and runways) on HAAF Property and is not considered to be significant.

Six new monitoring wells (MW-POLA-117A, -117B, -118, -119, -120, and -121) were installed at the POL Outparcel, to improve the groundwater monitoring well network coverage, and sampled. Five rounds of groundwater sampling were conducted since installation (February 1997, March 1997, March/April 1998, September/October 1998, and January 1999). These samples were analyzed for TPH measured as purgeable and extractable, BTEX, lead, and PNAs. Results of these samples indicate that only two wells, PL-MW-101 and MW-POLA-121, yielded consistent TPH detections that exceeded the GSA Phase I RCG of 1,200 micrograms per liter. Both of these wells are located within approximately 80 ft of the former AST-2 location. Downgradient wells did not detect TPH or yielded lower TPH concentrations.

The groundwater TPH concentration data collected during this remedial investigation indicate that TPH concentrations are highest near the source (PL-MW-101 and MW-POLA-121) and decrease to below the RCG within a short distance (approximately 100 ft). Total petroleum hydrocarbon concentrations at individual wells appear, within the limitations of the available data, to be gradually decreasing over time. These trends indicate that the concentrations and size of the plume are declining and natural attenuation is occurring at the POL Outparcel (see Sections 4.0 and 5.0).

Groundwater data collected for biodegradation indicator parameters strongly indicate that biodegradation has occurred within the POL Outparcel groundwater plume (see Section 5.0). Almost all samples yielded temperatures between 16 and 20 degrees Celsius and pH readings between 6 and 8, the ranges most favorable to the occurrence of biodegradation. Dissolved oxygen (D.O.) levels were very low at wells PL-MW-101 and -104 and MW-POLA-121 and indicate that D.O. has been depleted within the TPH plume through hydrocarbon oxidation. Redox potential measurements indicate reducing conditions in these three wells, resulting from the removal of D.O. These results provide a strong indication that aerobic biodegradation of the hydrocarbons has occurred within the TPH plume. In all other wells, D.O. concentrations are significantly higher, and redox conditions are oxidizing. These trends indicate that the groundwater in areas downgradient from the petroleum-hydrocarbon plume has the capacity for further aerobic biodegradation should the plume migrate to these areas.

Elevated methane levels in wells PL-MW-101 and MW-POLA-121 and elevated ferrous iron in PL-MW-101, relative to other wells, indicate that anaerobic biodegradation of hydrocarbons is occurring in the reducing environment of the POL Outparcel TPH plume. The data show the typical progression from aerobic to anaerobic biodegradation as oxygen is depleted in the area of highest TPH concentrations. Because biodegradation is a TPH-consuming process, and TPH is no longer being released at the site, it can be inferred that the mass of the TPH plume at the POL Outparcel is being reduced through natural attenuation.

Slug tests were performed in wells MW-POLA-117A, -118, -119, and -121, PL-MW-101, -103, -104, -106, -108, -112B, -113A, and -113C. Drawdown and recovery pump tests were performed in wells MW-POLA-117B and -120. Hydraulic conductivity at the site ranges from 7.4×10^{-4} ft/day in MW-POLA-121 to 5.3 ft/day in PL-MW-108. Further details are provided in Appendix F.

Tables

Table A-1. Petroleum, Oil, and Lubricant Outparcel Subsurface Soil Organics Summary

(Page 1 of 2)

Sample Number Depth Type Location Soil	HB-4071 SB-POLA-101 2' Bedrock	HB-4073 SB-POLA-101 6.5' Bedrock	HB-4074 SB-POLA-101 7.5' Bedrock	HB-4065 SB POLA-102 2' Bedrock	HB-4067 SB-POLA-103 2.5' Bedrock	HB-4068 SB-POLA-103 4' FD[a] Bedrock	GSA[b] Phase I Residential Cleanup Goals for Soil
ANALYTE	Results in milligrams per kilogram						
2-Methylnaphthalene	ND[c] (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	NA[d]
Acenaphthene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	NA
Anthracene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	9,376
Benzo(a)anthracene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.11
Benzo(a)pyrene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.186
Benzo(b)fluoranthene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.11
Benzo(k)fluoranthene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.11
Chrysene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	1.1
Dibenz(a,h)anthracene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.037
Fluoranthene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	1,250
Fluorene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	1,250
Indeno(1,2,3-cd)pyrene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	0.11
Naphthalene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	1,240
Phenanthrene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	0.071	NA
Pyrene	ND (0.035)	ND (0.035)	ND (0.036)	ND (0.036)	ND (0.035)	ND (0.035)	938
Benzene	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	0.84
Ethylbenzene	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	3,400
Toluene	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	2,700
Xylenes	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	ND (0.0011)	980
TPH[e] Gasoline	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	100
Unknown HC[f] (purgeable)[g]	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	ND (1.1)	NA
Aviation Fuel (JP4)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	200
TPH Diesel	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	ND (11)	200
Unknown HC (extractable)[h]	260 J[i]	ND (11)	ND (11)	61 J	ND (11)	12 J	NA
Lead (total)	18.5	6.7	6	13.6	13.2	11.1	190

Table A-1. Petroleum, Oil, and Lubricant Outparcel Subsurface Soil Organics Summary

Sample Number Location Depth Type	HB-4069 SB-POLA-103 Soil 6.5' Bedrock	HB-4061 SB-POLA-104 1.5' Fill	HB-4062 SB-POLA-104 6' Bedrock	HB-4063 SB-POLA-104 8.5' Bedrock	HB-4064 SB-POLA-104 10.5' Bedrock	HB-4039 SB-POLA-118 4.5'[a] Bedrock	GSA Phase I Residential Cleanup Goals (RCGs) for Soil
ANALYTE	Results in milligrams per kilogram						
2-Methylnaphthalene	ND (0.037)	0.043	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	NA
Acenaphthene	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	NA
Anthracene	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	9,376
Benzo(a)anthracene	ND (0.037)	0.047	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.11
Benzo(a)pyrene	ND (0.037)	0.051	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.186
Benzo(b)fluoranthene	ND (0.037)	0.071	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.11
Benzo(k)fluoranthene	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.11
Chrysene	ND (0.037)	0.070	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	1.1
Dibenz(a,h)anthracene	ND (0.037)	0.041	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.037
Fluoranthene	ND (0.037)	0.054	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	1,250
Fluorene	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	1,250
Indeno(1,2,3-cd)pyrene	ND (0.037)	0.036	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	0.11
Naphthalene	ND (0.037)	ND (0.034)	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	1,240
Phenanthrene	ND (0.037)	0.055	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	NA
Pyrene	ND (0.037)	0.059	ND (0.035)	ND (0.039)	ND (0.035)	ND (0.035)	938
Benzene	ND (0.0011)	ND (0.001)	ND (0.0011)	ND (0.0012)	ND (0.001)	ND (0.0011)	0.84
Ethylbenzene	ND (0.0011)	ND (0.001)	ND (0.0011)	ND (0.0012)	ND (0.001)	ND (0.0011)	3,400
Toluene	ND (0.0011)	ND (0.001)	ND (0.0011)	ND (0.0012)	ND (0.001)	ND (0.0011)	2,700
Xylenes	ND (0.0011)	ND (0.001)	ND (0.0011)	ND (0.0012)	ND (0.001)	ND (0.0011)	980
TPH Gasoline	ND (1.1)	ND (1.0)	ND (1.1)	ND (1.2)	ND (1.0)	ND (1.1)	100
Unknown HC (purgeable)	ND (1.1)	ND (1.0)	ND (1.1)	ND (1.2)	ND (1.0)	ND (1.1)	NA
Aviation Fuel (JP4)	ND (11)	ND (10)	ND (11)	ND (12)	ND (10)	ND (11)	200
TPH Diesel	ND (11)	ND (10)	ND (11)	ND (12)	ND (10)	ND (11)	200
Unknown HC (extractable)	ND (11)	16 J	ND (11)	ND (12)	ND (10)	ND (11)	NA
Lead (total)	9.2	16.6	6.6	9.8	7.7	5.4	190

Shaded value (or detection limit) exceeds the GSA Phase I Residential Cleanup Goal WCFS, 1995b);

[a] Field Duplicate [b] General Services Administration [c] Not detected [d] Not available

[e] Total petroleum hydrocarbon(s) [f] Hydrocarbons [g] unknown HC (purgeable) compared to TPH Gasoline Residential Cleanup Goal

[h] Unknown HC (extractable) compared to TPH Diesel Residential Cleanup Goal [i] Estimated Value

Checked by: MMS 12-23-99
Approved By: AWS 12-23-99

Table A-2. Petroleum, Oil, and Lubricant Outparcel Composite Surface Rock Organics Summary

Sample Number Location	HB-4103 SR-POLA-001	General Services Administration Phase I Residential Cleanup Goals for Soil
ANALYTE	Results in milligrams per kilogram	
2-Methylnaphthalene	ND[a] (0.5)	NA[b]
Acenaphthene	ND (0.5)	NA
Anthracene	ND (0.5)	9,376
Benzo(a)anthracene	ND (0.5)	0.11
Benzo(a)pyrene	ND (0.5)	0.186
Benzo(b)fluoranthene	ND (0.5)	0.11
Benzo(k)fluoranthene	ND (0.5)	0.11
Chrysene	0.96 J[c]	1.1
Dibenz(a,h)anthracene	ND (0.5)	0.037
Fluoranthene	ND (0.5)	1,250
Fluorene	ND (0.5)	1,250
Indeno(1,2,3-cd)pyrene	ND (0.5)	0.11
Naphthalene	ND (0.5)	1,240
Phenanthrene	ND (0.5)	NA
Pyrene	ND (0.5)	938
Aviation Fuel (JP4)	ND (1,000)	200
TPH[d] Diesel	ND (1,000)	200
Unknown HC[e] (extractable)	1,800 J[f]	NA
Aroclor-1016	ND (0.02)	0.16 (Total PCBs)[g]
Aroclor-1221	ND (0.02)	
Aroclor-1232	ND (0.02)	
Aroclor-1242	ND (0.02)	
Aroclor-1248	ND (0.02)	
Aroclor-1254	ND (0.02)	
Aroclor-1260	ND (0.02)	

Shaded value (or detection limit) exceeds the Residential Cleanup Goal (WCFS, 1995b

[a] Not Detected (detection limit in parentheses)

[b] Not Available

[c] Estimated Value

[d] Total petroleum hydrocarbon(s)

[e] hydrocarbon(s) unknown HC (extractable) compared to TPH Diesel Residential Clean

[f] Estimated

[g] Polychlorinated biphenyls

Checked By: NMK 12-23-99

Approved By: AWS 12-23-99

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

(Page 1 of 7)

Location	MW-POLA-117A		MW-POLA-117B		MW-POLA-118			GSA[b] Phase I Residential
Sample Number	HB-4311	HB-4344	HB-4304	HB-4336	HB-4316	HB-4317 (FD)[a]	HB-4341	Cleanup
Date	02/27/1997	03/26/1997	02/27/1997	03/26/1997	02/27/1997	02/27/1997	03/26/1997	Goals
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND[c] (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA[d]
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH[e] Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC[f] (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	53 J[g]	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

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Location	MW-POLA-119		MW-POLA-120		MW-POLA-121		PL-MW-101	GSA Phase I Residential
Sample Number	HB-4303	HB-4350	HB-4306	HB-4351	HB-4320	HB-4345	HB-4321	Cleanup
Date	02/27/1997	03/27/1997	02/27/1997	03/27/1997	02/28/1997	03/26/1997	02/28/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	62 J	NA
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (30)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	47	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (40)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	2.7	4.6	ND (5)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	7.3	10 J	78	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	7.7	13 J	140	20,299,000
TPH Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	630 J	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	480 J	ND (50)	4800 J	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	ND (50)	ND (50)	ND (50)	ND (50)	580 J	730 J	6600 J	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

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Location	PL-MW-101	PL-MW-103			PL-MW-104		PL-MW-105	GSA Phase I Residential
Sample Number	HB-4348	HB-4308	HB-4352	HB-4353 (FD)	HB-4314	HB-4337	HB-4293	Cleanup
Date	03/27/1997	02/27/1997	03/27/1997	03/27/1997	02/28/1997	03/26/1997	02/26/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Acenaphthene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (30)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (40)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	77 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	120 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH Gasoline	4,600 J	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	130 J	180 J	ND (50)	NA
Aviation Fuel (JP4)	ND (500)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (500)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	3,900 J	110 J	ND (50)	ND (50)	270 J	230 J	ND (50)	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

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Location	PL-MW-105	PL-MW-106			PL-MW-107		PL-MW-108	GSA Phase I Residential
Sample Number	HB-4325	HB-4294	HB-4295 (FD)	HB-4326	HB-4299	HB-4329	HB-4296	Cleanup
Date	03/25/1997	02/26/1997	02/26/1997	03/25/1997	02/26/1997	03/25/1997	02/26/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	ND (50)	ND (50)	ND (50)	ND (50)	56 J	ND (50)	ND (50)	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

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Location	PL-MW-108	PL-MW-109		PL-MW-111A		PL-MW-111B		GSA Phase I Residential
Sample Number	HB-4327	HB-4310	HB-4328	HB-4297	HB-4339	HB-4298	HB-4346	Cleanup
Date	03/25/1997	02/27/1997	03/25/1997	02/26/1997	03/26/1997	02/26/1997	03/26/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

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Location	PL-MW-112A		PL-MW-112B		PL-MW-113A		PL-MW-113C	GSA Phase I Residential
Sample Number	HB-4307	HB-4330	HB-4300	HB-4349	HB-4309	HB-4343	HB-4302	Cleanup
Date	02/27/1997	03/25/1997	02/26/1997	03/27/1997	02/27/1997	03/26/1997	02/27/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter							
2-Methylnaphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	100 J	ND (50)	ND (50)	110 J	59 J	ND (50)	51 J	NA

Table A-3. Petroleum, Oil, and Lubricant Outparcel Groundwater Organics Summary

Location	PL-MW-113C	PL-MW-114			PL-MW-115		PL-MW-116		GSA Phase I Residential
Sample Number	HB-4342	HB-4319	HB-4331	HB-4332 (FD)	HB-4318	HB-4340	HB-4305	HB-4335	Cleanup
Date	03/26/1997	02/28/1997	03/25/1997	03/25/1997	02/28/1997	03/26/1997	02/27/1997	03/26/1997	Goals (RCGs)
ANALYTE	Results in micrograms per liter								
2-Methylnaphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Acenaphthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	526,495,000
Benzo(a)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	200,000
Benzo(a)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	19,000
Benzo(b)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	56,000
Benzo(k)fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Chrysene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	2,128,000
Dibenz(a,h)anthracene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	29,000
Fluoranthene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	284,842,000
Fluorene	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	36,988,000
Indeno(1,2,3-cd)pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	301,000
Naphthalene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	1,710,000
Phenanthrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	NA
Pyrene	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	249,882,000
Benzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	350
Ethylbenzene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1,924,000
Toluene	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	835,000
Xylenes	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	20,299,000
TPH Gasoline	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	600
Unknown HC (purgeable)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	NA
Aviation Fuel (JP4)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
TPH Diesel	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	ND (50)	1,200
Unknown HC (extractable)	ND (50)	ND (50)	ND (50)	ND (50)	140 J	97 J	ND (50)	ND (50)	NA

Shaded value (or detection limit) exceeds the GSA Phase I Residential Cleanup Goal (WCFS, 1995b);

[a] Field Duplicate [b] General Services Administration [c] Not Detected [d] Not Available [e] Total petroleum hydrocarbon(s)

[f] Hydrocarbon(s) unknown HC (purgeable) compared to TPH Gasoline Residential Cleanup Goal, unknown HC (extractable) compared to TPH Diesel Residential Cleanup Goal

[g] Estimated Value

Checked By: MMJ 12-23-99
Approved By: AWS 12-23-99

BRAC POL

DRAWN BY	RDB 10/19/99	CHECKED BY	MMS 12-16-99	DRAWING NUMBER	762538-A326
		APPROVED BY	AWS 12/16/99		

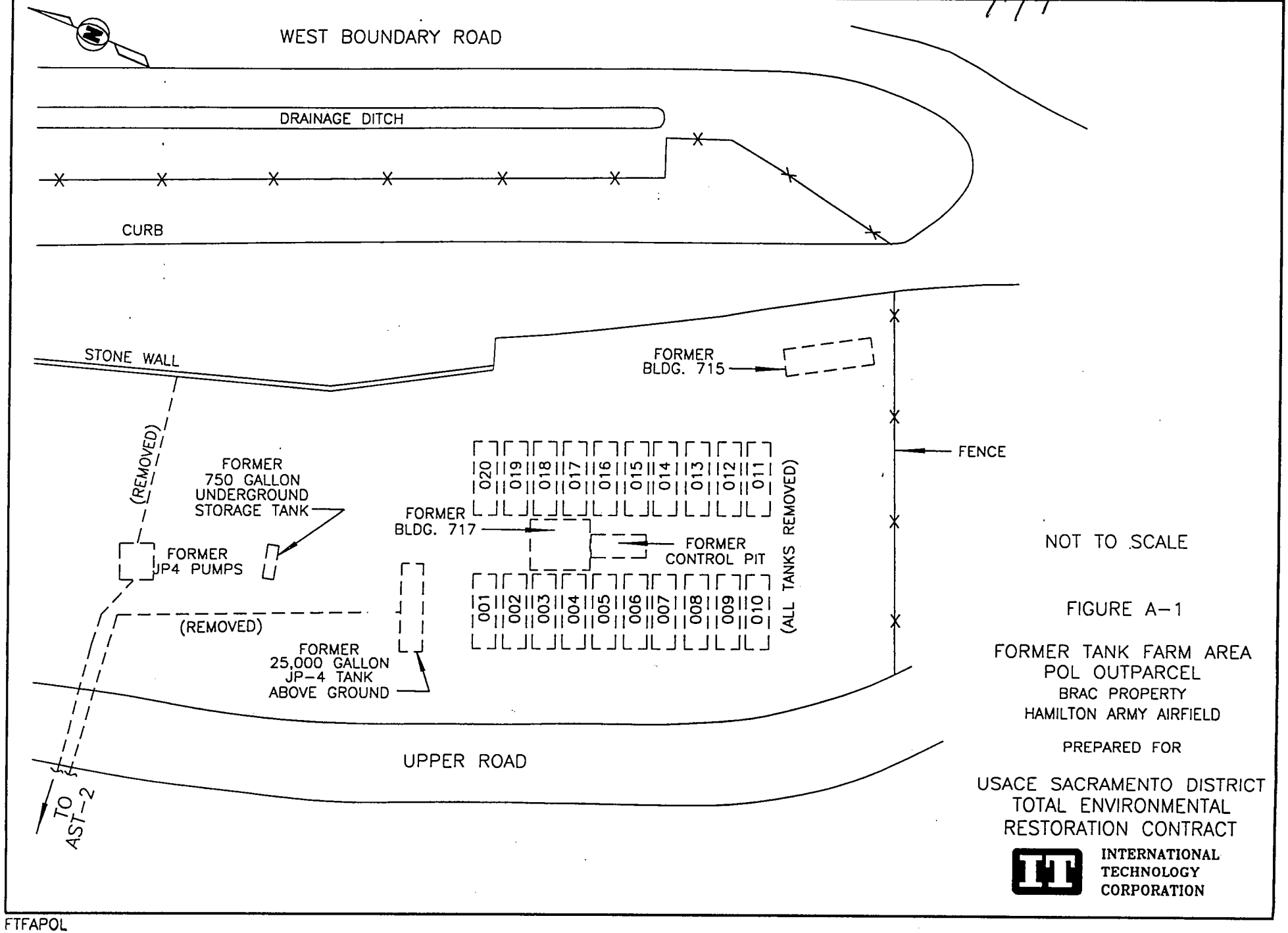


FIGURE A-1

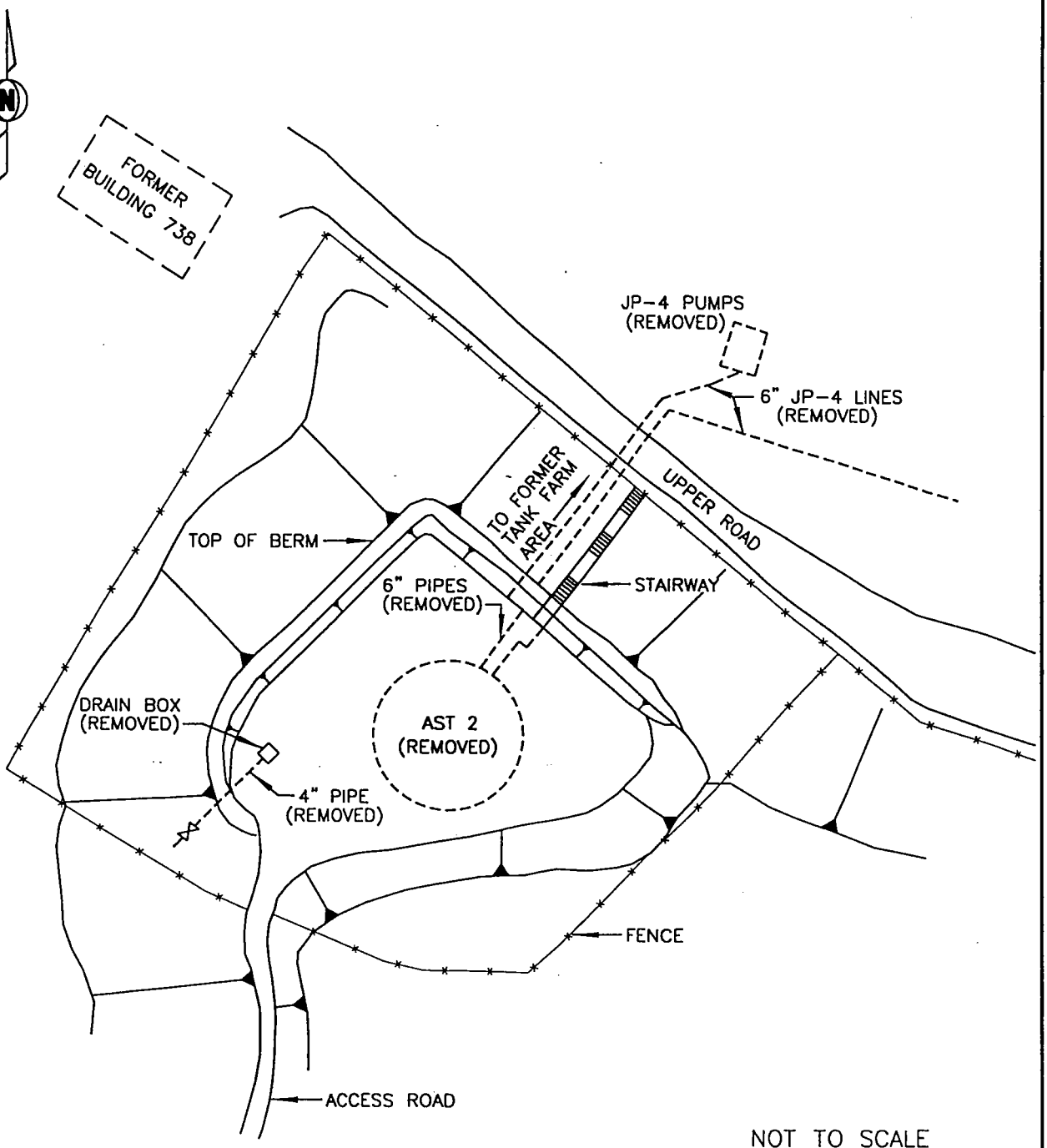
FORMER TANK FARM AREA
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL
RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

FTFAPOL



NOT TO SCALE

FIGURE A-2

FORMER AST-2
PLAN LOCATION MAP
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

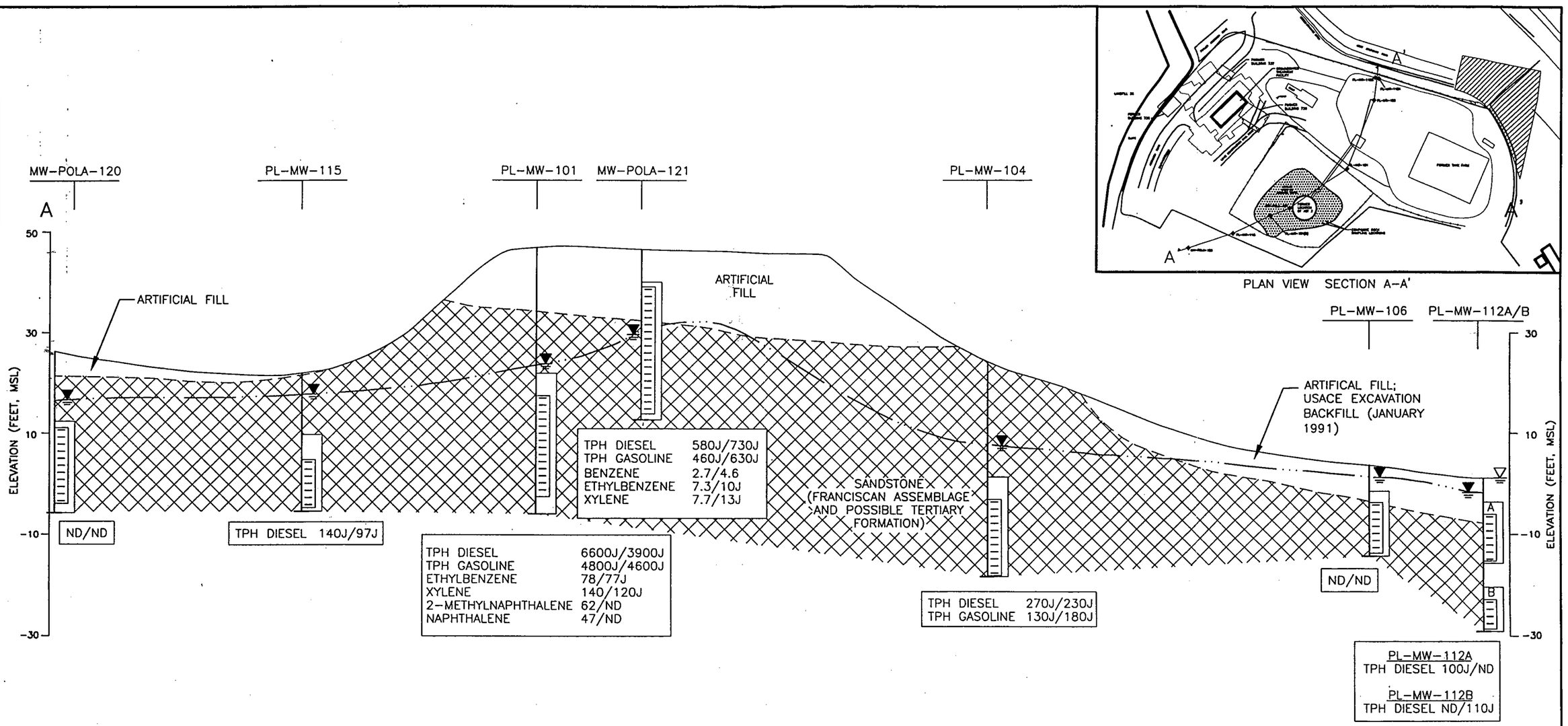
USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL
RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	RDB	CHECKED BY	mms	8-26-99	DRAWING NUMBER	762538-B505
	8/24/99	APPROVED BY	Ans	8/26/99		

BRAC POL

fast2pol XREF: HBASE12S



PLAN VIEW SECTION A-A'

ARTIFICIAL FILL

SANDSTONE

WATER LEVEL ELEVATION (MARCH 1997)

DEEPER ZONE WATER LEVEL ELEVATION (MARCH 1997)

GEOLOGIC CONTACT, APPROXIMATELY LOCATED

MONITORING WELL, SHOWING
FILTER PACK
SCREEN INTERVAL

GROUNDWATER ANALYTICAL RESULTS (IN $\mu g/L$)

6600/3900	FEBRUARY 1997/MARCH 1997 RESULT
J	ESTIMATED VALUE
ND	NOT DETECTED

NOTE:

WHEN THE CHROMATOGRAM DOES NOT MATCH THAT OF THE FUEL STANDARD USED FOR CALIBRATION, THE CONTAMINANT IS REPORTED BY THE LABORATORY AS "UNKNOWN HYDROCARBON". WHEN THE UNKNOWN FALLS INTO THE GASOLINE RANGE, IT WAS QUANTITATED AGAINST THE GASOLINE STANDARD. WHEN THE UNKNOWN FALLS INTO THE DIESEL RANGE, IT WAS QUANTITATED AGAINST THE DIESEL STANDARD.

APPROXIMATE HORIZONTAL SCALE

0 50 100 FEET

APPROXIMATE VERTICAL SCALE

0 20 40 FEET

(VERTICAL EXAGGERATION = 2.5X)

FIGURE A-3

POL OUTPARCEL
HYDROGEOLOGIC CROSS SECTION A-A'

BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL
RESTORATION CONTRACT

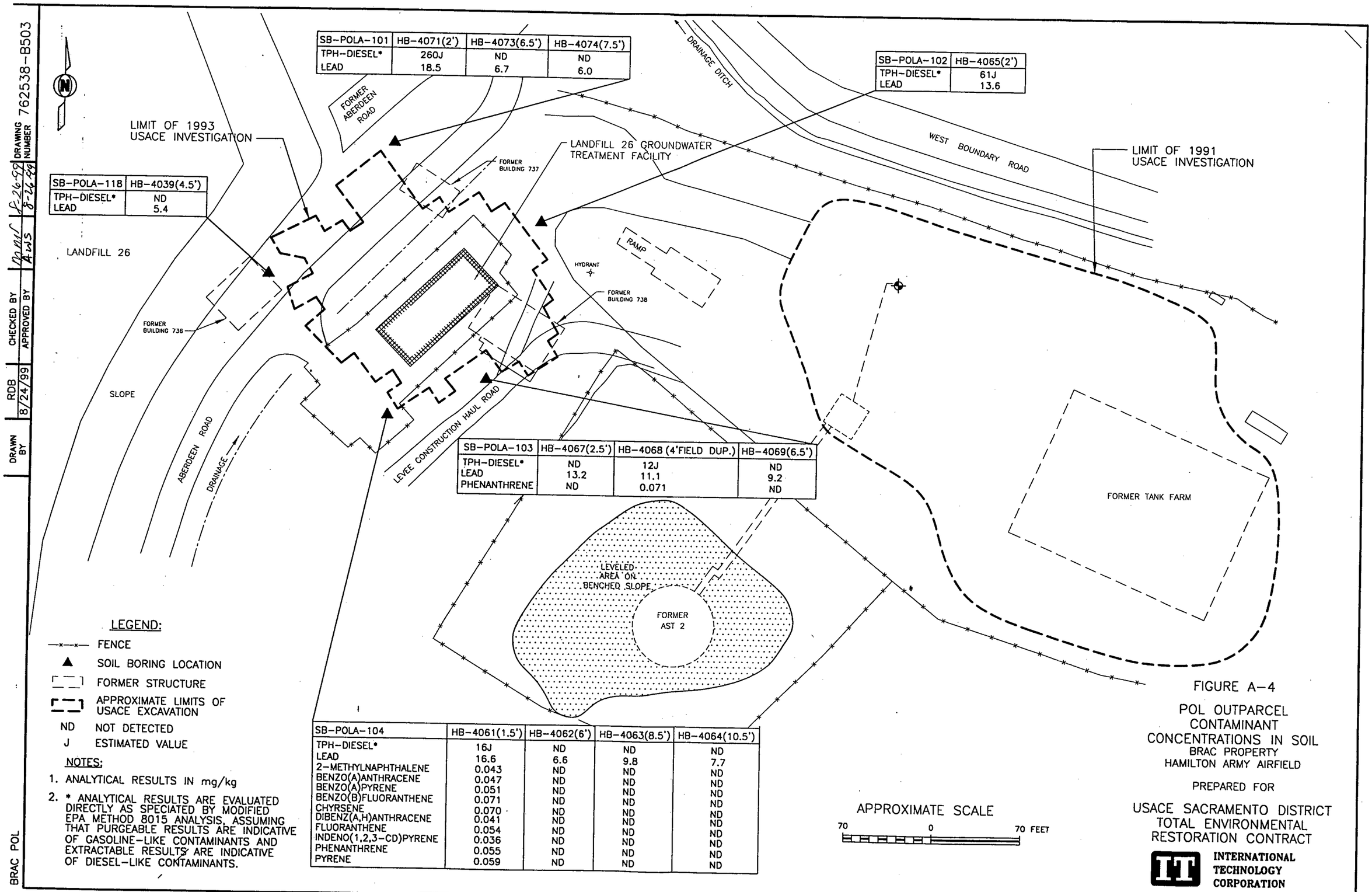
INTERNATIONAL TECHNOLOGY CORPORATION

BY	DATE	APPROVED BY	DATE	NUMBER
	8/24/99	AWS	8/26/99	

CHECKED BY MMS 8-24-99

BRAC POL

HAPOLXSA



SB-POLA-101	HB-4071(2')	HB-4073(6.5')	HB-4074(7.5')
TPH-DIESEL*	260J	ND	ND
LEAD	18.5	6.7	6.0

SB-POLA-102	HB-4065(2')
TPH-DIESEL*	61J
LEAD	13.6

SB-POLA-118	HB-4039(4.5')
TPH-DIESEL*	ND
LEAD	5.4

SB-POLA-103	HB-4067(2.5')	HB-4068 (4'FIELD DUP.)	HB-4069(6.5')
TPH-DIESEL*	ND	12J	ND
LEAD	13.2	11.1	9.2
PHENANTHRENE	ND	0.071	ND

SB-POLA-104	HB-4061(1.5')	HB-4062(6')	HB-4063(8.5')	HB-4064(10.5')
TPH-DIESEL*	16J	ND	ND	ND
LEAD	16.6	6.6	9.8	7.7
2-METHYLNAPHTHALENE	0.043	ND	ND	ND
BENZO(A)ANTHRACENE	0.047	ND	ND	ND
BENZO(A)PYRENE	0.051	ND	ND	ND
BENZO(B)FLUORANTHENE	0.071	ND	ND	ND
CHYRSENE	0.070	ND	ND	ND
DIBENZ(A,H)ANTHRACENE	0.041	ND	ND	ND
FLUORANTHENE	0.054	ND	ND	ND
INDENO(1,2,3-CD)PYRENE	0.036	ND	ND	ND
PHENANTHRENE	0.055	ND	ND	ND
PYRENE	0.059	ND	ND	ND

BRAC POL

DRAWN BY	RDB 8/24/99	CHECKED BY / APPROVED BY	MMS 8-26-99 / AWS 8/26/99	DRAWING NUMBER	762538-A316

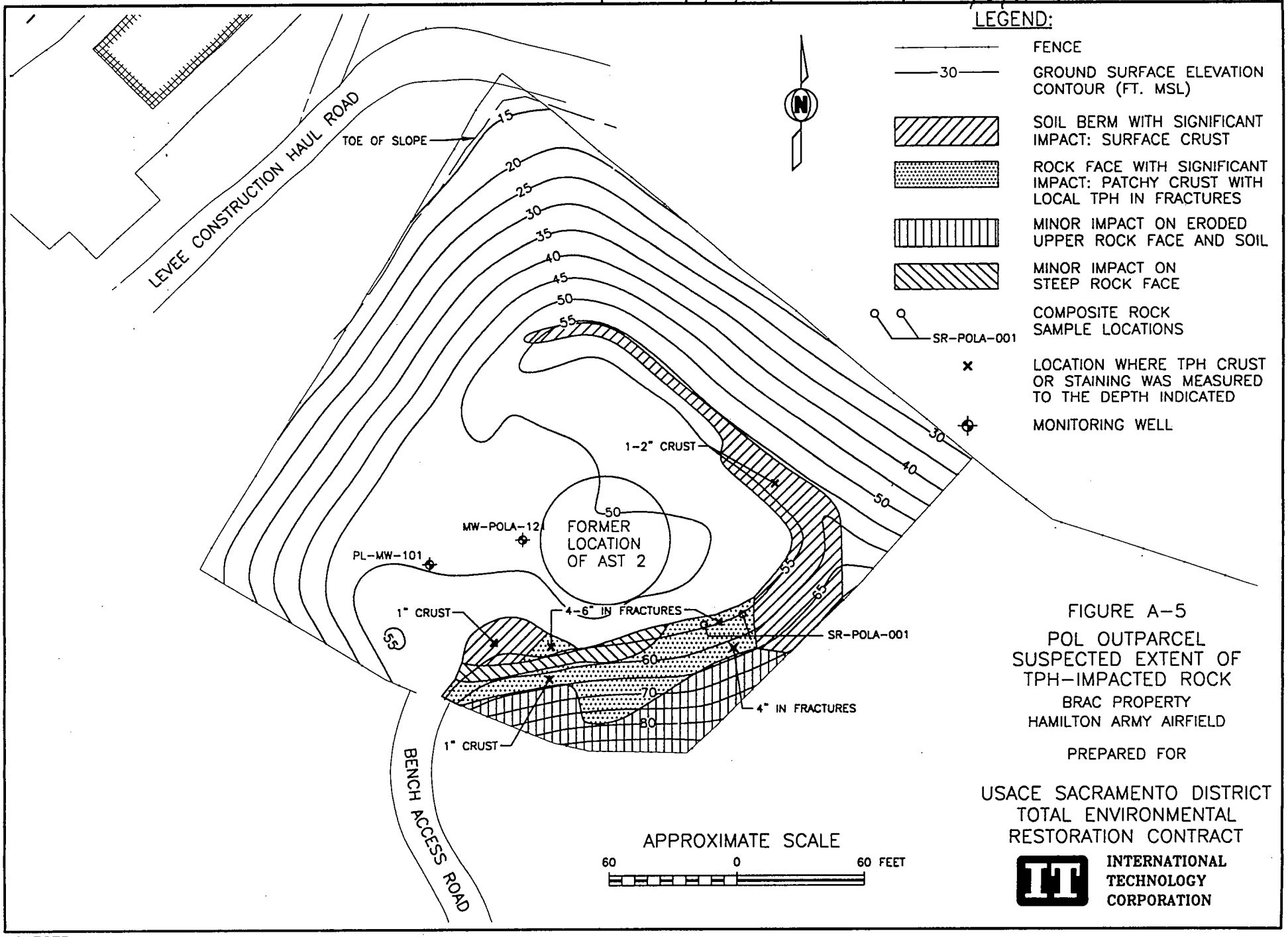


FIGURE A-5

POL OUTPARCEL SUSPECTED EXTENT OF TPH-IMPACTED ROCK

BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

POLEOTPH

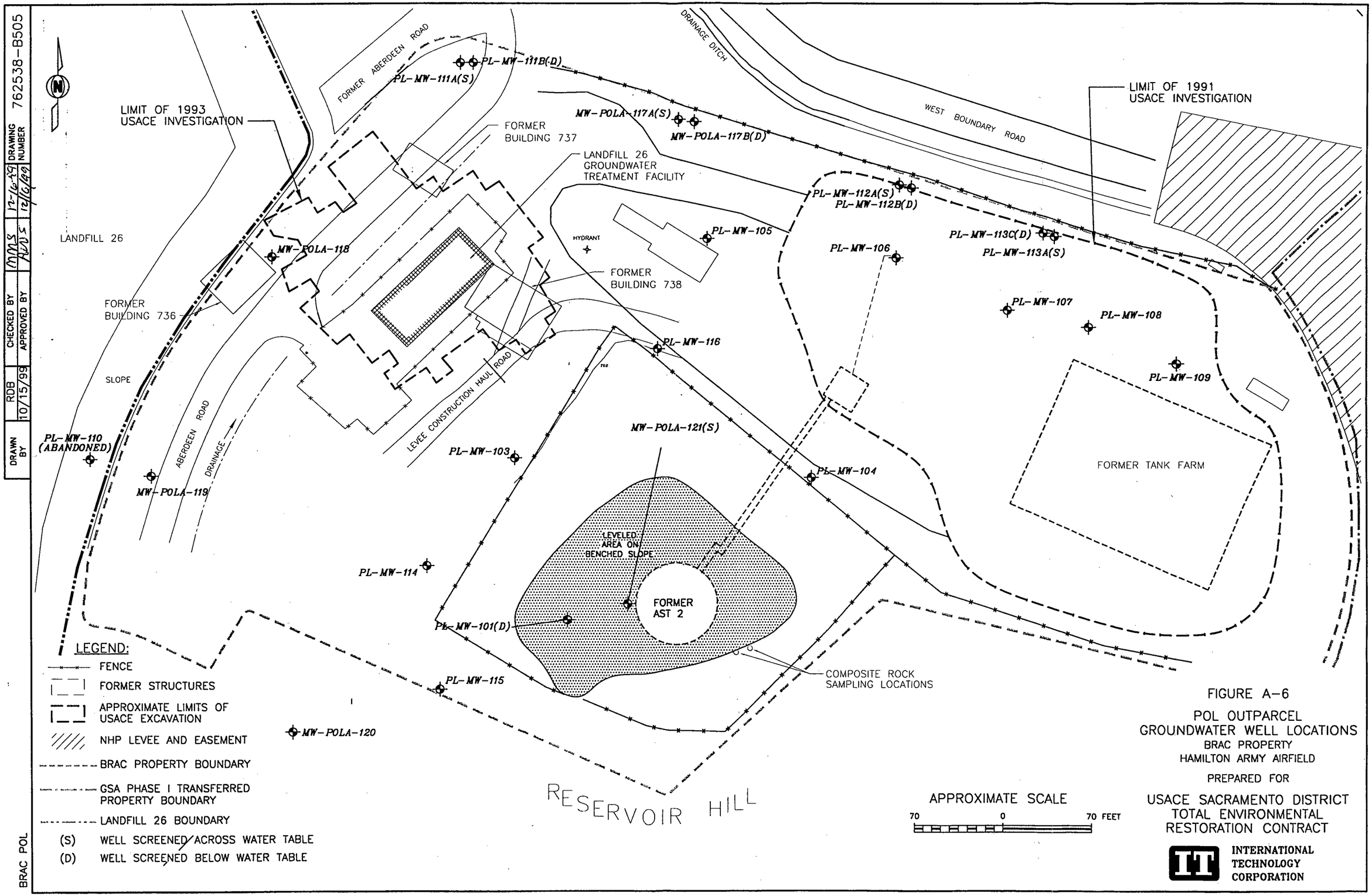
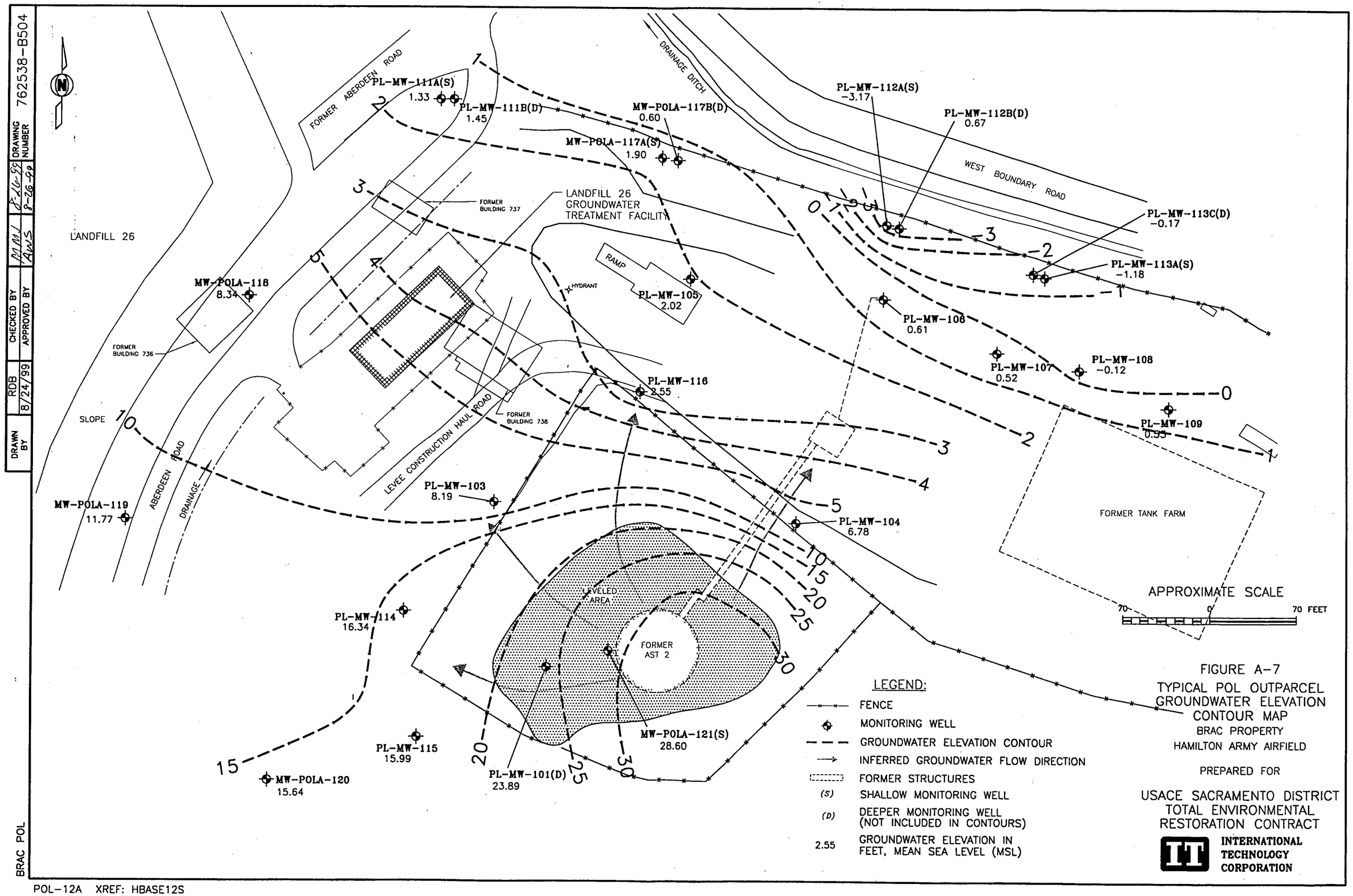


FIGURE A-6

POL OUTPARCEL
GROUNDWATER WELL LOCATIONS
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL
RESTORATION CONTRACT



POL-12A XREF: HBASE12S

APPENDIX B

Boring Logs and Well Construction Diagrams

Source: IT, 1999 (Appendix B)

Appendix B
Boring Logs and Well Construction Diagrams

BORING NO. SB-POLA-101

COORDINATES: N. 575,992.31
E. 1,418,351.03

FIELD GEOLOGIST D. Britton
CHECKED BY D. Britton
APPROVED BY T. Ervin
TOTAL DEPTH 7.5 ft.

DATE BEGAN 10-28-96
DATE FINISHED 10-28-96
SURFACE ELEV. 8.77 ft.
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	RECOVERY/DRIVE (in.)	BLOWS PER 6 IN.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0						ml		SILT; pale yellowish brown; dry; 80% silt; 20% gravels from regional parent rock; high organic content (roots from grasses). 0.3'
	HB-4071	14	20/23/38		N/A	bedrock		SILTSTONE; moderate yellowish brown; slightly moist; non-plastic; 80% silt; 20% unweathered siltstone up to 1/2" in length; no odor; moderate reddish brown oxidation; highly weathered with distinct light brown oxidized zones.
	HB-4072	18	13/36/39	1" of slough in top tube.				
	Grab							
5	HB-4073	12	36/147					Moisture increasing at 7'.
		6	100					Completely weathered SILTSTONE.
	HB-4074							TOTAL DEPTH 7.5 FEET
10								
15								
20								
25								
30								
35								

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
SAMPLING METHOD : California Modified Split Spoon Sampler
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	BJ	CHECKED BY	CFC 12-10-99	FILE NAME & DISK NUMBER	SPOLA101(HA26)
DATE	12/27/96	APPROVED BY	AWS 12-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

BORING NO. SB-POLA-102

COORDINATES: N. 575,947.27
E. 1,418,471.18

FIELD GEOLOGIST D. Britton
CHECKED BY D. Britton
APPROVED BY T. Ervin
TOTAL DEPTH 5 ft.

DATE BEGAN 10-28-96
DATE FINISHED 10-28-96
SURFACE ELEV. 8.28 ft.
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	RECOVERY/DRIVE (in.)	BLOWS PER 6 IN.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0	HB-4065	14	28/42/78			fill		(FILL) Gravel; very fine sand; silt; pale yellowish brown. 1.0'
	No	sample				bedrock		(BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; dry; cemented; weathered.
	Grab							
5								TOTAL DEPTH 5.0 FEET
10								
15								
20								
25								
30								
35								

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
SAMPLING METHOD : California Modified Split Spoon Sampler
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	BJ	CHECKED BY	CFC 12-10-99	FILE NAME & DISK NUMBER	SPOLA102(HA26)
DATE	12/27/96	APPROVED BY	AJS 12-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

BORING NO. SB-POLA-103

COORDINATES: N. 575,827.66
E. 1,418,424.26

FIELD GEOLOGIST D. Britton — DATE BEGAN 10-28-96
CHECKED BY D. Britton — DATE FINISHED 10-28-96
APPROVED BY T. Ervin — SURFACE ELEV. 14.06 ft.
TOTAL DEPTH 9.5 ft. — CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	RECOVERY/DRIVE (in.)	BLOWS PER 6 IN.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0	Grab					ml		SILT; dark yellowish orange; dry; 80% silt; 10% sand; 10% cemented unweathered SANDSTONE. 1.5'
	HB-4067	14	28/42/40			bedrock		(BEDROCK) SANDSTONE; moderate olive brown; slightly moist; non-plastic. 4.0'
	HB-4068	18	15/17/19					
5	Grab					bedrock		SILTSTONE; moderate yellowish brown; slightly moist; non-plastic; 45% silt; 15% sand; 40% up to 1" dia. gravel.
	HB-4069	12	37/25/47					
	No Sample	6	200		0.2-0.3			
10								TOTAL DEPTH 9.5 FEET
15								
20								
25								
30								
35								

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
SAMPLING METHOD : California Modified Split Spoon Sampler
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	BJ	CHECKED BY	CFC 12/10/99	FILE NAME & DISK NUMBER	SPOLA103(HA26)
DATE	12-20-96	APPROVED BY	AWS 12/10/99		

INTERNATIONAL TECHNOLOGY CORPORATION

BORING NO. SB-POLA-104

COORDINATES: N. 575,787.06
E. 1,418,362.59

FIELD GEOLOGIST D. Britton
CHECKED BY D. Britton
APPROVED BY T. Ervin
TOTAL DEPTH 10.5 ft.

DATE BEGAN 10-28-96
DATE FINISHED 10-28-96
SURFACE ELEV. 13.59 ft.
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	RECOVERY/DRIVE (in.)	BLOWS PER 6 IN.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0	Grab	4	50	Hard topsoil.				(FILL) SILT; pale yellowish brown; 50% silt; 20% gravel; 30% very fine sand.
	HB-4061	8	50/110		0.3	ml		
	Grab							
5	HB-4062	17	35/60/75		0.2			5.0' (BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; dry; dense; moderately cemented; very fine to fine grained; slight moisture; few cemented nodules up to 1" in length.
	Grab					bedrock		
	HB-4063	12	7/8/10					Moist at 7.5'.
	Grab							
10	HB-4064	12	35/80					Becomes dry at 9.5'.
15								TOTAL DEPTH 10.5 FEET
20								
25								
30								
35								

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
SAMPLING METHOD : California Modified Split Spoon Sampler
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	BJ	CHECKED BY	CFC 12/12/99	FILE NAME & DISK NUMBER	SPOLA104(HA26)
DATE	12-20-96	APPROVED BY	AWS, 2-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

BORING NO. SB-POLA-118

COORDINATES: N. 575,889.43
E. 1,418,256.43

FIELD GEOLOGIST C. Carlton — DATE BEGAN 10/10/96
CHECKED BY C. Carlton — DATE FINISHED 10/10/96
APPROVED BY T. Ervin — SURFACE ELEV. 12.65 ft.
TOTAL DEPTH 17 ft. — CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	RECOVERY/DRIVE (in.)	BLOWS PER 6 IN.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0	Grab			Slow drilling.		ch		(FILL) SILTY CLAY with GRAVEL; pale yellowish brown; dry; medium stiff; high plasticity; 20% gravel; abundant fine roots. 0.5'
						sm		Well Graded SILTY SAND with GRAVEL; dark yellowish orange; dry; dense; 50% very fine to medium sand; 30% silt; 20% gravel to 2cm dia. 2.0'
		9	18/50-3"			bedrock		(BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; dry; very dense; weakly-cemented; weathered; very fine-to fine-grained.
	HB-4039	7	100-6"		0.4			Grayish orange; slightly weathered; locally well-cemented; dry to slightly moist.
5	Grab							
		3	50-3"					
10	Not Sampled			Very hard drilling.				
15	Grab							
20								TOTAL DEPTH 17.0 FEET
								Note: Borehole grouted to surface.
25								
30								
35								

DRILLER : Mark Nelson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	CFC 12-10-99	FILE NAME & DISK NUMBER	POLA-118(HA26)
DATE	12-20-96	APPROVED BY	HCB 12-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

TABLE B2-1
POL AREA MONITORING WELL CONSTRUCTION DETAILS
HAMILTON AAF-BRAC
PROJECT #762538

WELL NO.	DATE COMPLETED	TOTAL DRILLED DEPTH (FT. BGS)	TOTAL WELL DEPTH (FT. BGS)	BOREHOLE DIAMETER (IN.)	SCREEN INTERVAL (FT.)	FILTER PACK INTERVAL (FT.)	BENTONITE SEAL INTERVAL (FT.)	GROUT SEAL INTERVAL (FT.)	PVC STICKUP (FT.)	STEEL MONUMENT STICKUP (FT.)
MW-POLA-117A	10/18/96	17.6	15	10.0	5.0-15.0	4.0-17.6	2.0-4.0	0-2.0	3.2	3.1
MW-POLA-117B	10/19/97	28	26	10.0	16.0-26.0	14.0-28.0	12.0-14.0	0-12.0	2.1	2.4
MW-POLA-118	10/24/97	16.4	15	10.0	5.0-15.0	4.0-16.4	2.0-4.0	0-2.0	2.1	2.6
MW-POLA-119	10/11/97	17	14.4	12.0	4.4-14.4	4.0-17.0	2.0-4.0	0-2.0	2.2	3.0
MW-POLA-120	1/30/97	31.8	30.66	8.63	15.0-30.0	14.0-31.8	12.0-14.0	0-12.0	2.9	3.6
MW-POLA-121	1/31/97	33.6	32.67	8.63	7.0-32.0	6.0-33.6	3.0-6.0	0-3.0	2.4	3.4

Checked By: LKC 6/3/97

Approved By: CFC 6/4/97

APPENDIX B2: MONITORING WELL LOGS, COREHOLE LOGS, AND CONSTRUCTION DIAGRAMS

Well Number	Log/Diagram
MW-POLA-117A	Monitoring Well Log
MW-POLA-117B	Monitoring Well Log - Abandoned
MW-POLA-117B	Monitoring Well Log - Redrill
MW-POLA-118	Monitoring Well Log - Redrill (SB-POLA-118 was abandoned)
MW-POLA-119	Monitoring Well Log
MW-POLA-120	Corehole Log, Well Construction Diagram
MW-POLA-121	Corehole Log, Well Construction Diagram

MONITORING WELL NO. MW-POLA-117A

COORDINATES: N. 575,997.19
E. 1,418,614.98

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 17.6 ft.

DATE BEGAN 10/11/96
DATE FINISHED 10/18/96
SURFACE ELEV. 5.26 ft.
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	DRILLING REMARKS	P.I.D. READING (ppm)	USCS	PROFILE	DESCRIPTION
0	Grab	Standpipe with Locking Cap; Portland Cement Apron; Portland Cement Grout; Bentonite Seal; 4" dia. PVC Blank Casing; 10" dia. Borehole; 4" dia. PVC Screen with 0.010" Slots; #2/12 Sand; 4" dia. PVC Sediment Trap	0.9	sm		(FILL) Well graded SILTY SAND with GRAVEL; pale yellowish brown; dry; angular gravel to 10 cm. 0.5' SILTY SAND; dusky brown; dry to slightly moist; medium dense; 60% very fine-grained sand; 40% silt.
5			0.8			6.0' (BEDROCK) ARKOSIC SANDSTONE; moderate yellowish brown; slightly moist; silty; trace clay; very fine-grained; weathered; friable; weakly-cemented
10			1.5	bedrock		Dry, little to no clay.
15			1.3			Grayish orange; dry; silty; no clay; slightly weathered; few cemented nodules to 3 cm dia.
20						TOTAL DEPTH 17.6 FEET
25						
30						
35						

DRILLER : Mark Nelson/Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	CJC 12/10/99	FILE NAME & DISK NUMBER	POLA117A(HA25)
DATE	12-23-96	APPROVED BY	AWS 12/10/99		

INTERNATIONAL TECHNOLOGY CORPORATION

MONITORING WELL NO. (Abandoned) MW-POLA-117B

COORDINATES: N. N/A
E. N/A

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 30 ft.

DATE BEGAN 10/11/96
DATE FINISHED 10/11/96
SURFACE ELEV. N/A
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
0	Grab	Moderately fast drilling.	sm		(FILL) Well graded SILTY SAND with GRAVEL; pale yellowish brown; dry; 50% very fine to coarse sand; 35% silt; 15% angular gravel and rocks.
2.0					SILTY SAND; dusky brown; slightly moist; medium dense; 60% very fine to fine sand; 40% silt.
6.0			bedrock		(BEDROCK) ARKOSIC SANDSTONE; moderate yellowish brown; slightly moist; silty; trace clay; very fine-grained; friable; weathered; weakly-cemented.
10					Dark yellowish orange.
					Grayish orange; dry; silty; no clay; slightly weathered; few cemented nodules 2 cm dia.
15					Dark yellowish orange.
20					Abundant cemented nodules to 22 ft.; nodules are hard; calcite-cemented; dark greenish gray; quartzo-feldspathic with minor mica.
25					Abundant cemented nodules to 29 ft.
30					TOTAL DEPTH 30.0 FEET Note: Borehole was grouted to surface.
35					

DRILLER : Mark Nelson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	CFC 12/10/99	FILE NAME & DISK NUMBER	MW-117B(HA26)
DATE	12-20-96	APPROVED BY	RWS 12-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

MONITORING WELL NO. (Redrill) MW-POLA-117B

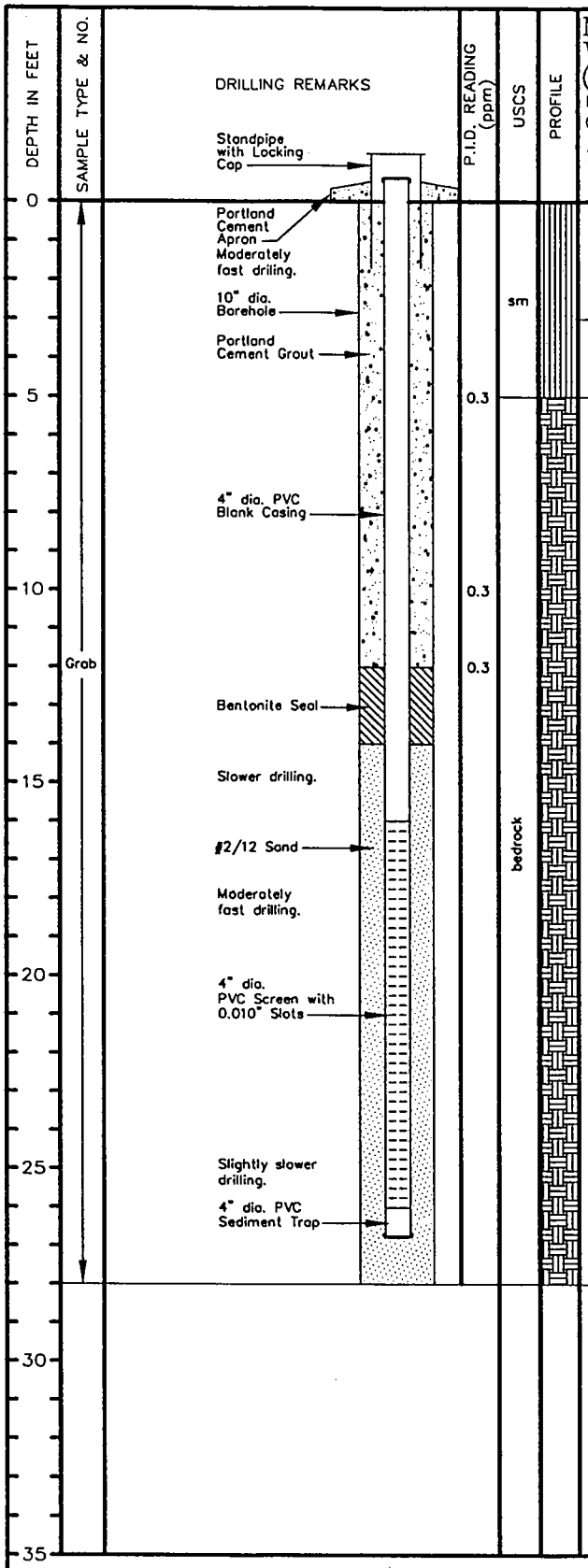
COORDINATES: N. 575,991.01 E. 1,418,621.43

FIELD GEOLOGIST C. Carlton — DATE BEGAN 10/18/96

CHECKED BY C. Carlton — DATE FINISHED 10/18/96

APPROVED BY T. Ervin — SURFACE ELEV. 5.15 ft.

TOTAL DEPTH 28 ft. — CORE SIZE N/A



DEPTH	DESCRIPTION
0	(FILL) Well graded SILTY SAND with GRAVEL; pale yellowish brown; dry; 50% very fine to coarse sand; 30% silt; 20% gravel to 4 cm dia.
3.0'	SILTY SAND; dark brown; slightly moist; medium dense; 60% very fine to fine sand; 40% silt.
5.0'	(BEDROCK) ARKOSIC SANDSTONE; moderate yellowish brown; slightly moist; silty; trace clay; very fine-grained; friable; weathered; weakly-cemented.
	Dark yellowish orange; dry; little to no clay.
	1 ft. thick bed of mudstone; light olive brown; slightly moist; trace sand Silty.
	Locally well-cemented; grayish orange; slightly weathered.
	Dark yellowish orange.
	Abundant cemented nodules.
	TOTAL DEPTH 28.0 FEET

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	CC 12-10-97	FILE NAME & DISK NUMBER	POLA117B(HA25)
DATE	12-20-96	APPROVED BY	AWS 12/10/97		

INTERNATIONAL TECHNOLOGY CORPORATION

MONITORING WELL NO. (Redrill) MW-POLA-118

COORDINATES: N. 575,884.63
E. 1,418,250.85

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 16.4 ft.

DATE BEGAN 10/24/96
DATE FINISHED 10/24/96
SURFACE ELEV. 12.39
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
0	Grab	Standpipe with Locking Cap; Portland Cement Apron; Moderately fast drilling.	ch		(FILL) SILTY CLAY with GRAVEL; pale yellowish brown; dry; medium stiff to stiff; high plasticity; 15% gravel; abundant fine roots. 2.0'
5		Portland Cement Grout; Bentonite Seal; 4" dia. PVC Blank Casing; 10" dia. Borehole; 4" dia. PVC Screen with 0.010" Slots	bedrock		(BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; dry; very dense; weakly-cemented; friable; weathered; very fine-to fine-grained; iron-oxide stained; few cemented nodules.
10		Very slow drilling.			Well-cemented; grayish orange; slightly weathered.
15		#2/12 Sand; 4" dia. PVC Sediment Trap			
20					TOTAL DEPTH 16.4 FEET
25					
30					
35					

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY		FILE NAME & DISK NUMBER	POLA118R(HA25)
DATE	12-23-96	APPROVED BY			

INTERNATIONAL TECHNOLOGY CORPORATION

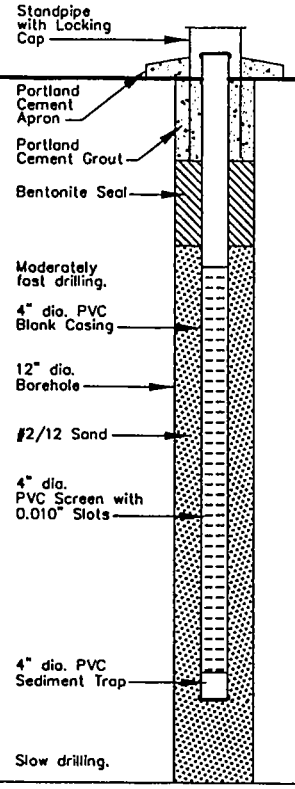
MONITORING WELL NO. MW-POLA-119

COORDINATES: N. 575,685.50
E. 1,418,143.12

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 17 ft.

DATE BEGAN 10-10-96
DATE FINISHED 10-11-96
SURFACE ELEV. 19.30 ft.
CORE SIZE N/A

DEPTH IN FEET	SAMPLE TYPE & NO.	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
0	Grab	Standpipe with Locking Cap; Portland Cement Apron; Portland Cement Grout; Bentonite Seal; Moderately fast drilling; 4" dia. PVC Blank Casing; 12" dia. Borehole; #2/12 Sand; 4" dia. PVC Screen with 0.010" Slots; 4" dia. PVC Sediment Trap; Slow drilling.	sm		(FILL) Well-graded SILTY SAND with GRAVEL; pale yellowish brown; dry; medium dense; 50% very fine to coarse sand; 30% silt; 20% gravel.
3.0			bedrock		(BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; dry; weathered; dense; weakly-cemented; very fine-to fine-grained; slightly moist; few cemented nodules to 2 cm diameter. Very moist to wet. Well-cemented; fresh.
17.0					TOTAL DEPTH 17.0 FEET



DRILLER : Mark Nelson
DRILLING CO. : SES Incorporated
DRILLING METHOD : Hollow Stem Auger
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	BJ	CHECKED BY	CC 12/10/99	FILE NAME & DISK NUMBER	MPOLA119(HA23)
DATE	12/27/96	APPROVED BY	[illegible]		

INTERNATIONAL TECHNOLOGY CORPORATION

COREHOLE NO. MW-POLA-120

COORDINATES: N. N/A
E. N/A

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 40 ft.

DATE BEGAN 11/4/96
DATE FINISHED 11/13/96
SURFACE ELEV. N/A
CORE SIZE 3"(Run 1),2-1/4" (Runs 2-5),1.9"(Runs 6-26)

DEPTH IN FEET	RUN NUMBER	RECOVERY/DRIVE (in.)	% RECOVERY	% RQD	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
0	1	9	25	0	Moderately fast drilling (auger).	sm		(FILL) SILTY SAND with GRAVEL; moderate yellowish brown; dry to slightly moist; loose; abundant organic matter; angular fragments of yellowish gray very fine-grained sandstone in a light brown iron-oxide matrix.
	2	9	38	0				4.0'
5	3	18	30	0		bedrock		(BEDROCK) ARKOSIC SANDSTONE; dark yellowish orange; very fine-grained; weathered. Highly weathered, fractured 3" interval; clay-filled.
10	4	18	75	56				
	5	18	75	56				
15	6	12	67	N/A	Hard drilling at 14 ft. NX coring from 14-40 ft. Driller injected water. Note: no RQD for 1.9" core.			Massive; medium light gray; very fine-grained; fresh; ~40% quartz; ~40% feldspar; 10% mafics; well-cemented; numerous discontinuous calcite veins 1-2 mm wide; few moderate yellowish brown iron-oxide stained zones surrounding < 1mm wide, iron-oxide/calcite-filled fractures; poorly-defined mafic mineral laminations. Veins and fractures are high angle (>45°).
	7	14	100					
	8	19	86					Numerous high-angle to vertical cross-cutting calcite veins; white. Two 1mm thick fractures; quartz-and chlorite-filled with slickenside lineations; no evidence of saturation.
20	9	17	94					
	10	4	100					
	11	17	100					
	12	18	100					
	13	5	56					Iron-oxide stained fracture; ~1 mm wide; partially filled with iron-oxide; approximately 45° dip.
	14	6	100					Iron-oxide stained and partially filled fractures.
25	15	20	100					Iron-oxide stained and partially filled fracture; near horizontal; uneven.
	16	31	100					
	17	5	100					Shale interbed; 2 mm thick; medium dark gray; 20° dip.
30	18	12	100					
	19	11	100					
	20	11	100					Numerous subvertical calcite veins to 33 ft.; white and gray. 2 cm thick dark gray shale interbed at 32.3 ft. Shale fragments incorporated into calcite veins.
	21	24	100					
35	22	15	100					

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : 0-14': Dry Coring through 8" H.S.A.; 14'-40': 3" O.D. NX Coring;
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	cfc 12-10-97	FILE NAME & DISK NUMBER	MPOLA120(HA25)
DATE	12/30/96	APPROVED BY	[illegible]		

INTERNATIONAL TECHNOLOGY CORPORATION

COREHOLE NO. MW-POLA-120

COORDINATES: N. N/A
E. N/A

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 40 ft.

DATE BEGAN 11/4/96
DATE FINISHED 11/13/96
SURFACE ELEV. N/A
CORE SIZE 3"(Run 1),2-1/4" (Runs 2-5),1.9"(Runs 6-26)

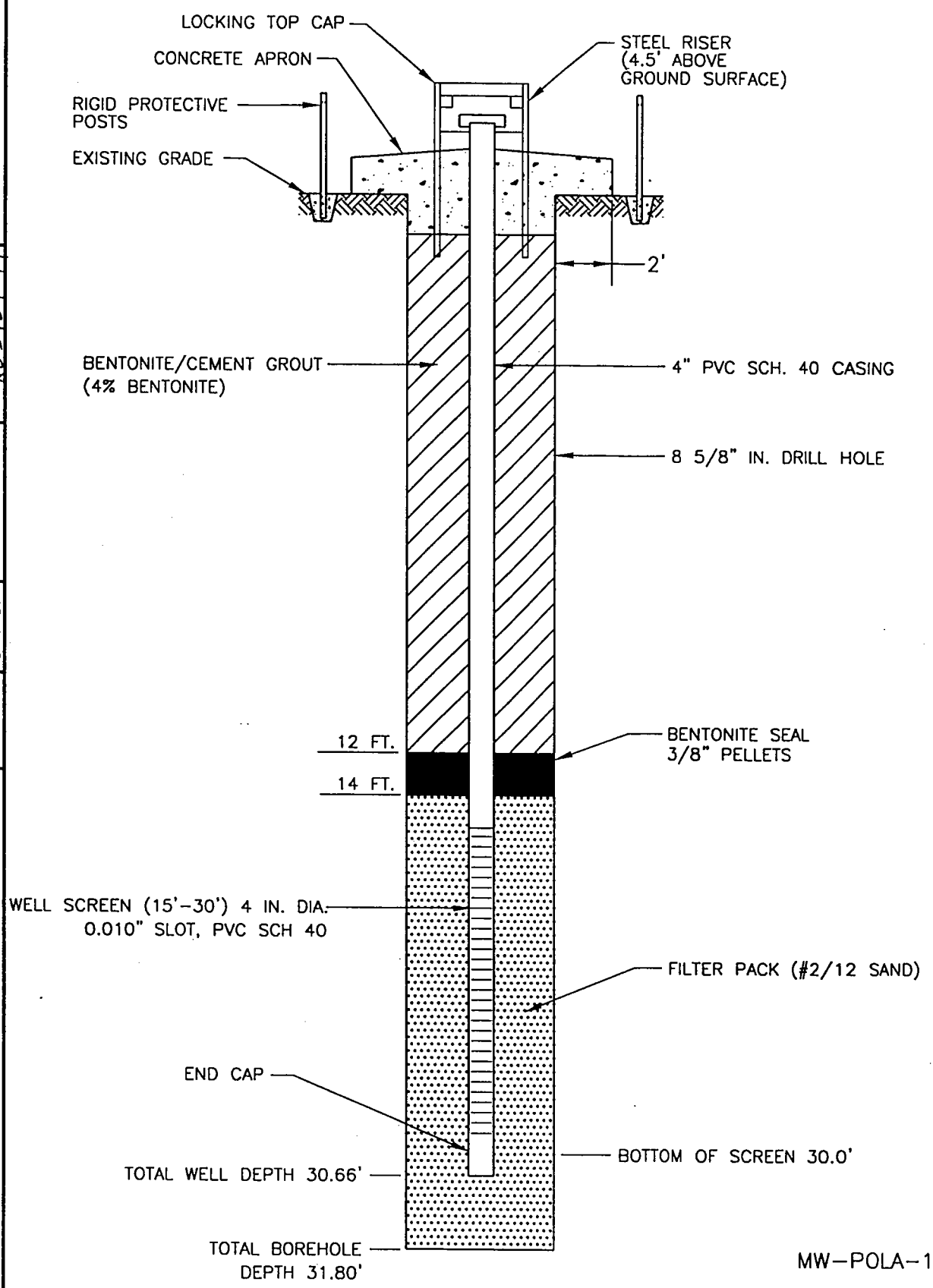
DEPTH IN FEET	RUN NUMBER	RECOVERY/DRIVE (in.)	% RECOVERY	% RQD	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
35	23	13	100	N/A	Runs 25 and 26: Drilling speed increased.	bedrock		Shale lamination, dip ~20°. Calcite veining along bedding plane and subsequent near-vertical veining; several veins include light bluish mineralization.
	24	11	100					
	25	20	100					Increasing density of erratic calcite veins. Some fractures may be only partially filled (core from 38 ft. to 40 ft. is broken).
	26	13	100					
40								TOTAL DEPTH 40.0 FEET
45								
50								
55								
60								
65								
70								

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : 0-14': Dry Coring through 8" H.S.A.; 14'-40': 3" O.D. NX Coring;
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	clk 12/10/98	FILE NAME & DISK NUMBER MPOLA120(HA25)
DATE	12/30/96	APPROVED BY	12-10-98	

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	J.KYLE 6-4-97	CHECKED BY	CLC 12/10/99	DRAWING NUMBER	762538-A197
		APPROVED BY	RWS 12-10-99		



NOT TO SCALE

MW-POLA-120

WELL CONSTRUCTION DIAGRAM
HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
PREPARED FOR
USACE, SACRAMENTO DISTRICT

INTERNATIONAL TECHNOLOGY CORPORATION

POL-DWC2

COREHOLE NO. MW-POLA-121

COORDINATES: N. N/A
E. N/A

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 40 ft.

DATE BEGAN 11/18/96
DATE FINISHED 11/21/96
SURFACE ELEV. N/A
CORE SIZE 1.9"

DEPTH IN FEET	RUN NUMBER	RECOVERY/DRIVE (in.)	% RECOVERY	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
0	NO CORING	N/A	N/A	Auger drilling.	sw		(FILL) Well graded GRAVELLY SAND with SILT; moderate yellowish brown; slightly moist to dry; 50% very fine to coarse sand; 30% gravel and angular rocks; 20% silt; trace clay.
5	1	4	8	Slower drilling. NX coring with water injection.			
	2	0	0				
10	3	2	11				
	4	10	56				12.5'
	5	0	0		bedrock		(BEDROCK) ARKOSIC SANDSTONE; medium gray; very fine-grained; massive; fresh; indurated; calcite-cemented; few partially iron-oxide stained fractures; ~20° to 45° dip.
	6	0	0				
15	7	12	92	PID = 0.4ppm			Medium dark gray to 16' with abundant iron-oxide filled fractures. Run 7: Core is broken; one piece has a partially open fracture (<1 mm) with iron-oxide staining.
	8	1	9				
	9	6	100				Numerous subvertical calcite-filled fractures to 20'; <1-2 mm wide.
	10	26	100				
20	11	29	97	PID = 0.3ppm PID = 0.2ppm			Fining-upward sequence with shale intraclasts.
	12	8	100				
	13	13	81				Shale lamination; black; approximately 0.5 cm thick; dip ~30°.
25	14	24	100				
	15	14	100				Shale lamination; approximately 0.3 cm thick.
	16	27	90				Fracture <1mm wide; black to dusky brown coating (hydrocarbon?); ~20° dip. Calcite-filled fracture; subvertical; up to 1 cm wide; several generations of filling; few discontinuous pores.
30	17	28	100	Slightly faster coring.			Very fine- to medium-grained.
	18	33	92				
35							

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : 0-5'; 8" H.S.A., No Coring; 5'-40'; 3" O.D. NX Coring
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY		FILE NAME & DISK NUMBER MPOLA121(HA25)
DATE	12-30-96	APPROVED BY		

INTERNATIONAL TECHNOLOGY CORPORATION

COREHOLE NO. MW-POLA-121

COORDINATES: N. N/A
E. N/A

FIELD GEOLOGIST C. Carlton
CHECKED BY C. Carlton
APPROVED BY T. Ervin
TOTAL DEPTH 40 ft.

DATE BEGAN 11/18/96
DATE FINISHED 11/21/96
SURFACE ELEV. N/A
CORE SIZE 1.9"

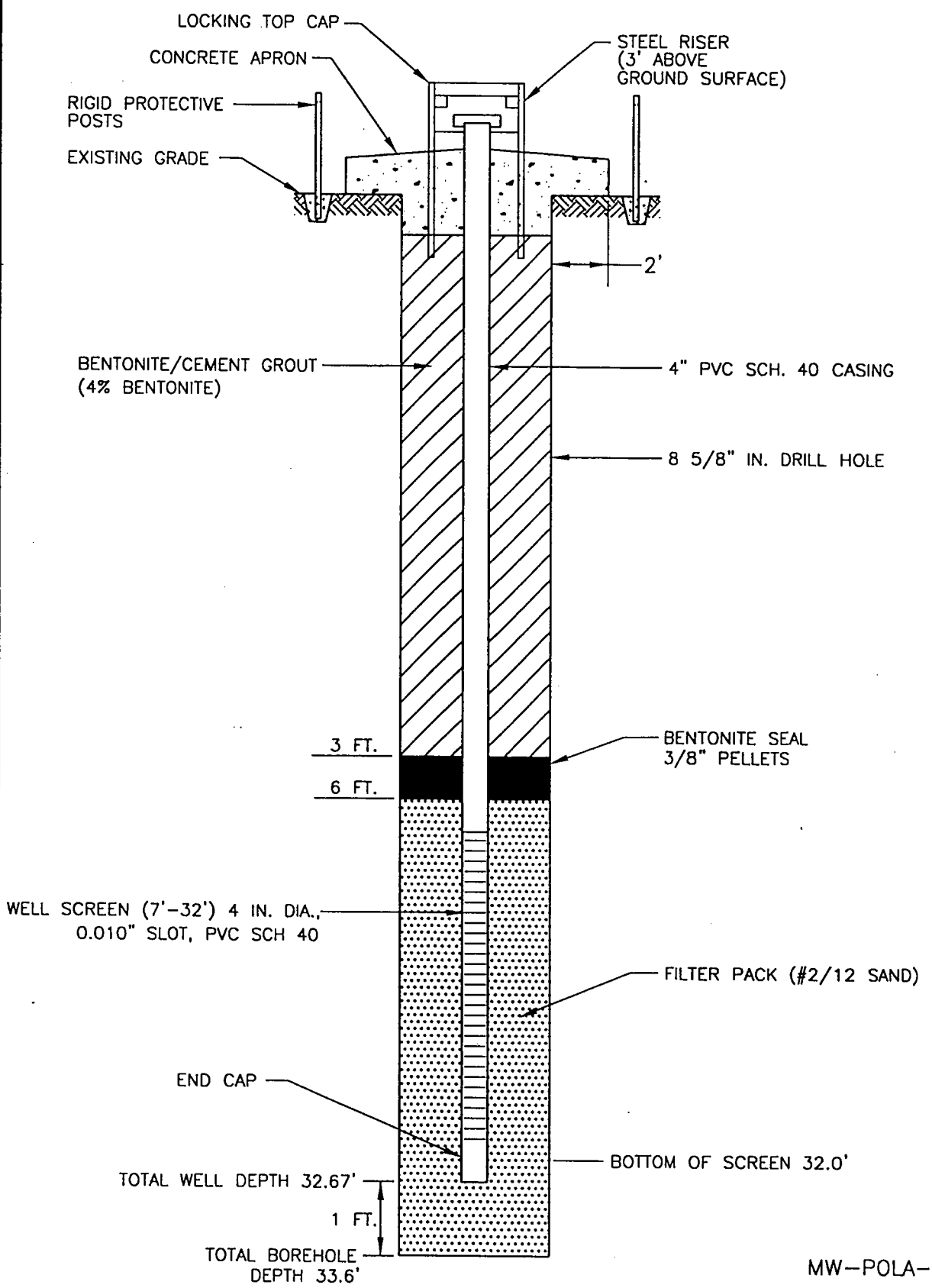
DEPTH IN FEET	RUN NUMBER	RECOVERY/DRIVE (in.)	% RECOVERY	DRILLING REMARKS	USCS	PROFILE	DESCRIPTION
35	19	10	28		bedrock		Same as above. .
	20	19	79				
40							TOTAL DEPTH 40.0 FEET
45							
50							
55							
60							
65							
70							

DRILLER : Rick Williamson
DRILLING CO. : SES Incorporated
DRILLING METHOD : 0-5';8" H.S.A., No Coring; 5'-40';3" O.D. NX Coring
PROJECT NAME : Hamilton BRAC RI/FS
LOCATION : Hamilton Army Airfield
PROJECT NO. : 762538

DRAWN BY	T.R.S.	CHECKED BY	CEC 12/1-99	FILE NAME & DISK NUMBER	MPOLA121(HA25)
DATE	12-30-96	APPROVED BY	12-10-99		

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	J.KYLE 6-3-97	CHECKED BY / APPROVED BY	cfc 12/10/99 AJLS 12-10-99	DRAWING NUMBER	762538-A196



NOT TO SCALE

MW-POLA-121

WELL CONSTRUCTION DIAGRAM
HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
PREPARED FOR
USACE, SACRAMENTO DISTRICT

INTERNATIONAL TECHNOLOGY CORPORATION

POL-DWC

APPENDIX C

Well Development and Well Survey Data

Source: IT, 1999 (Appendix C)

INTERNATIONAL TECHNOLOGY CORPORATION

WELL DEVELOPMENT RECORD
Hamilton BRAC - Project # 762538

Location: HAMILTON
Personnel: J. STRACK
Date: 2-7-97

Well/Piez. #: MW-POLA-117A
Date Installed: 10/18/96
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 18.40' TOC

Method of Development:
[X] Swabbing [X] Bailing [ ] Pumping

Weather: CLOUDY
Screened Interval (ft. BGL): 5'-15'

Equipment #s: pH Meter BETA TECH HYDAC EC Meter BETA TECH HYDAC Turbidity Meter HF ORT-15CE

Equipment decontamined prior to development Y x N ____

Describe: STEAM CLEANER

Collected sample of water added to well Y ____ N ✓

Describe: ____

INITIAL DEPTH: 18.40' (TOC) ↳ soc below

DATE	TIME	WATER LEVEL (ft. ~~BGL~~ TOC)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS	TEMP
2-7-97	1030	3.80	0	7.33	2040	OFF SCALE		53.6
	1035		12	7.57	2120	631		53.1
	1055	16.50	16	N/A	N/A	N/A	BEGIN SWABBING	
	1115	16.40	—	—	—	—	SUSPEND SWABBING	
	1315	15.45	—	—	—	—	RECOVERING	
	1515	15.15	↓	~~7.15~~ 2-7-97			"	
2/4	1330	11.38	21	7.76	1778	514	Dry	58.-
2/21	1345 ~~1345~~	3.82	0-2.5				Start pumping @ about ¼ gpm.	
	1355	—	↓	7.69	1330	25.6	Clear	
	1400	—	3.75	7.81	1480	24.1	Clear	64.1
	(stop at 1400 start 1415) ↑ 1415	—		7.94	1470	27.2	Clear (after pump turned back on).	66.-

TOC = TOP OF CASING (STEEL MONUMENT)
Stickup = 2.85'

WELL DEVELOPMENT RECORD
(continuation sheet)

WELL/PIEZ. NO. MW-FOUR-1
PAGE 2 OF 2

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS
2/21	1430	—	~12 gal	7.68	1390	19.4	Clear. ran out of water. Pump off
	Recovery						(Wait for pump to be pulled).
	1438	stop	pump.				
	1445	16.27'					
	1450	15.87					
	1603	15.80					
	1730	15.12					

Tco
68

WDRCD2.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

WELL DEVELOPMENT RECORD
Hamilton BRAC - Project # 762538

Location: HAMILTON BRAC
Well/Piez. #: MW-POLA-11B
Personnel: J Strack
Date Installed: 10/18/96
Date: 2-3-97
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 31' (30.65)

Method of Development:

[X] Swabbing [X] Bailing [X] Pumping

Weather: CLOUDY
Screened Interval (ft. BGL): 16'-26'

Equipment #s: pH Meter ✓ EC Meter ✓ Turbidity Meter ✓

Equipment decontamined prior to development Y ✓ N ____

Describe: STEAM CLEANER

Collected sample of water added to well Y ____ N X

Describe: ____

INITIAL BOTTOM DEPTH: 30.00' (TOC)

DATE	TIME	WATER LEVEL (ft. ~~BGL~~ TOC)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS
2-3-97	1127	4.25	0-2	7.68	1500	4.12	W.L. INITIALLY REMAINS ON 1st BAIL 52.0
	1131	19.60	12	7.98	1631	338	
	1140	24.80	16	8.02	1447	958	
	1300	15.65					W.L. PRIOR TO SWABBING
	1330		26	8.15	1393	OFF SCALE	AFTER SWABBING/~~BAILING~~
	1415	25.2	27	7.93	1349	"	PUMPING ~1/4 gpm 55
	1422	27.5	30	7.79	1367	140	
	1436	~29	34	7.56	1286	199	WL BELOW PUMP CHECK VALVE
2/21	0 min	4.98	0				Start pump ~1/4 gpm
↓	5 "	-	~3	7.46	9400	217	77.2
↓	10	-	~5	7.74	960	193	Slightly cloudy 61.

Static: 4.98' TOC (Steel Mon.)

TOC = TOP OF CASING (Steel Monument)
Stickup = 3.45'

WELL DEVELOPMENT RECORD
(continuation sheet)

WELL/PIEZ. NO. MW-POLA-117.
PAGE 2 OF 3

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS	Temp
2/4/97	1355	3.38 ~~4.37~~ JC 2/4	Pump rate: 0.5 gpm					
	13:56	4.42						
	13:57	5.30						
	13:58	6.28		7.68	1051	910		60.[illegible]
	14:00	7.35						
	14:02	9.00		7.73	1097	414		
	14:16	11.20		7.77	1011	1280		
	14:20	13.26		7.75	1042	1320		
	14:25	15.77		7.71	1087	967		
	14:30	18.20		7.72	1051	640		
	14:35	20.13		7.78	1068	443		
	14:40	21.37		7.74	1078	316		
	14:45	22.36		7.71	1041	274		62.[illegible]
	14:50	23.31		7.76	1038	296		
	14:55	24.15		7.64	997	990		62.
	15:00	24.94		7.61	987	1220		
	15:05	26.30		7.58	999	957		
	15:10	26.95		7.55	1022	529		
	15:15	27.74		7.55	993	1042		
	15:25	29		7.73	956	1040	Dry	
			Total: ~40 gal					

WDRCD2.XLS

WELL DEVELOPMENT RECORD
Hamilton BRAC - Project # 762538
(continuation sheet)

WELL/PIEZ. NO. MW-PBLA-117
PAGE 3 OF 3

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS	Temp
2/21	20 min	-	5	7.83	1010	316		
	30	-	7.5	7.86	1020	169.4		
	60	-		7.80	1020	77.2		
	1.10	-		7.73	1110	172.7		
	1hr 30min	-		7.69	1050	467	Slightly cloudy again	65.7
	1hr 50m	-		7.75	480	372		66.1°
	2h 10m	-		7.76	980	155	getting clearer	
	2h 30m	-		7.55	1000	82.0		
	2h 37m	-		7.52	910	94.0	Turned up pump still slightly clear	
	2h 42m	-	~45 gal				Pump off, no water	
	Recovery							
	0-9 min	25.82		Time	water Level			
	10	25.70		2 hr	12.40			
	11	25.42		2h 15m	11.10			
	12	25.25		2h 30m	10.35			
	15	24.90		2h 45m	9.42			
	20	24.31		3hr 58m	6.92			
	30	23.25		5hr 22	5.75			
	1hr 10m	18.26		6hr 57	5.32			
	1hr 30m	15.42						
	1hr 45m	13.88						
GALLONS	REMOVED					PREPARED	BY L Carr	
BAILED								
PUMPED	~45	2/21/97						
TOTAL								

0 am
np
5 gpm
25m

WDRCD2.XLS

CORPORATION

WELL DEVELOPMENT RECORD
Hamilton BRAC - Project # 762538

Location: MW-POLA-120 (Pol Hill)

Personnel: L. CARR

Date: 2/4/97

Method of Development:

☑ Swabbing ☐ Bailing ☑ Pumping

Weather: Partly Cloudy

Equipment #s: pH Meter Hydac 9 EC Meter Hydac 9 Turbidity Meter TURB 3

Equipment decontamined prior to development Y ✓ N ____

Describe: Steam Cleaned

Collected sample of water added to well Y ____ N ✓

Describe: n/a

Well/Piez. #: MW-POLA-120

Date Installed: 1/30/97

Csg. Diameter (I.D.): 4"

Total Depth (ft. BGL): ~~34.70~~ (TOC) 34.40

Screened Interval (ft. BGL): 15'-30'

Water level 11.12' bgl (TOC) Total Depth: 34.40' ~~33.70'~~ (TOC) (TOC = Steel Monument Stickup)

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS
2/4	12:37	11.12'	0-2.5	8.38	16.31 ~~18.54~~	6.83	Cloudy, 1st bail.
↓	12:44	30.70'	17.5	7.84	15.41	135	Silty.
↓	12:47	32.26'	28	7.62	16.41	80	Cloudy. Nearly dry.
2/18	10:45	12.53	SWAB →				Swab for 15 min.
↓	11:25	14.40'					Begin Bail. Pump Level @ 12.70' aft
↓	11:45	–	Approximate Vol. 0-1 gal	7.54	1280	878	Pump @ approx 0.5 gpm
	11:50	–	2.5	7.63	1170	354	Cloudy, brown water.
	~~12:00~~ 11:55	–	5.0	7.70	1160	759	"
	12:00	–	7.5	7.61	1200	855	" "
	12:05	–	10.0	7.59	1170	1057	Cloudy, brown
↓	12:10	–	12.5	7.49	1220	1190	" "

Static level for 2/18: 12.55'

Hamilton BRAC - Project # 162538
(continuation sheet)

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal) est.	pH	EC	TURBIDITY	COMMENTS	Temp °F
2/18/97	12:15	–	15.0	7.52	1180	1162		63.8
	12:20	–	17.5	7.39	1190	1069		"
	12:25	–	20.0	7.42	1170	736	Slightly clearer.	64.3
	12:30	–	22.5	7.36	1210	668		65.0
	12:35	–	25.0	7.35	1170	534	Clearer	64.8
	12:40	–	27.5	7.32	1180	420	"	65.6
	12:45	–	32.5	7.34	1110	165	"	67.3
	13:05	–	37.5	7.44	1120	116	"	65.5
	13:15	–	42.5	7.28	1080	75.1	" Almost clear	64.3
	13:25	–	47.5	7.25	1100	59.1		64.5
	13:35	–	52.5	7.16	1090	42.4	Looks clear	66.1
	13:45	–	57.5	7.22	1120	35.3	"	66.4
	13:55	–	62.5	7.20	1120	29.9	"	67.2
	14:05	–	67.5	7.22	1070	26.0	"	67.3
	14:15	–	72.5	7.15	1090	22.4	"	66.6
	14:25	–	77.5	7.22	1070	18.6	"	65.1
	14:30	–	82.5	7.21	1180	12.5	"	65.4
			est. total) real total: 55 gal.					

GALLONS	REMOVED
BAILED	28
PUMPED	55
TOTAL	83

PREPARED BY L. Carr

WORCD2.XLS

CORPORATION

WELL DEVELOPMENT RECORD
Hamilton BRAC - Project # 762538

Location: POL Hill
Personnel: L. CARR
Date: 2/4/97

Well/Piez. #: MW-POLA-121
Date Installed: 1/31/97
Csg. Diameter (I.D.): 4"
Total Depth (ft. BGL): 32.67'

Method of Development:
☐ Swabbing ☑ Bailing ☐ Pumping

Weather: Sunny
Screened Interval (ft. BGL): 31'-7'

Equipment #s: pH Meter 4610 EC Meter 4610 Turbidity Meter Turb.3

Equipment decontamined prior to development Y ✓ N ____

Describe: Steam/Pressure cleaned

Collected sample of water added to well Y ____ N ✓

Describe: ____

Static: 11.83' (Top of Standpipe) T.D. of well = 56.12' (T.O. Standpipe) Stickup -

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS
2/4/97	4:17	11.83'	0-2.5	6.53	618	21	1st bail.
↓	4:25	-	12.5	7.27	1295	OFF SCALE	Cloudy, gray
↓	4:30	33.52'	30.0'	7.60	2500	"	" Dry "
Static 11.88 2/18	9:30	11.8~~83~~6 (2/18/97)	0-2.5	7.13	2400	n/a (off scale)	Grey, (Pre-swab) cloudy, smelly.
	9:35		12.5	7.24	640	n/a	"
	9:37	29.15*	17.5	7.2~~8~~3 (2/18/97)	~~550~~ 600 (2/18/97)	544	"
	SWAB -	after swab 27.37'					
	10:15		20	7.40	920	54.	Post-swab.
	10:20	34.97	25	-	-	-	-

~~* = Water level meter accuracy questionable.~~ ~~Lacayard~~ JC 2/4/97

WELL DEVELOPMENT RECORD
(continuation sheet)

DATE	TIME	WATER LEVEL (ft. BGL)	VOLUME REMOVED (gal)	pH	EC	TURBIDITY	COMMENTS
2/21/97	1645	11.86	0			1120	Start pumping @ 1/4 gpm (after surge)
	1655	-	2.5	7.14	690	↓	Cloudy, gray.
	1710	-	7.5	7.13	530	960	Increase flow to 1 at 1700.
	1720	-	-	7.14	525	800	Clearing up. Pumped dry.
	1730	-	27.5	7.12	528	650	↓
	Finished until later date.						

WDRCD2.XLS

Hamilton Arm, .irfield
BRAC - POL Hill
Monitoring Wells

WELL ID	NORTHING	EASTING	GRD ELEV.	TOP OF CASING	TOP OF PVC	COMMENT
PL-MW-101	575,607.7	1,418,496.3	46.50	48.88	48.76	MONITORING WELL
PL-MW-103	575,736.1	1,418,455.1	14.79	17.34	17.17	MONITORING WELL
PL-MW-104	575,720.2	1,418,689.1	24.83	27.46	27.25	MONITORING WELL
PL-MW-105	575,910.6	1,418,606.8	9.53	11.64	11.49	MONITORING WELL
PL-MW-106	575,895.1	1,418,756.4	4.94	6.72	6.53	MONITORING WELL
PL-MW-107	575,853.5	1,418,844.4	5.11	7.28	7.07	MONITORING WELL
PL-MW-108	575,839.8	1,418,908.6	4.91	6.89	6.72	MONITORING WELL
PL-MW-109	575,810.7	1,418,977.3	5.64	7.48	7.26	MONITORING WELL
PL-MW-111A	576,049.8	1,418,411.3	5.37	7.52	7.33	MONITORING WELL
PL-MW-111B	576,049.9	1,418,421.6	5.34	7.91	7.67	MONITORING WELL
PL-MW-112A	575,953.0	1,418,758.8	2.27	4.24	4.08	MONITORING WELL
PL-MW-112B	575,950.6	1,418,768.3	2.14	4.33	4.17	MONITORING WELL
PL-MW-113A	575,912.4	1,418,880.8	3.18	5.12	4.96	MONITORING WELL
PL-MW-113C	575,915.1	1,418,872.0	3.08	5.53	5.40	MONITORING WELL
PL-MW-114	575,650.8	1,418,385.6	20.50	22.95	22.70	MONITORING WELL
PL-MW-115	575,553.1	1,418,395.9	22.31	24.41	24.16	MONITORING WELL
PL-MW-116	575,822.8	1,418,567.4	16.12	18.80	17.97	MONITORING WELL
MW-POLA-117A	575,997.2	1,418,615.0	5.26	8.36	7.86	MONITORING WELL
MW-POLA-117B	575,991.0	1,418,621.4	5.15	7.55	7.25	MONITORING WELL
MW-POLA-118	575,884.6	1,418,250.9	12.39	15.00	14.49	MONITORING WELL
MW-POLA-119	575,685.6	1,418,143.1	19.30	21.83	21.53	MONITORING WELL
MW-POLA-120	575,457.2	1,418,276.4	26.54	30.14	29.44	MONITORING WELL
MW-POLA-121	575,620.5	1,418,543.6	46.30	49.72	48.70	MONITORING WELL

HUNTER SURVEYING, INC.

Orangevale, CA 95662
Phone: (916) 988-5600
Fax: (916) 988-5688

18 March, 1998

INTERNATIONAL TECHNOLOGY CORPORATION
Hamilton Army Airfield
Bldg. 86 South Runway
Novato, CA 94949

Attn.: Dean Thomas

Re: **SURVEY REPORT - HAMILTON ARMY AIRFIELD**
BRAC Project No. 762538

SAMPLE LOCATION	NORTHING	EASTING	ELEVATION (GRD) (TRIG)	ELEVATION (PVC) (LEVEL)	ELEVATION (GRD) (LEVEL)
HOSPITAL HILL - TEMP. WELLS					
HHTW-01	573,205	1,419,361	—	3.49	3.38
HHTW-02	573,232	1,419,261	—	2.62	2.3
HHTW-03	573,277	1,419,341	—	2.04	1.8
HHTW-04	572,947	1,419,457	—	4.78	4.09
HHTW-05	572,977	1,419,486	—	3.69	2.51
HHTW-06	572,916	1,419,509	—	2.39	2.13
POL HILL - TEMP. WELLS / SURFACE WATER SAMPLE LOCATIONS					
PZ-POLA-01	575,993	1,418,618	—	7.43	4.9
PZ-POLA-02	575,949	1,418,761	—	4.19	1.7
PZ-POLA-03	575,911	1,418,876	—	4.86	2.8
PZ-POLA-04	575,896	1,418,753	—	6.97	4.4
SW-POLA-01	576,053	1,418,628	6.07 *	—	—
SW-POLA-02	575,920	1,418,983	6.10 *	—	—
ONSHORE PORTION OF OFFSHORE FUEL LINE SAMPLE LOCATIONS					
PH-SEGI-01X	573,750	1,426,431	-5.4	—	—
PH-SEGI-02X	573,735	1,426,478	-5.5	—	—
PH-SEGI-03X	573,719	1,426,526	-4.3	—	—
PH-SEGI-04X	573,704	1,426,571	-3.7	—	—
PH-SEGI-05X	573,690	1,426,620	-3.1	—	—
PH-SEGI-06X	573,676	1,426,669	-1.7	—	—

* Elevation of Surface Water Sampling Location at top of staff gauge.

Note: Onshore portion of Offshore fuel line sample locations are based on the positions indicated by Joe Strack (IT) on 16 March 1998. Elevations are of the existing ground surface 16 March 1998.

APPENDIX D

Field Documentation

Source: IT, 1999 (Appendix D)

Appendix D
Field Documentation

INTERNATIONAL TECHNOLOGY CORPORATION

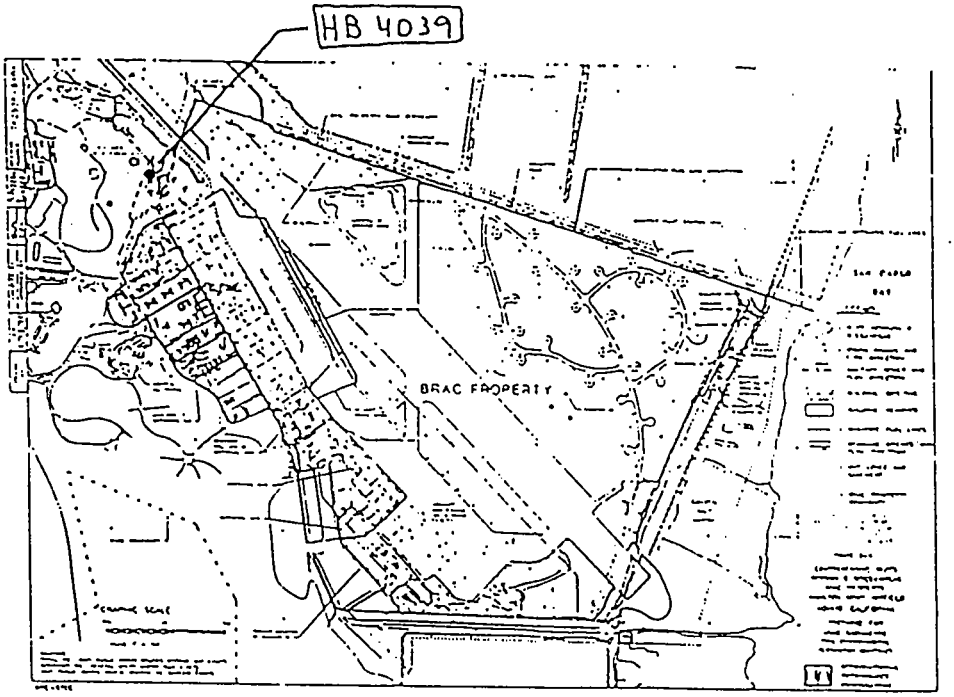
DATE	1 0 1 0 9 6
TIME	1 0 0 0
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB- 4039
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB/MW POLA 118
SAMPLE MATRIX : (soil) water
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 3.5' - 4.5'
WEATHER: Clear, Warm
PREPARED BY: Dennis Hada

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2- 2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
VOC 8010	
Metals 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	
Sacramento	✓
APPL	



Soil type: Sand Stone
PID: 0.4
Comments: Dry

INTERNATIONAL TECHNOLOGY CORPORATION

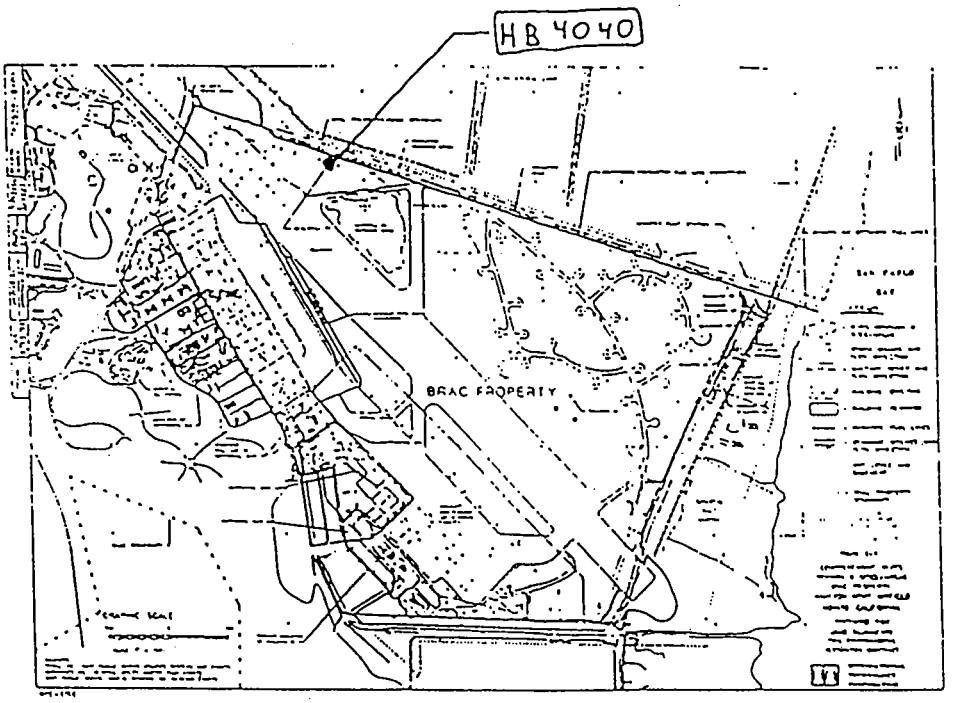
DATE	1	0	1	0	9	6
TIME			1	3	5	5
PAGE	1 OF 1					
PROJECT NO : 762538						

SAMPLE COLLECTION LOG

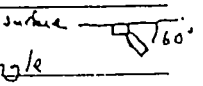
PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB- 4040
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: Building 20
SAMPLE MATRIX : (soil) water
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket
DRILLING METHOD: Hand Auger
DEPTH of SAMPLE: ~~6 pH~~ 0.5' - 1'
WEATHER: Clear, Warm
PREPARED BY: [illegible]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	3 - 2x6 Sleeves

Analyses: Requested:	
TPH (ext) 8015M as:	
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
8010	
Metals 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	
Sacramento	✓
APPL	



Soil type: Fill Material (Silty CLAY)
PID:
Comments: Augered down 2" then sampled @ 60° angle



IN ATIONAL TECHNOLOGY CORPORATION

ANALYSIS RE ST AND CHAIN OF CUSTO / RECORD*

HOLD

Reference Documen 49303
Page 1 of ____

Project Name/No. 1 Hamilton AAF/ 762 538
Sample Team Members 2 ITSI DH / MB
Profit Center No. 3
Project Manager 4 Casey Kenney
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 Calvin Tanaka
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4037	WATER - Trip Blank	10/10/96 DA	40 ml VOA	6 VOAs	HCL/4°C	TPH (ext) 8015 mod, ~~UOC 8010~~ BTEX 8020 DH		
HB-4039	SOIL - DRAC 3.5'-4.5' SB/MW POLA 118	10/10/96 1000	SJ Sleeve	2-2x6 sleeves	4°C	TPH (PRG) 8015 mod, BTEX 8020, TPH (EXT) 1015 M diesel, JP-4; PVA's 8270, Lead 7421	FOR LAB USE ONLY	
HB-4040	Building 20 0.5'-1'	10/10/96 1355		3-2x6 sleeves				
HB-4041		10/10/96 1400		2-2x6 sleeves				
HB-4042	WATER - Equipment Rinse	10/10/96 1440	40 ml VOA	8-VOA's	HCL/4°C	TPH (ext) 8015 mod, BTEX 8020		
			1 L GA	6-Ambers	4°C	TPH (ext) 8015 M - diesel, JP-4 PVA's 7270		
			1 L POLY	1 POLY	Nitric Acid + 4°C	Lead 7421		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☑ Archive ____ (mo

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☑

Turnaround Time Required: 26 14 day Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

MCA

INTERNATIONAL TECHNOLOGY CORPORATION

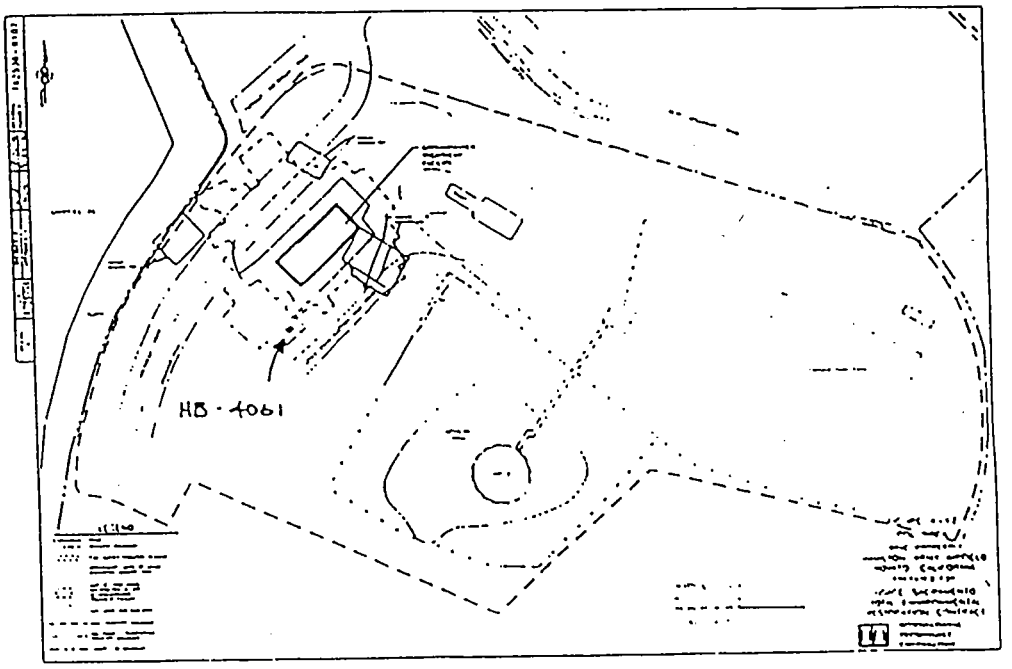
DATE	110209
TIME	0855
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4061
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SP-PCLA-104
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 1'-1.5'
WEATHER: Clear & Warming
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	1-2"x6"

Analyses:	Requested:
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
3010	
ls 6020 ICP-MS/7471	
OC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: Fill
PID: 0.3ppm
Comments:

RIFS-SCL XLS

INTERNATIONAL TECHNOLOGY CORPORATION

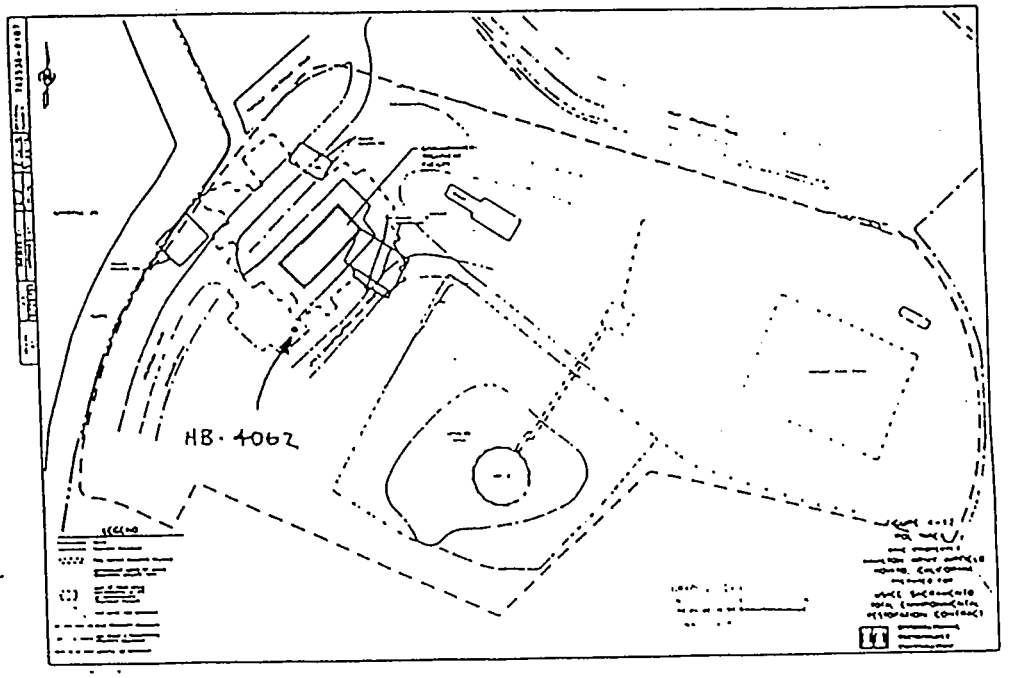
DATE	1 0 2 8 9 6
TIME	0 9 1 5
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4062
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SP-POLA-104
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 5'-6'
WEATHER: Clear & Warm
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses:	Requested:
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
3010	
Metals 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: Bedrock & Weathered Bedrock
PID: 0.2PPM
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

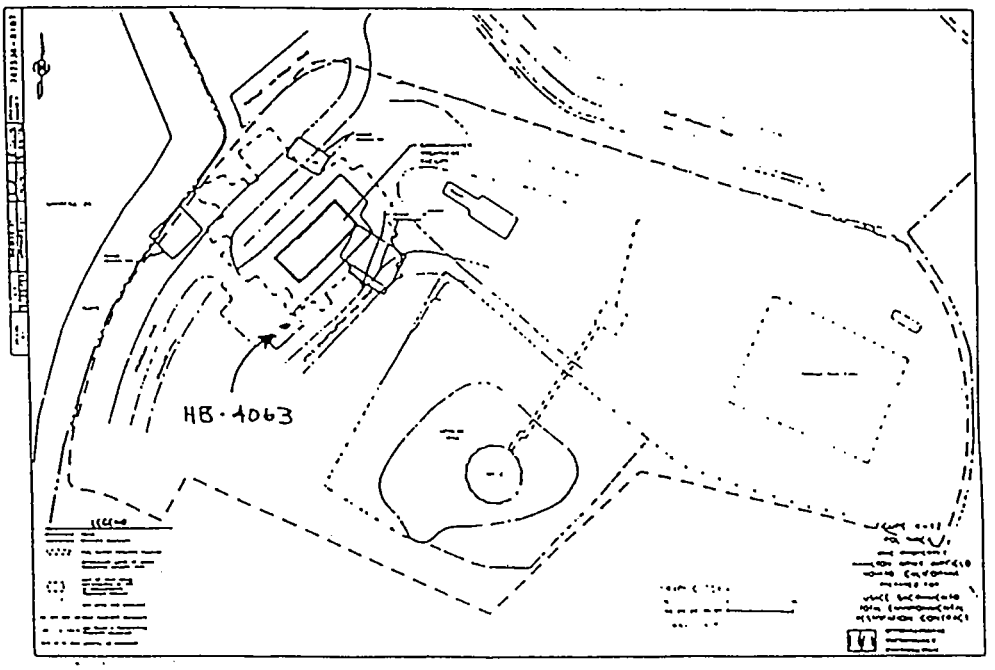
DATE	10 28 96
TIME	0935
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4063
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-104
SAMPLE MATRIX : soil water product
COMPOSITE: YES NO
SAMPLING METHOD: drive bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 7.5-8.5'
WEATHER: Clear & Warm
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
8010	
Metals 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: Bedrock & Weathered Bedrock
PID: 0.2PPM
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

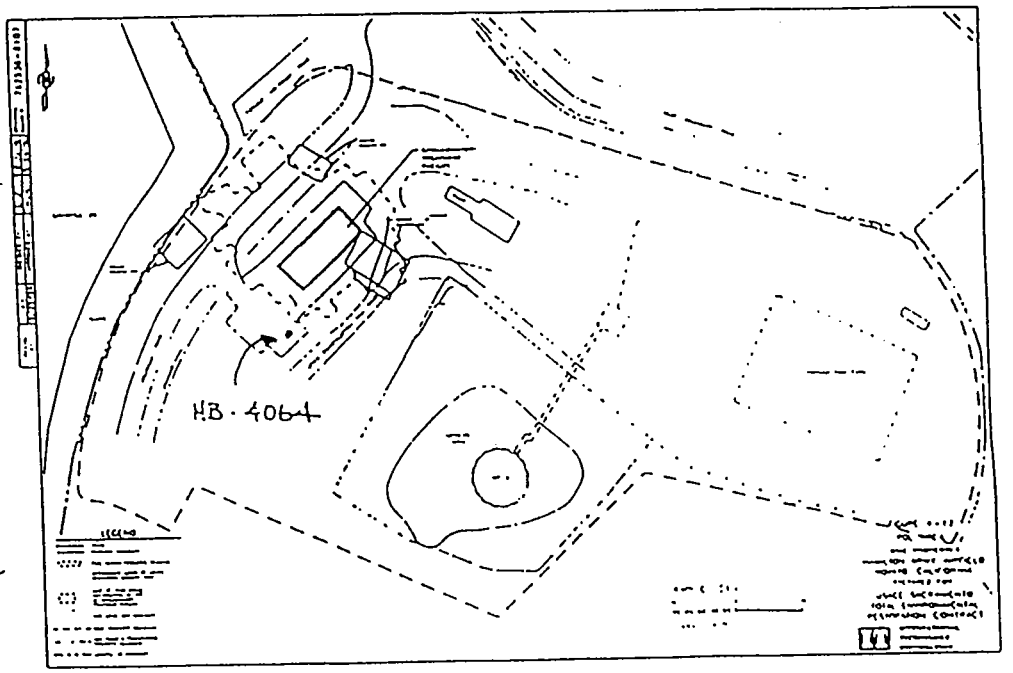
DATE	1 0 2 8 9 6
TIME	0 9 5 0
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

ROJECT NAME: HAMILTON AAF
AMPLE NUMBER: HB- 4064
AMPLE LOCATION: BRAC RI/FS
ORING NUMBER: SB-POLA-104
AMPLE MATRIX : (soil) water product
OMPOSITE: YES (NO)
AMPLING METHOD: (drive) bucket direct
RILLING METHOD: Hollow Stem Auger
EPTH of SAMPLE: 9.5'-10.5'
WEATHER: Clear & Warm
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses:	Requested:
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNA - 8270	✓
010	
als 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: Bedrock & Weathered Bedrock
PID: 0.2 PPM
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

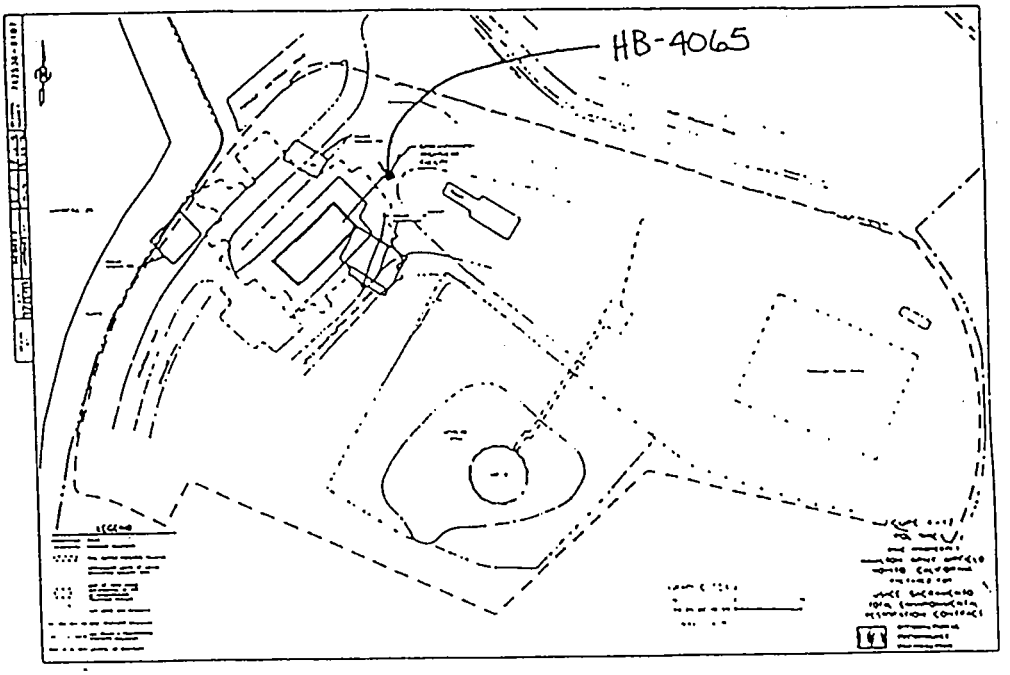
DATE	1	10	28	9	6
TIME		1	1	1	0
PAGE	1 OF 1				
PROJECT NO : 762538					

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4065
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-102
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 1'-2'
WEATHER: Clear & Warm
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
3010	
..als 6020 ICP-MS/7471	
TOC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: BEDROCK
PID: 0.2 PPM
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

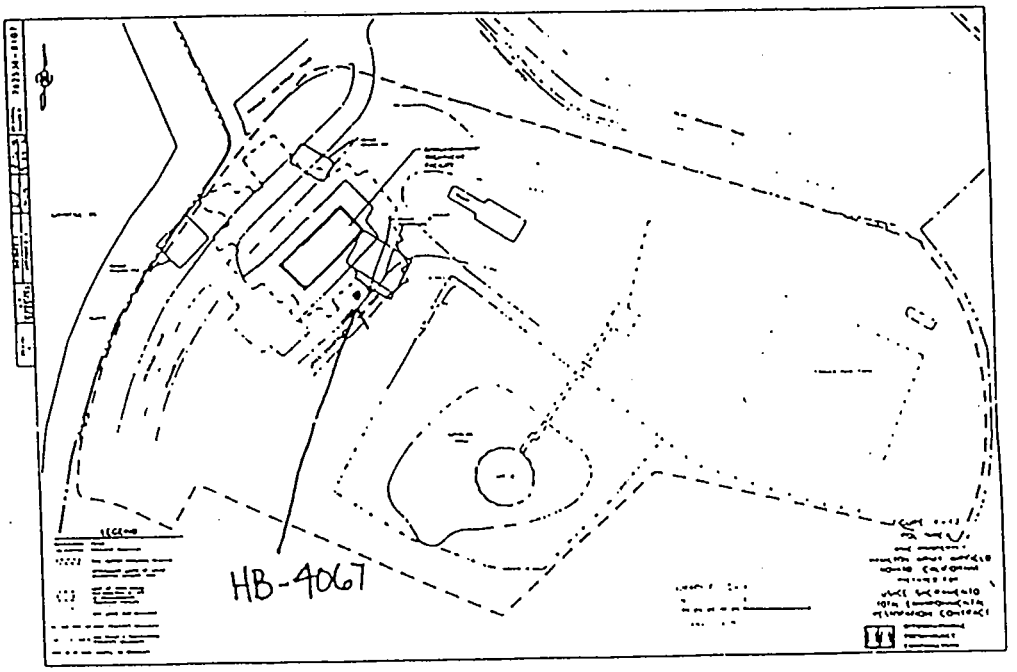
DATE	1 0 2 0 9 6
TIME	1 3 3 0
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4067
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-103
SAMPLE MATRIX : soil water product
COMPOSITE: YES NO
SAMPLING METHOD: drive bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 1.5'-2.5'
WEATHER: Clear & Warm
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses:	Requested:
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
[illegible]010	
[illegible]s 6020 ICP-MS/7471	
[illegible]OC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: FILL
PID: 0.2 PPM
Comments:

RIFS-SCL XLS

INTERNATIONAL TECHNOLOGY CORPORATION

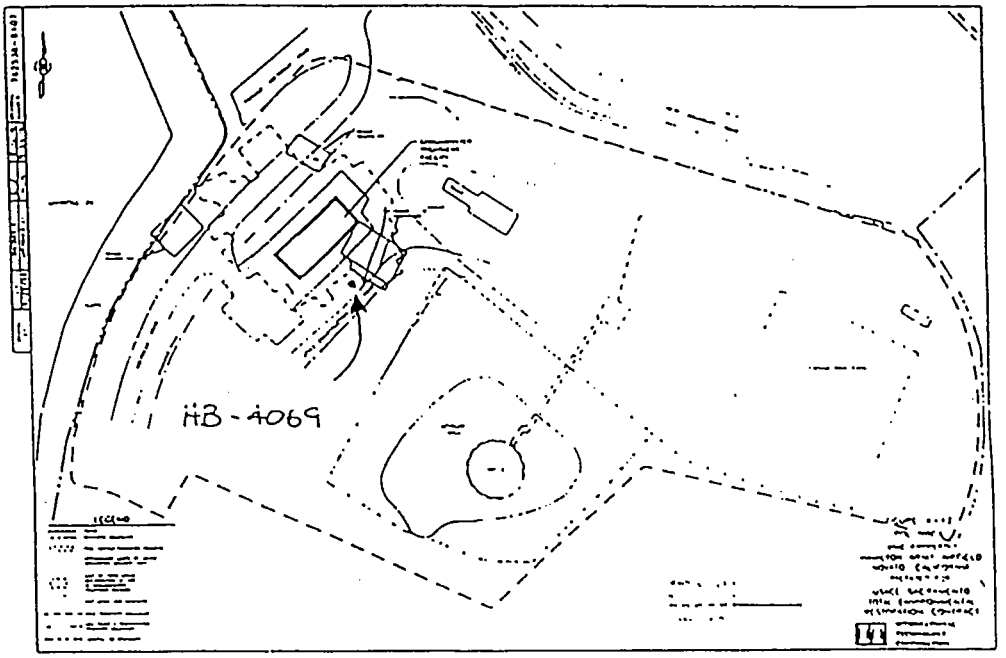
DATE	1 0 2 0 9 6
TIME	1 3 5 5
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB- 4069
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-103
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 5.5'-6.5'
WEATHER: Overcast & Cool
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
[illegible] 9010	
[illegible] 6020 ICP-MS/7471	
[illegible]C 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: BEDROCK - WEATHERED BEDROCK
PID: 0.2 ppm
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

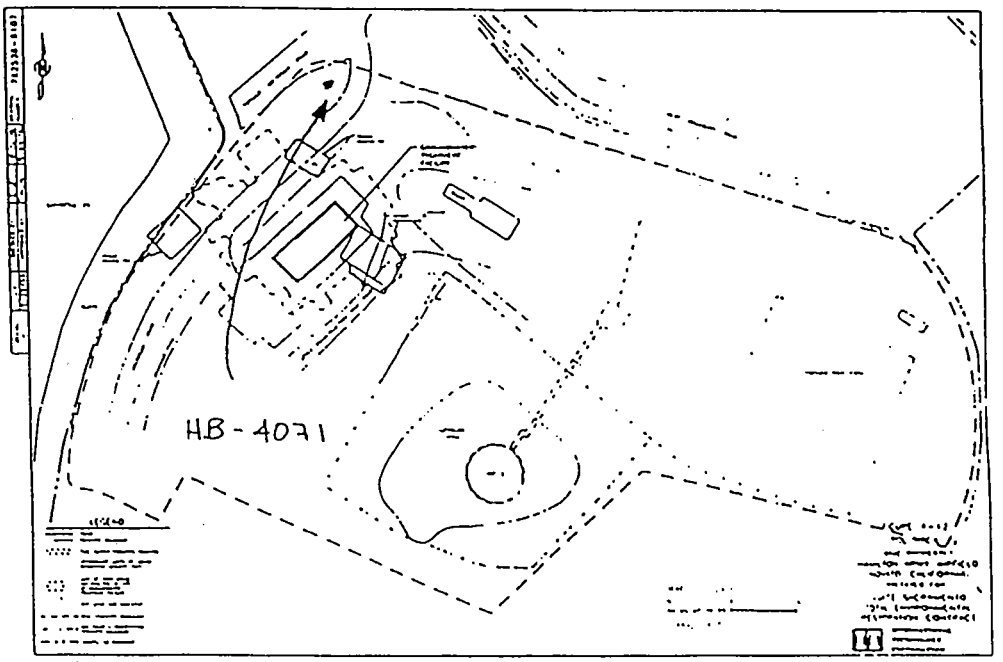
DATE	1 0 2 8 9 6
TIME	1 5 3 0
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4071
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-101
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 1'-2'
WEATHER: Overcast, Cool & Windy
PREPARED BY: James W. Carlson

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
1010	
s 6020 ICP-MS/7471	
C 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: FILL
PID: WINDY
Comments: QA TAKEN AT THIS LOCATION # HB-4072

RIFS-SCL XLS

INTERNATIONAL TECHNOLOGY CORPORATION

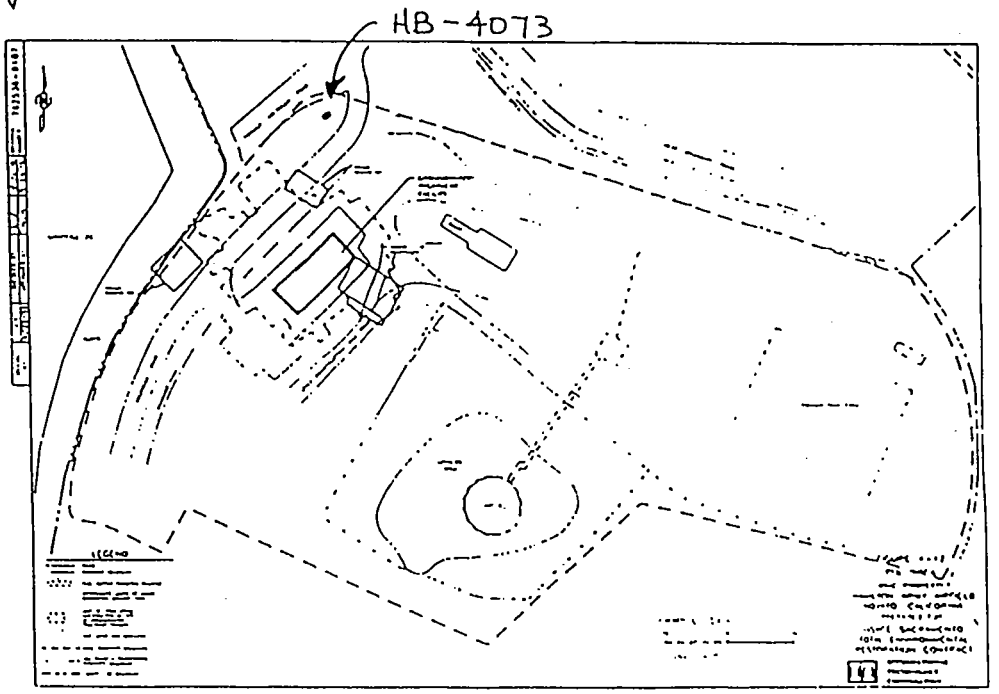
DATE	1 0 2 8 9 6
TIME	1 6 0 0
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB- 4073
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-101
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 5.5'-6.5'
WEATHER: Overcast, Cool & Very Windy
PREPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
8010	
s 6020 ICP-MS/7471	
OC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: BEDROCK · WEATHERED BEDROCK
PID: TOO WINDY
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

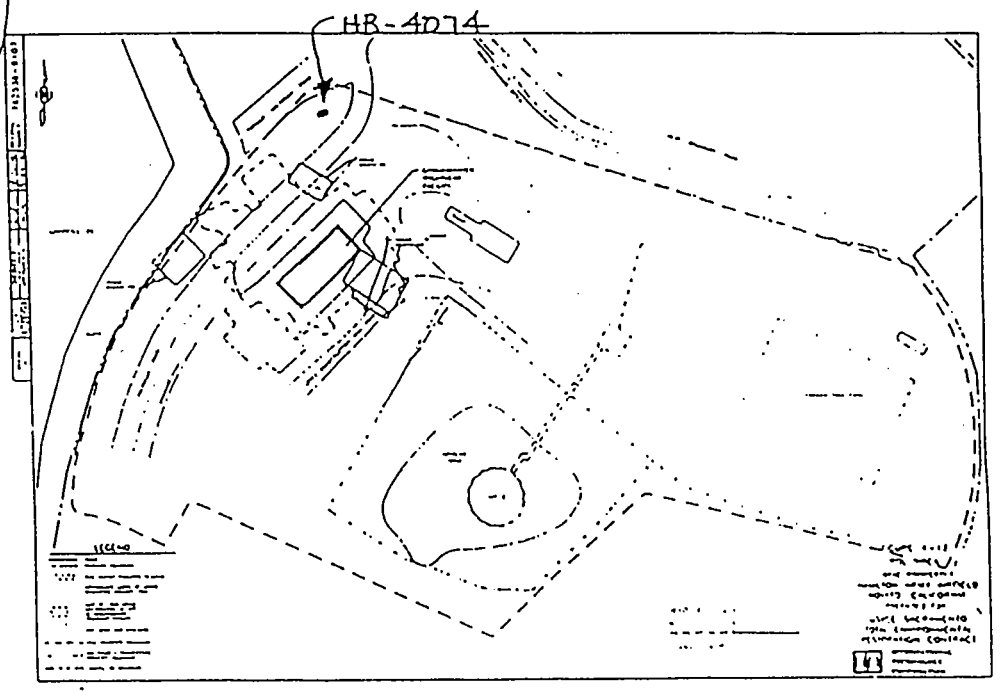
DATE	1 0 2 8 9 6
TIME	1 6 1 5
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4074
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-101
SAMPLE MATRIX : (soil) water product
COMPOSITE: YES (NO)
SAMPLING METHOD: (drive) bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 7-7.5'
WEATHER: Overcast Cool & Windy
PREPARED BY: James W. Lukson

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	1-2"x6"

Analyses: Requested:	
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
1010	
s 6020 ICP-MS/7471	
OC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: Bedrock & Weathered Bedrock
PID: Too Windy
Comments:

INTERNATIONAL TECHNOLOGY CORPORATION

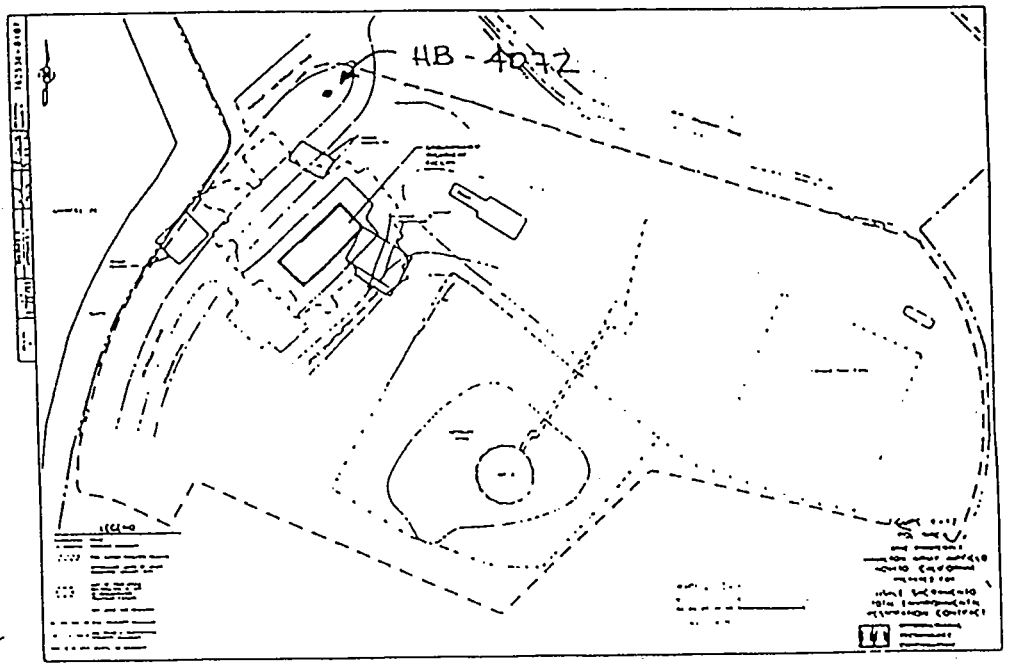
TIME	1540
PAGE	1 OF 1
PROJECT NO : 762538	

SAMPLE COLLECTION LOG

PROJECT NAME: HAMILTON AAF
SAMPLE NUMBER: HB-4072 QA
SAMPLE LOCATION: BRAC RI/FS
BORING NUMBER: SB-POLA-101
SAMPLE MATRIX : soil water product
COMPOSITE: YES NO
SAMPLING METHOD: drive bucket direct
DRILLING METHOD: Hollow Stem Auger
DEPTH of SAMPLE: 2'-3.5'
WEATHER: Overcast, Cool & Very Windy
PREPARED BY: James W. Cudm

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	3-2"x6"

Analyses:	Requested:
TPH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
TPH (prg) 8015 as gas	✓
PNAs 8270	✓
8010	
6020 ICP-MS/7471	
DC 9060	
Lead 7421	✓
BTEX 8020	✓
PCBs 8080	
Lab:	
Quanterra West	
Sacramento	
APPL	✓



Soil type: FILL
PID: Too Windy
Comments: QA SAMPLE OF HB-4071

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

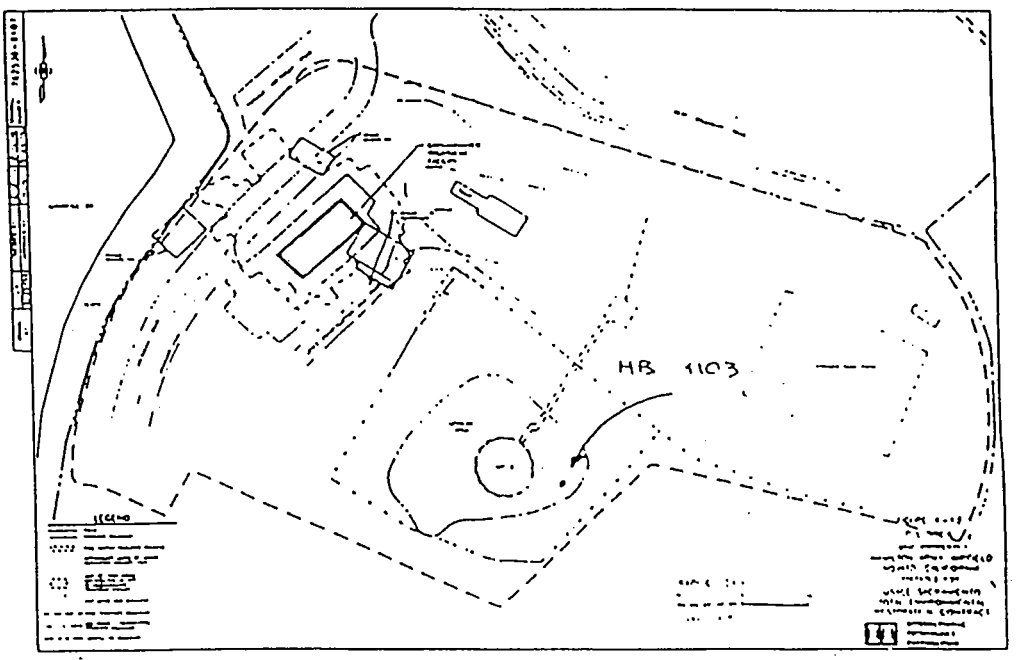
DATE	1	1	0	6	9	6
TIME	[redacted]		1	3	3	0
PAGE	1 OF 1					
PROJECT NO : 762538						

SAMPLE COLLECTION LOG

ROJECT NAME: HAMILTON AAF
AMPLE NUMBER: HB- 4103
AMPLE LOCATION: BRAC RI/FS
ORING NUMBER: N/A
AMPLE MATRIX : soil water product (ROCK)
OMPOSITE: YES (NO)
AMPLING METHOD: drive bucket (direct)
RILLING METHOD: N/A
EPTH of SAMPLE: SURFACE
/EATHER: CLEAR & WARM
REPARED BY: [signature]

CONTAINERS USED	AMOUNT COLLECTED
ss sleeve	2 x 8oz Jars

Analyses:	Requested:
PH (ext) 8015M as:	✓
Diesel	✓
JP-4	✓
PH (prg) 8015 as gas	
NA 8270	✓
.0	
ls 6020 ICP-MS/7471	
OC 9060	
Lead 7421	
BTEX 8020	
PCBs 8080	✓
Lab:	
Quanterra West	✓
Sacramento	
APPL	



Soil type: ROCK
PID: N A
Comments:

RIFS-SCL.XLS

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD *

Project Name/No. [1] Hamilton AAF/162538
Sample Team Members [2] ITSI/DH, JA & RE
Profit Center No. [3]
Project Manager [4] Casey Kenney
Purchase Order No. [6]
Required Report Date [11] 14 day

Samples Shipment Date [7] / /96
Lab Destination [8] Quanterra West Sacramento
Lab Contact [9] Calvin Tanaka
Project Contact/Phone [12] Todd McIntyre (415) 883-6386
Carrier/Waybill No. [13] White Cotton

Bill to: [5] IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: [10] Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Pre-servative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
HB-4060	WATER - TRIP BLANK	28 OCT 1996 / N/A	VOA	6x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4061	SOIL - BEAC - RI/FS SB-POLA-104 1'-1.5' deep	0855	STAINLESS STEEL SLEEVE	1-2"x6"	4°C	TPH(prg) 8015 GAS, BTEX 8020, TPH(ext) 8015M Diesel / JP-4, PNA's 8270, LEAD 7421		
HB-4062	SB-POLA-104 5'-6' deep	0915		2-2"x6"				
HB-4063	SB-POLA-104 7.5'-8.5'	0935						
HB-4064	SB-POLA-104 9.5'-10.5'	0950						
HB-4065	SB-POLA-102 1'-2'	1110						
HB-4066	WATER - EQUIPMENT RINSATE	1315	VOA	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4066		1315	AMBER GLASS LITER	6x1 l	4°C	TPH(ext) 8015M for Diesel/JP-4, PNA's 8270		

Special Instructions: [23]

Sample Disposal: [25] Return to Client ☐ Disposal by Lab ☒ Archive ____ (mos

Possible Hazard Identification: [24] Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

QC Level: [27] I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

Turnaround Time Required: [26] Normal ☐ Rush ☐ 14 day

1. Relinquished by [28] (Signature/Affiliation) Date: ____ Time: ____
2. Relinquished by (Signature/Affiliation) Date: ____ Time: ____
3. Relinquished by (Signature/Affiliation) Date: ____ Time: ____

1. Received by [28] (Signature/Affiliation) Date: ____ Time: ____
2. Received by (Signature/Affiliation) Date: ____ Time: ____
3. Received by (Signature/Affiliation) Date: ____ Time: ____

Comments: [29]

MCA 3

ERNATIONAL
CHNOLOGY
CORPORATION

ANALYSIS R JEST AND CHAIN OF CUSTOD. RECORD (cont.)*

Reference Document 52441
Page 2 of ___

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB-4066	WATER- EQUIPMENT RINSATE	28 OCT 96 / 1315	LITER POLY	1 x 1 l	HNO_3 4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4067	SOIL - BRAC RI/FS SB-POLA-103 1'-1.5'-2.5' DEEP	1330	STAINLESS STEEL SLEEVE	2-2"x6"	4°C	TPH(MO) 8015 GM, BTEX 8020 TPH(DRO) 8015 M Diesel, JP4, PNAs 8270, LEAD 7421		
HB-4068	SB-POLA-103 2.5'-4' DEEP	1345		3-2"x6"				
HB-4069	SB-POLA-103 5.5'-6.5' DEEP	1355		2-2"x6"			FOR LAB USE ONLY	
HB-4071	SB-POLA-101 1'-2' DEEP	1530		2-2"x6"				
HB-4073	SB-POLA-101 5.5'-6.5' DEEP	1600		2-2"x6"			FOR LAB USE ONLY	
HB-4074	SB-POLA-101 7'-7.5' DEEP	1615		1-2"x6"				
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	

MCA 3/1

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Project Name/No. 1 Hamilton AAF/762538

Sample Team Members 2 ITSI/JA,DH ;RE

Profit Center No. 3

Project Manager 4 Casey Kenney

Purchase Order No. 6

Required Report Date 11 2 Weeks

Samples Shipment Date 7 / /96

Lab Destination 8 APPL Inc.

Lab Contact 9 Glen Brown

Project Contact/Phone 12 Todd McIntyre (415) 883-6386

Carrier/Waybill No. 13 Federal Express

Bill to: 5 USACE SPD Laboratory
25 Liberty Ship Way
Sausalito, CA 94965

Report to: 10 USACE SPD Laboratory
~~25 Liberty Ship Way~~
~~Sausalito, CA 94965~~

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4070	WATER-TRIP BLANK	28 Oct 1996 / N/A	VOA	6x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4072	SOIL-BRAC RI/FS SB-POLA-101 2-3.5' DEEP	↓ / 1540	STAINLESS STEEL SLEEVE	3-2"x6"	4°C	TPH(prg) 8015 GAS, BTEX 8020, TPH(ext) 8015M FOR DIESEL & JP-4, PNAs 8270, LEAD 7421		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 2 Weeks Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

MCA 3

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

White: To accompany samples

Project Name/No. [1] Hamilton AAF/762538

Sample Team Members [2] ITSI/JA, DH, RE

Profit Center No. [3]

Project Manager [4] Casey Kenney

Purchase Order No. [6]

Required Report Date [11] 14 day

Samples Shipment Date [7] 11/6/96

Lab Destination [8] Quanterra West Sacramento

Lab Contact [9] Calvin Tanaka

Project Contact/Phone [12] Todd McIntyre (415) 883-6386

Carrier/Waybill No. [13] White Cotton

Bill to: [5] IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949

Report to: [10] Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]		Container Type [17]	Sample Volume [18]	Preservative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
HB-4103	ROCK - BEAC RI/FS PCL HILL	06 NOV. 1996	1330	8oz. Glass JAR	2 x 8oz.	4°C	TPH(ext) ECD/FID, Diesel, TP-4, PCB's ECD, PNA's 8270	FOR LAB USE ONLY	
		NOT USED							
								FOR LAB USE ONLY	

COPY

Special Instructions: [23]

Possible Hazard Identification: [24] Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: [25] Return to Client ☐ Disposal by Lab ☐ Archive ____ (mos.)

Turnaround Time Required: [26] Normal ☐ Rush ☐ 14 day

QC Level: [27] I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by [28] (Signature/Affiliation)	Date: 11-6-96 Time:	1. Received by [28] (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: [29]

MCA 3/15/9

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HALMILTON AAF/ BRAC POL HILL
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: ~~524462~~ 524448
Sample No.: HB-4293

Sample Location or: [illegible]
Well ID (attach map if necessary):
Date and Time Collected: 26FEB1997/0825
Sample Collected by: MB/VE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: PVC BAILER 3.5
Sampling Equipment/ID No.: VOLATILE BAILER

26FEB1997 ~~STATIC~~ W.L. AT SAMPLE 10.86'
WELL RECOVERED 76%

6" Diameter = 1.5 gal/ft
4" Diameter = 0.67 gal/ft
2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4'
Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 22.5' ( )
Depth to Water (d) 7.24' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 22.5 - 7.24 = 15.26 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 15.26 = 10.22 GAL ( )
Casing Volumes = 3 × (f) = 30.7 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time MILL.	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.6	~~7.81~~ MS 721	1510	24 TURBIDITY	7.56
5	58.7	745	1515	141	7.54
10	57.6	750	1525	107	7.73
15	5[illegible].8	751	1530	240	7.61
20	57.3	[illegible]	[illegible]	[illegible]	[illegible]
23	56.0	734	1545	419	7.68
AT SAMPLE	55.6	731	0825	17.8 NTU	7.30

Total Volume Purged: 23 GAL Time: 1545 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
8 VOA's	N	HCL/4°C	TPH(ppm) 8015 GAS, BTEX 8020
6 LITER GLASS AMBER	N	NONE/4°C	TPH(ext) 8015M JP-4's DIESEL, PNA's 8270
1 LITER POLY	N	HNO_3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON AAF / BRAC POL HILL
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524462 26 FEB 1997 ~~524448~~ 524448
Sample No.: HB-4294 & HB-4295 (FIELD DUPLICATE TIME LABELED 0845)

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-106
Date and Time Collected: 26 FEB 1997 @ 0915
Sample Collected by: ZW & DE + MB & JA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.: ~~Hydrine~~ 25 FEB 97 DISPOSABLE BAILER

[W.L. @ SAMPLE 4.98'
WELL RECOVERED 94%]

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/ft ( )
Depth to Well Bottom (c) 20.36' ( ) Depth to Water (d) 4.00' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 20.36' - 4.00' = 16.36' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 16.36 FT = 10.96 GAL ( )
Casing Volumes = 3 × (f) = 32.9 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (umhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.7	1442	1500	~CLEAR (2.4 NTU)	7.40
5	58.2	1461	1515	SL TURBID (59 NTU)	7.31
10	58.6	1468	1522	(140 NTU)	7.47
15	56.6	1456	1530	(140 NTU)	7.40
20	56.6	1498	1537	TURBID (~1000 NTU)	7.47
AT SAMPLE	58.1	1472	0915	~CLEAR (~9 NTU)	7.31

Total Volume Purged: 20+ GALLONS Time: 1540 Purged Dry (Y/N): YES 25 FEB 1997

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 8 x 40 ml	N	HCl / 4°C	TPH (prg) 8015 GAS & BTEX 8020
LITER GLASS AMBER 6 x 1 l	N	4°C	TPH (ext) 8015M JP-4 & DIESEL & PNA's 8270
LITER POLY 1 x 1 l	N	HNO_3 / 4°C	LEAD 7421

HB-4294 HB-4295

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON AAF/BRAC PGL HILL
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524448
Sample No.: HB-4296

Sample Location or:
Well ID (attach map if necessary): PL-MW-108
Date and Time Collected: 26 FEB 1997 / 1030
Sample Collected by: MB / DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LUCITE BAILER

WL. AT SAMPLE 4.06'
WELL RECOVERED ~100%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 19.74' ( ) Depth to Water (d) 4.04' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.74' - 4.04 = 15.7' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 15.7' = 10.52 GAL ( )
Casing Volumes = 3 × (f) = 31.6 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time MIN.	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	54.4	687	1605	7.40 TURBIDITY	7.80
5	54.0	710	1610	767	7.7
10	54.4	756	1615	760	8.0
15	55.8	700	1620	364	7.92
20	56.0	708	1625	291	7.58
23.5	55.4	720	1630	1154	7.77
AT SAMPLE	56.3	758	1030	~12 NTU	8.00

Total Volume Purged: 23.5 GAL Time: 1630 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
8 VOA	N	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1L	N	4°C	TPH(ext) 8015M for JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1L	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON AAF/BRAC POL HILL
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524448
Sample No.: HB-4297

Sample Location or:
Well ID (attach map if necessary): PL-MW-111A
Date and Time Collected: 26 FEB 1997 / 1110
Sample Collected by: MB/OE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LUCITE BAILER

W.L. AT SAMPLE 4.74'
WELL RECOVERED >100%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4' Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 19.7' ( ) Depth to Water (d) 4.80' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.7 - 4.80 = 14.9' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.9' = 9.98 GAL ( )
Casing Volumes = 3 × (f) = ~~29.9 GAL~~ 30 GAL ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time MIN	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	55.4	2860	1650	53.0	7.12
5	55.7	3030	1655	1100	7.12
10		N/A			
15	55.6	2980	1700	1030	7.2
AT SAMPLE	59.7	2830	1110	11 NTU	6.73

Total Volume Purged: 15.5 Time: 1700 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 8x40ml	N	HCl/4°C	TPH(prg)8015 GAS & BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext)8015M for JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1l	N	HNO_3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIR FIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 52494
Sample No.: HB-4298

Sample Location or: BLAC - POL HILL
Well ID (attach map if necessary): PL-MW-111B
Date and Time Collected: 2/26/97 1300
Sample Collected by: MB/EE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LUCITE BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 32.30' ( ) Depth to Water (d) 5.02' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 32.30' - 5.02' = 27.28' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 27.28' = 18.28 GAL ( )
Casing Volumes = 3 × (f) = 54. GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	68	2600	1125	18.5	6.87
5	67	2540	1128	98.8	7.19
15	67	2550	1135	65.6	7.27
20	67	2510	1140	107.7	7.36
25	67	2530	1144	94.5	7.23
30	67	2540	1150	240 ϕ	7.24
35	67	2490	1155	295 ϕ	7.20
40	68	2630	1200	207.0	7.17
45	66	2580	1250	191.3	7.32
50	66	2600	1255	MB ~~40.5~~ 120.7	7.24
55	65	2780	1300	252 ϕ	7.09

Total Volume Purged: ____ Time: ____ Purged Dry (Y/N): ____

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40mL	N	HCL 4°C	TPH (EPA) 8015 GAS, BTEX 8020
1 LITER GLASS AMBER 6x1L	N	4°C	TPH (EXT) 8015 JP-4 & DIESEL, PNA's 8270
1 LITER POLY	N	HNO3 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON AAF / BRAC POL HILL
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524448
Sample No.: HB-4299

Sample Location or:
Well ID (attach map if necessary): PL-MW-107
Date and Time Collected: 2/26/97 1300
Sample Collected by: MB/EE, ZW/JA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.:

W.L. AT SAMPLE 11.81
53% RECOVERY

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/ft ( )
Depth to Well Bottom (c) 19.94' ( ) Depth to Water (d) 4.56' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.94 - 4.56 = 15.38 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/ft × 15.38 ft = 10.3 GAL ( )
Casing Volumes = 3 × (f) = 30.9 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	54.6	2190	1605	~ CLEAR 6.8 NTU	8.46
5	55.6	2090	1615	50 NTU	8.35
10	55.4	2150	1620	SL TURBID 170 NTU	8.21
15	56.2	2200	1625	240 NTU	8.27
20	57.0	2090	1628	86 NTU	8.34
AT SAMPLE	65	1880	1330	8310 TURBID	8.22

Total Volume Purged: 21 GALLONS Time: 1630 Purged Dry (Y/N): YES 25 FEB 1997

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8 X 40 ML	N	HCL 4°C	TPH (PPC) 8015 GAS BTEX 8020
LTER GLASS AMBER 1 X 1 L	N	4°C	TPH (EXT) 8015 JP-4 & DIESEL, PNAs 8270
LTER POLY	N	HNO3 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524448
Sample No.: HB-4300

Sample Location or: BRAC PCL HILL
Well ID (attach map if necessary): PL-MW-112B
Date and Time Collected: 26FEB1997 / 1450
Sample Collected by: J.A. & Z.W.
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 32.6' ( ) Depth to Water (d) 1.88' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 32.6 - 1.88' = 30.72 ( )
Casing Water Volume (f) = (b) × (e) = 30.72' × 0.67 = 20.6 ( )
Casing Volumes = 3 × (f) = 61.7 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.3	1550	1345	~3NTU	8.04
10	57.2	1520	1352	~8NTU	7.86
20	57.8	1520	1402	~10NTU	7.62
30	58.2	1500	1413	~31NTU	7.37
40	58.4	1510	1420	~100NTU	7.46
50	58.8	1530	1428	~190NTU	7.54
60	59.0	1480	1440	~650NTU	7.47
62+	59.2	1490	1445	~220NTU	7.48

Total Volume Purged: 63+ GAL. Time: 1445 Purged Dry (Y/N): NO

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 8x40ml	N	HCl / 4°C	TPH(PRG) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1l	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON AIR FIELD
Project No.: 762532
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB-4302

Sample Location or: FUAC FOL HILL
Well ID (attach map if necessary): AL-MW-113C
Date and Time Collected: 27 FEB 1997 / 0925
Sample Collected by: ~~[illegible]~~ JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LUCITE BAILER

AT SAMPLE, WATER LEVEL 4.14' RECOVERED 100%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT.
Depth to Well Bottom (c) 32.41' Depth to Water (d) 4.14'
Length of Static Water Column in Casing (e) = (c) - (d) = 32.41' - 4.14' = 28.27'
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 28.27 = 18.94
Casing Volumes = 3 × (f) = ~~56~~ MB 57 GALLONS

Volume Purged (GAL)	Temp. (°C)	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	64.9	1690	1455	17.3 TURBID	7.65
5	62.7	1640	1459	80.4	7.84
10	63.0	1660	1500	60.2	7.85
15	63.9	1680	1503	90.23	7.87
20	64.0	1690	1510	90.67	7.93
25	64.1	1690	1512	90.8	7.81
30	64.2	1720	1515	1130	7.74
34	64.5	1730	1525	519	7.71
AT SAMPLE	53.5	2160	0925	23 NTU	7.19

Total Volume Purged: 34 Time: 1525 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8 x 40mL	N	HCl / 4°C	TPH(gas) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6 x 1L	N	4°C	TPH(ext) 8015M JP 4 & Diesel, PNAS 8270
LITER POLY 1 x 1L	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB 4303

Sample Location or: BROW POL HILL
Well ID (attach map if necessary): MW-POLA 119
Date and Time Collected: 2/27/97 / 1000
Sample Collected by: ~~MB/DE~~ MB/DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 17.8' ( ) Depth to Water (d) 8.78' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 17.8' - 8.78' = 9.02' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 9.02' = 6.04 ( )
Casing Volumes = 3 × (f) = 18 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	61.3	1150	0915	50.4 CLEAR	7.09
5	59.3	1150	0925	443 TURBID	7.37
10	60.1	1160	0928	555	7.33
15	59.7	1160	0930	269	7.25
18	59.3	1140	0935	734	7.28

Total Volume Purged: _____ Time: _____ Purged Dry (Y/N): _____

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB 4304

Sample Location or: BRAC FOL HILL
Well ID (attach map if necessary): ~~FL MW~~ MW-RCLA 117B
Date and Time Collected: 27 FEB 1997 | 1035
Sample Collected by: ~~MTG/FE~~ JA/ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LUCITE BAILER

AT SAMPLE
WATER LEVEL 5.06'
RECOVERED 99.8%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 30.92' ( ) Depth to Water (d) 5.00' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.92' - 5.00' = 25.92' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 25.92' = 17.37 ( )
Casing Volumes = 0.67 GAL/FT. × (f) = 52 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.0	8021	1635	2.06 CLEAR	7.81
5	60.3	8023	1638	2.96	7.85
10	61.0	8035	1640	3.10 TURBID	7.84
15	61.6	8054	1643	OFF SCALE	7.87
20	62.2	8058	1645	NTU	7.92
25	62.5	8055	1650		7.87
30	62.9	8077	1655		7.90
31	62.6	8078	1657		7.94
AT SAMPLE	55.9	1070	1035	~25 NTU	6.99

Total Volume Purged: 31 Time: 1657 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 6x40mL	N	HCl/4°C	TPH(AQ) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1L	N	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNAs 8270
LITER POLY 1x1L	N	HNO_3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB-4305

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-116
Date and Time Collected: 27 FEB 1997 / 1125
Sample Collected by: ZW, JA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: ~~4"~~ 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE BAILER

W.L. AT SAMPLE - 13.28'
RECOVERY ~100%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/ft ( )
Depth to Well Bottom (c) 24.5' ( ) Depth to Water (d) 13.26' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 24.5 - 13.26 = 11.24 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/ft × 11.24 = 7.5 GALLONS ( )
Casing Volumes = 3 × (f) = 22.5 ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	57.5	538	1650	~14NTU	7.28
4.0	57.5	515	1654	~80NTU	7.15
8.0	56.5	501	1658	~130NTU	7.15
12.0	57.0	508	1703	184NTU	6.98
16.0	56.6	512	1706	540NTU	7.13
~~20.0~~					
~~22.5+~~					
AT SAMPLE	57.2	538	1125	~23NTU	7.10

Total Volume Purged: 16 GALLONS Time: 1706 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40mL	N	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1 L	N	4°C	TPH(ext) 8015M for JP-4 & DIESEL, PNAs 8270
LITER POLY 1x1 L	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB - 4306

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MW-POLA-120
Date and Time Collected: 2/27/97 1135
Sample Collected by: ~~HB/DE~~ MB MB/DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 34.7 ( ) Depth to Water (d) 12.50' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 34.7' - 12.50' = 22.2' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 22.2' = 14.87' ( )
Casing Volumes = 3 × (f) = 45 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (MICROS)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.4	965	1050	57C CLEAR	7.19
15	60.6	970	1058	619 TURBID	7.43
30	61.4	980	1110	735	7.44
45	60.8	960	1120	310	7.74

Total Volume Purged: _____ Time: _____ Purged Dry (Y/N): _____

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB-4307

Sample Location or: BEAL POL HILL
Well ID (attach map if necessary): PL-MW-112A
Date and Time Collected: 27 FEB 1997 / 1310
Sample Collected by: MB / RE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: ~~DISPOSABLE BAILER~~ BAILER 27 FEB 1997 JWC

AT SAMPLE
WATER LEVEL 6.36'
RECOVERY 84%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 19.8' ( ) Depth to Water (d) 3.75' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.8' - 3.75' = 16.05' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 16.05' = 10.75' ( )
Casing Volumes = 3 × (f) = 32.26 GALLONS ( )

Volume Purged (GAL)	Temp. (°C)	Conductance (umhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	64.2	1980	1415	38.1 TURBID	7.73
5	61.7	1930	1420	500	7.71
10	61.3	1940	1422	172	7.57
15	61.9	1950	1425	182	7.69
20	62.4	1930	1430	133	7.58
AT SAMPLE	56.7	1914	1310	~13 NTU	7.17

Total Volume Purged: 20.5 Time: 1430 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	N	HCl / 4°C	TPH(prg) EC15 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext) EC15M FOR JP-4 & DIESEL, PNAS 8270
LITER POLY 1x1l	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB- 4308

Sample Location or: BPAC POL HILL
Well ID (attach map if necessary): PL - MW - 103
Date and Time Collected: 2/27/97 1345
Sample Collected by: MB/DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE 1 LITER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 30.2' ( ) Depth to Water (d) 6.08' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.2' - 6.08' = 24.12 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 24.12 = 16.16' ( )
Casing Volumes = 3 × (f) = 48 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	65.0	620	1300	1310 CLEAR	7.37
8	62.3	550	1307	1860	7.18
16	63.2	550	1314	2240 TURBID	7.26
* 24	61.9	510	1317	5180	7.25
32	63.6	560	1320	3620	7.13
40	63.7	590	1325	1910	7.06
48	63.4	580	1330	1210 NTU	7.09

Total Volume Purged: Time: Purged Dry (Y/N):

SAMPLE PACKAGING

* NOTE: WATER IS DARK GREY WITH ODOR OF DIESEL OR PETROLEUM.

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.: 524447
Chain-of-Custody Control No.: HB-4309
Sample No.:

Sample Location or: BIAC FOL HILL
Well ID (attach map if necessary): PL-MW-113A
Date and Time Collected: 27 FEB 1997 / 1400
Sample Collected by: ~~MBTE~~ JA/ZW 27 FEB 1997
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: ~~DISPOSABLE ELECTRIC~~ BAILER 27 FEB 1997

AT SAMPLE
WATER LEVEL - 6.92'
RECOVERY 81%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 19.45' ( ) Depth to Water (d) 3.93' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.45' - 3.93' = 15.52' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 15.52' = 10.40' ( )
Casing Volumes = 3 × (f) = 31 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	62.7	1374	1539	2560	7.09
5	61.8	1349	1540	4370	7.10
10	61.5	1352	1545	6270	7.04
15	61.8	1365	1547	6490	7.02
20	63.2	1379	1550	1980	7.00
AT SAMPLE	58.2	1622	1400	CLEAR	6.95

Total Volume Purged: 20 Time: 1550 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 6x40mL	N	HCl / 4°C	TPH(PVS) EC15 GAS, BTEX EC20
LITER GLASS AMBER 6x1L	N	4°C	
LITER POLY 1x1L	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB-4310

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-109
Date and Time Collected: 27 FEB 1997 / 1500
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE BAILER

[W.L. AT SAMPLE 5.54' RECOVERY 98%]

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/ft ( )
Depth to Well Bottom (c) 20.7' ( ) Depth to Water (d) 5.16' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 20.7' - 5.16' = 15.54' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/ft × 15.54' = 10.4118 GAL ( )
Casing Volumes = 3 × (f) = 31.2 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	26 FEB 97 56.0	1240	1555	~12NTU	7.16
5	56.0	1260	26 FEB 97 1600	~50NTU	7.19
10	56.3	1290	1605	~55NTU	7.20
15	56.2	1320	1607	~200NTU	7.07
20	56.6	1270	1611	~400NTU	7.11
~~25~~ 23	56.6	1250	1613	~1200NTU OFF SCALE	7.10
30					
AT SAMPLE	56.6	1920	1500	~5NTU	6.98

Total Volume Purged: 23+ Time: 1613 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	N	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext) 8015M (FOR JP-4 & DIESEL) & PNA's 8270
LITER POLY 1x1l	N	HNO3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524447
Sample No.: HB-4311

Sample Location or: BEAC FOL HILL
Well ID (attach map if necessary): 27 FEB 1997 SWMW-POLA ~~FL-MW~~ 117A
Date and Time Collected: 27 FEB 1997 ~~MB/DS~~ ~~MB~~ 27 FEB 1997 1545
Sample Collected by: ~~MB/FE~~ JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: LAGTIC BAILER

W.L. AT SAMPLE 12.02'
RECOVERY 48%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 18.85' ( ) Depth to Water (d) 4.56' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 18.85' - 4.56' = 14.29' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.29' = 9.57' ( )
Casing Volumes = 3 × (f) = MB ~~28~~ 29 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	61.3	1260	1618	1.730 CLEAR	7.80
5	60.4	1070	1620	1.745 "	7.85
10	60.7	MB ~~8650~~ 1050	1625	3.260 TURBID	7.80
15	60.5	1050	1631	9.090 "	7.79
20	60.8	1030	1635	3.430 "	7.75
AT SAMPLE	56.4	1250	1545	2/10 NTU	7.47

Total Volume Purged: 20.5 Time: 1635 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40mL	N	HCl/4°C	TPH(gas) 8015 GRO, BTEX 8020
LITER GLASS AMBER 6x1L	N	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL & PNAs 8270
LITER POLY 1x1L	N	HNO_3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: #524467/#524462
Sample No.: HB-43144 & QA-HB-4315

Sample Location or: BRAC FOL HILL
Well ID (attach map if necessary): FL-MW-104
Date and Time Collected: 28 FEB 1997 / 0920
Sample Collected by: JA, ZIA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE 1 LITER

W.L. AT SAMPLE 20.02'
RECOVERY 97%

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 45.35' ( ) Depth to Water (d) 19.20' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 45.35' - 19.20' = 26.15' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 26.15' = 17.52' ( )
Casing Volumes = 3 × (f) = 53 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	66.4°	920	1430	28.3 CLEAR	6.96
8.5	65.0	920	1434	55.4 S	7.01
17	62.8	880	1440	66.5 S	6.97
25.5	62.8	890	1445	22.90 TURBID	6.96
32	63.3	870	1450	72.30 S	7.05
AT SAMPLE	54.8	HOZ 1178	0920	.49 NTU	6.59

Total Volume Purged: 32 GALLONS Time: 1450 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	N	HCl / 4°C	TPH(prg) EC15 GAS, BTEX EC20
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext) EC15M FOR JP-4 & DIESEL, PNA: EC20
LITER POLY 1x1l	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524467
Sample No.: HB-4316 AND HB-4317

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MW-POLA 118
Date and Time Collected: 2/28/97 0920 / 0940
Sample Collected by: ~~LB/DE~~ MB/DG
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

2/28/97 WL 6.69'

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 18.90' ( ) Depth to Water (d) 5.30' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 18.90' - 5.30' = 13.6' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 13.6' = 9.11' ( )
Casing Volumes = 3 × (f) = 27 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (MICROS)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	61.4°	1230	0830	2.03 CLEAR	6.38
5	60.3	1170	0837	8.80 TURBID	6.82
10	60.2	1170	0845	8.44	6.98
15	61.0	1240	0850	575	7.23
20	61.6	1240	0853	983	7.31
				~~2.65 NTUMB~~	
@ SAMPLE	58.2	1250	0925	~2.65 NTU	6.69

Total Volume Purged: 20 GALLONS Time: 0853 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 5x40ml	No	HCl / 4°C	TPH (PURGE) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	No	4°C	TPH (EXT) 8015 M JP4 & DIESEL, PNA 8270
LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: ~~156~~ MB 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524467
Sample No.: HB-4318

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-115
Date and Time Collected: 2/28/97 1035
Sample Collected by: ~~MB/RE~~ MB/RE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE 1 LITER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

2/28/97 WL = 6.25'

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 30.5 ( ) Depth to Water (d) 6.28' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.5' - 6.28' = 24.22 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 24.22' = 16.23' ( )
Casing Volumes = ~~MB~~ 3 × (f) = 49 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.3	800	1540	12.30 CLEAR	7.41
8	62.6	830	1545	13.90 TURBID	7.41
16	63.3	840	1550	OFF SCALE INTO	7.42
22	63.6	820	1555	OFF SCALE INTO	7.34
@ SAMPLE	64.4	890	1030	~2.41 NTU	6.92

Total Volume Purged: 22 GALLONS Time: 1555 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8X 40mL	N	HCl/4°C	TPH (PURG.) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6X1L	N	4°C	TPH (EXT.) 8015 M JP4 & DIESEL, PNA 8270
LITER POLY 1X1L	N	1 HNO3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524467
Sample No.: HB-4319

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): FL-MW-114
Date and Time Collected: 26FEB1997 / 1050
Sample Collected by: ~~MB/DE~~ MWS JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE 1 LITER

[W.L. AT SAMPLE - 4.72'
RECOVERY 100%]

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 30.0' ( ) Depth to Water (d) 4.67' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.0' - 4.67' = 25.33' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 25.33' = 16.97' ( )
Casing Volumes = 3 × (f) = 51 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (MICROMHOS)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	59.8	290	1510	WB ~~840~~ 10.51 CLEAR	7.51
8.5	61.2	290	1515	784C TURBID	7.71
17	61.6	280	1520	98C	7.60
23	61.7	290	1525	OFF SCALE NTU	7.83
AT SAMPLE	55.3	437	1050	130NTU	7.11

Total Volume Purged: 23 GALLONS Time: 1525 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40mL	N	HCl / 4°C	TPH(prg) EC15 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1l	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524467
Sample No.: HB - 4320

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MW-POLA-121
Date and Time Collected: 2/28/98 1125
Sample Collected by: ~~MB/DE~~ HB MB/DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: BAILER PVC 3.5"
Sampling Equipment/ID No.: BAILER DISPOSABLE 1 LITER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

2/28/97 29.74 = W.L.

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 36.4 ( ) Depth to Water (d) 13.96 ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 36.4' - 13.96' = 22.44' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 22.44' = 15.03' ( )
Casing Volumes = 3 × (f) = 45 GALLONS ( )

Volume Purged (GAL)	Temp. (F°)	Conductance (INCHES)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	58.8	350	1607	36.5 CLEAR	6.61
* 7	60.1	480	1609	OFF-SCALE > NTU	7.39
14	61.3	750	1615	OFF-SCALE > NTU	6.99
21	61.2	780	1625	~~34.3 TURBID~~ HB	7.08
25	59.8	830	1630	OFF SCALE >NTU	7.22
@ SAMPLE	61.9	860	1120	~14.6 NTU	7.04

Total Volume Purged: 25 GALLONS Time: 1630 Purged Dry (Y/N): YES

* NOTE. SAMPLE HAS ODOR.

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8X 40mL	N	HCl/4°C	TPH (PURG.) 8015 GAS BTEX 8020
LITER GLASS AMBER 6X1L	N	4°C	TPH (EXT.) 8015 M JP4 & DIESEL PAH 8270
LITER POLY 1X1L	N	HNO_3/4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524467
Sample No.: HB-4321

Sample Location or: BRAC PCL HILL
Well ID (attach map if necessary): PL-MW-101
Date and Time Collected: 28FEB1997 / 1150
Sample Collected by: JA, ZW, DE
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE BAILER

[W.L. AT SAMPLE 43.43'
RECOVERY 32%]

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 52.5 ( ) Depth to Water (d) 24.09' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 52.5 - 24.09 = 28.41 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 × 28.41 = 19.0 ( )
Casing Volumes = 3 × (f) = 57.1 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	58.3	1477	1640	42NTU, HYDROCARBON ODOR, NO FLOATING PRODUCT	6.76
10	56.8	1467	1645	63NTU, HC ODOR, SHEEN	6.76
20	57.0	1541	1655	64NTU, H.C ODOR, SL. BLACK	6.66
30 26	57.0	1696	1659	30NTU, HC ODOR, BLACK	
~~40~~					
~~50~~					
~~57~~					
AT SAMPLE	59.0	1349	1150	25NTU	6.96

Total Volume Purged: 26 GALLONS Time: 1659 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 6x40ml	N	HCl / 4°C	TPH (prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	N	4°C	TPH (ext) 8015M FOR JP-4 & DIESEL, PNA's 8270
	N	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: HB-4325

Sample Location or: BRAC - FOL HILL
Well ID (attach map if necessary): FL-11W-105
Date and Time Collected: 25 MARCH 1997 / 0725
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 4" BAILER PVC,
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) MB ~~7.83~~ 22.5' ( ) Depth to Water (d) MB ~~22.5~~ 7.83' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 22.5' - 7.83' = 14.67 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.67 = 9.83 ( )
Casing Volumes = 3 × (f) = 29 GALLONS ( )

Volume Purged ( )	Temp. (F°)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			29 MAR 1997		
INITIAL	70.6	548	1530	* CLEAR	8.12
10	73.1	565	1535	TURBID	8.10
17	71.7	567	1539	"	7.90
			25 MAR 1997		
AT SAMPLE	60.4	630	0725	~ CLEAR	7.66

Total Volume Purged: 17 GALLONS Time: 1539 Purged Dry (Y/N): YES

SAMPLE PACKAGING

* DO NOT HAVE TURBIDITY METER

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	4°C / HCl	TPH(prg) 8015 GAS, BTEX 8020
1 LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015 FOR DIESEL & JP-4, PNAs 8270
1 LITER POLY 1x1l	No	4°C / HNO_3	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: HB-4326

Sample Location or: PRAC-POL-HILL
Well ID (attach map if necessary): PL-MW-106
Date and Time Collected: 25 MARCH 1997 / 0820
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 4" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 20.10' ( ) Depth to Water (d) 4.45' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 20.10' - 4.45' = 15.65' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 15.65 = 10.49 ( )
Casing Volumes = 3 × (f) = 31.5 ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
24 MAR 1997 INITIAL	65.1	12.82	24 MAR 1997 1600	*CLEAR	7.50
10	64.6	1227	1605	TURBID	7.60
18	63.0	1351	1610	TURBID	7.91
			25 MAR 1997 0820		25 MAR 1997 NA. ★
AT SAMPLE	62.9	1312		N CLEAR	

Total Volume Purged: 18 GALLONS Time: 1610 Purged Dry (Y/N): Y

SAMPLE PACKAGING

* NOTE: DO NOT HAVE TURBIDITY METER.
★ NOTE: METER MALFUNCTION

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 8x40ml	NO	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITRE GLASS AMBER 6x1l	NO	4°C	TPH(ext) 8015M FOR DIESEL / JP-4, PNA 8270
LITRE POLY 1x1l	NO	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: HB-4327

Sample Location or: BOAC - POL HILL
Well ID (attach map if necessary): PL-MW-108
Date and Time Collected: 25 MARCH 1997 / 0920
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 4" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 19.5' ( ) Depth to Water (d) 4.40' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.50 - 4.40' = 15.10' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 15.10' = 10.12' ( )
Casing Volumes = 3 × (f) = 30. ( )

Volume Purged (GAL.)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			24 MAR 1997		
MB ~~10~~ INITIAL	65.6	707	1630	CLEAR *	7.95
MB ~~19~~ 10	64.5	680	1635	TURBID	8.03
19	64.7	700	1643	S	8.05
			25 MAR 1997		
AT SAMPLE	64.6	646	0920	★ ~ CLEAR	* —

Total Volume Purged: 19 Time: 1643 Purged Dry (Y/N): Y

SAMPLE PACKAGING

* TURBIDITY METER IS NOT PRESENT
★ " METER MALFUNCTION

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	4°C / HCl	TPH(prg) 8015 GAS, BTEX 8020
1 LTER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR DIESEL/JP-4, PNA 8270
1 LITER POLY 1x1l	No	4°C / HNO_3	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

ect Name: HAMILTON ARMY AIRFIELD
ect No.: ~~456~~ MB 762538
uest-for-Analysis Control No.:
in-of-Custody Control No.: 524443
ple No.: HB-4328

Sample Location or: BRAC - POL HILL
Well ID (attach map if necessary): PL - MW - 109
Date and Time Collected: 25 MARCH 1997 / 1010
Sample Collected by: JA ZIL
Checked by (Office)/Date:

UIPMENT

ging Method/Equipment: 4" BAILER PVC
npling Equipment/ID No.: DISPOSABLE TEFLON BAILER

Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

RGING INFORMATION

sing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
pth to Well Bottom (c) 20.40' ( ) Depth to Water (d) 5.52' ( )
ngth of Static Water Column in Casing (e) = (c) - (d) = 20.40' - 5.52' = 14.88 ( )
sing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.88 = 9.97 ( )
sing Volumes = 3 × (f) = 29.9 GALLONS ( )

ume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			24 MAR 1997		
INITIAL	64.7	1037	1645	*CLEAR	7.81
10	64.3	1042	1650	TURBID	7.55
18	64.3	1013	1655	SS	7.53
			25 MAR 1997		
AT SAMPLE	63.7	951	1010	CLEAR	7.48

otal Volume Purged: 18 GALLONS Time: 1655 Purged Dry (Y/N): Y

AMPLE PACKAGING

* NOTE: TURBIDITY METER N/A

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	4°C/HCl	TPH(prg) 8015 GAS, BTEX 8020
ER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA 8270
ER POLY 1x1l	No	4°C/HNO3	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: HB- 4329

Sample Location or: POL HILL
Well ID (attach map if necessary): PL-MW-107
Date and Time Collected: 25 MARCH 1997 / 1220
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 ( )
Depth to Well Bottom (c) 19.85 (ft.) Depth to Water (d) 5.20 (ft.)
Length of Static Water Column in Casing (e) = (c) - (d) = 19.85 - 5.20 = 14.65 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 × 14.65 = 9.82 ( )
Casing Volumes = 3 × (f) = 29.5 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			24 MAR 1997		
INITIAL	65.3	1882	1625	~ CLEAR *	8.54
5	64.7	1859	1627	~ CLEAR	8.44
10	63.3	1818	1631	SL. TURBID	8.41
15	64.1	1842	1637	" "	8.46
20	64.5	1869	1640	" "	8.50
21	64.5	1877	1643	" "	8.63
			25 MAR 1997		
AT SAMPLE	68.6	1842	1220	38.2 NTU	8.20

Total Volume Purged: 21 Time: 1643 Purged Dry (Y/N): YES

* 24 MAR 1997 NO NTU METER

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	4°C / HCl	TPH(prg) 8015 GAS, BTEX 8020
1 LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR DIESEL & JP-4, PNA: 8270
1 LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: ~~HB-4329~~ HB-4330 25MAR1997

Sample Location or: POL HILL
Well ID (attach map if necessary): PL-MW-112A
Date and Time Collected: 25 MARCH 1997 ~~1220~~ 1400 25MAR1997
Sample Collected by: JL, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 24MARCH1997 Aqua 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/ft. ( )
Depth to Well Bottom (c) 19.3 ft. ( ) Depth to Water (d) 4.85 ft. ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.3 - 4.85 = 14.45 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 × 14.45 = 9.68 ( )
Casing Volumes = 3 × (f) = 29.1 GALLONS ( )

Volume Purged (GAL.)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			24 MAR 1997		
INITIAL	66°	2020	1540	~CLEAR	7.56
5	65.2°	2000	1543	SL. TURBID	7.50
10	63.7°	24MAR97 ~~013~~ 2130	1550	" "	7.42
15	64.1°	~~20~~ 2100	1553	" "	7.41
20	65.0°	2040	1601	" "	7.59
21 GALLONS	64.4	2030	1603	" "	7.66
			25MAR 1997		
AT SAMPLE	65.5	2030	1400	30.7NTU	7.30

Total Volume Purged: 21 GALLONS Time: 1603 Purged Dry (Y/N): YES

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	HCl / 4°C	TPH(PRG) 8015 GAS, BTEX 8020
1 LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015 FOR DIESEL/JP4, PNA's 8270
1 LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524443
Sample No.: HB-4331 & HB-4332 (FIELD DUP.)

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MB-POL-PL MW 114
Date and Time Collected: 25 MAR 1997 / 1510 & 1600 (F.D.)
Sample Collected by: ZIJ, JA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" PVC BAILER
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 29.8' ( ) Depth to Water (d) 6.10' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 29.8' - 6.10' = 23.7' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 23.7' = 15.88 ( )
Casing Volumes = 3 × (f) = 48 GALLONS ( )

Volume Purged (GAL.)	Temp. (F°)	Conductance (µmhos)	Time (24 HR)	Water Description (Color, Turbidity, Odor, Oil)	pH
			25 MAR 1997		
INITIAL	61.9	352	0745	CLEAR	7.84
8	62.8	363	0749	"	7.62
16	64.4	375	0753	TURBID	7.73
22	64.3	371	0757	"	8.17
			25 MAR 1997		
AT SAMPLE	65.7	372	1510	30.0	7.30

Total Volume Purged: 22 GALLONS Time: 0757 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA's 8x40ml	No	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

INTERNATIONAL TECHNOLOGY CORPORATION

QUALITY ASSURANCE

SAMPLE INFORMATION FORM

JOB NAME: HAMILTON AAF

SAMPLE I. D.#: HB-4333

JOB NO.: 762538

LOCATION: Lab-Field-Lab

QA TYPE: Trip Blank

DATE / TIME TAKEN: 26 MARCH 1997 / N.A.

METHOD: TPH (prg) 8015 GAS, BTEX 8020

SOURCE: Lab Provided

PRINT NAME: JAMES W. ANDERSON

SIGNATURE: James W. Anderson

tb_br.wp

INTERNATIONAL TECHNOLOGY CORPORATION

QUALITY ASSURANCE

SAMPLE INFORMATION FORM

JOB NAME: HAMILTON AAF

SAMPLE I. D.#: HB-4334

JOB NO.: 762538

LOCATION: Lab-Field-Lab

QA TYPE: Trip Blank

DATE / TIME TAKEN: 26 MARCH 1997 / N.A.

METHOD: TPH (prg.) 8015 GAS, BTEX 8020

SOURCE: Lab Provided

PRINT NAME: JAMES W. ANDERSON

SIGNATURE: James W. Anderson

tb_br.wp

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524444
Sample No.: HB 4335

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-116
Date and Time Collected: 26 MAR 1997 / 0800
Sample Collected by: JK, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 24.30' ( ) Depth to Water (d) 14.23' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 24.30' - 14.23' = 10.07 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 10.07 = 6.75 ( )
Casing Volumes = 3 × (f) = 20 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time 25 MARCH 97	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	62.4	404	0810	CLEAR	17.34
4	62.9	402	0815	SS	17.35
8	63.4	405	0817	TURBID	17.36
13	63.5	415	0823	SS	17.32
AT SAMPLE	60.0	432	0800	20.8NTU	7.28

Total Volume Purged: 13 GALLONS Time: 0823 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
	No		
	No		
	No		

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Site Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB- 4336

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-11B
Date and Time Collected: 3-26-97 0850
Sample Collected by: M. BARRETT / D EVANS
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 30.70' ( ) Depth to Water (d) 5.46' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.70' - 5.46' = 25.24' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 25.24' = 16.91' ( )
Casing Volumes = 3 × (f) = 51 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			25 MARCH 97		
INITIAL	67.0	872	0900	~~00~~ MB CLEAR	8.23
9	65.6	832	0905	"	8.24
18	69.0	874	0910	TURBID	8.22
23	68.3	883	0920	"	8.26
			26 MARCH 97		
AT SAMPLE					
~~INITIAL~~ MB	60.8	790	0850	12.6 NTU CLEAR	7.42

Total Volume Purged: 23 GALLONS Time: 0920 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524444
Sample No.: HB-4337 & HB-4338 (QA)

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-104
Date and Time Collected: 26 MAR 1997 / 0900 & 0950 (QA)
Sample Collected by: ZW, JA
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 45.20' ( ) Depth to Water (d) 19.40' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 45.20' - 19.40' = 25.80' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 25.80' = 17.29 ( )
Casing Volumes = 3 × (f) = 52 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time 25 MAR 1997	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	70.6	941	1500	22.5 NTU CLEAR	7.12
9	70.1	912	1504	58.9 NTU TURBID	7.17
18	70.1	914	1507	31.5 NTU SS	7.12
27	71.6	861	1510	26.9 NTU SS	7.24
30.5	70.1	879	1515	82.6 NTU SS	7.22
AT SAMPLE	62.2	1035	0900	7.4 NTU	7.13

Total Volume Purged: 30.5 GALLONS Time: 1515 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
	No		
	No		
	No		

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB - 4339

Sample Location or: BEAC POL HILL
Well ID (attach map if necessary): PL-MW-111A
Date and Time Collected: 3-26-97, 0930
Sample Collected by: M. BARBOUR / D EVANS
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.:

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 19.50' ( ) Depth to Water (d) 5.11' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.50' - 5.11' = 14.39' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.39' = 9.64' ( )
Casing Volumes = 3 × (f) = 29 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	68.9	2071	1030	CLEAR ≈	7.34
5	67.8	2064	1033	SS TURBID	7.30
10	67.9	2064	1035	SS	7.38
15	67.7	2078	1039	TURBID	7.48
AT SAMPLE			26 MARCH 97		
~~[illegible]~~ HB	61.1	1995	0940	6.46 NTU CLEAR	7.00

Total Volume Purged: 15 GALLONS Time: 1039 Purged Dry (Y/N): X

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB-4340

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-115
Date and Time Collected: 3-26-97 1040
Sample Collected by: M. BARRETT / D GLANG
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.:

3" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 30.20' ( ) Depth to Water (d) 6.48' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.20' - 6.43' = 23.72' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 23.72' = 15.89 ( )
Casing Volumes = 3 × (f) = 48 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time 25 MARCH 97	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	68.7	983	1400	1.61 NTU CLEAR	7.34
8	66.4	912	1404	9.70 NTU SS	7.43
16	69.5	910	1408	TURBID > 200 NTU	7.44
22	69.2	918	1413	TURBID > 200 NTU	7.49
			26 MARCH 97		~~7.18~~
AT SAMPLE	64.7	732	1045	4.35 NTU CLEAR	7.18

Total Volume Purged: 22 GALLONS Time: 1413 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524444
Sample No.: HB-4341

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): ~~PL-MW-~~ MW-POLA - 118 26MAR1997 JWC
Date and Time Collected: 26MAR1997 / 1040
Sample Collected by: JA, ZIH
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 18.10' ( ) Depth to Water (d) 5.72' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 18.10' - 5.72' = 12.98' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 12.98' = 8.70 ( )
Casing Volumes = 3 × (f) = 26 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (µmhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			25MAR1997		
INITIAL	66.0	1284	0945	CLEAR	7.22
5	66.2	1278	0949	SS	7.38
10	66.5	1285	0952	TURBID	7.37
15	70.1	1377	1000	SS	7.28
21	68.2	1302	1005	TURBID	7.54
			26MAR1997		
AT SAMPLE	63.4	1272	1040	~CLEAR	7.58

Total Volume Purged: 21 GALLONS Time: 1005 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
	No		
	No		
	No		

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524444
Sample No.: HB-4342

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-113C
Date and Time Collected: 26 MAR 1997 / 1135
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 32.15' ( ) Depth to Water (d) 4.48' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 32.15' - 4.48' = 27.67' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 27.67' = 18.54 ( )
Casing Volumes = 3 × (f) = 56 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	69.6	2017	1050	CLEAR ≈	7.78
9	69.2	2020	1055	SS	8.16
18	70.2	2021	1105	TURBID	7.98
27	70.6	2018	1110	SS	7.43
AT SAMPLE	62.9	1952	1135	18.62	7.83

Total Volume Purged: 27 GALLONS Time: 1110 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
	No		
	No		
	No		

TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 52444
Sample No.: HB-4343

Sample Location or: BEAC POL HILL
Well ID (attach map if necessary): PL-MW-113A
Date and Time Collected: 26 MAR 1997 / 1325
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 19.20' ( ) Depth to Water (d) 4.66' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 19.20' - 4.66' = 14.54' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 14.54' = 9.74 ( )
Casing Volumes = 3 × (f) = 29 GALLONS ( )

Volume Purged (GAL)	Temp. (°F)	Conductance (umhos)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	71.2	1547	1325	2.57 NTU CLEAR	7.14
5	69.8	1495	1327	19.95 NTU "	7.20
10	68.5	1496	1330	43.0 NTU TURBID	7.20
15	68.6	1518	1336	TURBID > 200 NTU	7.17
17	69.5	1542	1340	TURBID > 200 NTU	7.19
AT SAMPLE	63.3	1522	1325	2.30 NTU	6.98

Total Volume Purged: 17 GALLONS Time: 1340 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
	No		
	No		
	No		

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TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB - 4344

Sample Location or: BRAC FOL HILL
Well ID (attach map if necessary): MW-FOLA-117A
Date and Time Collected: 3-26-97 1400
Sample Collected by: M. BARRETT / D. EVANS
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.:

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 18.40' ( ) Depth to Water (d) 5.51' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 18.40' - 5.51' = 12.89' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 12.89' = 8.64' ( )
Casing Volumes = 3 × (f) = 26 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	72.1	1264	1250	2.70 NTU CLEAR	8.04
5	70.3	1204	1254	65.6 NTU SS	8.20
10	68.3	1152	1258	48.7 NTU TURBID	8.03
15	69.5	1183	1300	78.2 NTU S	7.95
16.5	69.1	1162	1305	TURBID > 200 NTU	8.12
AT SAMPLE	66.5	918	1350	6.45 NTU CLEAR	7.12

Total Volume Purged: 16.5 GALLONS Time: 1305 Purged Dry (Y/N): Y

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

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INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524444
Sample No.: 1'B-4345

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MW-POLA-12J
Date and Time Collected: 26 MAR 1997 / 1455
Sample Collected by: JA, ZN
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT. ( )
Depth to Well Bottom (c) 36.15' ( ) Depth to Water (d) 19.41' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 36.15' - 19.41' = 16.74' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 16.74 = 11.22 ( )
Casing Volumes = 3 × (f) = 34 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	76.6	1302	1540	52.5 NTU TURBID	7.11
5	72.4	1254	1545	63.2 NTU SS	7.11
10	70.2	1273	1550	98.3 NTU SS	7.27
15	70.0	1295	1555	129.8 NTU SS	7.22
17	70.1	1356	1558	160.8 NTU SS	7.24
AT SAMPLE	68.5	1488	1455	3.16 NTU	7.34

Total Volume Purged: 17 GALLONS Time: 1558 Purged Dry (Y/N): Y

SAMPLE PACKAGING

* NOTE: WATER HAS ODOR H_2S

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.:
Sample No.: HB -4346

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-1118
Date and Time Collected: 3-26-97 1605
Sample Collected by:
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.:

3" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 32.05' ( ) Depth to Water (d) 5.00' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 32.05' - 5.00' = 27.05' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 27.05 = 18.12 ( )
Casing Volumes = 3 × (f) = 54 ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	66.0	2400	1500	2.52 NTU CLEAR	7.06
10	65.3	2440	1525	1.63 NTU SS	7.11
20	66.2	2460	1540	0.63 NTU SS	7.18
30	64.3	2570	1545	2.23 NTU SS	7.16
40	*68.5	2650	1550	1.79 NTU SS	7.19
50	68.1	2620	1555	4.51 NTU SS	7.11
MIS 53 54	68.5	2600	1600	5.28 NTU SS	7.13

Total Volume Purged: Time: Purged Dry (Y/N):

SAMPLE PACKAGING

* TEMPERATURE INCREASE DUE TO PUMP RPM INC

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters

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INTERNATIONAL TECHNOLOGY CORPORATION

QUALITY ASSURANCE

SAMPLE INFORMATION FORM

JOB NAME: HAMILTON AAF

SAMPLE I. D.#: HB-4347

JOB NO.: 762538

LOCATION: Lab-Field-Lab

QA TYPE: Trip Blank

DATE / TIME TAKEN: 27 MARCH 1997

METHOD: TPH (prg) 8015 GAS, BTEX 8020

SOURCE: Lab Provided

PRINT NAME: JAMES W. ANDERSON

SIGNATURE: James W. Anderson

tb_br.wp

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524445
Sample No.: HB-4348

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-101
Date and Time Collected: 27 MARCH 1997/0800
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 52.30' ( ) Depth to Water (d) 24.30' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 52.30' - 24.30' = 28' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 28' = 18.76 ( )
Casing Volumes = 3 × (f) = 56 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
			26 MARCH 97		
INITIAL	61.4	875	0800	1.62 NTU CLEAR	7.17
10 5 MIN	62.0	966	0805	26.5 NTU TURBID	7.09
20	61.6	1079	0810	23.2 NTU "	7.07
29	60.4	1123	0815	200 NTU / TURBID	7.02
			27 MAR 1997		
AT SAMPLE	61.3	1184	0800	1.82 NTU	7.30*

Total Volume Purged: 29 GALLONS Time: 0815 Purged Dry (Y/N): Y

SAMPLE PACKAGING

* SAMPLE CREW USING DIFFERENT METER THAN BAILING CREW.

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	NO	HCl / 4°C	TPH(prg) 8015 GRO, BTEX 8020
LITER GLASS AMBER 6x1l	NO	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNA 8310
LITER POLY 1x1l	NO	HNO_3 / 4°C	LEAD 1421

INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524445
Sample No.: HB-4349

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-1123
Date and Time Collected: 27 MARCH 1997 / 0910
Sample Collected by: JA, ZJ
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 32.30' ( ) Depth to Water (d) 2.36' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 32.30' - 2.36' = 29.94' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 29.94' = 20.06 ( )
Casing Volumes = 3 × (f) = 60 GALLONS ( )

Volume Purged (GAL.)	Temp. (°F)	Conductance (µmhos)	Time 27 MAR 1997	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	63.4	1125	0800	3.24 NTU CLEAR	7.34
10	63.2	1214	0810	2.41 NTU SS	7.81
20	62.8	1181	0820	2.80 NTU ~~[illegible]~~	7.75
30	63.1	1134	0825	1.76 NTU SS	7.82
40	63.5	1158	0835	10.05 NTU CLEAR	7.62
50	63.7	1158	0845	5.62 NTU SS	7.51
60	64.4	1158	0900	7.88 NTU CLEAR	7.52
AT SAMPLE	64.4	1268 *	0910	6.8 NTU	7.79

Total Volume Purged: 60 GALLONS Time: [illegible] Purged Dry (Y/N): NO

SAMPLE PACKAGING

* DIFFERENT METERS USED BY SAMPLE CREW

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8 x 40ml	No	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNA's 8270
LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

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INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524945
Sample No.: HB-4350

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): MW-POLA-119
Date and Time Collected: 27 MARCH 1997 / 1010
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 4" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 17.60' ( ) Depth to Water (d) 9.27' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 17.60' - 9.27' = 8.33' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 8.33' = 5.58 ( )
Casing Volumes = 3 × (f) = 17 GALLONS ( )

Volume Purged (GAL.)	Temp. (°F)	Conductance (umhos)	Time 27MAR1997	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	64.3	1162	0940	0.63 NTU CLEAR	7.24
3	63.8	1203	0942	200 NTU/L TURBID	7.36
6	63.8	1195	0945	200 NTU/L TURBID	7.33
9	62.6	1183	0948	200 NTU/L TURBID	7.31
12	62.8	1202	0950	200 NTU/L TURBID	7.29
15	63.5	1137	0952	200 NTU/L TURBID	7.28
18	64.3	1142	0955	200 NTU/L TURBID	7.35
AT SAMPLE	64.9	1318 *	1010	>200 NTU TURBID	7.50 *

Total Volume Purged: 18 GALLONS Time: 0955 Purged Dry (Y/N): NO

SAMPLE PACKAGING

* DIFFERENT METERS USED BY SAMPLE CREW

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR JP-4's DIESEL, PNA's 8270
LITER POLY 1x1l	No	4°C / HNO_3	LEAD 7421

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INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524445
Sample No.: HB-4351

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): POLA-MW4-120
Date and Time Collected: 27 MARCH 1997 / 1110
Sample Collected by: JA, ZW
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 3.5" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE TEFLON BAILER

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 34.4' ( ) Depth to Water (d) 13.28' ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 34.4' - 13.28' = 21.12' ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT × 21.12' = 14.15 ( )
Casing Volumes = 3 × (f) = 42 GALLONS ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	60.8	1059	1035	3.03 NTU CLEAR	7.27
7	62.5	1022	1038	6.65	7.25
14	62.7	1046	1040	6.34	7.24
21	64.8	1060	1045	3.53	7.16
28	65.4	9.99	1050	4.64 NTU CLEAR	7.18
35	65.0	1021	1055	5.98	7.16
42	64.9	1032	1100	22.2 TURBID	7.19
AT SAMPLE	67.8 ★	1086 *	1110	7.95	7.58*

Total Volume Purged: 42 Time: 1100 Purged Dry (Y/N): NO

★ TEMP. AFFECTED BY METER BEING LEFT IN THE SUN.
* SAMPLE CREW USING DIFFERENT METERS

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOA 8x40ml	No	HCl / 4°C	TPH(prg) 8015 GAS; BTEX 8020
LITER GLASS AMBER 6x1l	No	4°C	TPH(ext) 8015M FOR JP-4 & DIESEL, PNAs 8270
LITER POLY 1x1l	No	HNO_3 / 4°C	LEAD 7421

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INTERNATIONAL TECHNOLOGY CORPORATION

GROUND WATER SAMPLE COLLECTION LOG

Project Name: HAMILTON ARMY AIRFIELD
Project No.: 762538
Request-for-Analysis Control No.:
Chain-of-Custody Control No.: 524445
Sample No.: HB- 4352/HB-4353 (FD)

Sample Location or: BRAC POL HILL
Well ID (attach map if necessary): PL-MW-103
Date and Time Collected: 3-27-97 1145/1215 (FD)
Sample Collected by: M.B/D.E.
Checked by (Office)/Date:

EQUIPMENT

Purging Method/Equipment: 4" BAILER PVC
Sampling Equipment/ID No.: DISPOSABLE BAILER TEFLON

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) 0.67 GAL/FT ( )
Depth to Well Bottom (c) 30.0' ( ) Depth to Water (d) 7.02 ( )
Length of Static Water Column in Casing (e) = (c) - (d) = 30.0' - 7.02' = 22.98 ( )
Casing Water Volume (f) = (b) × (e) = 0.67 GAL/FT. × 22.98 = 15.4 ( )
Casing Volumes = 3 × (f) = 46 ( )

Volume Purged ( )	Temp. ( )	Conductance ( )	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
INITIAL	64.5	632	1120	1.33 NTU CLEAR	6.92
8	62.3	598	1125	20.2 NTU TURBID	6.92
16	62.2	613	1128	19.4 NTU	6.97
24	62.1	600	1131	114.5 NTU	6.98
32	62.4	613	1135	103.8 NTU TURBID	6.97
40	62.8	626	1138	43.4 NTU	6.99
46	62.8	639	1140	48.8 NTU	7.02

Total Volume Purged: 46 GALLONS Time: 1140 Purged Dry (Y/N): N

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
VOAs 8X40 mL	NO	HCl / 4°C	TPH (PRG) 8015 GAS, BTEX 8020
LITER GLASS AMBER 6X1L	NO	4°	TPH (EXT) 8015 FOR JP-4 & DIESEL PNA 82
LITER POLY 1X1L	NO	HNO_3 / 4°C	LEAD 7421

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APPENDIX D2

ANALYSIS REQUEST/CHAIN OF CUSTODY FORMS

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document # 433033
Page 1 of ____

Project Name/No. 1 Hamilton AAF/ 762538
Sample Team Members 2 ITSI DH / MB
Profit Center No. 3
Project Manager 4 Casey Kenney
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 Calvin Tanaka
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4037	WATER - Trip Blank	10/10/96 NA	40 ml VOA	6 VOAs	HCL / 4°C	TPH (vg) 8015 gas, ~~VOC 8010~~ BTEX 8020 DH	FOR LAB USE ONLY	
HB-4039	SOIL - DRAC 3.5'-4.5' SB/MW POLA 118	10/10/96 1000	SJ Sleeve	2-2x6 Sleeves	4°C	TPH (PRG) 8015 gas, BTEX 8020, TPH (EXT) 8015 M diesel, JP-4, PNA's 8270, Lead 7421		
HB-4040	0.5'-1' Building 20	10/10/96 1355		3-2x6 Sleeves				
HB-4041	0.5'-1'	10/10/96 1400		2-2x6 Sleeves				
HB-4042	WATER - Equipment Rinse	10/10/96 1440	40 ml VOA	8-VOA's	HCL / 4°C	TPH (prg) 8015 gas, BTEX 8020	FOR LAB USE ONLY	
			1 L GA	6-Ambers	4°C	TPH (ext) 8015 M - diesel, JP-4 PNA's 8270		
			1 L POLY	1 POLY	Nitric Acid + 4°C	Lead 7421		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☑ Archive ____ (mos.)

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☑

Turnaround Time Required: 26 14 day Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

White: To accompany samples

Yellow: Field copy

Project Name/No. [1] Hamilton AAF/762538

Sample Team Members [2] ITSI/DH, JA & RE

Profit Center No. [3]

Project Manager [4] Casey Kenney

Purchase Order No. [6]

Required Report Date [11] 14 day

Samples Shipment Date [7] / /96

Lab Destination [8] Quanterra West Sacramento

Lab Contact [9] Calvin Tanaka

Project Contact/Phone [12] Todd McIntyre (415) 883-6386

Carrier/Waybill No. [13] White Cotton

Bill to: [5] IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949

Report to: [10] Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Pre-servative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
HB-4060	WATER - TRIP BLANK	28 OCT 1996 / N/A	VOA	6x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4061	SOIL - BRAC - RI/FS SB-POLA-104 1'-1.5' DEEP	/ 0855	STAINLESS STEEL SLEEVE	1-2"x6"	4°C	TPH(PRG) 8015 GAS, BTEX 8020, TPH (ext) 8015M Diesel & JP-4, PNA's 8270, LEAD 7421		
HB-4062	SB-POLA-104 5'-6' DEEP	/ 0915		2-2"x6"				
HB-4063	SB-POLA-104 7.5'-8.5'	/ 0935						
HB-4064	SB-POLA-104 9.5'-10.5'	/ 0950					FOR LAB USE ONLY	
HB-4065	SB-POLA-102 1'-2'	/ 1110						
HB-4066	WATER - EQUIPMENT RINSATE	/ 1315	VOA	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4066		/ 1315	AMBER GLASS LITER	6x1 l	4°C	TPH(ext) 8015M for Diesel & JP-4, PNA's 8270		

Special Instructions: [23]

Sample Disposal: [25] Return to Client ☐ Disposal by Lab ☒ Archive ____ (mos.)

Possible Hazard Identification: [24] Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: [26] Normal ☐ Rush ☐ 14 day

QC Level: [27] I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by [28] (Signature/Affiliation)	Date: Time:	1. Received by [28] (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: [29]

*See back of form for special instructions

MCA 3/15/91

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document N 524415
Page 2 of ____

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date ____

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB-4066	WATER- EQUIPMENT RINSATE	28 OCT 1996 / 1315	LITER POLY	1x1 l	HNO_3 4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4067	SOIL - BRAC RI/FS SB-POLA-103 1'x1.5'-2.5' DEEP	1330	STAINLESS STEEL SLEEVE	2-2"x6"	4°C	TPH(mg) 8015 GAS, BTEX 8020, TPH(ext) 8015M mod Diesel, JP-4, PNAs 8270, LEAD 7421		
HB-4068	SB-POLA-103 2.5'-4' DEEP	1345		3-2"x6"				
HB-4069	SB-POLA-103 5.5'-6.5' DEEP	1355		2-2"x6"			FOR LAB USE ONLY	
HB-4071	SB-POLA-101 1'-2' DEEP	1530		2-2"x6"				
HB-4073	SB-POLA-101 5.5'-6.5' DEEP	1600		2-2"x6"				
HB-4074	SB-POLA-101 7'-7.5' DEEP	1615		1-2"x6"			FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	

White: To accompany samples

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Page 1 of ____

Project Name/No. 1 Hamilton AAF/762538

Sample Team Members 2 ITSI/JA, DH & RE

Profit Center No. 3

Project Manager 4 Casey Kenney

Purchase Order No. 6

Required Report Date 11 2 Weeks

Samples Shipment Date 7 / /96

Lab Destination 8 APPL Inc.

Lab Contact 9 Glen Brown

Project Contact/Phone 12 Todd McIntyre (415) 883-6386

Carrier/Waybill No. 13 Federal Express

Bill to: 5 USACE SPD Laboratory
25 Liberty Ship Way
Sausalito, CA 94965

Report to: 10 USACE SPD Laboratory
25 Liberty Ship Way
Sausalito, CA 94965

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16		Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4070	WATER-TRIP BLANK	28 Oct 1996	N/A	VOA	6x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4072	SOIL - BRAC RI/FS SB-POLA-101 2'-3.5' DEEP	↓	1540	STAINLESS STEEL SLEEVE	3-2"x6"	4°C	TPH(prg) 8015 GAS, BTEX 8020 TPH(ext) 8015M FOR DIESEL & JP4, PNAs 8270, LEAD 7421		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 2 Weeks Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

MCA 3/15/91

White: To accompany samples. Yellow: Field copy

*See back of form for Sample Disposal Instructions.

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Project Name/No. [1] Hamilton AAF/762538
Sample Team Members [2] ITSI / JA, DH, RE
Profit Center No. [3]
Project Manager [4] Casey Kenney
Purchase Order No. [6]
Required Report Date [11] 14 day

Samples Shipment Date [7] 11/6/96
Lab Destination [8] Quanterra West Sacramento
Lab Contact [9] Calvin Tanaka
Project Contact/Phone [12] Todd McIntyre (415) 883-6386
Carrier/Waybill No. [13] White Cotton

Bill to: [5] IT Corporation
Hamilton AAF, Bldg. 86
Novato, CA 94949

Report to: [10] Todd McIntyre
Hamilton AAF, Bldg. 86
Novato, CA 94949

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Pre-servative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
HB-4103	ROCK - BRAC RI/FS PCL HILL	06 NOV. 1996 1330	8oz. GLASS JAR	2 x 8oz.	4°C	TPH(G+D) EC/TSM, Diesel, SIP-4, PCB's EC60, PNAs 8270	FOR LAB USE ONLY	
		NOT USED 11-6-96						
							FOR LAB USE ONLY	

COPY

Special Instructions: [23]

Possible Hazard Identification: [24]
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: [25]
Return to Client ☐ Disposal by Lab ☐ Archive _____ (mos.)

Turnaround Time Required: [26]
Normal ☐ Rush ☐ 14 day

QC Level: [27]
I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by [28] (Signature/Affiliation)	Date: 11-6-96 Time: 1145	1. Received by [28] (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: [29]

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No.
Page 1 of ____

Project Name/No. 1 Hamilton AAF/762538
Sample Team Members 2 ITSI/ZW, DE, JA, MB, RE
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 Calvin Tanaka
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4292	WATER - TRIP BLANK	26 FEB 1997 / NA.	VOA's	6x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LA USE O	
HB-4293	WATER - BRAC PCL HILL PL-MW-105	/ 0825	VOA's	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4293	↓	/ 0825	LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M JP-4 & DIESEL, PNA's 8270		
HB-4293	↓	/ 0825	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4294	PL-MW-106	/ 0915	VOA's	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4294	↓	/ 0915	LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M JP-4 & DIESEL, PNA's 8270		
HB-4294	↓	/ 0915	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4295	↓ PL-MW-106	/ 0945	VOA's	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 14 day Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation) Date: Time:
2. Relinquished by (Signature/Affiliation) Date: Time:
3. Relinquished by (Signature/Affiliation) Date: Time:

1. Received by 28 (Signature/Affiliation) Date: Time:
2. Received by (Signature/Affiliation) Date: Time:
3. Received by (Signature/Affiliation) Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No. 524448

Page 2 of ____

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4295	WATER - BRAC POL HILL PL-MW-106	26 FEB 1997 / 0945	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M JP-4 & Diesel, PNA's 8270		
HB-4295	↓ ↓	/ 0945	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4296	PL-MW-108	/ 1030	VOA's	8x40ml	HCl / 4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4296	↓ ↓	/ 1030	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M JP-4 & DIESEL PNA's 8270		
HB-4296	↓ ↓	/ 1030	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4297	PL-MW-111A	/ 1110	VOA's	8x40ml	HCl / 4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4297	↓ ↓	/ 1110	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & DIESEL, PNA's 8270		
HB-4297	↓ ↓	/ 1110	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4298	PL-MW-111B	/ 1300	VOA's	8x40ml	HCl / 4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4298	↓ ↓	/ 1300	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4298	↓ ↓	/ 1300	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4299	PL-MW-107	/ 1330	VOA's	8x40ml	HCl / 4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4299	↓ ↓	/ 1330	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4299	↓ ↓	/ 1330	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		
HB-4300	PL-MW-112B	/ 1450	VOA's	8x40ml	HCl / 4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4300	↓ ↓	/ 1450	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4300	↓ ↓	/ 1450	LITER POLY	1x1l	HNO_3 / 4°C	LEAD 7421		

White to accompany samples

Yellow: field copy

*See back of form for special instructions.

MCA 3-15-91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 24448
Page 1 of 2

Project Name/No. 1 Hamilton AAF/762538
Sample Team Members 2 ITSI/ZW, DE, JA, MG, RE
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7/21/96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 Calvin Tanaka (415) 887-9613 Chris Rogers
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4292	WATER - TRIP BLANK	26 FEB 1997 / NA	VOA's	6x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4293	WATER - BRAC POL HILL PL-MW-105	0825	VOA's	8x40ml	HCl/4°C	TPH(gas) 8015 GAS, BTEX 8020		
HB-4293			LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M JP-4 & DIESEL, PNA's 8270		
HB-4293		0825	LITER POLY	1x1l	HNO3/4°C	LEAD 7421		
HB-4294	PL-MW-106	0915	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4294		0915	LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M JP-4 & DIESEL, PNA's 8270		
HB-4294		0915	LITER POLY	1x1l	HNO3/4°C	LEAD 7421		
HB-4295	PL-MW-106	0945	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		

COPY

Special Instructions: 23

Possible Hazard Identification: 24
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: 25
Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required: 26 14 day
Normal ☐ Rush ☐

QC Level: 27
I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation) [signature]	Date: 7-21-97 Time: 0900	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No. 24448

Page 2 of 2

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date 2 23 97

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4295	WATER - BRAC POL HIN PL-MW-106	26 FEB 1997 / 0945	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4295	↓ ↓	/ 0945	LITER POLY	1x1l	HNO3/4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4296	PL-MW-108	/ 1030	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4296		/ 1030	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4296	↓ ↓	/ 1030	LITER POLY	1x1l	HNO3/4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4297	PL-MW-111A	/ 1110	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4297		/ 1110	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4297	↓	/ 1110	LITER POLY	1x1l	HNO3/4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4298	PL-MW-111B	/ 1300	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4298		/ 1300	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4298	↓ ↓	/ 1300	LITER POLY	1x1l	HNO3/4°C	LEAD 7421	FOR LAB USE ONLY	
HB-4299	PL-MW-107	/ 1330	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4299		/ 1330	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4299	↓ ↓	/ 1330	LITER POLY	1x1l	HNO3/4°C	LEAD 7421		
HB-4300	PL-MW-112B	/ 1450	VOA's	8x40ml	HCl/4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4300		/ 1450	LITER GLASS AMBER	6x1l	4°C	TPH(ext)&BTSM JP-4 & Diesel, PNA's 8270		
HB-4300	↓ ↓	/ 1450	LITER POLY	1x1l	HNO3/4°C	LEAD 7421	FOR LAB USE ONLY	

COPY

White: To accompany samples Yellow: Field copy

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No.
Page 1 of 3

Project Name/No. 1 Hamilton AAF/762538
Sample Team Members 2 ITSI / JA, ZW, MB, DE, RE
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 Calvin Tanaka
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4301	WATER - TRIP BLANK	27 FEB 1997 / NA	VOA	6x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4302	WATER - BRAC POL HILL PL-MW-113C	/ 0925	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4302	↓ ↓	/ 0925	LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4302	↓ ↓	/ 0925	LITER POLY	1x1l	HNO3 / 4°C	LEAD 7421		
HB-4303	MW-POLA-119	/ 1000	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4303	↓ ↓	/ 1000	LITER GLASS AMBER	6x1l	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4303	↓ ↓	/ 1000	LITER POLY	1x1l	HNO3 / 4°C	LEAD 7421		
HB-4304	MW-POLA-117B	↓ / 1035	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive ____ (mos.)

Possible Hazard Identification: 24
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 14 day
Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No.[30] 4447

Samples Shipment Date

Project Name HAWICTON ARMY AIRFIELD

Project No. 762538

ONE CONTAINER PER LINE

Sample[14] Number	Sample[15] Description/Type	Date/Time[16] Collected	Container[17] Type	Sample[18] Volume	Pre-[19] servative	Requested Testing[20] Program	Condition on[21] Receipt	Disposal[22] Record No.
HB-4304	WATER · BRAC POL HILL MW-POLA-117B	27 FEB 1997 / 1035	LITER AMBER GLASS	6x1l	4°C	TPH(ext)8015M FOR JP-4 & DIESEL, PNA's 8270		
HB-4304	↓ ↓	/ 1035	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4305	PL-MW-116	/ 1125	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020	USE ONLY	
HB-4305	↓ ↓	/ 1125	LITER AMBER GLASS	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4305	↓ ↓	/ 1125	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4306	MW-POLA-120	/ 1135	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4306	↓ ↓	/ 1135	LITER AMBER GLASS	6x1l	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4306	↓ ↓	/ 1135	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4307	PL-MW-112A	/ 1310	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4307	↓ ↓	/ 1310	LITER AMBER GLASS	6x1l	4°C	TPH (ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4307	↓ ↓	/ 1310	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4308	PL-MW-103	/ 1345	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4308	↓ ↓	/ 1345	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-4308	↓ ↓	/ 1345	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4309	PL-MW-113A	/ 1400	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-~~4310~~ 4309 27FEB1997	↓ ↓	/ 1400	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNA's 8270		
HB-~~4310~~ 4309 27FEB1997	↓ ↓	/ 1400	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4310	PL-MW-109	/ 1500	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020	USE ONLY	
HB-4310	↓ ↓	/ 1500	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4310	↓ ↓ ↓	/ 1500	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		

White: To accompany samples

Yellow: Field copy

*See back of form for special instructions.

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No.[30] 24447

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date

ONE CONTAINER PER LINE

Sample[14] Number	Sample[15] Description/Type	Date/Time[16] Collected	Container[17] Type	Sample[18] Volume	Pre-[19] servative	Requested Testing[20] Program	Condition on[21] Receipt	Disposal[22] Record No.
HB-4311	WATER · BRAC POL HILL MW-POLA-117A	27 FEB 1997 / 1545	VOA	8x40ml	HCl / 4°C	TPH(prg)8015GAS, BTEX 8020		
HB-4311	↓ ↓	/ 1545	LITER GLASS AMBER	6x1 l	4°C	TPH(ext)8015M for JP-4 & Diesel PNAs 8270		
HB-4311	↓ ↓	/ 1545	LITER POLY	1x1 l	HNO_3 / 4°C	LEAD 7421		

White: To accompany samples

Yellow: Field copy

*See back of form for special instructions.

MCA 3/15/91

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Project Name/No. 1 Hamilton AAF/762538
Sample Team Members 2 ITSI / JA, ZW, MB, DE, RE
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / 21 / 28 /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 ~~Calvin Tanaka~~ KRIS ROGERS
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, ~~Hamilton AAF, Bldg. 86, Novato, CA 94949~~

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4301	WATER - TRIP BLANK	27 FEB 1997 / NA	VOA	6x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4302	WATER - BRAC PGL HILL PL-MW-113C	/ 0925	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		
HB-4302	↓		LITER GLASS AMBER	6x1 l	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4302	↓	0925	LITER POLY	1x1 l	HNO_3 / 4°C	LEAD 7421		
HB-4303	MW-POLA 119	1000	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4303	↓	1000	LITER GLASS AMBER	6x1 l	4°C	TPH(ext) 8015M FOR JP-4 & Diesel, PNA's 8270		
HB-4303	↓	1000	LITER POLY	1x1 l	HNO_3 / 4°C	LEAD 7421		
HB-4304	MW-POLA-1178	1035	VOA	8x40ml	HCl / 4°C	TPH(prg) 8015 GAS, BTEX 8020		

COPY

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

Turnaround Time Required: 26 14 day Normal ☐ Rush ☐

1. Relinquished by 28 (Signature/Affiliation) [signature]	Date: 7 28 97 Time: 1230	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

NATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Samples Shipment Date 2 23 97

Project No. 762538

Project Name HAMILTON ARMY AIRFIELD

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB-4304	WATER - BRNC POL HILL MW-PCLA-117B	27 FEB 1997 / 1035	LITER AMBER GLASS	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270	FOR LAB USE ONLY	
HB-4304	↓ ↓	1035	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4305	PL-MW-116	1125	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4305	↓ ↓	1125	LITER AMBER GLASS	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-4305	↓ ↓	1125	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4306	MW-POLA-120	1135	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4306	↓ ↓	1135	LITER AMBER GLASS	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-4306	↓ ↓	1135	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4307	PL-MW-112A	1310	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4307	↓ ↓	1310	LITER AMBER GLASS	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-4307	↓ ↓	1310	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4308	PL-MW-103	1345	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4308	↓ ↓	1345	LITER GLASS AMBER	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-4308	↓ ↓	1345	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4309	PL-MW-113A	1400	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-~~4310~~ 4309 27 FEB 1997	↓ ↓	1400	LITER GLASS AMBER	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-~~4310~~ 4309 27 FEB 1997	↓ ↓	1400	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4310	PL-MW-109	1500	VOA	8x40ml	HCl/4°C	TPH(prg)EDB/GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4310	↓ ↓	1500	LITER GLASS AMBER	6x1l	4°C	TPH(ext)EDB/SM for JP-4 & Diesel, PNA's 8270		
HB-4310	↓ ↓ ↓	1500	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		

COPY

White: To accompany samples
Yellow: Field copy

*See back of form for specific instructions

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No [illegible]

Page 3 of 3

Project Name HAMILTON AAF

Project No. 762538

Samples Shipment Date [illegible]

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB-4311	WATER BLANK FOR AMS MW-10LA-1172	[illegible]	VOA	6x40ml	HCl/4°C	TPH(prg)ECD/GC, BTEX 8020	FOR LAB USE ONLY	
HB-4311	↓	LEAD	LITER	1x1 L	4°C	TPH(ext)FOR/SM 20 JP-4/DIESEL PAH 8270		
HB-4311	↓	LEAD	LITER POLY	1x1 L	HNO3/4°C	LEAD 7421		
		NOT USED 2-28-99 RJF					FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	

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INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 524467
Page 1 of 2

Project Name/No. Hamilton AAF/622.39
Sample Team Members 2 TSI/MB, JA, JW, JA, RL
Profit Center No. 3
Project Manager 4 Casey Kenney
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 28 FEB 97
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 ~~Calvin Tanaka~~ 28 FEB 1997 KRIS ROGERS
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, ~~Hamilton AAF, Bldg. 86, Novato, CA 94949~~

White: To accompany samples
Yellow: Field copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4312	WATER - TRIP BLANK	28 FEB 1997 / NA	VOA	6x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4314	WATER - DRAC POL-HILL PL-MW-104	/ 0920	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4314	↓	/	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNAs 8270		
HB-4314	↓	/ 0920	1 LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4316	MW-POLA-116	/ 0920	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4316	↓	/ 0920	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for JP-4 & Diesel, PNAs 8270		
HB-4316	↓	/ 0920	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		
HB-4317	↓ MW-POLA-118	↓ / 0940	VOA	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		

COPY

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Possible Hazard Identification: 24
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 14 day
Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No [illegible]
Page 2 of 2

Samples Shipment Date 28 [illegible]

Project Name HAMILTON AAF

Project No. 762538

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB 4317	WATER - BRAC POL HILL MW - POLA - 118	26 [illegible]	LITER GLASS AMBER	6 x 1 l	4°C	TPH(ext) EC/MS JP-4 & DIESEL, PNAs 8270		
HB - 4317	↓ ↓	[illegible]	LITER POLY	1 x 1 l	HNO_3/4°C	LEAD 7421	FOR LAB USE ONLY	
HB - 4318	FL - MW - 115	[illegible]	VOA	8 x 40 ml	HCl/4°C	TPH(prg) FIDS GAS, BTEX 8020		
HB - 4318		[illegible]	LITER GLASS AMBER	6 x 1 l	4°C	TPH(ext) EC/MS JP-4 & DIESEL, PNAs 8270	FOR LAB USE ONLY	
HB - 4318	↓ ↓	[illegible]	LITER POLY	1 x 1 l	HNO_3/4°C	LEAD 7421		
HB - 4319	FL - MW - 114	[illegible]	VOA	8 x 40 ml	HCl/4°C	TPH(prg) EC/MS GAS, BTEX 8020		
HB - 4319		[illegible]	LITER GLASS AMBER	6 x 1 l	4°C	TPH(ext) EC/MS JP-4 & DIESEL, PNAs 8270	FOR LAB USE ONLY	
HB - 4319	↓	[illegible]	LITER POLY	1 x 1 l	HNO_3/4°C	LEAD 7421		
HB - 4320	MW - [illegible] LA - 121	[illegible]	VOA	8 x 40 ml	HCl/4°C	TPH(prg) EC/MS GAS, BTEX 8020		
HB - 4320		[illegible]	LITER GLASS AMBER	6 x 1 l	4°C	TPH(ext) EC/MS JP-4 & DIESEL, PNAs 8270	FOR LAB USE ONLY	
HB - 4320	↓ ↓	[illegible]	LITER POLY	1 x 1 l	HNO_3/4°C	LEAD 7421		
HB - 4321	FL - MW - 101	[illegible]	LITER GLASS AMBER	6 x 1 l	4°C	TPH(ext) EC/MS JP-4 & DIESEL, PNAs 8270	FOR LAB USE ONLY	
HB - 4321		[illegible]	LITER POLY	1 x 1 l	HNO_3/4°C	LEAD 7421		
HB - 4321	↓ ↓	[illegible]	VOA	8 x 40 ml	HCl/4°C	TPH(prg) EC/MS GAS, BTEX 8020	FOR LAB USE ONLY	
							FOR LAB USE ONLY	

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*See back of form for special instructions

MCA 3/15/91

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 524462
Page 1 of 1

Project Name/No. 1 Hamilton AAF/
Sample Team Members 2 ITSI
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 2 Weeks

Samples Shipment Date 7 7/28/96
Lab Destination 8 APPL Inc.
Lab Contact 9 Glen Brown
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 Federal Express

Bill to: 5 ~~USACE SPD Laboratory~~
~~25 Liberty Ship Way~~
~~Sausalito, CA 94965~~

Report to: 10 USACE SPD Laboratory
25 Liberty Ship Way
Sausalito, CA 94965

White: To accompany samples
Yellow: Held copy

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4312	WATER TRIP BLANK	25 FEB 1991 / NA	VOA	6x40ml	HCl / 4°C	TPH(gas) BTEX 8021	FOR LAB USE ONLY	
HB-4315	WATER GRAB FROM WELL MW-104	/ 0920	VOA	8x40ml	HCl / 4°C	TPH(gas) BTEX 8020		
HB-4315	↓	/	LITER GLASS AMBER	6x1	4°C	TPH(ex) JP-4 & DIESEL PNA's 8270		
HB-4315	↓	↓ / 0920	1 LITER POLY	1x1	HNO3 / 4°C	LEAD 7421		
							FOR LAB USE ONLY	

COPY

Special Instructions: 23

Possible Hazard Identification: 24
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: 25
Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required: 26 2 Weeks
Normal ☐ Rush ☐

QC Level: 27
I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

*See back of form for special instructions.

MCA 3/15/91

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document 1 52
Page 1 of ____

Project Name/No. 1 Hamilton AAF/762538
Sample Team Members 2 ITSI / JA, DE, MB
Profit Center No. 3
Project Manager 4 Dennis Robinson
Purchase Order No. 6
Required Report Date 11 14 day

Samples Shipment Date 7 / /96
Lab Destination 8 Quanterra West Sacramento
Lab Contact 9 ~~Calvin Tanaka~~ KRIS ROGERS RG 3-24-97
Project Contact/Phone 12 Todd McIntyre (415) 883-6386
Carrier/Waybill No. 13 White Cotton

Bill to: 5 IT Corporation, Hamilton AAF, Bldg. 86, Novato, CA 94949
Report to: 10 Todd McIntyre, Hamilton AAF, Bldg. 86, Novato, CA 94949

White: To accompany samples

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Preservative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
HB-4322	WATER-TRIP BLANK	24 MARCH 1997 / N.A.	VOA's	6x40ml	4°C/HCl	TPH(prg)8015GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4323	WATER-EQUIPMENT RINSATE BLACK MTL: LOT 60730	/ 1350	VOA's	8x40ml	4°C/HCl	TPH(prg)8015 GAS, BTEX 8020		
HB-4323	↓	/ 1350	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for DIESEL/JP-4, PNA's 8270		
HB-4323	↓	/ 1350	LITER POLY	1x1l	4°C/HNO_3	LEAD 7421		
HB-4324	WATER-TRIP BLANK	25 MARCH 1997 / N.A.	VOA's	6x40ml	HCl/4°C	TPH(prg)8015GAS, BTEX 8020	FOR LAB USE ONLY	
HB-4325	WATER-BRAC PCL HILL PL-MW-105	/ 0725	VOA's	8x40ml	HCl/4°C	TPH(prg)8015 GAS, BTEX 8020		
HB-4325	↓	/ 0725	LITER GLASS AMBER	6x1l	4°C	TPH(ext)8015M for DIESEL/JP-4, PNA's 8270		
HB-4325	↓	/ 0725	LITER POLY	1x1l	HNO_3/4°C	LEAD 7421		

Special Instructions: 23

Sample Disposal: 25 Return to Client ☐ Disposal by Lab ☒ Archive ____ (mos.)

Possible Hazard Identification: 24 Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Turnaround Time Required: 26 14 day Normal ☐ Rush ☐

QC Level: 27 I. ☐ II. ☐ III. ☐ Project Specific (specify): Per CDQMP

1. Relinquished by 28 (Signature/Affiliation)	Date: Time:	1. Received by 28 (Signature/Affiliation)	Date: Time:
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29

MCA 3/15/9

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD (cont.)*

Reference Document No. 524443
Page 3 of ___

Project Name Hamilton AAF

Project No. 762538

Samples Shipment Date ___

ONE CONTAINER PER LINE

Sample 14 Number	Sample 15 Description/Type	Date/Time 16 Collected	Container 17 Type	Sample 18 Volume	Pre-19 servative	Requested Testing 20 Program	Condition on 21 Receipt	Disposal 22 Record No.
HB-4332	WATER- BRAC POL HILL PL-MW-114	25 March 1997/ 1600	LITER POLY	1x1 l	HNO_3 4°C	LEAD 7421		
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	
							FOR LAB USE ONLY	

White: To accompany samples Yellow: Field copy

HCA 3-15-91

Quanterra

Purgeable Volatile Organics
Method 8260

Client Name: IT Corporation - Hamilton Army Airfield
Client ID: HB-6339
LAB ID: 304265-0002-SA
Matrix: AQUEOUS
Authorized: 18 FEB 99

Sampled: 18 FEB 99
Prepared: NA

Received: 18 FEB 99
Analyzed: 02 MAR 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Methyl-t-butyl ether (MTBE)	ND	ug/L	2.0	

Surrogate	Recovery	Acceptable Range
1,2-Dichloroethane-d4	85 %	76 - 114
Toluene-d8	96 %	88 - 110
4-Bromofluorobenzene	91 %	86 - 115

MW-107

NA = Not Applicable
ND = Not Detected

Reported By: Pan, Yun

Approved By: Karin Yee

The cover letter is an integral part of this report.
Rev 230787

APPENDIX E

Validated Data

Source: IT, 1999 (Appendix E)

Appendix E
Validated Soil, Rock, and Groundwater Analytical Data

POL AREA SAMPLE TRACKING LOG
Hamilton AAF Project #762538
SORTED BY SAMPLE ID

COC #	Lab	Sample ID	S C	Location	Activity	Area	Depth (ft)	Bottom or Sidewall	Soil	Sample Purpose	Matrix	Collection Date	Shipping Date	Analyses Requested (EPA / ASTM Method #)	Analyses Codes	Remarks
495655	QWS	HB-4037		Trip Blank	POL Area				NA	TB	Water	10-Oct-95	11-Oct-96	8015/8020	A C	TB to Quanterra
495655	QWS	HB-4039		SB-POLA-118	POL Area		4.5'		R	Reg	Soil	10-Oct-96	11-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4060		Trip Blank	POL Area				NA	TB	Water	28-Oct-96	29-Oct-96	8015/8020	A C	TB to Quanterra
524415	QWS	HB-4061		SB-POLA-104	POL Area		1.5'		F	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4062		SB-POLA-104	POL Area		6'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4063		SB-POLA-104	POL Area		8.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4064		SB-POLA-104	POL Area		10.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4065		SB-POLA-102	POL Area		2'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4066		Equipment Rinse	POL Area				NA	ER	Water	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4067		SB-POLA-103	POL Area		2.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4068		SB-POLA-103	POL Area		4'		R	FD	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4067
524415	QWS	HB-4069		SB-POLA-103	POL Area		6.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524410	APPL	HB-4070		Trip Blank	POL Area				NA	TB	Water	28-Oct-96	29-Oct-96	8015/8020	A C	TB to APPL
524415	QWS	HB-4071		SB-POLA-101	POL Area		2'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524410	APPL	HB-4072		SB-POLA-101	POL Area		3.5'		R	QA	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	QA of HB-4071
524415	QWS	HB-4073		SB-POLA-101	POL Area		6.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4074		SB-POLA-101	POL Area		7.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524432	QWS	HB-4103		SR-POLA-001	POL Area		0'		R	Reg	Rock	6-Nov-96	6-Nov-96	8015M/8270/PCB-8080	A B D	
524448	QWS	HB-4292		Trip Blank	POL Area				NA	TB	Water	26-Feb-97	27-Feb-97	8015/8020	A C	
524448	QWS	HB-4293		PL-MW-105	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4294		PL-MW-106	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4295		PL-MW-106	POL Area				NA	FD	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4294
524448	QWS	HB-4296		PL-MW-108	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4297		PL-MW-111A	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4298		PL-MW-111B	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4299		PL-MW-107	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4300		PL-MW-112B	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4301		Trip Blank	POL Area				NA	TB	Water	27-Feb-97	28-Feb-97	8015/8020	A C	
524447	QWS	HB-4302		PL-MW-113C	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4303		MW-POLA-119	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4304		MW-POLA-117B	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4305		PL-MW-116	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4306		MW-POLA-120	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4307		PL-MW-112A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4308		PL-MW-103	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4309		PL-MW-113A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4310		PL-MW-109	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524447	QWS	HB-4311		MW-POLA-117A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524467	QWS	HB-4312		Trip Blank	POL Area				NA	TB	Water	28-Feb-97	28-Feb-97	8015/8020	A C	
524462	APPL	HB-4313		Trip Blank	POL Area				NA	TB	Water	28-Feb-97	28-Feb-97	8015/8020	A C	
524467	QWS	HB-4314		PL-MW-104	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524462	APPL	HB-4315		PL-MW-104	POL Area				NA	QA	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	QA of HB-4314
524467	QWS	HB-4316		MW-POLA-118	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	

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POL AREA SAMPLE TRACKING LOG
Hamilton AAF Project #762538
SORTED BY SAMPLE ID

COC #	Lab	Sample ID	S C	Location	Activity	Area	Depth (ft)	Bottom or Sidewall	Soil	Sample Purpose	Matrix	Collection Date	Shipping Date	Analyses Requested (EPA / ASTM Method #)	Analyses Codes	Remarks
524467	QWS	HB-4317		MW-POLA-118	POL Area				NA	FD	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4316
524467	QWS	HB-4318		PL-MW-115	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524467	QWS	HB-4319		PL-MW-114	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524467	QWS	HB-4320		MW-POLA-121	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524467	QWS	HB-4321		PL-MW-101	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4322		Trip Blank	POL Area				NA	TB	Water	24-Mar-97	26-Mar-97	8015/8020	A C	
524443	QWS	HB-4323		Equipment Rinse	POL Area				NA	ER	Water	24-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	Black Mtn. Dist. Water Lot #60730
524443	QWS	HB-4324		Trip Blank	POL Area				NA	Discarded	Water	25-Mar-97	Discard	8015/8020	A C	
524443	QWS	HB-4325		PL-MW-105	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4326		PL-MW-106	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4327		PL-MW-108	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4328		PL-MW-109	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4329		PL-MW-107	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4330		PL-MW-112A	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4331		PL-MW-114	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524443	QWS	HB-4332		PL-MW-114	POL Area				NA	FD	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	FD of HB-4331
524444	QWS	HB-4333		Trip Blank	POL Area				NA	TB	Water	26-Mar-97	27-Mar-97	8015/8020	A C	
524460	APPL	HB-4334		Trip Blank	POL Area				NA	TB	Water	26-Mar-97	26-Mar-97	8015/8020	A C	
524444	QWS	HB-4335		PL-MW-116	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4336		MW-POLA-117B	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4337		PL-MW-104	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524460	APPL	HB-4338		PL-MW-104	POL Area				NA	QA	Water	26-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	QA of HB-4337
524444	QWS	HB-4339		PL-MW-111A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4340		PL-MW-115	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4341		MW-POLA-118	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4342		PL-MW-113C	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4343		PL-MW-113A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8020/Lead 7421	A C E	
524444	QWS	HB-4344		MW-POLA-117A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4345		MW-POLA-121	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524444	QWS	HB-4346		PL-MW-111B	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8020	A C	
524445	QWS	HB-4347		Trip Blank	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4348		PL-MW-101	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4349		PL-MW-112B	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4350		MW-POLA-119	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4351		MW-POLA-120	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4352		PL-MW-103	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4353		PL-MW-103	POL Area				NA	FD	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	FD of HB-4352

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POL AREA SAMP TRACKING LOG
Hamilton AAF Project #762538
SORTED BY LOCATION

COC #	Lab	Sample ID	S C	Location	Activity	Area	Depth (ft)	Bottom or Sidewall	Soil	Sample Purpose	Matrix	Collection Date	Shipping Date	Analyses Requested (EPA / ASTM Method #)	Analyses Codes	Remarks
524415	QWS	HB-4066		Equipment Rinse	POL Area				NA	ER	Water	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4323		Equipment Rinse	POL Area				NA	ER	Water	24-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	Black Mtn. Dist. Water Lot #60730
524447	QWS	HB-4311		MW-POLA-117A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4344		MW-POLA-117A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8020/Lead 7421	A C E	
524447	QWS	HB-4304		MW-POLA-117B	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4336		MW-POLA-117B	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524467	QWS	HB-4316		MW-POLA-118	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524467	QWS	HB-4317		MW-POLA-118	POL Area				NA	FD	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4316
524444	QWS	HB-4341		MW-POLA-118	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4303		MW-POLA-119	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524445	QWS	HB-4350		MW-POLA-119	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4306		MW-POLA-120	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524445	QWS	HB-4351		MW-POLA-120	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524467	QWS	HB-4320		MW-POLA-121	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4345		MW-POLA-121	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524467	QWS	HB-4321		PL-MW-101	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524445	QWS	HB-4348		PL-MW-101	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4308		PL-MW-103	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524445	QWS	HB-4352		PL-MW-103	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524445	QWS	HB-4353		PL-MW-103	POL Area				NA	FD	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	FD of HB-4352
524467	QWS	HB-4314		PL-MW-104	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524462	APPL	HB-4315		PL-MW-104	POL Area				NA	QA	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	QA of HB-4314
524444	QWS	HB-4337		PL-MW-104	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524460	APPL	HB-4338		PL-MW-104	POL Area				NA	QA	Water	26-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	QA of HB-4337
524448	QWS	HB-4293		PL-MW-105	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4325		PL-MW-105	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4294		PL-MW-106	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524448	QWS	HB-4295		PL-MW-106	POL Area				NA	FD	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4294
524443	QWS	HB-4326		PL-MW-106	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4299		PL-MW-107	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4329		PL-MW-107	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4296		PL-MW-108	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4327		PL-MW-108	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4310		PL-MW-109	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4328		PL-MW-109	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4297		PL-MW-111A	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4339		PL-MW-111A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4298		PL-MW-111B	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4346		PL-MW-111B	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4307		PL-MW-112A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4330		PL-MW-112A	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524448	QWS	HB-4300		PL-MW-112B	POL Area				NA	Reg	Water	26-Feb-97	27-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524445	QWS	HB-4349		PL-MW-112B	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	

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POL AREA SAMP TRACKING LOG
Hamilton AAF Project #762538
SORTED BY LOCATION

COC #	Lab	Sample ID	S C	Location	Activity	Area	Depth (ft)	Bottom or Sidewall	Soil	Sample Purpose	Matrix	Collection Date	Shipping Date	Analyses Requested (EPA / ASTM Method #)	Analyses Codes	Remarks
524447	QWS	HB-4309		PL-MW-113A	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4343		PL-MW-113A	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4302		PL-MW-113C	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4342		PL-MW-113C	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524467	QWS	HB-4319		PL-MW-114	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524443	QWS	HB-4331		PL-MW-114	POL Area				NA	Reg	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	FD of HB-4331
524443	QWS	HB-4332		PL-MW-114	POL Area				NA	FD	Water	25-Mar-97	26-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524467	QWS	HB-4318		PL-MW-115	POL Area				NA	Reg	Water	28-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4340		PL-MW-115	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524447	QWS	HB-4305		PL-MW-116	POL Area				NA	Reg	Water	27-Feb-97	28-Feb-97	8015/8015M/8020/8270/7421	A B C D E	
524444	QWS	HB-4335		PL-MW-116	POL Area				NA	Reg	Water	26-Mar-97	27-Mar-97	8015/8015M/8020/8270/Lead 7421	A B C D E	
524415	QWS	HB-4071		SB-POLA-101	POL Area		2'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	QA of HB-4071
524410	APPL	HB-4072		SB-POLA-101	POL Area		3.5'		R	QA	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4073		SB-POLA-101	POL Area		6.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4074		SB-POLA-101	POL Area		7.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4065		SB-POLA-102	POL Area		2'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4067		SB-POLA-103	POL Area		2.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	FD of HB-4067
524415	QWS	HB-4068		SB-POLA-103	POL Area		4'		R	FD	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4069		SB-POLA-103	POL Area		6.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4061		SB-POLA-104	POL Area		1.5'		F	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4064		SB-POLA-104	POL Area		10.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4062		SB-POLA-104	POL Area		6'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
524415	QWS	HB-4063		SB-POLA-104	POL Area		8.5'		R	Reg	Soil	28-Oct-96	29-Oct-96	8015/8015M/8020/8270/7421	A B C D E	
495655	QWS	HB-4039		SB-POLA-118	POL Area		4.5'		R	Reg	Soil	10-Oct-96	11-Oct-96	8015M/8270/PCB-8080	A B D	
524432	QWS	HB-4103		SR-POLA-001	POL Area		0'		R	Reg	Rock	6-Nov-96	6-Nov-96	8015/8020	A C	TB to Quanterra
495655	QWS	HB-4037		Trip Blank	POL Area				NA	TB	Water	10-Oct-95	11-Oct-96	8015/8020	A C	TB to Quanterra
524415	QWS	HB-4060		Trip Blank	POL Area				NA	TB	Water	28-Oct-96	29-Oct-96	8015/8020	A C	TB to APPL
524410	APPL	HB-4070		Trip Blank	POL Area				NA	TB	Water	28-Oct-96	29-Oct-96	8015/8020	A C	
524448	QWS	HB-4292		Trip Blank	POL Area				NA	TB	Water	26-Feb-97	27-Feb-97	8015/8020	A C	
524447	QWS	HB-4301		Trip Blank	POL Area				NA	TB	Water	27-Feb-97	28-Feb-97	8015/8020	A C	
524467	QWS	HB-4312		Trip Blank	POL Area				NA	TB	Water	28-Feb-97	28-Feb-97	8015/8020	A C	
524462	APPL	HB-4313		Trip Blank	POL Area				NA	TB	Water	28-Feb-97	28-Feb-97	8015/8020	A C	
524443	QWS	HB-4322		Trip Blank	POL Area				NA	TB	Water	24-Mar-97	26-Mar-97	8015/8020	A C	
524443	QWS	HB-4324		Trip Blank	POL Area				NA	Discarded	Water	25-Mar-97	Discard	8015/8020	A C	
524444	QWS	HB-4333		Trip Blank	POL Area				NA	TB	Water	26-Mar-97	27-Mar-97	8015/8020	A C	
524460	APPL	HB-4334		Trip Blank	POL Area				NA	TB	Water	26-Mar-97	26-Mar-97	8015/8020	A C	
524445	QWS	HB-4347		Trip Blank	POL Area				NA	Reg	Water	27-Mar-97	27-Mar-97	8015/8020	A C	

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4293	PL-MW-105	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4293	PL-MW-105	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4293	PL-MW-105	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4293	PL-MW-105	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4293	PL-MW-105	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4293	PL-MW-105	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4293	PL-MW-105	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4293	PL-MW-105	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4293	PL-MW-105	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4293	PL-MW-105	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4294	PL-MW-106	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4294	PL-MW-106	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4294	PL-MW-106	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4294	PL-MW-106	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4294	PL-MW-106	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4294	PL-MW-106	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4294	PL-MW-106	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4294	PL-MW-106	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4294	PL-MW-106	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4294	PL-MW-106	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4295	PL-MW-106	26-Feb-97	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-4295	PL-MW-106	26-Feb-97	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	A
HB-4295	PL-MW-106	26-Feb-97	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-4295	PL-MW-106	26-Feb-97	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4295	PL-MW-106	26-Feb-97	METALS	SW7421	FD	LEAD	0.0032	MG/L	0.0032	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-4295	PL-MW-106	26-Feb-97	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4295	PL-MW-106	26-Feb-97	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-4295	PL-MW-106	26-Feb-97	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4295	PL-MW-106	26-Feb-97	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	A
HB-4295	PL-MW-106	26-Feb-97	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4296	PL-MW-108	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4296	PL-MW-108	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4296	PL-MW-108	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4296	PL-MW-108	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4296	PL-MW-108	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4296	PL-MW-108	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4296	PL-MW-108	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4296	PL-MW-108	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A

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Validated Groundwater Data
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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4296	PL-MW-108	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4296	PL-MW-108	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4297	PL-MW-111A	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4297	PL-MW-111A	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4297	PL-MW-111A	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4297	PL-MW-111A	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4297	PL-MW-111A	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4297	PL-MW-111A	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4297	PL-MW-111A	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4297	PL-MW-111A	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4297	PL-MW-111A	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4297	PL-MW-111A	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4298	PL-MW-111B	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4298	PL-MW-111B	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4298	PL-MW-111B	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4298	PL-MW-111B	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4298	PL-MW-111B	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4298	PL-MW-111B	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4298	PL-MW-111B	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4298	PL-MW-111B	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4298	PL-MW-111B	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4298	PL-MW-111B	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4299	PL-MW-107	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4299	PL-MW-107	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4299	PL-MW-107	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4299	PL-MW-107	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4299	PL-MW-107	26-Feb-97	METALS	SW7421	REG	LEAD	0.0035	MG/L	0.0032	S	AQ
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4299	PL-MW-107	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4299	PL-MW-107	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4299	PL-MW-107	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	56	UG/L	50	=	AQ
HB-4299	PL-MW-107	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-4299	PL-MW-107	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-4300	PL-MW-112B	26-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4300	PL-MW-112B	26-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4300	PL-MW-112B	26-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4300	PL-MW-112B	26-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4300	PL-MW-112B	26-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4300	PL-MW-112B	26-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4300	PL-MW-112B	26-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4300	PL-MW-112B	26-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4300	PL-MW-112B	26-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4300	PL-MW-112B	26-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4302	PL-MW-113C	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4302	PL-MW-113C	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4302	PL-MW-113C	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4302	PL-MW-113C	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4302	PL-MW-113C	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4302	PL-MW-113C	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4302	PL-MW-113C	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4302	PL-MW-113C	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	51	UG/L	50	=	AQ
HB-4302	PL-MW-113C	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4302	PL-MW-113C	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4303	MW-POLA-119	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4303	MW-POLA-119	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4303	MW-POLA-119	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4303	MW-POLA-119	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4303	MW-POLA-119	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4303	MW-POLA-119	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4303	MW-POLA-119	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4303	MW-POLA-119	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4303	MW-POLA-119	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4303	MW-POLA-119	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4303	MW-POLA-119	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4304	MW-POLA-117B	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4304	MW-POLA-117B	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4304	MW-POLA-117B	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4304	MW-POLA-117B	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4304	MW-POLA-117B	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4304	MW-POLA-117B	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4304	MW-POLA-117B	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4304	MW-POLA-117B	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4304	MW-POLA-117B	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4304	MW-POLA-117B	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4305	PL-MW-116	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4305	PL-MW-116	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4305	PL-MW-116	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4305	PL-MW-116	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4305	PL-MW-116	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4305	PL-MW-116	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4305	PL-MW-116	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4305	PL-MW-116	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4305	PL-MW-116	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4305	PL-MW-116	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4305	PL-MW-116	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4306	MW-POLA-120	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4306	MW-POLA-120	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4306	MW-POLA-120	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4306	MW-POLA-120	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4306	MW-POLA-120	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4306	MW-POLA-120	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4306	MW-POLA-120	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4306	MW-POLA-120	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4306	MW-POLA-120	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4306	MW-POLA-120	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4307	PL-MW-112A	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4307	PL-MW-112A	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4307	PL-MW-112A	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4307	PL-MW-112A	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4307	PL-MW-112A	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4307	PL-MW-112A	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4307	PL-MW-112A	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4307	PL-MW-112A	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	100	UG/L	50	=	AQ
HB-4307	PL-MW-112A	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4307	PL-MW-112A	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4308	PL-MW-103	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4308	PL-MW-103	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4308	PL-MW-103	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4308	PL-MW-103	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4308	PL-MW-103	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4308	PL-MW-103	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4308	PL-MW-103	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4308	PL-MW-103	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	110	UG/L	50	=	AQ
HB-4308	PL-MW-103	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4308	PL-MW-103	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4309	PL-MW-113A	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4309	PL-MW-113A	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4309	PL-MW-113A	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4309	PL-MW-113A	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4309	PL-MW-113A	27-Feb-97	METALS	SW7421	REG	LEAD	0.016	MG/L	0.016	Upq	AQ
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4309	PL-MW-113A	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4309	PL-MW-113A	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4309	PL-MW-113A	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	59	UG/L	50	=	AQ
HB-4309	PL-MW-113A	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4309	PL-MW-113A	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4310	PL-MW-109	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4310	PL-MW-109	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4310	PL-MW-109	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4310	PL-MW-109	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4310	PL-MW-109	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4310	PL-MW-109	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4310	PL-MW-109	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4310	PL-MW-109	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4310	PL-MW-109	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4310	PL-MW-109	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4311	MW-POLA-117A	27-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4311	MW-POLA-117A	27-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4311	MW-POLA-117A	27-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4311	MW-POLA-117A	27-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4311	MW-POLA-117A	27-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4311	MW-POLA-117A	27-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4311	MW-POLA-117A	27-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4311	MW-POLA-117A	27-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	53	UG/L	50	=	AQ
HB-4311	MW-POLA-117A	27-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4311	MW-POLA-117A	27-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4314	PL-MW-104	28-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4314	PL-MW-104	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4314	PL-MW-104	28-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4314	PL-MW-104	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4314	PL-MW-104	28-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4314	PL-MW-104	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4314	PL-MW-104	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4314	PL-MW-104	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	270	UG/L	50	=	AQ
HB-4314	PL-MW-104	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-4314	PL-MW-104	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	130	UG/L	50	=	CB
HB-4316	MW-POLA-118	28-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4316	MW-POLA-118	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4316	MW-POLA-118	28-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4316	MW-POLA-118	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4316	MW-POLA-118	28-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4316	MW-POLA-118	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4316	MW-POLA-118	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4316	MW-POLA-118	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4316	MW-POLA-118	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4316	MW-POLA-118	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4317	MW-POLA-118	28-Feb-97	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-4317	MW-POLA-118	28-Feb-97	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	A
HB-4317	MW-POLA-118	28-Feb-97	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-4317	MW-POLA-118	28-Feb-97	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4317	MW-POLA-118	28-Feb-97	METALS	SW7421	FD	LEAD	0.0032	MG/L	0.0032	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-4317	MW-POLA-118	28-Feb-97	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4317	MW-POLA-118	28-Feb-97	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-4317	MW-POLA-118	28-Feb-97	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4317	MW-POLA-118	28-Feb-97	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	AQ
HB-4317	MW-POLA-118	28-Feb-97	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-4318	PL-MW-115	28-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4318	PL-MW-115	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4318	PL-MW-115	28-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4318	PL-MW-115	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4318	PL-MW-115	28-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4318	PL-MW-115	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4318	PL-MW-115	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4318	PL-MW-115	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	140	UG/L	50	=	AQ
HB-4318	PL-MW-115	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4318	PL-MW-115	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4319	PL-MW-114	28-Feb-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4319	PL-MW-114	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4319	PL-MW-114	28-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4319	PL-MW-114	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4319	PL-MW-114	28-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4319	PL-MW-114	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4319	PL-MW-114	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4319	PL-MW-114	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4319	PL-MW-114	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4319	PL-MW-114	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4320	MW-POLA-121	28-Feb-97	BTEX	SW8020	REG	BENZENE	2.7	UG/L	1		A
HB-4320	MW-POLA-121	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	7.3	UG/L	1		A
HB-4320	MW-POLA-121	28-Feb-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4320	MW-POLA-121	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	7.7	UG/L	1		A
HB-4320	MW-POLA-121	28-Feb-97	METALS	SW7421	REG	LEAD	0.006	MG/L	0.0032		A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A

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HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4320	MW-POLA-121	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4320	MW-POLA-121	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4320	MW-POLA-121	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	580	UG/L	50	=	AQ
HB-4320	MW-POLA-121	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-4320	MW-POLA-121	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	480	UG/L	50	=	CB
HB-4321	PL-MW-101	28-Feb-97	BTEX	SW8020	REG	BENZENE	5	UG/L	10	UR	CR
HB-4321	PL-MW-101	28-Feb-97	BTEX	SW8020	REG	ETHYLBENZENE	78	UG/L	10		CR
HB-4321	PL-MW-101	28-Feb-97	BTEX	SW8020	REG	TOLUENE	5	UG/L	10	U	CR
HB-4321	PL-MW-101	28-Feb-97	BTEX	SW8020	REG	XYLENE (TOTAL)	140	UG/L	10		CR
HB-4321	PL-MW-101	28-Feb-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	62	UG/L	20		AQ
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	47	UG/L	20		A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4321	PL-MW-101	28-Feb-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	500	UG/L	500	U	A
HB-4321	PL-MW-101	28-Feb-97	TPHEXT	8015D	REG	DIESEL FUEL	500	UG/L	500	UR	A
HB-4321	PL-MW-101	28-Feb-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	6600	UG/L	500	=	AQ
HB-4321	PL-MW-101	28-Feb-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4321	PL-MW-101	28-Feb-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	4800	UG/L	50	=	AQ
HB-4325	PL-MW-105	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4325	PL-MW-105	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4325	PL-MW-105	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4325	PL-MW-105	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4325	PL-MW-105	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE .	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4325	PL-MW-105	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4325	PL-MW-105	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4325	PL-MW-105	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4325	PL-MW-105	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4325	PL-MW-105	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4326	PL-MW-106	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4326	PL-MW-106	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4326	PL-MW-106	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4326	PL-MW-106	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4326	PL-MW-106	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4326	PL-MW-106	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4326	PL-MW-106	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4326	PL-MW-106	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4326	PL-MW-106	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4326	PL-MW-106	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4327	PL-MW-108	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4327	PL-MW-108	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4327	PL-MW-108	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4327	PL-MW-108	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4327	PL-MW-108	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4327	PL-MW-108	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4327	PL-MW-108	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4327	PL-MW-108	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4327	PL-MW-108	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4327	PL-MW-108	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4328	PL-MW-109	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4328	PL-MW-109	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4328	PL-MW-109	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4328	PL-MW-109	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4328	PL-MW-109	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4328	PL-MW-109	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4328	PL-MW-109	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4328	PL-MW-109	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4328	PL-MW-109	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4328	PL-MW-109	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4329	PL-MW-107	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4329	PL-MW-107	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4329	PL-MW-107	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4329	PL-MW-107	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4329	PL-MW-107	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4329	PL-MW-107	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4329	PL-MW-107	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4329	PL-MW-107	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4329	PL-MW-107	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4329	PL-MW-107	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4330	PL-MW-112A	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4330	PL-MW-112A	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4330	PL-MW-112A	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4330	PL-MW-112A	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4330	PL-MW-112A	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4330	PL-MW-112A	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4330	PL-MW-112A	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4330	PL-MW-112A	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4330	PL-MW-112A	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4330	PL-MW-112A	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4331	PL-MW-114	25-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4331	PL-MW-114	25-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4331	PL-MW-114	25-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4331	PL-MW-114	25-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4331	PL-MW-114	25-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4331	PL-MW-114	25-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4331	PL-MW-114	25-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4331	PL-MW-114	25-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4331	PL-MW-114	25-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4331	PL-MW-114	25-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4332	PL-MW-114	25-Mar-97	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-4332	PL-MW-114	25-Mar-97	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	A
HB-4332	PL-MW-114	25-Mar-97	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-4332	PL-MW-114	25-Mar-97	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4332	PL-MW-114	25-Mar-97	METALS	SW7421	FD	LEAD	0.0032	MG/L	0.0032	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-4332	PL-MW-114	25-Mar-97	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4332	PL-MW-114	25-Mar-97	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-4332	PL-MW-114	25-Mar-97	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4332	PL-MW-114	25-Mar-97	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	A
HB-4332	PL-MW-114	25-Mar-97	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4335	PL-MW-116	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4335	PL-MW-116	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4335	PL-MW-116	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4335	PL-MW-116	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4335	PL-MW-116	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4335	PL-MW-116	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4335	PL-MW-116	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4335	PL-MW-116	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4335	PL-MW-116	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4335	PL-MW-116	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4336	MW-POLA-117B	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4336	MW-POLA-117B	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4336	MW-POLA-117B	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4336	MW-POLA-117B	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4336	MW-POLA-117B	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4336	MW-POLA-117B	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4336	MW-POLA-117B	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4336	MW-POLA-117B	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4336	MW-POLA-117B	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4336	MW-POLA-117B	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4337	PL-MW-104	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4337	PL-MW-104	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4337	PL-MW-104	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4337	PL-MW-104	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4337	PL-MW-104	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A

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HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4337	PL-MW-104	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4337	PL-MW-104	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4337	PL-MW-104	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	230	UG/L	50		AQ
HB-4337	PL-MW-104	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4337	PL-MW-104	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	180	UG/L	50		AQ
HB-4339	PL-MW-111A	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4339	PL-MW-111A	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4339	PL-MW-111A	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4339	PL-MW-111A	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4339	PL-MW-111A	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4339	PL-MW-111A	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4339	PL-MW-111A	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4339	PL-MW-111A	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4339	PL-MW-111A	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4339	PL-MW-111A	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4340	PL-MW-115	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4340	PL-MW-115	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-4340	PL-MW-115	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4340	PL-MW-115	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4340	PL-MW-115	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4340	PL-MW-115	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4340	PL-MW-115	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4340	PL-MW-115	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	97	UG/L	50		AQ
HB-4340	PL-MW-115	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4340	PL-MW-115	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4341	MW-POLA-118	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4341	MW-POLA-118	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4341	MW-POLA-118	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4341	MW-POLA-118	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4341	MW-POLA-118	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4341	MW-POLA-118	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4341	MW-POLA-118	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4341	MW-POLA-118	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4341	MW-POLA-118	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4341	MW-POLA-118	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4342	PL-MW-113C	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4342	PL-MW-113C	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4342	PL-MW-113C	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4342	PL-MW-113C	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4342	PL-MW-113C	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4342	PL-MW-113C	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4342	PL-MW-113C	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4342	PL-MW-113C	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4342	PL-MW-113C	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4342	PL-MW-113C	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4343	PL-MW-113A	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4343	PL-MW-113A	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4343	PL-MW-113A	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4343	PL-MW-113A	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4343	PL-MW-113A	26-Mar-97	METALS	SW7421	REG	LEAD	0.016	MG/L	0.016	Up	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4343	PL-MW-113A	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4343	PL-MW-113A	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4343	PL-MW-113A	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4343	PL-MW-113A	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4343	PL-MW-113A	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4344	MW-POLA-117A	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4344	MW-POLA-117A	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4344	MW-POLA-117A	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4344	MW-POLA-117A	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4344	MW-POLA-117A	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4344	MW-POLA-117A	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4344	MW-POLA-117A	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4344	MW-POLA-117A	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4344	MW-POLA-117A	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4344	MW-POLA-117A	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4345	MW-POLA-121	26-Mar-97	BTEX	SW8020	REG	BENZENE	4.6	UG/L	1		A
HB-4345	MW-POLA-121	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	10	UG/L	1		AQ
HB-4345	MW-POLA-121	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4345	MW-POLA-121	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	13	UG/L	1		AQ
HB-4345	MW-POLA-121	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	40	UG/L	40	UG	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	30	UG/L	30	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	40	UG/L	40	U	A
HB-4345	MW-POLA-121	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4345	MW-POLA-121	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4345	MW-POLA-121	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	730	UG/L	50		AQ
HB-4345	MW-POLA-121	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	630	UG/L	50		AQ
HB-4345	MW-POLA-121	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4346	PL-MW-111B	26-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4346	PL-MW-111B	26-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4346	PL-MW-111B	26-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4346	PL-MW-111B	26-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4346	PL-MW-111B	26-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4346	PL-MW-111B	26-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4346	PL-MW-111B	26-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4346	PL-MW-111B	26-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4346	PL-MW-111B	26-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4346	PL-MW-111B	26-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4348	PL-MW-101	27-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4348	PL-MW-101	27-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	77	UG/L	10	R	AQ
HB-4348	PL-MW-101	27-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4348	PL-MW-101	27-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	120	UG/L	10	R	AQ
HB-4348	PL-MW-101	27-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	40	UG/L	40	UG	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	30	UG/L	30	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	40	UG/L	40	U	A
HB-4348	PL-MW-101	27-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	500	UG/L	500	U	A
HB-4348	PL-MW-101	27-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	500	UG/L	500	UR	A
HB-4348	PL-MW-101	27-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	3900	UG/L	500		AQ
HB-4348	PL-MW-101	27-Mar-97	TPHPRG	8015G	REG	GASOLINE	4600	UG/L	50		AQ
HB-4348	PL-MW-101	27-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4349	PL-MW-112B	27-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4349	PL-MW-112B	27-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4349	PL-MW-112B	27-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4349	PL-MW-112B	27-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4349	PL-MW-112B	27-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4349	PL-MW-112B	27-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4349	PL-MW-112B	27-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4349	PL-MW-112B	27-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	110	UG/L	50		AQ
HB-4349	PL-MW-112B	27-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4349	PL-MW-112B	27-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4350	MW-POLA-119	27-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4350	MW-POLA-119	27-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4350	MW-POLA-119	27-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4350	MW-POLA-119	27-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-4350	MW-POLA-119	27-Mar-97	METALS	SW7421	REG	LEAD	0.0041	MG/L	0.0032		A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4350	MW-POLA-119	27-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4350	MW-POLA-119	27-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4350	MW-POLA-119	27-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4350	MW-POLA-119	27-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4350	MW-POLA-119	27-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4351	MW-POLA-120	27-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4351	MW-POLA-120	27-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4351	MW-POLA-120	27-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4351	MW-POLA-120	27-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4351	MW-POLA-120	27-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4351	MW-POLA-120	27-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4351	MW-POLA-120	27-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4351	MW-POLA-120	27-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4351	MW-POLA-120	27-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4351	MW-POLA-120	27-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4352	PL-MW-103	27-Mar-97	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-4352	PL-MW-103	27-Mar-97	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4352	PL-MW-103	27-Mar-97	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-4352	PL-MW-103	27-Mar-97	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4352	PL-MW-103	27-Mar-97	METALS	SW7421	REG	LEAD	0.0032	MG/L	0.0032	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-4352	PL-MW-103	27-Mar-97	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4352	PL-MW-103	27-Mar-97	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-4352	PL-MW-103	27-Mar-97	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4352	PL-MW-103	27-Mar-97	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-4352	PL-MW-103	27-Mar-97	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4353	PL-MW-103	27-Mar-97	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-4353	PL-MW-103	27-Mar-97	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-4353	PL-MW-103	27-Mar-97	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-4353	PL-MW-103	27-Mar-97	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-4353	PL-MW-103	27-Mar-97	METALS	SW7421	FD	LEAD	0.0032	MG/L	0.0032	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-4353	PL-MW-103	27-Mar-97	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-4353	PL-MW-103	27-Mar-97	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-4353	PL-MW-103	27-Mar-97	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-4353	PL-MW-103	27-Mar-97	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	A
HB-4353	PL-MW-103	27-Mar-97	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5714	SW-POLA-2	17-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5714	SW-POLA-2	17-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5714	SW-POLA-2	17-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5714	SW-POLA-2	17-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	192	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	192	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	300	REG	CHLORIDE	203	MG/L	100	o	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	300	REG	SULFATE	178	MG/L	10	o	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5714	SW-POLA-2	17-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	CALCIUM	45.8	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	CALCIUM	44.6	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	IRON	0.4	MG/L	0.05		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	IRON	1.3	MG/L	0.05		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	MAGNESIUM	33	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	MAGNESIUM	32.7	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	MANGANESE	0.066	MG/L	0.01		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	MANGANESE	0.12	MG/L	0.01		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	POTASSIUM	7	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	POTASSIUM	7.7	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	SODIUM	170	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	METALS	SW6010	REG	SODIUM	173	MG/L	5		A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5714	SW-POLA-2	17-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5714	SW-POLA-2	17-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5714	SW-POLA-2	17-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	65	UG/L	50		AQ
HB-5714	SW-POLA-2	17-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5714	SW-POLA-2	17-Mar-98	TPHPRG	8015M	REG	METHANE	0.0037	MG/L	0.002		A
HB-5714	SW-POLA-2	17-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5715	SW-POLA-1	17-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	154	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	154	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	300	REG	CHLORIDE	262	MG/L	100	o	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	300	REG	SULFATE	239	MG/L	10	o	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5715	SW-POLA-1	17-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	CALCIUM	43.7	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	CALCIUM	43.7	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	IRON	1.4	MG/L	0.05		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	IRON	1.5	MG/L	0.05		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	MAGNESIUM	38.7	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	MAGNESIUM	38.5	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	MANGANESE	0.3	MG/L	0.01		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	MANGANESE	0.15	MG/L	0.01		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	POTASSIUM	8.1	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	POTASSIUM	8.6	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	SODIUM	218	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	METALS	SW6010	REG	SODIUM	218	MG/L	5		A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5715	SW-POLA-1	17-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5715	SW-POLA-1	17-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5715	SW-POLA-1	17-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	69	UG/L	50		AQ
HB-5715	SW-POLA-1	17-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5715	SW-POLA-1	17-Mar-98	TPHPRG	8015M	REG	METHANE	0.0043	MG/L	0.002		A
HB-5715	SW-POLA-1	17-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	277	MG/L	5		A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	277	MG/L	5		A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	300	REG	CHLORIDE	34.9	MG/L	2	o	A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.5	MG/L	0.05		A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	300	REG	SULFATE	122	MG/L	10	o	A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5718	MW-POLA-117B	19-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	CALCIUM	16.2	MG/L	5		A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	CALCIUM	15.7	MG/L	5		A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	IRON	0.044	MG/L	0.05	J	AQ
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MANGANESE	0.0034	MG/L	0.01	J	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MANGANESE	0.0026	MG/L	0.01	J	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	SODIUM	179	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5718	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	SODIUM	192	MG/L	5		A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5718	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5718	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5718	MW-POLA-117B	19-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5718	MW-POLA-117B	19-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5718	MW-POLA-117B	19-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	275	MG/L	5		A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	275	MG/L	5		A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	300	REG	CHLORIDE	35	MG/L	2	o	A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.49	MG/L	0.05		A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	300	REG	SULFATE	125	MG/L	10	o	A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5719	MW-POLA-117B	19-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	CALCIUM	16.1	MG/L	5		A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	CALCIUM	15.9	MG/L	5		A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	IRON	0.036	MG/L	0.05	J	AQ
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MANGANESE	0.003	MG/L	0.01	J	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	MANGANESE	0.002	MG/L	0.01	J	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	SODIUM	172	MG/L	5		A
HB-5719	MW-POLA-117B	19-Mar-98	METALS	SW6010	REG	SODIUM	173	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5719	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5719	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5719	MW-POLA-117B	19-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5719	MW-POLA-117B	19-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5719	MW-POLA-117B	19-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5719	MW-POLA-117B	19-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5722	PL-MW-105	24-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5722	PL-MW-105	24-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5722	PL-MW-105	24-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5722	PL-MW-105	24-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	239	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	239	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	300	REG	CHLORIDE	20	MG/L	1		A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.45	MG/L	0.05		A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	300	REG	SULFATE	56.3	MG/L	10	o	A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5722	PL-MW-105	24-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	CALCIUM	47.4	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	CALCIUM	48	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	IRON	0.13	MG/L	0.05		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	IRON	0.0089	MG/L	0.05	J	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	MAGNESIUM	11.4	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	MAGNESIUM	11.8	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	MANGANESE	0.0038	MG/L	0.01	J	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	MANGANESE	0.0015	MG/L	0.01	J	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	SODIUM	84.7	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	METALS	SW6010	REG	SODIUM	87.1	MG/L	5		A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5722	PL-MW-105	24-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5722	PL-MW-105	24-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5722	PL-MW-105	24-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5722	PL-MW-105	24-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5722	PL-MW-105	24-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5722	PL-MW-105	24-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5725	PL-MW-109	25-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5725	PL-MW-109	25-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5725	PL-MW-109	25-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5725	PL-MW-109	25-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	413	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	413	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	300	REG	CHLORIDE	29.1	MG/L	10	o	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	300	REG	SULFATE	48	MG/L	10	o	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5725	PL-MW-109	25-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	CALCIUM	78.3	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	CALCIUM	79.4	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	IRON	0.036	MG/L	0.05	J	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	MAGNESIUM	27.4	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	MAGNESIUM	27.8	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	MANGANESE	0.0022	MG/L	0.01	J	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	SODIUM	106	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	METALS	SW6010	REG	SODIUM	107	MG/L	5		A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5725	PL-MW-109	25-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5725	PL-MW-109	25-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5725	PL-MW-109	25-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5725	PL-MW-109	25-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5725	PL-MW-109	25-Mar-98	TPHPRG	8015M	REG	METHANE	0.0056	MG/L	0.002		A
HB-5725	PL-MW-109	25-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5726	PL-MW-108	25-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5726	PL-MW-108	25-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5726	PL-MW-108	25-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5726	PL-MW-108	25-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	248	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	248	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	300	REG	CHLORIDE	6.4	MG/L	1		A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	300	REG	SULFATE	31.4	MG/L	10	o	A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5726	PL-MW-108	25-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	CALCIUM	45.6	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	CALCIUM	47.3	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	IRON	0.026	MG/L	0.05	J	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	IRON	0.0075	MG/L	0.05	J	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	MAGNESIUM	22.5	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	MAGNESIUM	23.3	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	MANGANESE	0.0039	MG/L	0.01	J	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	MANGANESE	0.0031	MG/L	0.01	J	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	SODIUM	49.5	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	METALS	SW6010	REG	SODIUM	50	MG/L	5		A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5726	PL-MW-108	25-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5726	PL-MW-108	25-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5726	PL-MW-108	25-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5726	PL-MW-108	25-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5726	PL-MW-108	25-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5726	PL-MW-108	25-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	388	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	388	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	300	REG	CHLORIDE	413	MG/L	100	o	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	300	REG	SULFATE	234	MG/L	100	o	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5728	PL-MW-111B	26-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	CALCIUM	106	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	CALCIUM	111	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	IRON	0.015	MG/L	0.05	J	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	MAGNESIUM	38.1	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	MAGNESIUM	39.5	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	MANGANESE	0.0083	MG/L	0.01	J	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	MANGANESE	0.0061	MG/L	0.01	J	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	SODIUM	394	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	METALS	SW6010	REG	SODIUM	408	MG/L	5		A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5728	PL-MW-111B	26-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5728	PL-MW-111B	26-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5728	PL-MW-111B	26-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5728	PL-MW-111B	26-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5728	PL-MW-111B	26-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5728	PL-MW-111B	26-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	242	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	242	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	300	REG	CHLORIDE	114	MG/L	5	o	A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.62	MG/L	0.05		A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	300	REG	SULFATE	119	MG/L	5	o	A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5730	MW-POLA-120	30-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	CALCIUM	90.1	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	CALCIUM	103	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	IRON	0.01	MG/L	0.05	J	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	MAGNESIUM	18.9	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	MAGNESIUM	20.1	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	MANGANESE	0.0024	MG/L	0.01	J	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	MANGANESE	0.0026	MG/L	0.01	J	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	SODIUM	85.1	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	METALS	SW6010	REG	SODIUM	87.1	MG/L	5		A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5730	MW-POLA-120	30-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5730	MW-POLA-120	30-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5730	MW-POLA-120	30-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5730	MW-POLA-120	30-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5730	MW-POLA-120	30-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5730	MW-POLA-120	30-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	337	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	337	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	300	REG	CHLORIDE	147	MG/L	10	o	A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.22	MG/L	0.05		A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	300	REG	SULFATE	191	MG/L	10	o	A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5731	MW-POLA-119	30-Mar-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	CALCIUM	106	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	CALCIUM	103	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	MAGNESIUM	32.2	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	MAGNESIUM	32.2	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	MANGANESE	0.007	MG/L	0.01	J	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	MANGANESE	0.012	MG/L	0.01		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	SODIUM	151	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	METALS	SW6010	REG	SODIUM	153	MG/L	5		A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5731	MW-POLA-119	30-Mar-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5731	MW-POLA-119	30-Mar-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5731	MW-POLA-119	30-Mar-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5731	MW-POLA-119	30-Mar-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5731	MW-POLA-119	30-Mar-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5731	MW-POLA-119	30-Mar-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5733	PL-MW-111A	01-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5733	PL-MW-111A	01-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5733	PL-MW-111A	01-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5733	PL-MW-111A	01-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	369	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	369	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.2	MG/L	0.2	UG	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	300	REG	CHLORIDE	398	MG/L	100	o	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	300	REG	SULFATE	249	MG/L	10	o	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5733	PL-MW-111A	01-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	CALCIUM	96.8	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	CALCIUM	99.4	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	IRON	0.17	MG/L	0.05		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	33.9	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	33.6	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.038	MG/L	0.01		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.043	MG/L	0.01		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	SODIUM	355	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	METALS	SW6010	REG	SODIUM	357	MG/L	5		A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5733	PL-MW-111A	01-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5734	PL-MW-111A	01-Apr-98	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-5734	PL-MW-111A	01-Apr-98	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	A
HB-5734	PL-MW-111A	01-Apr-98	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-5734	PL-MW-111A	01-Apr-98	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	310.1	FD	ALKALINITY, BICARB. AS CACO3	368	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	310.1	FD	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	310.1	FD	ALKALINITY, TOTAL AS CACO3	368	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	350.1	FD	AMMONIA	0.1	MG/L	0.1	U	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	300	FD	CHLORIDE	393	MG/L	100	o	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	353.2	FD	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	300	FD	SULFATE	252	MG/L	10	o	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	376.2	FD	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5734	PL-MW-111A	01-Apr-98	GENCHEM	365.3	FD	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	CALCIUM	94.1	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	CALCIUM	97.6	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	IRON	0.05	MG/L	0.05	U	A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	IRON	0.14	MG/L	0.05		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	MAGNESIUM	32.6	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	MAGNESIUM	32.8	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	MANGANESE	0.038	MG/L	0.01		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	MANGANESE	0.042	MG/L	0.01		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	SODIUM	337	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	METALS	SW6010	FD	SODIUM	345	MG/L	5		A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHPRG	8015M	FD	METHANE	0.002	MG/L	0.002	U	A
HB-5734	PL-MW-111A	01-Apr-98	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5735	PL-MW-106	01-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5735	PL-MW-106	01-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5735	PL-MW-106	01-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5735	PL-MW-106	01-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	493	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	493	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	300	REG	CHLORIDE	72.5	MG/L	5	o	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.092	MG/L	0.05		A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	300	REG	SULFATE	105	MG/L	5	o	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5735	PL-MW-106	01-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	CALCIUM	38.9	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	CALCIUM	39.1	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	16.2	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	15.6	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.001	MG/L	0.01	J	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	SODIUM	244	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	METALS	SW6010	REG	SODIUM	237	MG/L	5		A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5735	PL-MW-106	01-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5735	PL-MW-106	01-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5735	PL-MW-106	01-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5735	PL-MW-106	01-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5735	PL-MW-106	01-Apr-98	TPHPRG	8015M	REG	METHANE	0.0028	MG/L	0.002		A
HB-5735	PL-MW-106	01-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5736	MW-POLA-118	01-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5736	MW-POLA-118	01-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5736	MW-POLA-118	01-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5736	MW-POLA-118	01-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	273	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	273	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	300	REG	CHLORIDE	224	MG/L	10	o	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.9	MG/L	0.05		A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	300	REG	SULFATE	173	MG/L	10	o	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5736	MW-POLA-118	01-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	CALCIUM	164	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	CALCIUM	177	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	40.4	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	MAGNESIUM	42	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.0048	MG/L	0.01	J	A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	MANGANESE	0.33	MG/L	0.01		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	POTASSIUM	7.8	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	POTASSIUM	8.5	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	SODIUM	71.6	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	METALS	SW6010	REG	SODIUM	74.8	MG/L	5		A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5736	MW-POLA-118	01-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5738	PL-MW-113C	02-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5738	PL-MW-113C	02-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5738	PL-MW-113C	02-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5738	PL-MW-113C	02-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	596	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	596	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	300	REG	CHLORIDE	92	MG/L	10	o	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	300	REG	SULFATE	277	MG/L	10	o	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5738	PL-MW-113C	02-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	CALCIUM	5.9	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	CALCIUM	6.4	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	IRON	0.0079	MG/L	0.05	J	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	IRON	0.057	MG/L	0.05		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	MAGNESIUM	5.2	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	MAGNESIUM	5.4	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	MANGANESE	0.0039	MG/L	0.01	J	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	SODIUM	435	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	METALS	SW6010	REG	SODIUM	462	MG/L	5		A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5738	PL-MW-113C	02-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5738	PL-MW-113C	02-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5738	PL-MW-113C	02-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5738	PL-MW-113C	02-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5738	PL-MW-113C	02-Apr-98	TPHPRG	8015M	REG	METHANE	0.0096	MG/L	0.002		A
HB-5738	PL-MW-113C	02-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5741	PL-MW-116	06-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5741	PL-MW-116	06-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5741	PL-MW-116	06-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5741	PL-MW-116	06-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	165	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	165	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	300	REG	CHLORIDE	8	MG/L	1		A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	1.3	MG/L	0.05		A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	300	REG	SULFATE	26	MG/L	1		A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5741	PL-MW-116	06-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	CALCIUM	34.1	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	CALCIUM	33.5	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	IRON	0.03	MG/L	0.05	J	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	IRON	0.011	MG/L	0.05	J	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	MAGNESIUM	9.9	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	MAGNESIUM	9.2	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	MANGANESE	0.002	MG/L	0.01	J	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	MANGANESE	0.0023	MG/L	0.01	J	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	SODIUM	41.4	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	METALS	SW6010	REG	SODIUM	38.7	MG/L	5		A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A

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HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5741	PL-MW-116	06-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5741	PL-MW-116	06-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5741	PL-MW-116	06-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5741	PL-MW-116	06-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5741	PL-MW-116	06-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5741	PL-MW-116	06-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	654	MG/L	5		A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	654	MG/L	5		A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	300	REG	CHLORIDE	785	MG/L	100	o	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	300	REG	SULFATE.	6360	MG/L	1000	o	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5743	PL-MW-113A	07-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	CALCIUM	161	MG/L	5		A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	CALCIUM	158	MG/L	20	Q	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	IRON	0.033	MG/L	0.05	J	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	IRON	0.2	MG/L	0.2	UQ	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	Uq	AQ
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	Uq	AQ
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	MAGNESIUM	192	MG/L	5		A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	MAGNESIUM	180	MG/L	20	Q	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	MANGANESE	0.47	MG/L	0.01		A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	MANGANESE	0.44	MG/L	0.04	Q	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	POTASSIUM	8.4	MG/L	5		A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	POTASSIUM	20	MG/L	20	UQ	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	SODIUM	3260	MG/L	50	o	A
HB-5743	PL-MW-113A	07-Apr-98	METALS	SW6010	REG	SODIUM	3260	MG/L	50	o	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5743	PL-MW-113A	07-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5743	PL-MW-113A	07-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5743	PL-MW-113A	07-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5743	PL-MW-113A	07-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5743	PL-MW-113A	07-Apr-98	TPHPRG	8015M	REG	METHANE	0.0022	MG/L	0.002		A
HB-5743	PL-MW-113A	07-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	403	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	403	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	300	REG	CHLORIDE	41.1	MG/L	10	o	A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.19	MG/L	0.05		A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	300	REG	SULFATE	175	MG/L	10	o	A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5744	PL-MW-112B	07-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	CALCIUM	14.1	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	CALCIUM	13.4	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	IRON	0.014	MG/L	0.05	J	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	IRON	0.0064	MG/L	0.05	J	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	MAGNESIUM	5.9	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	MAGNESIUM	5.3	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	MANGANESE	0.0016	MG/L	0.01	J	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	MANGANESE	0.002	MG/L	0.01	J	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	SODIUM	288	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	METALS	SW6010	REG	SODIUM	254	MG/L	5		A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5744	PL-MW-112B	07-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5744	PL-MW-112B	07-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5744	PL-MW-112B	07-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5744	PL-MW-112B	07-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5744	PL-MW-112B	07-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5744	PL-MW-112B	07-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5744	PL-MW-112B	07-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	320	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	320	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	300	REG	CHLORIDE	47.8	MG/L	10	o	A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.27	MG/L	0.05		A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	300	REG	SULFATE	137	MG/L	10	o	A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5748	MW-POLA-117A	08-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.093	MG/L	0.05		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	CALCIUM	26.8	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	CALCIUM	26.2	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	IRON	0.15	MG/L	0.05		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	IRON	0.01	MG/L	0.05	J	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	MAGNESIUM	8.5	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	MAGNESIUM	8.5	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	MANGANESE	0.006	MG/L	0.01	J	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	MANGANESE	0.002	MG/L	0.01	J	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	SODIUM	206	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	METALS	SW6010	REG	SODIUM	214	MG/L	5		A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5748	MW-POLA-117A	08-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5748	MW-POLA-117A	08-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5748	MW-POLA-117A	08-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5748	MW-POLA-117A	08-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5748	MW-POLA-117A	08-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5748	MW-POLA-117A	08-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5748	MW-POLA-117A	08-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5750	PL-MW-103	09-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5750	PL-MW-103	09-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5750	PL-MW-103	09-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5750	PL-MW-103	09-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	205	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	205	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	300	REG	CHLORIDE	12.8	MG/L	1		A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.24	MG/L	0.05		A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	300	REG	SULFATE	68.7	MG/L	5	o	A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5750	PL-MW-103	09-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	CALCIUM	71.8	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	CALCIUM	66.8	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	IRON	0.66	MG/L	0.05		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	IRON	0.013	MG/L	0.05	J	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	MAGNESIUM	17.4	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	MAGNESIUM	16.5	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	MANGANESE	4.2	MG/L	0.01		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	MANGANESE	3.1	MG/L	0.01		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	SODIUM	31.9	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	METALS	SW6010	REG	SODIUM	31.5	MG/L	5		A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5750	PL-MW-103	09-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5750	PL-MW-103	09-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5750	PL-MW-103	09-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	200	UG/L	50		AQ
HB-5750	PL-MW-103	09-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5750	PL-MW-103	09-Apr-98	TPHPRG	8015M	REG	METHANE	0.0039	MG/L	0.002		A
HB-5750	PL-MW-103	09-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5751	PL-MW-107	09-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5751	PL-MW-107	09-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5751	PL-MW-107	09-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5751	PL-MW-107	09-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	749	MG/L	5		A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	749	MG/L	5		A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	300	REG	CHLORIDE	26.6	MG/L	2	o	A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.1	MG/L	0.05		A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	300	REG	SULFATE	261	MG/L	10	o	A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5751	PL-MW-107	09-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.36	MG/L	0.05		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	CALCIUM	5.4	MG/L	5		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	CALCIUM	5.2	MG/L	5		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	IRON	0.62	MG/L	0.05		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	IRON	0.041	MG/L	0.05	J	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	MANGANESE	0.012	MG/L	0.01		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	MANGANESE	0.0034	MG/L	0.01	J	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	SODIUM	484	MG/L	5		A
HB-5751	PL-MW-107	09-Apr-98	METALS	SW6010	REG	SODIUM	468	MG/L	10	o	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5751	PL-MW-107	09-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5751	PL-MW-107	09-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5751	PL-MW-107	09-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5751	PL-MW-107	09-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5751	PL-MW-107	09-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5751	PL-MW-107	09-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5753	PL-MW-115	14-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5753	PL-MW-115	14-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5753	PL-MW-115	14-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5753	PL-MW-115	14-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	301	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	301	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	300	REG	CHLORIDE	19.9	MG/L	5	o	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	300	REG	SULFATE	130	MG/L	5	o	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5753	PL-MW-115	14-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	CALCIUM	116	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	CALCIUM	118	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	IRON	0.026	MG/L	0.05	J	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	IRON	0.051	MG/L	0.05		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	18.8	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	18.8	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.2	MG/L	0.01		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.2	MG/L	0.01		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	SODIUM	37.7	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	METALS	SW6010	REG	SODIUM	38.9	MG/L	5		A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5753	PL-MW-115	14-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5753	PL-MW-115	14-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5753	PL-MW-115	14-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	100	UG/L	50		AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5753	PL-MW-115	14-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5753	PL-MW-115	14-Apr-98	TPHPRG	8015M	REG	METHANE	0.058	MG/L	0.002		A
HB-5753	PL-MW-115	14-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5754	PL-MW-115	14-Apr-98	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	AQ
HB-5754	PL-MW-115	14-Apr-98	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5754	PL-MW-115	14-Apr-98	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	AQ
HB-5754	PL-MW-115	14-Apr-98	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	310.1	FD	ALKALINITY, BICARB. AS CACO3	300	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	310.1	FD	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	310.1	FD	ALKALINITY, TOTAL AS CACO3	300	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	350.1	FD	AMMONIA	0.1	MG/L	0.1	U	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	300	FD	CHLORIDE	19.6	MG/L	5	o	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	353.2	FD	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	300	FD	SULFATE	132	MG/L	5	o	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	376.2	FD	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5754	PL-MW-115	14-Apr-98	GENCHEM	365.3	FD	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	CALCIUM	114	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	CALCIUM	119	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	IRON	0.017	MG/L	0.05	J	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	IRON	0.06	MG/L	0.05		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	MAGNESIUM	18.5	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	MAGNESIUM	18.9	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	MANGANESE	0.2	MG/L	0.01		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	MANGANESE	0.21	MG/L	0.01		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	SODIUM	36.8	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	METALS	SW6010	FD	SODIUM	39.4	MG/L	5		A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-5754	PL-MW-115	14-Apr-98	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5754	PL-MW-115	14-Apr-98	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-5754	PL-MW-115	14-Apr-98	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	100	UG/L	50		AQ
HB-5754	PL-MW-115	14-Apr-98	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5754	PL-MW-115	14-Apr-98	TPHPRG	8015M	FD	METHANE	0.062	MG/L	0.002		A
HB-5754	PL-MW-115	14-Apr-98	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	445	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	445	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	300	REG	CHLORIDE	79.1	MG/L	10	o	A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.1	MG/L	0.05		A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	300	REG	SULFATE	357	MG/L	20	o	A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5756	PL-MW-112A	14-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	CALCIUM	30.9	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	CALCIUM	15.6	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	IRON	0.5	MG/L	0.05		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	17.2	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	9.8	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.1	MG/L	0.01		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.042	MG/L	0.01		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	SODIUM	276	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	METALS	SW6010	REG	SODIUM	384	MG/L	5		A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5756	PL-MW-112A	14-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5756	PL-MW-112A	14-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5756	PL-MW-112A	14-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5756	PL-MW-112A	14-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5756	PL-MW-112A	14-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5756	PL-MW-112A	14-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5758	PL-MW-114	14-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5758	PL-MW-114	14-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5758	PL-MW-114	14-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5758	PL-MW-114	14-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	176	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	176	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	300	REG	CHLORIDE	18.5	MG/L	5	o	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.057	MG/L	0.05		A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	300	REG	SULFATE	49	MG/L	5	o	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5758	PL-MW-114	14-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	CALCIUM	55.2	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	CALCIUM	59.8	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	IRON	0.59	MG/L	0.05		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	9.9	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	MAGNESIUM	10.6	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.0025	MG/L	0.01	J	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	MANGANESE	0.041	MG/L	0.01		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	SODIUM	31.2	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	METALS	SW6010	REG	SODIUM	34	MG/L	5		A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5758	PL-MW-114	14-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5760	MW-POLA-121	16-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5760	MW-POLA-121	16-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5760	MW-POLA-121	16-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5760	MW-POLA-121	16-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	128	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	128	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	300	REG	CHLORIDE	3.5	MG/L	1		A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	300	REG	SULFATE	15.4	MG/L	1		A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5760	MW-POLA-121	16-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.055	MG/L	0.05		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	CALCIUM	32.4	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	CALCIUM	32	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	IRON	0.27	MG/L	0.05		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	6.9	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	7.1	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.34	MG/L	0.01		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.33	MG/L	0.01		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	SODIUM	19.3	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	METALS	SW6010	REG	SODIUM	19	MG/L	5		A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5760	MW-POLA-121	16-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5760	MW-POLA-121	16-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5760	MW-POLA-121	16-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	100	UG/L	50		AQ
HB-5760	MW-POLA-121	16-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5760	MW-POLA-121	16-Apr-98	TPHPRG	8015M	REG	METHANE	0.12	MG/L	0.01		A
HB-5760	MW-POLA-121	16-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5761	PL-MW-104	16-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5761	PL-MW-104	16-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5761	PL-MW-104	16-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5761	PL-MW-104	16-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	509	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	509	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	300	REG	CHLORIDE	24.5	MG/L	5	o	A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	300	REG	SULFATE	10.4	MG/L	1		A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5761	PL-MW-104	16-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	CALCIUM	150	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	CALCIUM	153	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	IRON	0.67	MG/L	0.05		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	IRON	0.007	MG/L	0.05	J	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	25.5	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	27	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.67	MG/L	0.01		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.69	MG/L	0.01		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	SODIUM	32.9	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	METALS	SW6010	REG	SODIUM	33.9	MG/L	5		A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5761	PL-MW-104	16-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5761	PL-MW-104	16-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5761	PL-MW-104	16-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	220	UG/L	50		AQ
HB-5761	PL-MW-104	16-Apr-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5761	PL-MW-104	16-Apr-98	TPHPRG	8015M	REG	METHANE	0.04	MG/L	0.002		A
HB-5761	PL-MW-104	16-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	67	UG/L	50		AQ
HB-5762	PL-MW-101	16-Apr-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5762	PL-MW-101	16-Apr-98	BTEX	SW8020	REG	ETHYLBENZENE	46	UG/L	1		AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5762	PL-MW-101	16-Apr-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5762	PL-MW-101	16-Apr-98	BTEX	SW8020	REG	XYLENE (TOTAL)	52	UG/L	2	G	AQ
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	516	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	516	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	300	REG	CHLORIDE	62.4	MG/L	10	o	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	300	REG	SULFATE	52.8	MG/L	10	o	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5762	PL-MW-101	16-Apr-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.076	MG/L	0.05		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	CALCIUM	177	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	CALCIUM	177	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	IRON	1.3	MG/L	0.05		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	IRON	0.21	MG/L	0.05		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	24.7	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	MAGNESIUM	25.4	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.55	MG/L	0.01		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	MANGANESE	0.54	MG/L	0.01		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	SODIUM	55.5	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	METALS	SW6010	REG	SODIUM	55.1	MG/L	5		A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	21	UG/L	20		A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20		A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5762	PL-MW-101	16-Apr-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	AQ
HB-5762	PL-MW-101	16-Apr-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	500	UG/L	500	U	A
HB-5762	PL-MW-101	16-Apr-98	TPHEXT	8015D	REG	DIESEL FUEL	500	UG/L	500	Uo	A
HB-5762	PL-MW-101	16-Apr-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	2100	UG/L	500		AQ
HB-5762	PL-MW-101	16-Apr-98	TPHPRG	8015G	REG	GASOLINE	2700	UG/L	50		A
HB-5762	PL-MW-101	16-Apr-98	TPHPRG	8015M	REG	METHANE	2.8	MG/L	0.1		A
HB-5762	PL-MW-101	16-Apr-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5777	SW-POLA-2	11-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	METALS	SW7421	REG	LEAD	0.015	MG/L	0.015	Up	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5777	SW-POLA-2	11-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5777	SW-POLA-2	11-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5777	SW-POLA-2	11-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5777	SW-POLA-2	11-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5778	SW-POLA-1	11-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5778	SW-POLA-1	11-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5778	SW-POLA-1	11-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5778	SW-POLA-1	11-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5778	SW-POLA-1	11-Jun-98	METALS	SW7421	REG	LEAD	0.015	MG/L	0.015	Up	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5778	SW-POLA-1	11-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	AQ
HB-5778	SW-POLA-1	11-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5778	SW-POLA-1	11-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5778	SW-POLA-1	11-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5778	SW-POLA-1	11-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5778	SW-POLA-1	11-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5781	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5781	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5781	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5781	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5781	MW-POLA-117B	15-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5781	MW-POLA-117B	15-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5781	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5781	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5781	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5781	MW-POLA-117B	15-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5781	MW-POLA-117B	15-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5782	MW-POLA-117B	15-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5782	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5782	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5782	MW-POLA-117B	15-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5782	MW-POLA-117B	15-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5782	MW-POLA-117B	15-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5783	MW-POLA-108B	16-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5783	MW-POLA-108B	16-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5783	MW-POLA-108B	16-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5783	MW-POLA-108B	16-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5783	MW-POLA-108B	16-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5784	MW-POLA-111B	16-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5784	MW-POLA-111B	16-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5784	MW-POLA-111B	16-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5784	MW-POLA-111B	16-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5784	MW-POLA-111B	16-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5786	PL-MW-105	17-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5786	PL-MW-105	17-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5786	PL-MW-105	17-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5786	PL-MW-105	17-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5786	PL-MW-105	17-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5786	PL-MW-105	17-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5786	PL-MW-105	17-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5786	PL-MW-105	17-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5786	PL-MW-105	17-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5786	PL-MW-105	17-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5786	PL-MW-105	17-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5787	PL-MW-106	18-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5787	PL-MW-106	18-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5787	PL-MW-106	18-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5787	PL-MW-106	18-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5787	PL-MW-106	18-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5787	PL-MW-106	18-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5787	PL-MW-106	18-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5787	PL-MW-106	18-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5787	PL-MW-106	18-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	53	UG/L	50		AQ
HB-5787	PL-MW-106	18-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5787	PL-MW-106	18-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5788	PL-MW-109	18-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5788	PL-MW-109	18-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5788	PL-MW-109	18-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5788	PL-MW-109	18-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5788	PL-MW-109	18-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5788	PL-MW-109	18-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5788	PL-MW-109	18-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5788	PL-MW-109	18-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5788	PL-MW-109	18-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5788	PL-MW-109	18-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5788	PL-MW-109	18-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5789	PL-MW-120	18-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5789	PL-MW-120	18-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5789	PL-MW-120	18-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5789	PL-MW-120	18-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5789	PL-MW-120	18-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5789	PL-MW-120	18-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5789	PL-MW-120	18-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5789	PL-MW-120	18-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5789	PL-MW-120	18-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5789	PL-MW-120	18-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5789	PL-MW-120	18-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5792	MW-POLA-119	23-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5792	MW-POLA-119	23-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5792	MW-POLA-119	23-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5794	MW-POLA-11B	24-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5794	MW-POLA-11B	24-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5794	MW-POLA-11B	24-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5794	MW-POLA-11B	24-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5794	MW-POLA-11B	24-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5794	MW-POLA-11B	24-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5794	MW-POLA-11B	24-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	AQ
HB-5794	MW-POLA-11B	24-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5794	MW-POLA-11B	24-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5794	MW-POLA-11B	24-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5794	MW-POLA-11B	24-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5796	PL-MW-113C	25-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5796	PL-MW-113C	25-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5796	PL-MW-113C	25-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5796	PL-MW-113C	25-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5796	PL-MW-113C	25-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5797	PL-MW-116	25-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5797	PL-MW-116	25-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5797	PL-MW-116	25-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5797	PL-MW-116	25-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5797	PL-MW-116	25-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5797	PL-MW-116	25-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5797	PL-MW-116	25-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5797	PL-MW-116	25-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5797	PL-MW-116	25-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5797	PL-MW-116	25-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5797	PL-MW-116	25-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	Uq	AQ
HB-5798	PL-MW-113A	25-Jun-98	METALS	SW7421	REG	LEAD - T	0.015	MG/L	0.015	Up	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5798	PL-MW-113A	25-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5798	PL-MW-113A	25-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5798	PL-MW-113A	25-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5798	PL-MW-113A	25-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5798	PL-MW-113A	25-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5800	PL-MW-111A	29-Jun-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5800	PL-MW-111A	29-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5800	PL-MW-111A	29-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5800	PL-MW-111A	29-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5800	PL-MW-111A	29-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5800	PL-MW-111A	29-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	METALS	SW7421	FD	LEAD - D	0.003	MG/L	0.003	U	A
HB-5801	PL-MW-111A	29-Jun-98	METALS	SW7421	FD	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-5801	PL-MW-111A	29-Jun-98	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5801	PL-MW-111A	29-Jun-98	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-5801	PL-MW-111A	29-Jun-98	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5801	PL-MW-111A	29-Jun-98	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	AQ
HB-5801	PL-MW-111A	29-Jun-98	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5802	PL-MW-114	30-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5802	PL-MW-114	30-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5802	PL-MW-114	30-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5802	PL-MW-114	30-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5802	PL-MW-114	30-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5802	PL-MW-114	30-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5802	PL-MW-114	30-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5802	PL-MW-114	30-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5802	PL-MW-114	30-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5802	PL-MW-114	30-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5802	PL-MW-114	30-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5803	PL-MW-117A	30-Jun-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5803	PL-MW-117A	30-Jun-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5803	PL-MW-117A	30-Jun-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5803	PL-MW-117A	30-Jun-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5803	PL-MW-117A	30-Jun-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5803	PL-MW-117A	30-Jun-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5805	PL-MW-112B	01-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5805	PL-MW-112B	01-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5805	PL-MW-112B	01-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5805	PL-MW-112B	01-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5805	PL-MW-112B	01-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5805	PL-MW-112B	01-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	Uq	AQ
HB-5806	PL-MW-112A	01-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5806	PL-MW-112A	01-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5806	PL-MW-112A	01-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5806	PL-MW-112A	01-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5806	PL-MW-112A	01-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5807	PL-MW-107	01-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5807	PL-MW-107	01-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5807	PL-MW-107	01-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5807	PL-MW-107	01-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5807	PL-MW-107	01-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5807	PL-MW-107	01-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5807	PL-MW-107	01-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5807	PL-MW-107	01-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5807	PL-MW-107	01-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5807	PL-MW-107	01-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5807	PL-MW-107	01-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5808	PL-MW-103	02-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5808	PL-MW-103	02-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5808	PL-MW-103	02-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5808	PL-MW-103	02-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5808	PL-MW-103	02-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5808	PL-MW-103	02-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	AQ
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5808	PL-MW-103	02-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5808	PL-MW-103	02-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5808	PL-MW-103	02-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5808	PL-MW-103	02-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5808	PL-MW-103	02-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5808	PL-MW-103	02-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	76	UG/L	50		AQ
HB-5810	PL-MW-104	06-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5810	PL-MW-104	06-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5810	PL-MW-104	06-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5810	PL-MW-104	06-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5810	PL-MW-104	06-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5810	PL-MW-104	06-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5810	PL-MW-104	06-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5810	PL-MW-104	06-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5810	PL-MW-104	06-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5810	PL-MW-104	06-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5810	PL-MW-104	06-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5811	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5811	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5811	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5811	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5811	PL-MW-115	07-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	Uq	AQ
HB-5811	PL-MW-115	07-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5811	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5811	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5811	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5811	PL-MW-115	07-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5811	PL-MW-115	07-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5812	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5812	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5812	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5812	PL-MW-115	07-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5812	PL-MW-115	07-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5812	PL-MW-115	07-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	AQ
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5812	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5812	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5812	PL-MW-115	07-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5812	PL-MW-115	07-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5812	PL-MW-115	07-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5813	MW-POLA-121	07-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5813	MW-POLA-121	07-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5813	MW-POLA-121	07-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5813	MW-POLA-121	07-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5813	MW-POLA-121	07-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5815	PL-MW-101	09-Jul-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5815	PL-MW-101	09-Jul-98	BTEX	SW8020	REG	ETHYLBENZENE	42	UG/L	1		AQ
HB-5815	PL-MW-101	09-Jul-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5815	PL-MW-101	09-Jul-98	BTEX	SW8020	REG	XYLENE (TOTAL)	34	UG/L	1		AQ
HB-5815	PL-MW-101	09-Jul-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	Uq	AQ
HB-5815	PL-MW-101	09-Jul-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	Uq	AQ
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5815	PL-MW-101	09-Jul-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5815	PL-MW-101	09-Jul-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5815	PL-MW-101	09-Jul-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	1600	UG/L	50		AQ
HB-5815	PL-MW-101	09-Jul-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5815	PL-MW-101	09-Jul-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	2300	UG/L	50		AQ
HB-5818	PL-MW-105	11-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5818	PL-MW-105	11-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5818	PL-MW-105	11-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5818	PL-MW-105	11-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	242	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	242	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	300	REG	CHLORIDE	18.8	MG/L	5	o	A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.5	MG/L	0.05		A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	300	REG	SULFATE	58.4	MG/L	5	o	A
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5818	PL-MW-105	11-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	CALCIUM	47.7	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	CALCIUM	45.6	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	IRON	0.0047	MG/L	0.05	J	A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	IRON	0.59	MG/L	0.05		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	Uq	AQ
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	MAGNESIUM	10.4	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	MAGNESIUM	10.9	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	MANGANESE	0.0066	MG/L	0.01	J	A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	MANGANESE	0.023	MG/L	0.01		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	SODIUM	84.1	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	METALS	SW6010	REG	SODIUM	79.3	MG/L	5		A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	AQ
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5818	PL-MW-105	11-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5819	MW-POLA-117B	11-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	264	MG/L	5		AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	264	MG/L	5		AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	300	REG	CHLORIDE	33.6	MG/L	10	o	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.54	MG/L	0.05		AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	300	REG	SULFATE	125	MG/L	10	o	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	CALCIUM	15.9	MG/L	5		A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	CALCIUM	15.2	MG/L	5		A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	IRON	0.012	MG/L	0.05	J	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	IRON	0.33	MG/L	0.05		A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	MANGANESE	0.0014	MG/L	0.01	J	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	MANGANESE	0.013	MG/L	0.01		A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	SODIUM	180	MG/L	5		A
HB-5819	MW-POLA-117B	11-Sep-98	METALS	SW6010	REG	SODIUM	174	MG/L	5		A
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5819	MW-POLA-117B	11-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	FD	ALKALINITY, BICARB. AS CACO3	264	MG/L	5		AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	FD	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	310.1	FD	ALKALINITY, TOTAL AS CACO3	264	MG/L	5		AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	350.1	FD	AMMONIA	0.1	MG/L	0.1	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	300	FD	CHLORIDE	34.4	MG/L	10	o	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	353.2	FD	NITRATE PLUS NITRITE AS N	0.55	MG/L	0.05		AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	300	FD	SULFATE	125	MG/L	10	o	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	376.2	FD	SULFIDE, TOTAL	0.05	MG/L	0.05	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	GENCHEM	365.3	FD	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	CALCIUM	16.6	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	CALCIUM	15.6	MG/L	5		A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	IRON	0.011	MG/L	0.05	J	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	IRON	0.17	MG/L	0.05		A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	MAGNESIUM	5	MG/L	5	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	MAGNESIUM	5	MG/L	5	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	MANGANESE	0.0023	MG/L	0.01	J	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	MANGANESE	0.0078	MG/L	0.01	J	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	SODIUM	187	MG/L	5		A
HB-5820	MW-POLA-117B	11-Sep-98	METALS	SW6010	FD	SODIUM	173	MG/L	5		A
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHPRG	8015M	FD	METHANE	0.002	MG/L	0.002	U	AQ
HB-5820	MW-POLA-117B	11-Sep-98	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5822	PL-MW-108	14-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5822	PL-MW-108	14-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5822	PL-MW-108	14-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5822	PL-MW-108	14-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	462	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	462	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	300	REG	CHLORIDE	27.6	MG/L	10	o	A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.065	MG/L	0.05		A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	300	REG	SULFATE	63.9	MG/L	10	o	A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.5	MG/L	0.5	UG	A
HB-5822	PL-MW-108	14-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	CALCIUM - D	33.6	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	CALCIUM - T	33.4	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	IRON - D	0.035	MG/L	0.05	J	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	IRON - T	2.8	MG/L	0.05		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	MAGNESIUM - D	17.5	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	MAGNESIUM - T	17.8	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	MANGANESE - D	0.18	MG/L	0.01		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	MANGANESE - T	0.22	MG/L	0.01		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	POTASSIUM - D	5	MG/L	5	U	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	POTASSIUM - T	5	MG/L	5	U	A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	SODIUM - D	196	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	METALS	SW6010	REG	SODIUM - T	192	MG/L	5		A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5822	PL-MW-108	14-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5822	PL-MW-108	14-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5822	PL-MW-108	14-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5822	PL-MW-108	14-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5822	PL-MW-108	14-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5822	PL-MW-108	14-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	397	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	397	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	300	REG	CHLORIDE	435	MG/L	50	o	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	300	REG	SULFATE	250	MG/L	10	o	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5823	PL-MW-111B	14-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	CALCIUM - D	115	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	CALCIUM - T	107	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	IRON - D	0.0045	MG/L	0.05	J	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	IRON - T	0.0083	MG/L	0.05	J	A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW7421	REG	LEAD - D	0.003	MG/L	0.003	U	A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW7421	REG	LEAD - T	0.003	MG/L	0.003	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	MAGNESIUM - D	38.9	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	MAGNESIUM - T	36.7	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	MANGANESE - D	0.036	MG/L	0.01		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	MANGANESE - T	0.025	MG/L	0.01		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	POTASSIUM - D	5	MG/L	5	U	A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	POTASSIUM - T	5	MG/L	5	U	A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	SODIUM - D	380	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	METALS	SW6010	REG	SODIUM - T	359	MG/L	5		A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5823	PL-MW-111B	14-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5823	PL-MW-111B	14-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5823	PL-MW-111B	14-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5823	PL-MW-111B	14-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5823	PL-MW-111B	14-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5824	PL-MW-109	15-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5824	PL-MW-109	15-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5824	PL-MW-109	15-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5824	PL-MW-109	15-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	429	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	429	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	300	REG	CHLORIDE	31.1	MG/L	10	o	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	300	REG	SULFATE	51.1	MG/L	10	o	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5824	PL-MW-109	15-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	R
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	CALCIUM	70.7	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	CALCIUM	71.5	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	IRON	0.24	MG/L	0.05		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5824	PL-MW-109	15-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	AQ
HB-5824	PL-MW-109	15-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	MAGNESIUM	24.6	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	MAGNESIUM	25.4	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	MANGANESE	0.0025	MG/L	0.01	J	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	MANGANESE	0.007	MG/L	0.01	J	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	SODIUM	105	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	METALS	SW6010	REG	SODIUM	108	MG/L	5		A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5824	PL-MW-109	15-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5824	PL-MW-109	15-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5824	PL-MW-109	15-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5824	PL-MW-109	15-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5824	PL-MW-109	15-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5824	PL-MW-109	15-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	315	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	315	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	300	REG	CHLORIDE	169	MG/L	10	o	A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.35	MG/L	0.05		A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	300	REG	SULFATE	196	MG/L	10	o	A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5825	MW-POLA-119	15-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	R
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	CALCIUM	99	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	CALCIUM	100	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	IRON	0.0064	MG/L	0.05	J	A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	IRON	0.17	MG/L	0.05		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	AQ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	MAGNESIUM	30.8	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	MAGNESIUM	31.2	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	MANGANESE	0.013	MG/L	0.01		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	MANGANESE	0.06	MG/L	0.01		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	SODIUM	155	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	METALS	SW6010	REG	SODIUM	154	MG/L	5		A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5825	MW-POLA-119	15-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5825	MW-POLA-119	15-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5825	MW-POLA-119	15-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5825	MW-POLA-119	15-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5825	MW-POLA-119	15-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5827	PL-MW-106	16-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5827	PL-MW-106	16-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5827	PL-MW-106	16-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5827	PL-MW-106	16-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	514	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	514	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	300	REG	CHLORIDE	71.6	MG/L	10	o	A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.088	MG/L	0.05		A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	300	REG	SULFATE	107	MG/L	10	o	A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5827	PL-MW-106	16-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	R
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	CALCIUM	37.1	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	CALCIUM	36.2	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	IRON	0.12	MG/L	0.05		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	MAGNESIUM	14.3	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	MAGNESIUM	14.3	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	MANGANESE	0.006	MG/L	0.01	J	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	MANGANESE	0.0075	MG/L	0.01	J	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	SODIUM	252	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	METALS	SW6010	REG	SODIUM	250	MG/L	5		A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5827	PL-MW-106	16-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5827	PL-MW-106	16-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5827	PL-MW-106	16-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5827	PL-MW-106	16-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5827	PL-MW-106	16-Sep-98	TPHPRG	8015M	REG	METHANE	0.0046	MG/L	0.002		AQ
HB-5827	PL-MW-106	16-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5828	PL-MW-120	16-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5828	PL-MW-120	16-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5828	PL-MW-120	16-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5828	PL-MW-120	16-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	231	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	231	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	300	REG	CHLORIDE	145	MG/L	10	o	A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.9	MG/L	0.05		A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	300	REG	SULFATE	114	MG/L	10	o	A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5828	PL-MW-120	16-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	R
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	CALCIUM	98.3	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	CALCIUM	96.7	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	MAGNESIUM	22	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	MAGNESIUM	20.7	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	MANGANESE	0.0031	MG/L	0.01	J	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	MANGANESE	0.0097	MG/L	0.01	J	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	SODIUM	104	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	METALS	SW6010	REG	SODIUM	88.7	MG/L	5		A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5828	PL-MW-120	16-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5828	PL-MW-120	16-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5828	PL-MW-120	16-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5828	PL-MW-120	16-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5828	PL-MW-120	16-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5828	PL-MW-120	16-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5830	MW-POLA-118	17-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5830	MW-POLA-118	17-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5830	MW-POLA-118	17-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5830	MW-POLA-118	17-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	303	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	303	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	300	REG	CHLORIDE	246	MG/L	10	o	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	1	MG/L	0.05		A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	300	REG	SULFATE	219	MG/L	10	o	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5830	MW-POLA-118	17-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	189	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	189	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.0051	MG/L	0.05	J	CQ
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.3	MG/L	0.05		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	42.5	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	42.2	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.27	MG/L	0.01		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.43	MG/L	0.01		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5.7	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	6	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	66.2	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	66	MG/L	5		A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	AQ
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5830	MW-POLA-118	17-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5833	PL-MW-112B	21-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5833	PL-MW-112B	21-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5833	PL-MW-112B	21-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5833	PL-MW-112B	21-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	416	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	416	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	300	REG	CHLORIDE	43.9	MG/L	10	o	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.18	MG/L	0.05		A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	300	REG	SULFATE	202	MG/L	10	o	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5833	PL-MW-112B	21-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	R
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	CALCIUM	13.9	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	CALCIUM	13.8	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	MAGNESIUM	5.7	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	MAGNESIUM	5.7	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	SODIUM	262	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	METALS	SW6010	REG	SODIUM	262	MG/L	5		A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5833	PL-MW-112B	21-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5835	PL-MW-111A	22-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5835	PL-MW-111A	22-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5835	PL-MW-111A	22-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5835	PL-MW-111A	22-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	389	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	389	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	300	REG	CHLORIDE	404	MG/L	20	o	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	300	REG	SULFATE	270	MG/L	10	o	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5835	PL-MW-111A	22-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	CALCIUM	95.7	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	CALCIUM	94.9	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	IRON	0.53	MG/L	0.05		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	MAGNESIUM	31.3	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	MAGNESIUM	31.1	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	MANGANESE	0.032	MG/L	0.01		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	MANGANESE	0.058	MG/L	0.01		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	SODIUM	326	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	METALS	SW6010	REG	SODIUM	324	MG/L	5		A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5835	PL-MW-111A	22-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5835	PL-MW-111A	22-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5835	PL-MW-111A	22-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5835	PL-MW-111A	22-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5835	PL-MW-111A	22-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5835	PL-MW-111A	22-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5836	PL-MW-111A	22-Sep-98	BTEX	SW8020	FD	BENZENE	1	UG/L	1	U	A
HB-5836	PL-MW-111A	22-Sep-98	BTEX	SW8020	FD	ETHYLBENZENE	1	UG/L	1	U	A
HB-5836	PL-MW-111A	22-Sep-98	BTEX	SW8020	FD	TOLUENE	1	UG/L	1	U	A
HB-5836	PL-MW-111A	22-Sep-98	BTEX	SW8020	FD	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	310.1	FD	ALKALINITY, BICARB. AS CACO3	391	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	310.1	FD	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	310.1	FD	ALKALINITY, TOTAL AS CACO3	391	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	350.1	FD	AMMONIA	0.1	MG/L	0.1	U	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	300	FD	CHLORIDE	402	MG/L	20	o	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	353.2	FD	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	300	FD	SULFATE	261	MG/L	10	o	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	376.2	FD	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5836	PL-MW-111A	22-Sep-98	GENCHEM	365.3	FD	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	CALCIUM	95.2	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	CALCIUM	100	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	IRON	0.05	MG/L	0.05	U	A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	IRON	1.1	MG/L	0.05		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW7421	FD	LEAD	0.003	MG/L	0.003	U	A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	MAGNESIUM	31.3	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	MAGNESIUM	32.7	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	MANGANESE	0.048	MG/L	0.01		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	MANGANESE	0.096	MG/L	0.01		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	POTASSIUM	5	MG/L	5	U	A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	SODIUM	331	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	METALS	SW6010	FD	SODIUM	339	MG/L	5		A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	ACENAPHTHENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	ANTHRACENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	CHRYSENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	FLUORANTHENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	FLUORENE	15	UG/L	15	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	PHENANTHRENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	SEMIVOLS	SW8270	FD	PYRENE	20	UG/L	20	U	A
HB-5836	PL-MW-111A	22-Sep-98	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5836	PL-MW-111A	22-Sep-98	TPHEXT	8015D	FD	DIESEL FUEL	50	UG/L	50	U	A
HB-5836	PL-MW-111A	22-Sep-98	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5836	PL-MW-111A	22-Sep-98	TPHPRG	8015G	FD	GASOLINE	50	UG/L	50	U	A
HB-5836	PL-MW-111A	22-Sep-98	TPHPRG	8015M	FD	METHANE	0.002	MG/L	0.002	U	AQ
HB-5836	PL-MW-111A	22-Sep-98	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5837	PL-MW-116A	22-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5837	PL-MW-116A	22-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5837	PL-MW-116A	22-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5837	PL-MW-116A	22-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	166	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	166	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	300	REG	CHLORIDE	8.1	MG/L	1		A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.98	MG/L	0.05		A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	300	REG	SULFATE	28.7	MG/L	1		A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5837	PL-MW-116A	22-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	CALCIUM	32.8	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	CALCIUM	32.8	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	IRON	0.05	MG/L	0.05	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	IRON	0.17	MG/L	0.05		CQ
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	MAGNESIUM	9.5	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	MAGNESIUM	9.5	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	SODIUM	38.5	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	METALS	SW6010	REG	SODIUM	38.2	MG/L	5		A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	AQ
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	AQ
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5837	PL-MW-116A	22-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5837	PL-MW-116A	22-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5837	PL-MW-116A	22-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5837	PL-MW-116A	22-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5837	PL-MW-116A	22-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5837	PL-MW-116A	22-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5839	PL-MW-113C	23-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5839	PL-MW-113C	23-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5839	PL-MW-113C	23-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5839	PL-MW-113C	23-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	614	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	614	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	300	REG	CHLORIDE	99.5	MG/L	10	o	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	300	REG	SULFATE	282	MG/L	10	o	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5839	PL-MW-113C	23-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	5.7	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	5.9	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.05	MG/L	0.05	U	A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.092	MG/L	0.05		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	5	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	5.1	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.012	MG/L	0.01		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.011	MG/L	0.01		A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	425	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5839	PL-MW-113C	23-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	428	MG/L	5		A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5839	PL-MW-113C	23-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5839	PL-MW-113C	23-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5839	PL-MW-113C	23-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5839	PL-MW-113C	23-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5839	PL-MW-113C	23-Sep-98	TPHPRG	8015M	REG	METHANE	0.0059	MG/L	0.002		A
HB-5839	PL-MW-113C	23-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5840	PL-MW-103	23-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5840	PL-MW-103	23-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5840	PL-MW-103	23-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5840	PL-MW-103	23-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	240	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	240	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	300	REG	CHLORIDE	22.1	MG/L	2	o	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	300	REG	SULFATE	109	MG/L	5	o	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5840	PL-MW-103	23-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	84.9	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	85.8	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.21	MG/L	0.05		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.23	MG/L	0.05		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	20.2	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	20.3	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	1.8	MG/L	0.01		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	1.8	MG/L	0.01		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	34.5	MG/L	5		A
HB-5840	PL-MW-103	23-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	34.7	MG/L	5		A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5840	PL-MW-103	23-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5840	PL-MW-103	23-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5840	PL-MW-103	23-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5840	PL-MW-103	23-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5840	PL-MW-103	23-Sep-98	TPHPRG	8015M	REG	METHANE	0.01	MG/L	0.002		A
HB-5840	PL-MW-103	23-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5842	PL-MW-113A	24-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5842	PL-MW-113A	24-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5842	PL-MW-113A	24-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5842	PL-MW-113A	24-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	688	MG/L	5		A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	688	MG/L	5		A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	300	REG	CHLORIDE	818	MG/L	50	o	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	300	REG	SULFATE	7360	MG/L	500	o	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5842	PL-MW-113A	24-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	180	MG/L	20	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	193	MG/L	25	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.2	MG/L	0.2	UG	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	IRON - TOTAL	1.2	MG/L	0.25	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	Uq	AQ
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	199	MG/L	20	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	211	MG/L	25	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.88	MG/L	0.04	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	1.3	MG/L	0.05	G	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	20	MG/L	20	UG	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	25	MG/L	25	UG	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	3440	MG/L	20	o	A
HB-5842	PL-MW-113A	24-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	3470	MG/L	25	o	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5842	PL-MW-113A	24-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5843	MW-POLA-117A	24-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	322	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	322	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	300	REG	CHLORIDE	48.7	MG/L	10	o	A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.42	MG/L	0.05		A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	300	REG	SULFATE	143	MG/L	10	o	A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5843	MW-POLA-117A	24-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	25.6	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	25.5	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.05	MG/L	0.05	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.38	MG/L	0.05		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	7.4	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	7.5	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.01	MG/L	0.01	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.018	MG/L	0.01		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	197	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	201	MG/L	5		A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5843	MW-POLA-117A	24-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5843	MW-POLA-117A	24-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5843	MW-POLA-117A	24-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5843	MW-POLA-117A	24-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	AQ
HB-5843	MW-POLA-117A	24-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	AQ
HB-5846	PL-MW-112A	29-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5846	PL-MW-112A	29-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5846	PL-MW-112A	29-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5846	PL-MW-112A	29-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	562	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	562	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	300	REG	CHLORIDE	119	MG/L	30	o	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.13	MG/L	0.05		A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	300	REG	SULFATE	571	MG/L	30	o	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.5	MG/L	0.5	UG	A
HB-5846	PL-MW-112A	29-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	CALCIUM	5.2	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	CALCIUM	5.2	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	IRON	0.014	MG/L	0.05	J	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	IRON	1.2	MG/L	0.05		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	Uq	AQ
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	MAGNESIUM	6.9	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	MAGNESIUM	7.1	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	MANGANESE	0.0036	MG/L	0.01	J	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	MANGANESE	0.047	MG/L	0.01		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	SODIUM	560	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	METALS	SW6010	REG	SODIUM	569	MG/L	5		A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5846	PL-MW-112A	29-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5847	PL-MW-107	29-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5847	PL-MW-107	29-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5847	PL-MW-107	29-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5847	PL-MW-107	29-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	756	MG/L	5		A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	756	MG/L	5		A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	300	REG	CHLORIDE	21	MG/L	10	o	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.06	MG/L	0.05		A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	300	REG	SULFATE	210	MG/L	10	o	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5847	PL-MW-107	29-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.34	MG/L	0.05		A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	CALCIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	CALCIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	IRON	0.028	MG/L	0.05	J	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	IRON	1.3	MG/L	0.05		A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	MAGNESIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	MANGANESE	0.01	MG/L	0.01	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	MANGANESE	0.02	MG/L	0.01		A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	SODIUM	438	MG/L	5		A
HB-5847	PL-MW-107	29-Sep-98	METALS	SW6010	REG	SODIUM	440	MG/L	5		A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHPRG	8015M	REG	METHANE	0.002	MG/L	0.002	U	A
HB-5847	PL-MW-107	29-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5849	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5849	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5849	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5849	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	281	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	281	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	300	REG	CHLORIDE	22.2	MG/L	5	o	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	300	REG	SULFATE	148	MG/L	5	o	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5849	PL-MW-115	30-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	117	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	CALCIUM- DISSOLVED	116	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.051	MG/L	0.05		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.11	MG/L	0.05		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	19.1	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	19.3	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.23	MG/L	0.01		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.24	MG/L	0.01		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	37.7	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	39.3	MG/L	5		A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5849	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5849	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5849	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5849	PL-MW-115	30-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5849	PL-MW-115	30-Sep-98	TPHPRG	8015M	REG	METHANE	0.052	MG/L	0.002		A
HB-5849	PL-MW-115	30-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5850	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5850	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5850	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5850	PL-MW-115	30-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	283	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	283	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	300	REG	CHLORIDE	22.6	MG/L	10	o	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	300	REG	SULFATE	137	MG/L	10	o	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5850	PL-MW-115	30-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	117	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	118	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.045	MG/L	0.05	J	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.11	MG/L	0.05		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	19.3	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	19.5	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.24	MG/L	0.01		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.24	MG/L	0.01		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	38.3	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	39.5	MG/L	5		A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5850	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5850	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5850	PL-MW-115	30-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5850	PL-MW-115	30-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5850	PL-MW-115	30-Sep-98	TPHPRG	8015M	REG	METHANE	0.051	MG/L	0.002		A
HB-5850	PL-MW-115	30-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5851	PL-MW-114	30-Sep-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5851	PL-MW-114	30-Sep-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5851	PL-MW-114	30-Sep-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5851	PL-MW-114	30-Sep-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	227	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	227	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	300	REG	CHLORIDE	88.7	MG/L	10	o	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.055	MG/L	0.05		A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	300	REG	SULFATE	77.5	MG/L	10	o	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5851	PL-MW-114	30-Sep-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	CALCIUM - DISSOLVED	111	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	CALCIUM - TOTAL	109	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	IRON - DISSOLVED	0.05	MG/L	0.05	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	IRON - TOTAL	0.066	MG/L	0.05		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW7421	REG	LEAD - DISSOLVED	0.003	MG/L	0.003	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW7421	REG	LEAD - TOTAL	0.003	MG/L	0.003	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - DISSOLVED	20.2	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	MAGNESIUM - TOTAL	20	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	MANGANESE - DISSOLVED	0.15	MG/L	0.01		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	MANGANESE - TOTAL	0.17	MG/L	0.01		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	POTASSIUM - DISSOLVED	5	MG/L	5	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	POTASSIUM - TOTAL	5	MG/L	5	U	A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	SODIUM - DISSOLVED	35.4	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	METALS	SW6010	REG	SODIUM - TOTAL	36	MG/L	5		A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5851	PL-MW-114	30-Sep-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5851	PL-MW-114	30-Sep-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5851	PL-MW-114	30-Sep-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5851	PL-MW-114	30-Sep-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5851	PL-MW-114	30-Sep-98	TPHPRG	8015M	REG	METHANE	0.13	MG/L	0.006		A
HB-5851	PL-MW-114	30-Sep-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5853	MW-POLA-121	01-Oct-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5853	MW-POLA-121	01-Oct-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5853	MW-POLA-121	01-Oct-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5853	MW-POLA-121	01-Oct-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	404	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	404	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	300	REG	CHLORIDE	13.4	MG/L	1		A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	300	REG	SULFATE	13.1	MG/L	1		A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5853	MW-POLA-121	01-Oct-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	CALCIUM	112	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	CALCIUM	115	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	IRON	3.1	MG/L	0.05		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	IRON	3.3	MG/L	0.05		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	MAGNESIUM	18.8	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	MAGNESIUM	19.2	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	MANGANESE	1.4	MG/L	0.01		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	MANGANESE	1.4	MG/L	0.01		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	SODIUM	29.1	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	METALS	SW6010	REG	SODIUM	30.6	MG/L	5		A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	AQ
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5853	MW-POLA-121	01-Oct-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	AQ
HB-5853	MW-POLA-121	01-Oct-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5853	MW-POLA-121	01-Oct-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5853	MW-POLA-121	01-Oct-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5853	MW-POLA-121	01-Oct-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5853	MW-POLA-121	01-Oct-98	TPHPRG	8015M	REG	METHANE	0.6	MG/L	0.05		A
HB-5853	MW-POLA-121	01-Oct-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5857	PL-MW-104	06-Oct-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5857	PL-MW-104	06-Oct-98	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/L	1	U	A
HB-5857	PL-MW-104	06-Oct-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5857	PL-MW-104	06-Oct-98	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/L	1	U	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	556	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	556	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	300	REG	CHLORIDE	32.4	MG/L	2	G	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	300	REG	SULFATE	7.6	MG/L	1		A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.05	MG/L	0.05	U	A
HB-5857	PL-MW-104	06-Oct-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	CALCIUM	161	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	CALCIUM	156	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	IRON	0.098	MG/L	0.05		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	IRON	0.45	MG/L	0.05		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	MAGNESIUM	28.4	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	MAGNESIUM	26.5	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	MANGANESE	0.73	MG/L	0.01		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	MANGANESE	0.71	MG/L	0.01		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	SODIUM	34.7	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	METALS	SW6010	REG	SODIUM	33.7	MG/L	5		A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5857	PL-MW-104	06-Oct-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5857	PL-MW-104	06-Oct-98	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5857	PL-MW-104	06-Oct-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	180	UG/L	50		AQ
HB-5857	PL-MW-104	06-Oct-98	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5857	PL-MW-104	06-Oct-98	TPHPRG	8015M	REG	METHANE	0.15	MG/L	0.01		A
HB-5857	PL-MW-104	06-Oct-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	83	UG/L	50		AQ
HB-5859	PL-MW-101	06-Oct-98	BTEX	SW8020	REG	BENZENE	1	UG/L	1	U	A
HB-5859	PL-MW-101	06-Oct-98	BTEX	SW8020	REG	ETHYLBENZENE	39	UG/L	1		AQ
HB-5859	PL-MW-101	06-Oct-98	BTEX	SW8020	REG	TOLUENE	1	UG/L	1	U	A
HB-5859	PL-MW-101	06-Oct-98	BTEX	SW8020	REG	XYLENE (TOTAL)	47	UG/L	1	V	AQ
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, BICARB. AS CACO3	544	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, CARB. AS CACO3	5	MG/L	5	U	A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	310.1	REG	ALKALINITY, TOTAL AS CACO3	544	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	350.1	REG	AMMONIA	0.1	MG/L	0.1	U	A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	300	REG	CHLORIDE	62.7	MG/L	5	o	A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	353.2	REG	NITRATE PLUS NITRITE AS N	0.05	MG/L	0.05	U	A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	300	REG	SULFATE	52.6	MG/L	5	o	A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	376.2	REG	SULFIDE, TOTAL	0.066	MG/L	0.05		A
HB-5859	PL-MW-101	06-Oct-98	GENCHEM	365.3	REG	TOTAL PHOSPHORUS	0.05	MG/L	0.05	U	A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	CALCIUM	185	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	CALCIUM	175	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	IRON	0.22	MG/L	0.05		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	IRON	0.82	MG/L	0.05		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW7421	REG	LEAD	0.003	MG/L	0.003	U	A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	MAGNESIUM	26.5	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	MAGNESIUM	24.1	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	MANGANESE	0.49	MG/L	0.01		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	MANGANESE	0.47	MG/L	0.01		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	POTASSIUM	5	MG/L	5	U	A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	SODIUM	53.5	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	METALS	SW6010	REG	SODIUM	51	MG/L	5		A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	ACENAPHTHENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	ANTHRACENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	CHRYSENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	FLUORANTHENE	20	UG/L	20	U	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	FLUORENE	15	UG/L	15	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	NAPHTHALENE	20	UG/L	20	U	AQ
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	PHENANTHRENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	SEMIVOLS	SW8270	REG	PYRENE	20	UG/L	20	U	A
HB-5859	PL-MW-101	06-Oct-98	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	250	UG/L	250	U	A
HB-5859	PL-MW-101	06-Oct-98	TPHEXT	8015D	REG	DIESEL FUEL	250	UG/L	250	Uo	A
HB-5859	PL-MW-101	06-Oct-98	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	4700	UG/L	250		AQ
HB-5859	PL-MW-101	06-Oct-98	TPHPRG	8015G	REG	GASOLINE	2900	UG/L	50		AQ
HB-5859	PL-MW-101	06-Oct-98	TPHPRG	8015M	REG	METHANE	3.2	MG/L	0.12		A
HB-5859	PL-MW-101	06-Oct-98	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5862	PL-MW114	07-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	56	UG/L	56	U	A
HB-5862	PL-MW114	07-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	56	UG/L	56	UR	A
HB-5862	PL-MW114	07-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	56	UG/L	56	U	A
HB-5862	PL-MW114	07-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5862	PL-MW114	07-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5863	MW-POLA-120	07-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	53	UG/L	53	U	A
HB-5863	MW-POLA-120	07-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	53	UG/L	53	UR	A
HB-5863	MW-POLA-120	07-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	53	UG/L	53	U	A
HB-5863	MW-POLA-120	07-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5863	MW-POLA-120	07-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5864	PL-MW-115	07-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	51	UG/L	51	U	A
HB-5864	PL-MW-115	07-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	51	UG/L	51	UR	A
HB-5864	PL-MW-115	07-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	51	UG/L	51	U	A
HB-5864	PL-MW-115	07-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5864	PL-MW-115	07-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5866	PL-MW-116	08-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	52	UG/L	52	U	A
HB-5866	PL-MW-116	08-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	52	UG/L	52	UR	A
HB-5866	PL-MW-116	08-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	52	UG/L	52	U	A
HB-5866	PL-MW-116	08-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5866	PL-MW-116	08-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5868	PL-MW-103	08-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	53	UG/L	53	U	A
HB-5868	PL-MW-103	08-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	53	UG/L	53	UR	A
HB-5868	PL-MW-103	08-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	53	UG/L	53	U	A
HB-5868	PL-MW-103	08-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5868	PL-MW-103	08-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5871	PL-MW-104	11-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	AQ
HB-5871	PL-MW-104	11-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	AQ
HB-5871	PL-MW-104	11-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	170	UG/L	50		AQ
HB-5871	PL-MW-104	11-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5871	PL-MW-104	11-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	200	UG/L	50		AQ
HB-5874	PL-MW-101	12-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	1000	UG/L	1000	U	A
HB-5874	PL-MW-101	12-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	1000	UG/L	1000	Uo	A
HB-5874	PL-MW-101	12-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	5300	UG/L	1000		AQ
HB-5874	PL-MW-101	12-Jan-99	TPHPRG	8015G	REG	GASOLINE	250	UG/L	250	Uo	A
HB-5874	PL-MW-101	12-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	4100	UG/L	250		AQ
HB-5875	PL-MW-101	12-Jan-99	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	500	UG/L	500	U	A
HB-5875	PL-MW-101	12-Jan-99	TPHEXT	8015D	FD	DIESEL FUEL	500	UG/L	500	Uo	A
HB-5875	PL-MW-101	12-Jan-99	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	3000	UG/L	500		AQ

POL Outparcel
Validated Groundwater Data
(Revised Aug. 17, 1999)

Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-5875	PL-MW-101	12-Jan-99	TPHPRG	8015G	FD	GASOLINE	500	UG/L	500	Uo	A
HB-5875	PL-MW-101	12-Jan-99	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	4400	UG/L	500		AQ
HB-5876	MW-POLA-121	12-Jan-99	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	50	UG/L	50	U	A
HB-5876	MW-POLA-121	12-Jan-99	TPHEXT	8015D	REG	DIESEL FUEL	50	UG/L	50	U	A
HB-5876	MW-POLA-121	12-Jan-99	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	50	UG/L	50	U	A
HB-5876	MW-POLA-121	12-Jan-99	TPHPRG	8015G	REG	GASOLINE	50	UG/L	50	U	A
HB-5876	MW-POLA-121	12-Jan-99	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	54	UG/L	50		AQ

Sample Purpose Codes:
REG - regular sample
FD - field duplicate sample

Unit Abbreviations:
ug/kg - microgram(s) per kilogram
mg/kg - milligram(s) per kilogram

Detection Limit:
The listed detection limit is the method detection limit.

Laboratory Qualifiers:
o - This value is confirmation only.
R - Reporting limit elevated due to sample volume limitations
U - Compound was analyzed for, but not detected ("non-detect")
UQ - Compound was analyzed for, but not detected ("non-detect") and qualified
G - Reporting limit elevated due to sample matrix interference
J - Estimated value
Q - Reporting limit raised due to high level of another analyte in the sample
= - &RESULT SUMMARY
V - Secondary column result is the preferred value
R - Raised reporting limit due to high analyte level
S - Reported value determined by Method of Standard Additions
UG - Compound was analyzed for, but not detected ("non-detect") and repor
Uo - Compound was analyzed for, but not detected ("non-detect") and this va
Up - Compound was analyzed for, but not detected ("non-detect") and report
Upq - Compound was analyzed for, but not detected ("non-detect"), reporting and post digestion spike recovery fell between 40% and 85%
UR - Compound was analyzed for, but not detected ("non-detect") and report

Validation Codes:
A - Accepted
AQ - Add Qualifier
R - Rejected (No rejected data was used during the data evaluation process to reach conclusions presented in this closure report. Only detections, whether estimated (J-qualified) or not, were used in reaching conclusions.)
CB - Change both Qualifier and Result
CQ - Change Qualifier
CR - Change Result

Validation Qualifiers:
A - Accepted
J - Estimated
J+ - Estimated with positive bias
R - Rejected (No rejected data was used during the data evaluation process to reach conclusions presented in this closure report. Only detections, whether estimated (J-qualified) or not, were used in reaching conclusions.)
U - Non-detect
UJ - Non-detect estimated
J- - Estimated with negative bias
UR - Non-detect rejected

Checked By: [illegible] 12-23-99
Approved By: AWS 12-23-99

Appendix E2
Validated Rock Analytical Data

POL Outparcel
Validated Rock Data
(Revised Aug. 17, 1999)

Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1016	20	UG/KG	20	U	AQ
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1221	20	UG/KG	20	U	A
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1232	20	UG/KG	20	U	A
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1242	20	UG/KG	20	U	A
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1248	20	UG/KG	20	U	A
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1254	20	UG/KG	20	U	A
HB-4103	SR-POLA-001	06-Nov-96	PEST/PCBS	SW8080	REG	AROCLOR-1260	20	UG/KG	20	U	AQ
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	ANTHRACENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	CHRYSENE	960	UG/KG	500		A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	FLUORENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	500	UG/KG	500	Uj	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	SEMIVOLS	SW8270	REG	PYRENE	500	UG/KG	500	U	A
HB-4103	SR-POLA-001	06-Nov-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	1000	MG/KG	1000	U	A
HB-4103	SR-POLA-001	06-Nov-96	TPHEXT	8015D	REG	DIESEL FUEL	1000	MG/KG	1000	UR	A
HB-4103	SR-POLA-001	06-Nov-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	1800	MG/KG	1000	d	AQ

Sample Purpose Codes:
REG - regular sample

Unit Abbreviations:
ug/kg - microgram(s) per kilogram
mg/kg - milligram(s) per kilogram

Detection Limit:
The listed detection limit is the method detection limit.

Laboratory Qualifiers:
d - QC control parameter outside of acceptance limits for this result
Uj - Compound was analyzed for, but not detected ("non-detect"). All reporting limits raised due to matrix interference.
U - Compound was analyze for, but not detected ("non-detect")
UR - Compound was analyzed for, but not detected ("non-detect"). All reporting limits raised due to sample volume limitations.

Validation Codes:
A - Accepted
AQ - Add Qualifier

Validation Qualifiers:
J - Estimated
U - Non-detect
UJ - Non-detect estimated

Checked By: MMS 12-23-99
Approved By: AWS 12-23-99

Appendix E3
Validated Groundwater Analytical Data

POL Outparcel
Validated Soil Data
(Revised Aug. 17, 1999)

Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4039	SB-POLA-118	10-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	METALS	SW7421	REG	LEAD	5.4	MG/KG	0.32		A	A
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	A	U
HB-4039	SB-POLA-118	10-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	BENZENE	1	UG/KG	1	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/KG	1	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1	UG/KG	1	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/KG	1	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	METALS	SW7421	REG	LEAD	16.6	MG/KG	1.6	R	A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	43	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	34	UG/KG	34	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	34	UG/KG	34	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	47	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	51	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	71	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	34	UG/KG	34	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	70	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	41	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	54	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	34	UG/KG	34	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	36	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	34	UG/KG	34	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	55	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	59	UG/KG	34		A	A
HB-4061	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	10	MG/KG	10	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	10	MG/KG	10	U	A	U
HB-4061	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	16	MG/KG	10	d	AQ	J
HB-4061	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1	MG/KG	1	U	AQ	UJ
HB-4061	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1	MG/KG	1	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U

POL Outparcel
Validated Soil Data
(Revised Aug. 17, 1999)

Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4062	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	METALS	SW7421	REG	LEAD	6.6	MG/KG	0.63	R	A	A
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	A	U
HB-4062	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.2	UG/KG	1.2	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.2	UG/KG	1.2	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.2	UG/KG	1.2	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.2	UG/KG	1.2	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	METALS	SW7421	REG	LEAD	9.8	MG/KG	0.71	R	A	A
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	39	UG/KG	39	U	AQ	UJ
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	39	UG/KG	39	U	AQ	UJ
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	39	UG/KG	39	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	12	MG/KG	12	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	12	MG/KG	12	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	12	MG/KG	12	U	A	U
HB-4063	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.2	MG/KG	1.2	U	AQ	UJ
HB-4063	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.2	MG/KG	1.2	U	AQ	UJ
HB-4064	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	BENZENE	1	UG/KG	1	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1	UG/KG	1	U	A	U

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4064	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1	UG/KG	1	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1	UG/KG	1	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	METALS	SW7421	REG	LEAD	7.7	MG/KG	0.63	R	A	A
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	10	MG/KG	10	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	10	MG/KG	10	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	10	MG/KG	10	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1	MG/KG	1	U	A	U
HB-4064	SB-POLA-104	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1	MG/KG	1	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	METALS	SW7421	REG	LEAD	13.6	MG/KG	1.6	R	A	A
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	36	UG/KG	36	U	AQ	UJ
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	36	UG/KG	36	U	AQ	UJ
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	36	UG/KG	36	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4065	SB-POLA-102	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	61	MG/KG	11	d	AQ	J
HB-4065	SB-POLA-102	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	AQ	UJ
HB-4065	SB-POLA-102	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	AQ	UJ
HB-4067	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U

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Validated Soil Data
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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4067	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	METALS	SW7421	REG	LEAD	13.2	MG/KG	1.6	R	A	A
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4067	SB-POLA-103	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	AQ	UJ
HB-4067	SB-POLA-103	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	AQ	UJ
HB-4068	SB-POLA-103	28-Oct-96	BTEX	SW8020	FD	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	BTEX	SW8020	FD	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	BTEX	SW8020	FD	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	BTEX	SW8020	FD	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	METALS	SW7421	FD	LEAD	11.1	MG/KG	1.6	R	A	A
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	CHRYSENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	FLUORENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	PHENANTHRENE	71	UG/KG	35		A	A
HB-4068	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	FD	PYRENE	35	UG/KG	35	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	TPHEXT	8015D	FD	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	TPHEXT	8015D	FD	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4068	SB-POLA-103	28-Oct-96	TPHEXT	8015D	FD	UNKNOWN HYDROCARBON	12	MG/KG	11	d	AQ	J
HB-4068	SB-POLA-103	28-Oct-96	TPHPRG	8015G	FD	GASOLINE	1.1	MG/KG	1.1	U	AQ	UJ
HB-4068	SB-POLA-103	28-Oct-96	TPHPRG	8015G	FD	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	AQ	UJ
HB-4069	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4069	SB-POLA-103	28-Oct-96	METALS	SW7421	REG	LEAD	9.2	MG/KG	0.67	R	A	A
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	37	UG/KG	37	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	A	U
HB-4069	SB-POLA-103	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	METALS	SW7421	REG	LEAD	18.5	MG/KG	1.6	R	A	A
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	AQ	UJ
HB-4071	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4071	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	260	MG/KG	11	d	AQ	J+
HB-4071	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	R	R
HB-4071	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	R	R
HB-4073	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	METALS	SW7421	REG	LEAD	6.7	MG/KG	0.32		A	A

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	35	UG/KG	35	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	A	U
HB-4073	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	BENZENE	1.1	UG/KG	1.1	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	ETHYLBENZENE	1.1	UG/KG	1.1	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	TOLUENE	1.1	UG/KG	1.1	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	BTEX	SW8020	REG	XYLENE (TOTAL)	1.1	UG/KG	1.1	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	METALS	SW7421	REG	LEAD	6	MG/KG	0.33		A	A
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	2-METHYLNAPHTHALENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ACENAPHTHENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	ANTHRACENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)ANTHRACENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(A)PYRENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(B)FLUORANTHENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	BENZO(K)FLUORANTHENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	CHRYSENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	DIBENZ(A,H)ANTHRACENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORANTHENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	FLUORENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	INDENO(1,2,3-CD)PYRENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	NAPHTHALENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PHENANTHRENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	SEMIVOLS	SW8270	REG	PYRENE	36	UG/KG	36	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	AVIATION FUEL (JP4)	11	MG/KG	11	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	DIESEL FUEL	11	MG/KG	11	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	TPHEXT	8015D	REG	UNKNOWN HYDROCARBON	11	MG/KG	11	U	A	U
HB-4074	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	GASOLINE	1.1	MG/KG	1.1	U	AQ	UJ
HB-4074	SB-POLA-101	28-Oct-96	TPHPRG	8015G	REG	UNKNOWN HYDROCARBON	1.1	MG/KG	1.1	U	AQ	UJ

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Sample ID	Location Code	Sample Date	Test Group/Method	Lab Method	Samp Purp	Analyte	Result	Units	Detect Limit	Lab Qlfr	Val Code	Val Qlfr

Sample Purpose Codes:
REG - regular sample
FD - field duplicate sample

Unit Abbreviations:
ug/kg - microgram(s) per kilogram
mg/kg - milligram(s) per kilogram

Detection Limit:
The listed detection limit is the method detection limit.

Laboratory Qualifiers:
d - QC control parameter outside of acceptance limits for this result
R - Reporting limit elevated due to sample volume limitations
U - Compound was analyzed for, but not detected ("non-detect")

Validation Codes:
A - Accepted
AQ - Add Qualifier
R - Rejected (No rejected data was used during the data evaluation process to reach conclusions presented in this closure report. Only detections, whether estimated (J-qualified) or not, were used in reaching conclusions)

Validation Qualifiers:
A - Accepted
J - Estimated
J+ - Estimated with positive bias
R - Rejected (No rejected data was used during the data evaluation process to reach conclusions presented in this closure report. Only detections, whether estimated (J-qualified) or not, were used in reaching conclusions)
U - Non-detect
UJ - Non-detect estimated

Checked By: MAS 12-23-99
Approved By: AWS 12/23/99

APPENDIX F

Aquifer Test Data

Source: IT, 1999 (Appendix F)

APPENDIX F

AQUIFER TEST DATA

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F-1	Hydraulic Conductivities from Aquifer Tests, Petroleum Oil, and Lubricant Outparcel

List of Acronyms

cm/sec	centimeters per second
ft/day	feet per day
ft/ft	feet per feet
POL	Petroleum, Oil, and Lubricant
PVC	polyvinyl chloride

F.1.0 Introduction

To further develop an understanding of the Petroleum, Oil, and Lubricant (POL) hydrogeologic system, single well aquifer tests were conducted on newly-installed monitoring wells during April/May of 1997. Monitoring well locations are shown on Figure 4-1.

The objectives of the tests were to:

- Provide estimates of hydraulic conductivity
- Provide a better understanding of the POL Outparcel hydrogeologic system
- Aid in the selection and subsequent design of remedial alternatives for contaminated groundwater.

The following discussions describe the procedures and results of the tests.

F.2.0 Aquifer Test Description and Procedures

Single well aquifer tests were conducted to provide hydrologic parameter estimates. Single well tests included slug and well recovery tests. The following discussions provide brief descriptions of both tests and the procedures used.

F.2.1 Slug Tests

Slug tests were conducted in wells MW-POLA-117A, -118, -119, and -121 to estimate near-field aquifer hydraulic conductivity. Except for MW-POLA-121, slug tests consisted of two separate steps; slug in (positive displacement) and slug out (negative displacement). At MW-POLA-121, only a slug in test was performed due to the very slow recovery time. The slug consisted of a piece of hollow polyvinyl chloride (PVC), partially filled with sand, approximately 2 inches in diameter by 5.5 feet long. The slug contained a pointed bottom piece to minimize water-level disturbance. The hollow PVC slug was designed to float on the water column and displace a set volume of approximately 0.13 cubic feet (0.98 gallons). To perform the test, the slug was rapidly inserted into or removed from the monitoring well. Water-level changes were recorded using a pressure transducer attached to a data logger installed in the well being tested.

Detailed procedures for conducting the slug test in each well were as follows:

- Measured and recorded the static water level using a water-level indicator
- Installed a pressure transducer attached to a data logger into the water column
- Lowered the slug within 1 foot of the water level, then rapidly lowered the slug into the well until submerged to a set level based on the buoyancy of the slug and recorded the slug-in time
- Monitored the water level using a data logger until the water level returned to within 10 percent of the static level, if possible
- Rapidly pulled the slug out of the water column, and recorded the slug-out time (except for MW-POLA-121)
- Monitored the water level using a data logger until the water level returned to within 10 percent of the static level, if possible, during the slug-out step and stopped the test
- Transferred the data from the data logger onto a computer diskette.

F.2.2 Well Recovery Tests

Well recovery tests were performed on new monitoring wells MW-POLA-117B and -120. Procedures for the test were as follows:

- Measured the static water level with a water-level indicator and recorded the level
- Placed a constant-velocity submersible pump in the well and began extracting water
- Periodically measured the amount of drawdown with a water-level meter and the flow rate with a graduated container and a stopwatch
- Shut off the pump and monitored the recovery of the water level with a water-level meter until the level stabilized
- Estimated the well hydraulic conductivity.

F.3.0 Aquifer Test Data Analysis and Interpretation Methods

This section discusses the specific analysis techniques used to evaluate the aquifer test data. Included are single well analysis methods for both slug and well recovery tests conducted on new wells installed for this study.

F.3.1 Previous Studies

One investigation (ESI, 1993) has been conducted to determine the aquifer properties at the POL Outparcel. This investigation included:

- Water level measurements to determine the horizontal gradients
- Slug tests to determine the hydraulic conductivity in the POL Outparcel.

Results of the water level measurements are presented on Figure A-7 in Appendix A. The results of the slug tests are presented in Table F-1.

F.3.2 Interpretive Methods

Slug test results were analyzed using the assumptions and methods of Bouwer and Rice (1976) and Bouwer (1989). Well recovery tests were analyzed using the assumptions and methods of Theis and Jacob (Jacob, 1963). Details of each interpretation method are presented below.

F.3.2.1 Bouwer and Rice Method - Slug Test Analysis

Slug tests were performed on newly-installed monitoring wells MW-POLA-117A, -118, -119, and -121, where well development indicated that recharge was too slow to perform well recovery tests. Data from slug tests were analyzed using the method of Bouwer and Rice (1976) and Bouwer (1989). This method can be applied to fully, partially penetrating, partially screened, perforated, or open wells. The method was originally developed for unconfined aquifers, but can also be applied to confined or semiconfined aquifer conditions (Bouwer, 1989). The method is designed to measure the hydraulic conductivity of the aquifer surrounding the screened portion of the well. This test is a single well test and provides only a very near field estimate of hydraulic conductivity.

F.3.2.2 Theis and Jacob Recovery Test Analysis

Well recovery tests were performed on newly-installed monitoring wells MW-POLA-117B and -120. Hydraulic conductivities were estimated from post-well development pumping records. Well recovery data was processed using "Aquifer Test" software developed by Waterloo, Hydrogeologic. The analytical method used was the Theis-Jacob Analysis Recovery Test based on Jacob (1963). The following assumptions were made in accordance with this method:

- The aquifer is confined and has an "apparent" infinite extent

- The aquifer is homogeneous, isotropic, of uniform thickness over the area influenced by pumping
- The piezometric surface was horizontal prior to pumping
- The well was pumped at a constant rate
- The well is fully penetrating
- The water removed from storage is discharged instantaneously with decline in head
- The well diameter is small so that well storage is negligible.

The monitoring wells were installed in weathered, fractured sandstone bedrock which is inherently heterogeneous and anisotropic. Groundwater flow occurs through open fractures and, to a lesser extent, through the sandstone matrix. Since there is no defined lower aquifer boundary, the well cannot be defined as fully penetrating. Based on these factors, this test is used to provide an estimate of near-field hydraulic conductivity.

F.4.0 Aquifer Test Results

This section presents the results of the analysis of aquifer test data. These include slug and well recovery tests.

F.4.1 Slug Test Results

Table F-1 lists the results of slug tests conducted on the new monitoring wells along with the results of the previous investigation (ESI, 1993). These results should be used with discretion as they represent values for the near field characteristics of the well tested. Hydraulic conductivity values (averages of the slug in and slug out tests) range from 9.8×10^{-6} centimeters/second (cm/sec) (2.8×10^{-2} feet/day [ft/day]) at PL-MW-106 to 1.9×10^{-3} cm/sec (5.3 ft/day) at PL-MW-108. The differences in the results of slug in (rising head) tests and slug out (falling head) tests in newly-constructed wells ranged from zero at MW-POLA-119 to a falling head value that is approximately twice the rising head value at MW-POLA-117A.

F.4.2 Well Recovery Test Results

Hydraulic conductivity estimates from well recovery tests are presented on Table F-1. The hydraulic conductivity for MW-POLA-117B is 2.2×10^{-5} cm/sec (6.2×10^{-2} ft/day) and for MW-POLA-120 is 5.8×10^{-5} cm/sec (1.6×10^{-1} ft/day). These hydraulic conductivity values are

higher than those determined by slug tests. This was anticipated as well recovery tests were not performed on wells with relatively low recharge during well development.

F.4.3 Hydraulic Gradients

Hydraulic gradients at the POL Outparcel range from 0.016 feet/feet (ft/ft) (between MW-POLA-119 and -118) to 0.16 ft/ft (between MW-POLA-121 and PL-MW-104). The highest gradients are limited to the radial area, west to northeast, within approximately 100 feet of the former AST-2 location. This steep gradient generally follows the surface topography. A narrow, steep band also appears to exist between PL-MW-106 and -112A. This narrow, steep band may be the effect of drainage through the artificial fill exceeding the drainage into the fill from the upgradient bedrock.

F.4.4 Estimate of Seepage Velocity

Seepage velocity is estimated from the following formula:

$$V_s = \frac{KI}{\eta_e}$$

Where:

V_s = seepage velocity (ft/day)
K = hydraulic conductivity (ft/day)
I = hydraulic gradient (ft/ft)
η_e = effective porosity

The effective porosity for the fractured, weathered sandstone bedrock is estimated at 10 percent ($\eta_e = 0.10$) (Freeze and Cherry, 1979).

The edge of the POL Outparcel petroleum hydrocarbon (Figures A-4 in Appendix A) lies near the PL-MW-104, where low-levels of total petroleum hydrocarbon were detected. From this point to the next downgradient monitoring well, PL-MW-106, the hydraulic gradient is 0.03 ft/ft (for both February and March 1997). The hydraulic conductivity at both wells is approximately

0.03 ft/day (ESI, 1993). Using 10 percent effective porosity, the seepage velocity is estimated as follows:

$$V_s = \frac{0.03\ ft/day\ x\ 0.03\ ft/ft}{0.10} = 9.0\ x\ 10^{-3}\ ft/day$$

The distance between PL-MW-104 and -106 is approximately 190 feet. Without consideration of retention factors, the travel time from PL-MW-104 to -106 is approximately 58 years.

Although this estimate may be typical for flow through the fracture, weathered bedrock, localized flow through individual fractures may result in isolated areas of relatively high hydraulic conductivity, and therefore, rapid seepage velocity.

Table F-1. Hydraulic Conductivities from Aquifer Tests
Petroleum, Oil, and Lubricant Outparcel

Well Number	HC[a] (cm/sec)[b]	HC (feet/day)	HC (cm/sec)	HC (feet/day)	HC (cm/sec)	HC (feet/day)
	Falling Head		Rising Head		Average	
MW-POLA-117A	1.2E-06	3.4E-03	3.1E-06	8.8E-03	2.2E-06	6.1E-03
MW-POLA-117B*	NC[c]	NC	2.2E-05	6.2E-02	2.2E-05	6.2E-02
MW-POLA-118	1.0E-05	2.8E-02	6.8E-06	1.9E-02	8.4E-06	2.4E-02
MW-POLA-119	2.3E-05	6.5E-02	2.3E-05	6.5E-02	2.3E-05	6.5E-02
MW-POLA-120*	NC	NC	5.8E-05	1.6E-01	5.8E-05	1.6E-01
MW-POLA-121	1.0E-06	2.8E-03	NC	NC	1.0E-06	2.8E-03
PL-MW-101	NC	NC	3.7E-06	1.0E-02	3.7E-06	1.0E-02
PL-MW-103	1.2E-04	3.4E-01	1.5E-03	4.3E+00	8.1E-04	2.3E+00
PL-MW-104	1.1E-05	3.1E-02	1.2E-05	3.4E-02	1.2E-05	3.3E-02
PL-MW-106	9.8E-06	2.8E-02	NC	NC	9.8E-06	2.8E-02
PL-MW-108	2.8E-03	7.9E+00	9.1E-04	2.6E+00	1.9E-03	5.3E+00
PL-MW-112B	1.7E-04	4.8E-01	3.4E-04	9.6E-01	2.6E-04	7.2E-01
PL-MW-113A	NC	NC	1.3E-05	3.7E-02	1.3E-05	3.7E-02
PL-MW-113C	4.9E-05	1.4E-01	4.6E-05	1.3E-01	4.8E-05	1.3E-01
LOG AVERAGE						**7.3E-02**

* Recovery Pump Test
All other wells - slug test

References:
Bower, H. and Rice, R.C., 1976, *A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells,* Water Resources Research, Vol. 12, No. 3.
Jacob, C.E., 1963, *The Recovery Method for Determining the Coefficient Transmissivity,* U.S. Geologic Survey, Water Supply Paper 1536-I, Washington, D.C.

[a] Hydraulic conductivity
[b] Centimeters per second
[c] Not conducted

Checked By: MMS 12-23-99
Approved By: AWS 12-23-99

Table F-1
POL Area
Hydraulic Conductivity Estimates
Hamilton AAF POL CAP
IT Project No. 762538

Well Number	K (cm/sec)	K (ft/day)	K (cm/sec)	K (ft/day)	K (cm/sec)	K (ft/day)
SLUG TESTS	Falling Head		Rising Head		Average	
MW-POLA-117A	3.3E-06	9.4E-03	1.7E-06	4.7E-03	2.5E-06	7.1E-03
MW-POLA-118	8.1E-06	2.3E-02	6.3E-06	1.8E-02	7.2E-06	2.1E-02
MW-POLA-119	4.6E-05	1.3E-01	4.6E-05	1.3E-01	4.6E-05	1.3E-01
MW-POLA-121	2.6E-07	7.4E-04			2.6E-07	7.4E-04
PL-MW-101			3.7E-06	1.0E-02	3.7E-06	1.0E-02
PL-MW-103	1.2E-04	3.4E-01	1.5E-03	4.3E+00	8.1E-04	2.3E+00
PL-MW-104	1.1E-05	3.1E-02	1.2E-05	3.4E-02	1.2E-05	3.3E-02
PL-MW-106	9.8E-06	2.8E-02			9.8E-06	2.8E-02
PL-MW-108	2.8E-03	7.9E+00	9.1E-04	2.6E+00	1.9E-03	5.3E+00
PL-MW-112B	1.7E-04	4.8E-01	3.4E-04	9.6E-01	2.6E-04	7.2E-01
PL-MW-113A			1.3E-05	3.7E-02	1.3E-05	3.7E-02
PL-MW-113C	4.9E-05	1.4E-01	4.6E-05	1.3E-01	4.8E-05	1.3E-01
SPECIFIC CAPACITY TESTS						
MW-POLA-117B*			7.2E-05	2.0E-01	7.2E-05	2.0E-01
MW-POLA-120*			1.0E-04	2.8E-01	1.0E-04	2.8E-01
LOG AVERAGE					2.8E-05	7.8E-02

* - Well Recovery Test; Theis & Jacob Recovery Method
All other wells - Slug Test; Bouwer & Rice Method
PL-MW-###: Data obtained from ESI (1993)
K - Hydraulic Conductivity

Checked By: CFC 7-21-97

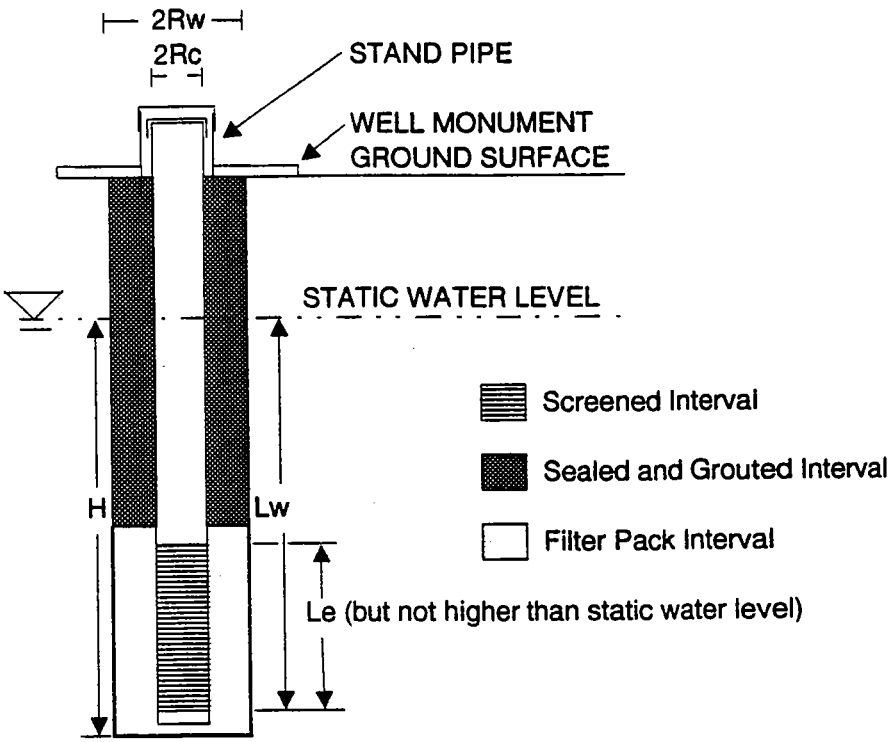
Approved By: 7/21/97

3:34 PM 7/10/97 POL_HC.XLS

APPENDIX F1

SLUG TEST DATA FORMS AND ANALYSES

SLUG TEST CALCULATION FORM
PARAMETER DESCRIPTION DIAGRAM
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By [illegible] 7/21/97

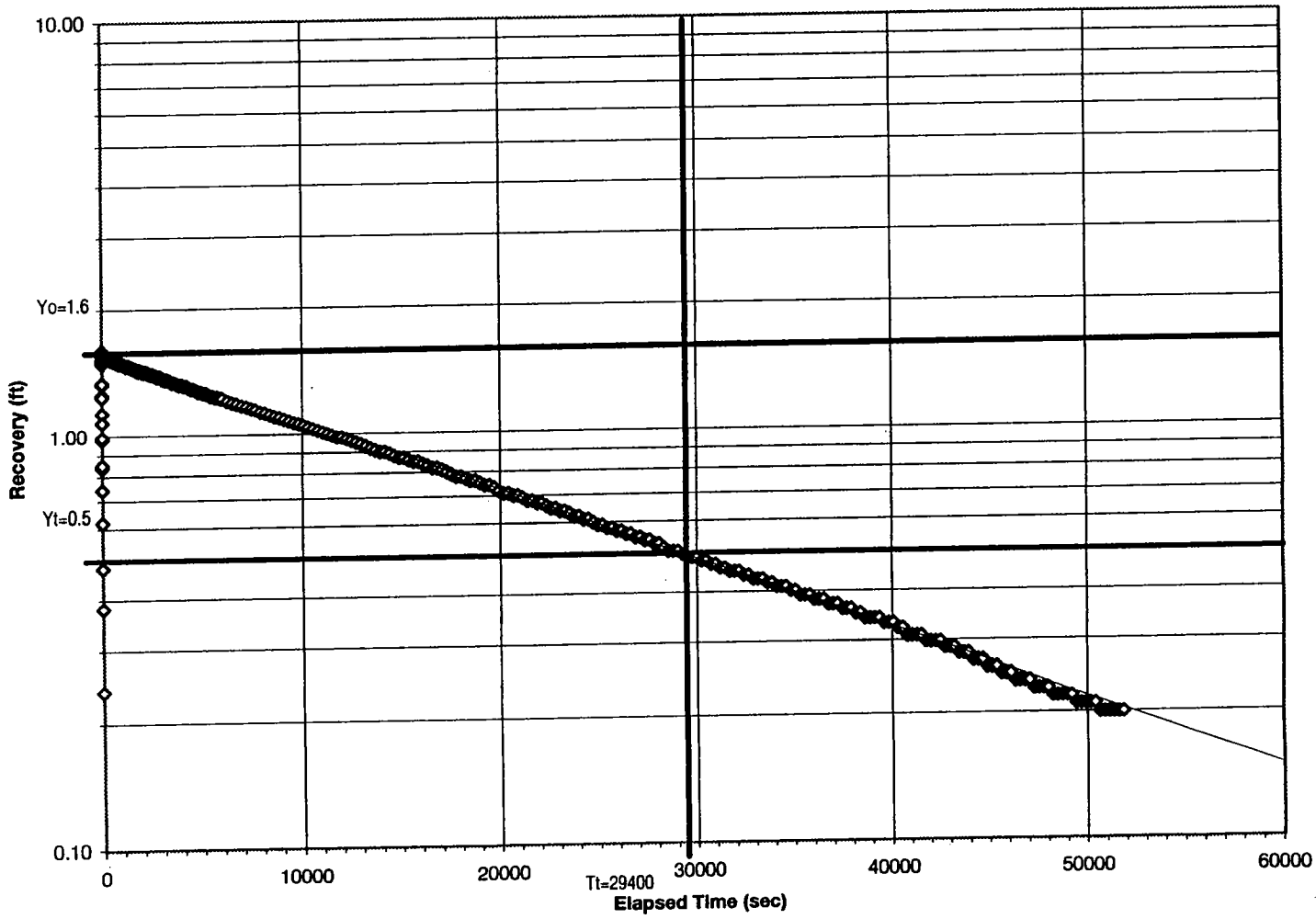
SLUG TEST CALCULATION FORM
MW-POLA-117A Slug In
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	5.97 ft
Outer Casing/Christy Box Elevation (from survey)	3.2 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	2.77 ft
Depth To Top Of Screen Interval (from well comp. form)	5 ft
Depth To Bottom Of Screen Interval (from well comp. form)	15 ft
Depth To Bottom Of Filter Pack (from well comp. form)	17.6 ft
H (Aquifer Thickness - based on bottom of filter pack)	14.83 ft
Lw (Saturated Height above Bottom of Screen)	12.23 ft
Le (Saturated Height of Screen)	10 ft
Rw (Radius of Well Borehole)	0.4 ft
Rc (Radius of Well Casing)	0.156 ft
Le/Rw (for determining parameters A and B)	25
A (Bouwer and Rice, 1989) IF H>Lw	2.3
B (Bouwer and Rice, 1989) IF H>Lw	0.4
Yo (Drawdown @ Time 0 - from drawdown curve)	1.6 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.5 ft
t (Time - from drawdown curve)	29400 sec
Hydraulic Conductivity - K	9.38E-03 ft/day
Transmissivity - T	9.38E-02 sqft/day

Checked By Cfc 7-21-97
Approved By [illegible] 7-21-97

12:54 PM 7/10/97 117A-IN.FRM

SLUG TEST F VERY CHART
MW-POLA-117A Slug In
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By JAR 7-21-97

12:40 PM 7/10/97 117a-in.xlc

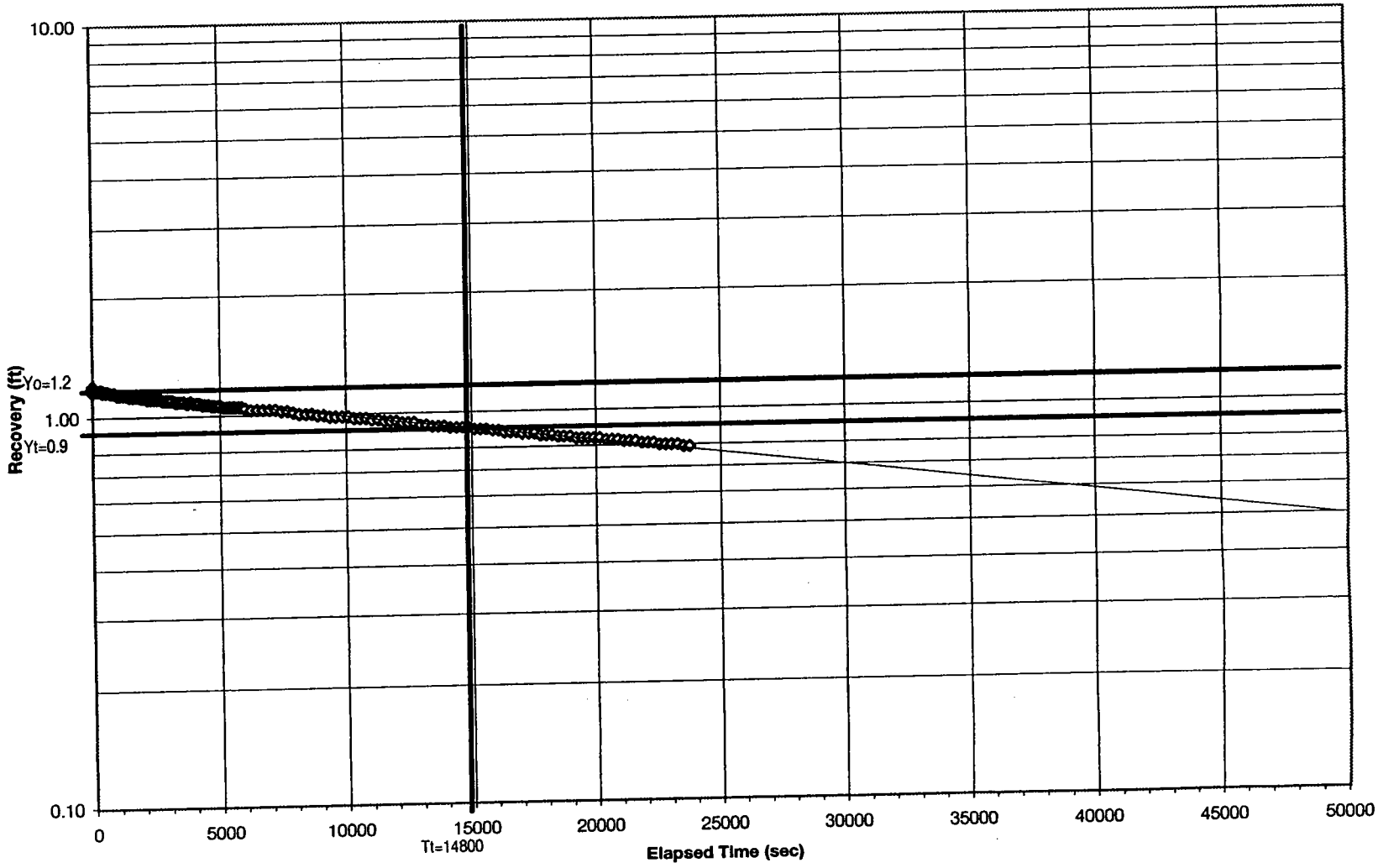
SLUG TEST CALCULATION FORM
MW-POLA-117A Slug Out
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	5.36 ft
Outer Casing/Christy Box Elevation (from survey)	3.2 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	2.16 ft
Depth To Top Of Screen Interval (from well comp. form)	5 ft
Depth To Bottom Of Screen Interval (from well comp. form)	15 ft
Depth To Bottom Of Filter Pack (from well comp. form)	17.6 ft
H (Aquifer Thickness - based on bottom of filter pack)	15.44 ft
Lw (Saturated Height above Bottom of Screen)	12.84 ft
Le (Saturated Height of Screen)	10 ft
Rw (Radius of Well Borehole)	0.4 ft
Rc (Radius of Well Casing)	0.156 ft
Le/Rw (for determining parameters A and B)	25
A (Bouwer and Rice, 1989) IF H>Lw	2.3
B (Bouwer and Rice, 1989) IF H>Lw	0.4
Yo (Drawdown @ Time 0 - from drawdown curve)	1.2 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.9 ft
t (Time - from drawdown curve)	14800 sec
Hydraulic Conductivity - K	4.65E-03 ft/day
Transmissivity - T	4.65E-02 sqft/day

Checked By CFC 7-21-97
Approved By AR 7-21-97

12:54 PM 7/10/97 117A-OUT.FRM

SLUG TEST RECOVERY CHART
MW-POLA-117A Slug Out
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By [illegible] 7-21-97

12:25 PM 7/10/97 117a-out.xlc

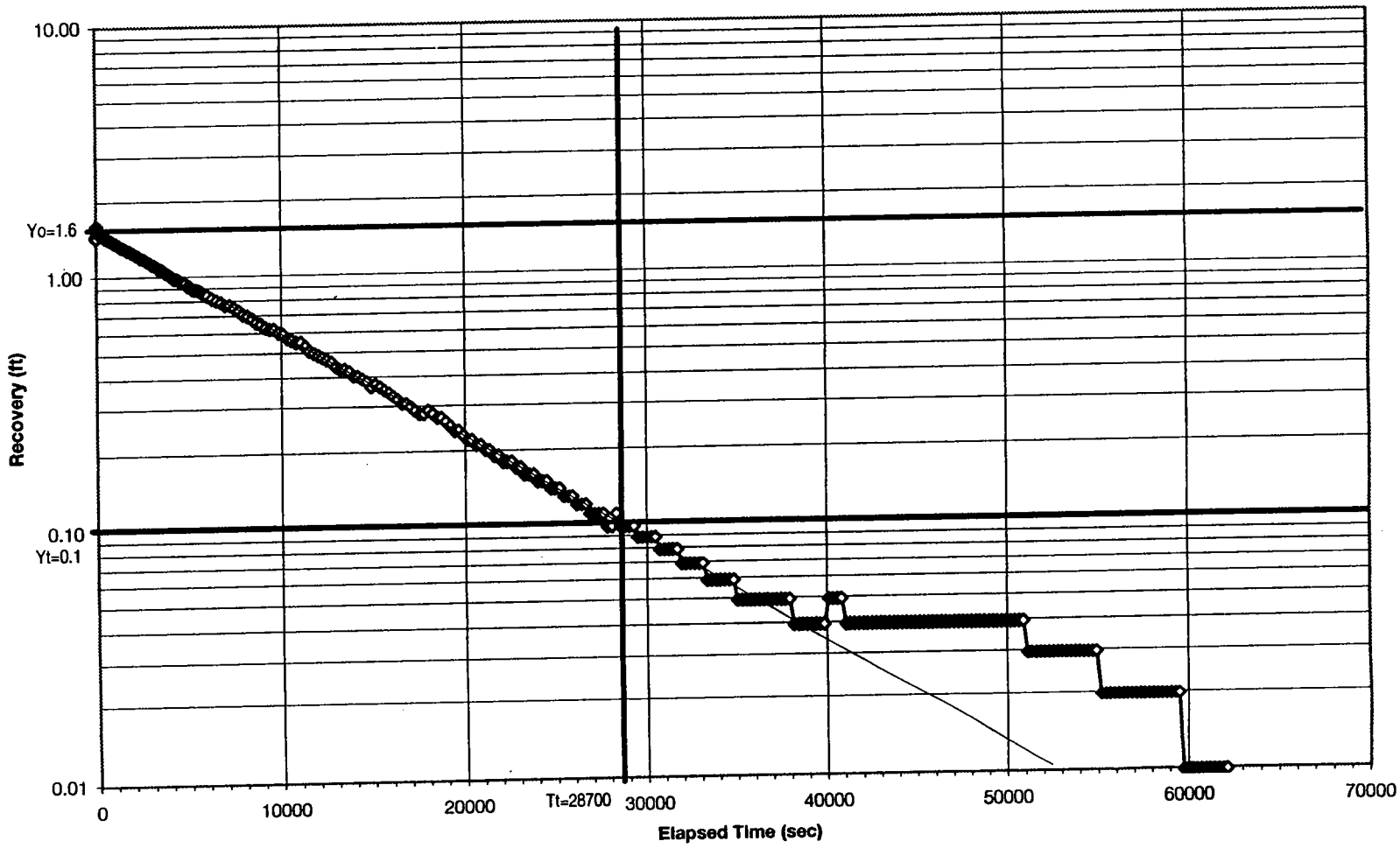
SLUG TEST CALCULATION FORM
MW-POLA-118 Slug In
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	6.45 ft
Outer Casing/Christy Box Elevation (from survey)	2.1 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	4.35 ft
Depth To Top Of Screen Interval (from well comp. form)	5 ft
Depth To Bottom Of Screen Interval (from well comp. form)	15 ft
Depth To Bottom Of Filter Pack (from well comp. form)	16.4 ft
H (Aquifer Thickness - based on bottom of filter pack)	12.05 ft
Lw (Saturated Height above Bottom of Screen)	10.65 ft
Le (Saturated Height of Screen)	10 ft
Rw (Radius of Well Borehole)	0.4 ft
Rc (Radius of Well Casing)	0.156 ft
Le/Rw (for determining parameters A and B)	25
A (Bouwer and Rice, 1989) IF H>Lw	2.3
B (Bouwer and Rice, 1989) IF H>Lw	0.4
Yo (Drawdown @ Time 0 - from drawdown curve)	1.6 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.1 ft
t (Time - from drawdown curve)	28700 sec
Hydraulic Conductivity - K	2.27E-02 ft/day
Transmissivity - T	2.27E-01 sqft/day

Checked By CJC 7-21-97
Approved By [illegible] 7-21-97

12:56 PM 7/10/97 118-IN.FRM

SLUG TEST RECOVERY CHART
MW-POLA-118 Slug In
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By [illegible] 7-21-97

12:11 PM 7/10/97 118-in.xlc

SLUG TEST CALCULATION FORM
MW-POLA-118 Slug Out
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	6.35 ft
Outer Casing/Christy Box Elevation (from survey)	2.1 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	4.25 ft
Depth To Top Of Screen Interval (from well comp. form)	5 ft
Depth To Bottom Of Screen Interval (from well comp. form)	15 ft
Depth To Bottom Of Filter Pack (from well comp. form)	16.4 ft
H (Aquifer Thickness - based on bottom of filter pack)	12.15 ft
Lw (Saturated Height above Bottom of Screen)	10.75 ft
Le (Saturated Height of Screen)	10 ft
Rw (Radius of Well Borehole)	0.4 ft
Rc (Radius of Well Casing)	0.156 ft
Le/Rw (for determining parameters A and B)	25
A (Bouwer and Rice, 1989) IF H>Lw	2.3
B (Bouwer and Rice, 1989) IF H>Lw	0.4
Yo (Drawdown @ Time 0 - from drawdown curve)	1.4 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.5 ft
t (Time - from drawdown curve)	13700 sec
Hydraulic Conductivity - K	1.77E-02 ft/day
Transmissivity - T	1.77E-01 sqft/day

Checked By CTC 7-21-97
Approved By [illegible] 7-21-97

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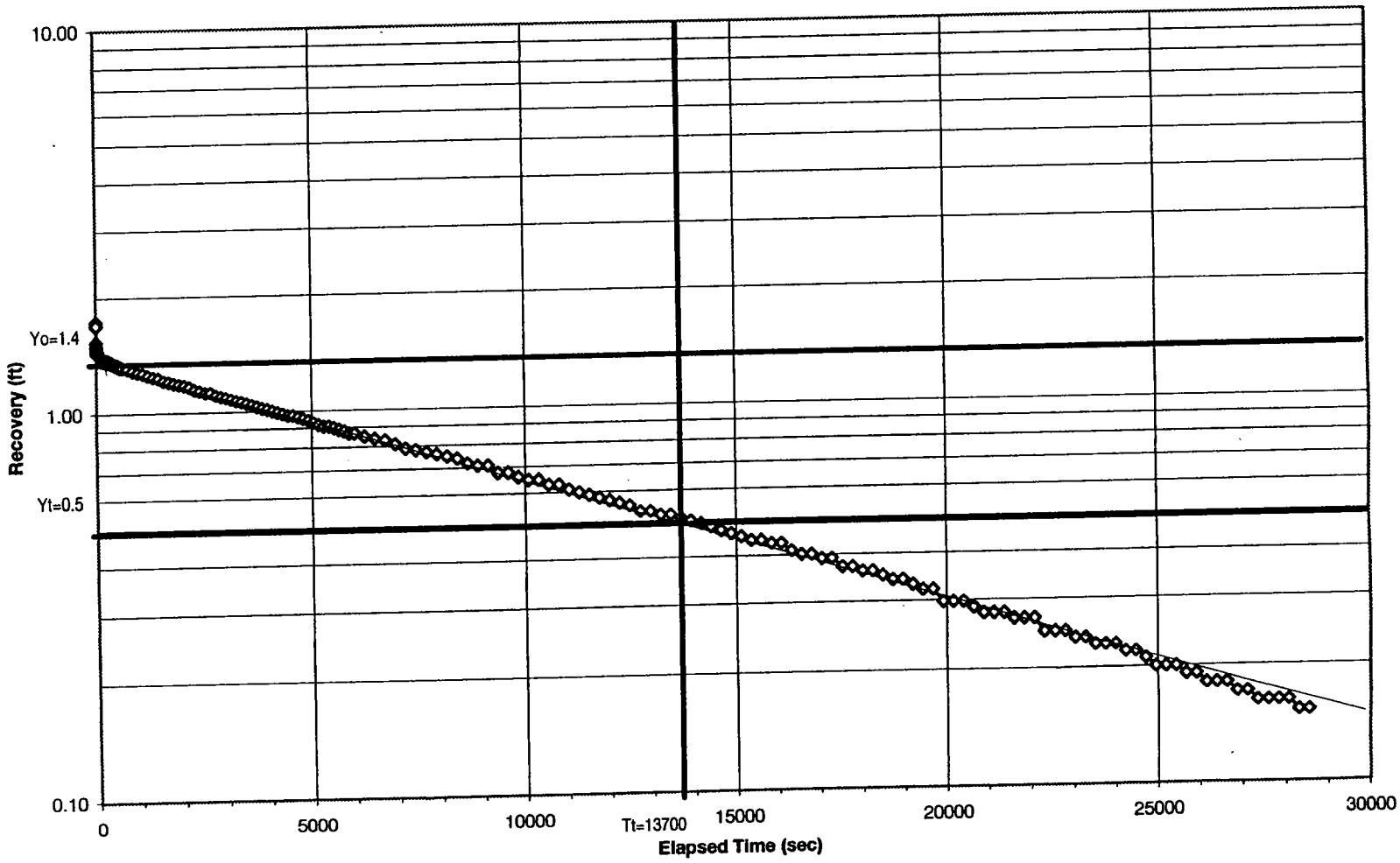
SLUG TEST RECOVERY CHART
MW-POLA-118 Slug Out
Hamilton AAF POL CAP
Project No. 762538



Checked By Cfc 7-21-97
Approved By MR 7-21-97

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SLUG TEST CALCULATION FORM
MW-POLA-119 Slug In
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	9.83 ft
Outer Casing/Christy Box Elevation (from survey)	2.2 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	7.63 ft
Depth To Top Of Screen Interval (from well comp. form)	4.4 ft
Depth To Bottom Of Screen Interval (from well comp. form)	14.4 ft
Depth To Bottom Of Filter Pack (from well comp. form)	17 ft
H (Aquifer Thickness - based on bottom of filter pack)	9.37 ft
Lw (Saturated Height above Bottom of Screen)	6.77 ft
Le (Saturated Height of Screen)	6.77 ft
Rw (Radius of Well Borehole)	0.5 ft
Rc (Radius of Well Casing)	0.268 ft
Le/Rw (for determining parameters A and B)	13.54
A (Bouwer and Rice, 1989) IF H>Lw	2
B (Bouwer and Rice, 1989) IF H>Lw	0.3
Yo (Drawdown @ Time 0 - from drawdown curve)	0.4 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.1 ft
t (Time - from drawdown curve)	8100 sec
Hydraulic Conductivity - K	1.29E-01 ft/day
Transmissivity - T	8.76E-01 sqft/day

Checked By CFC 7-21-97
Approved By [illegible] 7-21-97

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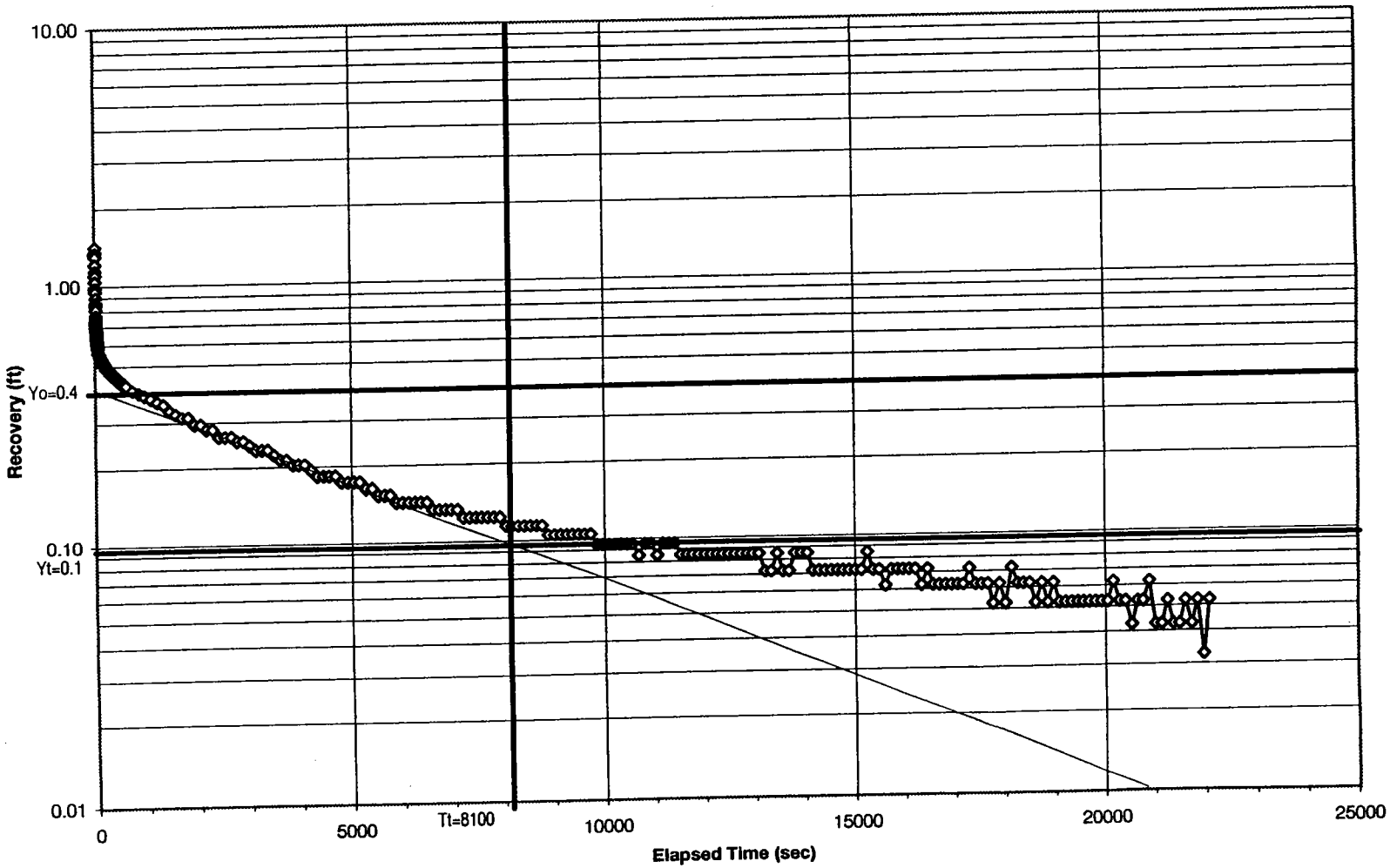
SLUG TEST RECOVERY CHART
MW-POLA-119 Slug In
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By BR 7-21-97

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SLUG TEST CALCULATION FORM
MW-POLA-119 Slug Out
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	9.83 ft
Outer Casing/Christy Box Elevation (from survey)	2.2 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	7.63 ft
Depth To Top Of Screen Interval (from well comp. form)	4.4 ft
Depth To Bottom Of Screen Interval (from well comp. form)	14.4 ft
Depth To Bottom Of Filter Pack (from well comp. form)	17 ft
H (Aquifer Thickness - based on bottom of filter pack)	9.37 ft
Lw (Saturated Height above Bottom of Screen)	6.77 ft
Le (Saturated Height of Screen)	6.77 ft
Rw (Radius of Well Borehole)	0.5 ft
Rc (Radius of Well Casing)	0.268 ft
Le/Rw (for determining parameters A and B)	13.54
A (Bouwer and Rice, 1989) IF H>Lw	2
B (Bouwer and Rice, 1989) IF H>Lw	0.3
Yo (Drawdown @ Time 0 - from drawdown curve)	0.4 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.1 ft
t (Time - from drawdown curve)	8300 sec
Hydraulic Conductivity - K	1.26E-01 ft/day
Transmissivity - T	8.55E-01 sqft/day

Checked By CJC 7-21-97
Approved By [illegible] 7-21-97

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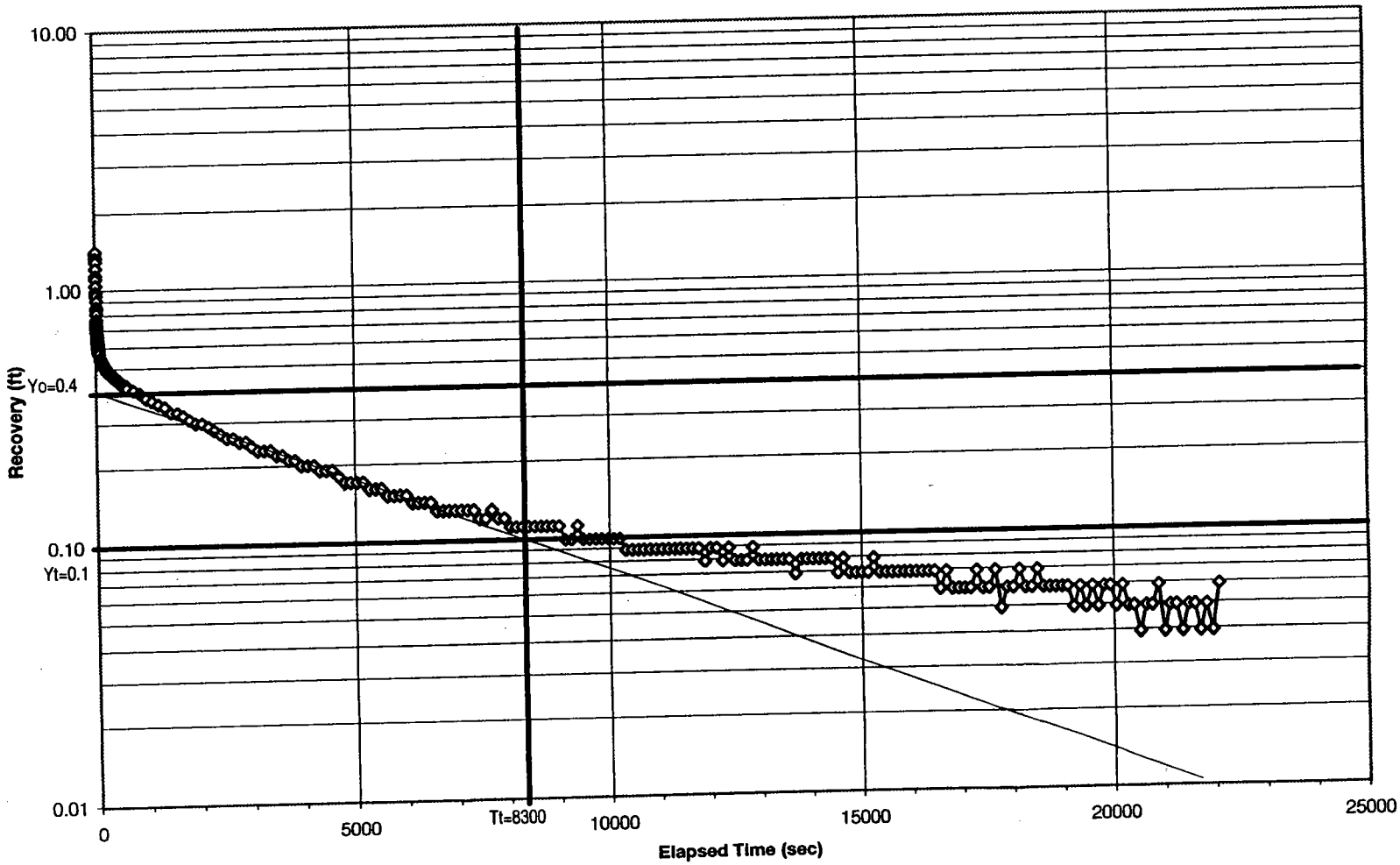
SLUG TEST RECOVERY CHART
MW-POLA-119 Slug Out
Hamilton AAF POL CAP
Project No. 762538



Checked By Cfc 7-21-97
Approved By 7-21-97

12:37 PM 7/10/97 119-out.xlc

SLUG TEST CALCULATION FORM
MW-POLA-121 Slug In
Hamilton AAF POL CAP
Project No. 762538

Measured Depth To Static Water (from data form)	21.22 ft
Outer Casing/Christy Box Elevation (from survey)	2.4 ft
Ground Elevation (from survey)	0 ft
Christy Box (enter "0") or Stand Pipe (enter "1")	1
Depth to Static Water from Ground Surface	18.82 ft
Depth To Top Of Screen Interval (from well comp. form)	7 ft
Depth To Bottom Of Screen Interval (from well comp. form)	32 ft
Depth To Bottom Of Filter Pack (from well comp. form)	33.6 ft
H (Aquifer Thickness - based on bottom of filter pack)	14.78 ft
Lw (Saturated Height above Bottom of Screen)	13.18 ft
Le (Saturated Height of Screen)	13.18 ft
Rw (Radius of Well Borehole)	0.36 ft
Rc (Radius of Well Casing)	0.268 ft
Le/Rw (for determining parameters A and B)	36.61111
A (Bouwer and Rice, 1989) IF H>Lw	2.6
B (Bouwer and Rice, 1989) IF H>Lw	0.4
Yo (Drawdown @ Time 0 - from drawdown curve)	0.75 ft
Yt (Drawdown @ Time t - from drawdown curve)	0.6 ft
t (Time - from drawdown curve)	182000 sec
Hydraulic Conductivity - K	7.35E-04 ft/day
Transmissivity - T	9.68E-03 sqft/day

Checked By CFC 7-21-97
Approved By [illegible] 7-21-97

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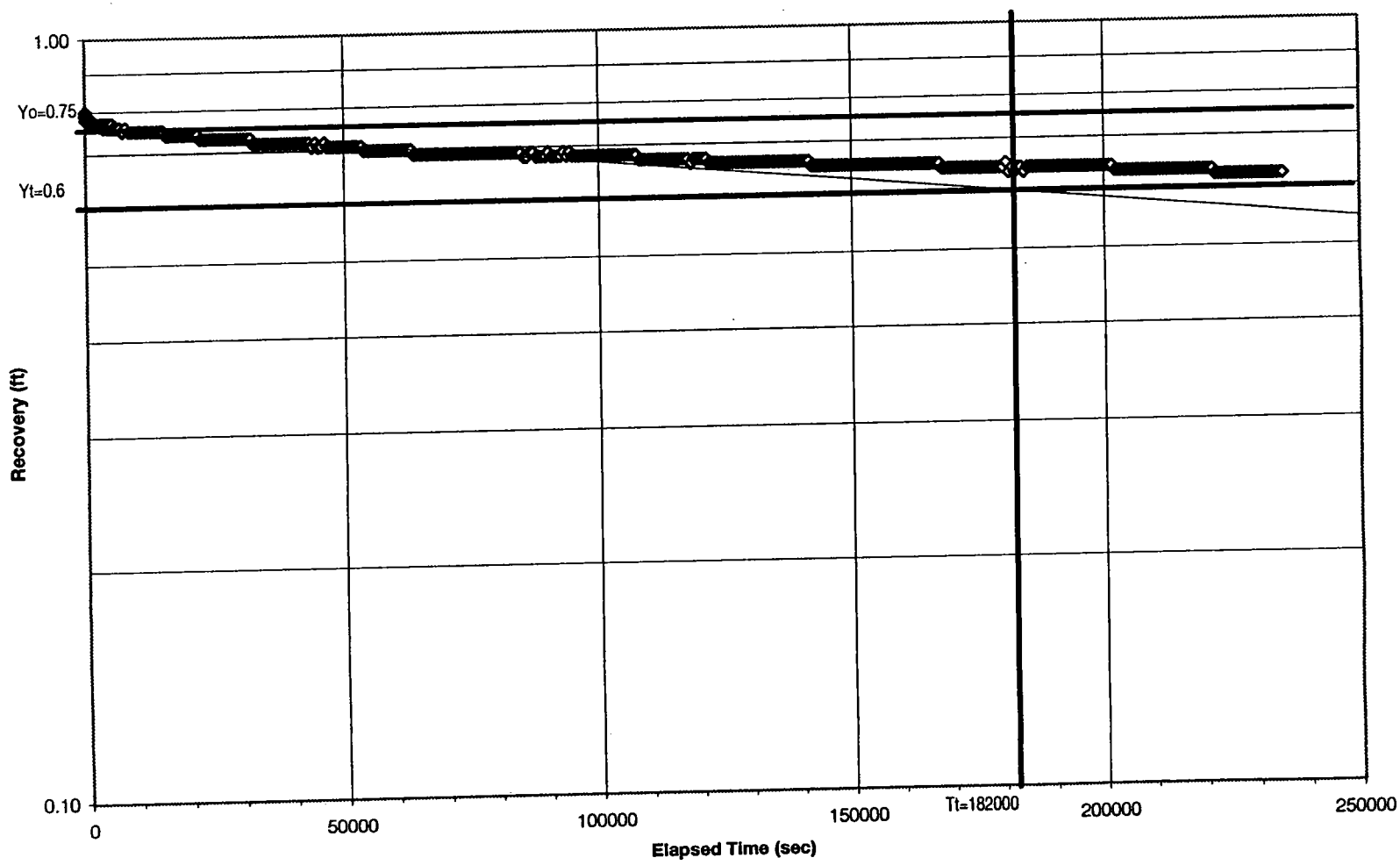
SLUG TEST RECOVERY CHART
MW-POLA-121 Slug In
Hamilton AAF POL CAP
Project No. 762538



Checked By CFC 7-21-97
Approved By [illegible] 7-21-97

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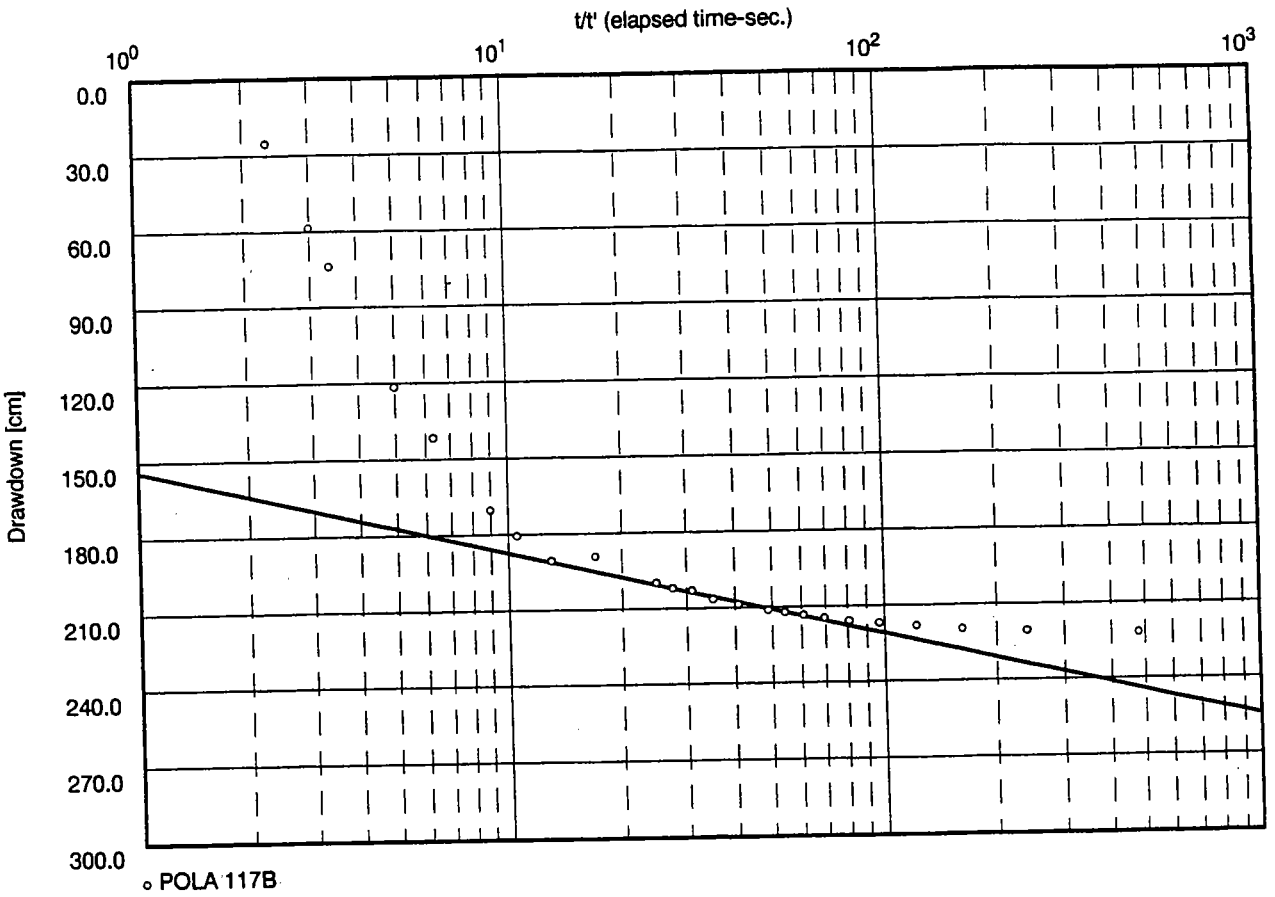
APPENDIX F2

WELL RECOVERY TEST FORMS AND ANALYSES

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 1 Project: Hamilton BRAC Evaluated by: P.L. — Date: 5/9/97

Pumping Test No. 1	Test conducted on: 4/4/97
MW-POLA-117B	
Discharge 0.19 U.S.gal/min	
	Pumping test duration: 14400 s



Transmissivity [cm²/s]: 6.54×10^{-2}

Hydraulic conductivity [cm/s]: 7.15×10^{-5}

Aquifer thickness [cm]: 914.4

Waterloo Hydrogeologic
180 Columbia St. W.
Waterloo,Ontario,Canada
ph.(519)746-1798

Pumping test analysis
Recovery method after
THEIS & JACOB
Unconfined aquifer

Project: Hamilton BRAC

Evaluated by: P.L. | Date: 5/9/97

Pumping Test No. 1 | Test conducted on: 4/4/97

MW-POLA-117B | POLA 117B

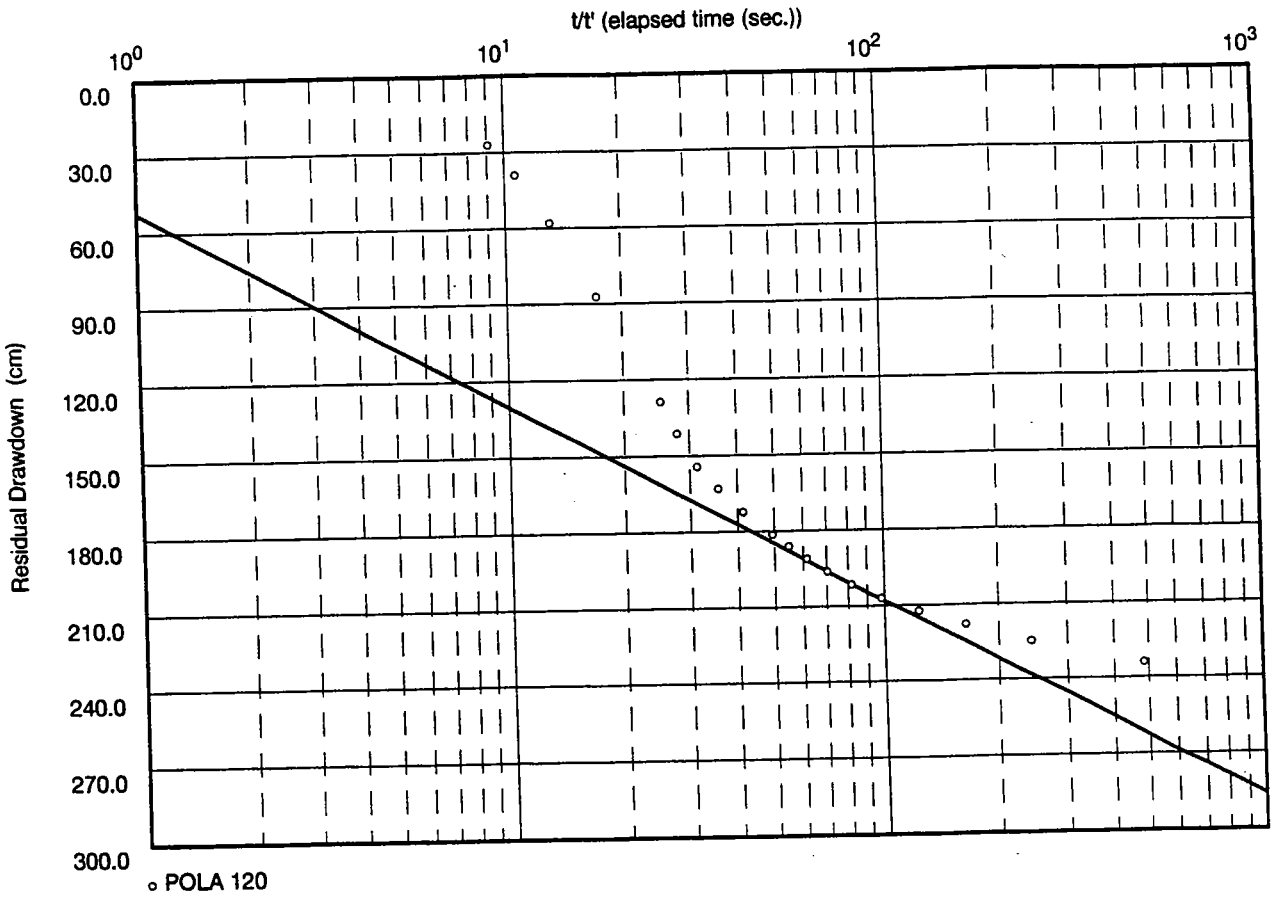
Discharge 0.19 U.S.gal/min

Static water level: 146.6 cm below datum | Pumping test duration: 14400 s

	Time from end of pumping [s]	Water level [cm]	Residual drawdown [cm]	Corrected drawdown [cm]
1	30	405.4	258.8	222.2
2	60	403.6	257.0	220.9
3	90	402.3	255.7	220.0
4	120	400.2	253.6	218.4
5	150	398.4	251.8	217.1
6	180	396.8	250.2	216.0
7	210	395.3	248.7	214.9
8	240	393.5	246.9	213.6
9	270	392.0	245.4	212.5
10	300	390.4	243.8	211.3
11	360	387.4	240.8	209.1
12	420	384.4	237.8	206.8
13	480	379.5	232.9	203.2
14	540	378.3	231.7	202.3
15	600	375.2	228.6	200.0
16	900	361.2	214.6	189.4
17	1200	363.0	216.4	190.8
18	1500	349.9	203.3	180.7
19	1800	336.8	190.2	170.4
20	2700	301.4	154.8	141.7
21	3600	277.7	131.1	121.7
22	6000	224.0	77.4	74.1
23	7200	207.6	61.0	58.9
24	10920	172.5	25.9	25.5

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 1 Project: Hamilton BRAC Evaluated by: P.L. — Date: 5/9/97

Pumping Test No. 1	Test conducted on: 4/2/97
MW-POLA-120	
Discharge 0.63 U.S.gal/min	
	Pumping test duration: 14580 s



Transmissivity [cm²/s]: 9.33×10^{-2}

Hydraulic conductivity [cm/s]: 1.02×10^{-4}

Aquifer thickness [cm]: 914.4

Waterloo Hydrogeologic
180 Columbia St. W.
Waterloo,Ontario,Canada
ph.(519)746-1798

Pumping test analysis
Recovery method after
THEIS & JACOB
Unconfined aquifer

Project: Hamilton BRAC

Evaluated by: P.L. | Date: 5/9/97

Pumping Test No. 1 | Test conducted on: 4/2/97

MW-POLA-120 | POLA 120

Discharge 0.63 U.S.gal/min

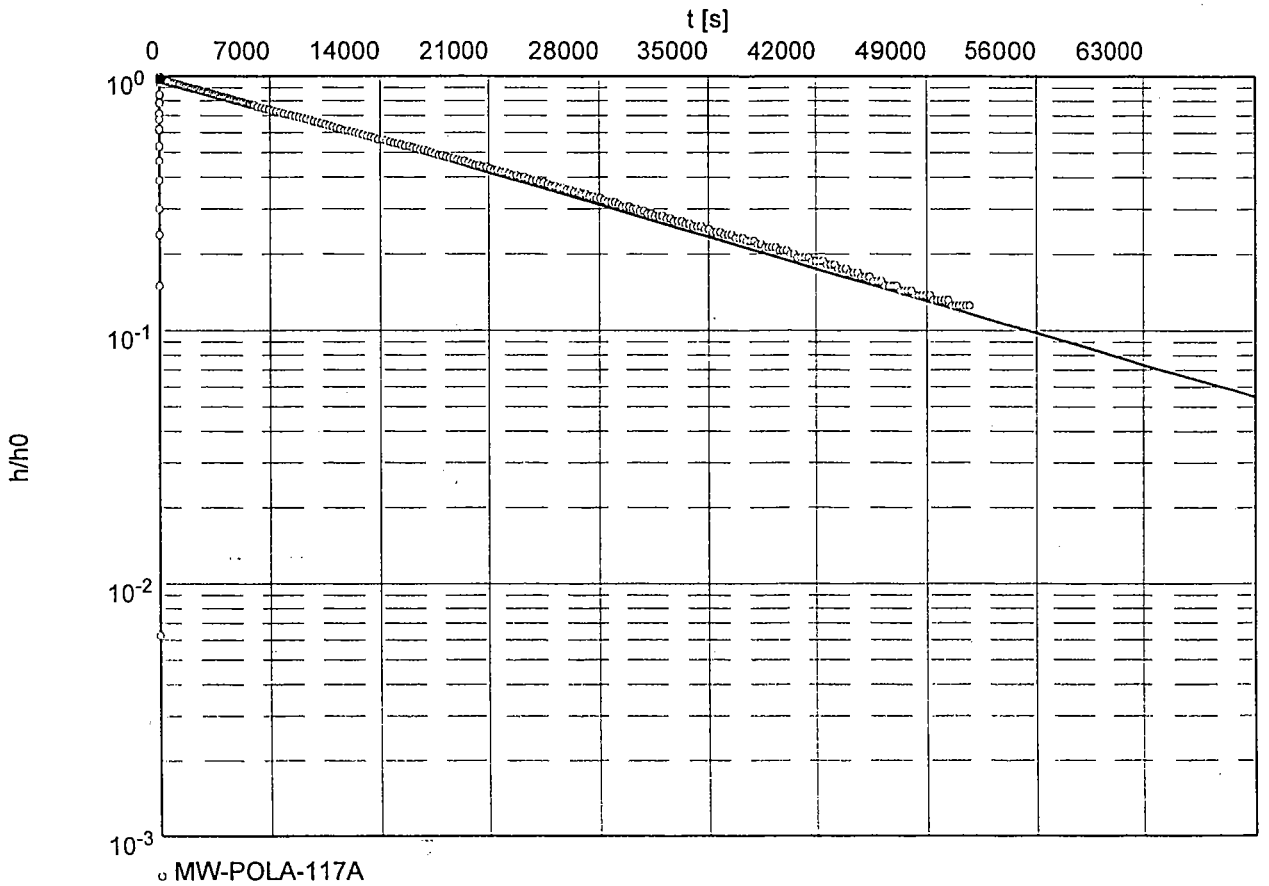
Static water level: 408.4 cm below datum | Pumping test duration: 14580 s

	Time from end of pumping [s]	Water level [cm]	Residual drawdown [cm]	Corrected drawdown [cm]
1	30	684.3	275.9	234.3
2	60	671.2	262.8	225.0
3	90	661.7	253.3	218.2
4	120	654.1	245.7	212.7
5	150	646.8	238.4	207.3
6	180	639.5	231.1	201.9
7	210	632.5	224.1	196.6
8	240	625.4	217.0	191.3
9	270	619.0	210.6	186.4
10	300	613.0	204.6	181.7
11	360	601.4	193.0	172.6
12	420	589.8	181.4	163.4
13	480	578.8	170.4	154.5
14	540	563.0	154.6	141.5
15	600	548.0	139.6	129.0
16	900	500.5	92.1	87.4
17	1200	468.8	60.4	58.4
18	1500	448.7	40.3	39.4
19	1800	436.2	27.8	27.3

Modeling Data

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: Hamilton BRAC Evaluated by: Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	



Hydraulic conductivity [cm/s]: 4.69×10^{-6}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
1	0	48.8	48.8	
2	1	0.0	0.0	
3	1	0.0	0.0	
4	2	0.3	0.3	
5	2	0.0	0.0	
6	3	0.0	0.0	
7	4	7.3	7.3	
8	4	11.6	11.6	
9	5	14.6	14.6	
10	5	18.9	18.9	
11	6	22.6	22.6	
12	7	25.6	25.6	
13	7	25.9	25.9	
14	8	29.9	29.9	
15	8	34.7	34.7	
16	9	30.2	30.2	
17	10	32.9	32.9	
18	10	38.4	38.4	
19	11	38.1	38.1	
20	11	40.8	40.8	
21	12	41.1	41.1	
22	13	46.0	46.0	
23	13	45.7	45.7	
24	14	46.6	46.6	
25	14	47.5	47.5	
26	15	48.2	48.2	
27	16	48.2	48.2	
28	16	48.2	48.2	
29	17	47.5	47.5	
30	17	47.9	47.9	
31	18	47.9	47.9	
32	19	47.5	47.5	
33	19	47.9	47.9	
34	20	46.9	46.9	
35	21	47.5	47.5	
36	22	48.2	48.2	
37	23	47.9	47.9	
38	24	48.2	48.2	
39	25	47.5	47.5	
40	26	47.9	47.9	
41	27	47.5	47.5	
42	28	47.5	47.5	
43	29	47.5	47.5	
44	30	47.5	47.5	
45	31	47.5	47.5	
46	32	47.5	47.5	
47	33	47.5	47.5	
48	34	47.5	47.5	
49	35	47.5	47.5	
50	36	47.5	47.5	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
51	37	47.5	47.5	
52	38	47.5	47.5	
53	39	47.5	47.5	
54	40	47.5	47.5	
55	41	47.5	47.5	
56	42	47.5	47.5	
57	43	47.5	47.5	
58	44	47.5	47.5	
59	45	47.5	47.5	
60	46	47.5	47.5	
61	47	47.5	47.5	
62	48	47.5	47.5	
63	49	47.5	47.5	
64	50	47.5	47.5	
65	51	47.5	47.5	
66	52	47.5	47.5	
67	53	47.5	47.5	
68	54	47.5	47.5	
69	55	47.5	47.5	
70	56	47.5	47.5	
71	57	47.5	47.5	
72	58	47.5	47.5	
73	59	47.5	47.5	
74	60	47.5	47.5	
75	72	47.2	47.2	
76	84	47.5	47.5	
77	96	47.5	47.5	
78	108	47.5	47.5	
79	120	47.5	47.5	
80	132	47.5	47.5	
81	144	47.9	47.9	
82	156	47.5	47.5	
83	168	47.5	47.5	
84	180	47.5	47.5	
85	192	47.5	47.5	
86	204	47.5	47.5	
87	216	47.2	47.2	
88	228	47.2	47.2	
89	240	47.2	47.2	
90	252	47.2	47.2	
91	264	47.2	47.2	
92	276	47.2	47.2	
93	288	47.2	47.2	
94	300	47.2	47.2	
95	312	46.9	46.9	
96	324	46.9	46.9	
97	336	46.9	46.9	
98	348	46.9	46.9	
99	360	46.9	46.9	
100	372	46.9	46.9	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
101	384	46.9	46.9
102	396	46.9	46.9
103	408	46.9	46.9
104	420	46.6	46.6
105	432	46.6	46.6
106	444	46.6	46.6
107	456	46.6	46.6
108	468	46.6	46.6
109	480	46.6	46.6
110	492	46.6	46.6
111	504	46.6	46.6
112	516	46.6	46.6
113	528	46.6	46.6
114	540	46.6	46.6
115	552	46.6	46.6
116	564	46.6	46.6
117	576	46.3	46.3
118	588	46.3	46.3
119	600	46.3	46.3
120	720	46.0	46.0
121	840	45.7	45.7
122	960	45.7	45.7
123	1080	45.4	45.4
124	1200	45.1	45.1
125	1320	45.1	45.1
126	1440	44.8	44.8
127	1560	44.5	44.5
128	1680	44.2	44.2
129	1800	43.9	43.9
130	1920	43.9	43.9
131	2040	43.6	43.6
132	2160	43.6	43.6
133	2280	43.3	43.3
134	2400	43.0	43.0
135	2520	43.0	43.0
136	2640	42.7	42.7
137	2760	42.4	42.4
138	2880	42.4	42.4
139	3000	42.1	42.1
140	3120	41.8	41.8
141	3240	41.8	41.8
142	3360	41.5	41.5
143	3480	41.1	41.1
144	3600	41.1	41.1
145	3720	40.8	40.8
146	3840	40.5	40.5
147	3960	40.5	40.5
148	4080	40.2	40.2
149	4200	40.2	40.2
150	4320	39.9	39.9

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
151	4440	39.6	39.6
152	4560	39.6	39.6
153	4680	39.3	39.3
154	4800	39.0	39.0
155	4920	39.0	39.0
156	5040	38.7	38.7
157	5160	38.7	38.7
158	5280	38.4	38.4
159	5400	38.1	38.1
160	5520	38.1	38.1
161	5640	37.8	37.8
162	5760	37.8	37.8
163	5880	37.5	37.5
164	6000	37.5	37.5
165	6240	36.9	36.9
166	6480	36.6	36.6
167	6720	36.3	36.3
168	6960	36.0	36.0
169	7200	35.7	35.7
170	7440	35.4	35.4
171	7680	35.1	35.1
172	7920	34.7	34.7
173	8160	34.4	34.4
174	8400	34.1	34.1
175	8640	33.8	33.8
176	8880	33.5	33.5
177	9120	33.2	33.2
178	9360	32.9	32.9
179	9600	32.6	32.6
180	9840	32.3	32.3
181	10080	32.0	32.0
182	10320	31.7	31.7
183	10560	31.4	31.4
184	10800	31.1	31.1
185	11040	30.8	30.8
186	11280	30.5	30.5
187	11520	30.2	30.2
188	11760	29.9	29.9
189	12000	29.9	29.9
190	12240	29.6	29.6
191	12480	29.3	29.3
192	12720	29.0	29.0
193	12960	28.7	28.7
194	13200	28.3	28.3
195	13440	28.0	28.0
196	13680	27.7	27.7
197	13920	27.4	27.4
198	14160	27.4	27.4
199	14400	27.1	27.1
200	14640	26.8	26.8

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
201	14880	26.5	26.5	
202	15120	26.5	26.5	
203	15360	26.2	26.2	
204	15600	25.9	25.9	
205	15840	25.9	25.9	
206	16080	25.6	25.6	
207	16320	25.3	25.3	
208	16560	25.0	25.0	
209	16800	25.0	25.0	
210	17040	24.7	24.7	
211	17280	24.4	24.4	
212	17520	24.1	24.1	
213	17760	23.8	23.8	
214	18000	23.8	23.8	
215	18240	23.5	23.5	
216	18480	23.2	23.2	
217	18720	23.2	23.2	
218	18960	22.9	22.9	
219	19200	22.6	22.6	
220	19440	22.6	22.6	
221	19680	22.3	22.3	
222	19920	21.9	21.9	
223	20160	21.6	21.6	
224	20400	21.6	21.6	
225	20640	21.3	21.3	
226	20880	21.3	21.3	
227	21120	21.0	21.0	
228	21360	20.7	20.7	
229	21600	20.7	20.7	
230	21840	20.4	20.4	
231	22080	20.4	20.4	
232	22320	20.1	20.1	
233	22560	19.8	19.8	
234	22800	19.8	19.8	
235	23040	19.5	19.5	
236	23280	19.5	19.5	
237	23520	19.2	19.2	
238	23760	18.9	18.9	
239	24000	18.9	18.9	
240	24240	18.6	18.6	
241	24480	18.6	18.6	
242	24720	18.3	18.3	
243	24960	18.0	18.0	
244	25200	18.0	18.0	
245	25440	17.7	17.7	
246	25680	17.7	17.7	
247	25920	17.4	17.4	
248	26160	17.4	17.4	
249	26400	17.1	17.1	
250	26640	17.1	17.1	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
251	26880	16.8	16.8
252	27120	16.8	16.8
253	27360	16.5	16.5
254	27600	16.5	16.5
255	27840	16.2	16.2
256	28080	16.2	16.2
257	28320	15.8	15.8
258	28560	15.5	15.5
259	28800	15.5	15.5
260	29040	15.5	15.5
261	29280	15.2	15.2
262	29520	14.9	14.9
263	29760	14.9	14.9
264	30000	14.9	14.9
265	30240	14.6	14.6
266	30480	14.6	14.6
267	30720	14.3	14.3
268	30960	14.3	14.3
269	31200	14.0	14.0
270	31440	14.0	14.0
271	31680	13.7	13.7
272	31920	13.7	13.7
273	32160	13.7	13.7
274	32400	13.4	13.4
275	32640	13.4	13.4
276	32880	13.1	13.1
277	33120	13.1	13.1
278	33360	13.1	13.1
279	33600	12.8	12.8
280	33840	12.8	12.8
281	34080	12.5	12.5
282	34320	12.5	12.5
283	34560	12.5	12.5
284	34800	12.2	12.2
285	35040	12.2	12.2
286	35280	11.9	11.9
287	35520	11.9	11.9
288	35760	11.9	11.9
289	36000	11.6	11.6
290	36240	11.6	11.6
291	36480	11.6	11.6
292	36720	11.3	11.3
293	36960	11.3	11.3
294	37200	11.3	11.3
295	37440	11.0	11.0
296	37680	11.0	11.0
297	37920	11.0	11.0
298	38160	10.7	10.7
299	38400	10.7	10.7
300	38640	10.4	10.4

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 8 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
301	38880	10.4	10.4	
302	39120	10.4	10.4	
303	39360	10.4	10.4	
304	39600	10.1	10.1	
305	39840	10.1	10.1	
306	40080	10.1	10.1	
307	40320	9.8	9.8	
308	40560	9.8	9.8	
309	40800	9.4	9.4	
310	41040	9.4	9.4	
311	41280	9.4	9.4	
312	41520	9.4	9.4	
313	41760	9.1	9.1	
314	42000	9.1	9.1	
315	42240	9.1	9.1	
316	42480	9.1	9.1	
317	42720	8.8	8.8	
318	42960	8.8	8.8	
319	43200	8.8	8.8	
320	43440	8.5	8.5	
321	43680	8.5	8.5	
322	43920	8.5	8.5	
323	44160	8.2	8.2	
324	44400	8.2	8.2	
325	44640	8.2	8.2	
326	44880	7.9	7.9	
327	45120	7.9	7.9	
328	45360	7.9	7.9	
329	45600	7.6	7.6	
330	45840	7.6	7.6	
331	46080	7.6	7.6	
332	46320	7.3	7.3	
333	46560	7.3	7.3	
334	46800	7.3	7.3	
335	47040	7.3	7.3	
336	47280	7.0	7.0	
337	47520	7.0	7.0	
338	47760	7.0	7.0	
339	48000	7.0	7.0	
340	48240	6.7	6.7	
341	48480	6.7	6.7	
342	48720	6.7	6.7	
343	48960	6.7	6.7	
344	49200	6.7	6.7	
345	49440	6.4	6.4	
346	49680	6.4	6.4	
347	49920	6.4	6.4	
348	50160	6.4	6.4	
349	50400	6.4	6.4	
350	50640	6.1	6.1	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 9 Project: Hamilton BRAC Evaluated by:	Date: 5.15.1997

Slug Test No. 1	Test conducted on: 5/7-5/8/97
MW-POLA-117A	MW-POLA-117A

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
351	50880	6.1	6.1
352	51120	6.1	6.1
353	51360	6.1	6.1
354	51600	6.1	6.1
355	51840	6.1	6.1

	slug/bail test analysis BOUWER-RICE's method	Page 1	
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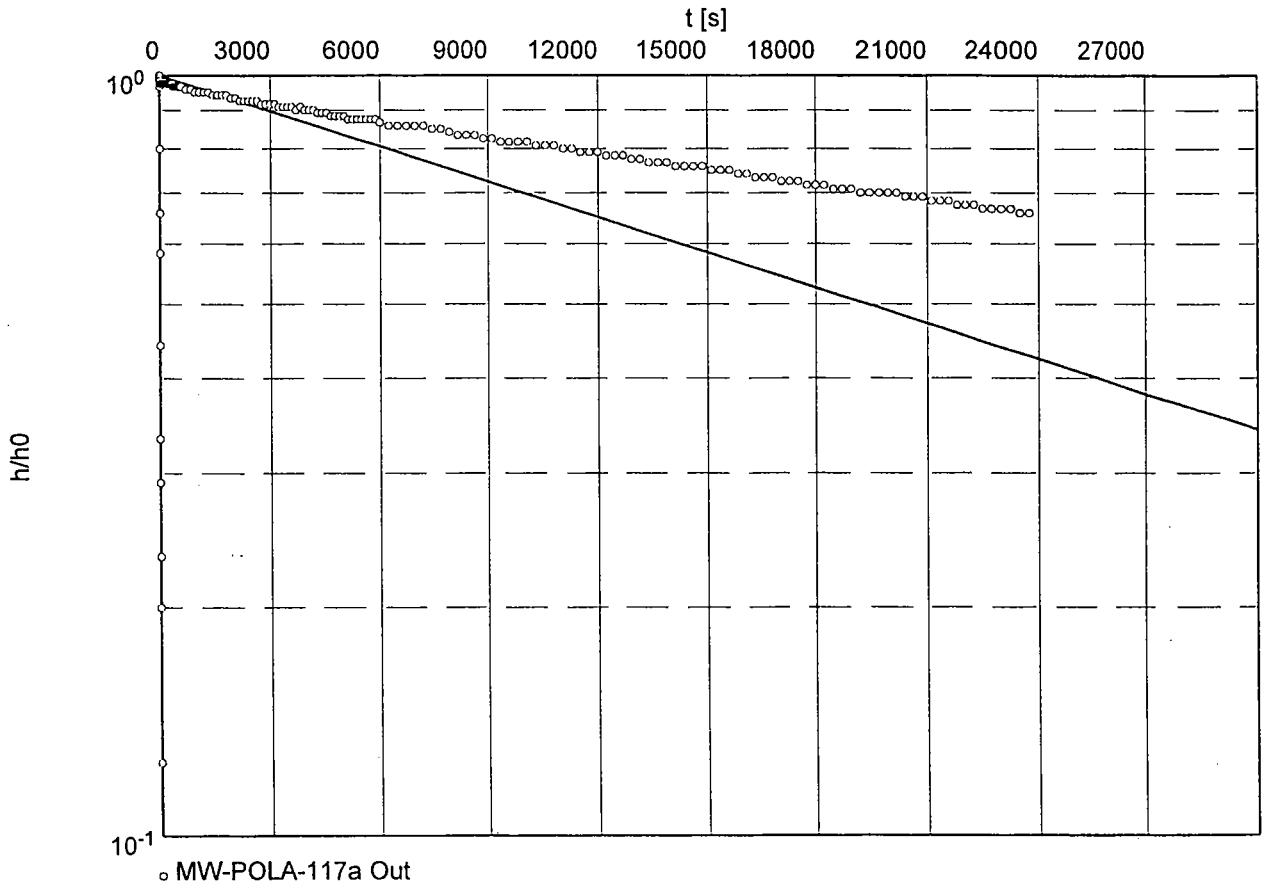
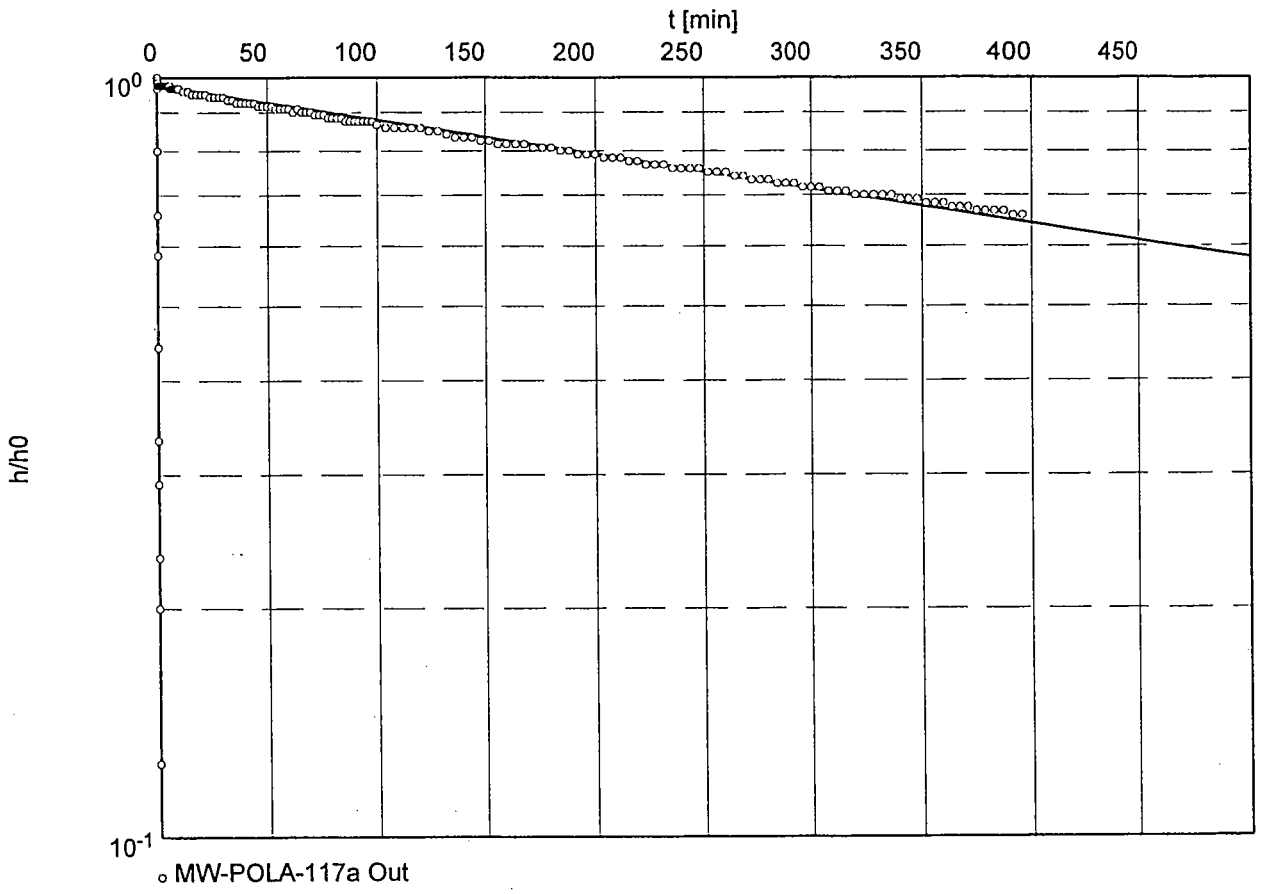
Slug Test No. SLUG OUT	Test conducted on: 4/3/97
MW-POLA-117A	



Hydraulic conductivity [cm/s]: 4.04×10^{-6}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 1 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 3.87×10^{-6}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 2 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117a Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
1	0.00	1.20	1.20	
2	0.01	-0.40	-0.40	
3	0.02	-0.40	-0.40	
4	0.03	-0.40	-0.40	
5	0.04	-0.35	-0.35	
6	0.05	0.00	0.00	
7	0.06	-0.15	-0.15	
8	0.07	0.24	0.24	
9	0.08	0.28	0.28	
10	0.09	0.53	0.53	
11	0.10	0.70	0.70	
12	0.11	0.79	0.79	
13	0.12	0.96	0.96	
14	0.13	1.16	1.16	
15	0.14	1.21	1.21	
16	0.15	1.20	1.20	
17	0.16	1.19	1.19	
18	0.17	1.18	1.18	
19	0.18	1.18	1.18	
20	0.19	1.18	1.18	
21	0.20	1.18	1.18	
22	0.21	1.18	1.18	
23	0.22	1.18	1.18	
24	0.23	1.18	1.18	
25	0.24	1.18	1.18	
26	0.25	1.18	1.18	
27	0.26	1.18	1.18	
28	0.27	1.18	1.18	
29	0.28	1.18	1.18	
30	0.29	1.18	1.18	
31	0.30	1.18	1.18	
32	0.31	1.18	1.18	
33	0.32	1.18	1.18	
34	0.33	1.18	1.18	
35	0.35	1.18	1.18	
36	0.37	1.18	1.18	
37	0.38	1.18	1.18	
38	0.40	1.18	1.18	
39	0.42	1.18	1.18	
40	0.43	1.18	1.18	
41	0.45	1.18	1.18	
42	0.47	1.18	1.18	
43	0.48	1.17	1.17	
44	0.50	1.17	1.17	
45	0.52	1.17	1.17	
46	0.53	1.17	1.17	
47	0.55	1.17	1.17	
48	0.57	1.17	1.17	
49	0.58	1.17	1.17	
50	0.60	1.17	1.17	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 3 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117a Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
51	0.62	1.17	1.17
52	0.63	1.17	1.17
53	0.65	1.17	1.17
54	0.67	1.17	1.17
55	0.68	1.17	1.17
56	0.70	1.17	1.17
57	0.72	1.17	1.17
58	0.73	1.17	1.17
59	0.75	1.17	1.17
60	0.77	1.17	1.17
61	0.78	1.17	1.17
62	0.80	1.17	1.17
63	0.82	1.17	1.17
64	0.83	1.17	1.17
65	0.85	1.17	1.17
66	0.87	1.17	1.17
67	0.88	1.17	1.17
68	0.90	1.17	1.17
69	0.92	1.17	1.17
70	0.93	1.17	1.17
71	0.95	1.17	1.17
72	0.97	1.17	1.17
73	0.98	1.17	1.17
74	1.00	1.17	1.17
75	1.20	1.17	1.17
76	1.40	1.17	1.17
77	1.60	1.17	1.17
78	1.80	1.17	1.17
79	2.00	1.17	1.17
80	2.20	1.17	1.17
81	2.40	1.17	1.17
82	2.60	1.17	1.17
83	2.80	1.17	1.17
84	3.00	1.17	1.17
85	3.20	1.17	1.17
86	3.40	1.17	1.17
87	3.60	1.17	1.17
88	3.80	1.17	1.17
89	4.00	1.17	1.17
90	4.20	1.17	1.17
91	4.40	1.17	1.17
92	4.60	1.17	1.17
93	4.80	1.17	1.17
94	5.00	1.17	1.17
95	5.20	1.17	1.17
96	5.40	1.17	1.17
97	5.60	1.17	1.17
98	5.80	1.17	1.17
99	6.00	1.17	1.17
100	6.20	1.16	1.16

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 4 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117a Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
101	6.40	1.16	1.16
102	6.60	1.16	1.16
103	6.80	1.16	1.16
104	7.00	1.16	1.16
105	7.20	1.16	1.16
106	7.40	1.16	1.16
107	7.60	1.16	1.16
108	7.80	1.16	1.16
109	8.00	1.16	1.16
110	8.20	1.16	1.16
111	8.40	1.16	1.16
112	8.60	1.16	1.16
113	8.80	1.16	1.16
114	9.00	1.16	1.16
115	9.20	1.16	1.16
116	9.40	1.16	1.16
117	9.60	1.16	1.16
118	9.80	1.16	1.16
119	10.00	1.16	1.16
120	12.00	1.15	1.15
121	14.00	1.15	1.15
122	16.00	1.14	1.14
123	18.00	1.14	1.14
124	20.00	1.14	1.14
125	22.00	1.14	1.14
126	24.00	1.13	1.13
127	26.00	1.13	1.13
128	28.00	1.13	1.13
129	30.00	1.13	1.13
130	32.00	1.12	1.12
131	34.00	1.12	1.12
132	36.00	1.11	1.11
133	38.00	1.11	1.11
134	40.00	1.11	1.11
135	42.00	1.11	1.11
136	44.00	1.11	1.11
137	46.00	1.10	1.10
138	48.00	1.10	1.10
139	50.00	1.10	1.10
140	52.00	1.10	1.10
141	54.00	1.09	1.09
142	56.00	1.09	1.09
143	58.00	1.09	1.09
144	60.00	1.09	1.09
145	62.00	1.08	1.08
146	64.00	1.09	1.09
147	66.00	1.08	1.08
148	68.00	1.08	1.08
149	70.00	1.08	1.08
150	72.00	1.07	1.07

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 5 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117a Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
151	74.00	1.07	1.07
152	76.00	1.07	1.07
153	78.00	1.06	1.06
154	80.00	1.06	1.06
155	82.00	1.06	1.06
156	84.00	1.06	1.06
157	86.00	1.05	1.05
158	88.00	1.05	1.05
159	90.00	1.05	1.05
160	92.00	1.05	1.05
161	94.00	1.05	1.05
162	96.00	1.05	1.05
163	98.00	1.05	1.05
164	100.00	1.04	1.04
165	104.00	1.03	1.03
166	108.00	1.03	1.03
167	112.00	1.03	1.03
168	116.00	1.03	1.03
169	120.00	1.03	1.03
170	124.00	1.02	1.02
171	128.00	1.02	1.02
172	132.00	1.01	1.01
173	136.00	1.00	1.00
174	140.00	1.00	1.00
175	144.00	1.00	1.00
176	148.00	0.99	0.99
177	152.00	0.99	0.99
178	156.00	0.98	0.98
179	160.00	0.98	0.98
180	164.00	0.98	0.98
181	168.00	0.98	0.98
182	172.00	0.97	0.97
183	176.00	0.97	0.97
184	180.00	0.97	0.97
185	184.00	0.96	0.96
186	188.00	0.96	0.96
187	192.00	0.95	0.95
188	196.00	0.95	0.95
189	200.00	0.95	0.95
190	204.00	0.94	0.94
191	208.00	0.94	0.94
192	212.00	0.94	0.94
193	216.00	0.93	0.93
194	220.00	0.93	0.93
195	224.00	0.92	0.92
196	228.00	0.92	0.92
197	232.00	0.92	0.92
198	236.00	0.91	0.91
199	240.00	0.91	0.91
200	244.00	0.91	0.91

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 6 Project: Evaluated by:	Date: 11.05.1997

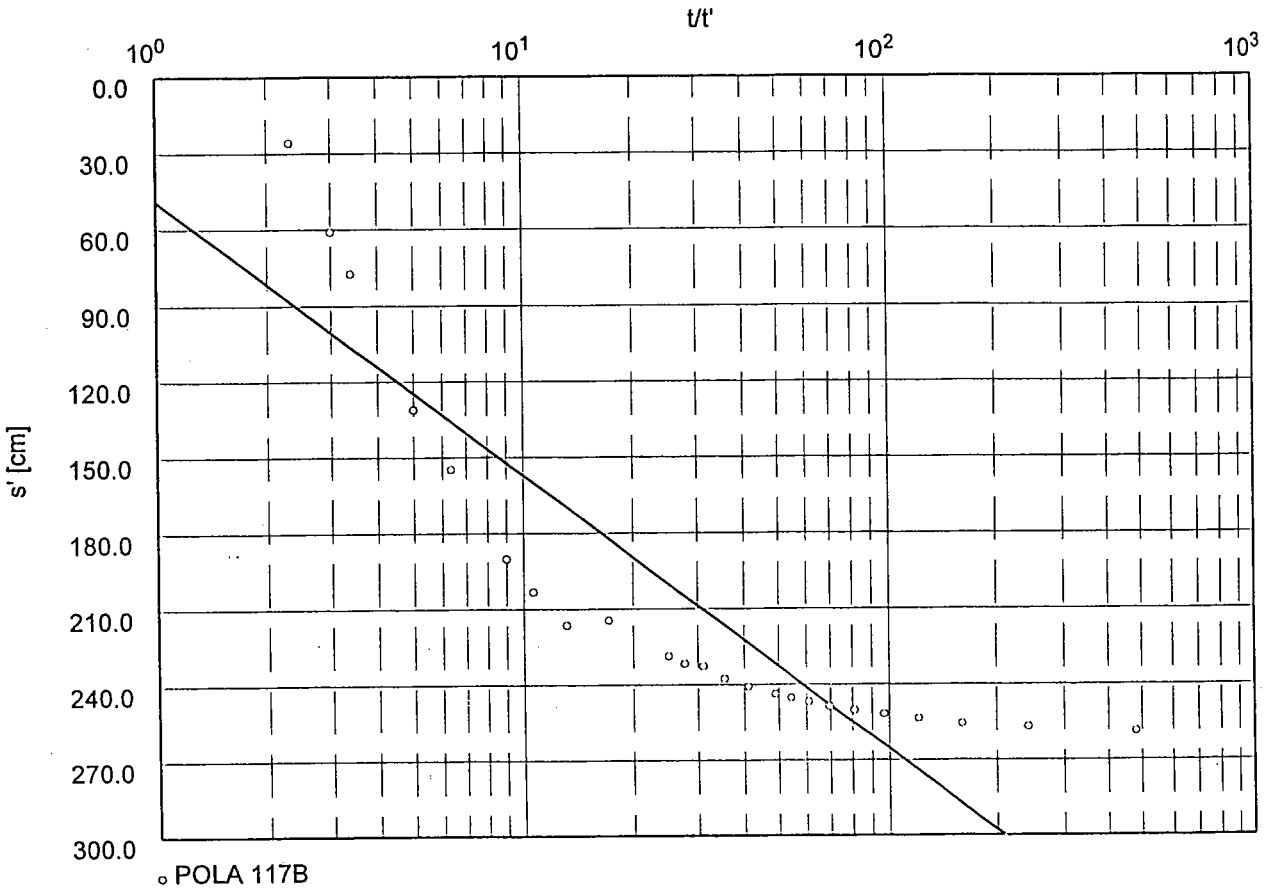
Slug Test No.	Test conducted on:
	MW-POLA-117a Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
201	248.00	0.91	0.91
202	252.00	0.90	0.90
203	256.00	0.90	0.90
204	260.00	0.90	0.90
205	264.00	0.89	0.89
206	268.00	0.89	0.89
207	272.00	0.88	0.88
208	276.00	0.88	0.88
209	280.00	0.88	0.88
210	284.00	0.87	0.87
211	288.00	0.87	0.87
212	292.00	0.87	0.87
213	296.00	0.86	0.86
214	300.00	0.86	0.86
215	304.00	0.86	0.86
216	308.00	0.85	0.85
217	312.00	0.85	0.85
218	316.00	0.85	0.85
219	320.00	0.84	0.84
220	324.00	0.84	0.84
221	328.00	0.84	0.84
222	332.00	0.84	0.84
223	336.00	0.84	0.84
224	340.00	0.83	0.83
225	344.00	0.83	0.83
226	348.00	0.83	0.83
227	352.00	0.82	0.82
228	356.00	0.82	0.82
229	360.00	0.82	0.82
230	364.00	0.81	0.81
231	368.00	0.81	0.81
232	372.00	0.81	0.81
233	376.00	0.80	0.80
234	380.00	0.80	0.80
235	384.00	0.80	0.80
236	388.00	0.80	0.80
237	392.00	0.79	0.79
238	396.00	0.79	0.79

	Pumping test analysis Recovery method after THEIS & JACOB Confined aquifer	Page 1 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Pumping Test No. 1	Test conducted on: 4/4/97
MW-POLA-117B	
Discharge 0.19 U.S.gal/min	
	Pumping test duration: 14400 s



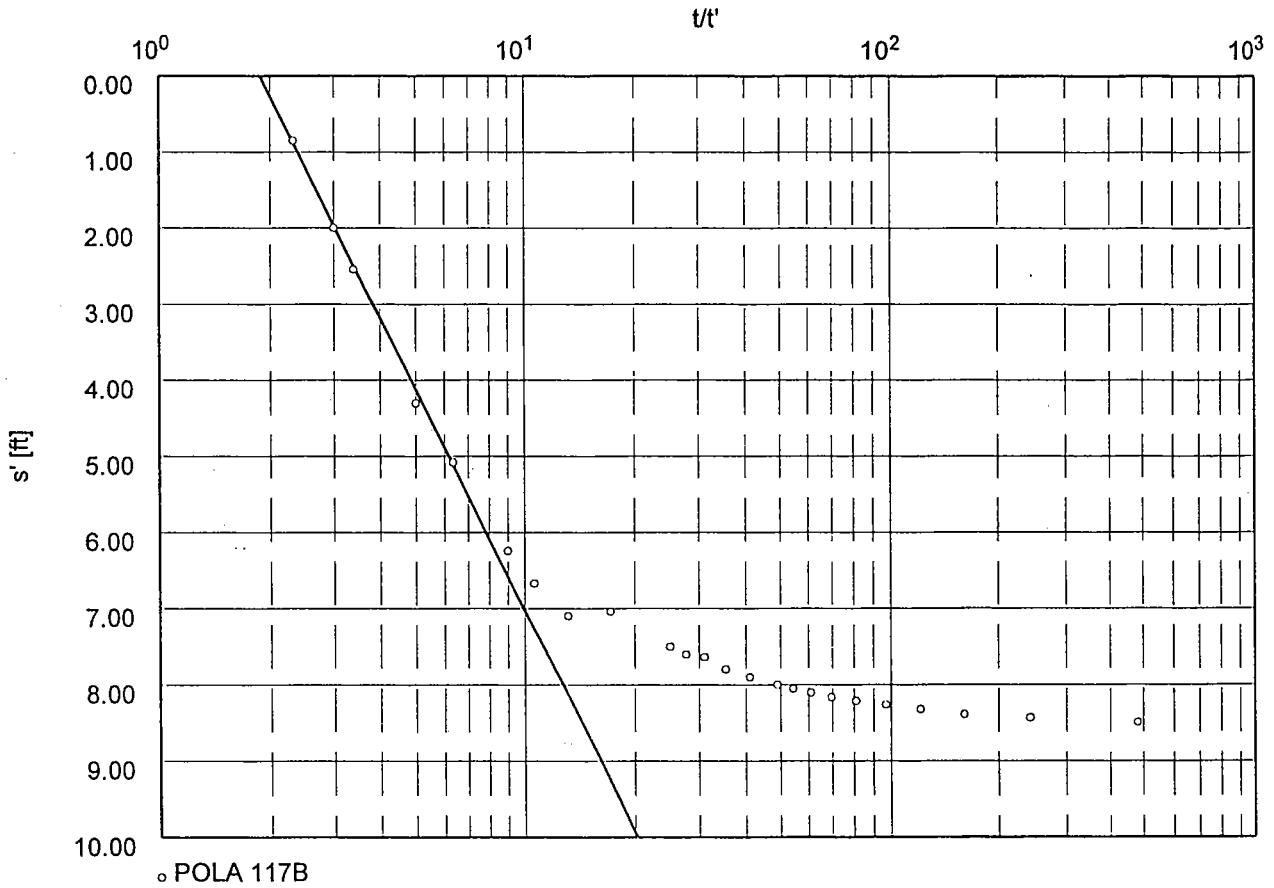
Transmissivity [cm²/s]: 2.02×10^{-2}

Hydraulic conductivity [cm/s]: 2.21×10^{-5}

Aquifer thickness [cm]: 914.4

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Confined aquifer	Page 1 Project: Evaluated by: Date: 09.05.1997

Pumping Test No.	Test conducted on:
Discharge 0.19 U.S.gal/min	
	Pumping test duration: 240.00 min



Transmissivity [ft²/min]: 4.80×10^{-4}

Hydraulic conductivity [ft/min]: 1.60×10^{-5}

Aquifer thickness [ft]: 30.00

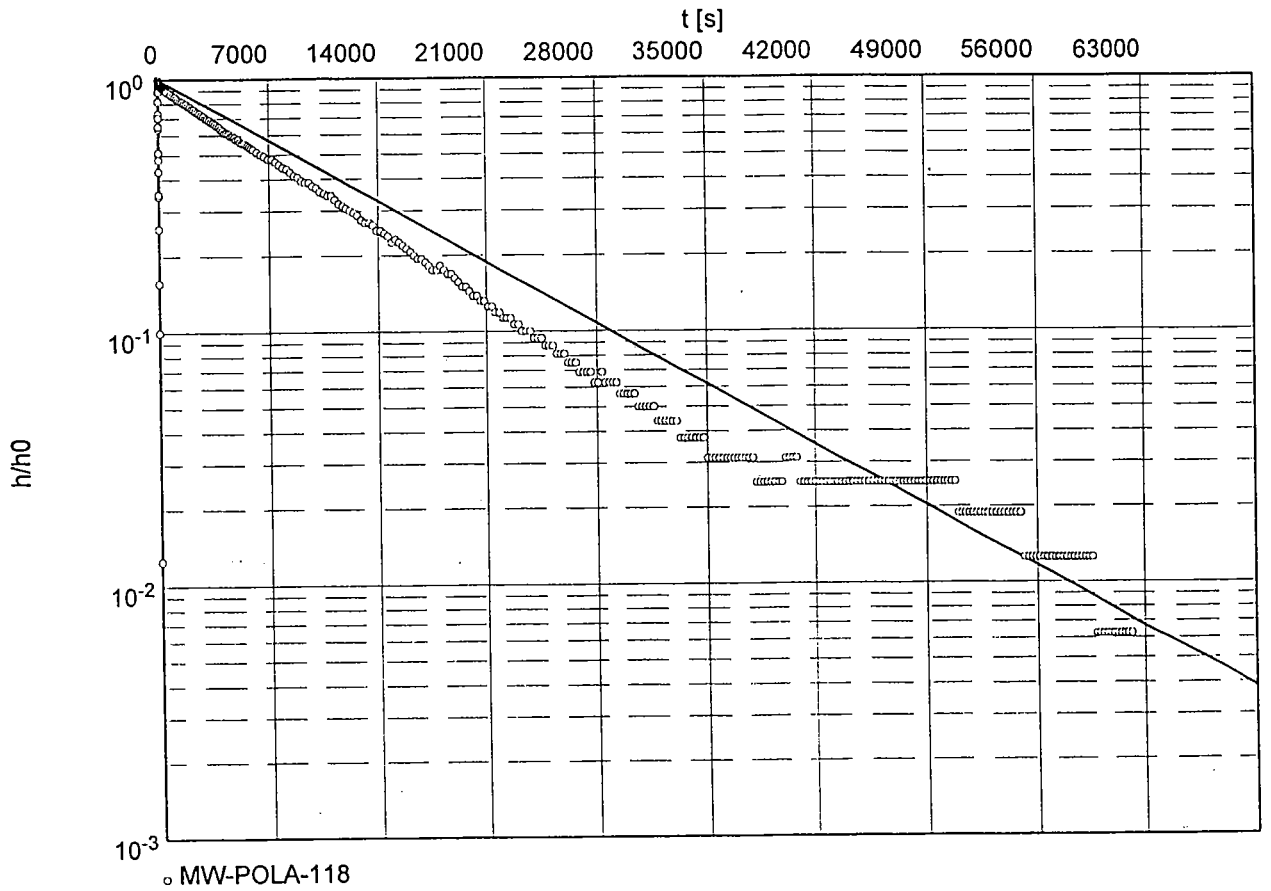
Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Confined aquifer	Page 2 Project: Evaluated by:	Date: 09.05.1997

Pumping Test No.	Test conducted on:
	POLA 117B
Discharge 0.19 U.S.gal/min	
Static water level: 4.81 ft below datum	Pumping test duration: 240.00 min

	Time from end of pumping [min]	Water level [ft]	Residual drawdown [ft]
1	0.50	13.30	8.49
2	1.00	13.24	8.43
3	1.50	13.20	8.39
4	2.00	13.13	8.32
5	2.50	13.07	8.26
6	3.00	13.02	8.21
7	3.50	12.97	8.16
8	4.00	12.91	8.10
9	4.50	12.86	8.05
10	5.00	12.81	8.00
11	6.00	12.71	7.90
12	7.00	12.61	7.80
13	8.00	12.45	7.64
14	9.00	12.41	7.60
15	10.00	12.31	7.50
16	15.00	11.85	7.04
17	20.00	11.91	7.10
18	25.00	11.48	6.67
19	30.00	11.05	6.24
20	45.00	9.89	5.08
21	60.00	9.11	4.30
22	100.00	7.35	2.54
23	120.00	6.81	2.00
24	182.00	5.66	0.85

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: Hamilton BRAC Evaluated by: Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	



Hydraulic conductivity [cm/s]: 1.98×10^{-8}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
1	0	48.8	48.8
2	1	0.0	0.0
3	1	0.6	0.6
4	2	4.9	4.9
5	2	7.6	7.6
6	3	12.5	12.5
7	4	16.8	16.8
8	4	17.1	17.1
9	5	21.0	21.0
10	5	23.5	23.5
11	6	25.0	25.0
12	7	31.1	31.1
13	7	31.7	31.7
14	8	34.4	34.4
15	8	35.7	35.7
16	9	34.4	34.4
17	10	39.9	39.9
18	10	43.6	43.6
19	11	46.0	46.0
20	11	47.9	47.9
21	12	44.5	44.5
22	13	43.6	43.6
23	13	47.2	47.2
24	14	47.9	47.9
25	14	46.3	46.3
26	15	47.2	47.2
27	16	46.9	46.9
28	16	46.6	46.6
29	17	46.9	46.9
30	17	46.9	46.9
31	18	46.9	46.9
32	19	47.9	47.9
33	19	48.2	48.2
34	20	47.9	47.9
35	21	48.2	48.2
36	22	48.2	48.2
37	23	48.2	48.2
38	24	48.2	48.2
39	25	48.2	48.2
40	26	48.2	48.2
41	27	48.2	48.2
42	28	48.8	48.8
43	29	47.9	47.9
44	30	48.2	48.2
45	31	48.2	48.2
46	32	48.2	48.2
47	33	48.2	48.2
48	34	47.9	47.9
49	35	47.9	47.9
50	36	47.9	47.9

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
51	37	47.9	47.9	
52	38	47.9	47.9	
53	39	47.9	47.9	
54	40	47.9	47.9	
55	41	47.5	47.5	
56	42	47.9	47.9	
57	43	47.5	47.5	
58	44	47.5	47.5	
59	45	47.5	47.5	
60	46	47.5	47.5	
61	47	47.5	47.5	
62	48	47.5	47.5	
63	49	47.2	47.2	
64	50	47.2	47.2	
65	51	47.2	47.2	
66	52	47.2	47.2	
67	53	47.2	47.2	
68	54	47.2	47.2	
69	55	47.2	47.2	
70	56	47.2	47.2	
71	57	47.2	47.2	
72	58	46.9	46.9	
73	59	47.2	47.2	
74	60	46.9	46.9	
75	72	46.6	46.6	
76	84	46.6	46.6	
77	96	46.3	46.3	
78	108	46.0	46.0	
79	120	46.0	46.0	
80	132	46.0	46.0	
81	144	46.0	46.0	
82	156	45.7	45.7	
83	168	45.7	45.7	
84	180	45.7	45.7	
85	192	45.7	45.7	
86	204	45.4	45.4	
87	216	45.4	45.4	
88	228	45.4	45.4	
89	240	45.4	45.4	
90	252	45.1	45.1	
91	264	45.1	45.1	
92	276	45.1	45.1	
93	288	44.8	44.8	
94	300	44.8	44.8	
95	312	45.1	45.1	
96	324	44.8	44.8	
97	336	44.8	44.8	
98	348	44.8	44.8	
99	360	44.5	44.5	
100	372	44.5	44.5	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
101	384	44.5	44.5
102	396	44.5	44.5
103	408	44.2	44.2
104	420	44.2	44.2
105	432	44.2	44.2
106	444	44.2	44.2
107	456	44.2	44.2
108	468	43.9	43.9
109	480	43.9	43.9
110	492	43.9	43.9
111	504	43.9	43.9
112	516	43.9	43.9
113	528	43.9	43.9
114	540	43.9	43.9
115	552	43.6	43.6
116	564	43.6	43.6
117	576	43.6	43.6
118	588	43.6	43.6
119	600	43.3	43.3
120	720	43.0	43.0
121	840	42.4	42.4
122	960	41.8	41.8
123	1080	41.5	41.5
124	1200	40.8	40.8
125	1320	40.2	40.2
126	1440	39.9	39.9
127	1560	39.6	39.6
128	1680	39.0	39.0
129	1800	38.7	38.7
130	1920	38.1	38.1
131	2040	37.8	37.8
132	2160	37.2	37.2
133	2280	36.9	36.9
134	2400	36.3	36.3
135	2520	36.0	36.0
136	2640	35.7	35.7
137	2760	35.1	35.1
138	2880	34.7	34.7
139	3000	34.1	34.1
140	3120	33.8	33.8
141	3240	33.5	33.5
142	3360	32.9	32.9
143	3480	32.6	32.6
144	3600	32.3	32.3
145	3720	31.7	31.7
146	3840	31.4	31.4
147	3960	30.8	30.8
148	4080	30.5	30.5
149	4200	29.9	29.9
150	4320	29.9	29.9

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
151	4440	29.6	29.6
152	4560	29.0	29.0
153	4680	29.0	29.0
154	4800	28.7	28.7
155	4920	28.0	28.0
156	5040	28.0	28.0
157	5160	27.4	27.4
158	5280	27.1	27.1
159	5400	27.1	27.1
160	5520	26.8	26.8
161	5640	26.5	26.5
162	5760	26.2	26.2
163	5880	25.9	25.9
164	6000	25.6	25.6
165	6240	25.0	25.0
166	6480	24.4	24.4
167	6720	24.1	24.1
168	6960	23.5	23.5
169	7200	23.5	23.5
170	7440	22.9	22.9
171	7680	22.3	22.3
172	7920	21.6	21.6
173	8160	21.3	21.3
174	8400	20.7	20.7
175	8640	20.1	20.1
176	8880	19.8	19.8
177	9120	19.2	19.2
178	9360	18.9	18.9
179	9600	18.9	18.9
180	9840	18.3	18.3
181	10080	18.0	18.0
182	10320	17.4	17.4
183	10560	17.1	17.1
184	10800	16.8	16.8
185	11040	16.8	16.8
186	11280	16.2	16.2
187	11520	15.5	15.5
188	11760	15.2	15.2
189	12000	14.9	14.9
190	12240	14.6	14.6
191	12480	14.3	14.3
192	12720	14.0	14.0
193	12960	13.4	13.4
194	13200	13.1	13.1
195	13440	13.1	13.1
196	13680	12.8	12.8
197	13920	12.2	12.2
198	14160	12.2	12.2
199	14400	11.9	11.9
200	14640	11.6	11.6

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
201	14880	11.0	11.0	
202	15120	11.3	11.3	
203	15360	11.0	11.0	
204	15600	10.7	10.7	
205	15840	10.4	10.4	
206	16080	10.1	10.1	
207	16320	9.8	9.8	
208	16560	9.4	9.4	
209	16800	9.4	9.4	
210	17040	9.1	9.1	
211	17280	8.8	8.8	
212	17520	8.5	8.5	
213	17760	8.5	8.5	
214	18000	8.8	8.8	
215	18240	8.5	8.5	
216	18480	8.2	8.2	
217	18720	8.2	8.2	
218	18960	7.9	7.9	
219	19200	7.6	7.6	
220	19440	7.3	7.3	
221	19680	7.3	7.3	
222	19920	7.0	7.0	
223	20160	6.7	6.7	
224	20400	6.7	6.7	
225	20640	6.4	6.4	
226	20880	6.4	6.4	
227	21120	6.1	6.1	
228	21360	6.1	6.1	
229	21600	5.8	5.8	
230	21840	5.8	5.8	
231	22080	5.5	5.5	
232	22320	5.5	5.5	
233	22560	5.5	5.5	
234	22800	5.2	5.2	
235	23040	5.2	5.2	
236	23280	4.9	4.9	
237	23520	4.9	4.9	
238	23760	4.9	4.9	
239	24000	4.6	4.6	
240	24240	4.6	4.6	
241	24480	4.6	4.6	
242	24720	4.3	4.3	
243	24960	4.3	4.3	
244	25200	4.3	4.3	
245	25440	4.0	4.0	
246	25680	4.0	4.0	
247	25920	4.0	4.0	
248	26160	3.7	3.7	
249	26400	3.7	3.7	
250	26640	3.7	3.7	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
251	26880	3.4	3.4
252	27120	3.4	3.4
253	27360	3.4	3.4
254	27600	3.4	3.4
255	27840	3.0	3.0
256	28080	3.0	3.0
257	28320	3.4	3.4
258	28560	3.0	3.0
259	28800	3.0	3.0
260	29040	3.0	3.0
261	29280	3.0	3.0
262	29520	2.7	2.7
263	29760	2.7	2.7
264	30000	2.7	2.7
265	30240	2.7	2.7
266	30480	2.7	2.7
267	30720	2.4	2.4
268	30960	2.4	2.4
269	31200	2.4	2.4
270	31440	2.4	2.4
271	31680	2.4	2.4
272	31920	2.1	2.1
273	32160	2.1	2.1
274	32400	2.1	2.1
275	32640	2.1	2.1
276	32880	2.1	2.1
277	33120	2.1	2.1
278	33360	1.8	1.8
279	33600	1.8	1.8
280	33840	1.8	1.8
281	34080	1.8	1.8
282	34320	1.8	1.8
283	34560	1.8	1.8
284	34800	1.8	1.8
285	35040	1.5	1.5
286	35280	1.5	1.5
287	35520	1.5	1.5
288	35760	1.5	1.5
289	36000	1.5	1.5
290	36240	1.5	1.5
291	36480	1.5	1.5
292	36720	1.5	1.5
293	36960	1.5	1.5
294	37200	1.5	1.5
295	37440	1.5	1.5
296	37680	1.5	1.5
297	37920	1.5	1.5
298	38160	1.2	1.2
299	38400	1.2	1.2
300	38640	1.2	1.2

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 8 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
301	38880	1.2	1.2	
302	39120	1.2	1.2	
303	39360	1.2	1.2	
304	39600	1.2	1.2	
305	39840	1.2	1.2	
306	40080	1.5	1.5	
307	40320	1.5	1.5	
308	40560	1.5	1.5	
309	40800	1.5	1.5	
310	41040	1.2	1.2	
311	41280	1.2	1.2	
312	41520	1.2	1.2	
313	41760	1.2	1.2	
314	42000	1.2	1.2	
315	42240	1.2	1.2	
316	42480	1.2	1.2	
317	42720	1.2	1.2	
318	42960	1.2	1.2	
319	43200	1.2	1.2	
320	43440	1.2	1.2	
321	43680	1.2	1.2	
322	43920	1.2	1.2	
323	44160	1.2	1.2	
324	44400	1.2	1.2	
325	44640	1.2	1.2	
326	44880	1.2	1.2	
327	45120	1.2	1.2	
328	45360	1.2	1.2	
329	45600	1.2	1.2	
330	45840	1.2	1.2	
331	46080	1.2	1.2	
332	46320	1.2	1.2	
333	46560	1.2	1.2	
334	46800	1.2	1.2	
335	47040	1.2	1.2	
336	47280	1.2	1.2	
337	47520	1.2	1.2	
338	47760	1.2	1.2	
339	48000	1.2	1.2	
340	48240	1.2	1.2	
341	48480	1.2	1.2	
342	48720	1.2	1.2	
343	48960	1.2	1.2	
344	49200	1.2	1.2	
345	49440	1.2	1.2	
346	49680	1.2	1.2	
347	49920	1.2	1.2	
348	50160	1.2	1.2	
349	50400	1.2	1.2	
350	50640	1.2	1.2	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 9 Project: Hamilton BRAC Evaluated by:	Date: 05.15.1997

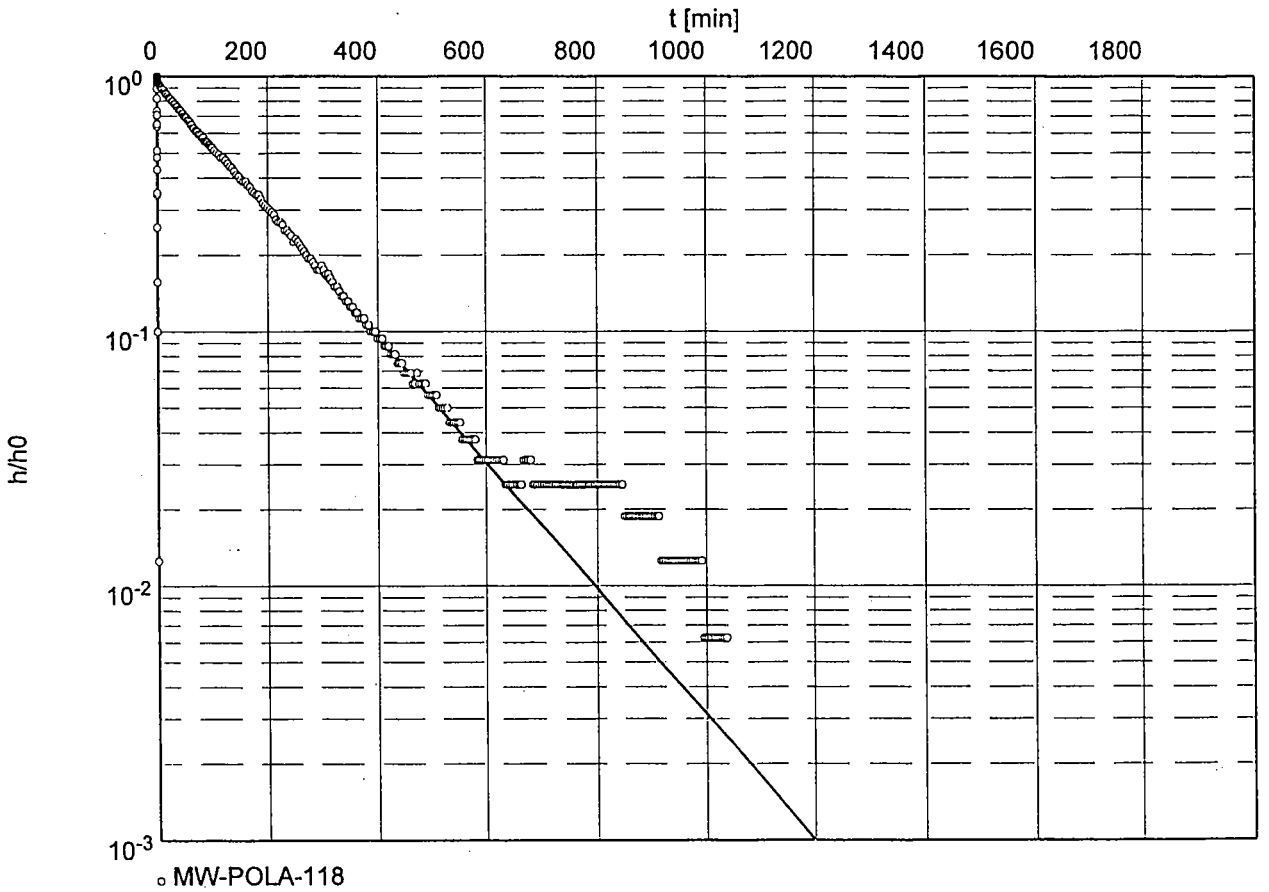
Slug Test No. SLUG IN	Test conducted on: 5/6/97
MW-POLA-118	MW-POLA-118

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
351	50880	1.2	1.2
352	51120	0.9	0.9
353	51360	0.9	0.9
354	51600	0.9	0.9
355	51840	0.9	0.9
356	52080	0.9	0.9
357	52320	0.9	0.9
358	52560	0.9	0.9
359	52800	0.9	0.9
360	53040	0.9	0.9
361	53280	0.9	0.9
362	53520	0.9	0.9
363	53760	0.9	0.9
364	54000	0.9	0.9
365	54240	0.9	0.9
366	54480	0.9	0.9
367	54720	0.9	0.9
368	54960	0.9	0.9
369	55200	0.6	0.6
370	55440	0.6	0.6
371	55680	0.6	0.6
372	55920	0.6	0.6
373	56160	0.6	0.6
374	56400	0.6	0.6
375	56640	0.6	0.6
376	56880	0.6	0.6
377	57120	0.6	0.6
378	57360	0.6	0.6
379	57600	0.6	0.6
380	57840	0.6	0.6
381	58080	0.6	0.6
382	58320	0.6	0.6
383	58560	0.6	0.6
384	58800	0.6	0.6
385	59040	0.6	0.6
386	59280	0.6	0.6
387	59520	0.6	0.6
388	59760	0.3	0.3
389	60000	0.3	0.3
390	60240	0.3	0.3
391	60480	0.3	0.3
392	60720	0.3	0.3
393	60960	0.3	0.3
394	61200	0.3	0.3
395	61440	0.3	0.3
396	61680	0.3	0.3
397	61920	0.3	0.3
398	62160	0.3	0.3

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 1 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 2.26×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 2 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
1	0.00	1.60	1.60
2	0.01	0.00	0.00
3	0.02	0.02	0.02
4	0.03	0.16	0.16
5	0.04	0.25	0.25
6	0.05	0.41	0.41
7	0.06	0.55	0.55
8	0.07	0.56	0.56
9	0.08	0.69	0.69
10	0.09	0.77	0.77
11	0.10	0.82	0.82
12	0.11	1.02	1.02
13	0.12	1.04	1.04
14	0.13	1.13	1.13
15	0.14	1.17	1.17
16	0.15	1.13	1.13
17	0.16	1.31	1.31
18	0.17	1.43	1.43
19	0.18	1.51	1.51
20	0.19	1.57	1.57
21	0.20	1.46	1.46
22	0.21	1.43	1.43
23	0.22	1.55	1.55
24	0.23	1.57	1.57
25	0.24	1.52	1.52
26	0.25	1.55	1.55
27	0.26	1.54	1.54
28	0.27	1.53	1.53
29	0.28	1.54	1.54
30	0.29	1.54	1.54
31	0.30	1.54	1.54
32	0.31	1.57	1.57
33	0.32	1.58	1.58
34	0.33	1.57	1.57
35	0.35	1.58	1.58
36	0.37	1.58	1.58
37	0.38	1.58	1.58
38	0.40	1.58	1.58
39	0.42	1.58	1.58
40	0.43	1.58	1.58
41	0.45	1.58	1.58
42	0.47	1.60	1.60
43	0.48	1.57	1.57
44	0.50	1.58	1.58
45	0.52	1.58	1.58
46	0.53	1.58	1.58
47	0.55	1.58	1.58
48	0.57	1.57	1.57
49	0.58	1.57	1.57
50	0.60	1.57	1.57

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 3 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
51	0.62	1.57	1.57
52	0.63	1.57	1.57
53	0.65	1.57	1.57
54	0.67	1.57	1.57
55	0.68	1.56	1.56
56	0.70	1.57	1.57
57	0.72	1.56	1.56
58	0.73	1.56	1.56
59	0.75	1.56	1.56
60	0.77	1.56	1.56
61	0.78	1.56	1.56
62	0.80	1.56	1.56
63	0.82	1.55	1.55
64	0.83	1.55	1.55
65	0.85	1.55	1.55
66	0.87	1.55	1.55
67	0.88	1.55	1.55
68	0.90	1.55	1.55
69	0.92	1.55	1.55
70	0.93	1.55	1.55
71	0.95	1.55	1.55
72	0.97	1.54	1.54
73	0.98	1.55	1.55
74	1.00	1.54	1.54
75	1.20	1.53	1.53
76	1.40	1.53	1.53
77	1.60	1.52	1.52
78	1.80	1.51	1.51
79	2.00	1.51	1.51
80	2.20	1.51	1.51
81	2.40	1.51	1.51
82	2.60	1.50	1.50
83	2.80	1.50	1.50
84	3.00	1.50	1.50
85	3.20	1.50	1.50
86	3.40	1.49	1.49
87	3.60	1.49	1.49
88	3.80	1.49	1.49
89	4.00	1.49	1.49
90	4.20	1.48	1.48
91	4.40	1.48	1.48
92	4.60	1.48	1.48
93	4.80	1.47	1.47
94	5.00	1.47	1.47
95	5.20	1.48	1.48
96	5.40	1.47	1.47
97	5.60	1.47	1.47
98	5.80	1.47	1.47
99	6.00	1.46	1.46
100	6.20	1.46	1.46

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 4 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
101	6.40	1.46	1.46	
102	6.60	1.46	1.46	
103	6.80	1.45	1.45	
104	7.00	1.45	1.45	
105	7.20	1.45	1.45	
106	7.40	1.45	1.45	
107	7.60	1.45	1.45	
108	7.80	1.44	1.44	
109	8.00	1.44	1.44	
110	8.20	1.44	1.44	
111	8.40	1.44	1.44	
112	8.60	1.44	1.44	
113	8.80	1.44	1.44	
114	9.00	1.44	1.44	
115	9.20	1.43	1.43	
116	9.40	1.43	1.43	
117	9.60	1.43	1.43	
118	9.80	1.43	1.43	
119	10.00	1.42	1.42	
120	12.00	1.41	1.41	
121	14.00	1.39	1.39	
122	16.00	1.37	1.37	
123	18.00	1.36	1.36	
124	20.00	1.34	1.34	
125	22.00	1.32	1.32	
126	24.00	1.31	1.31	
127	26.00	1.30	1.30	
128	28.00	1.28	1.28	
129	30.00	1.27	1.27	
130	32.00	1.25	1.25	
131	34.00	1.24	1.24	
132	36.00	1.22	1.22	
133	38.00	1.21	1.21	
134	40.00	1.19	1.19	
135	42.00	1.18	1.18	
136	44.00	1.17	1.17	
137	46.00	1.15	1.15	
138	48.00	1.14	1.14	
139	50.00	1.12	1.12	
140	52.00	1.11	1.11	
141	54.00	1.10	1.10	
142	56.00	1.08	1.08	
143	58.00	1.07	1.07	
144	60.00	1.06	1.06	
145	62.00	1.04	1.04	
146	64.00	1.03	1.03	
147	66.00	1.01	1.01	
148	68.00	1.00	1.00	
149	70.00	0.98	0.98	
150	72.00	0.98	0.98	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 5 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
151	74.00	0.97	0.97	
152	76.00	0.95	0.95	
153	78.00	0.95	0.95	
154	80.00	0.94	0.94	
155	82.00	0.92	0.92	
156	84.00	0.92	0.92	
157	86.00	0.90	0.90	
158	88.00	0.89	0.89	
159	90.00	0.89	0.89	
160	92.00	0.88	0.88	
161	94.00	0.87	0.87	
162	96.00	0.86	0.86	
163	98.00	0.85	0.85	
164	100.00	0.84	0.84	
165	104.00	0.82	0.82	
166	108.00	0.80	0.80	
167	112.00	0.79	0.79	
168	116.00	0.77	0.77	
169	120.00	0.77	0.77	
170	124.00	0.75	0.75	
171	128.00	0.73	0.73	
172	132.00	0.71	0.71	
173	136.00	0.70	0.70	
174	140.00	0.68	0.68	
175	144.00	0.66	0.66	
176	148.00	0.65	0.65	
177	152.00	0.63	0.63	
178	156.00	0.62	0.62	
179	160.00	0.62	0.62	
180	164.00	0.60	0.60	
181	168.00	0.59	0.59	
182	172.00	0.57	0.57	
183	176.00	0.56	0.56	
184	180.00	0.55	0.55	
185	184.00	0.55	0.55	
186	188.00	0.53	0.53	
187	192.00	0.51	0.51	
188	196.00	0.50	0.50	
189	200.00	0.49	0.49	
190	204.00	0.48	0.48	
191	208.00	0.47	0.47	
192	212.00	0.46	0.46	
193	216.00	0.44	0.44	
194	220.00	0.43	0.43	
195	224.00	0.43	0.43	
196	228.00	0.42	0.42	
197	232.00	0.40	0.40	
198	236.00	0.40	0.40	
199	240.00	0.39	0.39	
200	244.00	0.38	0.38	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 6 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
201	248.00	0.36	0.36	
202	252.00	0.37	0.37	
203	256.00	0.36	0.36	
204	260.00	0.35	0.35	
205	264.00	0.34	0.34	
206	268.00	0.33	0.33	
207	272.00	0.32	0.32	
208	276.00	0.31	0.31	
209	280.00	0.31	0.31	
210	284.00	0.30	0.30	
211	288.00	0.29	0.29	
212	292.00	0.28	0.28	
213	296.00	0.28	0.28	
214	300.00	0.29	0.29	
215	304.00	0.28	0.28	
216	308.00	0.27	0.27	
217	312.00	0.27	0.27	
218	316.00	0.26	0.26	
219	320.00	0.25	0.25	
220	324.00	0.24	0.24	
221	328.00	0.24	0.24	
222	332.00	0.23	0.23	
223	336.00	0.22	0.22	
224	340.00	0.22	0.22	
225	344.00	0.21	0.21	
226	348.00	0.21	0.21	
227	352.00	0.20	0.20	
228	356.00	0.20	0.20	
229	360.00	0.19	0.19	
230	364.00	0.19	0.19	
231	368.00	0.18	0.18	
232	372.00	0.18	0.18	
233	376.00	0.18	0.18	
234	380.00	0.17	0.17	
235	384.00	0.17	0.17	
236	388.00	0.16	0.16	
237	392.00	0.16	0.16	
238	396.00	0.16	0.16	
239	400.00	0.15	0.15	
240	404.00	0.15	0.15	
241	408.00	0.15	0.15	
242	412.00	0.14	0.14	
243	416.00	0.14	0.14	
244	420.00	0.14	0.14	
245	424.00	0.13	0.13	
246	428.00	0.13	0.13	
247	432.00	0.13	0.13	
248	436.00	0.12	0.12	
249	440.00	0.12	0.12	
250	444.00	0.12	0.12	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 7 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
251	448.00	0.11	0.11
252	452.00	0.11	0.11
253	456.00	0.11	0.11
254	460.00	0.11	0.11
255	464.00	0.10	0.10
256	468.00	0.10	0.10
257	472.00	0.11	0.11
258	476.00	0.10	0.10
259	480.00	0.10	0.10
260	484.00	0.10	0.10
261	488.00	0.10	0.10
262	492.00	0.09	0.09
263	496.00	0.09	0.09
264	500.00	0.09	0.09
265	504.00	0.09	0.09
266	508.00	0.09	0.09
267	512.00	0.08	0.08
268	516.00	0.08	0.08
269	520.00	0.08	0.08
270	524.00	0.08	0.08
271	528.00	0.08	0.08
272	532.00	0.07	0.07
273	536.00	0.07	0.07
274	540.00	0.07	0.07
275	544.00	0.07	0.07
276	548.00	0.07	0.07
277	552.00	0.07	0.07
278	556.00	0.06	0.06
279	560.00	0.06	0.06
280	564.00	0.06	0.06
281	568.00	0.06	0.06
282	572.00	0.06	0.06
283	576.00	0.06	0.06
284	580.00	0.06	0.06
285	584.00	0.05	0.05
286	588.00	0.05	0.05
287	592.00	0.05	0.05
288	596.00	0.05	0.05
289	600.00	0.05	0.05
290	604.00	0.05	0.05
291	608.00	0.05	0.05
292	612.00	0.05	0.05
293	616.00	0.05	0.05
294	620.00	0.05	0.05
295	624.00	0.05	0.05
296	628.00	0.05	0.05
297	632.00	0.05	0.05
298	636.00	0.04	0.04
299	640.00	0.04	0.04
300	644.00	0.04	0.04

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 8 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
301	648.00	0.04	0.04
302	652.00	0.04	0.04
303	656.00	0.04	0.04
304	660.00	0.04	0.04
305	664.00	0.04	0.04
306	668.00	0.05	0.05
307	672.00	0.05	0.05
308	676.00	0.05	0.05
309	680.00	0.05	0.05
310	684.00	0.04	0.04
311	688.00	0.04	0.04
312	692.00	0.04	0.04
313	696.00	0.04	0.04
314	700.00	0.04	0.04
315	704.00	0.04	0.04
316	708.00	0.04	0.04
317	712.00	0.04	0.04
318	716.00	0.04	0.04
319	720.00	0.04	0.04
320	724.00	0.04	0.04
321	728.00	0.04	0.04
322	732.00	0.04	0.04
323	736.00	0.04	0.04
324	740.00	0.04	0.04
325	744.00	0.04	0.04
326	748.00	0.04	0.04
327	752.00	0.04	0.04
328	756.00	0.04	0.04
329	760.00	0.04	0.04
330	764.00	0.04	0.04
331	768.00	0.04	0.04
332	772.00	0.04	0.04
333	776.00	0.04	0.04
334	780.00	0.04	0.04
335	784.00	0.04	0.04
336	788.00	0.04	0.04
337	792.00	0.04	0.04
338	796.00	0.04	0.04
339	800.00	0.04	0.04
340	804.00	0.04	0.04
341	808.00	0.04	0.04
342	812.00	0.04	0.04
343	816.00	0.04	0.04
344	820.00	0.04	0.04
345	824.00	0.04	0.04
346	828.00	0.04	0.04
347	832.00	0.04	0.04
348	836.00	0.04	0.04
349	840.00	0.04	0.04
350	844.00	0.04	0.04

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 9 Project: Evaluated by:	Date: 11.05.1997

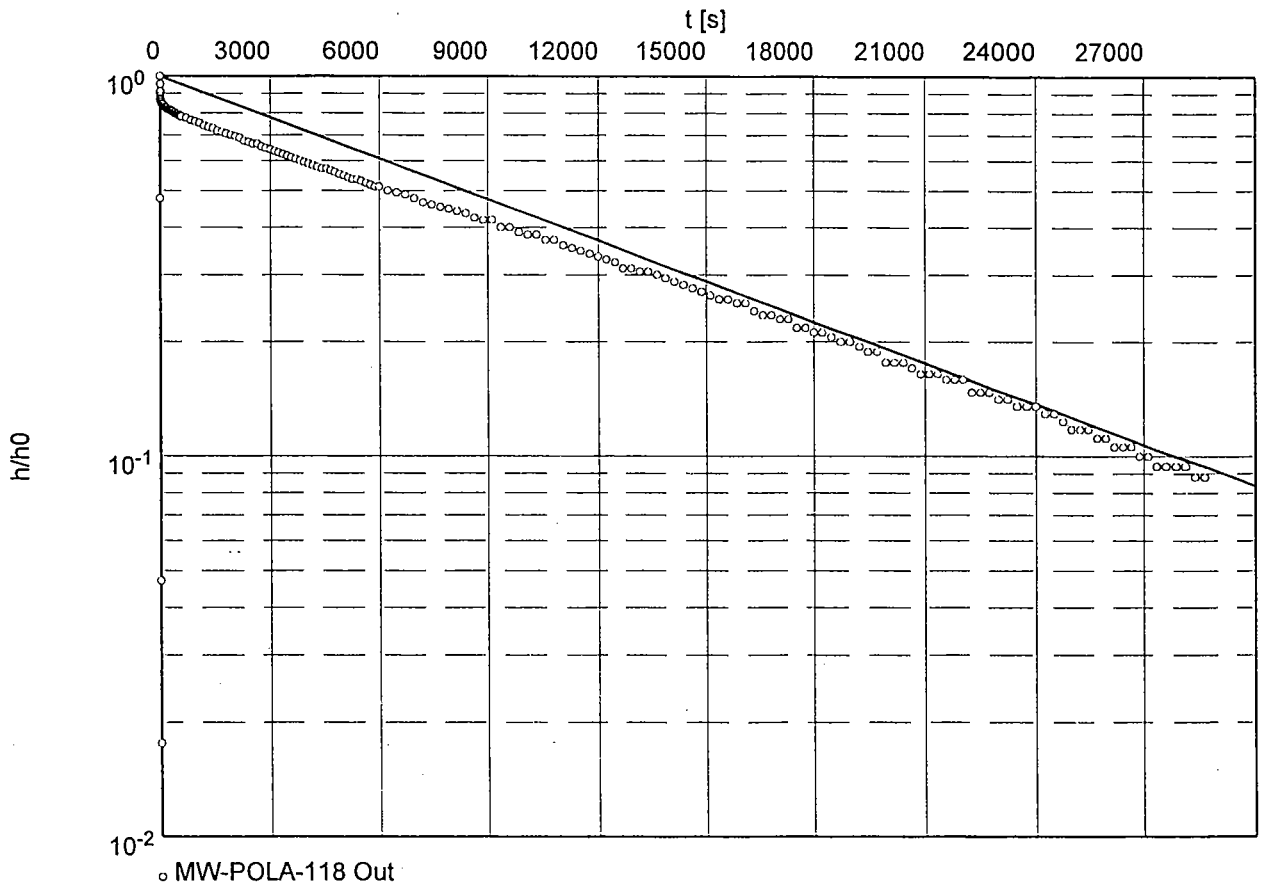
Slug Test No.	Test conducted on:
	MW-POLA-118

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
351	848.00	0.04	0.04	
352	852.00	0.03	0.03	
353	856.00	0.03	0.03	
354	860.00	0.03	0.03	
355	864.00	0.03	0.03	
356	868.00	0.03	0.03	
357	872.00	0.03	0.03	
358	876.00	0.03	0.03	
359	880.00	0.03	0.03	
360	884.00	0.03	0.03	
361	888.00	0.03	0.03	
362	892.00	0.03	0.03	
363	896.00	0.03	0.03	
364	900.00	0.03	0.03	
365	904.00	0.03	0.03	
366	908.00	0.03	0.03	
367	912.00	0.03	0.03	
368	916.00	0.03	0.03	
369	920.00	0.02	0.02	
370	924.00	0.02	0.02	
371	928.00	0.02	0.02	
372	932.00	0.02	0.02	
373	936.00	0.02	0.02	
374	940.00	0.02	0.02	
375	944.00	0.02	0.02	
376	948.00	0.02	0.02	
377	952.00	0.02	0.02	
378	956.00	0.02	0.02	
379	960.00	0.02	0.02	
380	964.00	0.02	0.02	
381	968.00	0.02	0.02	
382	972.00	0.02	0.02	
383	976.00	0.02	0.02	
384	980.00	0.02	0.02	
385	984.00	0.02	0.02	
386	988.00	0.02	0.02	
387	992.00	0.02	0.02	
388	996.00	0.01	0.01	
389	1000.00	0.01	0.01	
390	1004.00	0.01	0.01	
391	1008.00	0.01	0.01	
392	1012.00	0.01	0.01	
393	1016.00	0.01	0.01	
394	1020.00	0.01	0.01	
395	1024.00	0.01	0.01	
396	1028.00	0.01	0.01	
397	1032.00	0.01	0.01	
398	1036.00	0.01	0.01	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: Hamilton BRAC Evaluated by: P.L. | Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	



Hydraulic conductivity [cm/s]: 2.06×10^{-8}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: Hamilton BRAC Evaluated by: P.L. | Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
1	0	51.8	51.8
2	2	0.9	0.9
3	2	-2.4	-2.4
4	3	24.7	24.7
5	4	53.0	53.0
6	4	56.4	56.4
7	5	52.1	52.1
8	5	49.4	49.4
9	6	47.2	47.2
10	7	46.0	46.0
11	7	45.4	45.4
12	8	45.1	45.1
13	8	44.8	44.8
14	9	44.8	44.8
15	10	44.8	44.8
16	10	44.8	44.8
17	11	44.8	44.8
18	11	44.8	44.8
19	12	44.8	44.8
20	13	44.8	44.8
21	13	44.8	44.8
22	14	44.8	44.8
23	14	44.8	44.8
24	15	44.8	44.8
25	16	44.8	44.8
26	16	44.8	44.8
27	17	44.8	44.8
28	17	44.8	44.8
29	18	44.8	44.8
30	19	44.8	44.8
31	19	44.8	44.8
32	20	44.8	44.8
33	21	44.8	44.8
34	22	44.8	44.8
35	23	44.8	44.8
36	24	44.8	44.8
37	25	44.8	44.8
38	26	44.5	44.5
39	27	44.5	44.5
40	28	44.5	44.5
41	29	44.5	44.5
42	30	44.5	44.5
43	31	44.5	44.5
44	32	44.5	44.5
45	33	44.2	44.2
46	34	44.2	44.2
47	35	44.2	44.2
48	36	44.2	44.2
49	37	44.2	44.2
50	38	44.2	44.2

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: Hamilton BRAC Evaluated by: P.L. | Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
51	39	44.2	44.2	
52	40	44.2	44.2	
53	41	44.2	44.2	
54	42	44.2	44.2	
55	43	44.2	44.2	
56	44	44.2	44.2	
57	45	44.2	44.2	
58	46	44.2	44.2	
59	47	43.9	43.9	
60	48	43.9	43.9	
61	49	43.9	43.9	
62	50	43.9	43.9	
63	51	43.9	43.9	
64	52	43.9	43.9	
65	53	43.9	43.9	
66	54	43.9	43.9	
67	55	43.9	43.9	
68	56	43.9	43.9	
69	57	43.9	43.9	
70	58	43.9	43.9	
71	59	43.9	43.9	
72	60	43.9	43.9	
73	72	43.6	43.6	
74	84	43.6	43.6	
75	96	43.3	43.3	
76	108	43.3	43.3	
77	120	43.3	43.3	
78	132	43.0	43.0	
79	144	43.0	43.0	
80	156	43.0	43.0	
81	168	42.7	42.7	
82	180	42.7	42.7	
83	192	42.7	42.7	
84	204	42.4	42.4	
85	216	42.4	42.4	
86	228	42.4	42.4	
87	240	42.4	42.4	
88	252	42.4	42.4	
89	264	42.4	42.4	
90	276	42.1	42.1	
91	288	42.1	42.1	
92	300	42.1	42.1	
93	312	42.1	42.1	
94	324	41.8	41.8	
95	336	41.8	41.8	
96	348	41.8	41.8	
97	360	41.8	41.8	
98	372	41.5	41.5	
99	384	41.5	41.5	
100	396	41.5	41.5	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: Hamilton BRAC Evaluated by: P.L. Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
101	408	41.5	41.5	
102	420	41.1	41.1	
103	432	41.1	41.1	
104	444	41.1	41.1	
105	456	41.1	41.1	
106	468	41.1	41.1	
107	480	41.1	41.1	
108	492	41.1	41.1	
109	504	40.8	40.8	
110	516	40.8	40.8	
111	528	40.8	40.8	
112	540	40.8	40.8	
113	552	40.8	40.8	
114	564	40.5	40.5	
115	576	40.5	40.5	
116	588	40.5	40.5	
117	600	40.5	40.5	
118	720	40.2	40.2	
119	840	39.6	39.6	
120	960	39.3	39.3	
121	1080	39.0	39.0	
122	1200	38.4	38.4	
123	1320	38.1	38.1	
124	1440	37.8	37.8	
125	1560	37.2	37.2	
126	1680	36.9	36.9	
127	1800	36.6	36.6	
128	1920	36.3	36.3	
129	2040	36.0	36.0	
130	2160	35.7	35.7	
131	2280	35.1	35.1	
132	2400	34.7	34.7	
133	2520	34.4	34.4	
134	2640	34.4	34.4	
135	2760	33.8	33.8	
136	2880	33.5	33.5	
137	3000	33.2	33.2	
138	3120	32.9	32.9	
139	3240	32.6	32.6	
140	3360	32.3	32.3	
141	3480	32.0	32.0	
142	3600	31.7	31.7	
143	3720	31.4	31.4	
144	3840	31.1	31.1	
145	3960	30.8	30.8	
146	4080	30.5	30.5	
147	4200	30.2	30.2	
148	4320	29.9	29.9	
149	4440	29.6	29.6	
150	4560	29.6	29.6	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: Hamilton BRAC Evaluated by: P.L. Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
151	4680	29.3	29.3	
152	4800	29.0	29.0	
153	4920	28.7	28.7	
154	5040	28.3	28.3	
155	5160	28.0	28.0	
156	5280	27.7	27.7	
157	5400	27.7	27.7	
158	5520	27.4	27.4	
159	5640	27.1	27.1	
160	5760	26.8	26.8	
161	5880	26.5	26.5	
162	6000	26.5	26.5	
163	6240	25.9	25.9	
164	6480	25.6	25.6	
165	6720	25.3	25.3	
166	6960	24.7	24.7	
167	7200	24.1	24.1	
168	7440	23.8	23.8	
169	7680	23.5	23.5	
170	7920	23.2	23.2	
171	8160	22.9	22.9	
172	8400	22.6	22.6	
173	8640	21.9	21.9	
174	8880	21.6	21.6	
175	9120	21.6	21.6	
176	9360	20.7	20.7	
177	9600	20.7	20.7	
178	9840	20.1	20.1	
179	10080	19.8	19.8	
180	10320	19.8	19.8	
181	10560	19.2	19.2	
182	10800	19.2	19.2	
183	11040	18.6	18.6	
184	11280	18.3	18.3	
185	11520	18.0	18.0	
186	11760	17.7	17.7	
187	12000	17.4	17.4	
188	12240	17.1	17.1	
189	12480	16.8	16.8	
190	12720	16.2	16.2	
191	12960	16.2	16.2	
192	13200	15.8	15.8	
193	13440	15.8	15.8	
194	13680	15.5	15.5	
195	13920	15.2	15.2	
196	14160	14.9	14.9	
197	14400	14.6	14.6	
198	14640	14.3	14.3	
199	14880	14.0	14.0	
200	15120	13.7	13.7	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: Hamilton BRAC Evaluated by: P.L. Date: 05.15.1997

Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
201	15360	13.4	13.4	
202	15600	13.4	13.4	
203	15840	13.1	13.1	
204	16080	13.1	13.1	
205	16320	12.5	12.5	
206	16560	12.2	12.2	
207	16800	12.2	12.2	
208	17040	11.9	11.9	
209	17280	11.9	11.9	
210	17520	11.3	11.3	
211	17760	11.3	11.3	
212	18000	11.0	11.0	
213	18240	11.0	11.0	
214	18480	10.7	10.7	
215	18720	10.4	10.4	
216	18960	10.4	10.4	
217	19200	10.1	10.1	
218	19440	9.8	9.8	
219	19680	9.8	9.8	
220	19920	9.1	9.1	
221	20160	9.1	9.1	
222	20400	9.1	9.1	
223	20640	8.8	8.8	
224	20880	8.5	8.5	
225	21120	8.5	8.5	
226	21360	8.5	8.5	
227	21600	8.2	8.2	
228	21840	8.2	8.2	
229	22080	8.2	8.2	
230	22320	7.6	7.6	
231	22560	7.6	7.6	
232	22800	7.6	7.6	
233	23040	7.3	7.3	
234	23280	7.3	7.3	
235	23520	7.0	7.0	
236	23760	7.0	7.0	
237	24000	7.0	7.0	
238	24240	6.7	6.7	
239	24480	6.7	6.7	
240	24720	6.4	6.4	
241	24960	6.1	6.1	
242	25200	6.1	6.1	
243	25440	6.1	6.1	
244	25680	5.8	5.8	
245	25920	5.8	5.8	
246	26160	5.5	5.5	
247	26400	5.5	5.5	
248	26640	5.5	5.5	
249	26880	5.2	5.2	
250	27120	5.2	5.2	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: Hamilton BRAC Evaluated by: P.L. Date: 05.15.1997

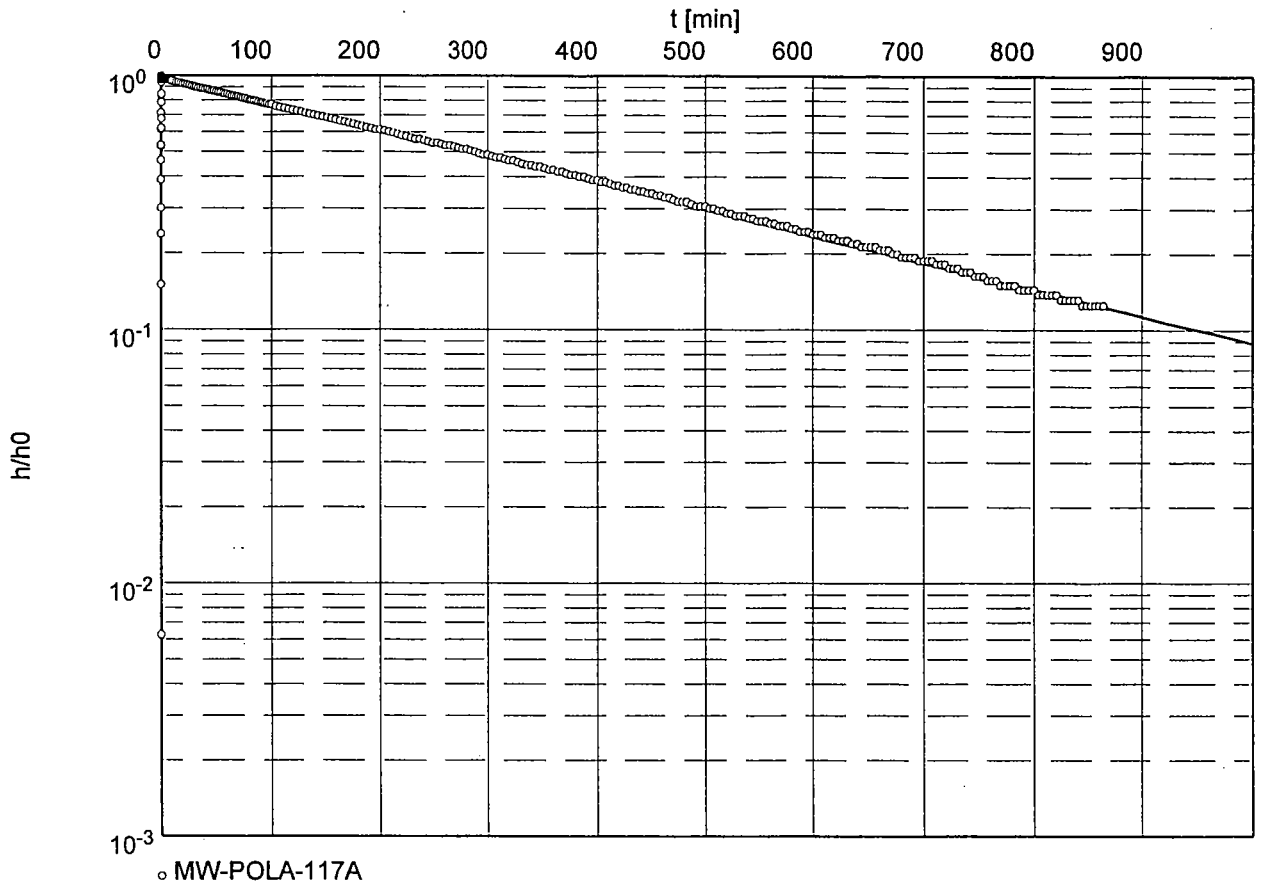
Slug Test No. SLUG OUT	Test conducted on: 5/7/97
MW-POLA-118	MW-POLA-118 Out

Static water level: 0.0 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
251	27360	4.9	4.9	
252	27600	4.9	4.9	
253	27840	4.9	4.9	
254	28080	4.9	4.9	
255	28320	4.6	4.6	
256	28560	4.6	4.6	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 1 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 8.99×10^{-6}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 2 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
1	0.00	1.60	1.60
2	0.01	0.00	0.00
3	0.02	0.00	0.00
4	0.03	0.01	0.01
5	0.04	0.00	0.00
6	0.05	0.00	0.00
7	0.06	0.24	0.24
8	0.07	0.38	0.38
9	0.08	0.48	0.48
10	0.09	0.62	0.62
11	0.10	0.74	0.74
12	0.11	0.84	0.84
13	0.12	0.85	0.85
14	0.13	0.98	0.98
15	0.14	1.14	1.14
16	0.15	0.99	0.99
17	0.16	1.08	1.08
18	0.17	1.26	1.26
19	0.18	1.25	1.25
20	0.19	1.34	1.34
21	0.20	1.35	1.35
22	0.21	1.51	1.51
23	0.22	1.50	1.50
24	0.23	1.53	1.53
25	0.24	1.56	1.56
26	0.25	1.58	1.58
27	0.26	1.58	1.58
28	0.27	1.58	1.58
29	0.28	1.56	1.56
30	0.29	1.57	1.57
31	0.30	1.57	1.57
32	0.31	1.56	1.56
33	0.32	1.57	1.57
34	0.33	1.54	1.54
35	0.35	1.56	1.56
36	0.37	1.58	1.58
37	0.38	1.57	1.57
38	0.40	1.58	1.58
39	0.42	1.56	1.56
40	0.43	1.57	1.57
41	0.45	1.56	1.56
42	0.47	1.56	1.56
43	0.48	1.56	1.56
44	0.50	1.56	1.56
45	0.52	1.56	1.56
46	0.53	1.56	1.56
47	0.55	1.56	1.56
48	0.57	1.56	1.56
49	0.58	1.56	1.56
50	0.60	1.56	1.56

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 3 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
51	0.62	1.56	1.56	
52	0.63	1.56	1.56	
53	0.65	1.56	1.56	
54	0.67	1.56	1.56	
55	0.68	1.56	1.56	
56	0.70	1.56	1.56	
57	0.72	1.56	1.56	
58	0.73	1.56	1.56	
59	0.75	1.56	1.56	
60	0.77	1.56	1.56	
61	0.78	1.56	1.56	
62	0.80	1.56	1.56	
63	0.82	1.56	1.56	
64	0.83	1.56	1.56	
65	0.85	1.56	1.56	
66	0.87	1.56	1.56	
67	0.88	1.56	1.56	
68	0.90	1.56	1.56	
69	0.92	1.56	1.56	
70	0.93	1.56	1.56	
71	0.95	1.56	1.56	
72	0.97	1.56	1.56	
73	0.98	1.56	1.56	
74	1.00	1.56	1.56	
75	1.20	1.55	1.55	
76	1.40	1.56	1.56	
77	1.60	1.56	1.56	
78	1.80	1.56	1.56	
79	2.00	1.56	1.56	
80	2.20	1.56	1.56	
81	2.40	1.57	1.57	
82	2.60	1.56	1.56	
83	2.80	1.56	1.56	
84	3.00	1.56	1.56	
85	3.20	1.56	1.56	
86	3.40	1.56	1.56	
87	3.60	1.55	1.55	
88	3.80	1.55	1.55	
89	4.00	1.55	1.55	
90	4.20	1.55	1.55	
91	4.40	1.55	1.55	
92	4.60	1.55	1.55	
93	4.80	1.55	1.55	
94	5.00	1.55	1.55	
95	5.20	1.54	1.54	
96	5.40	1.54	1.54	
97	5.60	1.54	1.54	
98	5.80	1.54	1.54	
99	6.00	1.54	1.54	
100	6.20	1.54	1.54	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 4 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
101	6.40	1.54	1.54
102	6.60	1.54	1.54
103	6.80	1.54	1.54
104	7.00	1.53	1.53
105	7.20	1.53	1.53
106	7.40	1.53	1.53
107	7.60	1.53	1.53
108	7.80	1.53	1.53
109	8.00	1.53	1.53
110	8.20	1.53	1.53
111	8.40	1.53	1.53
112	8.60	1.53	1.53
113	8.80	1.53	1.53
114	9.00	1.53	1.53
115	9.20	1.53	1.53
116	9.40	1.53	1.53
117	9.60	1.52	1.52
118	9.80	1.52	1.52
119	10.00	1.52	1.52
120	12.00	1.51	1.51
121	14.00	1.50	1.50
122	16.00	1.50	1.50
123	18.00	1.49	1.49
124	20.00	1.48	1.48
125	22.00	1.48	1.48
126	24.00	1.47	1.47
127	26.00	1.46	1.46
128	28.00	1.45	1.45
129	30.00	1.44	1.44
130	32.00	1.44	1.44
131	34.00	1.43	1.43
132	36.00	1.43	1.43
133	38.00	1.42	1.42
134	40.00	1.41	1.41
135	42.00	1.41	1.41
136	44.00	1.40	1.40
137	46.00	1.39	1.39
138	48.00	1.39	1.39
139	50.00	1.38	1.38
140	52.00	1.37	1.37
141	54.00	1.37	1.37
142	56.00	1.36	1.36
143	58.00	1.35	1.35
144	60.00	1.35	1.35
145	62.00	1.34	1.34
146	64.00	1.33	1.33
147	66.00	1.33	1.33
148	68.00	1.32	1.32
149	70.00	1.32	1.32
150	72.00	1.31	1.31

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 5 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
151	74.00	1.30	1.30
152	76.00	1.30	1.30
153	78.00	1.29	1.29
154	80.00	1.28	1.28
155	82.00	1.28	1.28
156	84.00	1.27	1.27
157	86.00	1.27	1.27
158	88.00	1.26	1.26
159	90.00	1.25	1.25
160	92.00	1.25	1.25
161	94.00	1.24	1.24
162	96.00	1.24	1.24
163	98.00	1.23	1.23
164	100.00	1.23	1.23
165	104.00	1.21	1.21
166	108.00	1.20	1.20
167	112.00	1.19	1.19
168	116.00	1.18	1.18
169	120.00	1.17	1.17
170	124.00	1.16	1.16
171	128.00	1.15	1.15
172	132.00	1.14	1.14
173	136.00	1.13	1.13
174	140.00	1.12	1.12
175	144.00	1.11	1.11
176	148.00	1.10	1.10
177	152.00	1.09	1.09
178	156.00	1.08	1.08
179	160.00	1.07	1.07
180	164.00	1.06	1.06
181	168.00	1.05	1.05
182	172.00	1.04	1.04
183	176.00	1.03	1.03
184	180.00	1.02	1.02
185	184.00	1.01	1.01
186	188.00	1.00	1.00
187	192.00	0.99	0.99
188	196.00	0.98	0.98
189	200.00	0.98	0.98
190	204.00	0.97	0.97
191	208.00	0.96	0.96
192	212.00	0.95	0.95
193	216.00	0.94	0.94
194	220.00	0.93	0.93
195	224.00	0.92	0.92
196	228.00	0.91	0.91
197	232.00	0.90	0.90
198	236.00	0.90	0.90
199	240.00	0.89	0.89
200	244.00	0.88	0.88

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 6 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
201	248.00	0.87	0.87
202	252.00	0.87	0.87
203	256.00	0.86	0.86
204	260.00	0.85	0.85
205	264.00	0.85	0.85
206	268.00	0.84	0.84
207	272.00	0.83	0.83
208	276.00	0.82	0.82
209	280.00	0.82	0.82
210	284.00	0.81	0.81
211	288.00	0.80	0.80
212	292.00	0.79	0.79
213	296.00	0.78	0.78
214	300.00	0.78	0.78
215	304.00	0.77	0.77
216	308.00	0.76	0.76
217	312.00	0.76	0.76
218	316.00	0.75	0.75
219	320.00	0.74	0.74
220	324.00	0.74	0.74
221	328.00	0.73	0.73
222	332.00	0.72	0.72
223	336.00	0.71	0.71
224	340.00	0.71	0.71
225	344.00	0.70	0.70
226	348.00	0.70	0.70
227	352.00	0.69	0.69
228	356.00	0.68	0.68
229	360.00	0.68	0.68
230	364.00	0.67	0.67
231	368.00	0.67	0.67
232	372.00	0.66	0.66
233	376.00	0.65	0.65
234	380.00	0.65	0.65
235	384.00	0.64	0.64
236	388.00	0.64	0.64
237	392.00	0.63	0.63
238	396.00	0.62	0.62
239	400.00	0.62	0.62
240	404.00	0.61	0.61
241	408.00	0.61	0.61
242	412.00	0.60	0.60
243	416.00	0.59	0.59
244	420.00	0.59	0.59
245	424.00	0.58	0.58
246	428.00	0.58	0.58
247	432.00	0.57	0.57
248	436.00	0.57	0.57
249	440.00	0.56	0.56
250	444.00	0.56	0.56

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 7 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
251	448.00	0.55	0.55	
252	452.00	0.55	0.55	
253	456.00	0.54	0.54	
254	460.00	0.54	0.54	
255	464.00	0.53	0.53	
256	468.00	0.53	0.53	
257	472.00	0.52	0.52	
258	476.00	0.51	0.51	
259	480.00	0.51	0.51	
260	484.00	0.51	0.51	
261	488.00	0.50	0.50	
262	492.00	0.49	0.49	
263	496.00	0.49	0.49	
264	500.00	0.49	0.49	
265	504.00	0.48	0.48	
266	508.00	0.48	0.48	
267	512.00	0.47	0.47	
268	516.00	0.47	0.47	
269	520.00	0.46	0.46	
270	524.00	0.46	0.46	
271	528.00	0.45	0.45	
272	532.00	0.45	0.45	
273	536.00	0.45	0.45	
274	540.00	0.44	0.44	
275	544.00	0.44	0.44	
276	548.00	0.43	0.43	
277	552.00	0.43	0.43	
278	556.00	0.43	0.43	
279	560.00	0.42	0.42	
280	564.00	0.42	0.42	
281	568.00	0.41	0.41	
282	572.00	0.41	0.41	
283	576.00	0.41	0.41	
284	580.00	0.40	0.40	
285	584.00	0.40	0.40	
286	588.00	0.39	0.39	
287	592.00	0.39	0.39	
288	596.00	0.39	0.39	
289	600.00	0.38	0.38	
290	604.00	0.38	0.38	
291	608.00	0.38	0.38	
292	612.00	0.37	0.37	
293	616.00	0.37	0.37	
294	620.00	0.37	0.37	
295	624.00	0.36	0.36	
296	628.00	0.36	0.36	
297	632.00	0.36	0.36	
298	636.00	0.35	0.35	
299	640.00	0.35	0.35	
300	644.00	0.34	0.34	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 8 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
301	648.00	0.34	0.34
302	652.00	0.34	0.34
303	656.00	0.34	0.34
304	660.00	0.33	0.33
305	664.00	0.33	0.33
306	668.00	0.33	0.33
307	672.00	0.32	0.32
308	676.00	0.32	0.32
309	680.00	0.31	0.31
310	684.00	0.31	0.31
311	688.00	0.31	0.31
312	692.00	0.31	0.31
313	696.00	0.30	0.30
314	700.00	0.30	0.30
315	704.00	0.30	0.30
316	708.00	0.30	0.30
317	712.00	0.29	0.29
318	716.00	0.29	0.29
319	720.00	0.29	0.29
320	724.00	0.28	0.28
321	728.00	0.28	0.28
322	732.00	0.28	0.28
323	736.00	0.27	0.27
324	740.00	0.27	0.27
325	744.00	0.27	0.27
326	748.00	0.26	0.26
327	752.00	0.26	0.26
328	756.00	0.26	0.26
329	760.00	0.25	0.25
330	764.00	0.25	0.25
331	768.00	0.25	0.25
332	772.00	0.24	0.24
333	776.00	0.24	0.24
334	780.00	0.24	0.24
335	784.00	0.24	0.24
336	788.00	0.23	0.23
337	792.00	0.23	0.23
338	796.00	0.23	0.23
339	800.00	0.23	0.23
340	804.00	0.22	0.22
341	808.00	0.22	0.22
342	812.00	0.22	0.22
343	816.00	0.22	0.22
344	820.00	0.22	0.22
345	824.00	0.21	0.21
346	828.00	0.21	0.21
347	832.00	0.21	0.21
348	836.00	0.21	0.21
349	840.00	0.21	0.21
350	844.00	0.20	0.20

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 9 Project: Evaluated by:	Date: 11.05.1997

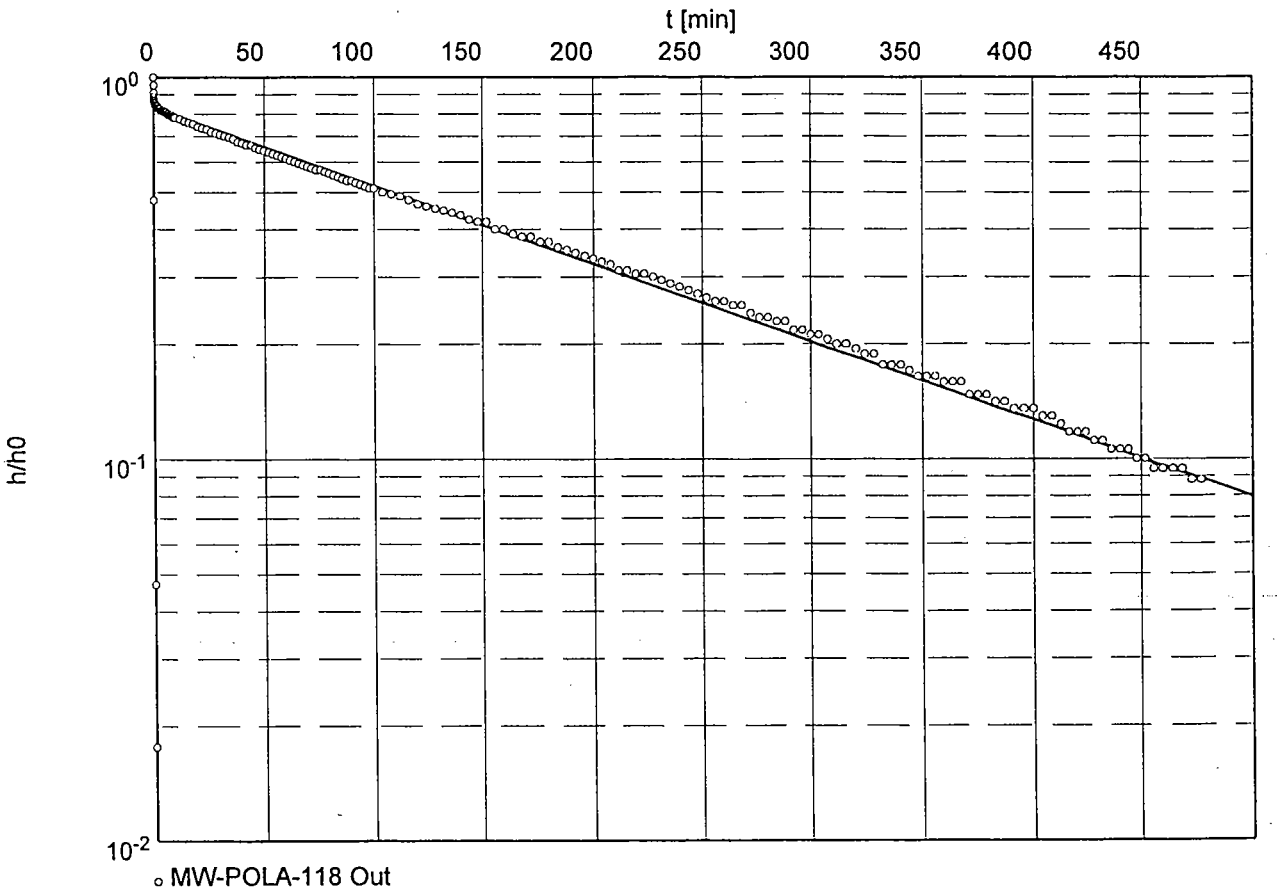
Slug Test No.	Test conducted on:
	MW-POLA-117A

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
351	848.00	0.20	0.20	
352	852.00	0.20	0.20	
353	856.00	0.20	0.20	
354	860.00	0.20	0.20	
355	864.00	0.20	0.20	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 1 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 1.86×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 2 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
1	0.00	1.70	1.70
2	0.03	0.03	0.03
3	0.04	-0.08	-0.08
4	0.05	0.81	0.81
5	0.06	1.74	1.74
6	0.07	1.85	1.85
7	0.08	1.71	1.71
8	0.09	1.62	1.62
9	0.10	1.55	1.55
10	0.11	1.51	1.51
11	0.12	1.49	1.49
12	0.13	1.48	1.48
13	0.14	1.47	1.47
14	0.15	1.47	1.47
15	0.16	1.47	1.47
16	0.17	1.47	1.47
17	0.18	1.47	1.47
18	0.19	1.47	1.47
19	0.20	1.47	1.47
20	0.21	1.47	1.47
21	0.22	1.47	1.47
22	0.23	1.47	1.47
23	0.24	1.47	1.47
24	0.25	1.47	1.47
25	0.26	1.47	1.47
26	0.27	1.47	1.47
27	0.28	1.47	1.47
28	0.29	1.47	1.47
29	0.30	1.47	1.47
30	0.31	1.47	1.47
31	0.32	1.47	1.47
32	0.33	1.47	1.47
33	0.35	1.47	1.47
34	0.37	1.47	1.47
35	0.38	1.47	1.47
36	0.40	1.47	1.47
37	0.42	1.47	1.47
38	0.43	1.46	1.46
39	0.45	1.46	1.46
40	0.47	1.46	1.46
41	0.48	1.46	1.46
42	0.50	1.46	1.46
43	0.52	1.46	1.46
44	0.53	1.46	1.46
45	0.55	1.45	1.45
46	0.57	1.45	1.45
47	0.58	1.45	1.45
48	0.60	1.45	1.45
49	0.62	1.45	1.45
50	0.63	1.45	1.45

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 3 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
51	0.65	1.45	1.45	
52	0.67	1.45	1.45	
53	0.68	1.45	1.45	
54	0.70	1.45	1.45	
55	0.72	1.45	1.45	
56	0.73	1.45	1.45	
57	0.75	1.45	1.45	
58	0.77	1.45	1.45	
59	0.78	1.44	1.44	
60	0.80	1.44	1.44	
61	0.82	1.44	1.44	
62	0.83	1.44	1.44	
63	0.85	1.44	1.44	
64	0.87	1.44	1.44	
65	0.88	1.44	1.44	
66	0.90	1.44	1.44	
67	0.92	1.44	1.44	
68	0.93	1.44	1.44	
69	0.95	1.44	1.44	
70	0.97	1.44	1.44	
71	0.98	1.44	1.44	
72	1.00	1.44	1.44	
73	1.20	1.43	1.43	
74	1.40	1.43	1.43	
75	1.60	1.42	1.42	
76	1.80	1.42	1.42	
77	2.00	1.42	1.42	
78	2.20	1.41	1.41	
79	2.40	1.41	1.41	
80	2.60	1.41	1.41	
81	2.80	1.40	1.40	
82	3.00	1.40	1.40	
83	3.20	1.40	1.40	
84	3.40	1.39	1.39	
85	3.60	1.39	1.39	
86	3.80	1.39	1.39	
87	4.00	1.39	1.39	
88	4.20	1.39	1.39	
89	4.40	1.39	1.39	
90	4.60	1.38	1.38	
91	4.80	1.38	1.38	
92	5.00	1.38	1.38	
93	5.20	1.38	1.38	
94	5.40	1.37	1.37	
95	5.60	1.37	1.37	
96	5.80	1.37	1.37	
97	6.00	1.37	1.37	
98	6.20	1.36	1.36	
99	6.40	1.36	1.36	
100	6.60	1.36	1.36	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 4 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
101	6.80	1.36	1.36	
102	7.00	1.35	1.35	
103	7.20	1.35	1.35	
104	7.40	1.35	1.35	
105	7.60	1.35	1.35	
106	7.80	1.35	1.35	
107	8.00	1.35	1.35	
108	8.20	1.35	1.35	
109	8.40	1.34	1.34	
110	8.60	1.34	1.34	
111	8.80	1.34	1.34	
112	9.00	1.34	1.34	
113	9.20	1.34	1.34	
114	9.40	1.33	1.33	
115	9.60	1.33	1.33	
116	9.80	1.33	1.33	
117	10.00	1.33	1.33	
118	12.00	1.32	1.32	
119	14.00	1.30	1.30	
120	16.00	1.29	1.29	
121	18.00	1.28	1.28	
122	20.00	1.26	1.26	
123	22.00	1.25	1.25	
124	24.00	1.24	1.24	
125	26.00	1.22	1.22	
126	28.00	1.21	1.21	
127	30.00	1.20	1.20	
128	32.00	1.19	1.19	
129	34.00	1.18	1.18	
130	36.00	1.17	1.17	
131	38.00	1.15	1.15	
132	40.00	1.14	1.14	
133	42.00	1.13	1.13	
134	44.00	1.13	1.13	
135	46.00	1.11	1.11	
136	48.00	1.10	1.10	
137	50.00	1.09	1.09	
138	52.00	1.08	1.08	
139	54.00	1.07	1.07	
140	56.00	1.06	1.06	
141	58.00	1.05	1.05	
142	60.00	1.04	1.04	
143	62.00	1.03	1.03	
144	64.00	1.02	1.02	
145	66.00	1.01	1.01	
146	68.00	1.00	1.00	
147	70.00	0.99	0.99	
148	72.00	0.98	0.98	
149	74.00	0.97	0.97	
150	76.00	0.97	0.97	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 5 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
151	78.00	0.96	0.96	
152	80.00	0.95	0.95	
153	82.00	0.94	0.94	
154	84.00	0.93	0.93	
155	86.00	0.92	0.92	
156	88.00	0.91	0.91	
157	90.00	0.91	0.91	
158	92.00	0.90	0.90	
159	94.00	0.89	0.89	
160	96.00	0.88	0.88	
161	98.00	0.87	0.87	
162	100.00	0.87	0.87	
163	104.00	0.85	0.85	
164	108.00	0.84	0.84	
165	112.00	0.83	0.83	
166	116.00	0.81	0.81	
167	120.00	0.79	0.79	
168	124.00	0.78	0.78	
169	128.00	0.77	0.77	
170	132.00	0.76	0.76	
171	136.00	0.75	0.75	
172	140.00	0.74	0.74	
173	144.00	0.72	0.72	
174	148.00	0.71	0.71	
175	152.00	0.71	0.71	
176	156.00	0.68	0.68	
177	160.00	0.68	0.68	
178	164.00	0.66	0.66	
179	168.00	0.65	0.65	
180	172.00	0.65	0.65	
181	176.00	0.63	0.63	
182	180.00	0.63	0.63	
183	184.00	0.61	0.61	
184	188.00	0.60	0.60	
185	192.00	0.59	0.59	
186	196.00	0.58	0.58	
187	200.00	0.57	0.57	
188	204.00	0.56	0.56	
189	208.00	0.55	0.55	
190	212.00	0.53	0.53	
191	216.00	0.53	0.53	
192	220.00	0.52	0.52	
193	224.00	0.52	0.52	
194	228.00	0.51	0.51	
195	232.00	0.50	0.50	
196	236.00	0.49	0.49	
197	240.00	0.48	0.48	
198	244.00	0.47	0.47	
199	248.00	0.46	0.46	
200	252.00	0.45	0.45	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 6 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]
201	256.00	0.44	0.44
202	260.00	0.44	0.44
203	264.00	0.43	0.43
204	268.00	0.43	0.43
205	272.00	0.41	0.41
206	276.00	0.40	0.40
207	280.00	0.40	0.40
208	284.00	0.39	0.39
209	288.00	0.39	0.39
210	292.00	0.37	0.37
211	296.00	0.37	0.37
212	300.00	0.36	0.36
213	304.00	0.36	0.36
214	308.00	0.35	0.35
215	312.00	0.34	0.34
216	316.00	0.34	0.34
217	320.00	0.33	0.33
218	324.00	0.32	0.32
219	328.00	0.32	0.32
220	332.00	0.30	0.30
221	336.00	0.30	0.30
222	340.00	0.30	0.30
223	344.00	0.29	0.29
224	348.00	0.28	0.28
225	352.00	0.28	0.28
226	356.00	0.28	0.28
227	360.00	0.27	0.27
228	364.00	0.27	0.27
229	368.00	0.27	0.27
230	372.00	0.25	0.25
231	376.00	0.25	0.25
232	380.00	0.25	0.25
233	384.00	0.24	0.24
234	388.00	0.24	0.24
235	392.00	0.23	0.23
236	396.00	0.23	0.23
237	400.00	0.23	0.23
238	404.00	0.22	0.22
239	408.00	0.22	0.22
240	412.00	0.21	0.21
241	416.00	0.20	0.20
242	420.00	0.20	0.20
243	424.00	0.20	0.20
244	428.00	0.19	0.19
245	432.00	0.19	0.19
246	436.00	0.18	0.18
247	440.00	0.18	0.18
248	444.00	0.18	0.18
249	448.00	0.17	0.17
250	452.00	0.17	0.17

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 7 Project: Evaluated by:	Date: 11.05.1997

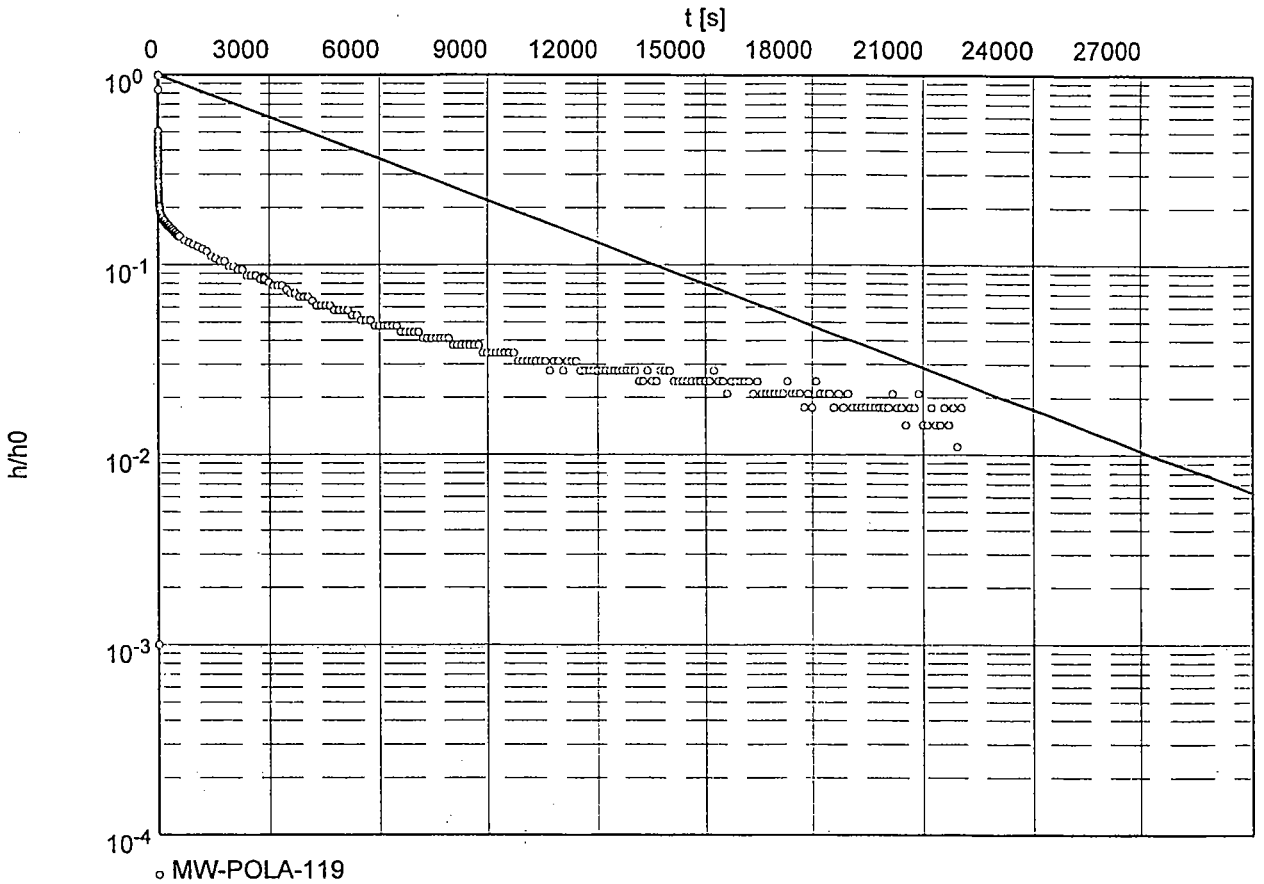
Slug Test No.	Test conducted on:
	MW-POLA-118 Out

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Change in Waterlevel [ft]	
251	456.00	0.16	0.16	
252	460.00	0.16	0.16	
253	464.00	0.16	0.16	
254	468.00	0.16	0.16	
255	472.00	0.15	0.15	
256	476.00	0.15	0.15	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: Hamilton BRAC Evaluated by: P.L. | Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	



Hydraulic conductivity [cm/s]: 5.30×10^{-8}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: Hamilton BRAC Evaluated by: P.L. | Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
1	0	390.8	91.5	
2	1	299.3	0.1	
3	1	299.3	0.1	
4	2	299.3	0.1	
5	2	299.3	0.1	
6	3	299.3	0.1	
7	4	299.3	0.1	
8	4	299.3	0.1	
9	5	299.3	0.1	
10	5	375.5	76.3	
11	6	389.5	90.3	
12	7	340.5	41.2	
13	7	345.3	46.1	
14	8	342.6	43.4	
15	8	341.4	42.2	
16	9	340.2	40.9	
17	10	338.9	39.7	
18	10	337.4	38.2	
19	11	336.2	37.0	
20	11	335.3	36.1	
21	12	334.1	34.8	
22	13	332.8	33.6	
23	13	331.9	32.7	
24	14	331.0	31.8	
25	14	330.1	30.9	
26	15	329.2	30.0	
27	16	328.3	29.0	
28	16	327.4	28.1	
29	17	326.7	27.5	
30	17	326.1	26.9	
31	18	325.5	26.3	
32	19	324.9	25.7	
33	19	324.3	25.1	
34	20	324.0	24.8	
35	21	322.8	23.6	
36	22	322.2	23.0	
37	23	321.6	22.3	
38	24	321.0	21.7	
39	25	320.6	21.4	
40	26	320.3	21.1	
41	27	320.0	20.8	
42	28	320.0	20.8	
43	29	319.7	20.5	
44	30	319.4	20.2	
45	31	319.4	20.2	
46	32	319.1	19.9	
47	33	318.8	19.6	
48	34	318.8	19.6	
49	35	318.8	19.6	
50	36	318.5	19.3	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
51	37	318.5	19.3
52	38	318.5	19.3
53	39	318.2	19.0
54	40	318.2	19.0
55	41	318.2	19.0
56	42	317.9	18.7
57	43	317.9	18.7
58	44	317.9	18.7
59	45	317.9	18.7
60	46	317.6	18.4
61	47	317.6	18.4
62	48	317.6	18.4
63	49	317.6	18.4
64	50	317.3	18.1
65	51	317.3	18.1
66	52	317.3	18.1
67	53	317.3	18.1
68	54	317.3	18.1
69	55	317.3	18.1
70	56	317.0	17.8
71	57	317.0	17.8
72	58	317.0	17.8
73	59	317.0	17.8
74	60	317.0	17.8
75	72	316.4	17.2
76	84	316.1	16.9
77	96	315.8	16.6
78	108	315.5	16.2
79	120	315.5	16.2
80	132	315.5	16.2
81	144	315.2	15.9
82	156	314.9	15.6
83	168	314.9	15.6
84	180	314.9	15.6
85	192	314.6	15.3
86	204	314.6	15.3
87	216	314.2	15.0
88	228	314.2	15.0
89	240	314.2	15.0
90	252	313.9	14.7
91	264	313.9	14.7
92	276	313.9	14.7
93	288	313.9	14.7
94	300	313.6	14.4
95	312	313.6	14.4
96	324	313.6	14.4
97	336	313.6	14.4
98	348	313.3	14.1
99	360	313.3	14.1
100	372	313.3	14.1

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: Hamilton BRAC Evaluated by: P.L. | Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]	
101	384	313.3	14.1	
102	396	313.0	13.8	
103	408	313.0	13.8	
104	420	313.0	13.8	
105	432	313.0	13.8	
106	444	312.7	13.5	
107	456	312.7	13.5	
108	468	312.7	13.5	
109	480	312.7	13.5	
110	492	312.4	13.2	
111	504	312.4	13.2	
112	516	312.4	13.2	
113	528	312.4	13.2	
114	540	312.4	13.2	
115	552	312.1	12.9	
116	564	312.1	12.9	
117	576	312.1	12.9	
118	588	312.1	12.9	
119	600	312.1	12.9	
120	720	311.5	12.3	
121	840	311.2	12.0	
122	960	310.9	11.7	
123	1080	310.6	11.4	
124	1200	310.3	11.1	
125	1320	310.0	10.8	
126	1440	309.4	10.1	
127	1560	309.1	9.8	
128	1680	308.8	9.5	
129	1800	308.8	9.5	
130	1920	308.2	8.9	
131	2040	308.2	8.9	
132	2160	307.8	8.6	
133	2280	307.8	8.6	
134	2400	307.2	8.0	
135	2520	307.2	8.0	
136	2640	307.2	8.0	
137	2760	306.9	7.7	
138	2880	306.9	7.7	
139	3000	306.6	7.4	
140	3120	306.3	7.1	
141	3240	306.3	7.1	
142	3360	306.3	7.1	
143	3480	306.0	6.8	
144	3600	305.7	6.5	
145	3720	305.7	6.5	
146	3840	305.4	6.2	
147	3960	305.4	6.2	
148	4080	305.4	6.2	
149	4200	305.1	5.9	
150	4320	304.8	5.6	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
151	4440	304.8	5.6
152	4560	304.8	5.6
153	4680	304.8	5.6
154	4800	304.5	5.3
155	4920	304.5	5.3
156	5040	304.5	5.3
157	5160	304.5	5.3
158	5280	304.2	5.0
159	5400	304.2	5.0
160	5520	303.9	4.7
161	5640	303.9	4.7
162	5760	303.9	4.7
163	5880	303.6	4.4
164	6000	303.6	4.4
165	6120	303.6	4.4
166	6240	303.6	4.4
167	6360	303.6	4.4
168	6480	303.6	4.4
169	6600	303.3	4.1
170	6720	303.3	4.1
171	6840	303.3	4.1
172	6960	303.3	4.1
173	7080	303.3	4.1
174	7200	303.0	3.7
175	7320	303.0	3.7
176	7440	303.0	3.7
177	7560	303.0	3.7
178	7680	303.0	3.7
179	7800	303.0	3.7
180	7920	303.0	3.7
181	8040	302.7	3.4
182	8160	302.7	3.4
183	8280	302.7	3.4
184	8400	302.7	3.4
185	8520	302.7	3.4
186	8640	302.7	3.4
187	8760	302.7	3.4
188	8880	302.4	3.1
189	9000	302.4	3.1
190	9120	302.4	3.1
191	9240	302.4	3.1
192	9360	302.4	3.1
193	9480	302.4	3.1
194	9600	302.4	3.1
195	9720	302.4	3.1
196	9840	302.1	2.8
197	9960	302.1	2.8
198	10080	302.1	2.8
199	10200	302.1	2.8
200	10320	302.1	2.8

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
201	10440	302.1	2.8
202	10560	302.1	2.8
203	10680	301.8	2.5
204	10800	302.1	2.8
205	10920	302.1	2.8
206	11040	301.8	2.5
207	11160	302.1	2.8
208	11280	302.1	2.8
209	11400	302.1	2.8
210	11520	301.8	2.5
211	11640	301.8	2.5
212	11760	301.8	2.5
213	11880	301.8	2.5
214	12000	301.8	2.5
215	12120	301.8	2.5
216	12240	301.8	2.5
217	12360	301.8	2.5
218	12480	301.8	2.5
219	12600	301.8	2.5
220	12720	301.8	2.5
221	12840	301.8	2.5
222	12960	301.8	2.5
223	13080	301.8	2.5
224	13200	301.4	2.2
225	13320	301.4	2.2
226	13440	301.8	2.5
227	13560	301.4	2.2
228	13680	301.4	2.2
229	13800	301.8	2.5
230	13920	301.8	2.5
231	14040	301.8	2.5
232	14160	301.4	2.2
233	14280	301.4	2.2
234	14400	301.4	2.2
235	14520	301.4	2.2
236	14640	301.4	2.2
237	14760	301.4	2.2
238	14880	301.4	2.2
239	15000	301.4	2.2
240	15120	301.4	2.2
241	15240	301.8	2.5
242	15360	301.4	2.2
243	15480	301.4	2.2
244	15600	301.1	1.9
245	15720	301.4	2.2
246	15840	301.4	2.2
247	15960	301.4	2.2
248	16080	301.4	2.2
249	16200	301.4	2.2
250	16320	301.1	1.9

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: Hamilton BRAC Evaluated by: P.L. | Date: 5/9/97

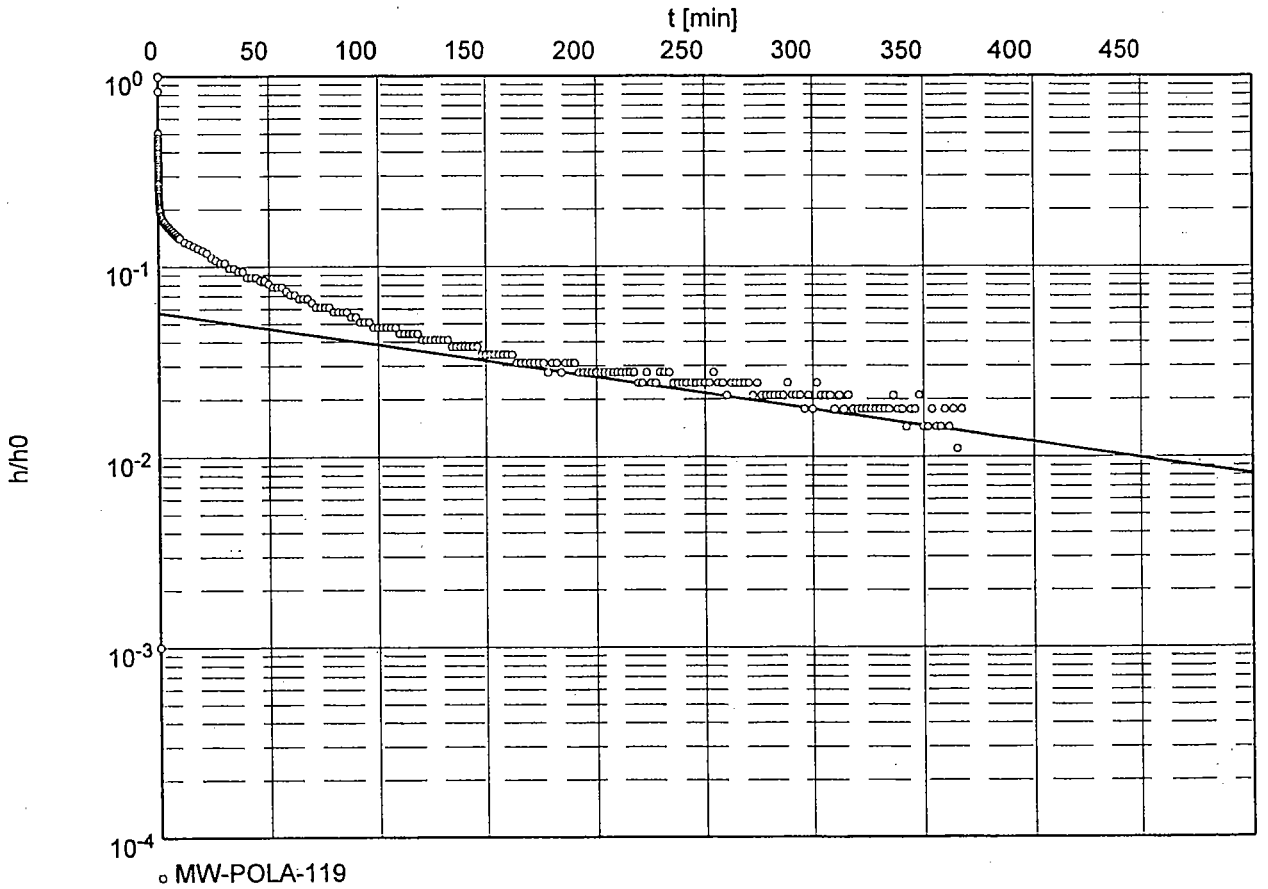
Slug Test No. SLUG IN	Test conducted on: 5/5/97
MW-POLA-119	MW-POLA-119

Static water level: 299.2 cm below datum

	Pumping test duration [s]	Water level [cm]	Drawdown [cm]
251	16440	301.4	2.2
252	16560	301.1	1.9
253	16680	301.1	1.9
254	16800	301.1	1.9
255	16920	301.1	1.9
256	17040	301.1	1.9
257	17160	301.1	1.9
258	17280	301.4	2.2
259	17400	301.1	1.9
260	17520	301.1	1.9
261	17640	301.1	1.9
262	17760	300.8	1.6
263	17880	301.1	1.9
264	18000	300.8	1.6
265	18120	301.4	2.2
266	18240	301.1	1.9
267	18360	301.1	1.9
268	18480	301.1	1.9
269	18600	300.8	1.6
270	18720	301.1	1.9
271	18840	300.8	1.6
272	18960	301.1	1.9
273	19080	300.8	1.6
274	19200	300.8	1.6
275	19320	300.8	1.6
276	19440	300.8	1.6
277	19560	300.8	1.6
278	19680	300.8	1.6
279	19800	300.8	1.6
280	19920	300.8	1.6
281	20040	300.8	1.6
282	20160	301.1	1.9
283	20280	300.8	1.6
284	20400	300.8	1.6
285	20520	300.5	1.3
286	20640	300.8	1.6
287	20760	300.8	1.6
288	20880	301.1	1.9
289	21000	300.5	1.3
290	21120	300.5	1.3
291	21240	300.8	1.6
292	21360	300.5	1.3
293	21480	300.5	1.3
294	21600	300.8	1.6
295	21720	300.5	1.3
296	21840	300.8	1.6
297	21960	300.2	1.0
298	22080	300.8	1.6

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis HVORSLEV's method	Page 1 Project: MW-POLA-119 Evaluated by: Date: 09.05.1997

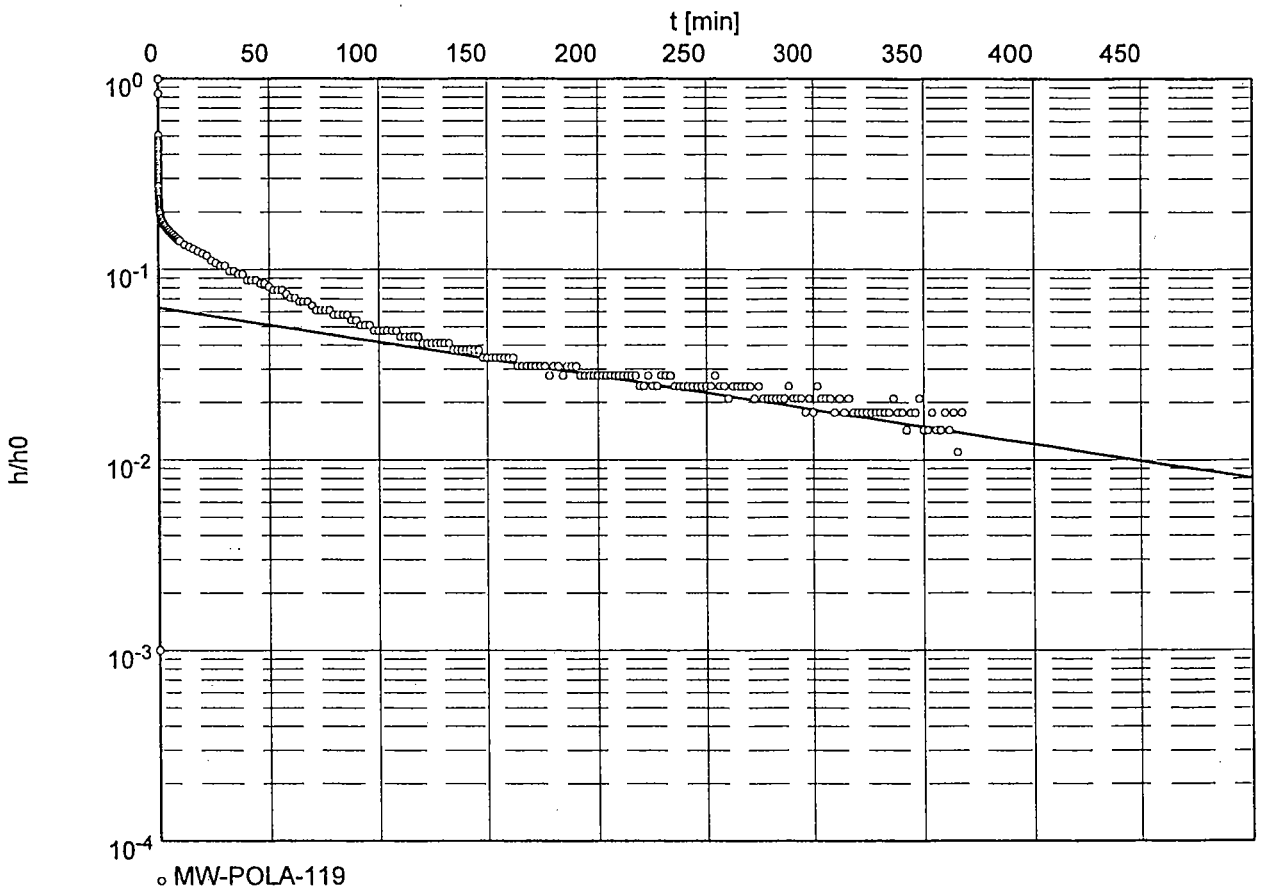
Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 1.93×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: MW-POLA-119 Evaluated by: Date: 09.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 1.52×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
1	0.00	12.82	3.00
2	0.01	9.82	0.00
3	0.02	9.82	0.00
4	0.03	9.82	0.00
5	0.04	9.82	0.00
6	0.05	9.82	0.00
7	0.06	9.82	0.00
8	0.07	9.82	0.00
9	0.08	9.82	0.00
10	0.09	12.32	2.50
11	0.10	12.78	2.96
12	0.11	11.17	1.35
13	0.12	11.33	1.51
14	0.13	11.24	1.42
15	0.14	11.20	1.38
16	0.15	11.16	1.34
17	0.16	11.12	1.30
18	0.17	11.07	1.25
19	0.18	11.03	1.21
20	0.19	11.00	1.18
21	0.20	10.96	1.14
22	0.21	10.92	1.10
23	0.22	10.89	1.07
24	0.23	10.86	1.04
25	0.24	10.83	1.01
26	0.25	10.80	0.98
27	0.26	10.77	0.95
28	0.27	10.74	0.92
29	0.28	10.72	0.90
30	0.29	10.70	0.88
31	0.30	10.68	0.86
32	0.31	10.66	0.84
33	0.32	10.64	0.82
34	0.33	10.63	0.81
35	0.35	10.59	0.77
36	0.37	10.57	0.75
37	0.38	10.55	0.73
38	0.40	10.53	0.71
39	0.42	10.52	0.70
40	0.43	10.51	0.69
41	0.45	10.50	0.68
42	0.47	10.50	0.68
43	0.48	10.49	0.67
44	0.50	10.48	0.66
45	0.52	10.48	0.66
46	0.53	10.47	0.65
47	0.55	10.46	0.64
48	0.57	10.46	0.64
49	0.58	10.46	0.64
50	0.60	10.45	0.63

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	0.62	10.45	0.63
52	0.63	10.45	0.63
53	0.65	10.44	0.62
54	0.67	10.44	0.62
55	0.68	10.44	0.62
56	0.70	10.43	0.61
57	0.72	10.43	0.61
58	0.73	10.43	0.61
59	0.75	10.43	0.61
60	0.77	10.42	0.60
61	0.78	10.42	0.60
62	0.80	10.42	0.60
63	0.82	10.42	0.60
64	0.83	10.41	0.59
65	0.85	10.41	0.59
66	0.87	10.41	0.59
67	0.88	10.41	0.59
68	0.90	10.41	0.59
69	0.92	10.41	0.59
70	0.93	10.40	0.58
71	0.95	10.40	0.58
72	0.97	10.40	0.58
73	0.98	10.40	0.58
74	1.00	10.40	0.58
75	1.20	10.38	0.56
76	1.40	10.37	0.55
77	1.60	10.36	0.54
78	1.80	10.35	0.53
79	2.00	10.35	0.53
80	2.20	10.35	0.53
81	2.40	10.34	0.52
82	2.60	10.33	0.51
83	2.80	10.33	0.51
84	3.00	10.33	0.51
85	3.20	10.32	0.50
86	3.40	10.32	0.50
87	3.60	10.31	0.49
88	3.80	10.31	0.49
89	4.00	10.31	0.49
90	4.20	10.30	0.48
91	4.40	10.30	0.48
92	4.60	10.30	0.48
93	4.80	10.30	0.48
94	5.00	10.29	0.47
95	5.20	10.29	0.47
96	5.40	10.29	0.47
97	5.60	10.29	0.47
98	5.80	10.28	0.46
99	6.00	10.28	0.46
100	6.20	10.28	0.46

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
101	6.40	10.28	0.46	
102	6.60	10.27	0.45	
103	6.80	10.27	0.45	
104	7.00	10.27	0.45	
105	7.20	10.27	0.45	
106	7.40	10.26	0.44	
107	7.60	10.26	0.44	
108	7.80	10.26	0.44	
109	8.00	10.26	0.44	
110	8.20	10.25	0.43	
111	8.40	10.25	0.43	
112	8.60	10.25	0.43	
113	8.80	10.25	0.43	
114	9.00	10.25	0.43	
115	9.20	10.24	0.42	
116	9.40	10.24	0.42	
117	9.60	10.24	0.42	
118	9.80	10.24	0.42	
119	10.00	10.24	0.42	
120	12.00	10.22	0.40	
121	14.00	10.21	0.39	
122	16.00	10.20	0.38	
123	18.00	10.19	0.37	
124	20.00	10.18	0.36	
125	22.00	10.17	0.35	
126	24.00	10.15	0.33	
127	26.00	10.14	0.32	
128	28.00	10.13	0.31	
129	30.00	10.13	0.31	
130	32.00	10.11	0.29	
131	34.00	10.11	0.29	
132	36.00	10.10	0.28	
133	38.00	10.10	0.28	
134	40.00	10.08	0.26	
135	42.00	10.08	0.26	
136	44.00	10.08	0.26	
137	46.00	10.07	0.25	
138	48.00	10.07	0.25	
139	50.00	10.06	0.24	
140	52.00	10.05	0.23	
141	54.00	10.05	0.23	
142	56.00	10.05	0.23	
143	58.00	10.04	0.22	
144	60.00	10.03	0.21	
145	62.00	10.03	0.21	
146	64.00	10.02	0.20	
147	66.00	10.02	0.20	
148	68.00	10.02	0.20	
149	70.00	10.01	0.19	
150	72.00	10.00	0.18	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
151	74.00	10.00	0.18
152	76.00	10.00	0.18
153	78.00	10.00	0.18
154	80.00	9.99	0.17
155	82.00	9.99	0.17
156	84.00	9.99	0.17
157	86.00	9.99	0.17
158	88.00	9.98	0.16
159	90.00	9.98	0.16
160	92.00	9.97	0.15
161	94.00	9.97	0.15
162	96.00	9.97	0.15
163	98.00	9.96	0.14
164	100.00	9.96	0.14
165	102.00	9.96	0.14
166	104.00	9.96	0.14
167	106.00	9.96	0.14
168	108.00	9.96	0.14
169	110.00	9.95	0.13
170	112.00	9.95	0.13
171	114.00	9.95	0.13
172	116.00	9.95	0.13
173	118.00	9.95	0.13
174	120.00	9.94	0.12
175	122.00	9.94	0.12
176	124.00	9.94	0.12
177	126.00	9.94	0.12
178	128.00	9.94	0.12
179	130.00	9.94	0.12
180	132.00	9.94	0.12
181	134.00	9.93	0.11
182	136.00	9.93	0.11
183	138.00	9.93	0.11
184	140.00	9.93	0.11
185	142.00	9.93	0.11
186	144.00	9.93	0.11
187	146.00	9.93	0.11
188	148.00	9.92	0.10
189	150.00	9.92	0.10
190	152.00	9.92	0.10
191	154.00	9.92	0.10
192	156.00	9.92	0.10
193	158.00	9.92	0.10
194	160.00	9.92	0.10
195	162.00	9.92	0.10
196	164.00	9.91	0.09
197	166.00	9.91	0.09
198	168.00	9.91	0.09
199	170.00	9.91	0.09
200	172.00	9.91	0.09

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
201	174.00	9.91	0.09
202	176.00	9.91	0.09
203	178.00	9.90	0.08
204	180.00	9.91	0.09
205	182.00	9.91	0.09
206	184.00	9.90	0.08
207	186.00	9.91	0.09
208	188.00	9.91	0.09
209	190.00	9.91	0.09
210	192.00	9.90	0.08
211	194.00	9.90	0.08
212	196.00	9.90	0.08
213	198.00	9.90	0.08
214	200.00	9.90	0.08
215	202.00	9.90	0.08
216	204.00	9.90	0.08
217	206.00	9.90	0.08
218	208.00	9.90	0.08
219	210.00	9.90	0.08
220	212.00	9.90	0.08
221	214.00	9.90	0.08
222	216.00	9.90	0.08
223	218.00	9.90	0.08
224	220.00	9.89	0.07
225	222.00	9.89	0.07
226	224.00	9.90	0.08
227	226.00	9.89	0.07
228	228.00	9.89	0.07
229	230.00	9.90	0.08
230	232.00	9.90	0.08
231	234.00	9.90	0.08
232	236.00	9.89	0.07
233	238.00	9.89	0.07
234	240.00	9.89	0.07
235	242.00	9.89	0.07
236	244.00	9.89	0.07
237	246.00	9.89	0.07
238	248.00	9.89	0.07
239	250.00	9.89	0.07
240	252.00	9.89	0.07
241	254.00	9.90	0.08
242	256.00	9.89	0.07
243	258.00	9.89	0.07
244	260.00	9.88	0.06
245	262.00	9.89	0.07
246	264.00	9.89	0.07
247	266.00	9.89	0.07
248	268.00	9.89	0.07
249	270.00	9.89	0.07
250	272.00	9.88	0.06

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: MW-POLA-119 Evaluated by:	Date: 09.05.1997

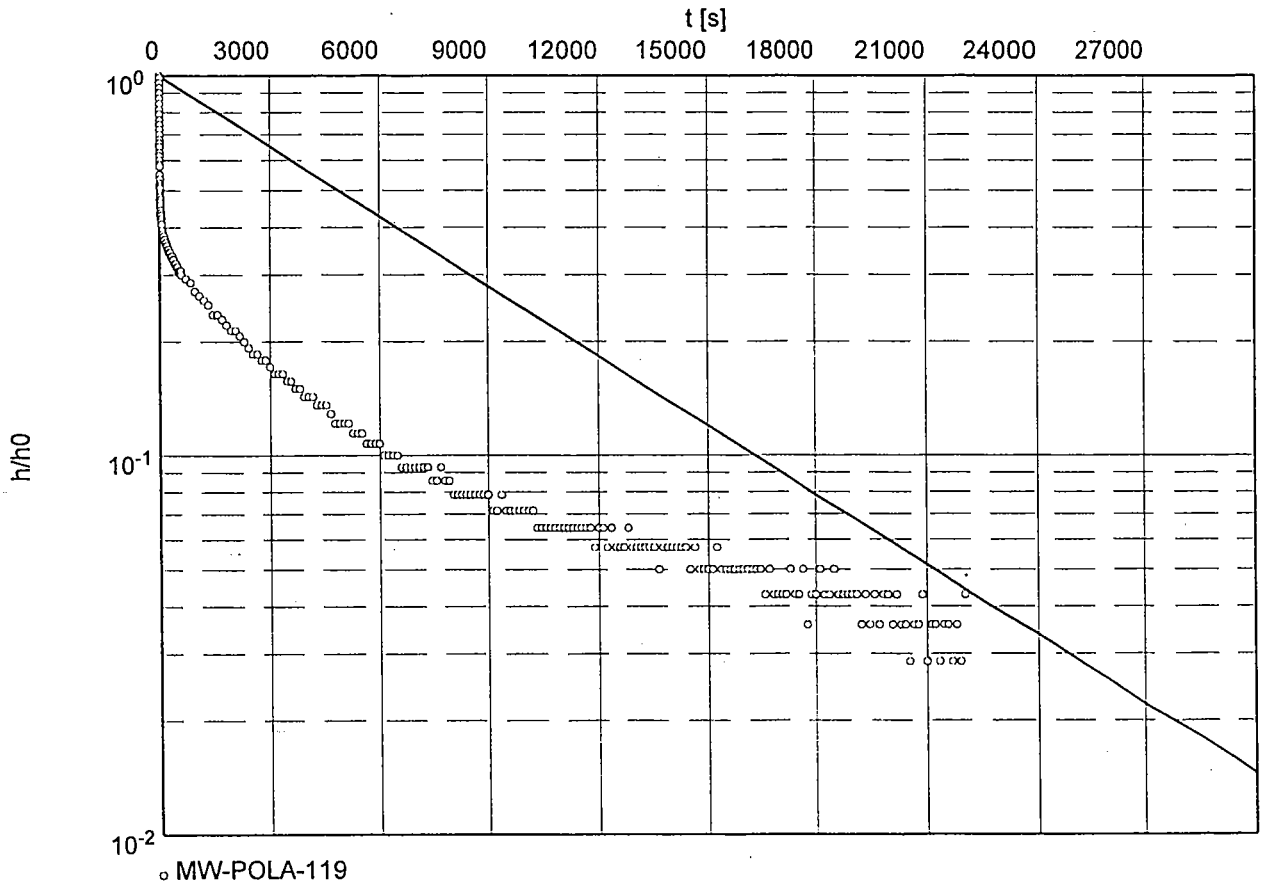
Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 9.82 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
251	274.00	9.89	0.07	
252	276.00	9.88	0.06	
253	278.00	9.88	0.06	
254	280.00	9.88	0.06	
255	282.00	9.88	0.06	
256	284.00	9.88	0.06	
257	286.00	9.88	0.06	
258	288.00	9.89	0.07	
259	290.00	9.88	0.06	
260	292.00	9.88	0.06	
261	294.00	9.88	0.06	
262	296.00	9.87	0.05	
263	298.00	9.88	0.06	
264	300.00	9.87	0.05	
265	302.00	9.89	0.07	
266	304.00	9.88	0.06	
267	306.00	9.88	0.06	
268	308.00	9.88	0.06	
269	310.00	9.87	0.05	
270	312.00	9.88	0.06	
271	314.00	9.87	0.05	
272	316.00	9.88	0.06	
273	318.00	9.87	0.05	
274	320.00	9.87	0.05	
275	322.00	9.87	0.05	
276	324.00	9.87	0.05	
277	326.00	9.87	0.05	
278	328.00	9.87	0.05	
279	330.00	9.87	0.05	
280	332.00	9.87	0.05	
281	334.00	9.87	0.05	
282	336.00	9.88	0.06	
283	338.00	9.87	0.05	
284	340.00	9.87	0.05	
285	342.00	9.86	0.04	
286	344.00	9.87	0.05	
287	346.00	9.87	0.05	
288	348.00	9.88	0.06	
289	350.00	9.86	0.04	
290	352.00	9.86	0.04	
291	354.00	9.87	0.05	
292	356.00	9.86	0.04	
293	358.00	9.86	0.04	
294	360.00	9.87	0.05	
295	362.00	9.86	0.04	
296	364.00	9.87	0.05	
297	366.00	9.85	0.03	
298	368.00	9.87	0.05	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: HAMILTON BRAC Evaluated by: P.L. Date: 5/11/97

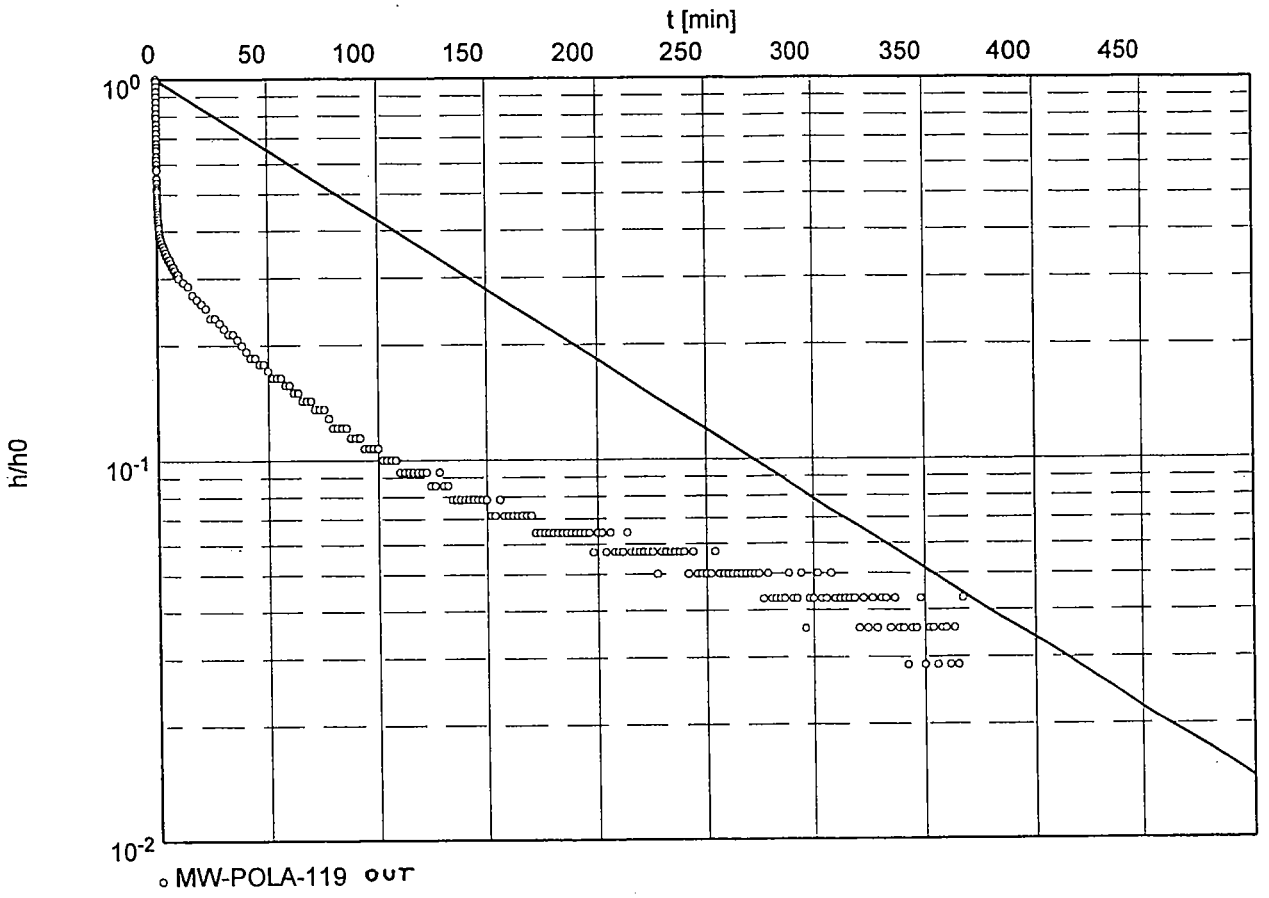
Slug Test No. SLUG OUT	Test conducted on: 5/6/97
MW-POLA-119	



Hydraulic conductivity [cm/s]: 1.16×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:



Hydraulic conductivity [ft/min]: 2.29×10^{-5}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
1	0.00	1.40	1.40
2	0.09	2.50	2.50
3	0.10	2.96	2.96
4	0.11	1.35	1.35
5	0.12	1.51	1.51
6	0.13	1.42	1.42
7	0.14	1.38	1.38
8	0.15	1.34	1.34
9	0.16	1.30	1.30
10	0.17	1.26	1.26
11	0.18	1.22	1.22
12	0.19	1.18	1.18
13	0.20	1.14	1.14
14	0.21	1.11	1.11
15	0.22	1.07	1.07
16	0.23	1.04	1.04
17	0.24	1.01	1.01
18	0.25	0.98	0.98
19	0.26	0.95	0.95
20	0.27	0.93	0.93
21	0.28	0.91	0.91
22	0.29	0.88	0.88
23	0.30	0.86	0.86
24	0.31	0.84	0.84
25	0.32	0.82	0.82
26	0.33	0.81	0.81
27	0.35	0.77	0.77
28	0.37	0.75	0.75
29	0.38	0.73	0.73
30	0.40	0.72	0.72
31	0.42	0.71	0.71
32	0.43	0.69	0.69
33	0.45	0.69	0.69
34	0.47	0.68	0.68
35	0.48	0.67	0.67
36	0.50	0.66	0.66
37	0.52	0.66	0.66
38	0.53	0.65	0.65
39	0.55	0.65	0.65
40	0.57	0.65	0.65
41	0.58	0.64	0.64
42	0.60	0.64	0.64
43	0.62	0.63	0.63
44	0.63	0.63	0.63
45	0.65	0.63	0.63
46	0.67	0.62	0.62
47	0.68	0.62	0.62
48	0.70	0.62	0.62
49	0.72	0.61	0.61
50	0.73	0.61	0.61

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
51	0.75	0.61	0.61
52	0.77	0.61	0.61
53	0.78	0.60	0.60
54	0.80	0.60	0.60
55	0.82	0.60	0.60
56	0.83	0.60	0.60
57	0.85	0.60	0.60
58	0.87	0.60	0.60
59	0.88	0.60	0.60
60	0.90	0.59	0.59
61	0.92	0.59	0.59
62	0.93	0.59	0.59
63	0.95	0.59	0.59
64	0.97	0.59	0.59
65	0.98	0.59	0.59
66	1.00	0.58	0.58
67	1.20	0.57	0.57
68	1.40	0.55	0.55
69	1.60	0.54	0.54
70	1.80	0.54	0.54
71	2.00	0.53	0.53
72	2.20	0.53	0.53
73	2.40	0.52	0.52
74	2.60	0.52	0.52
75	2.80	0.51	0.51
76	3.00	0.51	0.51
77	3.20	0.51	0.51
78	3.40	0.50	0.50
79	3.60	0.50	0.50
80	3.80	0.49	0.49
81	4.00	0.49	0.49
82	4.20	0.49	0.49
83	4.40	0.48	0.48
84	4.60	0.48	0.48
85	4.80	0.48	0.48
86	5.00	0.48	0.48
87	5.20	0.47	0.47
88	5.40	0.47	0.47
89	5.60	0.47	0.47
90	5.80	0.47	0.47
91	6.00	0.47	0.47
92	6.20	0.46	0.46
93	6.40	0.46	0.46
94	6.60	0.46	0.46
95	6.80	0.45	0.45
96	7.00	0.45	0.45
97	7.20	0.45	0.45
98	7.40	0.45	0.45
99	7.60	0.45	0.45
100	7.80	0.44	0.44

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
101	8.00	0.44	0.44
102	8.20	0.44	0.44
103	8.40	0.44	0.44
104	8.60	0.43	0.43
105	8.80	0.43	0.43
106	9.00	0.43	0.43
107	9.20	0.43	0.43
108	9.40	0.43	0.43
109	9.60	0.43	0.43
110	9.80	0.43	0.43
111	10.00	0.42	0.42
112	12.00	0.41	0.41
113	14.00	0.40	0.40
114	16.00	0.38	0.38
115	18.00	0.37	0.37
116	20.00	0.36	0.36
117	22.00	0.35	0.35
118	24.00	0.33	0.33
119	26.00	0.33	0.33
120	28.00	0.32	0.32
121	30.00	0.31	0.31
122	32.00	0.30	0.30
123	34.00	0.30	0.30
124	36.00	0.29	0.29
125	38.00	0.28	0.28
126	40.00	0.27	0.27
127	42.00	0.26	0.26
128	44.00	0.26	0.26
129	46.00	0.25	0.25
130	48.00	0.25	0.25
131	50.00	0.24	0.24
132	52.00	0.23	0.23
133	54.00	0.23	0.23
134	56.00	0.23	0.23
135	58.00	0.22	0.22
136	60.00	0.22	0.22
137	62.00	0.21	0.21
138	64.00	0.21	0.21
139	66.00	0.20	0.20
140	68.00	0.20	0.20
141	70.00	0.20	0.20
142	72.00	0.19	0.19
143	74.00	0.19	0.19
144	76.00	0.19	0.19
145	78.00	0.18	0.18
146	80.00	0.17	0.17
147	82.00	0.17	0.17
148	84.00	0.17	0.17
149	86.00	0.17	0.17
150	88.00	0.16	0.16

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
151	90.00	0.16	0.16
152	92.00	0.16	0.16
153	94.00	0.15	0.15
154	96.00	0.15	0.15
155	98.00	0.15	0.15
156	100.00	0.15	0.15
157	102.00	0.14	0.14
158	104.00	0.14	0.14
159	106.00	0.14	0.14
160	108.00	0.14	0.14
161	110.00	0.13	0.13
162	112.00	0.13	0.13
163	114.00	0.13	0.13
164	116.00	0.13	0.13
165	118.00	0.13	0.13
166	120.00	0.13	0.13
167	122.00	0.13	0.13
168	124.00	0.12	0.12
169	126.00	0.12	0.12
170	128.00	0.13	0.13
171	130.00	0.12	0.12
172	132.00	0.12	0.12
173	134.00	0.11	0.11
174	136.00	0.11	0.11
175	138.00	0.11	0.11
176	140.00	0.11	0.11
177	142.00	0.11	0.11
178	144.00	0.11	0.11
179	146.00	0.11	0.11
180	148.00	0.11	0.11
181	150.00	0.11	0.11
182	152.00	0.10	0.10
183	154.00	0.10	0.10
184	156.00	0.11	0.11
185	158.00	0.10	0.10
186	160.00	0.10	0.10
187	162.00	0.10	0.10
188	164.00	0.10	0.10
189	166.00	0.10	0.10
190	168.00	0.10	0.10
191	170.00	0.10	0.10
192	172.00	0.09	0.09
193	174.00	0.09	0.09
194	176.00	0.09	0.09
195	178.00	0.09	0.09
196	180.00	0.09	0.09
197	182.00	0.09	0.09
198	184.00	0.09	0.09
199	186.00	0.09	0.09
200	188.00	0.09	0.09

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: Evaluated by:	Date: 11.05.1997

Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
201	190.00	0.09	0.09
202	192.00	0.09	0.09
203	194.00	0.09	0.09
204	196.00	0.09	0.09
205	198.00	0.08	0.08
206	200.00	0.09	0.09
207	202.00	0.09	0.09
208	204.00	0.08	0.08
209	206.00	0.09	0.09
210	208.00	0.08	0.08
211	210.00	0.08	0.08
212	212.00	0.08	0.08
213	214.00	0.09	0.09
214	216.00	0.08	0.08
215	218.00	0.08	0.08
216	220.00	0.08	0.08
217	222.00	0.08	0.08
218	224.00	0.08	0.08
219	226.00	0.08	0.08
220	228.00	0.07	0.07
221	230.00	0.08	0.08
222	232.00	0.08	0.08
223	234.00	0.08	0.08
224	236.00	0.08	0.08
225	238.00	0.08	0.08
226	240.00	0.08	0.08
227	242.00	0.07	0.07
228	244.00	0.08	0.08
229	246.00	0.07	0.07
230	248.00	0.07	0.07
231	250.00	0.07	0.07
232	252.00	0.07	0.07
233	254.00	0.08	0.08
234	256.00	0.07	0.07
235	258.00	0.07	0.07
236	260.00	0.07	0.07
237	262.00	0.07	0.07
238	264.00	0.07	0.07
239	266.00	0.07	0.07
240	268.00	0.07	0.07
241	270.00	0.07	0.07
242	272.00	0.07	0.07
243	274.00	0.07	0.07
244	276.00	0.06	0.06
245	278.00	0.07	0.07
246	280.00	0.06	0.06
247	282.00	0.06	0.06
248	284.00	0.06	0.06
249	286.00	0.06	0.06
250	288.00	0.07	0.07

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: Evaluated by:	Date: 11.05.1997

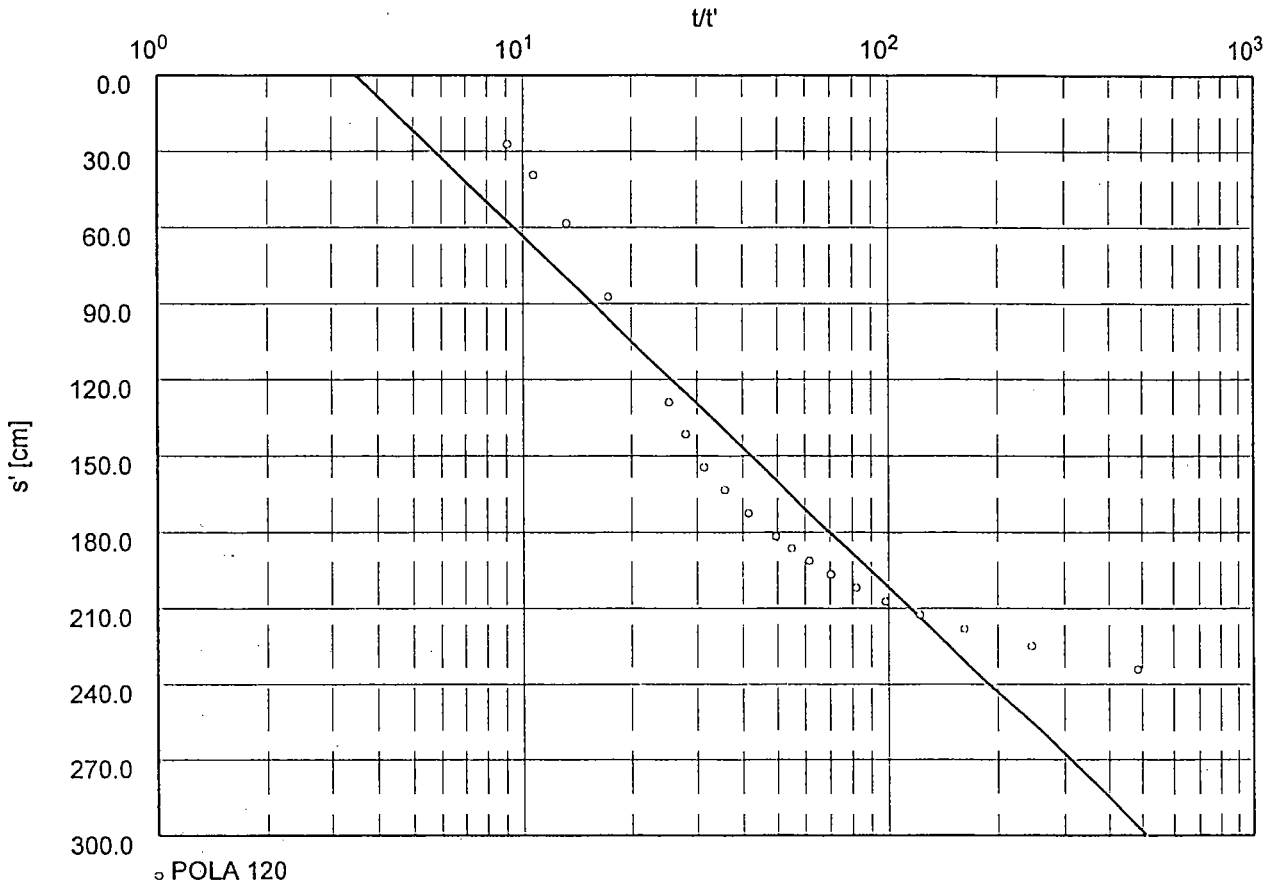
Slug Test No.	Test conducted on:
	MW-POLA-119

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
251	290.00	0.06	0.06	
252	292.00	0.06	0.06	
253	294.00	0.07	0.07	
254	296.00	0.05	0.05	
255	298.00	0.06	0.06	
256	300.00	0.06	0.06	
257	302.00	0.07	0.07	
258	304.00	0.06	0.06	
259	306.00	0.06	0.06	
260	308.00	0.07	0.07	
261	310.00	0.06	0.06	
262	312.00	0.06	0.06	
263	314.00	0.06	0.06	
264	316.00	0.06	0.06	
265	318.00	0.06	0.06	
266	320.00	0.05	0.05	
267	322.00	0.06	0.06	
268	324.00	0.05	0.05	
269	326.00	0.06	0.06	
270	328.00	0.05	0.05	
271	330.00	0.06	0.06	
272	332.00	0.06	0.06	
273	334.00	0.05	0.05	
274	336.00	0.06	0.06	
275	338.00	0.05	0.05	
276	340.00	0.05	0.05	
277	342.00	0.04	0.04	
278	344.00	0.05	0.05	
279	346.00	0.05	0.05	
280	348.00	0.06	0.06	
281	350.00	0.04	0.04	
282	352.00	0.05	0.05	
283	354.00	0.05	0.05	
284	356.00	0.04	0.04	
285	358.00	0.05	0.05	
286	360.00	0.05	0.05	
287	362.00	0.04	0.04	
288	364.00	0.05	0.05	
289	366.00	0.04	0.04	
290	368.00	0.06	0.06	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 1 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Pumping Test No. 1	Test conducted on: 4/2/97
MW-POLA-120	
Discharge 0.63 U.S.gal/min	
	Pumping test duration: 14580 s



Transmissivity [cm²/s]: 5.25×10^{-2}

Hydraulic conductivity [cm/s]: 5.75×10^{-5}

Aquifer thickness [cm]: 914.4

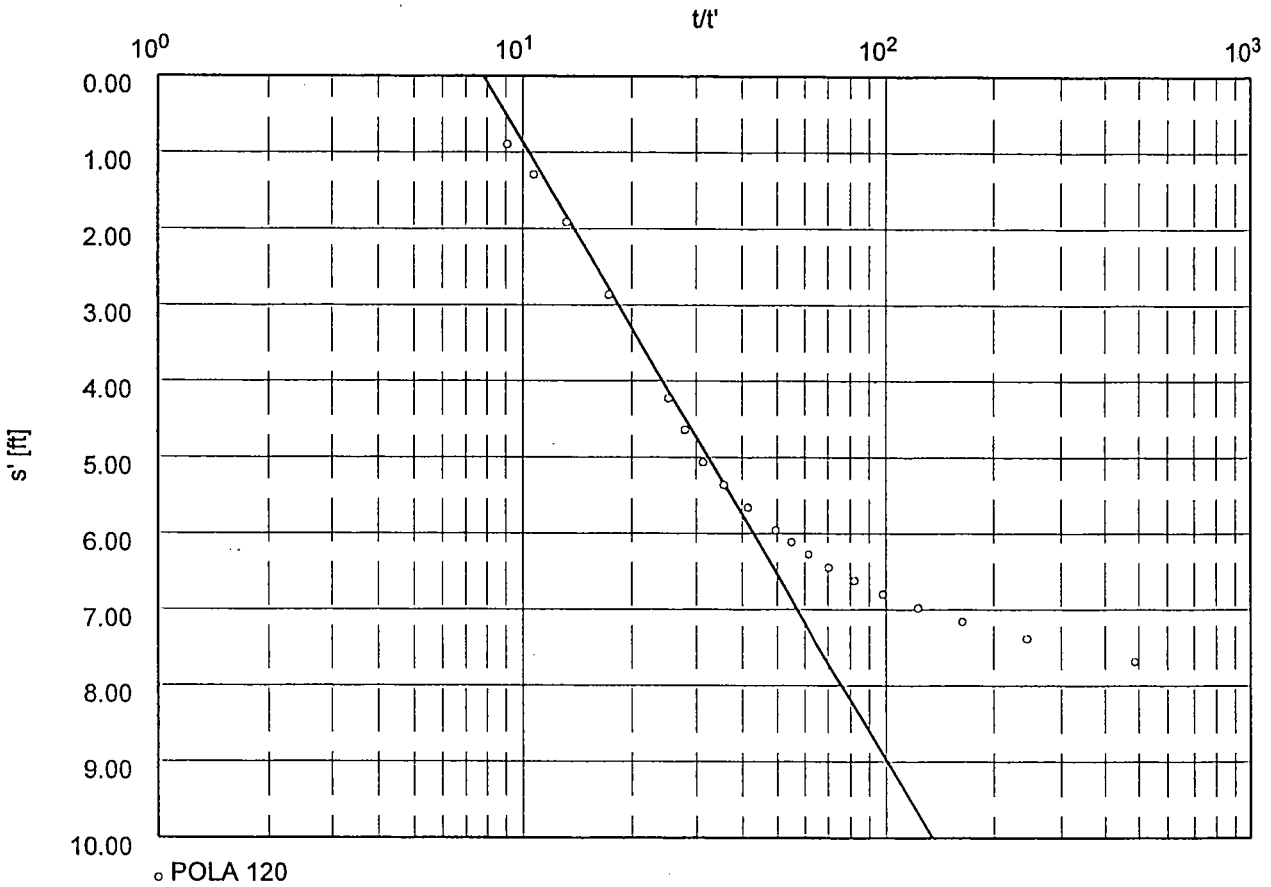
Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 2 Project: Hamilton BRAC Evaluated by: P.L. Date: 5/9/97

Pumping Test No. 1	Test conducted on: 4/2/97
MW-POLA-120	POLA 120
Discharge 0.63 U.S.gal/min	
Static water level: 408.4 cm below datum	Pumping test duration: 14580 s

	Time from end of pumping [s]	Water level [cm]	Residual drawdown [cm]	Corrected drawdown [cm]
1	30	684.3	275.8	234.2
2	60	671.2	262.7	225.0
3	90	661.7	253.3	218.2
4	120	654.1	245.7	212.7
5	150	646.8	238.4	207.3
6	180	639.5	231.0	201.9
7	210	632.5	224.0	196.6
8	240	625.4	217.0	191.3
9	270	619.0	210.6	186.4
10	300	613.0	204.5	181.6
11	360	601.4	192.9	172.6
12	420	589.8	181.4	163.4
13	480	578.8	170.4	154.5
14	540	563.0	154.5	141.5
15	600	548.0	139.6	128.9
16	900	500.5	92.0	87.4
17	1200	468.8	60.4	58.4
18	1500	448.7	40.2	39.3
19	1800	436.2	27.7	27.3

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 1 Project: Evaluated by:	Date: 09.05.1997

Pumping Test No.	Test conducted on:
Discharge 0.63 U.S.gal/min	
	Pumping test duration: 243.00 min



Transmissivity [ft²/min]: 1.90×10^{-3}

Hydraulic conductivity [ft/min]: 6.33×10^{-5}

Aquifer thickness [ft]: 30.00

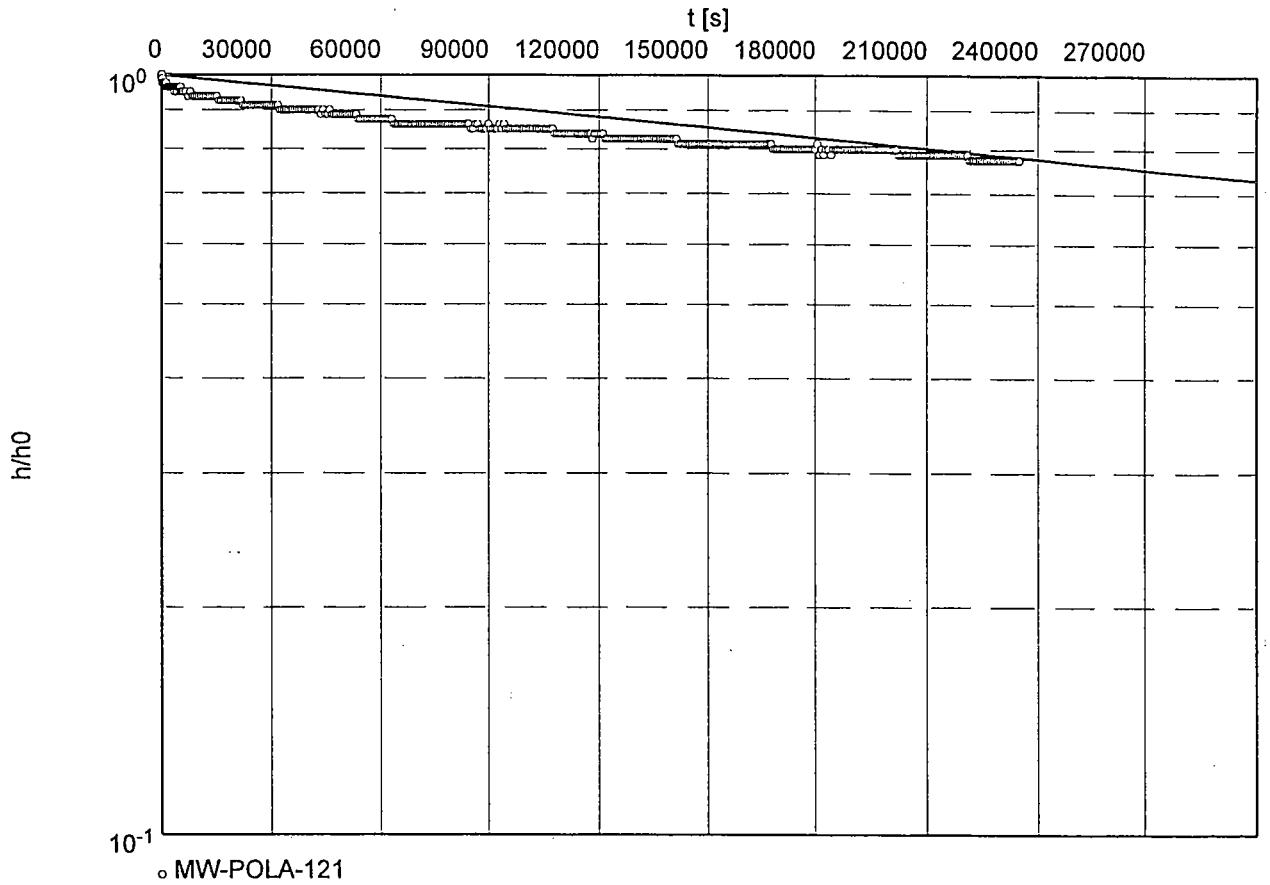
Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	Pumping test analysis Recovery method after THEIS & JACOB Unconfined aquifer	Page 2 Project: Evaluated by:	Date: 09.05.1997

Pumping Test No.	Test conducted on:
	POLA 120
Discharge 0.63 U.S.gal/min	
Static water level: 13.40 ft below datum	Pumping test duration: 243.00 min

	Time from end of pumping [min]	Water level [ft]	Residual drawdown [ft]	Corrected drawdown [ft]
1	0.50	22.45	9.05	7.68
2	1.00	22.02	8.62	7.38
3	1.50	21.71	8.31	7.16
4	2.00	21.46	8.06	6.98
5	2.50	21.22	7.82	6.80
6	3.00	20.98	7.58	6.62
7	3.50	20.75	7.35	6.45
8	4.00	20.52	7.12	6.28
9	4.50	20.31	6.91	6.11
10	5.00	20.11	6.71	5.96
11	6.00	19.73	6.33	5.66
12	7.00	19.35	5.95	5.36
13	8.00	18.99	5.59	5.07
14	9.00	18.47	5.07	4.64
15	10.00	17.98	4.58	4.23
16	15.00	16.42	3.02	2.87
17	20.00	15.38	1.98	1.91
18	25.00	14.72	1.32	1.29
19	30.00	14.31	0.91	0.90

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: HAMILTON BRAC-POL HILL Evaluated by: P.L. Date: 5/14/97

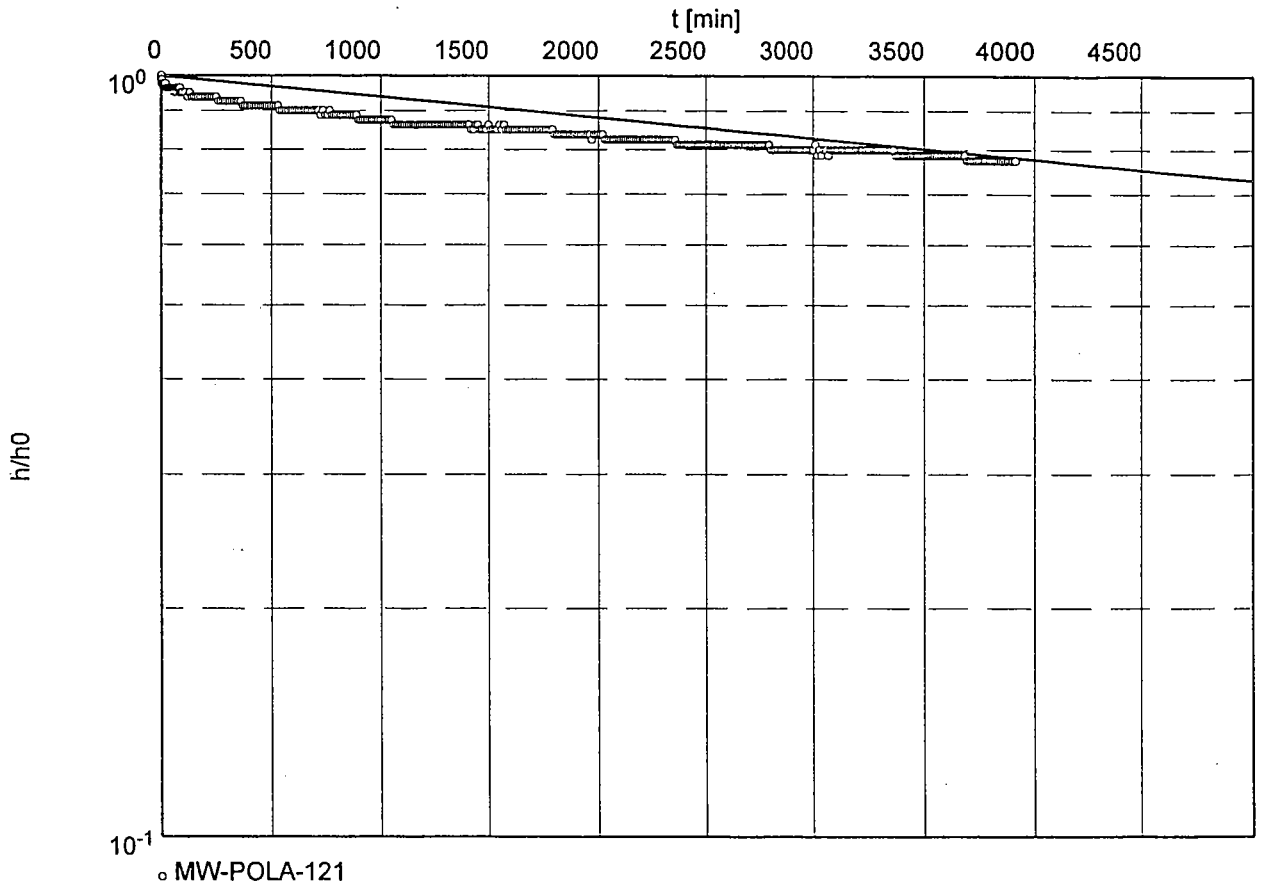
Slug Test No. SLUG IN	Test conducted on: 5/2-5/5/1997
MW-POLA-121	



Hydraulic conductivity [cm/s]: 6.96×10^{-8}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 1 Project: HAMILTON BRAC-POL HILL Evaluated by: Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	



Hydraulic conductivity [ft/min]: 1.36×10^{-7}

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 2 Project: HAMILTON BRAC-POL HILL Evaluated by: Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
1	0.00	0.80	0.80	
2	0.50	0.80	0.80	
3	0.52	0.80	0.80	
4	0.53	0.80	0.80	
5	0.55	0.80	0.80	
6	0.57	0.80	0.80	
7	0.58	0.80	0.80	
8	0.60	0.80	0.80	
9	0.62	0.80	0.80	
10	0.63	0.80	0.80	
11	0.65	0.79	0.79	
12	0.67	0.80	0.80	
13	0.68	0.80	0.80	
14	0.70	0.80	0.80	
15	0.72	0.80	0.80	
16	0.73	0.80	0.80	
17	0.75	0.80	0.80	
18	0.77	0.80	0.80	
19	0.78	0.80	0.80	
20	0.80	0.79	0.79	
21	0.82	0.79	0.79	
22	0.83	0.80	0.80	
23	0.85	0.80	0.80	
24	0.87	0.79	0.79	
25	0.88	0.79	0.79	
26	0.90	0.79	0.79	
27	0.92	0.79	0.79	
28	0.93	0.80	0.80	
29	0.95	0.79	0.79	
30	0.97	0.79	0.79	
31	0.98	0.79	0.79	
32	1.00	0.79	0.79	
33	1.20	0.79	0.79	
34	1.40	0.79	0.79	
35	1.60	0.79	0.79	
36	1.80	0.79	0.79	
37	2.00	0.79	0.79	
38	2.20	0.79	0.79	
39	2.40	0.79	0.79	
40	2.60	0.78	0.78	
41	2.80	0.79	0.79	
42	3.00	0.79	0.79	
43	3.20	0.79	0.79	
44	3.40	0.79	0.79	
45	3.60	0.79	0.79	
46	3.80	0.78	0.78	
47	4.00	0.79	0.79	
48	4.20	0.79	0.79	
49	4.40	0.78	0.78	
50	4.60	0.78	0.78	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 3 Project: HAMILTON BRAC-POL HILL Evaluated by: Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
51	4.80	0.78	0.78	
52	5.00	0.78	0.78	
53	5.20	0.78	0.78	
54	5.40	0.78	0.78	
55	5.60	0.78	0.78	
56	5.80	0.78	0.78	
57	6.00	0.78	0.78	
58	6.20	0.78	0.78	
59	6.40	0.78	0.78	
60	6.60	0.78	0.78	
61	6.80	0.78	0.78	
62	7.00	0.78	0.78	
63	7.20	0.78	0.78	
64	7.40	0.78	0.78	
65	7.60	0.78	0.78	
66	7.80	0.78	0.78	
67	8.00	0.78	0.78	
68	8.20	0.78	0.78	
69	8.40	0.78	0.78	
70	8.60	0.78	0.78	
71	8.80	0.78	0.78	
72	9.00	0.78	0.78	
73	9.20	0.78	0.78	
74	9.40	0.78	0.78	
75	9.60	0.78	0.78	
76	9.80	0.78	0.78	
77	10.00	0.78	0.78	
78	12.00	0.78	0.78	
79	14.00	0.78	0.78	
80	16.00	0.78	0.78	
81	18.00	0.78	0.78	
82	20.00	0.77	0.77	
83	22.00	0.78	0.78	
84	24.00	0.77	0.77	
85	26.00	0.77	0.77	
86	28.00	0.77	0.77	
87	30.00	0.77	0.77	
88	32.00	0.77	0.77	
89	34.00	0.77	0.77	
90	36.00	0.77	0.77	
91	38.00	0.77	0.77	
92	40.00	0.77	0.77	
93	42.00	0.77	0.77	
94	44.00	0.77	0.77	
95	46.00	0.77	0.77	
96	48.00	0.77	0.77	
97	50.00	0.77	0.77	
98	52.00	0.77	0.77	
99	54.00	0.77	0.77	
100	56.00	0.77	0.77	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 4 Project: HAMILTON BRAC-POL HILL Evaluated by:	Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
101	58.00	0.77	0.77
102	60.00	0.76	0.76
103	62.00	0.77	0.77
104	64.00	0.77	0.77
105	66.00	0.77	0.77
106	68.00	0.77	0.77
107	70.00	0.76	0.76
108	72.00	0.77	0.77
109	74.00	0.77	0.77
110	76.00	0.77	0.77
111	78.00	0.77	0.77
112	80.00	0.77	0.77
113	82.00	0.76	0.76
114	84.00	0.77	0.77
115	86.00	0.77	0.77
116	88.00	0.76	0.76
117	90.00	0.76	0.76
118	92.00	0.76	0.76
119	94.00	0.76	0.76
120	96.00	0.76	0.76
121	98.00	0.76	0.76
122	100.00	0.76	0.76
123	110.00	0.76	0.76
124	120.00	0.75	0.75
125	130.00	0.76	0.76
126	140.00	0.75	0.75
127	150.00	0.75	0.75
128	160.00	0.75	0.75
129	170.00	0.75	0.75
130	180.00	0.75	0.75
131	190.00	0.75	0.75
132	200.00	0.75	0.75
133	210.00	0.75	0.75
134	220.00	0.75	0.75
135	230.00	0.75	0.75
136	240.00	0.75	0.75
137	250.00	0.75	0.75
138	260.00	0.74	0.74
139	270.00	0.74	0.74
140	280.00	0.74	0.74
141	290.00	0.74	0.74
142	300.00	0.74	0.74
143	310.00	0.74	0.74
144	320.00	0.74	0.74
145	330.00	0.74	0.74
146	340.00	0.74	0.74
147	350.00	0.74	0.74
148	360.00	0.74	0.74
149	370.00	0.73	0.73
150	380.00	0.73	0.73

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 5 Project: HAMILTON BRAC-POL HILL Evaluated by:	Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
151	390.00	0.73	0.73	
152	400.00	0.73	0.73	
153	410.00	0.73	0.73	
154	420.00	0.73	0.73	
155	430.00	0.73	0.73	
156	440.00	0.73	0.73	
157	450.00	0.73	0.73	
158	460.00	0.73	0.73	
159	470.00	0.73	0.73	
160	480.00	0.73	0.73	
161	490.00	0.73	0.73	
162	500.00	0.73	0.73	
163	510.00	0.73	0.73	
164	520.00	0.73	0.73	
165	530.00	0.73	0.73	
166	540.00	0.72	0.72	
167	550.00	0.72	0.72	
168	560.00	0.72	0.72	
169	570.00	0.72	0.72	
170	580.00	0.72	0.72	
171	590.00	0.72	0.72	
172	600.00	0.72	0.72	
173	610.00	0.72	0.72	
174	620.00	0.72	0.72	
175	630.00	0.72	0.72	
176	640.00	0.72	0.72	
177	650.00	0.72	0.72	
178	660.00	0.72	0.72	
179	670.00	0.72	0.72	
180	680.00	0.72	0.72	
181	690.00	0.72	0.72	
182	700.00	0.72	0.72	
183	710.00	0.72	0.72	
184	720.00	0.72	0.72	
185	730.00	0.71	0.71	
186	740.00	0.72	0.72	
187	750.00	0.71	0.71	
188	760.00	0.71	0.71	
189	770.00	0.72	0.72	
190	780.00	0.71	0.71	
191	790.00	0.71	0.71	
192	800.00	0.71	0.71	
193	810.00	0.71	0.71	
194	820.00	0.71	0.71	
195	830.00	0.71	0.71	
196	840.00	0.71	0.71	
197	850.00	0.71	0.71	
198	860.00	0.71	0.71	
199	870.00	0.71	0.71	
200	880.00	0.71	0.71	

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 6 Project: HAMILTON BRAC-POL HILL Evaluated by:	Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
201	890.00	0.71	0.71
202	900.00	0.70	0.70
203	910.00	0.70	0.70
204	920.00	0.70	0.70
205	930.00	0.70	0.70
206	940.00	0.70	0.70
207	950.00	0.70	0.70
208	960.00	0.70	0.70
209	970.00	0.70	0.70
210	980.00	0.70	0.70
211	990.00	0.70	0.70
212	1000.00	0.70	0.70
213	1010.00	0.70	0.70
214	1020.00	0.70	0.70
215	1030.00	0.70	0.70
216	1040.00	0.70	0.70
217	1050.00	0.70	0.70
218	1060.00	0.69	0.69
219	1070.00	0.69	0.69
220	1080.00	0.69	0.69
221	1090.00	0.69	0.69
222	1100.00	0.69	0.69
223	1110.00	0.69	0.69
224	1120.00	0.69	0.69
225	1130.00	0.69	0.69
226	1140.00	0.69	0.69
227	1150.00	0.69	0.69
228	1160.00	0.69	0.69
229	1170.00	0.69	0.69
230	1180.00	0.69	0.69
231	1190.00	0.69	0.69
232	1200.00	0.69	0.69
233	1210.00	0.69	0.69
234	1220.00	0.69	0.69
235	1230.00	0.69	0.69
236	1240.00	0.69	0.69
237	1250.00	0.69	0.69
238	1260.00	0.69	0.69
239	1270.00	0.69	0.69
240	1280.00	0.69	0.69
241	1290.00	0.69	0.69
242	1300.00	0.69	0.69
243	1310.00	0.69	0.69
244	1320.00	0.69	0.69
245	1330.00	0.69	0.69
246	1340.00	0.69	0.69
247	1350.00	0.69	0.69
248	1360.00	0.69	0.69
249	1370.00	0.69	0.69
250	1380.00	0.69	0.69

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 7 Project: HAMILTON BRAC-POL HILL Evaluated by: Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
251	1390.00	0.69	0.69	
252	1400.00	0.69	0.69	
253	1410.00	0.69	0.69	
254	1420.00	0.68	0.68	
255	1430.00	0.68	0.68	
256	1440.00	0.69	0.69	
257	1450.00	0.69	0.69	
258	1460.00	0.68	0.68	
259	1470.00	0.68	0.68	
260	1480.00	0.68	0.68	
261	1490.00	0.68	0.68	
262	1500.00	0.69	0.69	
263	1510.00	0.68	0.68	
264	1520.00	0.68	0.68	
265	1530.00	0.68	0.68	
266	1540.00	0.68	0.68	
267	1550.00	0.69	0.69	
268	1560.00	0.68	0.68	
269	1570.00	0.69	0.69	
270	1580.00	0.68	0.68	
271	1590.00	0.68	0.68	
272	1600.00	0.68	0.68	
273	1610.00	0.68	0.68	
274	1620.00	0.68	0.68	
275	1630.00	0.68	0.68	
276	1640.00	0.68	0.68	
277	1650.00	0.68	0.68	
278	1660.00	0.68	0.68	
279	1670.00	0.68	0.68	
280	1680.00	0.68	0.68	
281	1690.00	0.68	0.68	
282	1700.00	0.68	0.68	
283	1710.00	0.68	0.68	
284	1720.00	0.68	0.68	
285	1730.00	0.68	0.68	
286	1740.00	0.68	0.68	
287	1750.00	0.68	0.68	
288	1760.00	0.68	0.68	
289	1770.00	0.68	0.68	
290	1780.00	0.68	0.68	
291	1790.00	0.68	0.68	
292	1800.00	0.67	0.67	
293	1810.00	0.67	0.67	
294	1820.00	0.67	0.67	
295	1830.00	0.67	0.67	
296	1840.00	0.67	0.67	
297	1850.00	0.67	0.67	
298	1860.00	0.67	0.67	
299	1870.00	0.67	0.67	
300	1880.00	0.67	0.67	

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Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
301	1890.00	0.67	0.67
302	1900.00	0.67	0.67
303	1910.00	0.67	0.67
304	1920.00	0.67	0.67
305	1930.00	0.67	0.67
306	1940.00	0.67	0.67
307	1950.00	0.67	0.67
308	1960.00	0.67	0.67
309	1970.00	0.66	0.66
310	1980.00	0.67	0.67
311	1990.00	0.67	0.67
312	2000.00	0.67	0.67
313	2010.00	0.67	0.67
314	2020.00	0.67	0.67
315	2030.00	0.66	0.66
316	2040.00	0.66	0.66
317	2050.00	0.66	0.66
318	2060.00	0.66	0.66
319	2070.00	0.66	0.66
320	2080.00	0.66	0.66
321	2090.00	0.66	0.66
322	2100.00	0.66	0.66
323	2110.00	0.66	0.66
324	2120.00	0.66	0.66
325	2130.00	0.66	0.66
326	2140.00	0.66	0.66
327	2150.00	0.66	0.66
328	2160.00	0.66	0.66
329	2170.00	0.66	0.66
330	2180.00	0.66	0.66
331	2190.00	0.66	0.66
332	2200.00	0.66	0.66
333	2210.00	0.66	0.66
334	2220.00	0.66	0.66
335	2230.00	0.66	0.66
336	2240.00	0.66	0.66
337	2250.00	0.66	0.66
338	2260.00	0.66	0.66
339	2270.00	0.66	0.66
340	2280.00	0.66	0.66
341	2290.00	0.66	0.66
342	2300.00	0.66	0.66
343	2310.00	0.66	0.66
344	2320.00	0.66	0.66
345	2330.00	0.66	0.66
346	2340.00	0.66	0.66
347	2350.00	0.66	0.66
348	2360.00	0.66	0.66
349	2370.00	0.65	0.65
350	2380.00	0.65	0.65

Waterloo Hydrogeologic 180 Columbia St. W. Waterloo,Ontario,Canada ph.(519)746-1798	slug/bail test analysis BOUWER-RICE's method	Page 9 Project: HAMILTON BRAC-POL HILL Evaluated by:	Date: 14.05.1997

Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
351	2390.00	0.65	0.65	
352	2400.00	0.65	0.65	
353	2410.00	0.65	0.65	
354	2420.00	0.65	0.65	
355	2430.00	0.65	0.65	
356	2440.00	0.65	0.65	
357	2450.00	0.65	0.65	
358	2460.00	0.65	0.65	
359	2470.00	0.65	0.65	
360	2480.00	0.65	0.65	
361	2490.00	0.65	0.65	
362	2500.00	0.65	0.65	
363	2510.00	0.65	0.65	
364	2520.00	0.65	0.65	
365	2530.00	0.65	0.65	
366	2540.00	0.65	0.65	
367	2550.00	0.65	0.65	
368	2560.00	0.65	0.65	
369	2570.00	0.65	0.65	
370	2580.00	0.65	0.65	
371	2590.00	0.65	0.65	
372	2600.00	0.65	0.65	
373	2610.00	0.65	0.65	
374	2620.00	0.65	0.65	
375	2630.00	0.65	0.65	
376	2640.00	0.65	0.65	
377	2650.00	0.65	0.65	
378	2660.00	0.65	0.65	
379	2670.00	0.65	0.65	
380	2680.00	0.65	0.65	
381	2690.00	0.65	0.65	
382	2700.00	0.65	0.65	
383	2710.00	0.65	0.65	
384	2720.00	0.65	0.65	
385	2730.00	0.65	0.65	
386	2740.00	0.65	0.65	
387	2750.00	0.65	0.65	
388	2760.00	0.65	0.65	
389	2770.00	0.65	0.65	
390	2780.00	0.65	0.65	
391	2790.00	0.65	0.65	
392	2800.00	0.64	0.64	
393	2810.00	0.64	0.64	
394	2820.00	0.64	0.64	
395	2830.00	0.64	0.64	
396	2840.00	0.64	0.64	
397	2850.00	0.64	0.64	
398	2860.00	0.64	0.64	
399	2870.00	0.64	0.64	
400	2880.00	0.64	0.64	

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Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
401	2890.00	0.64	0.64
402	2900.00	0.64	0.64
403	2910.00	0.64	0.64
404	2920.00	0.64	0.64
405	2930.00	0.64	0.64
406	2940.00	0.64	0.64
407	2950.00	0.64	0.64
408	2960.00	0.64	0.64
409	2970.00	0.64	0.64
410	2980.00	0.64	0.64
411	2990.00	0.64	0.64
412	3000.00	0.64	0.64
413	3010.00	0.65	0.65
414	3020.00	0.63	0.63
415	3030.00	0.64	0.64
416	3040.00	0.63	0.63
417	3050.00	0.64	0.64
418	3060.00	0.64	0.64
419	3070.00	0.63	0.63
420	3080.00	0.64	0.64
421	3090.00	0.64	0.64
422	3100.00	0.64	0.64
423	3110.00	0.64	0.64
424	3120.00	0.64	0.64
425	3130.00	0.64	0.64
426	3140.00	0.64	0.64
427	3150.00	0.64	0.64
428	3160.00	0.64	0.64
429	3170.00	0.64	0.64
430	3180.00	0.64	0.64
431	3190.00	0.64	0.64
432	3200.00	0.64	0.64
433	3210.00	0.64	0.64
434	3220.00	0.64	0.64
435	3230.00	0.64	0.64
436	3240.00	0.64	0.64
437	3250.00	0.64	0.64
438	3260.00	0.64	0.64
439	3270.00	0.64	0.64
440	3280.00	0.64	0.64
441	3290.00	0.64	0.64
442	3300.00	0.64	0.64
443	3310.00	0.64	0.64
444	3320.00	0.64	0.64
445	3330.00	0.64	0.64
446	3340.00	0.64	0.64
447	3350.00	0.64	0.64
448	3360.00	0.64	0.64
449	3370.00	0.63	0.63
450	3380.00	0.63	0.63

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Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]
451	3390.00	0.63	0.63
452	3400.00	0.63	0.63
453	3410.00	0.63	0.63
454	3420.00	0.63	0.63
455	3430.00	0.63	0.63
456	3440.00	0.63	0.63
457	3450.00	0.63	0.63
458	3460.00	0.63	0.63
459	3470.00	0.63	0.63
460	3480.00	0.63	0.63
461	3490.00	0.63	0.63
462	3500.00	0.63	0.63
463	3510.00	0.63	0.63
464	3520.00	0.63	0.63
465	3530.00	0.63	0.63
466	3540.00	0.63	0.63
467	3550.00	0.63	0.63
468	3560.00	0.63	0.63
469	3570.00	0.63	0.63
470	3580.00	0.63	0.63
471	3590.00	0.63	0.63
472	3600.00	0.63	0.63
473	3610.00	0.63	0.63
474	3620.00	0.63	0.63
475	3630.00	0.63	0.63
476	3640.00	0.63	0.63
477	3650.00	0.63	0.63
478	3660.00	0.63	0.63
479	3670.00	0.63	0.63
480	3680.00	0.63	0.63
481	3690.00	0.63	0.63
482	3700.00	0.62	0.62
483	3710.00	0.62	0.62
484	3720.00	0.62	0.62
485	3730.00	0.62	0.62
486	3740.00	0.62	0.62
487	3750.00	0.62	0.62
488	3760.00	0.62	0.62
489	3770.00	0.62	0.62
490	3780.00	0.62	0.62
491	3790.00	0.62	0.62
492	3800.00	0.62	0.62
493	3810.00	0.62	0.62
494	3820.00	0.62	0.62
495	3830.00	0.62	0.62
496	3840.00	0.62	0.62
497	3850.00	0.62	0.62
498	3860.00	0.62	0.62
499	3870.00	0.62	0.62
500	3880.00	0.62	0.62

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Slug Test No. 1	Test conducted on: 5/2-5/5/1997
MW-POLA-121	MW-POLA-121

Static water level: 0.00 ft below datum

	Pumping test duration [min]	Water level [ft]	Drawdown [ft]	
501	3890.00	0.62	0.62	
502	3900.00	0.62	0.62	
503	3910.00	0.62	0.62	
504	3920.00	0.62	0.62	

APPENDIX G

Cost Estimates

Source: IT, 1997c (Appendix G)

APPENDIX G

COST ESTIMATES

G.1 Cost Estimates

The following estimates were developed for the purpose of comparing the anticipated cost of each corrective action alternative. The cost estimates are primarily based on generic cost units, vendor information, conventional cost estimating guides, and site-specific conditions. The cost estimates are presented in a manner that allows for evaluating costs of each corrective action alternative developed for groundwater at the POL Area. In addition, costs for the no action alternative are presented for groundwater to provide a baseline for comparison with other alternatives. As no corrective action was deemed necessary for impacted soil at the site, only costs for the no action alternative are presented.

Costs for the corrective action alternatives were developed as follows:

- costs for sitework (i.e., excavation; labor; and treatment system installation, maintenance, and abandonment) are based on the Richardson Rapid System (Process Plant Construction Estimating Standards, Volume 1, Richardson Engineering Services Inc., Mesa, Arizona, 1997)

- costs for sample analysis are based on vendor price catalogs.

Cost Estimates for the Corrective Action Plan Developed for the Petroleum, Oil and Lubricant (POL) Area
Hamilton Army Air Field, Novato, California

I. Impacted Soil Corrective Action Alternatives

A. No Action — $0

1. No costs are associated with this alternative

II. Impacted Groundwater Corrective Action Alternatives

A. No Action — $0

1. No costs are associated with this alternative

B. Natural Attenuation with Groundwater Monitoring

Capital Costs: — **$9,378**

1. Deed Restrictions — $1,000
   Assume a $1,000 administrative cost to obtain a deed restriction

2. Natural Attenuation Parameter Analysis — $8,378

   a. Sample Analysis — $2,181
   Assume sampling of existing monitoring wells
   Assume 1.4 samples/well (includes QA samples)
   Assume 7 groundwater monitoring wells for sampling
   Assume each sampling event includes analysis for:
   pH, temperature, conductivity, redox, & dissolved oxygen (tests completed in field)
   Nitrate/nitrite, sulfate, dissolved methane, & alkalinity (tests completed in field lab)

TPH - extractable (Mod. EPA 8015) =	$90	/sample
TPH - purgeable (Mod. EPA 8015) =	$60	/sample
BTEX (EPA 8020) =	$60	/sample
Total (per sample, including 6% EDD surcharge) =	$223	/sample

   b. Labor (for Goundwater Well Sampling) — $1,728
   Assume rate for 2 sampling technicians @ $48 /hour/technician
   Assume 4 hours for decon prior to sampling
   Assume 2 hours/well/sampling event for sampling, shipping, etc.

   c. Rental of Equipment (for Groundwater Well Sampling/Field Analysis) — $1,200
   Assume rental of sampling/field analysis equipment, shipping, etc. @ $400/day
   Assume 7 existing groundwater monitoring wells
   Assume 3 days for sampling

   d. Data Validation — $469
   Assume rate for data validation @ $67/hour
   Assume one hour per sample (one sample per well)

   e. Technical Evaluation of the Analytical Results — $2,800
   Assume rate for 1 engineer @ $70/hour
   Assume 1 work week to conduct natural attenuation parameter evaluation

Operation and Maintenance Costs: **$21,399**

1. Groundwater Monitoring (Semi-annually) $21,399

a. Sample Analysis $4,363

Assume sampling of existing monitoring wells
Assume annual monitoring for 5 years
Assume 1.4 samples/well each sampling event (includes QA samples)
Assume 2 sample event/year
Assume 7 groundwater monitoring wells for sampling
Assume each sampling event includes analysis for:

TPH - extractable (Mod. EPA 8015) =	$90	/sample
TPH - purgeable (Mod. EPA 8015) =	$60	/sample
BTEX (EPA 8020) =	$60	/sample
Total (per sample, including 6% EDD surcharge) =	$223	/sample event

b. Labor (for Goundwater Well Sampling) $1,728

Assume rate for 2 sampling technicians @ $48 /hour/technician
Assume 4 hours for decon prior to sampling
Assume 2 hours/well/sampling event for sampling, shipping, etc.

c. Rental of Equipment (for Groundwater Well Sampling) $750

Assume rental of sampling equipment, shipping, etc. @ $250/day
Assume 7 existing groundwater monitoring wells
Assume 3 days for sampling

d. Labor (for Data Analysis and Validation of Groundwater Data) $2,680

Assume 1 man-week per sampling event
Assume chargeout rate for 1 - Validation Chemist @ $67/hour

e. Labor (for Writing Groundwater Reports) $4,320

Assume 2 man-weeks per report
Assume 1 report per year
Assume rate for 1 engineer @ $54/hour

f. Labor (for Production of Groundwater Reports) $2,400

Assume 1 man-week per report production and review
Assume 1 report per year
Assume rate for production and review staff @ $60/hour

C. In Situ Biodegradation

Capital Costs: **Year 1: $15,680**
Year 10: $1,600

1. Infiltration Trench Installation $7,274

Assume a CAT 225 Backhoe is used
Assume operator costs included
Assume trench is 400 feet long by 20 feet deep by 5 feet wide
Cost @ $1.78 per cubic yard = $2,637
Mobilization/Demobilization = $1,000
Assume a 100% markup for shoring and inaccessability costs

2. Installation of In Situ System — $500
   Assume a 0.3 milli-liter per minute injection pump

3. Connection of Infiltration Pipe to System — $2,548
   Assume 400 linear feet of 4" PVC piping for system
   Assume $6.37 /linear foot (including labor and materials)

4. Electrical Utility Hookup — $696
   Assume 200 linear feet of 2" conduit and associated cable
   Assume $3.48 /linear foot (including labor and materials)

5. Security Fencing Installation — $3,000
   Assume 120 linear feet of 8 feet high, chain link fence
   Assume $25 /linear foot (including labor and materials)

6. Permanent Overhead Lighting Installation — $1,662
   Assume $733 for 1 - 400 W mercury vapor lamp (labor and materials)
   Assume $929 for 1 - 20 foot high light pole (labor and materials)

7. Infiltration Trench Abandonment (Year 10) — $1,600
   Assume 400 linear feet
   Assume $4.00 /linear foot of grouting

Operation and Maintenance Costs: — **Years 1-10: $47,445**

1. In Situ System — $438
   Assume 1 HP pump
   Assume $0.067 KW/hr
   Cost per hour = $0.05

2. Labor (for Weekly Observation/Maintenance) — $39,936
   Assume 2 technicians for 8 hours per week
   Assume chargeout rate for 2 technicians @ $48/hour

3. Liquid Nutrient Additive — $200
   Assume general lawn fertilizer to be used

4. Permanent Overhead Lighting Operation — $631
   Assume annual cost (including electricity and lamp replacement)

5. Groundwater Monitoring (Annually) $21,399 *$40,000

a. Sample Analysis $4,363
Assume sampling of existing monitoring wells
Assume semi-annual monitoring for 5 years
Assume 1.4 samples/well each sampling event (includes QA samples)
Assume 2 sample event/year
Assume 7 groundwater monitoring wells for sampling
Assume each sampling event includes analysis for:

TPH—extractable (Mod. EPA 8015)	$90/sample
TPH—purgeable (Mod. EPA 8015)	$60/sample
BTEX (EPA 8020)	$60/sample
Total (per sample, including 6% EDO surcharge)	$223/sample event

b. Labor (for Groundwater Well Sampling) $1,728
Assume rate for 2 sampling technicians @ $48/hour/technician
Assume 4 hours for decon prior to sampling
Assume 2 hours/well/sampling event for sampling, shipping, etc.

c. Rental of Equipment (for Groundwater Well Sampling) $750
Assume rental of sampling equipment, shipping, etc. @ $250/day
Assume 7 existing groundwater monitoring wells
Assume 3 days for sampling

d. Labor (for Data Analysis and Validation of Groundwater Data) $2,680
Assume 1 man-week per sampling event
Assume chargeout rate for 1 Validation Chemist @ $67/hour

e. Labor (for Writing Groundwater Reports) $4,320
Assume 2 man-weeks per report
Assume 1 report per year
Assume rate for 1 engineer @ $54/hour

f. Labor (for Production of Groundwater Reports) $2,400
Assume 1 man-week per report production and review
Assume 1 report per year
Assume rate for production and review staff @ $60/hour

6. Miscellaneous $6,240
Assume miscellaneous services 10 percent of O&M costs

* Total cost of annual monitoring was estimated to be $40,000 per year based on February 7, 2003 communication with Mr. Raymond Zimny, U.S. Army Corps of Engineers, Sacramento, CA.

PRESENT WORTH CALCULATIONS

IMPACTED SOIL - NO ACTION ALTERNATIVE

ANNUAL DISCOUNT RATE = 5%

YEAR	CAPITAL COST	O&M COST	DISCOUNT FACTOR	ANNUAL EXPENDITURE	PRESENT WORTH
0	$0	$0	1.0000	$0	$0
1	$0	$0	0.9524	$0	$0
2	$0	$0	0.9070	$0	$0
3	$0	$0	0.8638	$0	$0
4	$0	$0	0.8227	$0	$0
5	$0	$0	0.7835	$0	$0
6	$0	$0	0.7462	$0	$0
7	$0	$0	0.7107	$0	$0
8	$0	$0	0.6768	$0	$0
9	$0	$0	0.6446	$0	$0
10	$0	$0	0.6139	$0	$0
TOTALS	$0	$0			$0

TOTAL COST OF NO ACTION ALTERNATIVE ***$0***

IMPACTED GROUNDWATER - NO ACTION ALTERNATIVE

ANNUAL DISCOUNT RATE = 5%

YEAR	CAPITAL COST	O&M COST	DISCOUNT FACTOR	ANNUAL EXPENDITURE	PRESENT WORTH
0	$0	$0	1.0000	$0	$0
1	$0	$0	0.9524	$0	$0
2	$0	$0	0.9070	$0	$0
3	$0	$0	0.8638	$0	$0
4	$0	$0	0.8227	$0	$0
5	$0	$0	0.7835	$0	$0
6	$0	$0	0.7462	$0	$0
7	$0	$0	0.7107	$0	$0
8	$0	$0	0.6768	$0	$0
9	$0	$0	0.6446	$0	$0
10	$0	$0	0.6139	$0	$0
TOTALS	$0	$0			$0

TOTAL COST OF NO ACTION ALTERNATIVE ***$0***

IMPACTED GROUNDWATER - NATURAL ATTENUATION ALTERNATIVE

ANNUAL DISCOUNT RATE = 5%

YEAR	CAPITAL COST	O&M COST	DISCOUNT FACTOR	ANNUAL EXPENDITURE	PRESENT WORTH
0	$9,378	$0	1.0000	$9,378	$9,378
1	$0	$21,399	0.9524	$21,399	$20,380
2	$0	$21,399	0.9070	$21,399	$19,409
3	$0	$21,399	0.8638	$21,399	$18,484
4	$0	$21,399	0.8227	$21,399	$17,605
5	$0	$21,399	0.7835	$21,399	$16,766
6	$0	$21,399	0.7462	$21,399	$15,968
7	$0	$21,399	0.7107	$21,399	$15,208
8	$0	$21,399	0.6768	$21,399	$14,483
9	$0	$21,399	0.6446	$21,399	$13,794
10	$0	$21,399	0.6139	$21,399	$13,137
TOTALS	$9,378	$213,990			$174,613

TOTAL COST OF NATURAL ATTENUATION ALTERNATIVE ***$174,613***

IMPACTED GROUNDWATER - IN-SITU BIODEGRADATION ALTERNATIVE

ANNUAL DISCOUNT RATE = 5%

YEAR	CAPITAL COST	O&M COST	DISCOUNT FACTOR	ANNUAL EXPENDITURE	PRESENT WORTH
0	$15,680	$0	1.0000	$15,680	$15,680
1	$0	$47,445	0.9524	$47,445	$45,187
2	$0	$47,445	0.9070	$47,445	$43,033
3	$0	$47,445	0.8638	$47,445	$40,983
4	$0	$47,445	0.8227	$47,445	$39,033
5	$0	$47,445	0.7835	$47,445	$37,173
6	$0	$47,445	0.7462	$47,445	$35,404
7	$0	$47,445	0.7107	$47,445	$33,719
8	$0	$47,445	0.6768	$47,445	$32,111
9	$0	$47,445	0.6446	$47,445	$30,583
10	$1,600	$47,445	0.6139	$49,045	$30,109
TOTALS	$17,280	$474,452			$383,015

TOTAL COST OF IN-SITU BIODEGRADATION ALTERNATIVE ***$383,015***

Task Level Summary:
Task 159892.08.PL.CR is currently ACTIVE. The task is managed by STUHR, CATHLEEN ANN.. The task is 25.19% spent (direct) and 0.00% complete (direct). The task is currently **open** to labor charges and is **open** to expense charges.

Performance	Current Month	Last Month	PJTD	Budget
Direct Labor	$.00	$296.33	$4,360.78	$17,760.00
Direct Expense	$.00	$71.50	$919.31	$3,205.00
Total Direct Cost	$.00	$367.83	$5,280.09	$20,965.00
Total Indirect Cost	$.00	$274.38	$4,005.26	$16,037.01
Labor Hours	0.0	10.0	131.6	
Memo: Non-Billable Direct Cost	$.00	$.00	$.00	
Memo: Net Asset Charge	$.00	$.00	$.00	
Committed Accrued Cost			$.00	
Original Commitment			$.00	
Revised Commitment			$.00	
Committed Invoiced Cost			$.00	
ETC Commitment			$.00	

Budget Information

Total Direct Labor	17 760	9 285.35	= 25.09%
Direct Exp	3 205		
Total Direct Cost Budget	20 965	37 002.01	spent
Total Indirect Cost Budget	16 037.01		

April Activities

- Prepare draft for review by Cathy Stuhr by incorporating edits from Steve Long and revising figures. 10 hrs for Ben Moayyad

Note: all drafting costs for 159892.08.PL.CR and ____ 08.PL.CA have be

% completion on report 35-40% ?

Labor Hours Summary: Task 159892.08.PL.CR

Click on the Employee Number to drill into financials or switch to COST view

Employee		Hours			
Number	Name	Current Month	Last Month	YTD	PJTD
33426	Moayyad, Behnaum	0.0	10.0	85.0	107.0
13972	Long, Steven Patrick	0.0	0.0	4.0	12.0
30096	Stuhr, Cathleen Ann	0.0	0.0	3.0	7.0
17743	Michaelis- Rambin, Nancy	0.0	0.0	0.0	4.6
30241	Antel, Robert J	0.0	0.0	0.5	0.5
31035	Johnson, Alice M	0.0	0.0	0.0	0.5

Task Level Summary:
Task 159892.08.PL.CA is currently ACTIVE. The task is managed by STUHR, CATHLEEN ANN.. The task is 44.92% spent (direct) and 0.00% complete (direct). The task is currently **open** to labor charges and is **open** to expense charges.

Performance	Current Month	Last Month	PJTD	Budget
Direct Labor	$63.27	$1,928.04	$8,305.78	$18,152.00
Direct Expense	$5.40	$291.54	$1,499.71	$3,675.00
Total Direct Cost	$68.67	$2,219.58	$9,805.49	$21,827.00
Total Indirect Cost	$58.59	$1,641.99	$6,782.58	$16,390.99
Labor Hours	1.0	50.1	200.5	
Memo: Non-Billable Direct Cost	$.00	$.00	$.00	
Memo: Net Asset Charge	$.00	$.00	$.00	
Committed Accrued Cost			$.00	
Original Commitment			$1,200.00	
Revised Commitment			$305.00	
Committed Invoiced Cost			$305.00	
ETC Commitment			$.00	

Budget Information

Total Direct Labor 18 152
Direct Exp 3 675
21 827
16 390.99

Direct 9736.82
Indirect 6723.99
16 460.81
38 217.99

43.07% Spent

April Activities

- Incorporated edits from Cathy Stuhr
- Finalize figures
- Draft section describing exit strategy for natural attenuation remedial alternative

% completion on report 50%

Labor Hours Summary: Task 159892.08.PL.CA

Click on the Employee Number to drill into financials or switch to COST view

Employee		Hours			
Number	Name	Current Month	Last Month	YTD	PJTD
30094	Kieu, Nghi Van	0.0	16.0	99.0	99.0
13972	Long, Steven Patrick	0.0	12.0	41.0	53.0
33027	Clymo, Amelia Susanne	0.0	18.0	23.0	23.0
30096	Stuhr, Cathleen Ann	0.0	1.0	5.0	7.0
17743	Michaelis- Rambin, Nancy	0.0	0.0	0.0	4.1
31500	Pritchard, Heather Jeanne	0.0	0.0	0.0	4.0
2276	Campfield, Paul Clayton	0.0	0.0	3.0	3.0
32140	Glover, Shannon L	0.0	2.4	2.4	2.4
18218	Wells, Eric Jason	0.0	0.0	0.0	2.0
2877	Elliott Jr, Charles S	1.0	0.0	1.0	1.0
33426	Moayyad, Behnaum	0.0	0.0	0.0	1.0
16960	Eilert, Brad W	0.0	0.5	0.5	0.5
13965	Horton, Doris Ann	0.0	0.0	0.3	0.3
31035	Johnson, Alice M	0.0	0.2	0.2	0.2

APPENDIX H

Monitored Natural Attenuation Summary

Source: IT, 1999 (Chapter 5.0)

ID 2841
BRAC 286
C.2

PETROLEUM, OIL, and LUBRICANT OUTPARCEL CLOSURE REPORT BRAC PROPERTY HAMILTON ARMY AIRFIELD NOVATO, CALIFORNIA

CONTRACT NO. DACW05-95-D-0001
DELIVERY ORDER NUMBER 0006

Submitted to:

U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, California 95814-2922

Submitted by:

IT Corporation
4005 Port Chicago Highway
Concord, California 94520

Revision C

December 23, 1999

Issued to:_____ Date:_____

5.0 Natural Attenuation Summary

In conjunction with the March/April 1998 and September/October 1998 groundwater monitoring events, groundwater samples were collected and analyzed for hydrogeologic chemical indicators of biodegradation of petroleum hydrocarbons. This section provides the evidence that natural attenuation is occurring at the POL Outparcel, including

- A petroleum-hydrocarbon (i.e., TPH) plume is evident under the former location of AST-2. The plume orientation tends to conform with groundwater flow patterns. However, the plume is not migrating and is shrinking.
- Trend shows either a static or diminishing petroleum-hydrocarbon groundwater plume.
- Benzene, toluene, ethylbenzene, and xylene do not appear to be present in most of the wells, and where present, have diminished over time.
- Geochemical indicators of natural attenuation are present.

These lines of evidence are defined in ASTM *Standard Guide for Remediation of Groundwater by Natural Attenuation at Petroleum Release Sites* (1998) and are necessary for demonstrating the appropriateness of remediation by natural attenuation. The primary line of evidence is generally considered enough to demonstrate natural attenuation at the site is a viable remedial alternative, but secondary lines of evidence are required when the monitoring data are limited or are not conclusive.

This section is organized into four subsections. Section 5.1 describes the operative mechanisms of contaminant attenuation and geochemical indicators that demonstrate natural attenuation is occurring. Sections 5.2 and 5.3 discuss historical TPH concentrations and the results of two rounds of monitoring for geochemical indicators of natural attenuation at the site. Section 5.4 summarizes the primary and secondary lines of evidence that natural attenuation is occurring at the POL Outparcel.

5.1 Operative Mechanisms and Geochemical Indicators of Natural Attenuation

Natural attenuation is the reduction in concentration and mass of a contaminant plume due to processes occurring naturally in the environment. Natural attenuation occurs through a combination of physical, chemical, and biological processes, including volatilization, dispersion,

dilution, sorption, and biodegradation (also known as intrinsic bioremediation). All of these processes contribute to a measurable reduction of the concentrations of contaminants within the plume. Biodegradation, however, is the only process that can produce significant reduction of the total mass of the contaminant plume via conversion of the hydrocarbons into carbon dioxide and water (Buscheck et al., 1996).

Hydrocarbon biodegradation is a series of microbially mediated chemical reactions that produce changes in the ambient geochemistry of the groundwater in which the reactions occur (AFCEE, 1995). The occurrence of biodegradation is indicated by measured trends in several geochemical parameters. In general, any of the following trends observed across a dissolved TPH plume (with increasing contaminant concentration) would suggest the occurrence of natural biodegradation:

A relative *decrease* in:	A relative *increase* in:
dissolved oxygen	ferrous iron
oxidation-reduction potential (redox)	alkalinity
nitrate	methane
sulfate	sulfide

Dissolved oxygen (D.O.) is the most thermodynamically favored electron acceptor used in the biodegradation of petroleum hydrocarbons (AFCEE, 1995). Aerobic biodegradation decreases the available D.O. in the groundwater and provides one of the best indicators of fuel biodegradation. However, it is difficult to collect representative readings when monitoring wells do not recharge adequately during purging and sampling. Excessive drawdown (greater than 5 percent of the standing water in the well) during the purge cycle tends to aerate the well water and inflate the D.O. readings above ambient levels. The POL Outparcel wells are screened in relatively low permeability bedrock and aeration of the well water during purging is a problem with many of the wells.

Oxidation-reduction (redox) potential of groundwater is a measure of the electron activity and indicates the relative tendency of a solution to accept or transfer electrons (AFCEE, 1995). Redox reactions in petroleum-hydrocarbon-contaminated groundwater are usually biologically mediated; therefore, the redox potential of a groundwater system depends upon and influences rates of biodegradation. Redox potentials within the plume are lower than those outside the plume and are often correlative with dissolved oxygen concentrations. The areas where oxygen has been depleted by biodegradation tend to have the lowest redox potentials.

After the D.O. is depleted by biodegradation, nitrate, iron, and sulfate may be used as electron acceptors for anaerobic biodegradation. Utilization of nitrate during biodegradation can produce a marked decrease of nitrate in wells screened within the hydrocarbon plume. Utilization of ferric iron and sulfate for anaerobic degradation produces ferrous iron and sulfide, respectively. An increase in these parameters (above background concentrations) within the plume provides another indicator of biodegradation.

Methanogenesis is another biodegradation process that can occur under anaerobic conditions. This process generally occurs after oxygen, nitrate, iron, and sulfate have been depleted by biodegradation (AFCEE, 1995). During methanogenesis, carbon dioxide is used as an electron acceptor and methane is produced. The presence of methane in groundwater within the plume provides an indication of microbial degradation when concentrations exceed background.

Alkalinity variations across the hydrocarbon plume can also provide evidence of biodegradation. Alkalinity tends to be higher in wells located within the hydrocarbon plume than those positioned outside the plume.

Other parameters that provide useful information about biodegradation include pH and temperature. These parameters do not provide direct evidence that biodegradation is occurring, but indicate if the physical and chemical conditions of the groundwater system are conducive to biodegradation. For example, biodegradation operates best when the pH is between six and eight and at temperatures between 16 and 20 degrees Celsius (°C) (Buscheck and O'Reilly, 1995).

5.2 *Historical Total Petroleum Hydrocarbon/Benzene, Toluene, Ethylbenzene, and Xylene Concentrations*

Groundwater monitoring data have been collected at the POL Outparcel since 1992, but the monitoring frequency and analytical procedures have varied, creating some difficulties in evaluating temporal and spatial plume trends. Monitoring was sporadic from 1992 to 1996 as only three events were conducted. Since February 1997, most of the POL Outparcel wells have been sampled five or six times. During the initial two monitoring events conducted between July and September 1992, TPH was quantified using EPA Method 418.1 (EPA, 1995). This method is nonspecific and does not accurately quantify petroleum hydrocarbons in the volatile range. In subsequent monitoring events, TPH was quantified using the more accurate EPA Method 8015M. The TPH results from 1992; therefore, are not comparable to later TPH results and the EPA Method 418.1 results have been omitted from discussion of TPH trends below.

Total petroleum hydrocarbon concentrations have decreased since groundwater monitoring was implemented in 1992. Table 4-1 summarizes the TPH and BTEX concentrations for wells PL-MW-101, -103, -104, -114, and -115 and MW-POLA-121 located in or immediately downgradient of the source area (AST-2). Total petroleum hydrocarbon concentrations have decreased in all of these wells except PL-MW-101, where concentrations have fluctuated between 3,900 to 11,600 µg/L. Concentrations of TPH in wells PL-MW-103, -114, and -115 and MW-POLA-121 have actually decreased to just above or below 50 µg/L, the method detection limit for TPH.

Initial concentrations of BTEX detected in wells PL-MW-101 and MW-POLA-121 (Table 5-1) have declined significantly since 1992. Benzene and toluene were detected in PL-MW-101 in 1992, but have not been detected in subsequent events. Ethylbenzene and total xylenes in well PL-MW-101 have decreased from initial concentrations of 110 and 290 µg/L in July 1992 to 39 and 47 µg/L in October 1998, respectively. Benzene, ethylbenzene, and total xylenes were detected in well MW-POLA-121 during the February and March 1997 monitoring events, but these hydrocarbons were not detected during the subsequent monitoring events. Benzene, toluene, ethylbenzene, and xylenes have not been detected in wells PL-MW-103, -104, -114, and -115 during any monitoring events.

Total petroleum hydrocarbon isoconcentration contours for the March 1994, February 1997, March/April 1998, and January 1999 monitoring events show that the plume is shrinking (see Figure 4-1). The isoconcentration contours for 100 and 500 µg/L have clearly receded toward the source area since 1994, and the areal extent of the plume has been reduced by approximately 50 percent. The portion of the plume containing TPH concentrations in excess of the GSA Phase I Sale Area RCG of 1,200 µg/L also appears to be shrinking.

5.3 Geochemical Indicators

The geochemical parameters collected during the March/April 1998 and September/October 1998 monitoring events provide additional evidence for biodegradation of the TPH plume (Tables 5-1 and 5-2). Of the parameters, D.O., redox potential, ferrous iron, and methane data follow the expected trends described in Section 5.1 for evidence of biodegradation. Isoconcentration maps of these parameters are provided in Figures 5-1 through 5-8.

The data are contoured for wells PL-MW-101, -103, -104, -114, -115, and -116 and MW-POLA-120 and -121 only because these wells are located within and just outside the petroleum-hydrocarbon groundwater plume.

The geochemical parameters show the following conditions and lateral trends that are indicative of TPH biodegradation (Tables 5-1 and 5-2):

- Dissolved oxygen concentrations are lowest at wells PL-MW-101 and -104 and MW-POLA-121, these are the closest to the former AST-2. Dissolved oxygen concentrations in these wells ranged from 0.5 to 0.6 milligrams per liter (mg/L) and 0.8 to 1.94 mg/L during the March/April 1998 and September/October 1998 monitoring events, respectively. Also, these wells have the highest hydrocarbon concentrations, i.e., low D.O. coincides with high concentration portion of the hydrocarbon plume. The September/October 1998 D.O. concentrations were probably lower than actually measured, but some aeration occurred due to excessive drawdown during well purging. Dissolved oxygen concentrations generally increase with distance from these wells and the source area. This pattern provides a strong indication that aerobic biodegradation of the hydrocarbons has occurred.

- Redox potentials are lowest at PL-MW-101, MW-POLA-121, and PL-MW-104, ranging from -255.6 to 11.5 millivolts (mV). The lowest redox potentials (-255.6 and -228.8 mV) were measured in well PL-MW-101, which also had the highest concentrations of TPH and lowest D.O. concentrations. Except for well PL-MW-115, which had a redox potential of 11 mV during the September/October 1998 monitoring event, all other wells had higher redox potentials in March/April 1998. These data indicate that conditions have become reducing (through oxygen depletion) in the area of highest TPH concentrations, and support the conclusion drawn from the D.O. concentrations that aerobic biodegradation of the hydrocarbons has occurred.

- Ferrous iron concentrations were highest in wells nearest the former AST, which is consistent with the results for D.O. and redox. Ferrous iron concentrations were much higher during the September/October 1998 monitoring event, with a maximum concentration of 2.88 mg/L detected in well MW-POLA-121.

- Methane concentrations were consistently highest in wells PL-MW-101, -104, and -115 and MW-POLA-121, 0.04 to 2.8 mg/L and 0.05 to 3.2 mg/L, respectively. This indicates that methanogenesis has occurred in the center of the hydrocarbon plume.

- The pH of all samples ranged from roughly six to eight, the range most favorable for TPH biodegradation.

- The temperature of the groundwater samples ranged from 16 to 20°C during the March/April 1998 monitoring event and 20 to 27°C during the September/October 1998 monitoring event. These differences in temperature probably reflect normal seasonal variation. The lower temperature range measured in March/April 1998 is more favorable for biodegradation of fuels because oxygen is more soluble in cold water.

- Nitrate may not be a suitable electron acceptor at this site because it was not detected in wells near the former AST, and the maximum concentration in wells outside the plume was only 1.3 mg/L. It is possible that the available nitrate was consumed by biodegradation of the TPH plume, but the low concentrations detected in wells outside the plume suggest that it is not an important electron acceptor for the POL Outparcel.

- The total alkalinity (expressed as $CaCO_3$) data are not conclusive, as concentrations within the plume are comparable to those outside the plume. In general, areas contaminated by fuel hydrocarbons may exhibit a total alkalinity that is higher than that seen in background areas. However, a trend may never be evident since naturally occurring calcite in the Franciscan bedrock would affect the alkalinity of the pore water. This is because the microbially-mediated reactions causing biodegredation can yield an increase in the total alkalinity of the system. Changes in alkalinity are most pronounced during aerobic respiration, denitrification, iron reduction, and sulfate reduction, and less pronounced during methanogenesis.

- The sulfate and sulfide data are not conclusive. After dissolved oxygen, nitrate, and bioavailable iron have been depleted in the microbial treatment zone, sulfate may be used as an electron acceptor for anaerobic biodegredation. This process is termed sulfate reduction and results in the production of sulfide. Sulfate concentrations are used as an indicator of anaerobic degradation of fuel compounds. Therefore, the expected trend is decreasing sulfate and increasing sulfide toward the center of the plume. In general, sulfate concentrations are lower in wells nearest the former AST-2, but sulfide was not detected in any wells during the March/April 1998 monitoring event. However, if the dissolved oxygen, nitrate, and bioavailable iron have not been depleted, sulfate may not have yet been reduced, and therefore, sulfides may have not been produced. A maximum sulfide concentration of 0.36 mg/L was detected in the source area well, well PL-MW-101 during the September/October 1998 monitoring event, but sulfide was also detected in many wells outside the plume. However, sulfide detections in the wells outside the plume may be influenced by the chemical composition of the Bay Mud (where some of the wells are screened) compared to the result of microbial reactions.

The data collected on these parameters (especially D.O. and redox potential) strongly indicate that intrinsic bioremediation has occurred at the POL Outparcel. The data show the typical progression from aerobic to anaerobic biodegradation as oxygen is depleted in the area of highest TPH concentrations.

5.4 Summary

The groundwater monitoring data collected at the POL Outparcel indicate the TPH plume is shrinking and natural attenuation is occurring. The lines of evidence for natural attenuation include the following:

- With the exception of well PL-MW-101 that is located near the center of the source area, TPH concentrations have declined significantly since March 1994. The areal extent of the TPH plume was reduced by approximately 50 percent since March 1994.
- Concentrations of TPH in well PL-MW-101 does appear to be relatively stable, i.e., not increasing (see Table 4-1).
- Concentrations of BTEX constituents have declined in all wells since 1992, including well PL-MW-101. Except for well PL-MW-101, BTEX was not detected in any other wells since March 1997.
- Geochemical indicators (i.e., D.O., redox potential, ferrous iron, methane, and sulfate) follow the expected trends for a TPH plume undergoing biodegradation.

These data trends indicate natural attenuation, with groundwater monitoring as a viable remedial action for the POL Outparcel.

Table 5-1. Geochemical Indicators
March/April 1998 Monitoring Event

Well	Dissolved Oxygen (mg/L)[a]	Redox (millivolts)	Ferrous Iron (mg/L)	Methane (mg/L)	Sulfate (mg/L)	Total Sulfide (mg/L)	Nitrate (mg/L)	Total Alkalinity as $CaCO_3$ (mg/L)	pH	Temperature (^{0}C)[b]
PL-MW-101	0.50	-225.6	0.07	2.8	53	ND (<0.05)[c]	ND (<0.05)	516	6.96	19.4
PL-MW-103	0.70	121.1	ND (<0.05)	0.0039	69	ND (<0.05)	0.24	205	6.87	16.8
PL-MW-104	0.60	24.6	0.01	0.04	10	ND (<0.05)	ND	509	6.78	18.7
Pl-MW-105	6.40	217.1	0.01	ND (<0.002)	56	ND (<0.05)	0.45	239	7.47	19.2
PL-MW-106	5.20	217.7	ND (<0.05)	0.0028	105	ND (<0.05)	0.09	493	7.30	16.6
PL-MW-107	6.50	174.0	0.01	ND (<0.002)	261	ND (<0.05)	0.10	749	8.05	19.7
PL-MW-108	3.30	221.1	NS[d]	ND (<0.002)	31	ND (<0.05)	ND (<0.05)	248	7.43	18.9
PL-MW-109	5.50	214.0	NS	0.0056	48	ND (<0.05)	ND (<0.05)	413	7.03	19.0
PL-MW-111A[e]	5.70	197.3	ND (<0.05)	ND (<0.002)/ND (<0.002)[f]	249/252	ND (<0.05)	ND (<0.05)/ND (<0.05)	369/368	7.12	12.6
PL-MW-111B	5.00	224.7	ND (<0.05)	ND (<0.002)	234	ND (<0.05)	ND (<0.05)	388	7.32	20.0
PL-MW-112A[e]	2.80	217.3	ND (<0.05)	ND (<0.002)	357	ND (<0.05)	0.10	445	7.55	16.3
PL-MW-112B	4.20	146.5	ND (<0.05)	ND (<0.002)	175	ND (<0.05)	0.19	403	7.99	20.2
PL-MW-113A[e]	2.60	114.0	0.01	0.0022	6360	ND (<0.05)	ND (<0.05)	654	6.90	16.5
PL-MW-113C	2.90	187.4	ND (<0.05)	0.0096	277	ND (<0.05)	ND (<0.05)	596	7.65	17.7
PL-MW-114	1.40	179.0	0.01	ND (<0.002)	49	ND (<0.05)	0.06	176	7.40	17.7
PL-MW-115	1.00	144.5	0.02	0.058/0.062	132/130	ND (<0.05)	ND (<0.05)/ND (<0.05)	300/301	7.35	17.0
PL-MW-116	6.70	197.4	ND (<0.05)	ND (<0.002)	26	ND (<0.05)	1.3	165	6.94	17.3
PL-MW-117A[e]	2.60	190.7	0.01	ND (<0.002)	137	ND (<0.05)	0.27	320	7.50	16.1
PL-MW-117B	3.60	137.4	ND (<0.05)	ND (<0.002)/ND (<0.002)	125/122.	ND (<0.05)	0.50/0.49	275/277	8.12	19.9
MW-POLA-118	3.20	184.1	ND (<0.05)	ND (<0.002)	173	ND (<0.05)	0.90	273	7.30	17.1
MW-POLA-119	1.90	146.9	0.01	ND (<0.002)	191	ND (<0.05)	0.22	337	7.12	20.6
MW-POLA-120	2.60	203.7	0.02	ND (<0.002)	119	ND (<0.05)	0.62	242	7.11	19.9
MW-POLA-121	0.60	11.5	ND (<0.05)	0.12	15	ND (<0.05)	ND (<0.05)	128	6.42	17.9

[a] Milligrams per liter
[b] Degrees Celsius
[c] Not detected above practical quantitation limit (practical quantitation limit is in parenthesis)
[d] Not sampled
[e] These are nested well pairs which are completed with a shallow zone (A) and deep zone (B)
[f] Original sample result/field duplicate result

Checked by MAL 12-23-99
Approved by ACWS 12-23-99

Table 5-2. Geochemical Indicators
September/October 1998 Monitoring Event

Well	Dissolved Oxygen (mg/L)[a]	Redox (millivolts)	Ferrous Iron (mg/L)	Methane (mg/L)	Sulfate (mg/L)	Total Sulfide (mg/L)	Nitrate (mg/L)	Total Alkalinity as $CaCO_3$ (mg/L)	pH	Temperature (^{0}C)[b]
PL-MW-101	0.82	-228.8	0.22	3.2	53	0.36	ND (<0.05)[c]	544	6.94	21.23
PL-MW-103	2.85	79.9	0.29	0.010	109	0.01	ND (<0.05)	240	6.94	22.24
PL-MW-104	1.94	-50.2	0.01	0.15	8	ND (<0.05)	ND (<0.05)	556	6.77	25.38
PI-MW-105	5.59	350.2	ND (<0.05)	ND (<0.002)	58	0.01	ND (<0.05)	242	7.25	23.15
PL-MW-106	2.12	131.3	ND (<0.05)	0.0046	107	0.03	0.088	514	7.24	25.49
PL-MW-107	7.99	285.2	ND (<0.05)	ND (<0.002)	210	0.12	0.06	756	8.12	22.49
PL-MW-108	4.31	254.7	0.05	ND (<0.002)	64	0.04	0.065	462	7.18	24.07
PL-MW-109	5.45	215.8	0.03	ND (<0.002)	51	0.02	ND (<0.05)	429	7.04	25.42
PL-MW-111A[d]	1.00	145.1	0.02	ND (<0.002)/ND (<0.002)[e]	270/261	0.05	ND (<0.05)/ND (<0.05	389/391	6.91	25.91
PL-MW-111B	1.05	172.4	0.01	ND (<0.002)	250	ND (<0.05)	ND (<0.05)	397	6.93	25.76
PL-MW-112A[d]	2.90	205.4	0.01	ND (<0.002)	571	0.13	0.13	562	7.14	22.46
PL-MW-112B	1.35	190.8	ND (<0.05)	ND (<0.002)	202	0.01	0.18	416	7.50	21.02
PL-MW-113A[d]	3.60	204.5	0.01	ND (<0.002)	7360	0.01	ND (<0.05)	688	6.80	25.92
PL-MW-113C	2.13	184.0	ND (<0.05)	0.0059	282	0.01	ND (<0.05)	614	7.55	23.29
PL-MW-114	1.52	225.6	ND (<0.05)	0.13	78	ND (<0.05)	0.055	227	7.06	20.73
PL-MW-115	2.10	10.6	ND (<0.05)	0.052/0.051	137/148	0.01	ND (<0.05)/ND (<0.05	281/283	7.09	21.16
PL-MW-116	6.11	285.5	0.01	ND (<0.002)	29	0.04	0.98	166	6.96	22.24
PL-MW-117A[d]	3.61	231.2	ND (<0.05)	ND (<0.002)	143	0.05	0.42	322	7.57	25.71
PL-MW-117B	2.00	242.3	ND (<0.05)	ND (<0.002)/ND (<0.002)	125/125	0.01	0.54/0.55	264/264	7.89	25.47
MW-POLA-118	1.50	186.2	0.81	ND (<0.002)	219	0.26	1	303	7.04	27.80
MW-POLA-119	2.11	144.1	0.08	ND (<0.002)	196	0.02	0.35	315	7.18	25.60
MW-POLA-120	2.82	183.3	ND (<0.05)	ND (<0.002)	114	ND (<0.05)	0.9	231	7.05	20.74
MW-POLA-121	1.91	-61.5	2.88	0.6	13	0.06	ND (<0.05)	404	6.81	22.77

[a] Milligrams per liter
[b] Degrees Celcius
[c] Not detected above practical quantitation limit (practical quantitation limit is in parenthesis)
[d] These are nested well pairs which are completed within a shallow zone (A) and deep zone (B)
[e] Original sample/duplicate sample

Checked by MMS 12-23-99
Approved by AWS 12-23-99

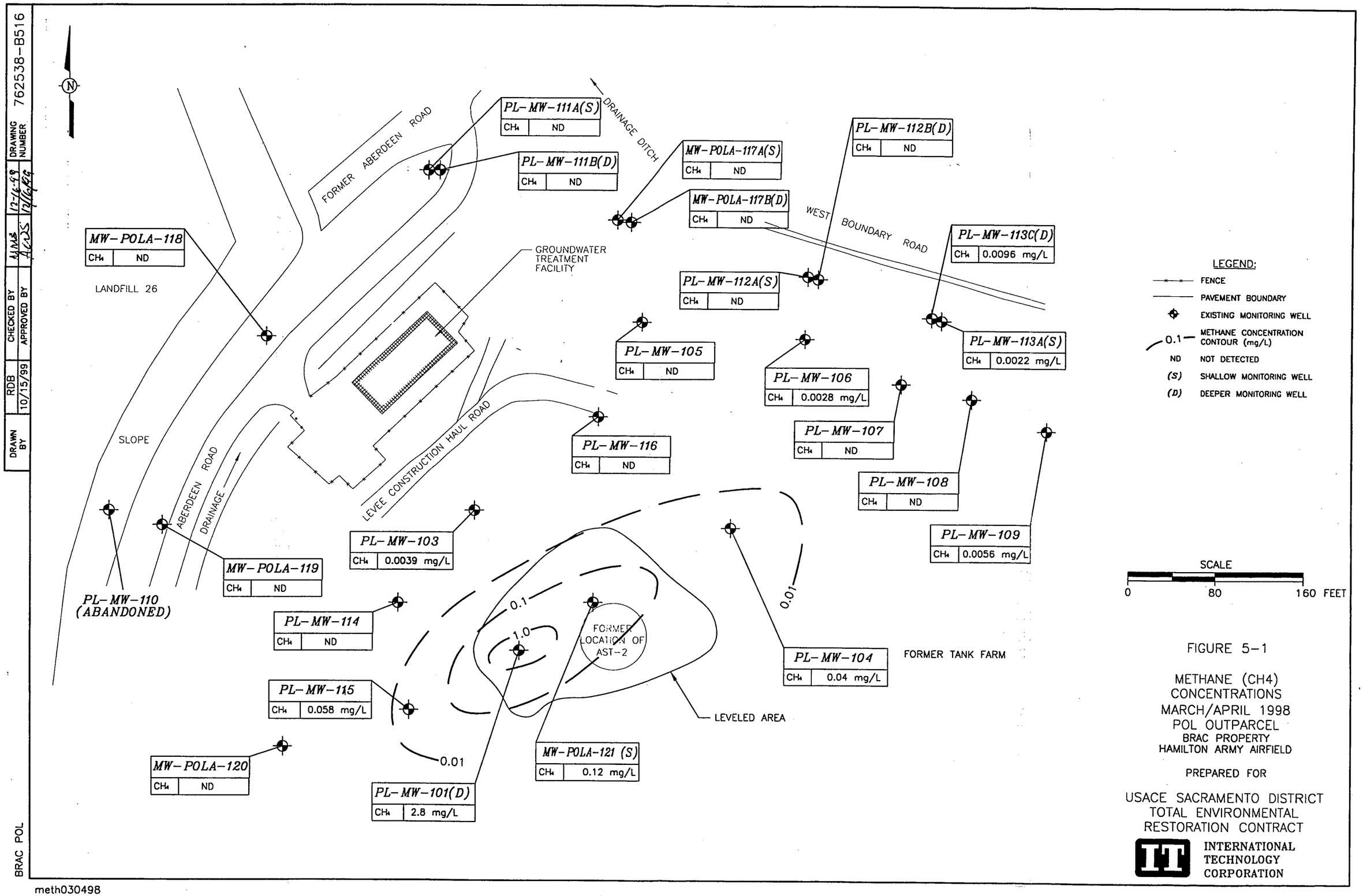


FIGURE 5-1

METHANE (CH4) CONCENTRATIONS
MARCH/APRIL 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	RDB	CHECKED BY	MMS	DRAWING NUMBER	762538-B516
	10/15/99	APPROVED BY	ACS 12/16/99		

BRAC POL

meth030498

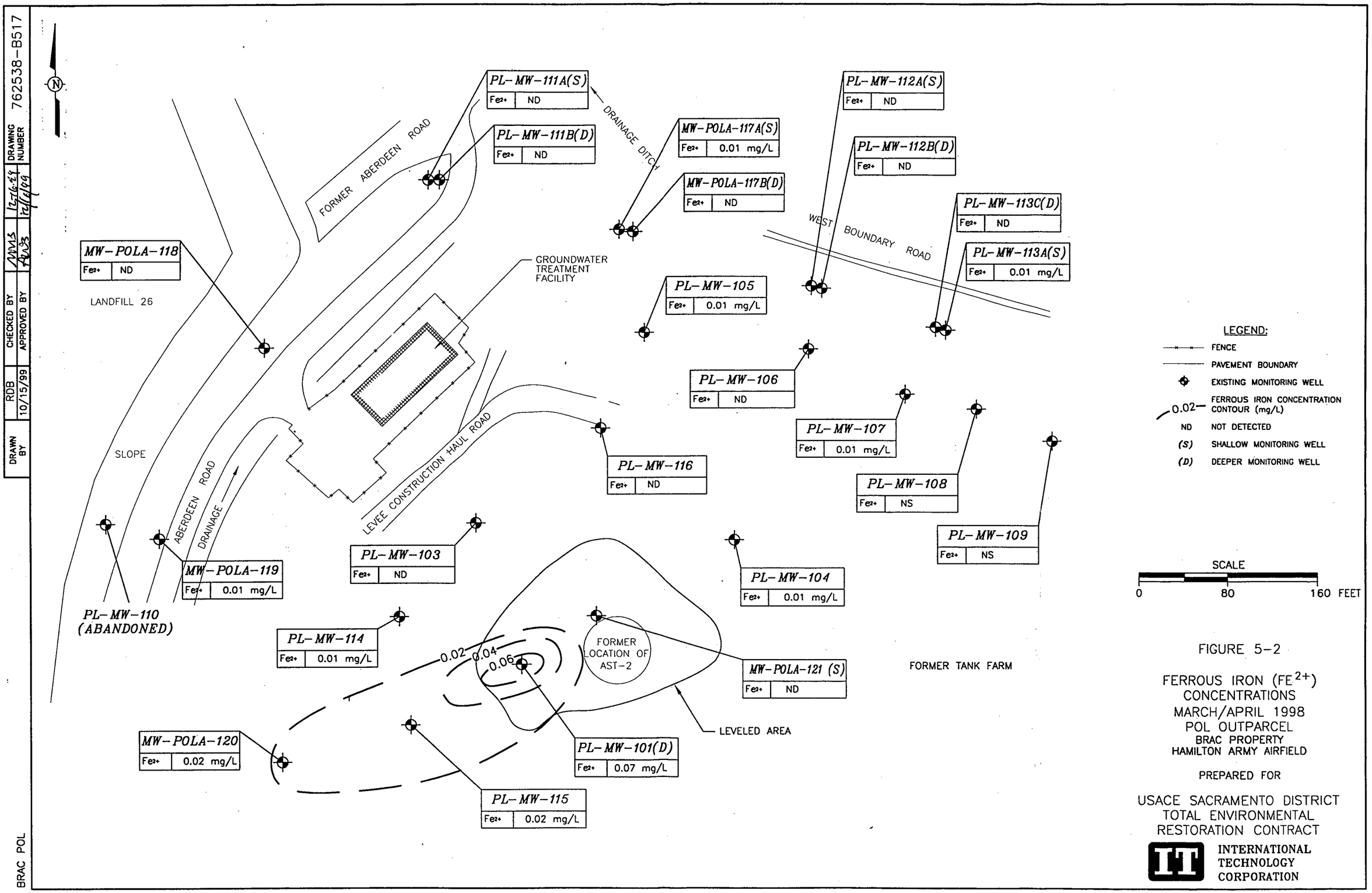


FIGURE 5-2

FERROUS IRON (FE^{2+}) CONCENTRATIONS
MARCH/APRIL 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	RDB	CHECKED BY		DRAWING NUMBER	762538-B517
	10/15/99	APPROVED BY			

BRAC POL

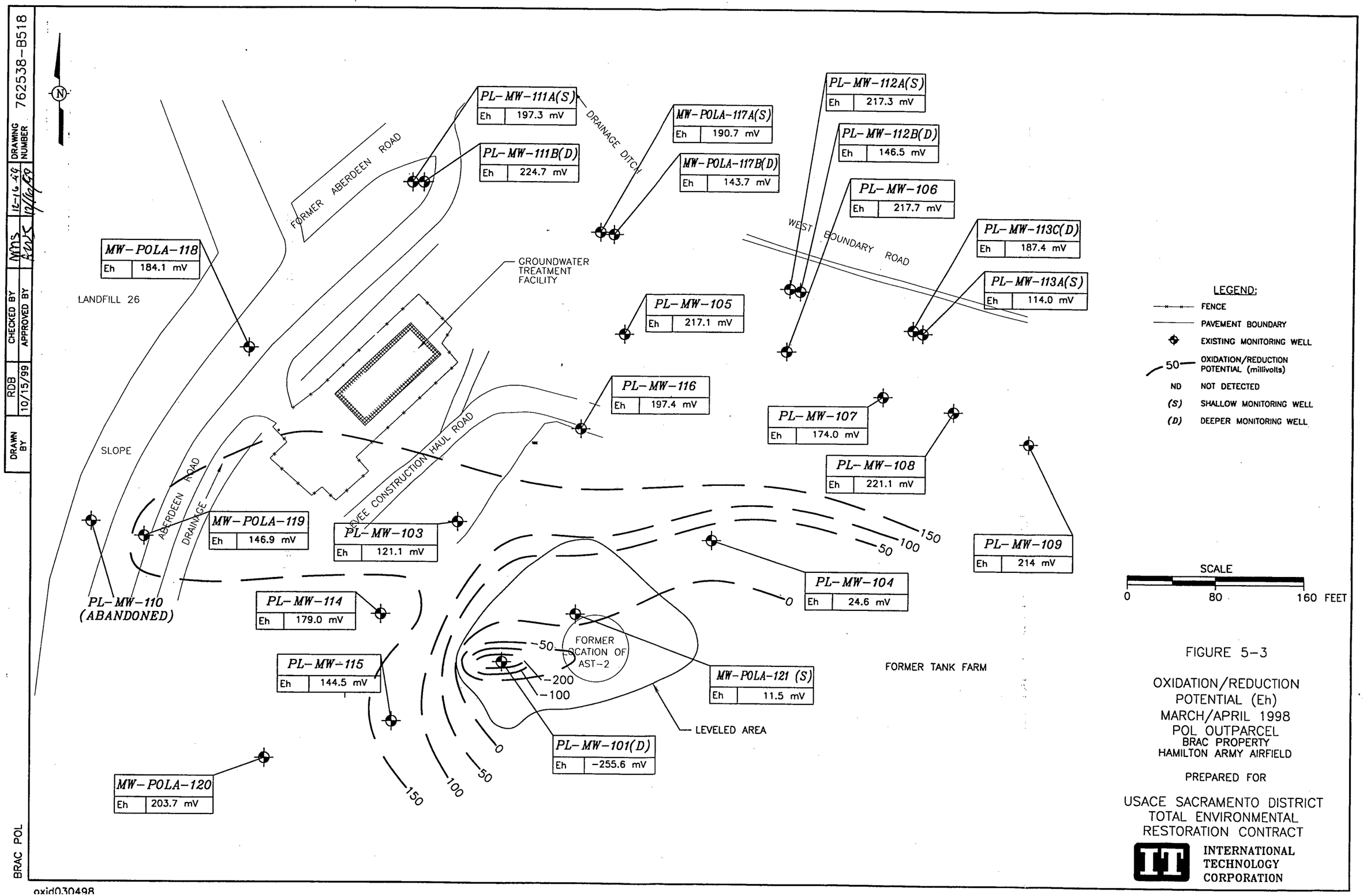


FIGURE 5-3

OXIDATION/REDUCTION POTENTIAL (Eh)
MARCH/APRIL 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	CHECKED BY	DRAWING NUMBER
RDB 10/15/99	APPROVED BY	762538-B518

BRAC POL

oxid030498

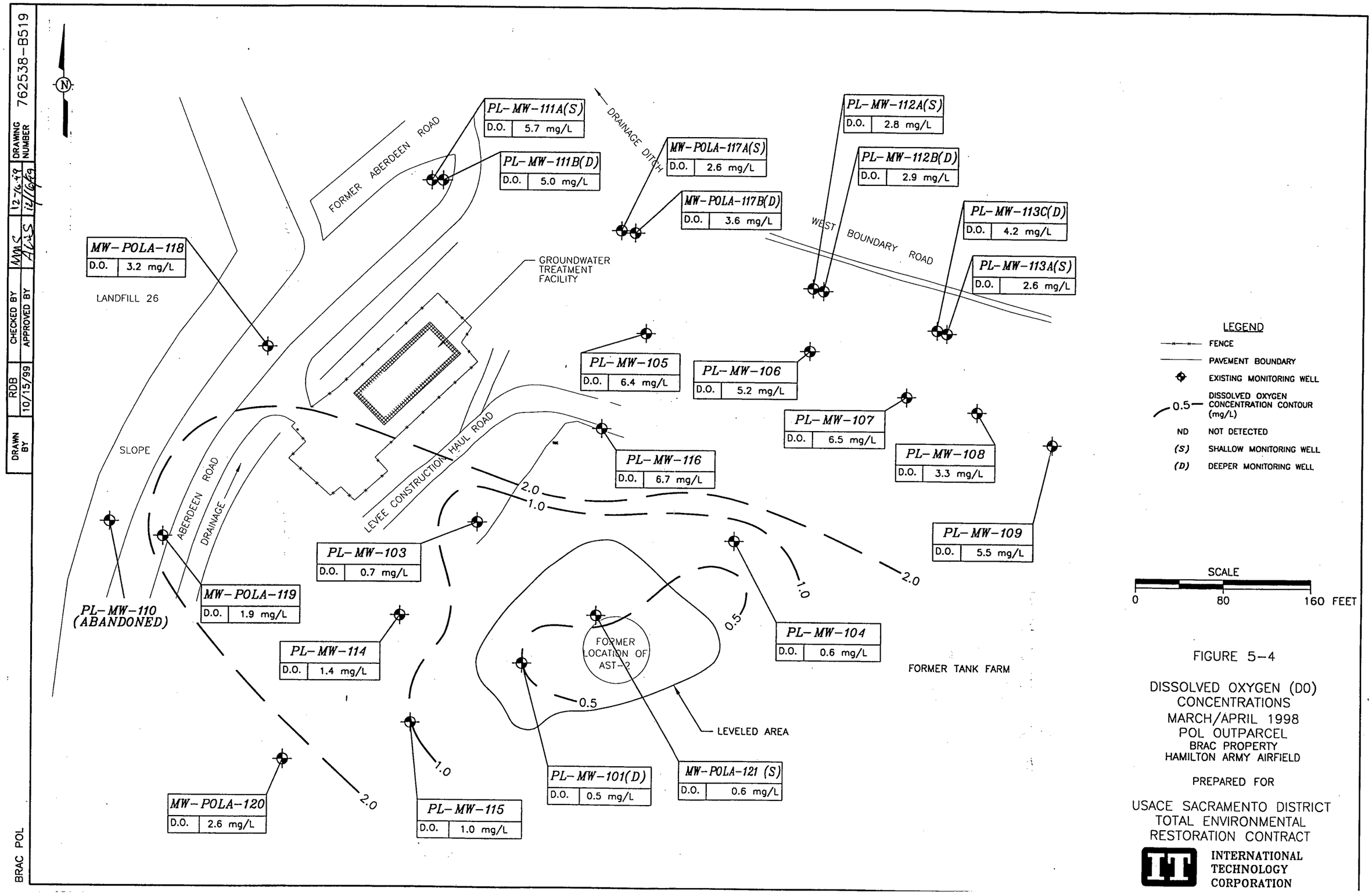


FIGURE 5-4

DISSOLVED OXYGEN (DO) CONCENTRATIONS
MARCH/APRIL 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

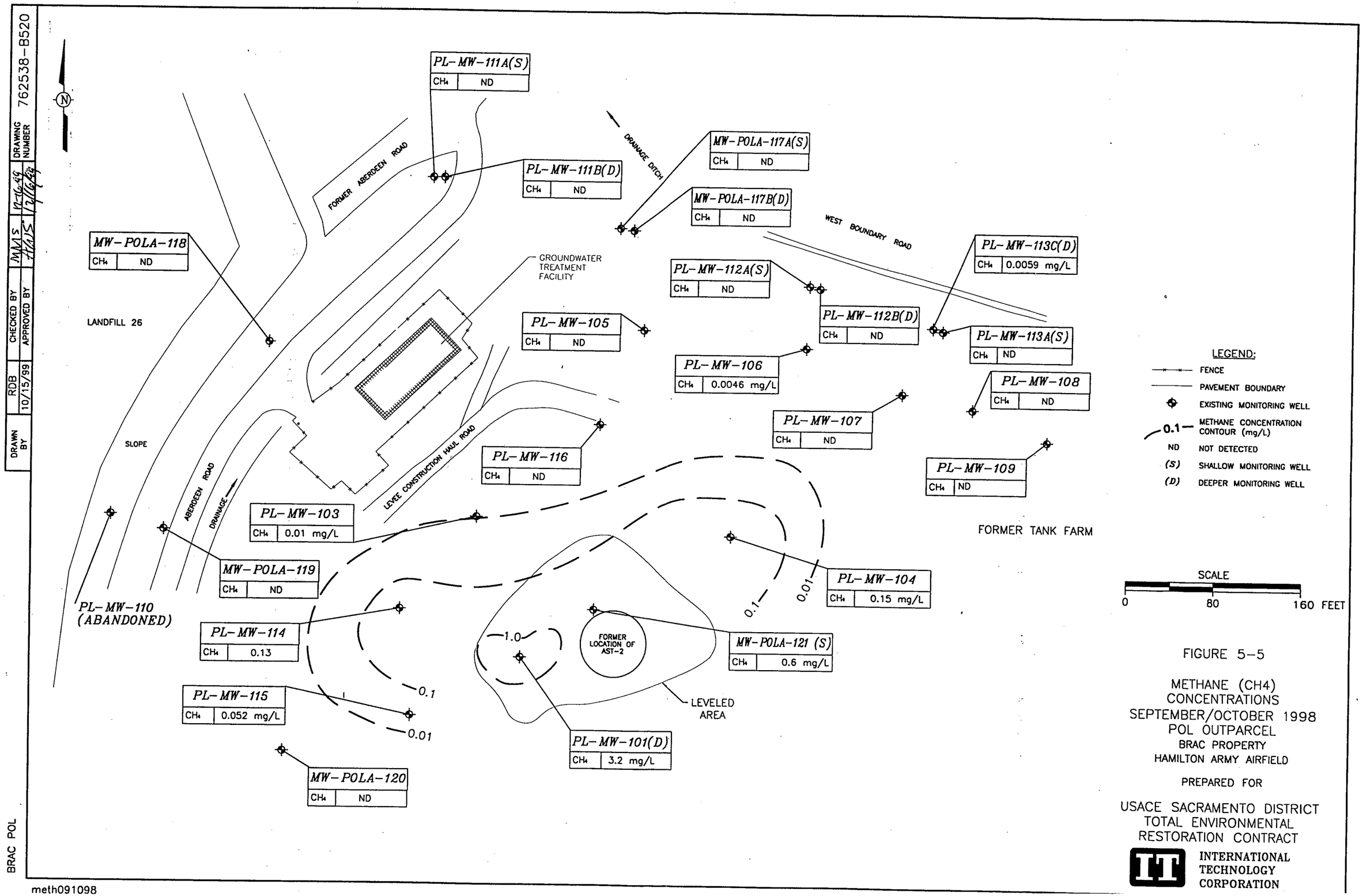
PREPARED FOR

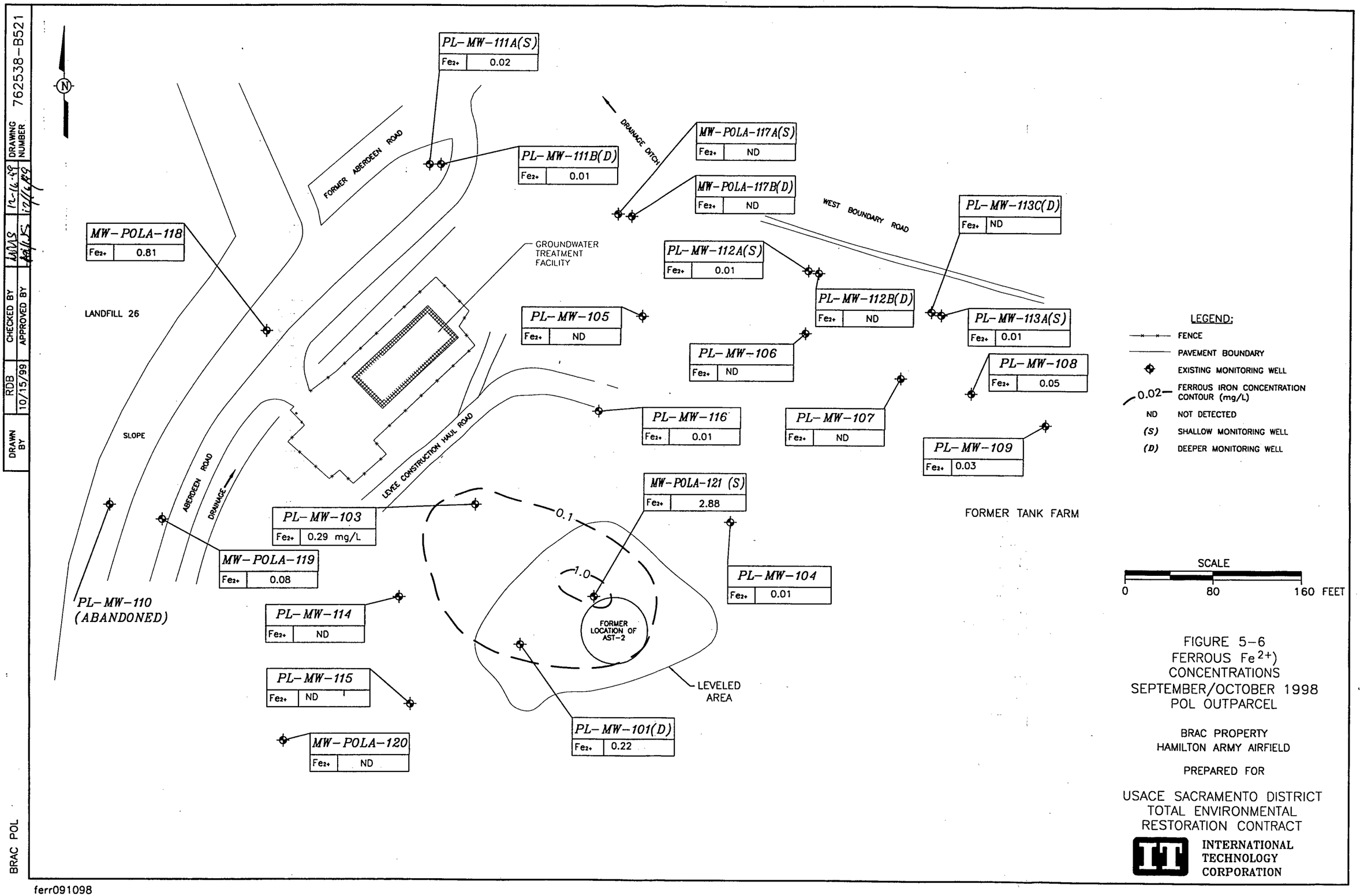
USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

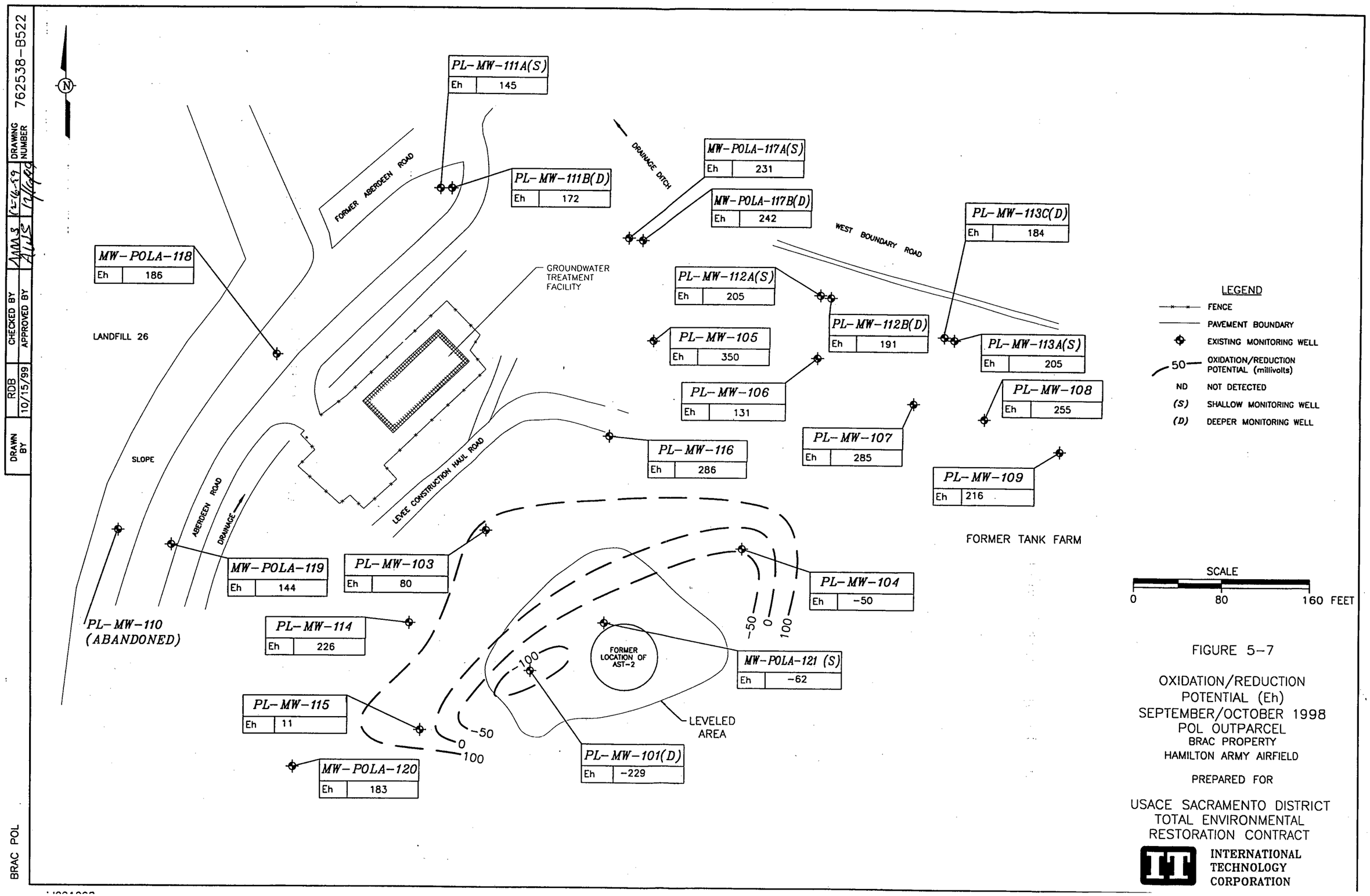
INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
RDB 10/15/99	MMS 12-16-99	ACS 12/16/99	762538-B519

BRAC POL


PL-MW-111A(S)
CH4 ND
PL-MW-111B(D)
CH4 ND
FORMER ABERDEEN ROAD
DRAINAGE DITCH
MW-POLA-117A(S)
CH4 ND
MW-POLA-117B(D)
CH4 ND
WEST BOUNDARY ROAD
MW-POLA-118
CH4 ND
GROUNDWATER TREATMENT FACILITY
PL-MW-112A(S)
CH4 ND
PL-MW-113C(D)
CH4 0.0059 mg/L
LANDFILL 26
PL-MW-105
CH4 ND
PL-MW-112B(D)
CH4 ND
PL-MW-113A(S)
CH4 ND
PL-MW-106
CH4 0.0046 mg/L
PL-MW-108
CH4 ND
PL-MW-107
CH4 ND
SLOPE
LEVEE CONSTRUCTION HAUL ROAD
PL-MW-116
CH4 ND
PL-MW-109
CH4 ND
ABERDEEN ROAD
DRAINAGE
PL-MW-103
CH4 0.01 mg/L
FORMER TANK FARM
MW-POLA-119
CH4 ND
PL-MW-104
CH4 0.15 mg/L
PL-MW-110 (ABANDONED)
PL-MW-114
CH4 0.13
FORMER LOCATION OF AST-2
MW-POLA-121 (S)
CH4 0.6 mg/L
PL-MW-115
CH4 0.052 mg/L
LEVELED AREA
PL-MW-101(D)
CH4 3.2 mg/L
MW-POLA-120
CH4 ND
0.1
0.01
1.0
LEGEND:
FENCE
PAVEMENT BOUNDARY
EXISTING MONITORING WELL
0.1 METHANE CONCENTRATION CONTOUR (mg/L)
ND NOT DETECTED
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
SCALE
0 80 160 FEET
FIGURE 5-5
METHANE (CH4) CONCENTRATIONS SEPTEMBER/OCTOBER 1998 POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD
PREPARED FOR
USACE SACRAMENTO DISTRICT TOTAL ENVIRONMENTAL RESTORATION CONTRACT
INTERNATIONAL TECHNOLOGY CORPORATION
DRAWN BY
RDB
10/15/99
CHECKED BY
APPROVED BY
DRAWING NUMBER
762538-B520
BRAC POL
meth091098


PL-MW-111A(S) Fe2+ 0.02
PL-MW-111B(D) Fe2+ 0.01
FORMER ABERDEEN ROAD
DRAINAGE DITCH
MW-POLA-117A(S) Fe2+ ND
MW-POLA-117B(D) Fe2+ ND
WEST BOUNDARY ROAD
PL-MW-113C(D) Fe2+ ND
MW-POLA-118 Fe2+ 0.81
GROUNDWATER TREATMENT FACILITY
PL-MW-112A(S) Fe2+ 0.01
PL-MW-112B(D) Fe2+ ND
PL-MW-113A(S) Fe2+ 0.01
LANDFILL 26
PL-MW-105 Fe2+ ND
PL-MW-106 Fe2+ ND
PL-MW-108 Fe2+ 0.05
PL-MW-116 Fe2+ 0.01
PL-MW-107 Fe2+ ND
PL-MW-109 Fe2+ 0.03
SLOPE
LEVEE CONSTRUCTION HAUL ROAD
ABERDEEN ROAD
DRAINAGE
MW-POLA-121 (S) Fe2+ 2.88
PL-MW-103 Fe2+ 0.29 mg/L
0.1
1.0
FORMER TANK FARM
MW-POLA-119 Fe2+ 0.08
PL-MW-104 Fe2+ 0.01
PL-MW-110 (ABANDONED)
PL-MW-114 Fe2+ ND
FORMER LOCATION OF AST-2
PL-MW-115 Fe2+ ND
LEVELED AREA
PL-MW-101(D) Fe2+ 0.22
MW-POLA-120 Fe2+ ND
LEGEND:
FENCE
PAVEMENT BOUNDARY
EXISTING MONITORING WELL
0.02 FERROUS IRON CONCENTRATION CONTOUR (mg/L)
ND NOT DETECTED
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
SCALE
0 80 160 FEET
FIGURE 5-6
FERROUS Fe2+)
CONCENTRATIONS
SEPTEMBER/OCTOBER 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD
PREPARED FOR
USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL
RESTORATION CONTRACT
INTERNATIONAL TECHNOLOGY CORPORATION
DRAWING NUMBER 762538-B521
CHECKED BY
APPROVED BY
DRAWN BY RDB 10/15/99
BRAC POL
ferr091098


PL-MW-111A(S)
Eh 145
PL-MW-111B(D)
Eh 172
FORMER ABERDEEN ROAD
DRAINAGE DITCH
MW-POLA-117A(S)
Eh 231
MW-POLA-117B(D)
Eh 242
WEST BOUNDARY ROAD
PL-MW-113C(D)
Eh 184
MW-POLA-118
Eh 186
GROUNDWATER TREATMENT FACILITY
PL-MW-112A(S)
Eh 205
PL-MW-112B(D)
Eh 191
LANDFILL 26
PL-MW-105
Eh 350
PL-MW-113A(S)
Eh 205
PL-MW-106
Eh 131
PL-MW-108
Eh 255
PL-MW-107
Eh 285
PL-MW-116
Eh 286
SLOPE
ABERDEEN ROAD
DRAINAGE
LEVEE CONSTRUCTION HAUL ROAD
PL-MW-109
Eh 216
FORMER TANK FARM
MW-POLA-119
Eh 144
PL-MW-103
Eh 80
PL-MW-104
Eh -50
PL-MW-110 (ABANDONED)
PL-MW-114
Eh 226
-50
0
100
FORMER LOCATION OF AST-2
MW-POLA-121 (S)
Eh -62
PL-MW-115
Eh 11
LEVELED AREA
-50
0
100
PL-MW-101(D)
Eh -229
MW-POLA-120
Eh 183
LEGEND
FENCE
PAVEMENT BOUNDARY
EXISTING MONITORING WELL
50 OXIDATION/REDUCTION POTENTIAL (millivolts)
ND NOT DETECTED
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
SCALE
0 80 160 FEET
FIGURE 5-7
OXIDATION/REDUCTION POTENTIAL (Eh)
SEPTEMBER/OCTOBER 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD
PREPARED FOR
USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT
INTERNATIONAL TECHNOLOGY CORPORATION
DRAWN BY
RDB
10/15/99
CHECKED BY
APPROVED BY
DRAWING NUMBER
762538-B522
BRAC POL

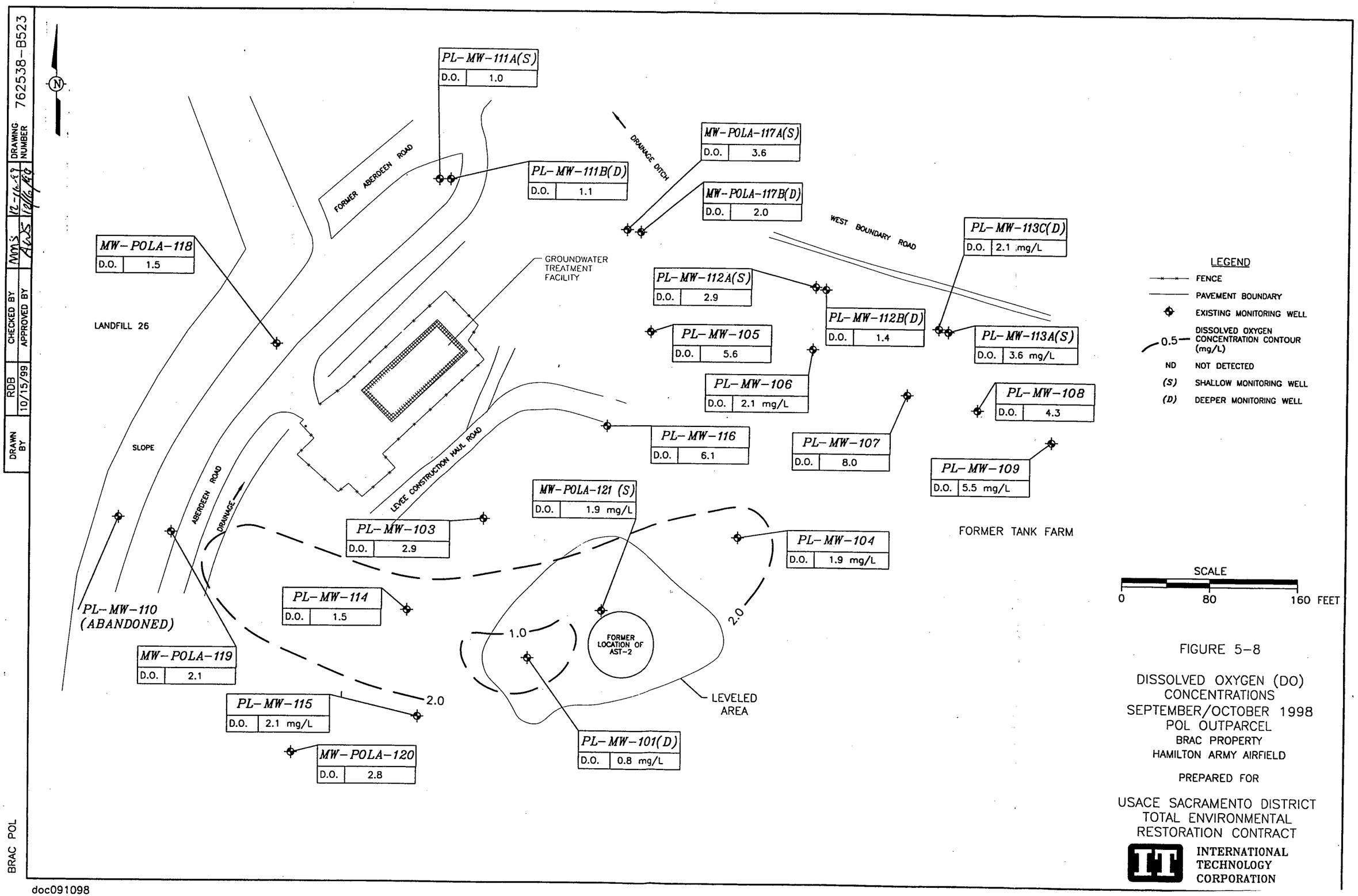


FIGURE 5-8

DISSOLVED OXYGEN (DO) CONCENTRATIONS
SEPTEMBER/OCTOBER 1998
POL OUTPARCEL
BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO DISTRICT
TOTAL ENVIRONMENTAL RESTORATION CONTRACT

INTERNATIONAL TECHNOLOGY CORPORATION

APPENDIX I

Groundwater Monitoring Report August 2002

Source: SOTA, 2002 (tables and figures only)

GROUNDWATER MONITORING REPORT

AUGUST 2002

POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

CONTRACT NO. DACW05-00-D-0015, D. O. NO. 0001

Prepared for:
US Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814

Prepared by:
SOTA Environmental Technology, Inc.
16835 W. Bernardo Drive, Suite 212
San Diego, CA 92127

Date: September 26, 2002
Version: Draft
SOTA Project No: 01HW007

SOTA
Environmental Technology, Inc.

EXECUTIVE SUMMARY

This report summarizes the results of the August 2002 groundwater sampling event that was completed as part of the groundwater monitoring program at the Petroleum, Oil, and Lubricant (POL) Hill site, Hamilton Army Airfield (HAAF), Novato, California. The HAAF groundwater monitoring program is being conducted under contract with the United States Army Corps of Engineers (USACE), Sacramento District. The purpose of the groundwater monitoring program at the POL Hill site is to confirm the natural attenuation process of known petroleum hydrocarbon contamination in groundwater.

During this event, groundwater samples were collected from nine monitoring wells, and analyzed for total petroleum hydrocarbons (TPH) both as extractable and as purgeable. The samples were additionally analyzed for methane, ferrous iron, sulfate, total alkalinity as indicated by calcium carbonate, oxidation/reduction potential (Eh), dissolved oxygen (DO), pH, and turbidity, and temperature were measured in the field.

The August 2002 groundwater sampling data indicate that TPH concentrations exceeded the site-specific General Services Administration Phase I Residential Cleanup Goals (RCG) of 1,200 µg/L for diesel and 600 µg/L for gasoline in only one well (PL-MW-101). Extractable TPH was detected in three wells (PL-MW-101, PL-MW-104, and MW-POLA-121), and purgeable TPH was detected in two wells (PL-MW-101 and PL-MW-104). Concentrations of both extractable and purgeable TPH were lower than levels detected in the previous events in February 2002 and September 2001.

Groundwater flow near the site of former AST-2 was generally directed towards the north at a relatively steep hydraulic gradient of approximately 0.16 feet/foot. In the northern portion of the site, groundwater flow was apparently directed towards the north but at a much shallower gradient (approximately 0.04 feet/foot). Compared to measurements made in September 2001, static water levels dropped in all nine wells, from 0.68 to 10.32 feet, which is typical during the dry season.

The decrease of extractable and purgeable TPH concentrations in groundwater over the period from September 2001 to August 2002 is correlates directly with the decrease in groundwater elevations at the site and the indicators of natural attenuation. These results suggest that a decrease of residual soil contamination dissolution near the capillary fringe resulting from the drop in the water table and/or the degrading of dissolved TPH in groundwater through natural attenuation processes may be occurring during the dry season. Based on the recent results, the TPH plume appears relatively stable in the area of the former aboveground storage tank (AST-2) and geochemical parameters indicate that natural attenuation is occurring at the site.

5.0 CONCLUSIONS

The following conclusions are based upon interpretation of the analytical data and field measurements collected during the August 2002 groundwater monitoring event:

- Groundwater flow near former AST-2 was apparently directed towards the north at a relatively steep hydraulic gradient of approximately 0.16 feet/foot. In the northern portion of the site, groundwater flow was estimated to flow towards the north at a much shallower gradient (approximately 0.037 feet/foot). Compared to measurements made in February 2002, static water levels, in all nine wells dropped from 0.68 (PL-MW-101) to 10.32 (MW-POLA-121) feet. This general drop in the water table reflects the result of lack of local precipitation during the dry season.

- The TPH plume near former AST-2 is relatively stable. TPH extractable and purgeable concentrations exceeded the GSA Phase I Residential Cleanup Goal of 1,200 µg/L for diesel and 600 µg/L for gasoline in only one well (PL-MW-101). Extractable TPH was detected in three wells (PL-MW-101, PL-MW-104, and MW-POLA-121). Purgeable TPH was detected in two wells (PL-MW-101 and PL-MW-104). Concentrations of extractable and purgeable TPH in all nine wells were lower than the detections in the previous events. The decrease of extractable and purgeable TPH concentrations in groundwater correlates directly with the decrease in groundwater elevations at the site and the indicators of natural attenuation over the period from September 2001 to August 2002.

- Currently, geochemical parameters indicate that natural attenuation, including the intrinsic biodegradation processes (anaerobic/aerobic), are occurring at the site. The anaerobic indicator of methane and aerobic indicators of DO and Eh in groundwater support that biodegradation processes are occurring at the site, although the reduction rate of the Total Petroleum Hydrocarbons is continues to be slow.

- Historical groundwater geochemical parameters reported data from 1997 to 1999 also indicate that natural attenuation is occurring at the site, including intrinsic biodegradation processes were occurring at the site.

The results of the POL Hill Monitoring Program in August 2002 sampling event were generally consistent with September 2001 and February 2002 groundwater monitoring data (SOTA, 2001b, 2002) as well as historical groundwater monitoring data (IT, 1999).

Table 1
Monitoring Well Construction Details
POL Hill, Hamilton Army Airfield, Novato, California

Well No.	Date Completed	Total Drilled Depth (ft. bgs)	Total Well Depth (ft. bgs)	Borehole Diameter (in.)	Casing Diameter (in.)	Screen Interval (ft.)	Filter Pack Interval (ft.)	Bentonite Seal Interval (ft.)	Grout Seal Interval (ft.)	PVC Stickup (ft.)	Steel Monument Stickup (ft.)
PL-MW-101	01/31/1991	53.0	49.8	8	4	29.8-49.3	24.8-53.0	19.8-24.8	0-19.8	2.3	2.5
PL-MW-103	01/31/1991	27.0	27.0	8	4	11.5-26.5	8.5-27.0	3.5-8.5	0-3.5	2.5	2.7
PL-MW-104	01/31/1991	42.8	42.8	8	4	27.8-42.3	22.8-42.8	17.8-22.8	0-17.8	2.45	2.7
PL-MW-106	01/23/1991	18.0	18.0	8	4	7.8-17.3	5.8-18.0	3.8-5.8	0-3.8	2.2	2.4
PL-MW-107	01/23/1991	17.3	17.3	10	4	7.2-16.7	4.3-17.3	2.1-4.3	0-2.1	2.55	2.75
PL-MW-114	08/18/1992	27.8	27.5	8	4	12.0-27.0	7.0-27.8	5.0-7.0	0-5.0	2.23	2.5
PL-MW-115	08/21/1992 *	28.0	28.0	8	4	17.5-27.5	12.5-28.0	7.0-12.5	0-7.0	1.84	2.1
	7/1/2000 **	33.1	33.1	8	4	22.6-32.6	17.6-33.1	12.1-17.6	0-12.1	-0.47 #	NA
PL-MW-116	03/02/1994	35.0	22.5	8.5	4	11.3-21.3	9.0-22.5	7.2-9.0	0-7.2	2.15	NA
MW-POLA-121	01/31/1997	33.6	32.67	8.63	4	7.0-32.0	6.0-33.6	3.0-6.0	0-3.0	2.4	3.4

Note:

All data are extracted from POL Hill Monitoring Well Installation Data Records.

*: Well construction details for PL-MW-115 were obtained from the original well installation specification.

was included in a residential reuse plan and the ground level of the well was elevated for the construction of a roadway which required adjusting some of the data pertaining to well. The adjustments were made only at the top of the casings from an addition of fill to what was the existing ground level. Therefore, the new top of casing as it is today is 26.94 ft versus the old top of casing of 24.41 ft prior to the reuse.

#: The PVC casing is now 0.47 ft below ground surface.

NA - Not Available

Table 2
Monitoring Well Water Level Measurements
POL Hill, Hamilton Army Airfield, Novato, California

Well No.	Date Measured	Casing Elevation [a] (Feet, MSL)	Depth to Groundwater (Feet, MSL)	Free product Thickness (Feet, MSL)	Groundwater Elevation (Feet, MSL)	Change in Elevation (Feet)
PL-MW-101	08/01/2002	49.46	25.14	0.0	24.32	-0.68
	02/25/2002		24.46	0.0	25.00	1.05
	09/26/2001		25.51	0.0	23.95	-1.21
	03/27/1997		24.30	0.0	25.16	-0.21
	02/28/1997		24.09	0.0	25.37	NA
PL-MW-103	08/01/2002	17.35	5.29	0.0	12.06	-1.58
	02/25/2002		3.71	0.0	13.64	1.20
	09/26/2001		4.91	0.0	12.44	2.11
	03/27/1997		7.02	0.0	10.33	-0.94
	02/27/1997		6.08	0.0	11.27	NA
PL-MW-104	08/01/2002	27.28	20.46	0.0	6.82	-3.93
	02/25/2002		16.53	0.0	10.75	4.98
	09/26/2001		21.51	0.0	5.77	-2.11
	03/26/1997		19.40	0.0	7.88	-0.20
	02/28/1997		19.20	0.0	8.08	NA
PL-MW-106	08/01/2002	6.56	6.90	0.0	-0.34	-3.58
	02/25/2002		3.32	0.0	3.24	4.53
	09/26/2001		7.85	0.0	-1.29	-3.40
	03/25/1997		4.45	0.0	2.11	-0.45
	02/26/1997		4.00	0.0	2.56	NA
PL-MW-107	08/01/2002	7.11	7.99	0.0	-0.88	-4.08
	02/25/2002		3.91	0.0	3.20	5.30
	09/26/2001		9.21	0.0	-2.10	-4.01
	03/25/1997		5.20	0.0	1.91	-0.64
	02/26/1997		4.56	0.0	2.55	NA
PL-MW-114	08/01/2002	22.86	3.76	0.0	19.10	-0.26
	02/25/2002		3.50	0.0	19.36	0.47
	09/26/2001		3.97	0.0	18.89	2.13
	03/25/1997		6.10	0.0	16.76	-1.43
	02/28/1997		4.67	0.0	18.19	NA
PL-MW-115	08/01/2002	26.94	7.95	0.0	18.99	-0.47
	02/25/2002		7.48	0.0	19.46	0.42
	09/26/2001		7.90	0.0	19.04	-1.42
	03/26/1997		6.48	0.0	20.46	-0.20
	02/28/1997		6.28	0.0	20.66	NA
PL-MW-116	08/01/2002	18.00	15.97	0.0	2.03	-4.80
	02/25/2002		11.17	0.0	6.83	5.95
	09/26/2001		17.12	0.0	0.88	-2.89
	03/26/1997		14.23	0.0	3.77	-0.97
	02/27/1997		13.26	0.0	4.74	NA
MW-POLA-121	08/01/2002	51.66	19.55	0.0	32.11	-10.32
	02/25/2002		9.23	0.0	42.43	12.05
	09/26/2001		21.28	0.0	30.38	-1.87
	03/26/1997		19.41	0.0	32.25	-5.45
	02/28/1997		13.96	0.0	37.70	NA

Note:
Historical data are extracted from IT report (IT, 1999)
MSL - Relative to Mean Sea Level
NA - Not Avaliable
[a]: Top of Casing elevation obtained from 2001 topographic survey. TOC is used as the reference point for groundwater elevation

Table 3
Groundwater Orgainc and Geochemical Parameters Summary
(August 1 - 2, 2002)
POL Hill, Hamilton Army Airfield, Novato, California

Well	TPH Extractable (EPA 8015M) (ug/L)	TPH Purgeable (EPA 8015M) (ug/L)	Dissolved Oxygen (EPA 360.1) (mg/L)	Redox (ASTM 1498) (mv)	Ferrous Iron (SM 3500) (mg/L)	Methane (RSK 175) (mg/L)	Sulfate (EPA 300.0) (mg/L)	Total Alkalinity as $CaCO_3$ (EPA 310.1) (mg/L)	pH (EPA 150.1) (pH Unit)	Turbidity (EPA 180.1) (NTU)	Field Temperature (°C)
PL-MW-101	2700	2600	6.6	450	ND (<0.10)	0.11	69	490J	7.39	4.5	18.5
PL-MW-103	ND (<250)	ND (<50)	3.7	330	ND (<0.10)	ND (<0.01)	110	240J	6.95	12.0	18.8
QC-1 a	ND (<250)	ND (<50)	3.9	480	ND (<0.10)	ND (<0.01)	110	250J	6.99	9.1	18.8
PL-MW-104	490	78	7.2	520	ND (<0.10)	0.050	9.1	500J	7.16	4.8	18.0
PL-MW-106	ND (<250)	ND (<50)	7.5	500	ND (<0.10)	ND (<0.01)	100	470J	7.36	6.9	19.2
PL-MW-107	ND (<250)	ND (<50)	7.1	470	ND (<0.10)	ND (<0.01)	210	720J	8.25	37.0	19.2
PL-MW-114	ND (<250)	ND (<50)	8.0	520	ND (<0.10)	ND (<0.01)	95	270J	7.06	5.1	21.2
PL-MW-115	ND (<250)	ND (<50)	4.2	530	ND (<0.10)	ND (<0.01)	140	270J	7.29	ND (<1.0)	23.5
PL-MW-116	ND (<250)	ND (<50)	6.8	540	ND (<0.10)	ND (<0.01)	32	160J	7.16	12.0	19.2
MW-POLA-121	360	ND (<50)	6.9	540	ND (<0.10)	ND (<0.01)	20	240J	7.20	110.0	18.2

Notes:
ug/L - Micrograms per liter
mg/L - Milligrams per liter
mv - Millivolts
°C - Degrees Celsius
NTU - Nephelometric Turbidity Units
ND - Not detected above practical quantitation limit (practical quantitation limit is in parenthesis)
J Estimated
[a] Field duplicate for PL-MW-116

Table 4
Historical Groundwater Organic Chemical Data Summary

POL Hill, Hamilton Army Airfield, Novato, California

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH [a] (µg/L)	TPH-P [b] (µg/L)	TPH-E [c] (µg/L)
PL-MW-101	Jul-92	**6**	**10**	**110**	**290**	(d)	(d)	(d)
	Aug-92	**6**	**4.3**	**94**	**260**	(d)	(d)	(d)
	Mar-94	<5	<5	**129**	**405**	**5350**	(e)	**5350**
	Feb-97	<10	<10	**78**	**140**	**11400**	**4800**	**6600**
	Mar-97	<1	<1	**77**	**120**	**8500**	**4600**	**3900**
	Apr-98	<1	<1	**46**	**52**	**4800**	**2700**	**2100**
	Jul-98	<1	<1	**42**	**34**	**3900**	**2300**	**1600**
	Oct-98	<1	<1	**39**	**47**	**7600**	**2900**	**4700**
	Jan-99	NA	NA	NA	NA	**9700**	**4400**	**5300**
	Sep-01	NA	NA	NA	NA	**6200**	**3300**	**2900**
	Feb-02	NA	NA	NA	NA	**16000**	**6200**	**9800**
	Aug-02	NA	NA	NA	NA	**5300**	**2600**	**2700**
PL-MW-103	Jul-92	<1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Aug-92	<1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Mar-94	<0.5	<0.5	<0.5	<0.5	**417**	(e)	**417**
	Feb-97	<1	<1	<1	<1	**110**	<50	**110**
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	**200**	(e)	**200**
	Jul-98	<1	<1	<1	<1	**76**	**76**	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	**320**	<50	**320**
	Feb-02	NA	NA	NA	NA	**570**	<50	**570**
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-104	Jul-92	<1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Aug-92	<1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Mar-94	<0.5	<0.5	<0.5	<0.5	**464**	(e)	**464**
	Feb-97	<1	<1	<1	<1	**400**	**130**	**270**
	Mar-97	<1	<1	<1	<1	**410**	**180**	**230**
	Apr-98	<1	<1	<1	<1	**287**	**67**	**220**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	**263**	**83**	**180**
	Jan-99	NA	NA	NA	NA	**370**	**200**	**170**
	Sep-01	NA	NA	NA	NA	**655**	**95**	**560**
	Feb-02	NA	NA	NA	NA	**890**	**110**	**780**
	Aug-02	NA	NA	NA	NA	**568**	**78**	**490**
PL-MW-106	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50

Table 4
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POL Hill, Hamilton Army Airfield, Novato, California

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH [a] (µg/L)	TPH-P [b] (µg/L)	TPH-E [c] (µg/L)
PL-MW-106	Jul-98	NA	NA	NA	NA	NA	NA	NA
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	NA	NA	NA
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	<250	<50	<250
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-107	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	NA	NA	NA
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	<250	<50	<250
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-114	Jul-92	<1.1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Aug-92	<1.1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Mar-94	<0.5	<0.5	<0.5	<0.5	**355**	(e)	**355**
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**570**	<50	**570**
	Aug-02	NA	NA	NA	NA	<250	<50	<250
PL-MW-115	Jul-92	<1.1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Aug-92	<1.1	<1.5	<1.4	<1.4	(d)	(d)	(d)
	Mar-94	<0.5	<0.5	<0.5	<0.5	**803**	(e)	**803**
	Feb-97	<1	<1	<1	<1	**140**	<50	**140**
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	**100**	<50	**100**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**250**	<50	**250**
	Aug-02	NA	NA	NA	NA	<250	<50	<250

Table 4
Historical Groundwater Organic Chemical Data Summary

POL Hill, Hamilton Army Airfield, Novato, California

Well	Monitoring Event Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total TPH [a] (µg/L)	TPH-P [b] (µg/L)	TPH-E [c] (µg/L)
PL-MW-116	Jul-92	NA	NA	NA	NA	NA	NA	NA
	Aug-92	NA	NA	NA	NA	NA	NA	NA
	Mar-94	NA	NA	NA	NA	NA	NA	NA
	Feb-97	<1	<1	<1	<1	<50	<50	<50
	Mar-97	<1	<1	<1	<1	<50	<50	<50
	Apr-98	<1	<1	<1	<1	<50	<50	<50
	Jul-98	NA	NA	NA	NA	NA	NA	NA
	Sep-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	<50	<50	<50
	Sep-01	NA	NA	NA	NA	<250	<50	<250
	Feb-02	NA	NA	NA	NA	**330** (f)	<50	**330** (f)
	Aug-02	NA	NA	NA	NA	<250	<50	<250
MW-POLA-121	Jul-92	NS (g)	NS	NS	NS	NS	NS	NS
	Aug-92	NS	NS	NS	NS	NS	NS	NS
	Mar-94	NS	NS	NS	NS	NS	NS	NS
	Feb-97	**2.7**	<1	**7.3**	**7.7**	**1060**	**480**	**580**
	Mar-97	**4.6**	<1	**10**	**13**	**1360**	**630**	**730**
	Apr-98	<1	<1	<1	<1	**100**	<50	**100**
	Jul-98	<1	<1	<1	<1	<50	<50	<50
	Oct-98	<1	<1	<1	<1	<50	<50	<50
	Jan-99	NA	NA	NA	NA	**54**	**54**	<50
	Sep-01	NA	NA	NA	NA	**640**	<50	**640**
	Feb-02	NA	NA	NA	NA	**530**	<50	**530**
	Aug-02	NA	NA	NA	NA	**360**	<50	**360**

Notes:

Historical data are extracted from IT report (IT, 1999)

All detected analytes are shown in bold

NA - Not analyzed

NS - Not sampled

[a] Total petroleum hydrocarbons (extractable and purgeable). The extractable and purgeable hydrocarbons results were added together and followed the IT's method to provide an estimate of the residual hydrocarbon contamination.

[b] Total petroleum hydrocarbons measured as purgeable

[c] Total petroleum hydrocarbons measured as extractable

(d) Total petroleum hydrocarbons were quantified using EPA Method 418.1. These results were not considered equivalent to the EPA Method 8015M results obtained from the March 1994 and later monitoring events. The data were not available in IT report

(e) no associated result

(f) Result from duplicate sample

(g) not sampled, well was not installed until January 1997

Table 5
Historical Groundwater Geochemical Parameters Summary
POL Hill, Hamilton Army Airfield, Novato, California
(March/April 1998 through August 2002)

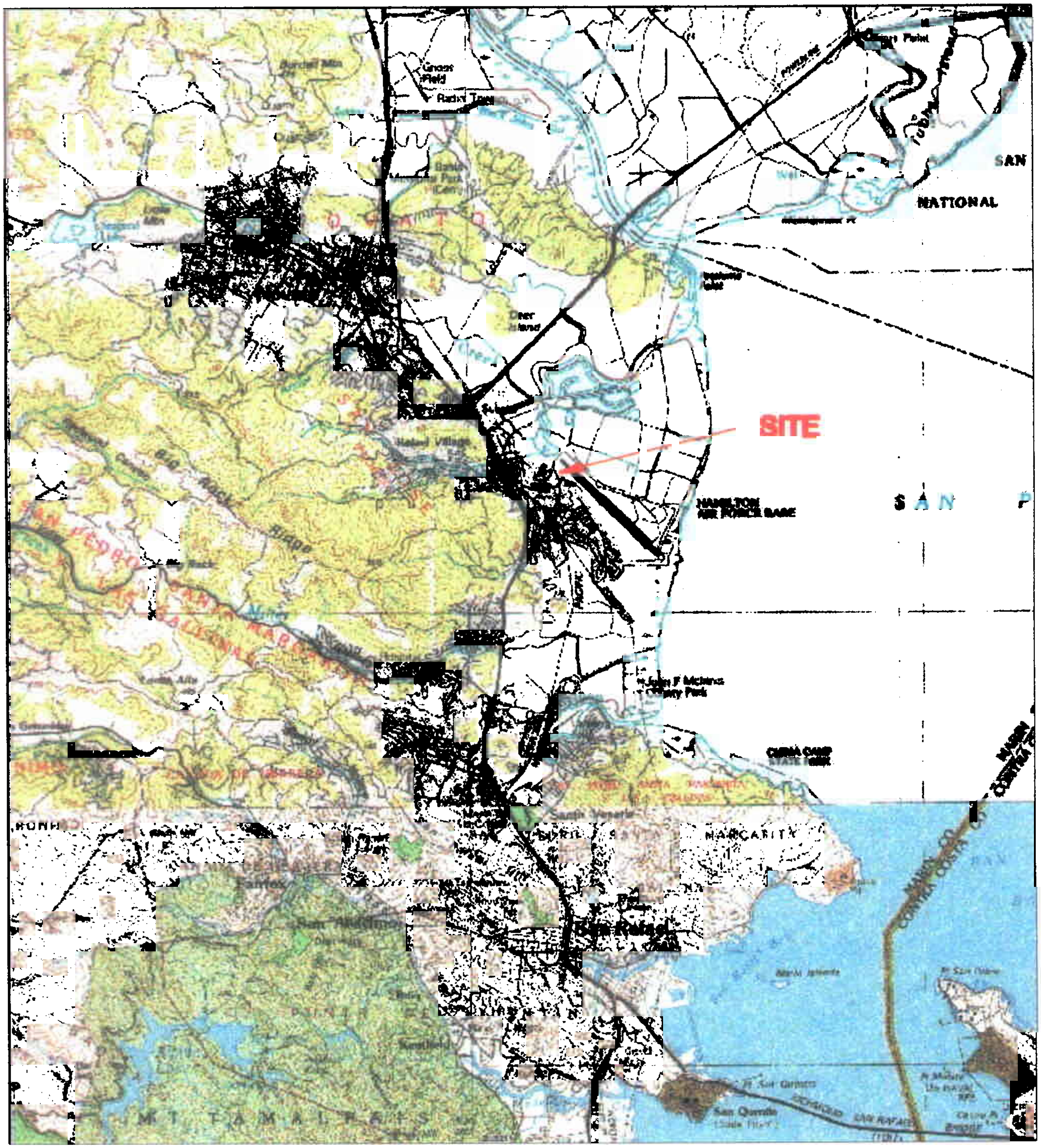
Well NO.	Date Sampled	Dissolved Oxygen (mg/L)	Redox (mv)	Ferrous Iron (mg/L)	Methane (mg/L)	Sulfate (mg/L)	Total Sulfide (mg/L)	Nitrate (mg/L)	Total Alkalinity as $CaCO_3$ (mg/L)	pH	Turbidity (NTU)	Temperature (°C)
PL-MW-101	March/April 1998	0.50	-225.6	0.07	2.8	53	ND (<0.05)	ND (<0.05)	516	6.96	NA	19.4
	Sept/Oct 1998	0.82	-228.8	0.22	3.2	53	0.36	ND (<0.05)	544	6.94	NA	21.2
	September 2001	3.10	550	ND (<0.10)	2.8 [a]/1.1J [b]	70	NA	NA	470	7.34	12.0	17.5
	February 2002	5.50	330	ND (<0.10)	1.0	75	NA	NA	490	7.42	15.0	18.0
	August 2002	6.60	450	ND (<0.10)	0.1	69			490J	7.39	4.5	18.5
PL-MW-103	March/April 1998	0.70	121.1	ND (<0.05)	0.0039	69	ND (<0.05)	0.24	205	6.87	NA	16.8
	Sept/Oct 1998	2.85	79.9	0.29	0.010	109	0.01	ND (<0.05)	240	6.94	NA	22.2
	September 2001	1.40	540	ND (<0.10)	ND (<1.0)/ND (<0.005)	120	NA	NA	250	6.92	3.0	19.8
	February 2002	1.70	230	ND (<0.10)	ND (<0.01)	100	NA	NA	210	7.24	17.0	15.5
	August 2002	3.70	330	ND (<0.10)	ND (<0.01)	110			240J	7	12	18.8
PL-MW-104	March/April 1998	0.60	24.6	0.01	0.04	10	ND (<0.05)	ND	509	6.78	NA	18.7
	Sept/Oct 1998	1.94	-50.2	0.01	0.15	8	ND (<0.05)	ND (<0.05)	556	6.77	NA	25.4
	September 2001	3.80	550	ND (<0.10)	ND (<1.0)/ND (<0.005)	110	NA	NA	470	7.46	11.0	17.9
	February 2002	6.40	230	ND (<0.10)	0.069	8.2	NA	NA	510	7.28	5.7	16.8
	August 2002	7.20	520	ND (<0.10)	0.05	9.1			500J	7.16	4.8	18
PL-MW-106	March/April 1998	5.20	217.7	ND (<0.05)	0.0028	105	ND (<0.05)	0.09	493	7.30	NA	16.6
	Sept/Oct 1998	2.12	131.3	ND (<0.05)	0.0046	107	0.03	0.088	514	7.24	NA	25.5
	September 2001	3.70	560	ND (<0.10)	ND (<1.0)/ND (<0.005)	9	NA	NA	510	7.15	5.2	18.5
	February 2002	6.70	360	ND (<0.10)	ND (<0.01)	110	NA	NA	480	7.53	14.0	14.3
	August 2002	7.50	500	ND (<0.10)	ND (<0.01)	100			470J	7.36	6.9	19.2
PL-MW-107	March/April 1998	6.50	174.0	0.01	ND (<0.002)	261	ND (<0.05)	0.1	749	8.05	NA	19.7
	Sept/Oct 1998	7.99	285.2	ND (<0.05)	ND (<0.002)	210	0.12	0.06	756	8.12	NA	22.5
	September 2001	3.50	510	ND (<0.10)	ND (<1.0)/ND (<0.005)	190	NA	NA	720	8.46	150.0	20.4
	February 2002	8.10	330	ND (<0.10)	ND (<0.01)	260	NA	NA	720	8.3	18.0	15.9
	August 2002	7.10	470	ND (<0.10)	ND (<0.01)	210			720J	8.25	37	19.2
PL-MW-114	March/April 1998	1.40	179.0	0.01	ND (<0.002)	49	ND (<0.05)	0.06	176	7.40	NA	17.7
	Sept/Oct 1998	1.52	225.6	ND (<0.05)	0.13	78	ND (<0.05)	0.055	227	7.06	NA	20.7
	September 2001	3.60	530	ND (<0.10)	ND (<1.0)/ND (<0.005)	120	NA	NA	290	7.12	8.7	19.8
	February 2002	5.10	390	ND (<0.10)	ND (<0.01)	150	NA	NA	240	7.17	9.0	14.9
	August 2002	8.00	520	ND (<0.10)	ND (<0.01)	95			270J	7.06	5.1	21.2

Table 5
Historical Groundwater Geochemical Parameters Summary
POL Hill, Hamilton Army Airfield, Novato, California
(March/April 1998 through August 2002)

Well NO.	Date Sampled	Dissolved Oxygen (mg/L)	Redox (mv)	Ferrous Iron (mg/L)	Methane (mg/L)	Sulfate (mg/L)	Total Sulfide (mg/L)	Nitrate (mg/L)	Total Alkalinity as $CaCO_3$ (mg/L)	pH	Turbidity (NTU)	Temperature (°C)
PL-MW-115	March/April 1998	1.00	144.5	0.02	0.058/0.062	132/130	ND (<0.05)	ND (<0.05)/ND (<0.05)	300/301	7.35	NA	17.0
	Sept/Oct 1998	2.10	10.6	ND (<0.05)	0.052/0.051	137/148	0.01	ND (<0.05)/ND (<0.05)	281/283	7.09	NA	21.2
	September 2001	1.30	530	ND (<0.10)	ND (<1.0)/ND (<0.005)	130	NA	NA	280	7.19	1.1	19.6
	February 2002	2.60	420	ND (<0.10)	ND (<0.01)	120	NA	NA	280	7.35	3.0	17.9
	August 2002	4.20	530	ND (<0.10)	ND (<0.01)	140			270J	7.29	ND (<1.0)	23.5
PL-MW-116	March/April 1998	6.70	197.4	ND (<0.05)	ND (<0.002)	26	ND (<0.05)	1.3	165	6.94	NA	17.3
	Sept/Oct 1998	6.11	285.5	0.01	ND (<0.002)	29	0.04	0.98	166	6.96	NA	22.2
	September 2001	2.80	520	ND (<0.10)	ND (<1.0)/ND (<0.005)	38	NA	NA	160	7.16	23.0	19.4
	February 2002	6.50	430	ND (<0.10)	ND (<0.01)	32	NA	NA	170	7.2	26.0	16.2
	August 2002	6.80	540	ND (<0.10)	ND (<0.01)	32			160J	7.16	12	19.2
MW-POLA-121	March/April 1998	0.60	11.5	ND (<0.05)	0.12	15	ND (<0.05)	ND (<0.05)	128	6.42	NA	17.9
	Sept/Oct 1998	1.91	-61.5	2.88	0.6	13	0.06	ND (<0.05)	404	6.81	NA	22.8
	September 2001	3.10	530	ND (<0.10)	ND (<1.0)/ND (<0.005)	16	NA	NA	290	7.04	12.0	18.4
	February 2002	7.10	410	ND (<0.10)	ND (<0.01)	24	NA	NA	160	7.34	8.5	18.6
	August 2002	6.90	540	ND (<0.10)	ND (<0.01)	20			240J	7.2	110	18.2

Notes:
Historical data are extracted from IT report (IT, 1999)
ND - Not detected above practical quantitation limit (practical quantitation limit is in parenthesis)
NA - Not analyzed
[a] Analyzed by ASTM D3416M
[b] Analyzed by method RSK 175

J Estimated
mg/L - Milligrams per liter
mv - Millivolts
NTU - Nephelometric Turbidity Units
°C - Degrees Celsius



0 2 4

SCALE MILES

N

SOURCE: USGS 30X60 MINUTE QUADRANGLE Topographic Map — 01 Jul 1983

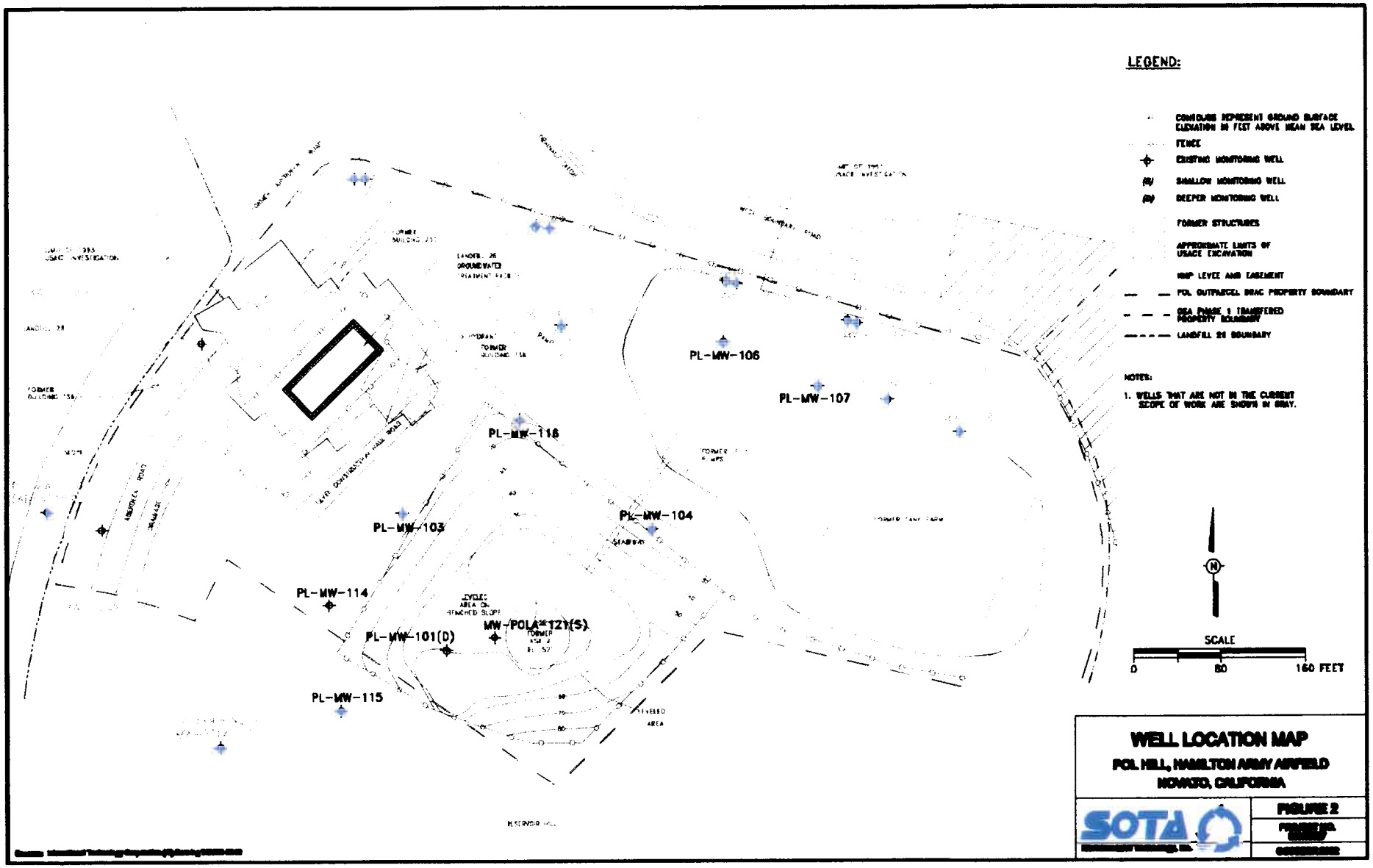
SITE MAP

POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

SOTA Environmental Technology, Inc.

FIGURE 1

PROJECT NO.

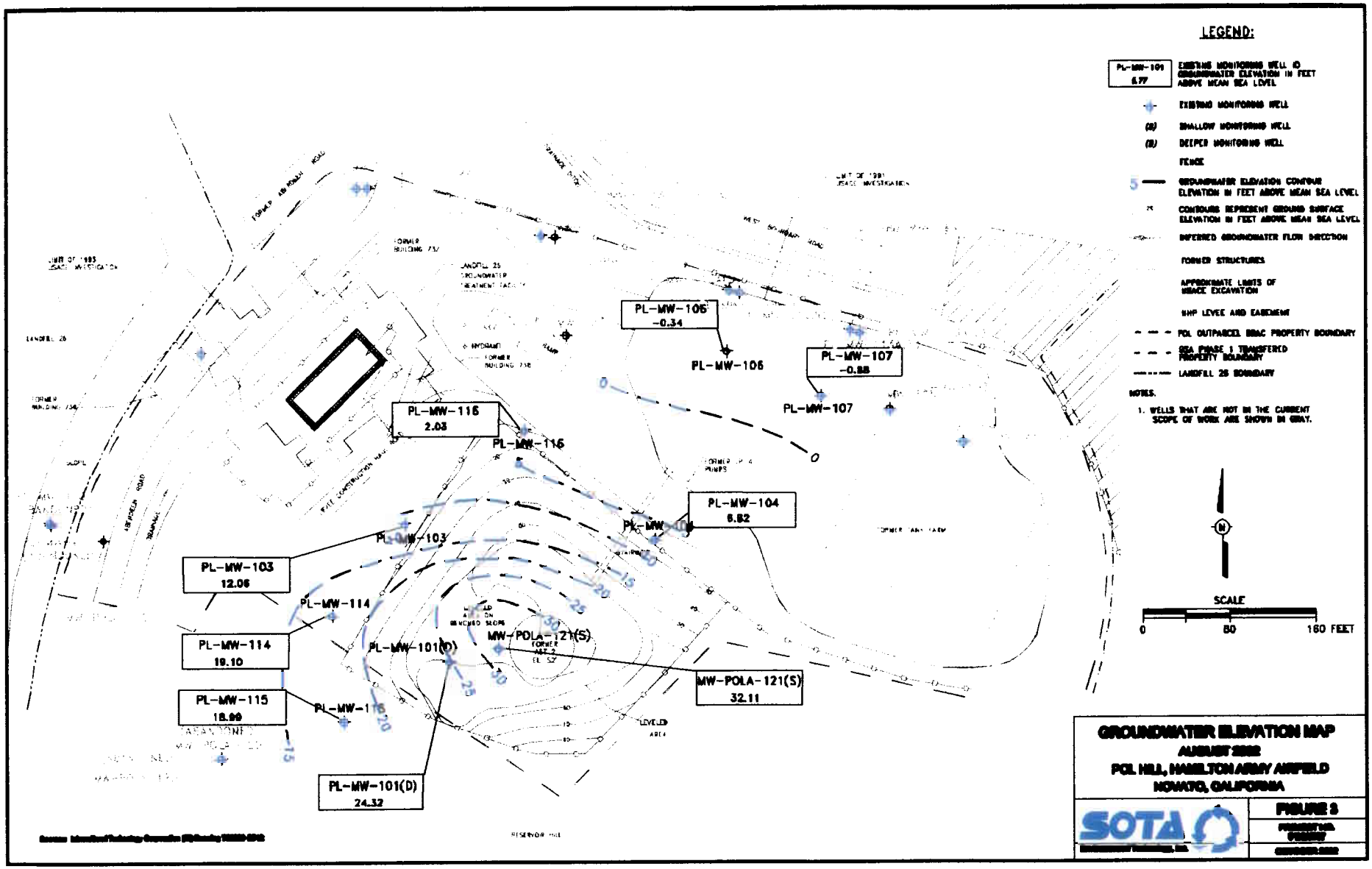


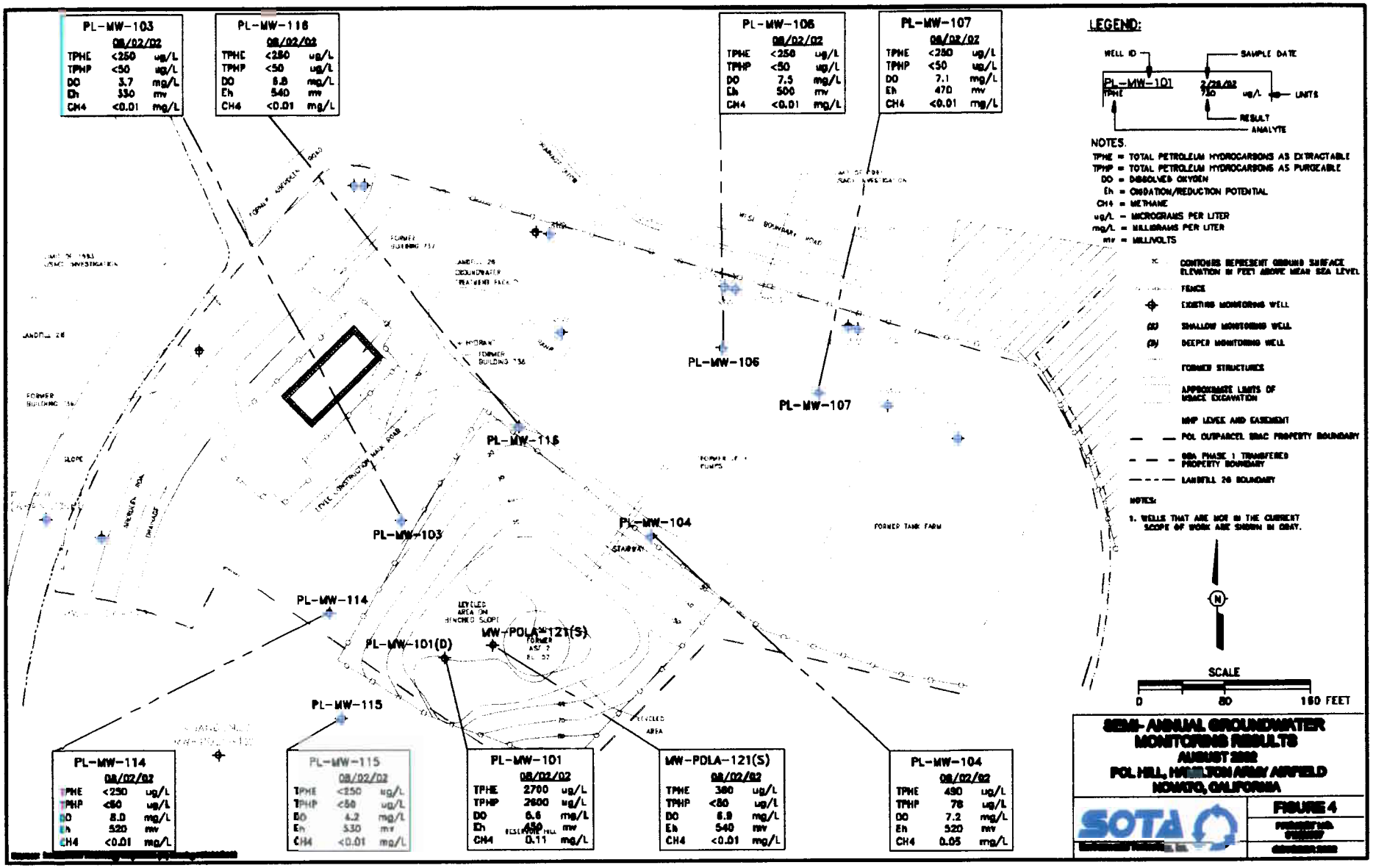
WELL LOCATION MAP

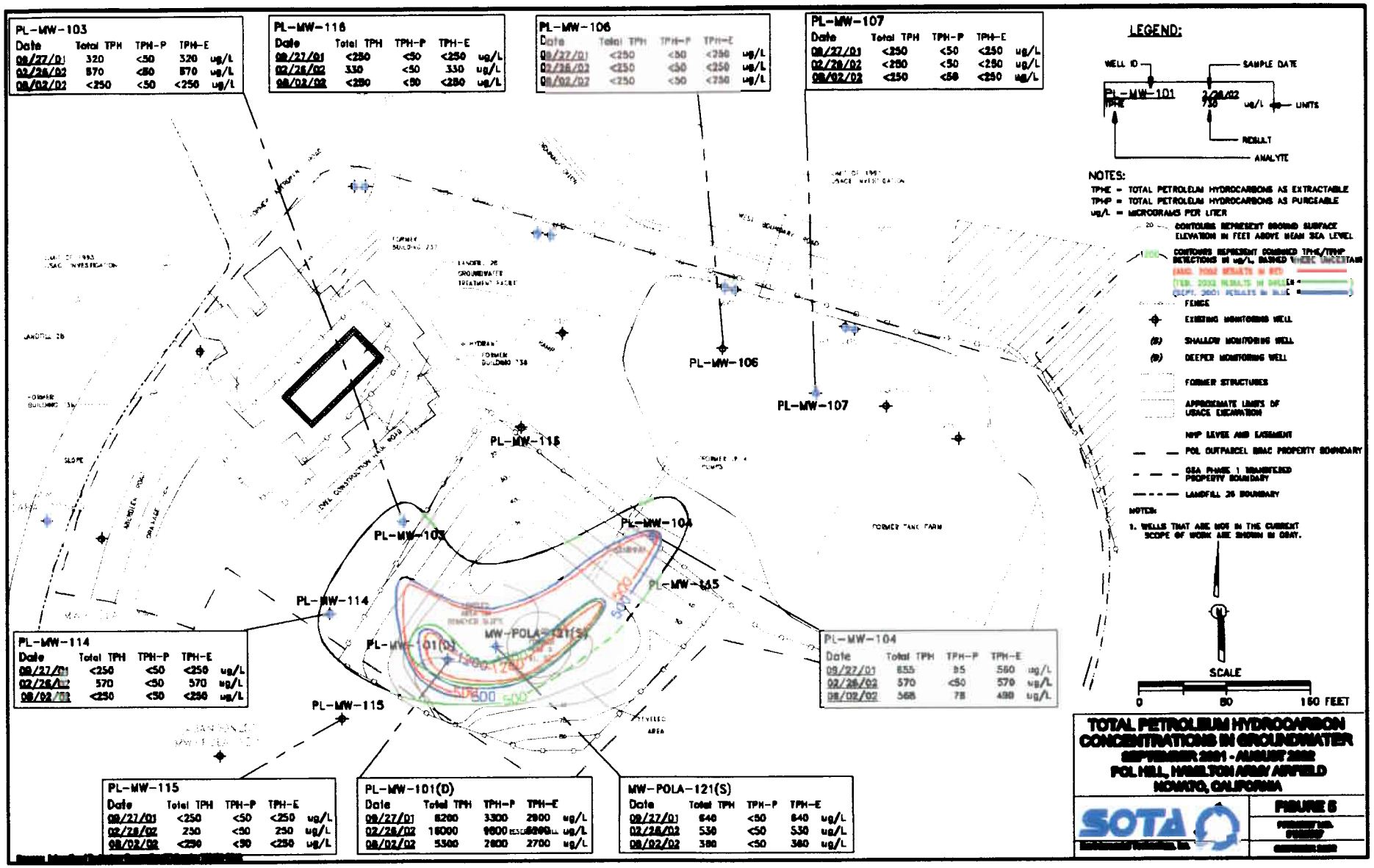
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA

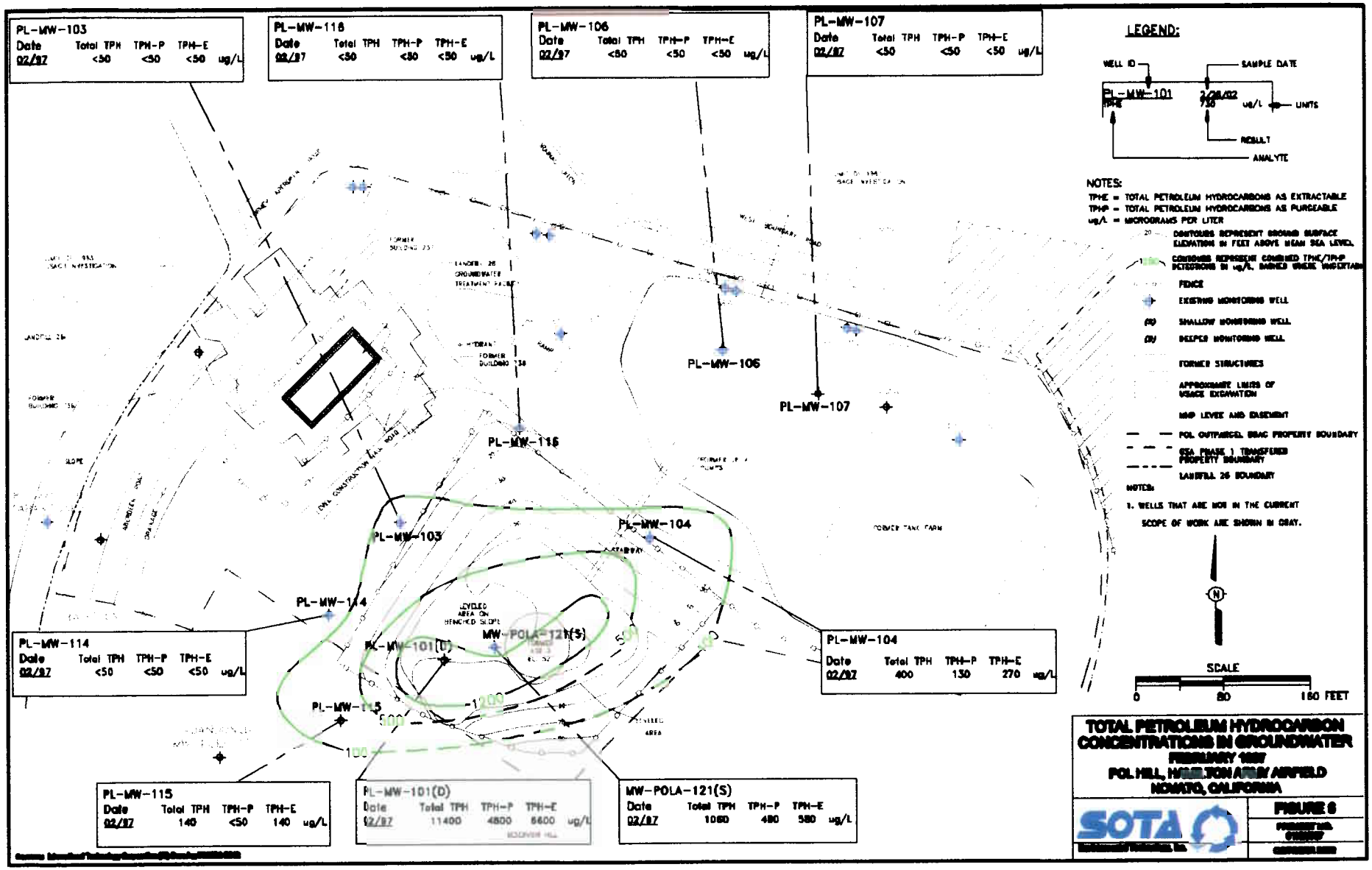
SOTA

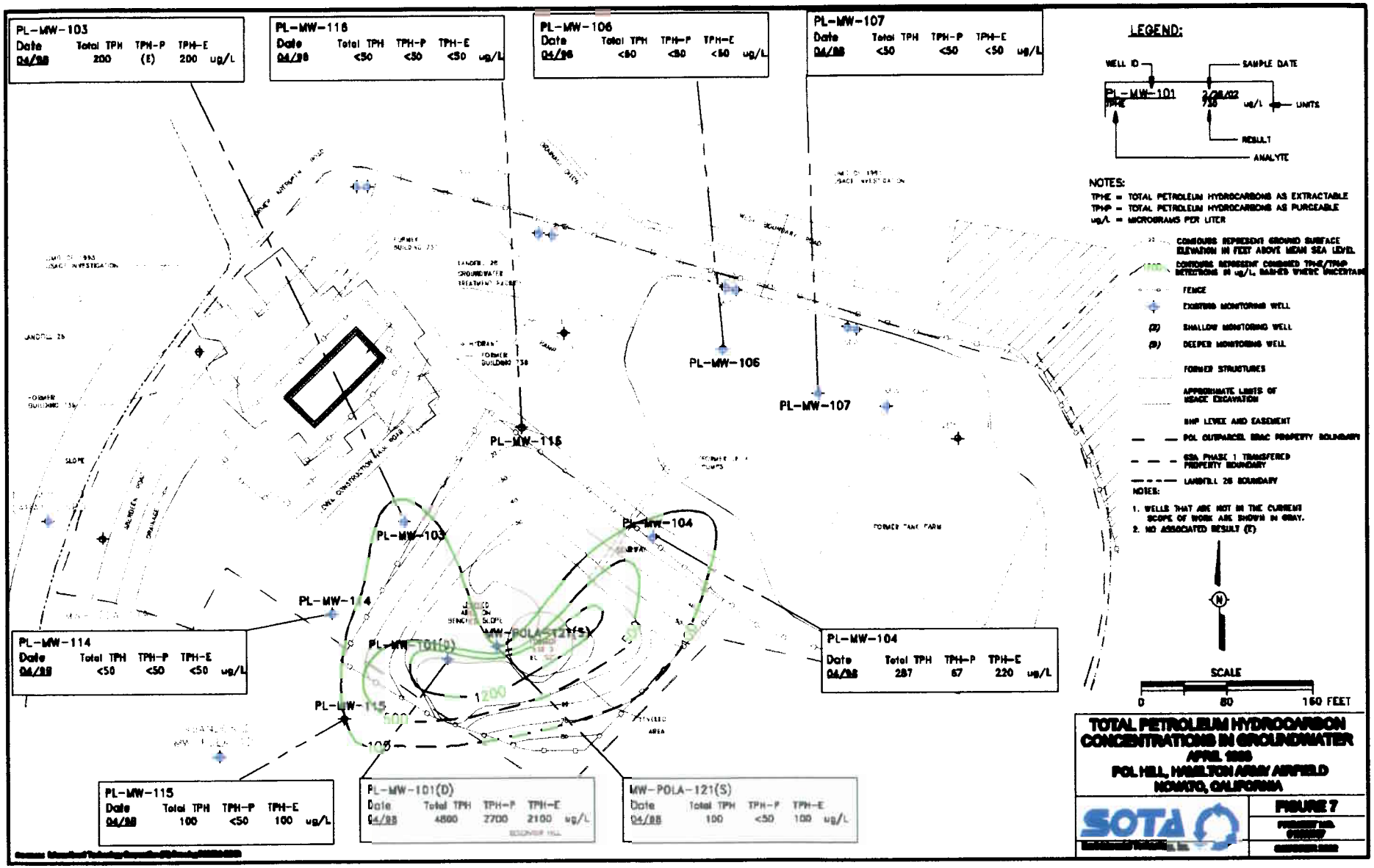
FIGURE 2

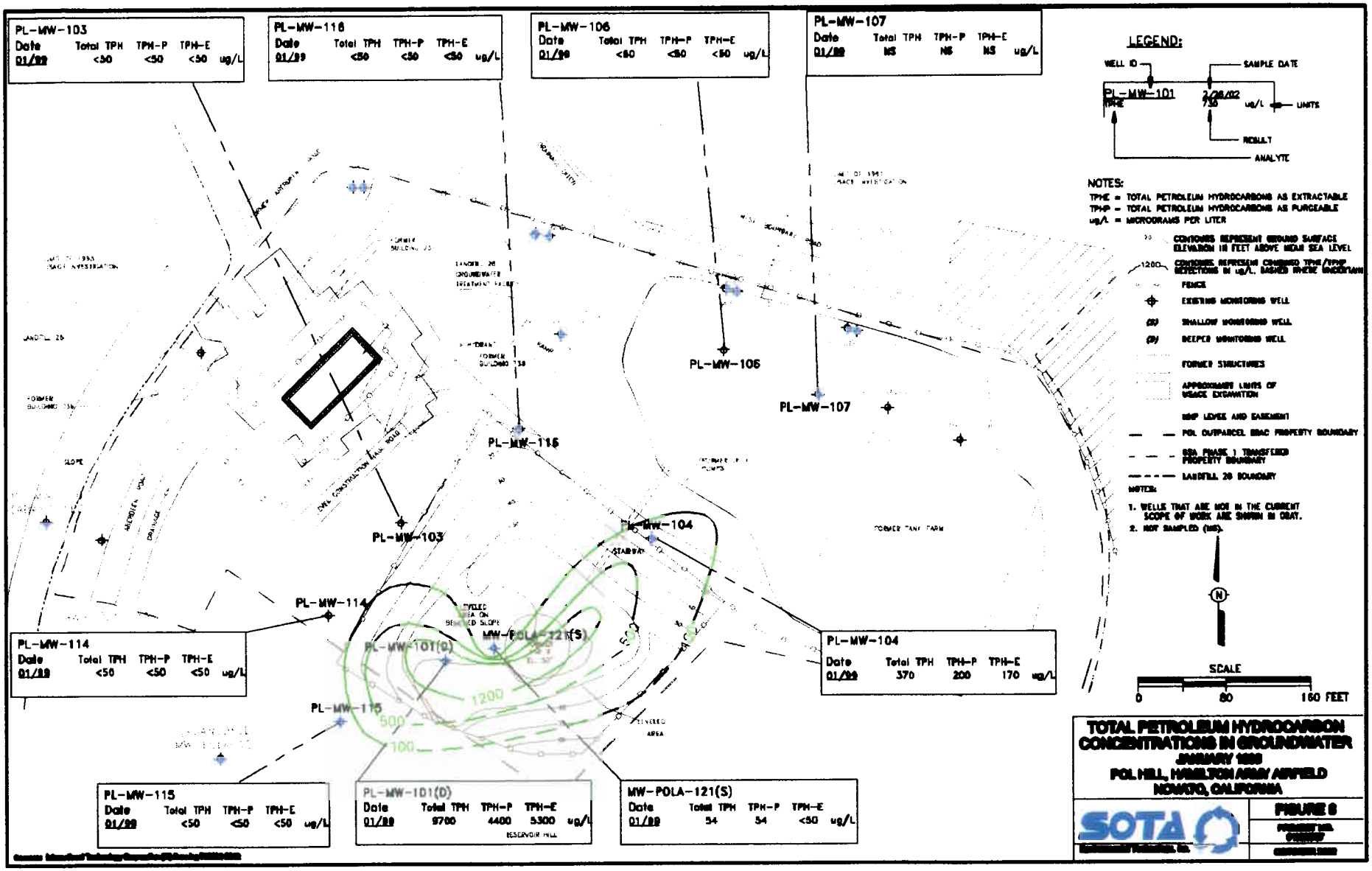

LEGEND:
PL-MW-101 6.77
EXISTING MONITORING WELL ID GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FENCE
5 GROUNDWATER ELEVATION CONTOUR ELEVATION IN FEET ABOVE MEAN SEA LEVEL
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
INFERRED GROUNDWATER FLOW DIRECTION
FORMER STRUCTURES
APPROXIMATE LIMITS OF MEACE EXCAVATION
NHP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
SEA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
SCALE
0 80 160 FEET
N
PL-MW-106 -0.34
PL-MW-106
PL-MW-107 -0.88
PL-MW-107
PL-MW-116 2.03
PL-MW-116
PL-MW-104 6.82
PL-MW-104
PL-MW-103
PL-MW-103 12.06
PL-MW-114
PL-MW-114 19.10
PL-MW-101(D)
MW-POLA-121(S)
MW-POLA-121(S) 32.11
PL-MW-115 18.90
PL-MW-115
PL-MW-101(D) 24.32
LANDFILL 26
FORMER BUILDING 737
LANDFILL 26 GROUNDWATER TREATMENT FACILITY
FORMER BUILDING 736
FORMER PUMPS
FORMER TANK FARM
LEVELED AREA
RESERVOIR HILL
GROUNDWATER ELEVATION MAP
AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 3

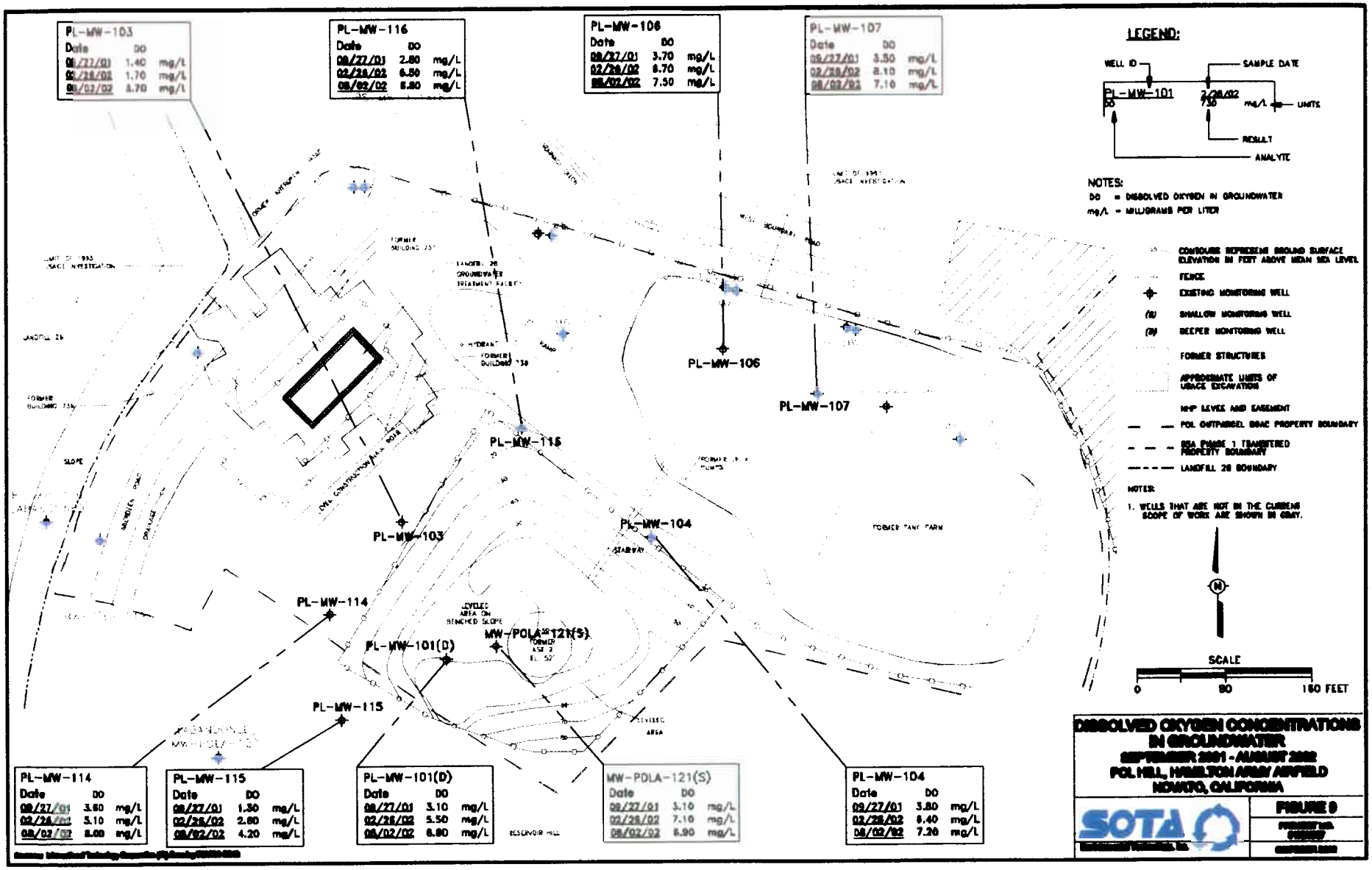

PL-MW-103
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 3.7 mg/L
Eh 330 mv
CH4 <0.01 mg/L
PL-MW-116
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 5.8 mg/L
Eh 540 mv
CH4 <0.01 mg/L
PL-MW-106
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 7.5 mg/L
Eh 500 mv
CH4 <0.01 mg/L
PL-MW-107
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 7.1 mg/L
Eh 470 mv
CH4 <0.01 mg/L
PL-MW-114
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 8.0 mg/L
Eh 520 mv
CH4 <0.01 mg/L
PL-MW-115
08/02/02
TPHE <250 ug/L
TPHP <50 ug/L
DO 4.2 mg/L
Eh 530 mv
CH4 <0.01 mg/L
PL-MW-101
08/02/02
TPHE 2700 ug/L
TPHP 2600 ug/L
DO 6.6 mg/L
Eh 450 mv
CH4 0.11 mg/L
MW-PDLA-121(S)
08/02/02
TPHE 380 ug/L
TPHP <50 ug/L
DO 6.9 mg/L
Eh 540 mv
CH4 <0.01 mg/L
PL-MW-104
08/02/02
TPHE 490 ug/L
TPHP 78 ug/L
DO 7.2 mg/L
Eh 520 mv
CH4 0.05 mg/L
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-PDLA-121(S)
PL-MW-115
FORMER TANK FARM
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
TPHE
2/28/02
750
ug/L
UNITS
RESULT
ANALYTE
NOTES:
TPHE = TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLE
TPHP = TOTAL PETROLEUM HYDROCARBONS AS PUROGABLE
DO = DISSOLVED OXYGEN
Eh = OXIDATION/REDUCTION POTENTIAL
CH4 = METHANE
ug/L = MICROGRAMS PER LITER
mg/L = MILLIGRAMS PER LITER
mv = MILLIVOLTS
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF MSACC EXCAVATION
MHP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0
80
160 FEET
SEMI-ANNUAL GROUNDWATER MONITORING RESULTS
AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 4

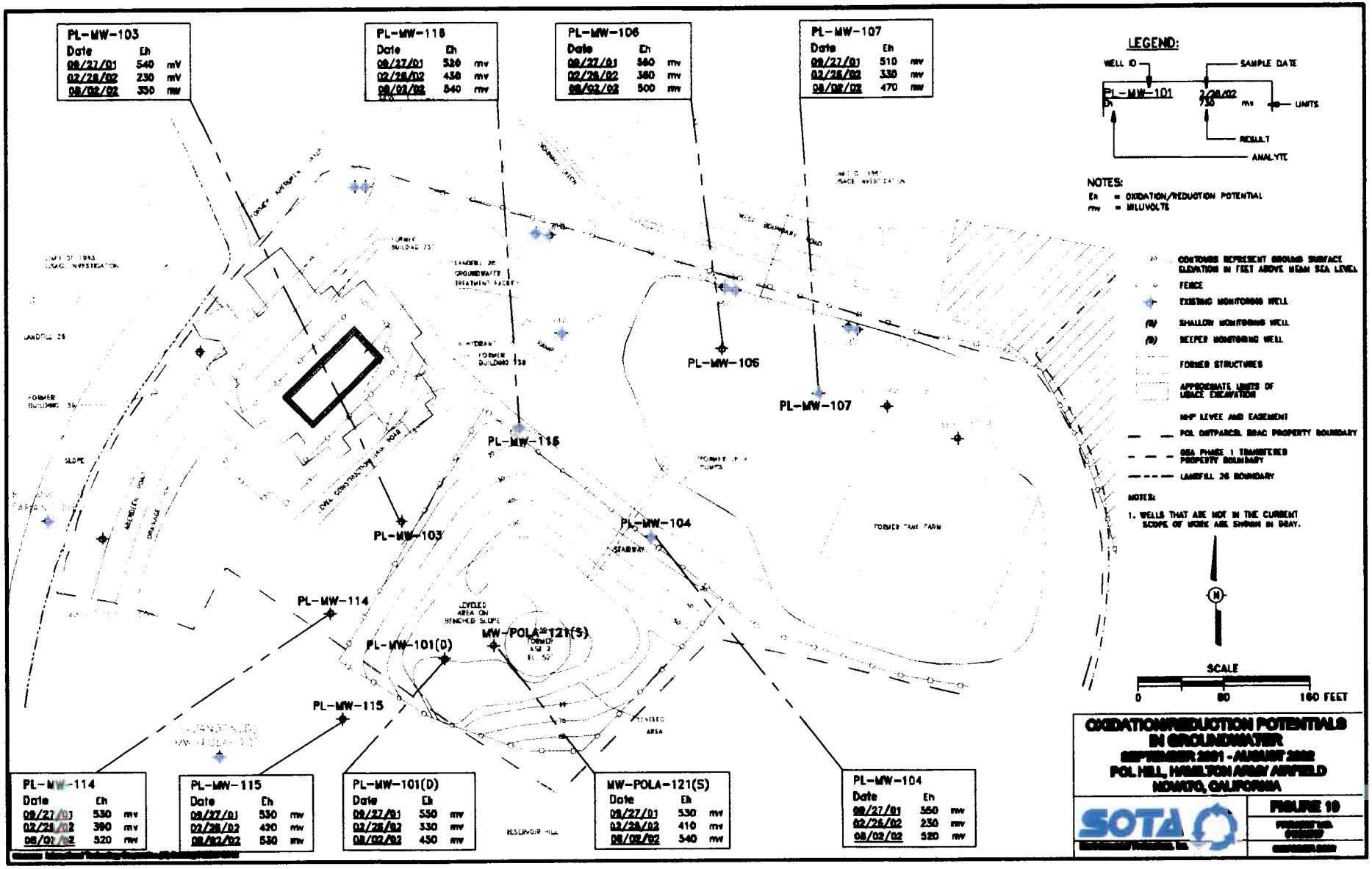

PL-MW-103
Date Total TPH TPH-P TPH-E
09/27/01 320 <50 320 ug/L
02/28/02 570 <50 570 ug/L
08/02/02 <250 <50 <250 ug/L
PL-MW-116
Date Total TPH TPH-P TPH-E
09/27/01 <250 <50 <250 ug/L
02/28/02 330 <50 330 ug/L
08/02/02 <250 <50 <250 ug/L
PL-MW-106
Date Total TPH TPH-P TPH-E
09/27/01 <250 <50 <250 ug/L
02/28/02 <250 <50 <250 ug/L
08/02/02 <250 <50 <250 ug/L
PL-MW-107
Date Total TPH TPH-P TPH-E
09/27/01 <250 <50 <250 ug/L
02/28/02 <250 <50 <250 ug/L
08/02/02 <250 <50 <250 ug/L
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
TPHE
2/28/02
730
ug/L
UNITS
RESULT
ANALYTE
NOTES:
TPHE = TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLE
TPHP = TOTAL PETROLEUM HYDROCARBONS AS PURGEABLE
ug/L = MICROGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
CONTOURS REPRESENT COMBINED TPHE/TPHP DETECTIONS IN ug/L, DASHED WHERE UNCERTAIN
(AUG. 2002 RESULTS IN RED)
(FEB. 2002 RESULTS IN GREEN)
(SEPT. 2001 RESULTS IN BLUE)
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF USACE EXCAVATION
NMP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
GSA PHASE 1 TRANSFERRED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0 80 160 FEET
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-105
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
PL-MW-114
Date Total TPH TPH-P TPH-E
09/27/01 <250 <50 <250 ug/L
02/28/02 570 <50 570 ug/L
08/02/02 <250 <50 <250 ug/L
PL-MW-104
Date Total TPH TPH-P TPH-E
09/27/01 655 95 560 ug/L
02/28/02 570 <50 570 ug/L
08/02/02 568 78 490 ug/L
PL-MW-115
Date Total TPH TPH-P TPH-E
09/27/01 <250 <50 <250 ug/L
02/28/02 250 <50 250 ug/L
08/02/02 <250 <50 <250 ug/L
PL-MW-101(D)
Date Total TPH TPH-P TPH-E
09/27/01 6200 3300 2900 ug/L
02/28/02 16000 9800 6200 ug/L
08/02/02 5300 2600 2700 ug/L
MW-POLA-121(S)
Date Total TPH TPH-P TPH-E
09/27/01 640 <50 640 ug/L
02/28/02 530 <50 530 ug/L
08/02/02 380 <50 380 ug/L
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER
SEPTEMBER 2001 - AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 5

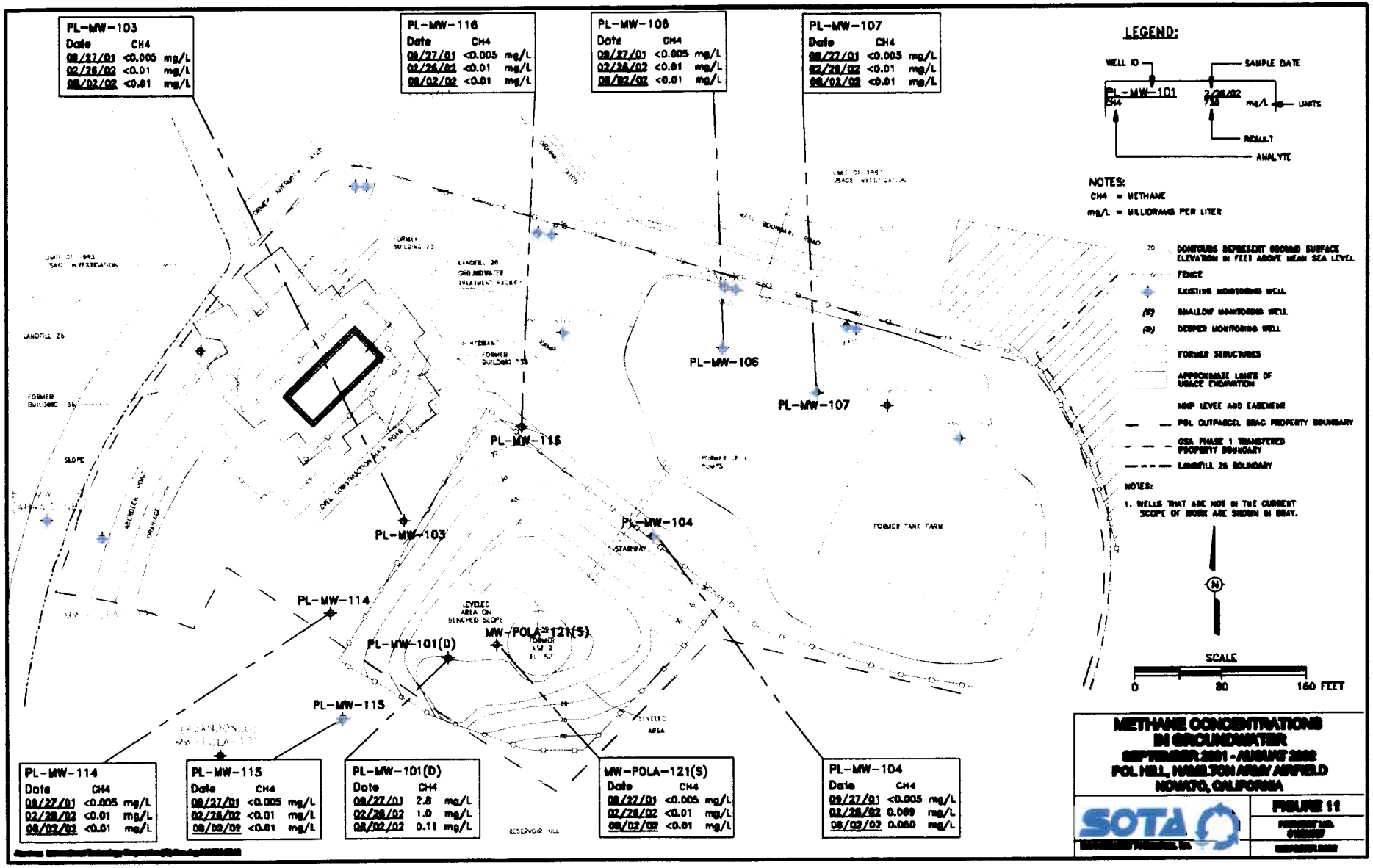

PL-MW-103
Date Total TPH TPH-P TPH-E
02/97 <50 <50 <50 ug/L
PL-MW-116
Date Total TPH TPH-P TPH-E
02/97 <50 <50 <50 ug/L
PL-MW-106
Date Total TPH TPH-P TPH-E
02/97 <50 <50 <50 ug/L
PL-MW-107
Date Total TPH TPH-P TPH-E
02/97 <50 <50 <50 ug/L
PL-MW-114
Date Total TPH TPH-P TPH-E
02/97 <50 <50 <50 ug/L
PL-MW-104
Date Total TPH TPH-P TPH-E
02/97 400 130 270 ug/L
PL-MW-115
Date Total TPH TPH-P TPH-E
02/97 140 <50 140 ug/L
PL-MW-101(D)
Date Total TPH TPH-P TPH-E
02/97 11400 4800 6600 ug/L
MW-POLA-121(S)
Date Total TPH TPH-P TPH-E
02/97 1060 480 580 ug/L
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
2/28/02
TPHE
750
ug/L
UNITS
RESULT
ANALYTE
NOTES:
TPHE = TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLE
TPHP = TOTAL PETROLEUM HYDROCARBONS AS PURGEABLE
ug/L = MICROGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
CONTOURS REPRESENT COMBINED TPHE/TPHP DETECTIONS IN ug/L, DASHED WHERE UNCERTAIN
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF USACE EXCAVATION
MHP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
GSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOW IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0
80
160 FEET
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER
FEBRUARY 1997
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 6


PL-MW-103
Date Total TPH TPH-P TPH-E
04/98 200 (E) 200 ug/L
PL-MW-118
Date Total TPH TPH-P TPH-E
04/98 <50 <50 <50 ug/L
PL-MW-106
Date Total TPH TPH-P TPH-E
04/98 <50 <50 <50 ug/L
PL-MW-107
Date Total TPH TPH-P TPH-E
04/98 <50 <50 <50 ug/L
PL-MW-114
Date Total TPH TPH-P TPH-E
04/98 <50 <50 <50 ug/L
PL-MW-104
Date Total TPH TPH-P TPH-E
04/98 287 67 220 ug/L
PL-MW-115
Date Total TPH TPH-P TPH-E
04/98 100 <50 100 ug/L
PL-MW-101(D)
Date Total TPH TPH-P TPH-E
04/98 4800 2700 2100 ug/L
MW-POLA-121(S)
Date Total TPH TPH-P TPH-E
04/98 100 <50 100 ug/L
PL-MW-106
PL-MW-107
PL-MW-115
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
1200
500
100
LANDFILL 26
FORMER BUILDING 736
FORMER TANK FARM
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
2/28/02
TPHE
TPHP
ug/L
UNITS
RESULT
ANALYTE
NOTES:
TPHE = TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLE
TPHP = TOTAL PETROLEUM HYDROCARBONS AS PURGEABLE
ug/L = MICROGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
CONTOURS REPRESENT COMBINED TPHE/TPHP DETECTIONS IN ug/L, DASHED WHERE UNCERTAIN
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF MSACC EXCAVATION
BNP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
ESA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
2. NO ASSOCIATED RESULT (E)
N
SCALE
0
80
160 FEET
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER
APRIL 1998
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 7


PL-MW-103
Date Total TPH TPH-P TPH-E
01/99 <50 <50 <50 ug/L
PL-MW-118
Date Total TPH TPH-P TPH-E
01/99 <50 <50 <50 ug/L
PL-MW-106
Date Total TPH TPH-P TPH-E
01/99 <50 <50 <50 ug/L
PL-MW-107
Date Total TPH TPH-P TPH-E
01/99 NS NS NS ug/L
PL-MW-114
Date Total TPH TPH-P TPH-E
01/99 <50 <50 <50 ug/L
PL-MW-115
Date Total TPH TPH-P TPH-E
01/99 <50 <50 <50 ug/L
PL-MW-101(D)
Date Total TPH TPH-P TPH-E
01/99 9700 4400 5300 ug/L
MW-POLA-121(S)
Date Total TPH TPH-P TPH-E
01/99 54 54 <50 ug/L
PL-MW-104
Date Total TPH TPH-P TPH-E
01/99 370 200 170 ug/L
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
1200
500
100
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
7/28/02
TPHE
750
ug/L
UNITS
RESULT
ANALYTE
NOTES:
TPHE = TOTAL PETROLEUM HYDROCARBONS AS EXTRACTABLE
TPHP = TOTAL PETROLEUM HYDROCARBONS AS PURGEABLE
ug/L = MICROGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
CONTOURS REPRESENT COMBINED TPHE/TPHP DETECTIONS IN ug/L, DASHED WHERE UNCERTAIN
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF VEGAS EXCAVATION
NMP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
BRA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
2. NOT SAMPLED (NS).
N
SCALE
0
80
160 FEET
TOTAL PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER
JANUARY 1999
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 8


PL-MW-103
Date DO
09/27/01 1.40 mg/L
02/26/02 1.70 mg/L
08/02/02 8.70 mg/L
PL-MW-116
Date DO
09/27/01 2.80 mg/L
02/26/02 6.50 mg/L
08/02/02 6.80 mg/L
PL-MW-106
Date DO
09/27/01 3.70 mg/L
02/26/02 6.70 mg/L
08/02/02 7.50 mg/L
PL-MW-107
Date DO
09/27/01 3.50 mg/L
02/26/02 8.10 mg/L
08/02/02 7.10 mg/L
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
2/26/02
DO
7.50
mg/L
UNITS
RESULT
ANALYTE
NOTES:
DO = DISSOLVED OXYGEN IN GROUNDWATER
mg/L = MILLIGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF USACE EXCAVATION
MHP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
SEA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0
80
160 FEET
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
LANDFILL 26
FORMER BUILDING 737
FORMER BUILDING 738
LANDFILL 26 GROUNDWATER TREATMENT FACILITY
HYDRANT
SLOPE
MERRILL ROAD
DRAINAGE
LEVELED AREA ON BENCHED SLOPE
FORMER TANK FARM
STAIRWAY
LEVELED AREA
RESERVOIR HILL
PL-MW-114
Date DO
09/27/01 3.60 mg/L
02/26/02 5.10 mg/L
08/02/02 8.00 mg/L
PL-MW-115
Date DO
09/27/01 1.30 mg/L
02/26/02 2.80 mg/L
08/02/02 4.20 mg/L
PL-MW-101(D)
Date DO
09/27/01 3.10 mg/L
02/26/02 5.50 mg/L
08/02/02 6.80 mg/L
MW-POLA-121(S)
Date DO
09/27/01 3.10 mg/L
02/26/02 7.10 mg/L
08/02/02 6.90 mg/L
PL-MW-104
Date DO
09/27/01 3.80 mg/L
02/26/02 6.40 mg/L
08/02/02 7.20 mg/L
DISSOLVED OXYGEN CONCENTRATIONS IN GROUNDWATER
SEPTEMBER 2001 - AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 8


PL-MW-103
Date Eh
09/27/01 540 mV
02/28/02 230 mV
08/02/02 350 mV
PL-MW-116
Date Eh
09/27/01 520 mv
02/28/02 430 mv
08/02/02 540 mv
PL-MW-106
Date Eh
09/27/01 560 mv
02/28/02 380 mv
08/02/02 500 mv
PL-MW-107
Date Eh
09/27/01 510 mv
02/28/02 330 mv
08/02/02 470 mv
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
2/28/02
Eh
730
mv
UNITS
RESULT
ANALYTE
NOTES:
Eh = OXIDATION/REDUCTION POTENTIAL
mv = MILLIVOLTS
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF USACE EXCAVATION
MHP LEVEE AND EASEMENT
POL DISTRICT, BRAC PROPERTY BOUNDARY
GSA PHASE I TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0
80
160 FEET
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
LANDFILL 26
SLOPE
FORMER BUILDING 136
FORMER TANK FARM
STAIRWAY
LEVELED AREA ON BENCHED SLOPE
RESERVOIR HILL
PL-MW-114
Date Eh
09/27/01 530 mv
02/28/02 390 mv
08/02/02 520 mv
PL-MW-115
Date Eh
09/27/01 530 mv
02/28/02 420 mv
08/02/02 530 mv
PL-MW-101(D)
Date Eh
09/27/01 550 mv
02/28/02 330 mv
08/02/02 450 mv
MW-POLA-121(S)
Date Eh
09/27/01 530 mv
02/28/02 410 mv
08/02/02 540 mv
PL-MW-104
Date Eh
09/27/01 560 mv
02/28/02 230 mv
08/02/02 520 mv
OXIDATION/REDUCTION POTENTIALS IN GROUNDWATER
SEPTEMBER 2001 - AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 10


PL-MW-103
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-116
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-106
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-107
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
LEGEND:
WELL ID
SAMPLE DATE
PL-MW-101
CH4
mg/L
UNITS
RESULT
ANALYTE
NOTES:
CH4 = METHANE
mg/L = MILLIGRAMS PER LITER
CONTOURS REPRESENT GROUND SURFACE ELEVATION IN FEET ABOVE MEAN SEA LEVEL
FENCE
EXISTING MONITORING WELL
(S) SHALLOW MONITORING WELL
(D) DEEPER MONITORING WELL
FORMER STRUCTURES
APPROXIMATE LIMITS OF USACE EXCAVATION
NMP LEVEE AND EASEMENT
POL OUTPARCEL BRAC PROPERTY BOUNDARY
OSA PHASE 1 TRANSFERED PROPERTY BOUNDARY
LANDFILL 26 BOUNDARY
NOTES:
1. WELLS THAT ARE NOT IN THE CURRENT SCOPE OF WORK ARE SHOWN IN GRAY.
N
SCALE
0
80
160 FEET
PL-MW-106
PL-MW-107
PL-MW-116
PL-MW-103
PL-MW-104
PL-MW-114
PL-MW-101(D)
MW-POLA-121(S)
PL-MW-115
LANDFILL 26
FORMER TANK FARM
PL-MW-114
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-115
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-101(D)
Date CH4
08/27/01 2.8 mg/L
02/26/02 1.0 mg/L
08/02/02 0.11 mg/L
MW-POLA-121(S)
Date CH4
08/27/01 <0.005 mg/L
02/26/02 <0.01 mg/L
08/02/02 <0.01 mg/L
PL-MW-104
Date CH4
08/27/01 <0.005 mg/L
02/26/02 0.089 mg/L
08/02/02 0.060 mg/L
METHANE CONCENTRATIONS IN GROUNDWATER
SEPTEMBER 2001 - AUGUST 2002
POL HILL, HAMILTON ARMY AIRFIELD
NOVATO, CALIFORNIA
SOTA
FIGURE 11