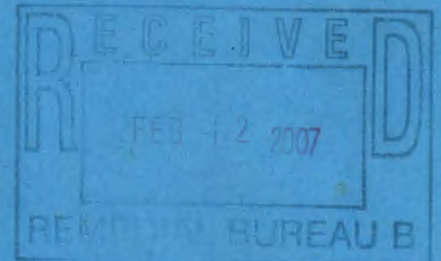


**ARAMARK Uniform Services (Syracuse) LLC
Christopher Service Company Site
3009 and 3117 Milton Avenue
Village of Solvay, New York**

**Voluntary Cleanup Project
VCP Site #V00665-7**

Voluntary Cleanup Site Investigation Report

**April 2006
Revision No. 1: January 2007**



Engineers • Environmental Scientists • Planners • Landscape Architects

**290 Elwood Davis Road
Box 3107
Syracuse, New York 13220**

November 14, 2006

Brian Davidson
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7016

File: 909.001

Re: ARAMARK Uniform Services (VCP Site #V00665-7)
November 2006 Progress Report
VCSIR Comment Responses

INITIALS:	DLH
JN & FILE ID	909.001
DATE:	11/14/2006
COPY	
DLH	
ROUTING COPY	

Dear Mr. Davidson:

This correspondence serves as the November 2006 Monthly Progress Report for the ARAMARK Uniform Services Voluntary Cleanup Project located at 3009 and 3117 Milton Avenue in Solvay, New York. Our responses to your August 11, 2006 comments to the Voluntary Cleanup Site Investigation Report (VCSIR) are also provided.

VCSIR Comment Responses

Comment: Although 3009 Milton Avenue is vacant, a sub-slab vapor sample, an indoor air sample, and outdoor air sample is needed during the heating season with the building under "normal" operating conditions to complete the evaluation of vapor intrusion on this property.

Response: This building is scheduled for demolition, therefore, eliminating the need for additional vapor monitoring.

Comment: Section 3.0, please change the heading "Baseline Risk Assessment" to "Qualitative Human Health Exposure Assessment" and remove the work "risk" from this section and Section 4.1.

Response: The revised VCSIR will incorporate these comments.

Comment: The collection of two (2), rather than one (1) additional round of groundwater samples from the existing monitoring well network is recommended to confirm the results of previous sampling and the effect of natural attenuation.

Response: Two supplemental rounds of groundwater samples (four total) have been collected. The summary data tables from the first supplemental sampling round (third total) are attached. The third round data indicates that the volatile organic compounds concentrations are consistent with the previous two rounds. The concentrations of semi-volatile organic compounds have decreased. The results confirm that natural attenuation is occurring. The second supplemental round of samples is currently being analyzed by the contract laboratory. The results will be forwarded when available.



Brian Davidson
NYSDEC
November 14, 2006
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Comment: Should the two houses located to the south of the property on Third Street, near the corner of Bailey Avenue and Third Street (1018 Third Street) become occupied in the future, a sub-slab vapor sample, and indoor air sample, and outdoor air sample should be collected during the heating season to evaluate vapor intrusion.

Response: The structures on these properties have been demolished.

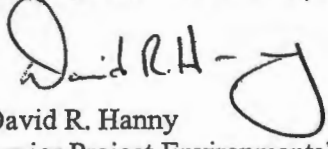
Comment: Has an in situ chemical oxidation remedy, such as the injection of Oxygen Release Compound (ORC) or permanganate, been considered in MW-2 to reduce concentrations of a source of contaminants in the subsurface soil?

Response: The utilization of chemical oxidation has been considered. Further evaluation of this remedial alternative will be addressed in the Remedial Action Work Plan. As outlined in the Voluntary Cleanup Site Investigation Report, a sub-slab ventilation system has been recommended to alleviate vapor intrusion concerns. As part of the design of the sub-slab ventilation system, a pilot test will be conducted in proximity to the former dry cleaning area. Additional data will be collected to size the sub-slab ventilation system. Based on the results of the pilot test, an additional remedial technology such as chemical oxidation may be employed to reduce the contaminant load. If the pilot test results indicate that the intended sub-slab vent system will accomplish indoor vapor mitigation and achieve some on-going mass removal, then the sub-slab vent system will be proposed as the remedy. Further discussion of this approach will be provided in the Remedial Action Work Plan following approval of the Voluntary Cleanup Site Investigation Report.

Following your review and approval of these responses, the VCSIR will be revised and submitted for approval. These comment responses will be inserted as a preface to the revised report. Please feel free to contact me if you have any questions regarding the project.

Very truly yours,

BARTON & LOGUIDICE, P.C.


David R. Hanny
Senior Project Environmental Scientist

DRH/akg

Cc: Gary Litwin – NYS DOH
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James Christopher III

ARAMARK Uniform Services (Syracuse) LLC
Christopher Service Company Site
Village of Solvay

Voluntary Cleanup Project
VCP Site #V00665-7

Voluntary Cleanup Site Investigation Report

April 2006
Revision No. 1: January 2007

Prepared for:

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Executive Summary

ARAMARK Uniform Services (Syracuse) LLC conducted an investigation of subsurface contamination in accordance with the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program (VCP) at its 3009 and 3117 Milton Avenue facility located in the Village of Solvay, Onondaga County, New York (see figure 1). The investigation and related activities were conducted under the oversight of Barton & Loguidice, P.C. (B&L) and the New York State Department of Environmental Conservation (NYSDEC). The site is identified in the VCP registry as VCP #V00665-7. The current primary site use is for an industrial laundry facility (3117 Milton Avenue) which does not include dry cleaning operations. There is also a residential property (3009 Milton Avenue) located east of the property that is currently vacant and is scheduled for demolition.

Previous site investigations identified the presence of volatile organic compounds (including petroleum hydrocarbons and chlorinated solvents) and semi-volatile organic compounds (polynuclear aromatic hydrocarbons) at concentrations that exceeded NYSDEC TAGM 4046 recommended soil cleanup objectives and NYSDEC Groundwater Quality Standards. The source and extent of the contamination was not fully defined, but the most significant contaminant concentrations were observed under the former dry cleaning area that was located in the interior of the western portion of the building. The purpose of the Voluntary Cleanup Site Investigation (VCSI) activities recently conducted was to identify any residual subsurface soil and groundwater contamination emanating from the site. These activities also defined the limits of residual contamination and any future remedial/mitigation efforts that would be necessary for the property to receive release from the VCP.

The field investigation activities included a review of available records, installation of subsurface soil borings and groundwater monitoring wells, installation of sub-slab and soil vapor survey points, and a residential private well survey. Several samples were collected as part of the investigation including: subsurface soil samples from the monitoring well borings, four rounds of groundwater samples from the permanent monitoring wells, and soil vapor samples from the sub-slab and soil gas survey points.

The results of these activities indicated the presence of residual petroleum-based contaminants (semi-volatile organic compounds – SVOCs) in subsurface soils, some of which exceeded their respective NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives. Subsurface soil exceedances were limited to SVOCs in proximity to MW-2 (located under the building near the former dry cleaning area) and MW-5 (western-most well on the north side of Milton Avenue). Due to their isolated nature, relatively low-level exceedances, and lack of VOCs; subsurface soil impacts do not warrant additional evaluation for remedial efforts.

Residual petroleum-based and chlorinated solvent contaminants were also detected above NYSDEC Part 703 Groundwater Standards. It appears that there are two distinct groundwater plumes emanating from the site. A chlorinated solvent plume is present below the building slab as delineated by historic locations GW-1, 4, and 7 and existing locations MW-2 and 6. Existing location MW-6 delineates the western (downgradient) extent of the plume. The source of the plume is likely associated with former dry cleaning operations conducted at the facility.

A petroleum-based plume (primarily indicated by elevated SVOCs) is present closer to Milton Avenue, but also encompasses a limited area below the building. The plume is delineated by historic GW locations with its terminus likely extending slightly beyond the existing location of MW-5. The source of the petroleum plume may be from historic site operations or from imported fill.

The depth to groundwater is approximately 5 to 6 feet below grade, with the exception of shallower depths adjacent to Milton Avenue (i.e., MW-5 and MW-6). Groundwater flows from southeast to northwest. Transport of contaminants via groundwater has been limited due to a small horizontal groundwater gradient (<0.05 percent). The low-level groundwater exceedances combined with a lack of downgradient receptors (as confirmed by a residential well survey) obviated the need for additional evaluation of groundwater remediation at the site.

The results of the sub-slab vapor survey have indicated the presence of chlorinated solvents, trichloroethene (TCE) and tetrachloroethene (PCE), above concentrations identified in the NYSDEC/NYSDOH Soil/Vapor Indoor Air Decision Matrices that warrant mitigation efforts. The elevated chlorinated solvent concentrations were limited to the western portion of the building (VP-2, 3, 4, and 9) near the former dry cleaning area. Based upon these results, an interim remedial measure (IRM) has been proposed. The proposed IRM includes the design and installation of a vapor intrusion mitigation system, based on the results of a pilot test to be conducted below the building slab in proximity to the former dry cleaning area. The system will require ongoing monitoring, the development of an operation and maintenance plan, and institutional controls to ensure that it is operated until no longer deemed necessary as determined by future monitoring. The adjacent residence (3009 Milton Avenue) which is located upgradient from the expected source is scheduled for demolition.

At this time, no active source area remediation is proposed. Following the completion of the IRM pilot test, construction, and initial monitoring, the necessity for source area remediation (employing chemical oxidation or other technologies) will be evaluated. If it is determined that a source area remediation is necessary, a Remedial Action Selection Report will be provided for the Department's review.



1.0 Introduction

ARAMARK Uniform Services conducted an investigation of subsurface contamination in accordance with the New York State Department of Environmental Conservation's (NYSDEC) Voluntary Cleanup Program (VCP) at its 3009 and 3117 Milton Avenue facility located in the Village of Solway, Onondaga County, New York (see figure 1). The Site is approximately 0.75-acres and is situated at the southeast corner of the intersection of Milton Avenue and Bailey Street. The current primary site use is for an industrial laundry facility (3117 Milton Avenue) which does not include dry cleaning operations. There is also a residential property (3009 Milton Avenue) located on the east side of the site which is currently vacant and scheduled for demolition.

Previous investigations conducted at the site include a 1999 Phase I Environmental Site Assessment (Phase I ESA) completed by LCS and a 2003 Limited Environmental Site Assessment Report and Supplement to the Site Investigation Report conducted by Ransom Environmental. Soil and groundwater samples were collected as part of the Ransom investigations and volatile and semi-volatile organic compounds were detected above NYSDEC standards. Based upon the findings of the 2003 Ransom Environmental Reports, low-level residual contamination appeared to be present both on- and off-site.

ARAMARK Uniform Services undertook a Voluntary Cleanup Site Investigation (VCP Site #V00665-7) in accordance with the NYSDEC's May 2002 Draft Voluntary Cleanup Program Guide. The investigation concentrated on characterizing the existing hydrogeologic and environmental conditions in order to determine the presence and extent of subsurface contamination originating from the Site. Site activities were conducted in accordance with the approved Site Work Plan containing a Sampling and Analysis Plan, Health and Safety Plan, and Citizen Participation Plan. The results of the investigation are the subject of this report.

1.1 Purpose of Report

This report presents the findings of the Voluntary Cleanup Site Investigation specific to the characterization of existing hydrogeologic and environmental conditions and the presence and extent of contaminants at the site. The results of the field activities were used to assess the existing contamination and to evaluate potential exposure targets. The report also presents a recommended remedial action based upon identifying methods to minimize, eliminate, or mitigate the release of contaminants from the site. Figures are located following the text, prior to the appendices in the back of the document.

1.2 Site Background

1.2.1 Site Description

The majority of the Site consists of a two-story block building utilized for non-dry cleaning laundry services (see figure 2). The front side of the building faces north towards Milton Avenue. There is a small parking area between the north side of the building and Milton Avenue. The main entrances to the facility are located on the western portion of the north side of the building. The eastern portion of the north side of the building consists of vehicle loading docks. The west side of the main building is adjacent to Bailey Avenue and access is provided by overhead bay doors. Beyond the rear of the building (south side) is a vacant area that historically abutted backyards of two residential properties that were located on Third Street. The two properties on Third Street, however, are owned by ARAMARK and have been demolished. The eastern portion of the main building is immediately adjacent to the residential structure (3009 Milton Avenue) located on the property. The two-story residential structure

located on the subject property is not considered as a source of the residual contamination associated with the site. The residential property is vacant and is scheduled for demolition.

1.2.2 Site History

The Site history was evaluated through a review of the Ransom Environmental Site Investigation Report and Supplement to the Site Investigation Report, along with the LCS, Inc Phase I ESA. Historical references available for review included the legal description and abstract of title, Sanborn Fire Insurance Maps, historic City directories, and historic aerial photographs. These documents are available for review in the VCP Application.¹

Research into the history of the Site indicates that the main use of the western portion has been for industrial laundry services (with the eastern portion being occupied by a residential property). Historically, water washing and dry cleaning operations were conducted at the Site. From 1946 to 1953 the Site was operated as a storage and auto repair facility with the current residential property located on the eastern portion. The building that was historically the auto repair facility appears to be the western portion of the current building located on the Site. The existing laundry facility

¹ At the time the application was submitted, Parcels A, B, and C were intended to be transferred from ARAMARK Uniform Acquisition, LLC to Christopher Services Company. Because of some corporate restructuring, described below, these transfers did not take place. On October 27, 2003, Aramark Uniform Acquisition, LLC changed its name to Aramark Uniform Services (Syracuse), LLC. Effective December 31, 2003, Christopher Services Company was merged into Aramark Uniform Services (Syracuse), LLC with Aramark Uniform Services (Syracuse), LLC as the surviving entity. Aramark Uniform Services (Syracuse), LLC, now owns all of the parcels that comprise the Site.

building appears to have been expanded to the east in 1999. Prior to the use as an auto repair facility in 1946, the Site was utilized for residential housing.

Initial historic reviews identified past on-site dry cleaning operations and past on-site auto repair activities as potential sources of contamination. The site also contained a 12,000-gallon fuel oil UST that was removed in 1971. This former UST was initially viewed as a potential source of contamination, but later investigations discount this possibility. The primary site contaminants are chlorinated solvents and petroleum hydrocarbons. The extent of the impacts of site contaminants were largely defined through previous investigations as described below.

1.2.3 Previous Investigations

The first investigation conducted at the site was a Phase I ESA by LCS, Inc. in 1999. The Phase I ESA included a records review and a non-intrusive site reconnaissance. No samples were collected as part of the Phase I ESA. LCS concluded that there was no historical evidence supporting the presence of a release of hazardous, toxic, or other contaminants of concern. The report did indicate the former presence of a 12,000-gallon heating oil UST which was reportedly removed from the site in 1971.

Ransom Environmental conducted a Limited Environmental Site Assessment in January 2003 and a Site Investigation Report was prepared in May 2003. The Ransom investigation focused on two areas of concern at the laundry facility Site: the former location of the 12,000-gallon fuel oil

UST (located below the existing 10,000-gallon carbon dioxide AST) and the former dry cleaning area located in the interior of the western portion of the building.

The January 2003 Ransom investigation included the installation of 10 soil/groundwater borings by direct push methods. The soil cores were screened with a photo-ionization detector (PID) and only one location exhibited elevated PID readings. Soil samples were collected at depths ranging from 7 to 8 feet below grade (approximately 6-inches above the groundwater table) from each of the boring locations and analyzed for the presence of volatile organic compounds (VOCs) by EPA Method 8260 and semi-volatile organic compounds (SVOCs) by EPA Method 8270. The locations of the historic soil/groundwater borings are shown on figure 3.

Following the collection of soil samples, groundwater samples were collected using temporary 1-inch diameter PVC well points and disposable bailers at locations SB-1 and SB's 4-10. Groundwater was not observed at locations SB-2 and 3. Groundwater samples were also analyzed for the presence of VOCs by EPA Method 8260 and SVOCs by EPA Method 8270.

The investigation identified the presence of VOCs (including petroleum hydrocarbons and chlorinated solvents) and SVOCs (polynuclear aromatic hydrocarbons) at concentrations that exceeded NYSDEC TAGM 4046 recommended soil cleanup objectives and NYSDEC Groundwater Quality Standards. The source and extent of the contamination was not fully defined. The most significant of the impacts were observed under the former dry cleaning area. Lower contaminant

concentrations were observed adjacent to the former 12,000-gallon UST, and no impacts were observed adjacent to the residential property (3009 Milton Avenue).

A Supplement to the Limited Environmental Site Assessment and Site Investigation Report was prepared in November 2003 based on the collection of off-site groundwater samples in May 2003. Four geoprobe borings (GW-24, 25, 26 and 27) were installed north of Milton Avenue and two borings (GW-28 and 29) were installed west of Bailey Street in order to collect groundwater samples to assess off-site impacts. Groundwater samples were analyzed for the presence of VOCs by EPA Method 625 and SVOCs by EPA Method 624. Although off-site impacts appeared minimal, the presence of VOCs (including petroleum hydrocarbons and chlorinated solvents) and SVOCs (polynuclear aromatic hydrocarbons) were identified at concentrations that exceeded NYSDEC Groundwater Quality Standards.

The potential sources of contamination were assumed to be the former underground storage tank and/or associated conveyance lines, the former dry cleaning area, or the floor drain and septic system. Historic sampling conducted by Ransom eliminated the floor drain and septic system as potential sources of contamination. The results of the historic Ransom subsurface soil and groundwater exceedances are summarized below.

Summary of January 2003 Subsurface Soil Boring Results (ug/kg – ppb)						
Compound	NYSDEC Soil Cleanup Objective	SB-1 (7.5- 8.0)	SB-4 (7.5- 8.0)	SB-6 (7.5- 8.0)	SB-7 (6.5- 7.0)	SB-9 (7.5-8.0)
Volatiles (EPA Method 8260)						
Tetrachloroethene	1,400	ND	ND	ND	28,800	ND
Trichloroethene	700	ND	813	ND	ND	ND
Vinyl chloride	200	ND	1,300	ND	ND	ND
Semi-Volatiles (EPA Method 8270)						
Benzo (a) anthracene	224	5,730	1,990	19,400	3,240	2,320
Benzo (a) pyrene	61	5,780	ND	12,900	ND	ND
Benzo (b) flouranthene	1,100	3,700	ND	13,100	ND	ND
Benzo (k) flouranthene	1,100	6,700	ND	18,700	ND	ND
Chrysene	400	5,800	1,840	21,900	3,390	2,160
Indeno (1,2,3-c,d) pyrene	3,200	3,430	ND	6,540	ND	ND

No compounds were detected above NYSDEC Recommended Soil Cleanup Objectives from locations SB-2, 3, 5, 8 and 10.

ND – Not detected above minimum detection limit or NYSDEC Recommended Soil Cleanup Objective.

Results based upon May 2003 Ransom Site Investigation Report.

Sample locations are depicted on figure 3.

Summary of Historical Groundwater Results (January/May 2003 – ug/l or ppb)								
Compound	NYSDEC Groundwater Standard	January 2003					May 2003	
		GW-1	GW-4	GW-5	GW-7	GW-9	GW-27	GW-28
Volatiles (EPA Method 8260)								
Cis-1,2-dichloroethene	5	105	4,260	ND	71.9	6.51	ND	ND
Tetrachloro-ethene	5	15.1	21.1	ND	381	5.28	11.7	ND
Trans 1,2-dichloroethene	5	ND	65.2	ND	13.1	ND	ND	ND
Trichloroethene	5	ND	82	ND	16.4	ND	ND	ND
1,1,2,2-tetra- chloroethane	5	ND	ND	ND	6.27	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	271	ND	ND	6.7
Benzene	0.7	4.7	1.48	1.17	1.69	ND	ND	ND
Ethylbenzene	5	29.3	ND	ND	13.5	ND	ND	ND
Total xylenes	5	ND	ND	ND	34.5	ND	ND	ND
toluene	5	ND	ND	ND	32.8	ND	ND	ND
n-propylbenzene	5	ND	ND	10.9	ND	ND	ND	ND
Sec-butylbenzene	5	ND	ND	17.5	ND	ND	ND	ND
Naphthalene	10	ND	ND	ND	52.5	ND	ND	ND
1,2,4-trimethyl-benzene	5	ND	ND	ND	20.3	ND	ND	ND

No VOCs were detected above NYSDEC Groundwater Standards at locations GW-6, 8 and 10 (January 2003) or at locations GW-24, 25, 26, and 29 (May 2003).

ND – Compound not detected at minimum detection limit or above NYSDEC Groundwater Standard.

Sample locations are depicted on figure 3.

**Summary of
Historical Groundwater Results
(January/May 2003 – ug/l or ppb)
- Continued -**

Compound	NYSDEC Ground- Water Standard	January 2003							May 2003		
		GW-1	GW-4	GW-5	GW-6	GW-7	GW-9	GW-10	GW-26	GW-27	GW-28
Semi-Volatiles (EPA Method 8270)											
Acen-aphthene	20	ND	ND	ND	ND	21.4	ND	ND	ND	ND	ND
Anthracene	50	ND	ND	ND	185	160	ND	ND	ND	ND	ND
Benzo (a) anthracene	0.002	3.51	41.9	7.19	340	172	5.15	5.41	5.76	3.68	7.04
Benzo (a) pyrene	0.002	ND	39.5	ND	216	101	4.45	5.37	ND	3.64	6.04
Benzo (b) flouranthene	0.002	ND	26.8	4.25	204	87.8	3.2	4.32	4.87	ND	5.16
Benzo (k) flouranthene	0.002	ND	12	4.15	294	107	2.94	5.39	5.04	3.44	5.72
Bis-phthalate	5	ND	ND	9.2	ND	266	6.39	ND	ND	ND	ND
Chrysene	0.002	3.9	37.2	7.35	368	170	5.4	6.24	6.81	4.44	8.04
Flouranthene	50	ND	ND	ND	894	380	ND	ND	9.61	ND	ND
Flourene	50	ND	ND	ND	ND	369	ND	ND	ND	ND	ND
Indeno pyrene	0.002	ND	ND	ND	96.9	63	ND	4.81	ND	ND	3.28
Naphthalene	10	ND	ND	ND	65	239	ND	ND	ND	ND	ND
Phenanthrene	50	ND	ND	ND	742	695	ND	ND	ND	ND	ND
pyrene	50	ND	ND	ND	889	317	ND	ND	ND	ND	ND

No SVOCs were detected above NYSDEC Groundwater Standards at locations GW-8 (January 2003) or at locations GW-24, 25, and 29 (May 2003).

ND – Compound not detected at minimum detection limit or above NYSDEC Groundwater Standard.

Sample locations are depicted on figure 3.



2.0 Voluntary Cleanup Site Investigation Report

2.1 Voluntary Cleanup Site Investigation

The following sections discuss the methodologies used during field activities to collect the data necessary to characterize physical and environmental conditions at the Site and to determine the appropriate level of remedial work required to bring the Site into compliance with the guidelines of the NYSDEC VCP.

2.1.1 *Site Survey and Preparation of Site Map*

A planimetric site base map was prepared from a survey completed by Ianuzzi & Romans, P.C., at a scale of 1 inch equals 20 feet. The base map identifies the property boundaries, utility poles, adjacent streets and properties, fences, manholes, subsurface utilities, on-site buildings, and other distinguishing features present at the Site.

2.1.2 *Site Inspection*

A site inspection team visited the site prior to intrusive investigations to catalog the types and amounts of waste/hazardous materials present on the property. The following conditions were observed:

Exterior Site Observations

Storm sewer catch basins were located adjacent to the building along the south side of Milton Avenue and the east side of Bailey Road. Underground gas utilities were present on the north

side of Milton Avenue and adjacent to the western exterior building wall on the east side of Bailey Road. Underground water utilities were also present on the north side of Milton Avenue. A 10,000-gallon carbon dioxide tank is located on the north side near the middle of the main building. No significant environmental concerns were noted in association with exterior features of the facility.

Interior Site Observations

The primary focus of the interior site walkover was in proximity to the former dry cleaning area near the existing water washing area. As stated above, dry cleaning is not currently conducted at the facility. In general, the facility appeared to be clean and no staining or visual observations of spills or leaks were noted. The facility manager provided a chemical data listing of all materials stored at the facility (see appendix A). The materials were stored in adequate containers and are not anticipated to be potential sources of observed contamination.

2.1.3 Residential Well Survey

The Syracuse-Onondaga County GIS website was utilized to obtain a listing of all properties within 0.125 miles of the facility in an effort to determine any private well usage. The list included 123 properties within the search range. The Onondaga County Department of Health (DOH) was contacted, and they were not aware of any records within the County's DOH that would indicate residential well information. The Village of Solvay Code Enforcement Office was contacted and they, too, did not have any records indicating residential well information. The Village Code

Enforcement Officer indicated that the Village recently sold their water department to the Onondaga County Water Authority (OCWA) and that OCWA supplies public water to residents within the Village of Solway.

Based on the residential well survey, there are no private supply wells located within 0.125-miles of the property.

2.2 Subsurface Investigation

2.2.1 *Subsurface Soil and Groundwater Investigation*

Six 2-inch overburden monitoring wells were installed at the Site in April 2005 (see figure 4). The wells were installed until a dense glacial till was encountered, which ranged from 7 to 12 feet below grade. The monitoring well boring and construction logs are presented in appendix B. The wells were installed to perform a number of functions including:

- Determine the horizontal and vertical hydraulic gradient(s) of groundwater flow,
- Determine potential routes of contaminant migration,
- Characterize levels of contaminants present in the groundwater, and
- Identify water level elevation measurements to determine direction of groundwater flow and seasonal variation in water table conditions.

During well installation, split spoon soil cores were collected at 2-foot intervals. Each split spoon was scanned with a PID for the presence of volatile organic vapors. One composite soil sample was collected from each monitoring well boring from the split spoon interval located within, or directly above, the point of saturation (with exception of MW-2 in which two samples were collected). The soil samples were analyzed for VOCs via EPA Method 8260 and SVOCs via EPA Method 8270. The soil sampling results are discussed below.

Following installation, each well was developed using disposable bailers, by removing several volumes of water from the well. The monitoring locations were completed at the surface with flush-mounted manhole boxes and capped with expandable rubber-seal caps.

In-situ variable hydraulic conductivity testing was performed following the completion of monitoring well installation and well development. Testing equipment included an electronic water level probe, peristaltic pump and a MiniTroll Data Logger (In-Situ, Inc.). The MiniTroll Data Logger is an automated measuring device designed to record small changes in a depressed or elevated head of water within a well. The instrument is connected to a pressure transducer which, when lowered into the water column, converts the pressure exerted by the head of water above it into a linear measurement of the depth of submergence.

The static water level was used as the reference point from which the instrument recorded test data. Rising head tests were performed by purging groundwater from each well at a measured rate and recording incremental increasing head data until the water level had recovered at

least to within 90 percent of the reference level. Data collected from the in-situ MiniTroll was used to determine hydraulic conductivity as discussed in the Site Hydrogeology section of this report.

Four rounds of groundwater samples (April 18, 2005; June 22, 2005; August 31, 2006; and November 2, 2006) were collected to characterize the existing site water quality conditions. The groundwater samples were analyzed for VOCs via EPA Method 8260 and SVOCs via EPA Method 8270. Prior to sampling, the monitoring wells were purged to ensure collection of a representative sample. Monitoring well MW-1 was only sampled during the April 2005 round. The well was dry during the second sampling round, and was damaged during demolition of the adjacent Third Street properties. Samples were collected from each location using the following general methodology:

1. The static water level was measured, and recorded to the nearest 1/100th of a foot, using an electronic tape;
2. The volume of water in the well was calculated;
3. Three volumes of well water were purged from each well, where possible;
4. Groundwater samples were collected using disposal bailers with the sample bottles filled in the order designated in the Sampling and Analysis Plan;

5. All measurements, including static water level, total depth of well, and measured field parameters were logged including the date and time of collection; and
6. Preserved samples were placed in coolers with ice along with the appropriate chain-of-custody forms for transport to the laboratory.

The results of the groundwater samples are discussed below and Groundwater Field Sampling Data Sheets are presented in appendix C.

Purged groundwater and excess soil cuttings from monitoring well installation, decontamination, well development, and sampling was staged in drums on-site. Waste profiling was conducted on the drum contents and Op-Tech Environmental Services removed the drums from the Site on October 7, 2005. The drums were transferred to Op-Tech's Waverly, New York disposal facility. Waste manifests, bills of lading, and disposal receipts are included in appendix D.

2.2.2 Community Air Monitoring Program (CAMP)

Air monitoring was conducted during monitoring well installation in conformance with the NYS Department of Health (NYSDOH) Generic Community Air Monitoring Plan. Real-time monitoring was conducted for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area during intrusive activities.

VOCs were monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) using Mini-RAE 2000 meters on a 15-minute logging cycle. Upwind concentrations were measured at the start of each intrusive activity and periodically thereafter to establish background conditions. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeded 10 parts per million (ppm) above background for a 15-minute average, work activities would be temporarily halted. Elevated readings were not encountered during any phase of the project and work stoppage was not required.

Particulate concentrations were also monitored continuously at the upwind and downwind perimeters of the exclusion zone or work area. The particulate monitoring was performed using MIE PDR-1000 meters that were capable of measuring particulate matter less than 10 micrometers in size (PM-10). The airborne particulate action level was readings greater than 150 ug/m3 for a 15-minute period. Construction activities would cease if the action levels were obtained and dust control measures would be implemented. This action level was never surpassed; therefore, dust control measures were not necessary.

2.2.3 Soil Vapor Investigation

Three interior sub-slab soil vapor points and one exterior perimeter soil vapor point were installed in April 2005. Based upon the initial results, six additional exterior soil vapor points were installed in October 2005. The locations of the soil vapor monitoring locations are depicted on figure 5.

The interior soil vapor points (VP-2 through 4) were installed by core drilling through the building slab. The exterior soil vapor points were installed by hand with a drive cap and sledge hammer (VP-1) and with a direct push Geoprobe unit (VP-5 through 10). Dedicated tubing and stainless steel vapor screens were utilized at all sampling locations. Beeswax was utilized to seal the penetrations of the interior sampling locations to ensure no intrusion of surface vapors. Tubing was purged prior to sample collection into 1 and 1.4-liter summa canisters regulated for a two-hour sampling period.

2.3 Quality Assurance/Quality Control

Several steps were taken in the field to ensure that samples were representative of site conditions. These procedures are discussed below.

2.3.1 *Decontamination Procedures*

The decontamination of non-dedicated equipment and tools used during drilling, well installation, and sampling activities was performed in accordance with the procedures outlined in the Work Plan and Sampling and Analysis Plan.

Upon the completion of each boring, all drilling equipment and down-hole tools were cleaned with a high-pressure steam system and allowed to air dry. Between consecutive soil sample intervals, each split-barrel sampler was scrubbed using analconox soap wash and potable water rinse. These steps provided assurance that soil samples and subsequent headspace measurements of volatile organic vapors were not influenced from possible contaminants detected in overlying horizons.

2.3.2 Field and Trip Blanks

The sampling procedures used during the Voluntary Cleanup Site Investigation involved non-dedicated (disposable) equipment. This included the use of disposal tubing for well development, disposable bailers for groundwater sampling, and disposable well points for vapor sampling. The submission of field blanks, therefore, was not required.

Trip blanks accompanied sample containers throughout all phases of water and/or soil sample collection for VOC parameters. Trip blanks received identical handling as all on-site samples. This methodology ensured that proper bottle preparation and laboratory integrity.

2.3.3 Documentation

The delivery of the samples to the laboratory was accompanied with appropriate chain-of-custody records. All information relative to the sampling activities was provided on these records including: sampling date and time, sample identification, number of bottles filled at each sampling location, preservatives, bottle size, sampling method, data and time of shipment, trip/wash blanks included, and release signature.

Sampling data sheets were maintained in the field for each sampling location. All pertinent data including: sample location, date, volume purged, static water level, total well depth, weather conditions, sample appearance, parameters to be analyzed, and the results of field parameter determinations were appropriately recorded. Sampling data sheets and chain-of-custody records are both provided in appendix C.

2.4 Data Analytical Analysis

Data summary tables were prepared for each of the analytical data packages received throughout the site environmental monitoring program. The summary tables were prepared following thorough review of the data with the guidelines as outlined by the ASP protocol and the individual laboratory case narratives. The summary tables and data are presented in appendix E. The data was also subject to third party validation. The complete validated data packages are bound separately as appendix F.

2.5 Site Geology

The Site is located within the Ontario Lowlands which is an area dominated by drumlins and glacial melt water features including kame deposits. Several drumlin features are visible to the southeast of the site. Regional geologic mapping data was obtained from the USGS publication "Geohydrology of the Glacial Outwash Aquifer in the Baldwinsville Area, Seneca River, Onondaga County, New York" (USGS WRIR 85-4094). According to the USGS publication, surficial geology at the site consists of a relatively thin veneer of glacial till overlying bedrock (the site is not located within the confines of the glacial outwash aquifer). The glacial till is described as an unsorted deposit of silt, sand, clay, cobbles, and boulders.

Development at the Site and surrounding properties has altered the soil characteristics at monitoring wells MW-2 through MW-5. (Monitoring wells MW-1 and MW-6 are located in yard areas with mature topsoil zones.) Artificial fill/overburden materials observed during subsurface activities revealed that native soils were likely removed during railroad and roadway construction around the site

exterior (monitoring wells MW-3, MW-4 and MW-5) and during building construction at MW-2. The artificial fill extends to depths of up to 5 feet for the wells located north of Milton Avenue and generally consisted of sand, crushed stone, and foreign materials including but not limited to brick fragments and pieces of asphalt.

Based on the borings, native unconsolidated materials at and near the site include two glacial till deposits. The upper till unit is light brown in color and consists of silt, sand, silty clay lenses with low plasticity, and occasional sub-rounded gravels and sub-angular rock fragments. The overburden color varied from light brown to dark gray at both MW-2 and MW-5 and a petroleum odor was noted at both locations in split spoon samples collected between 6 to 10 feet below the ground surface. Moisture content varied from slightly moist to very moist with occasional saturated zones perched between the clay and silt lenses. Borings were terminated upon encountering split spoon refusal in the second till unit, which is much denser and contains a greater percentage of gravel-size materials. The thickness of the underlying dense till deposit is unknown due to the limited depths of the subsurface borings. The underlying till layer likely provides a vertical barrier against contaminant migration. Borings were not advanced past this lower till interface in order to minimize the potential for creating a contaminant pathway for vertical migration through the confining till unit.

Based on the USGS publication, the glacial deposits overlie the Silurian-age Syracuse formation which includes shale, dolostone, gypsum, and salt members. Auger refusal in a weathered dolostone was encountered at both the original location MW-1 (driveway along Third Street) and at the revised location in the backyard to the south of the site building. Siltstone fragments were also common in the till material encountered at all of the boring locations.

2.5.1 Site Hydrogeology

Static water level elevations measured from the top of PVC in overburden groundwater monitoring wells indicated a relatively flat groundwater table with a general groundwater flow direction to the northwest. The average horizontal hydraulic gradient at the Site was calculated between MW-2 and MW-5 at <0.05 percent.

In-situ variable hydraulic conductivity testing was performed following the completion of monitoring well installation and well development. Recovery data collected from the MiniTrolls following a series of three short-term pumping tests was used to determine transmissivity and hydraulic conductivities for an unconfined aquifer system by using the Jacob's Method (modified Theis equation). Appendix G provides a summary of the analyses conducted at each of the monitoring wells. Based on the average transmissivity obtained from the residual drawdown (water level recovery) curves at each well, the following calculation was used to determine the hydraulic conductivity:

$$K = T/b$$

Where:

K = hydraulic conductivity in gallons per day per square foot (gpd/ft²)

T = transmissivity in gallons per day per foot (gpd/ft)

b = saturated thickness (screen length for this site)

Well Number	Screen Interval (FT)	Hydraulic Conductivity (gpd/ft ²)	Hydraulic Conductivity (ft/sec)
MW-1	4-7	dry well	dry well
MW-2	4-14	71	1.10×10^{-4}
MW-3	3-13	113	1.75×10^{-4}
MW-4	3-13	76	1.17×10^{-4}
MW-5	3-13	317	4.89×10^{-4}
MW-6	1-11	120	1.86×10^{-4}
Geometric mean:		139	2.15×10^{-4}

The hydraulic conductivity values represented above compare reasonably with glacial till deposits with a silt and sand matrix as described in table 2.2 of the 1979 publication entitled Groundwater by R. Allan Freeze and John A. Cherry. This reference indicates that hydraulic conductivities for unconsolidated silty sands range from 1 to 1000 gpd/ft², or 10^{-4} to 10^{-3} ft/sec. This correlates with the silty and sandy deposits encountered during completion of the subsurface soil borings.

MW-5 exhibited a slightly higher hydraulic conductivity than the remaining site wells. B&L did not collect a representative third data set from this well during the testing event because we were unable to create a measurable change to the water table elevation with our purging equipment.

2.6 Nature and Extent of Contamination

The following section discusses the results of the Voluntary Cleanup Site Investigation identifying the contaminant distribution at the Site. The laboratory data and summary tables are bound separately as appendix E.

Throughout the course of this report, the identified contaminants of concern are compared to NYSDEC Standards. Soil data is compared to NYSDEC TAGM 4046 Soil Cleanup Objectives, and groundwater data is compared to NYSDEC Groundwater Standards. Soil vapor data is compared to the Final NYSDEC/NYSDOH Soil Vapor/Indoor Air Decision Matrices (October 2006).

2.6.1 Subsurface Soil

One composite soil sample was collected from each monitoring well boring just above the saturated zone for analysis of VOCs and SVOCs (with exception to MW-2 in which two samples were collected). No chlorinated solvents or VOCs were detected above NYSDEC TAGM Soil Cleanup Objectives (TAGM Standards) at any of the monitoring well soil sampling locations (see table 1 of appendix E). Slight SVOC exceedances were present at locations MW-2 and MW-5. The following table summarizes the subsurface soil exceedances observed during the investigation.

Parameter	NYS DEC TAGM Standard (ppb)	Subsurface Soil Samples (ppb)		
		MW-2 (7-9FT)	MW-2 (9.5-11FT)	MW-5 (6-8FT)
Volatile Organic Compounds – None Detected Above TAGM Standards				
Semi-Volatile Organic Compounds				
Naphthalene	13,000	16,000	ND	ND
Dibenzofuran	6,200	8,700	ND	ND
Benzo (a) anthracene	224 or MDL	ND	53 J	ND
Chrysene	400	12,000 J	ND	2,300 J
Benzo (b) flouranthene	220 or MDL	13,000 J	ND	2,800 J
Benzo (a) pyrene	61 or MDL	9,300 J	ND	1,900 J
Dibenzo (a,h) anthracene	61 or MDL	ND	ND	250 J

MDL = Minimum Detection Limit

ND = Not detected at minimum detection limit or above NYSDEC Recommended Soil Cleanup Objective

J = Estimated Value

Items in bold exceed NYSDEC TAGM 4046 Cleanup Values

No compounds were detected above standards in subsurface soil samples collected from MW-1, 3, 4, and 6.

2.6.2 Groundwater

Four rounds of groundwater samples were collected (April 18, 2005; June 22, 2005; August 31, 2006; and November 2, 2006) from the permanent monitoring wells installed as part of the Voluntary Cleanup Site Investigation (see tables 2 through 5, respectively, in appendix E). All groundwater samples were analyzed for the presence of VOCs (EPA Method 8260) and SVOCs (EPA Method 8270). The locations of the existing monitoring well network are depicted on figure 4. The following tables summarize the contaminant concentrations exceeding the NYSDEC Groundwater Standards from the existing monitoring well locations.

Groundwater Monitoring Results (Round 1 and 2 Exceedances)							
Parameter	NYS DEC Standard (ppb)	Groundwater Samples (ppb)					
		MW-2		MW-5		MW-6	
		April '05	June '05	April '05	June '05	April '05	June '05
VOCs (EPA Method 8260)							
Vinyl Chloride	2	18 J	64 J	ND	ND	ND	ND
Cis-1,2-dichloroethene	5	10 J	79 J	ND	ND	ND	ND
Chloroform	7	ND	ND	15	28 J	ND	ND
Trichloroethene	5	ND	6 J	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	7	ND	ND
tetrachloroethene	5	12 J	19 J	ND	ND	10 J	7.3 J
SVOCs (EPA Method 8270)							
2,4-Dimethylphenol	1	ND	2.4 J	ND	ND	ND	ND
Naphthalene	10	18	38	ND	ND	ND	ND
Phenanthrene	50	ND	ND	60	84	ND	ND
Flouranthene	50	ND	ND	86	170	ND	ND
Pyrene	50	ND	ND	68	140	ND	ND
Benzo (a) anathracene	[0.002]	14	15	50	90	ND	ND
Chrysene	[0.002]	ND	13	3.5	85	ND	ND
Benzo (b) flouranthene	[0.002]	15	15	66	120	ND	ND
Benzo (k) flouranthene	[0.002]	8.5	5.9 J	33	36 J	ND	ND
Benzo (a) pyrene	[0.002]	12	11	47	89	ND	ND
Indeno perylene	[0.002]	2.6	3.5 J	9 J	28 J	ND	ND

ND = Not detected

J = Estimated Value

Items in bold exceed NYSDEC Groundwater Standards

No compounds were detected above NYSDEC Groundwater Standards during any of the sampling rounds from locations MW-1, 3 or 4. MW-1 was dry during sampling round 2 and damaged during rounds 3 and 4.

Groundwater Monitoring Results (Round 3 and 4 Exceedences)							
Parameter	NYS DEC Standard (ppb)	Groundwater Samples (ppb)					
		MW-2		MW-5		MW-6	
		Aug. '06	Nov. '06	Aug. '06	Nov. '06	Aug. '06	Nov. '06
VOCs (EPA Method 8260)							
Vinyl Chloride	2	45 J	52 J	ND	ND	ND	ND
Cis-1,2-dichloroethene	5	58 J	50 J	ND	ND	ND	2 J
Chloroform	7	ND	ND	33	20 J	6 J	5 J
Trichloroethene	5	10 J	2 J	ND	ND	ND	1 J
Bromodichloromethane	5	ND	ND	10 J	6 J	ND	ND
tetrachloroethene	5	75 J	ND	0.7 J	ND	12 J	13 J
SVOCs (EPA Method 8270)							
Benzo (a) anathracene	[0.002]	2 J	1 J	5 J	ND	ND	ND
Chrysene	[0.002]	2 J	1 J	5 J	ND	ND	ND
Benzo (b) flouranthene	[0.002]	1 J	ND	4 J	ND	ND	ND
Benzo (k) flouranthene	[0.002]	1 J	ND	5 J	ND	ND	ND
Benzo (a) pyrene	[0.002]	1 J	ND	ND	ND	ND	ND
Indeno perylene	[0.002]	ND	ND	3 J	ND	ND	ND

ND = Not detected

J = Estimated Value

Items in bold exceed NYSDEC Groundwater Standards

No compounds were detected above NYSDEC Groundwater Standards during any of the sampling rounds from locations MW-1, 3 or 4. MW-1 was dry during sampling round 2 and damaged during rounds 3 and 4.

Based on the static water levels collected as part of the SI, groundwater is flowing in a westerly/northwesterly direction. Figures 6 through 9 depict the groundwater flow direction during the four sampling rounds. The same suite of contaminants was observed in the former off-site piezometers (i.e., GW-26, 27, 28) as were observed in the adjacent existing monitoring wells (i.e., MW-5 and 6). The groundwater concentrations of the historic locations are also similar to the concentrations observed in the existing adjacent monitoring wells. The similar temporal concentrations indicate that the plumes are stabilized. Each of the existing monitoring wells was installed to refusal in a dense glacial till.

2.6.3 Soil Vapor

Three internal sub-slab soil vapor points and one external perimeter soil vapor point were installed in April 2005. Six additional external perimeter soil vapor points were installed in October 2005 as depicted on figure 5. The results of the soil vapor monitoring, along with the Final NYSDEC/NYSDOH Soil Vapor/Indoor Air Decision Matrices (October 2006) are included in attachment E (see tables 6 and 7 of attachment E). The BTEX, PCE and TCE concentrations (ug/m^3) are summarized in the following table.

Sub-Slab and Soil Vapor Samples (ug/m^3)										
Parameter	Sub-Slab Samples			Exterior Soil Vapor Samples						
	VP-2	VP-3	VP-4	VP-1	VP-5	VP-6	VP-7	VP-8	VP-9	VP-10
TCE	99.0	6,800	3,000	ND	ND	5.7	ND	ND	43.0	ND
PCE	230	51,000	6,700	ND	1.2	69.0	46.0	1.2	170.0	3.4
Benzene	ND	8.0	26.0	ND	14.0	38.0	18.0	13.0	16.0	22.0
Toluene	68.0	99.0	84.0	ND	150.0	170.0	160.0	190.0	180.0	200.0
Ethyl-benzene	22.0	61.0	32.0	ND	26.0	27.0	26.0	33.0	40.0	26.0
Total Xylenes	82.0	212.0	118.0	ND	116.0	133.0	123.0	164.0	229.0	130.0

Trichloroethene (TCE)

Tetrachloroethene (PCE)

Sub-slab TCE concentrations $>250 \text{ ug}/\text{m}^3$ require mitigation per Final NYS DEC/DOH matrices (October 2006).

Sub-slab PCE concentrations $>1,000 \text{ ug}/\text{m}^3$ require mitigation per Final NYS DEC/DOH matrices (October 2006).

TCE/PCE concentrations in **Bold** exceed NYS DEC/DOH concentrations that require mitigation.

Final NYS DEC/DOH matrices (October 2006) are included in Attachment E.

2.7 Contaminant Fate and Transport

2.7.1 *Potential Routes of Migration*

2.7.1.1 Air Contaminant Transport

The lateral migration of non-particulate airborne contaminants typically occurs as a function of air movement. Vertically, contaminants can also migrate according to their specific densities and/or because of changes in air pressure gradients. Volatilization from groundwater and/or soil (vapor intrusion) is the primary route of airborne contamination. Results of the sub-slab and soil vapor survey indicate the potential for air contaminant transport and vapor intrusion.

2.7.1.2 Soil Contaminant Transport

The results of the historic soil sampling conducted as part of the Ransom investigation, along with the soil sampling conducted as part of the VCSI indicate very minor soil impacts present at the site. No chlorinated solvents or VOCs were detected above NYSDEC TAGM Soil Cleanup Objectives (TAGM Standards) at any of the monitoring well soil sampling locations conducted as part of the VCSI. Slight SVOC exceedances were present at locations MW-2 and MW-5. These exceedances were minor, localized in nature, and do not appear to warrant additional investigation.

2.7.1.3 Groundwater Contaminant Transport

Based on the site data collected to-date, it appears there are two different areas of residual contamination present at the site and off-site. The first area is located below the building slab in proximity to the former dry cleaning area. Chlorinated solvents are the signature constituents present in this area. TCE, PCE, cis-1, 2-dichloroethene, and vinyl chloride were present in historic locations GW-4 and GW-7 and monitoring well location MW-2. The source area of the chlorinated solvent plume appears to be limited to below the building slab. Only low-level concentrations were observed off-site. Only slight exceedances of PCE were detected above groundwater standards at off-site location MW-6 (≤ 10 ppb). The approximate limits of the chlorinated solvent plume are depicted on figure 10.

The second area of contamination is located closer to Milton Avenue, with limited area also observed below the building slab. This area is primarily comprised of semi-volatile organic compounds (SVOCs) indicative of a petroleum release. The western limits of the plume extend beyond MW-5. The source of the plume is not certain. Although the former presence of the on-site 12,000-gallon fuel oil UST is a potential source, historic data collected from adjacent piezometers (GW-9 and GW-10) does not indicate a release in proximity to the former UST location. The presence of the SVOCs is indicative of an urban industrial area, and may be due to historic site uses or may be a result of imported fill utilized in the area.

3.0 Qualitative Human Health Exposure Assessment

A minor residual contaminant source exists in the form of limited subsurface contaminated soil and groundwater at the Site. A chlorinated solvent soil gas plume has also been identified below the building slab near the former dry cleaning area. The following assessment evaluates the observed site soil and groundwater contaminant conditions and the migration potential of these contaminants to determine which exposure pathways require additional site remediation. Additionally, theoretical exposure pathways were evaluated for possible future events (e.g., site construction) that would directly expose these minor residual contaminants to potential site construction workers.

3.1 Evaluation of Possible Exposure Pathways

Typical exposure pathways for site contaminants include direct contact with impacted soil or groundwater (absorption pathway), inhalation of vapors from soil or groundwater contamination (inhalation pathway), or ingestion of soil or groundwater contaminants (ingestion pathway). These pathways are discussed briefly below with respect to the site conditions encountered during the Voluntary Cleanup Site Investigation.

3.1.1 *Evaluation of Absorption Pathway*

Based upon the soil sampling conducted as part of the monitoring well installation, soil contaminants were localized in nature (adjacent to MW-2 and MW-5). Soil impacts (i.e., staining, elevated PID readings) were not observed until depths near the saturated zone (approximately 7 feet below grade). Since the majority of the site and adjacent lands have impermeable caps (i.e., building slabs, street pavement, etc.) direct absorption of site contaminants under existing conditions is not a complete pathway.

Subsurface soil may become exposed as a result of future underground utility line maintenance or site construction, resulting in an absorption pathway to construction workers or wildlife. Specific health and safety measures should be required to reduce the potential for direct contact with contaminated media during any site activity resulting in the potential exposure of these media. In addition, the timeframes of exposure would be short-term and appropriate engineering and worker safety measures (i.e., OSHA methods) would be implemented.

3.1.2 Evaluation of Inhalation Pathway

Based upon the results of the sub-slab and soil vapor survey, there is a known potential pathway for the volatilization of organic vapors from groundwater and/or soil to migrate upward and become airborne under existing site conditions. The bulk of the chlorinated solvent soil vapor contamination is located below the building slab.

Contaminated subsurface soil could also be exposed during future site construction or underground utility line maintenance that could provide a potential inhalation pathway. Again, specific health and safety measures would be required to reduce the potential for direct contact with contaminated groundwater during any site activities resulting in the potential exposure of this media.

3.1.3 Evaluation of Ingestion Pathway

Due to the depth of subsurface soil contamination and the presence of a public water supply, the ingestion pathway is not complete under existing conditions.

The potential exists that future subsurface activity at the site could result in exposure with construction site workers or wildlife to an accidental ingestion pathway involving contaminated subsurface soil or groundwater. Again, specific health and safety measures and engineering controls would be required to reduce the potential for direct contact with contaminated soil and groundwater during any site activities resulting in the potential exposure of this media.

3.1.4 Qualitative Human Health Exposure Assessment Summary

Based upon the existing exposure scenarios, pathways are not complete with respect to direct ingestion and absorption of subsurface soil and groundwater. There is, however, a potential pathway for the volatilization of organic and chlorinated solvent vapors. This pathway was verified by the results of the sub-slab and soil vapor survey.

Future subsurface construction activities on and off-site may result in one or more potential exposure pathways for site construction workers or wildlife. In the event of future site activities being conducted that may expose the remaining contaminated media, appropriate site specific health and safety measures would need to be incorporated into the project work plan.

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4.0 Voluntary Cleanup Site Investigation Summary and Conclusions

A phased site investigation of the ARAMARK Uniform Services (Syracuse) LLC, Solvay, New York property was conducted including a subsurface boring and well installation program, a residential well survey, four rounds of groundwater sampling, a sub-slab and soil gas survey, and in-place testing of hydraulic conductivity. The results of the site investigation indicated that subsurface soils include an artificial fill layer ranging from 0 to 5 feet thick, underlain by silty and clay deposits, from 5 to 12 feet. A dense till deposit was encountered at depths below 12 feet. Groundwater was observed at depths near 6 feet below grade.

Subsurface soil sampling and analysis associated with the soil boring program indicated only two areas (MW-2 and MW-5) with localized exceedances of TAGM #4046 Soil Cleanup Objectives to Protect Groundwater. The exceedances are limited to SVOCs and do not appear to warrant additional evaluation.

Groundwater sampling and analysis from the permanent wells installed at the Site indicated two different areas of residual contamination present at the site and off-site. The first area is comprised of chlorinated solvents, and is located below the building slab in proximity to the former dry cleaning area. The source area of the chlorinated solvent plume appears to be limited to below the building slab. The approximate limits of the chlorinated solvent plume are depicted on figure 10.

The second area of contamination is located closer to Milton Avenue, with limited area observed below the building. This area is primarily comprised of SVOCs indicative of a petroleum release. The western limits of the plume extend beyond MW-5 (see figure 10). The source of the plume is not certain, but is indicative of the highly urbanized industrial area.

The existing monitoring well network primarily delineates both of the separate plumes. The lack of downgradient receptors, as confirmed by a residential well survey, and low groundwater gradient minimizes the environmental significance of the residual groundwater contamination. In addition, the groundwater concentrations only marginally exceed standards and have been consistent compared to historic results which indicate stabilization of the plume.

Soil and groundwater impacts are minimal, and there are no complete exposure scenarios for these media under existing site conditions. There are, however, sub-slab vapor concentrations of TCE and PCE that warrant mitigation in proximity to the former dry cleaning area.

4.1 Migration Pathway Summary

Based upon observed site conditions and existing exposure scenarios, the following are potential migration pathways:

- Volatilization of organic constituents from subsurface soils and groundwater (vapor intrusion) under the western portion of the main building (3117 Milton Avenue).
- During future subsurface construction activities, one or more potential exposure pathways associated with residual subsurface soil, groundwater, and soil vapors could exist for potential construction site workers or wildlife.

The presence of elevated concentrations of sub-slab chlorinated solvent vapors identified during the Voluntary Cleanup Site Investigation in proximity to the former dry cleaning area warrants remedial action in accordance with the Final

NYSDEC/NYSDOH Soil Vapor Decision Matrices (October 2006). The remedial action was selected to prevent vapor intrusion from subsurface soils and groundwater into the building. Due to current site operations that would cause sample interference, an indoor air sample was not collected. According to the NYS DEC/DOH Soil Vapor/Indoor Air Matrices, the concentrations of chlorinated solvents in the sub-slab soil gas are at concentrations that warrant the installation of an active vapor intrusion mitigation system regardless of indoor air concentrations.

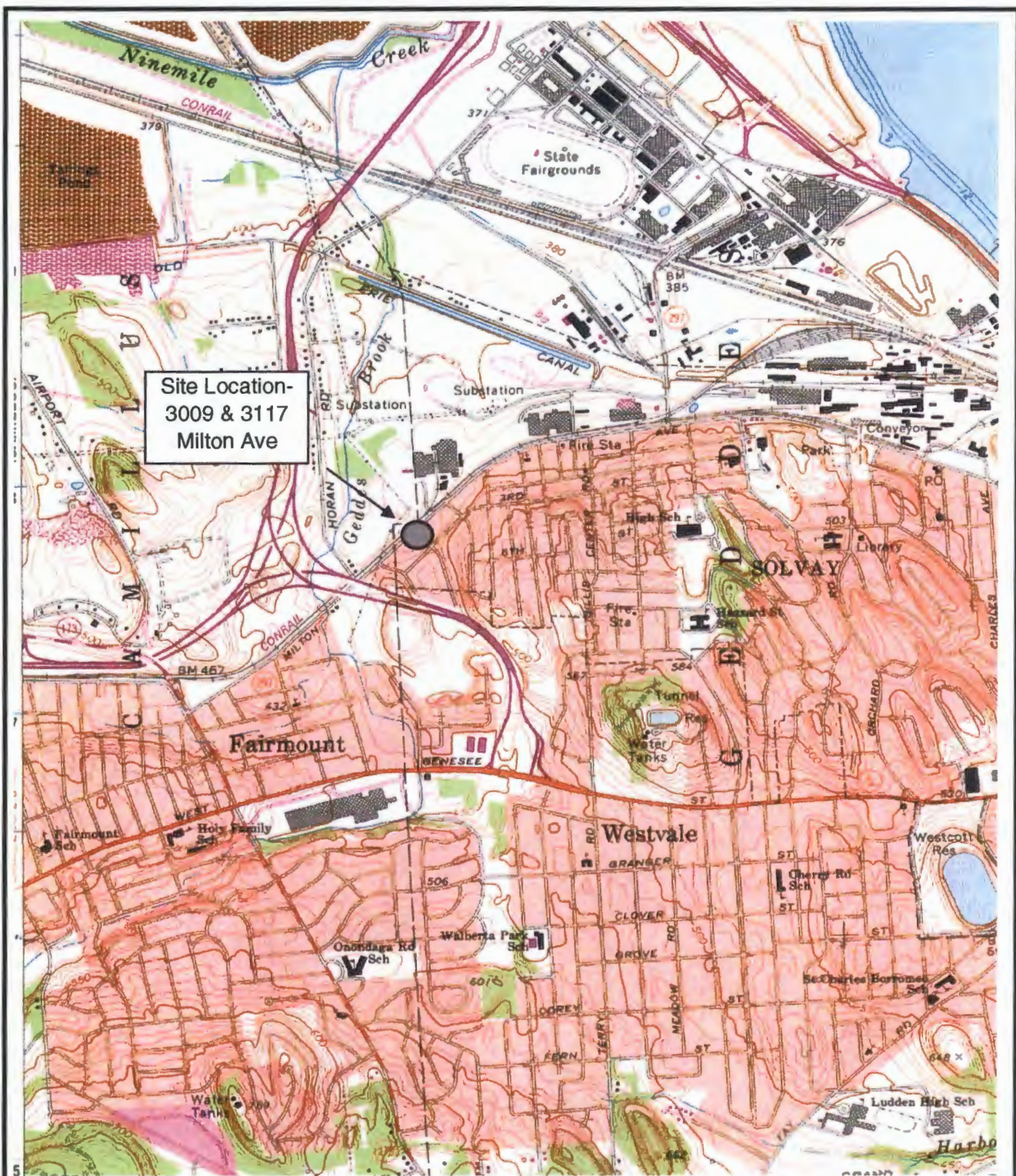
5.0 Recommendations

Based upon the results of the VCSI, it is recommended that ARAMARK Uniform Services conduct the following:

1. Conduct an interim remedial measure (IRM) consisting of the design of a NYSDEC/NYSDOH approvable sub-slab ventilation system to mitigate the potential for chlorinated solvent vapor intrusion below the building foundation in proximity to the former dry cleaning area. As part of the design of the sub-slab ventilation system, a pilot test will be conducted in proximity to the former dry cleaning area. Additional data will be collected to size the sub-slab ventilation system. Based on the pilot test data, chemical oxidation will also be evaluated.
2. Development of an approvable Operation and Maintenance Plan for the sub-slab ventilation system. Performance monitoring of the sub-slab ventilation system would also be conducted as outlined in the approvable sub-slab ventilation system design.
3. Development of an appropriate use restriction for operation of the sub-slab ventilation system (until no longer required).

At this time, no active source area remediation is proposed. Following the IRM pilot test, construction, and initial monitoring, the necessity for a remedial action will be evaluated. If it is determined that a remedial action is necessary, a Remedial Action Selection Report will be provided for the Department's review.

Figures



Project No. 909.001

Figure 1- Project Location Map
ARAMARK Uniform Services
Voluntary Cleanup Project



Barton
& Loguidice, P.C.
 Consulting Engineers

Village of Solvay

Onondaga Co., NY

Base Map: USGS 7.5' Topographic Quadrangle Syracuse West, N.Y. (1978)

X: XREF(S)_W/_ (ROT/TWIST)
L: LS=,OR L:ON=,OFF=
P: STANDARD.PC3.CTB

11/7/05-SYR-MJ, SMT
900/SI_REPORT/909001_FIG_2.DWG

LEGEND:

FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION

SCALE: 1" = 30'

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ARAMARK UNIFORM SERVICES

SITE PLAN

VILLAGE OF SOLVAY

ONONDAGA COUNTY, N.Y.

Figure

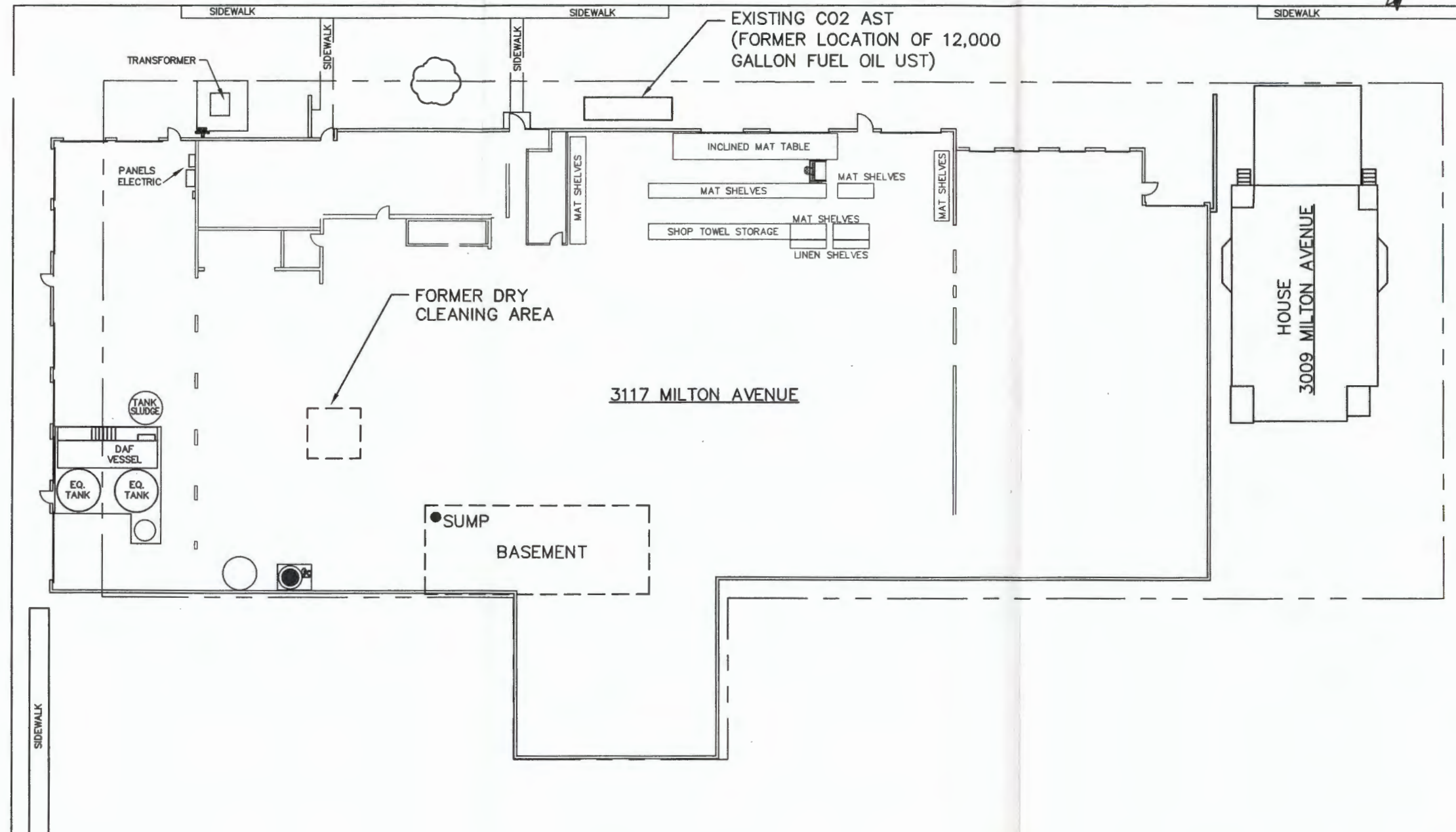
2

Project No.

909.001

BAILEY AVENUE

MILTON AVENUE



X: XREF(S)_W/_/ROT/TWIST)
L: LS=OR L:ON=; OFF=
P: STANDARD.PC3.CTB

11/7/05-SYR-MJ, SMT
900/SI_REPORT/909001_FIG_3.DWG

LEGEND:

⊕ FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION

SCALE: 1" = 30'

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ARAMARK UNIFORM SERVICES
HISTORIC
SOIL & GROUNDWATER
SAMPLE LOCATIONS

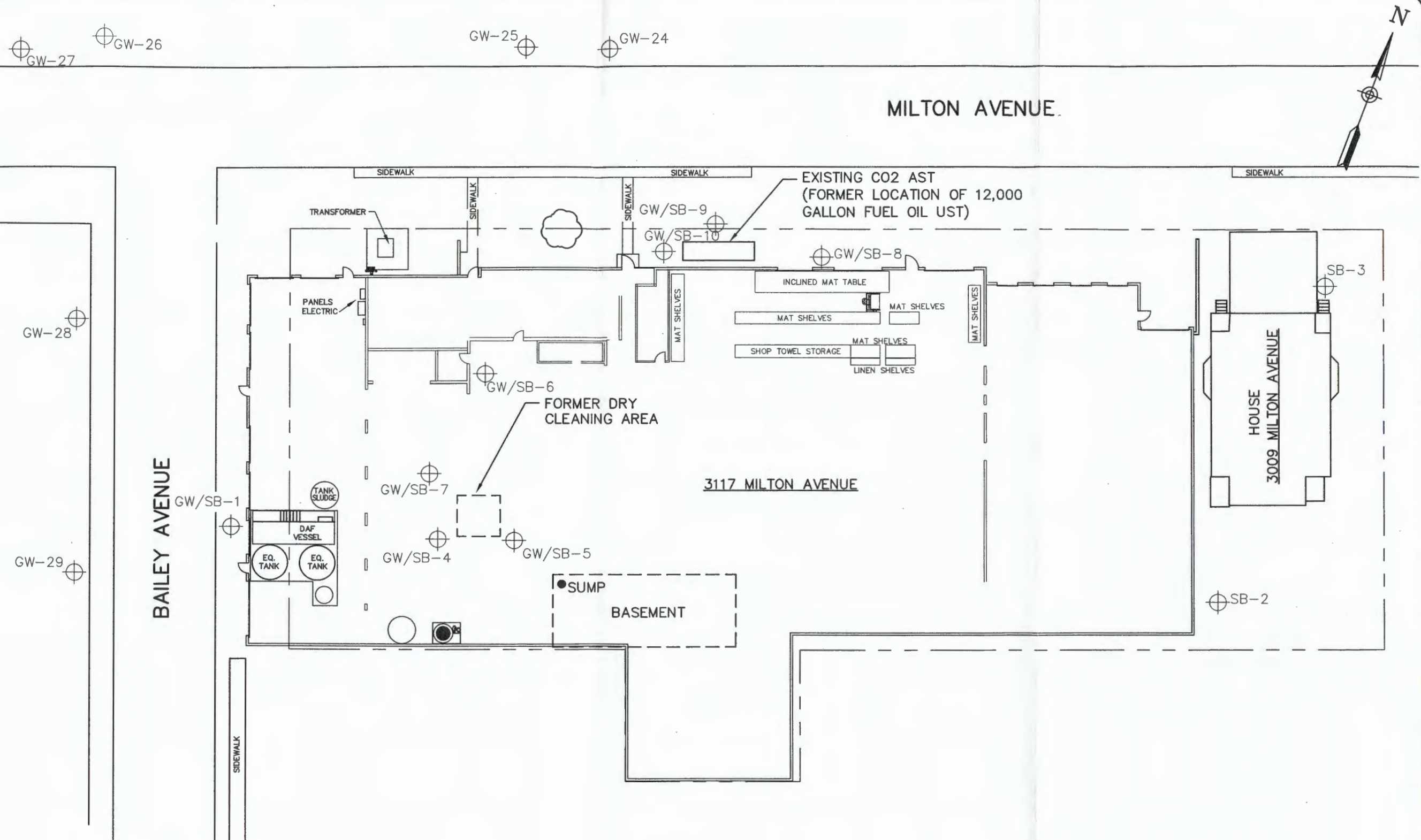
VILLAGE OF SOLVAY ONONDAGA COUNTY, N.Y.

Figure

3

Project No.

909.001



MW-5
EL=421.3
TOC=420.7

MW-4
EL=422.0
TOC=421.6

GW-25
MW-3
EL=422.5
TOC=422.3
GW-24

MW-6 (TP)
EL=419.1
TOC=418.8
GW-28

GW-29

MW-2
EL=424.0
TOC=423.8
GW/SB-4

MW-1
EL=424.8
TOC=424.4

MILTON AVENUE

BAILEY AVENUE

3117 MILTON AVENUE

HOUSE
3009 MILTON AVENUE

LEGEND:
⊕ FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION
⊙ EXISTING PERMANENT MONITORING WELL LOCATION

SCALE: 1" = 30'

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ARAMARK UNIFORM SERVICES
**PERMANENT MONITORING
WELL LOCATIONS**
VILLAGE OF SOLVAY ONONDAGA COUNTY, N.Y.

Figure
4
Project No.
909.001

11/7/05--SYR--MJ, SMT
900/SI_REPORT/909001_FIG_4.DWG

X: XREF(S)_W/_ (ROT/TWST)
L: LS=OR L=ON=OFF=
P: STANDARD.PC3.CTB

X: XREF(S)_W/_ (ROT/TWIST)
L: LS=,OR L: ON=,OFF=
P: STANDARD.PC3.CTB

11/7/05-SYR-MJ, SMT
900/SI_REPORT/909001_FIG_5.DWG

LEGEND:

- ⊗ SUB-SLAB VAPOR SURVEY POINT
- ⊗ SOIL GAS VAPOR SURVEY POINT

SCALE: 1" = 30'

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ARAMARK UNIFORM SERVICES

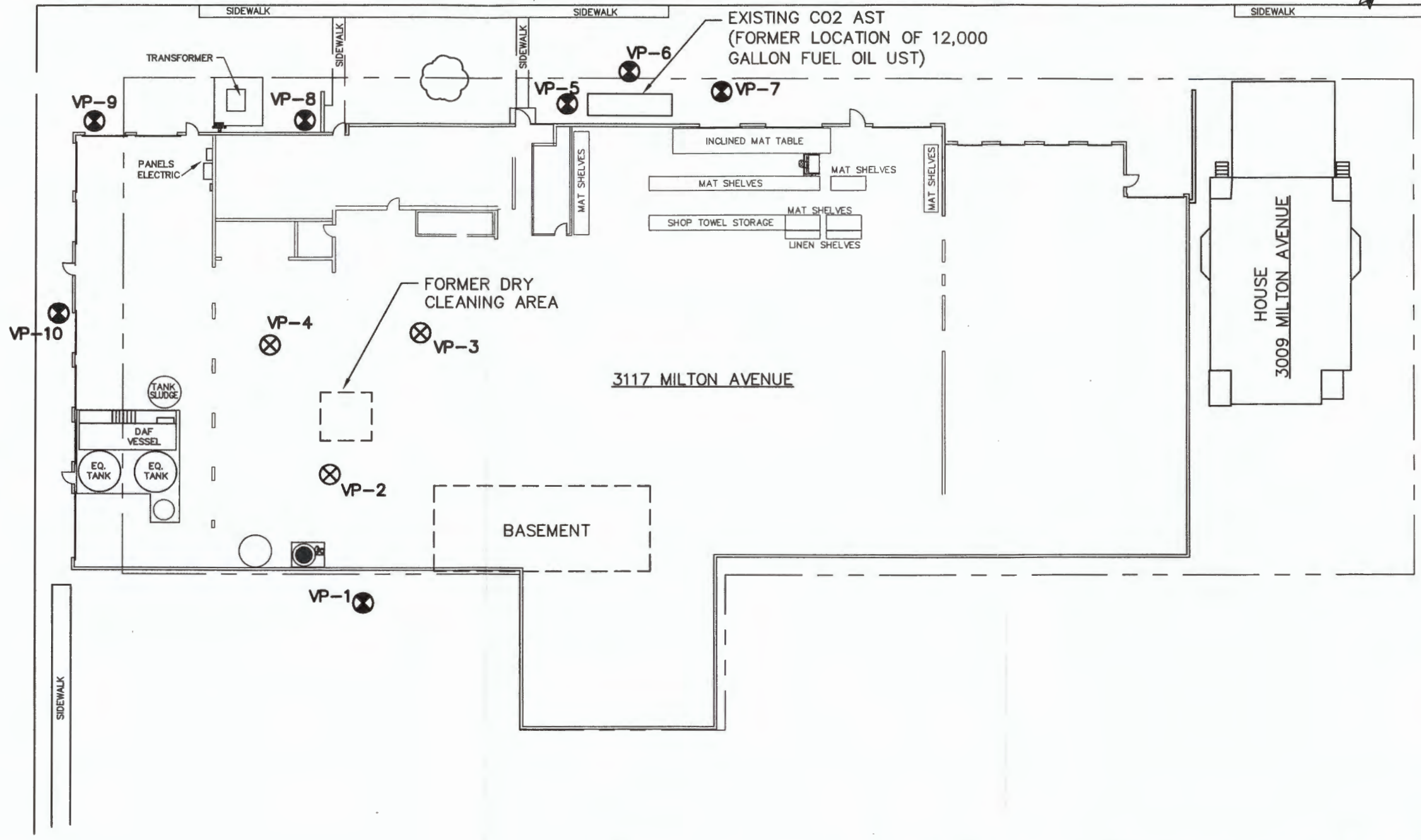
SUB-SLAB/SOIL
VAPOR SAMPLE LOCATIONS

VILLAGE OF SOLVAY ONONDAGA COUNTY, N.Y.

Figure
5
Project No.
909.001

BAILEY AVENUE

MILTON AVENUE



MW-5
EL=421.3
TOC=420.7
SWL=418.42

MW-4
EL=422.0
TOC=421.6
SWL=418.27

GW-25 MW-3 GW-24
EL=422.5
TOC=422.3
SWL=418.40

MW-6 (TP)
EL=419.1
TOC=418.8
SWL=418.07

MW-2
EL=424.0
TOC=423.8
SWL=418.29

MW-1
EL=424.8
TOC=424.4
SWL=418.45

LEGEND:

- FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION
- PERMANENT MONITORING WELL LOCATION
- GROUNDWATER FLOW DIRECTION
- EL = RIM ELEVATION
- TOC = TOP OF CASING ELEVATION
- SWL = STATIC WATER LEVEL ELEVATION

SCALE: 1" = 30'

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& Loguidice, P.C.
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ARAMARK UNIFORM SERVICES
GROUNDWATER ELEVATIONS
(APRIL 2005)
VILLAGE OF SOLVAY ONONDAGA COUNTY, N.Y.

Figure
6
Project No.
909.001

NOTE:

GROUNDWATER CONTOURS NOT DEPICTED
DUE TO SHALLOW GRADIENT.

11/7/05-SYR-MJ, SMT
900/SI_REPORT/909001_FIG_6.DWG

X: XREF(S)_W/_ (ROT/TWIST)
L: LS=OR L:ON=; OFF=
P: STANDARD.PC3.CTB

MW-5
EL=421.3
TOC=420.7
SWL=418.18

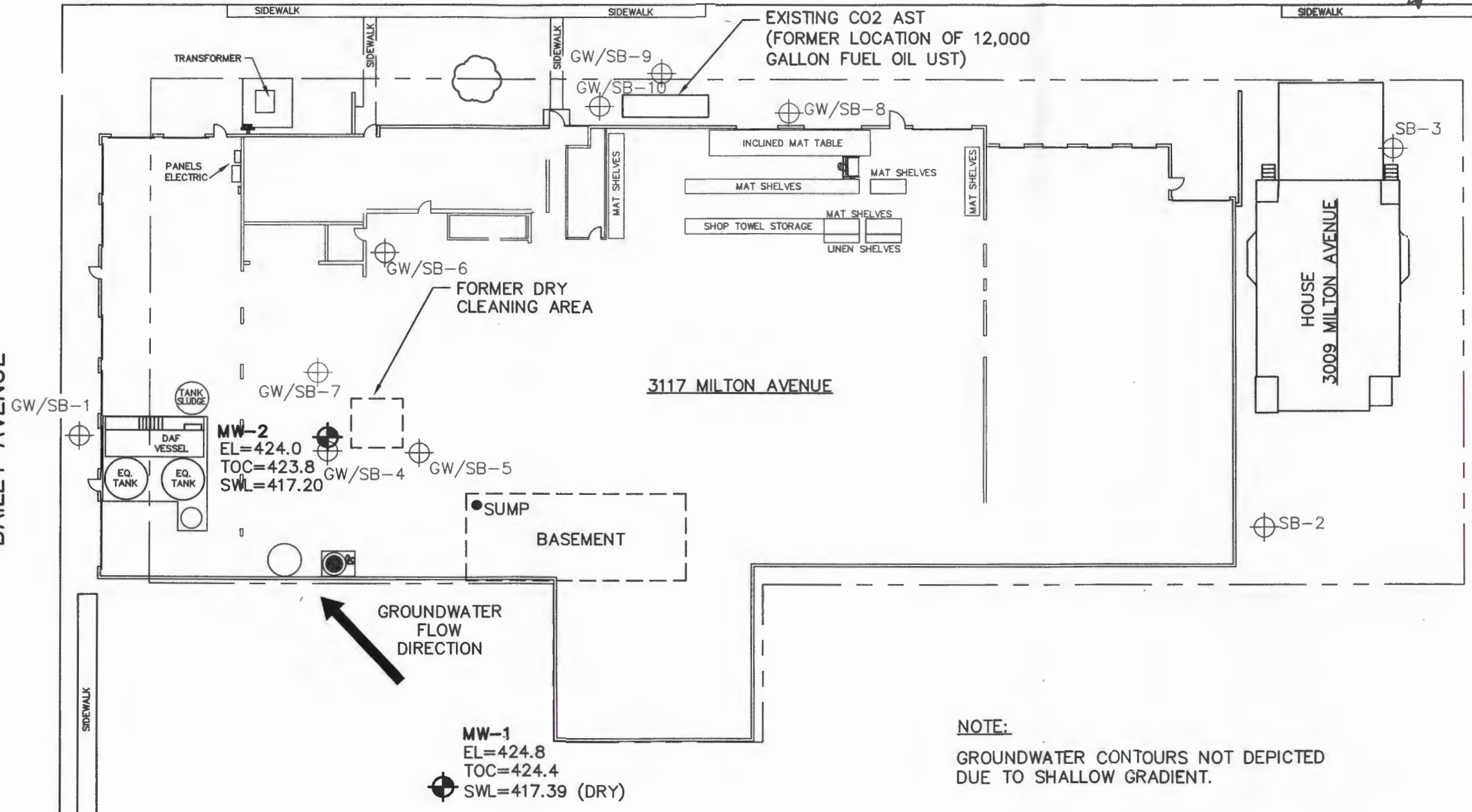
MW-4
EL=422.0
TOC=421.6
SWL=417.15

GW-25 MW-3 GW-24
EL=422.5
TOC=422.3
SWL=417.24

MILTON AVENUE

MW-6 (TP)
EL=419.1
TOC=418.8
SWL=417.20

BAILEY AVENUE



NOTE:

GROUNDWATER CONTOURS NOT DEPICTED DUE TO SHALLOW GRADIENT.

LEGEND:

- FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION
- PERMANENT MONITORING WELL LOCATION
- GROUNDWATER FLOW DIRECTION
- EL = RIM ELEVATION
- TOC = TOP OF CASING ELEVATION
- SWL = STATIC WATER LEVEL ELEVATION

SCALE: 1" = 30'

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& Loguidice, P.C.

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ARAMARK UNIFORM SERVICES

GROUNDWATER ELEVATIONS
(JUNE 2005)

VILLAGE OF SOLVAY

ONONDAGA COUNTY, N.Y.

Figure

7

Project No.

909.001

MW-5
EL=421.3
TOC=420.7
SWL=418.15

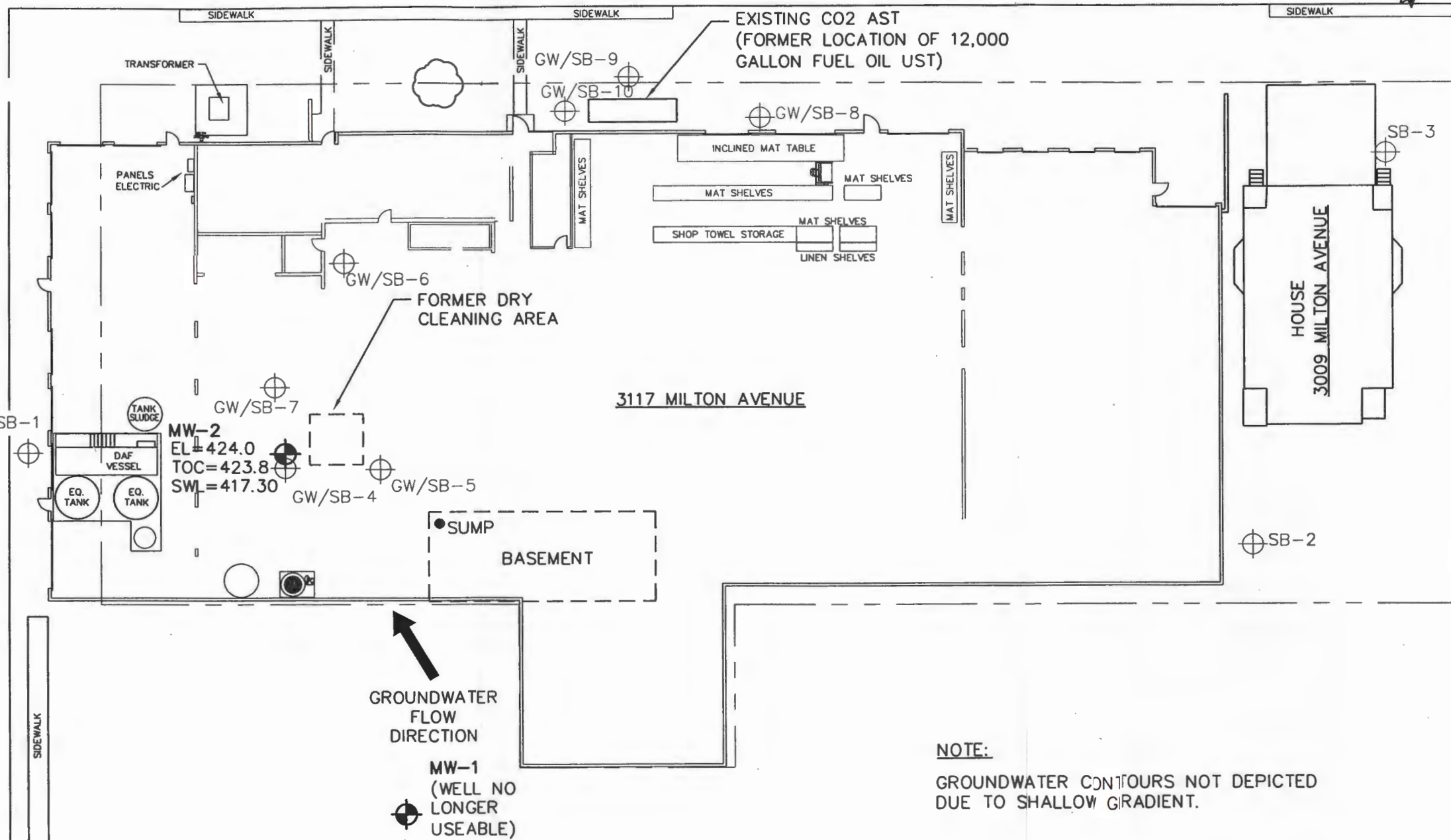
MW-4
EL=422.0
TOC=421.6
SWL=417.28

GW-25 MW-3 GW-24
EL=422.5
TOC=422.3
SWL=417.50

MILTON AVENUE

MW-6 (TP)
EL=419.1
TOC=418.8
SWL=417.29

BAILEY AVENUE



NOTE:

GROUNDWATER CONTOURS NOT DEPICTED
DUE TO SHALLOW GRADIENT.

LEGEND:

- FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION
- PERMANENT MONITORING WELL LOCATION
- GROUNDWATER FLOW DIRECTION

EL = RIM ELEVATION
TOC = TOP OF CASING ELEVATION
SWL = STATIC WATER LEVEL ELEVATION

SCALE: 1" = 30'

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& Loguidice, P.C.

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ARAMARK UNIFORM SERVICES

GROUNDWATER ELEVATIONS
(AUGUST 2006)

VILLAGE OF SOLVA Y

ONONDAGA COUNTY, N.Y.

Figure

8

Project No.

909.001

MW-5
EL=421.3
TOC=420.7
SWL=418.22

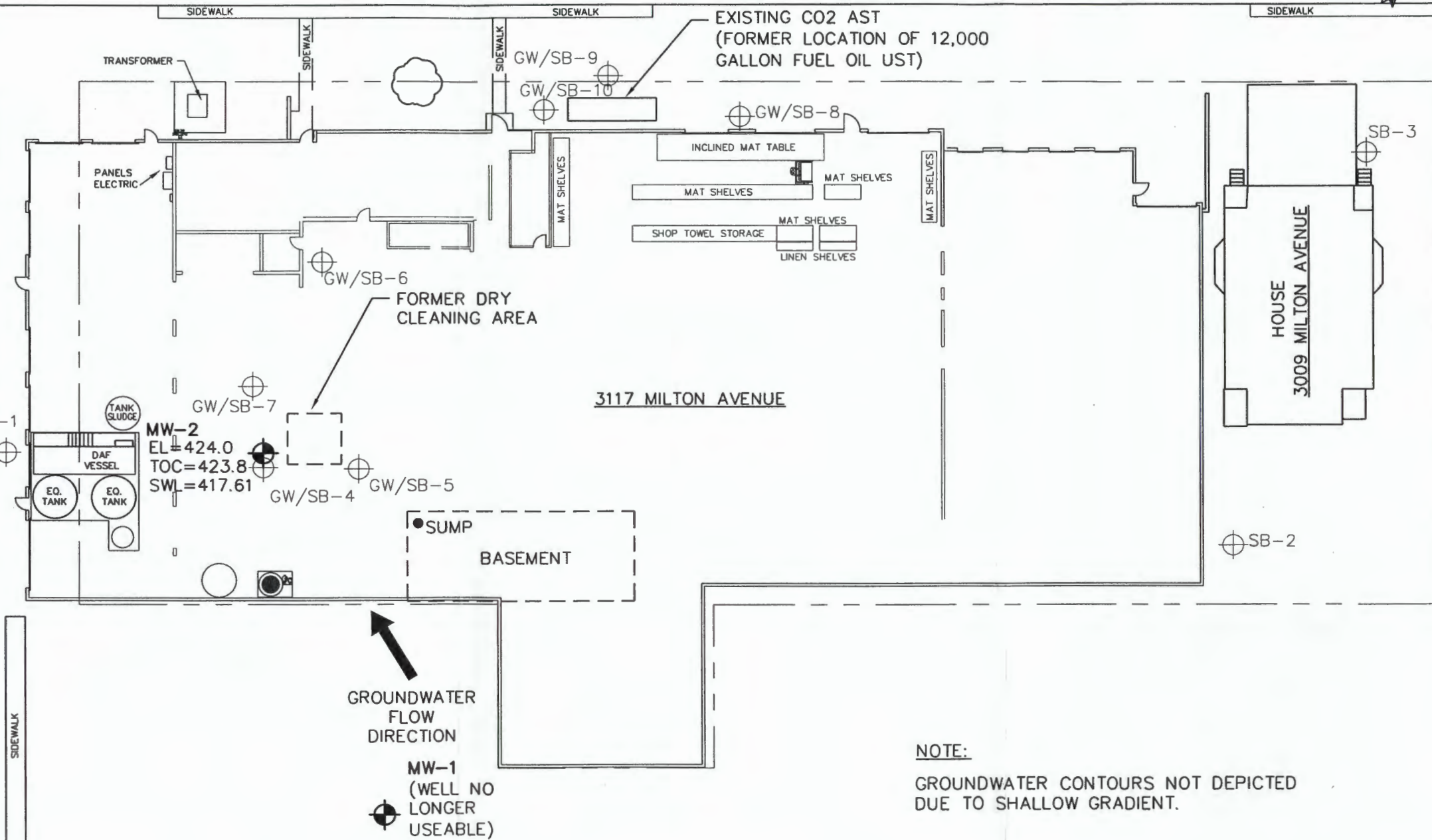
MW-4
EL=422.0
TOC=421.6
SWL=417.60

GW-25 MW-3 GW-24
EL=422.5
TOC=422.3
SWL=417.81

MILTON AVENUE

MW-6 (TP)
EL=419.1
TOC=418.8
SWL=417.64

BAILEY AVENUE



NOTE:

GROUNDWATER CONTOURS NOT DEPICTED
DUE TO SHALLOW GRADIENT.

LEGEND:

⊕ FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION

⊕ PERMANENT MONITORING WELL LOCATION

← GROUNDWATER FLOW DIRECTION

EL = RIM ELEVATION

TOC = TOP OF CASING ELEVATION

SWL = STATIC WATER LEVEL ELEVATION

SCALE: 1" = 30'

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& L
oguidice, P.C.

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ARAMARK UNIFORM SERVICES

GROUNDWATER ELEVATIONS
(NOVEMBER 2006)

VILLAGE OF SOLVAY

ONONDAGA COUNTY, N.Y.

Figure

9

Project No.

909.001

X: XREF(S)_W/_/_(ROT/TWIST)
L: LS=,OR L:ON=,OFF=
P: STANDARD.PC3.CTB

11/7/05-SYR-MJ, 1/19/07
900/SL_REPORT/909001_FIG_10.DWG

- LEGEND:
- ⊕ FORMER TEMPORARY SOIL AND/OR GROUNDWATER SAMPLE LOCATION
 - ⊙ PERMANENT MONITORING WELL LOCATION
 - GROUNDWATER FLOW DIRECTION
 - - - APPROXIMATE EXTENT OF PLUME

SCALE: 1"= 30'

B
L

Barton
Loguidice, P.C.
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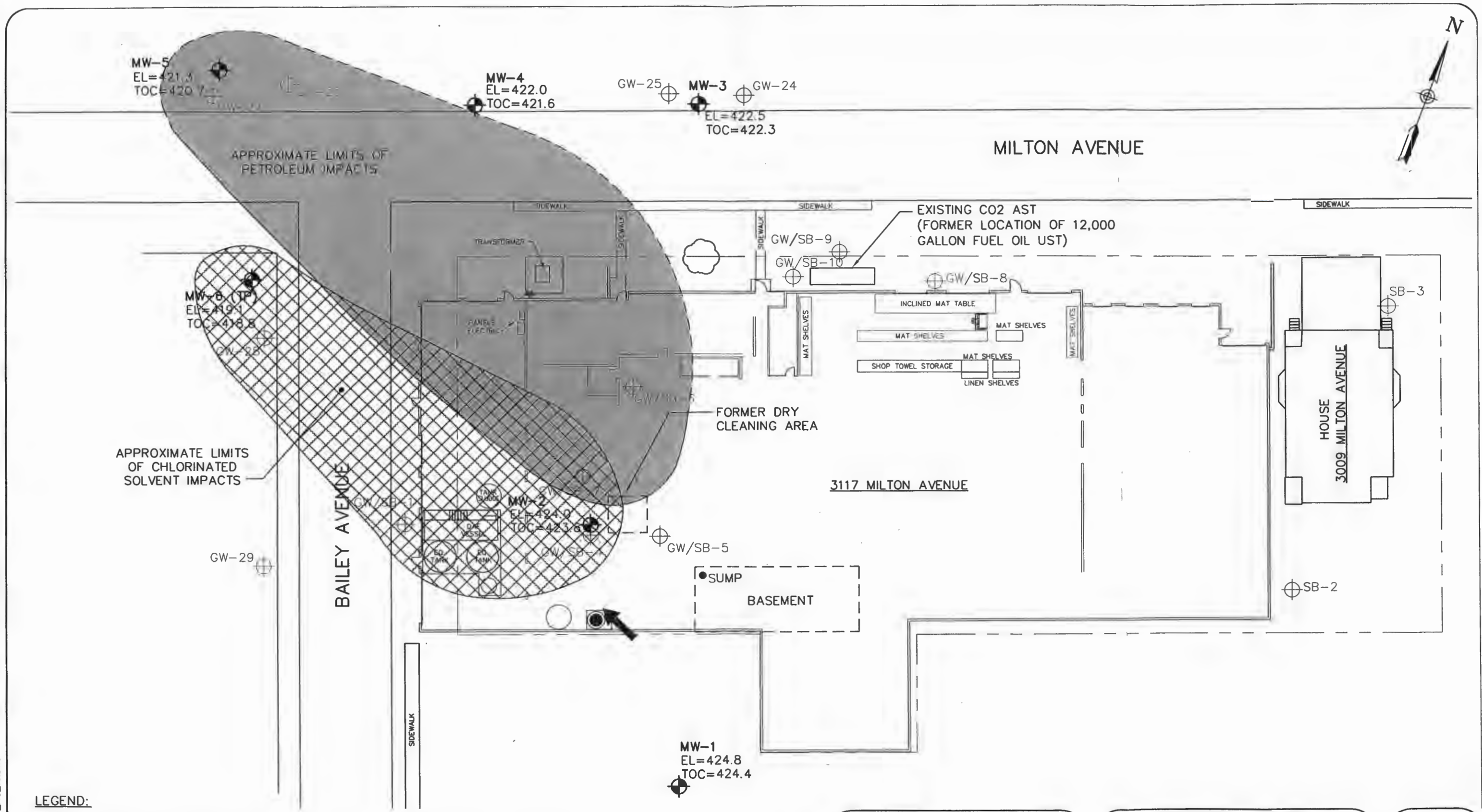
ARAMARK UNIFORM SERVICES

LIMITS OF
GROUNDWATER IMPACTS

VILLAGE OF SOLVAY ONONDAGA COUNTY, N.Y.

Figure
10

Project No.
909.001



Appendix A

Chemical Storage Data Listing

PlantCHEMICAL DATA LISTING

05/14/2002

<u>Product Name</u>	<u>Storage Location</u>	<u>MSDS?</u>	<u>Amount on site</u>
Aquid TURBOVERDRIVE	wastewater area	YES	approx 400 gallons 850 y cap.
Aquid	wastewater area	YES	2-55 gallon drum
Black Dye	Behind # 5 washer	YES	6-1 lb bucket
Bleach	wastewater area	YES	110 gallon tank
Builder 300	wastewater area	YES	110 gallon tank
Builder 300	wastewater area	YES	3-55 gallon drums
Clipper Cleaner	new building on rack	YES	1-55 gallon drum
Drew 6115	wastewater area	YES	2-55 gallon drum
Drewfloc 2270	wastewater area	YES	1-55 gallon drum
Drewfloc 480	wastewater area	YES	approx 700 gallon
Dye Stripper	Behind # 5 washer	YES	4-quart bottles
Dynalite TURBOCHARGE	wastewater area	YES	approx 800 gallons 2450-y
Dynalite II	wastewater area	YES	3-55 gallon drums
Eccogard WN-17 Base	washroom	YES	1-55 gallon drum
Flametard Fluff	new building on rack	YES	1-100 lb drum
Jinx Ink	Behind # 5 washer	YES	10-16 oz bottles
Maroon Dye	middle of washroom	YES	1-100 lb drum
Orange Dye	middle of washroom	YES	1-200 lb drum
Oxalic Acid	new building on rack	YES	1-100 lb drum
Precise Plus	new building on rack	YES	15-55 lb bags
Rinspeed	wastewater area	YES	110 gallon tank
Rinspeed	wastewater area	YES	3-55 gallon drums
Rite-Go	Behind # 5 washer	YES	10-24 oz. bottles
Royal Blend	new building on rack	YES	1-55 lb bag
Royal Blue Bleach	new building on rack	YES	1-100 lb drum
Rust Go	Behind # 5 washer	YES	30-14 oz bottles
So-White	wastewater area	YES	30 gallon drum
Targo	Behind # 5 washer	YES	5-gallon jars
Tex Stat II	wastewater area	YES	30 gallon drum
Turbo Flex D		YES	
Yellow Dye	middle of washroom	YES	1-100 lb drum

W.W.
CHEM.POLYMER &
COAGULANTS

1/2/1920

Dear Sir,
I have the pleasure to acknowledge the receipt of your letter of the 1st inst. in relation to the above matter.
The same has been forwarded to the proper authorities for their consideration.
I am, Sir, very respectfully,
Yours faithfully,
[Signature]

Appendix B

Monitoring Well Boring and Construction Logs



SUBSURFACE INVESTIGATION LOG

BORING NO. MW-1
B & L Project No. 909.001

Project: Aramark - Solvay
Client: The Wetlands Company
Project Location: 3009 & 3007 Milton Avenue - Solvay
Drill Rig: Tripod Elevation Datum:
Casing na Northing: Easting:
Soil Sampler: 3-in split spoon Start Date: 4/6/2005 Finish Date: same
Sample Hammer Wt. na Fall: na inches Contractor: Geologic - Northstar
Rock Sampler: NA Driller: Tripod field crew
Other: GS EI = 424.8 TOC EI. = 424.4 Geologist: RLV

Depth	Sample Type	Blows per 6"	N or RQD %	Recovery (ft)	PID (PPM)	Headspace	Material Description	Well Completion Details
		na	na	0.75	<1	<1	Topsoil 0-1.5' Boring located in grassy yard of adjoining property to north of site structure	Grout 0-1.5'
		na	na	0.75	<1	<1	GC (resembles till): Gravel; sub-angular to sub-rounded sandy, clayey, slightly silty, increasing moisture with depth but no saturation, slightly moist to moist range, light brown with oxidation staining.	Bentonite Chips 1.5-3'
5		na	na	0.50	<1	<1		#0 Morie Sand Pack from 3-7'
		na	na	0.5	<1	<1		
10							Bedrock based on dolostone fragments in spoon shoe Unable to advance past 7' with tripod, spoon bouncing on rock.	Flush-mount well completion with locking j-plug cap. Threaded end cap at bottom of casing. PVC screen is 0.010 continuous wrap.
15								

Notes:



SUBSURFACE INVESTIGATION LOG

BORING NO. MW-2
B & L Project No. 909.001

Project: Aramark - Solvay
Client: The Wetlands Company
Project Location: 3009 & 3007 Milton Avenue - Solvay

Drill Rig: Geoprobe Elevation _____ Datum: _____
Casing 3" split spoon Northing: _____ Easting: _____
Soil Sampler: 3" split spoon Start Date: 4/5/2005 Finish Date: same
Sample Hammer Wt. na Fall: na inches Contractor: Geologic - Northstar
Rock Sampler: Portable HQ core unit Driller: Scott Breeds
Other: GS EI = 424.0 TOC EI. = 423.8 Geologist: RLV

Depth	Sample Type	Blows per 6"	N or RQD %	Recovery (ft)	PID (PPM)	Headspace	Material Description	Well Completion Details
							Concrete slab cored 0-0.83' to access soil	
		na	na	1.5	<10	5	GM: 1 - 5 ft Gravel; angular to sub-angular, sandy; fine to coarse-grained, silty, slightly clayey, brown, moist.	Grout 0-2'
		na	na	47	25			Bentonite Chips 2-3.5'
5		na	na	4	3		GC: 5-8.5 ft Gravel, angular to sub-angular, sandy; fine to coarse-grained, clayey; low to medium plasticity, slightly silty, brown with dark gray to black lenses, moist to very moist (water perched between clays and silts)	5
		na	na	12	4			#0 Morie Sand Pack from 3.5-12.5'
10		na	na	0.50	23	12	SM: 8.5-12 ft Sand; fine to medium-grained, silty to very silty, upper 0.5' wet, slightly moist to moist from 9.5-11. Noticeable petroleum odor	
		na	na	1.5	270	75		
		na	na	0.8	12	9		12
							GM (resembles till) similar to MW-6, MW-5, MW-4 Gravel; sub-rounded to sub-angular, very silty, slightly sandy to sandy, slightly clayey, reddish brown to brown, oxidation staining, slightly moist to moist.	
15								

Flush-mount well completion with locking j-plug cap. Threaded end cap at bottom of casing. PVC screen is 0.010 continuous wrap.

Notes:

**SUBSURFACE
INVESTIGATION LOG**

BORING NO. MW-3
B & L Project No. 909.001

Project: Aramark - Solvay
Client: The Wetlands Company
Project Location: 3009 & 3007 Milton Avenue - Solvay

Drill Rig: CME 45T Elevation _____ Datum: _____
Casing 4.25 HAS Northing: _____ Easting: _____
Soil Sampler: 2-in Split Spoon Start Date: 4/4/2005 Finish Date: same
Sample Hammer Wt. 140 lbs Fall: 30 inches Contractor: Geologic - Northstar
Rock Sampler: NA Driller: Scott Breeds
Other: GS EI = 422.5 TOC EI. = 422.3 Geologist: RLV

Depth	Sample Type	Blows per 6"	N or RQD %	Recovery (ft)	PID (PPM)	Headspace	Material Description	Well Completion Details
—	—	20/10/6/5	na	1.0	<1	<1	ARTIFICIAL FILL: Gravel and rock fragments, sand, silt, gray to brown, dry to slightly moist 0-4 ft	 Grout 0-1' Bentonite Chips 1-3' #0 Morie Sand Pack from 3-12'
—	—	4/3/4/4	na	1.0	<1	<1		
5	—	2/1/1/2	na	0.75	<1	<1	SC (resembles till): Sand; fine to coarse-grained, silty 4-5.5 ft slightly gravelly, slightly clayey, light brown, dry	
—	—	2/1/1/1	na	2.0	<1	<1	CL: Clay; low plasticity, silty to very silty, slightly sandy; fine grained, dark brown to brown-gray, moist to very moist 5.5-10.5 ft	
—	—	2/3/4/5	na	2.0	<1	<1		
10	—	17/19/24/36	na	2.0	<1	<1	SM (resembles till): Silt, slightly sandy to sandy, slightly clayey to clayey, slightly gravelly, reddish brown, slightly moist 10.5 - TD	
—	—	50 for 0.2"		0.2			Boring TD at 12' due to contact with dense till	Flush-mount well completion with locking j-plug cap. Threaded end cap at bottom of casing. PVC screen is 0.010 continuous wrap.
15	—							
—	—							
—	—							
—	—							

Notes:

**SUBSURFACE
INVESTIGATION LOG**

BORING NO. MW-6

B & L Project No. 909.001

Project: Aramark - Solvay

Client: The Wetlands Company

Project Location: 3009 & 3007 Milton Avenue - Solvay

Drill Rig: CME 45T

Elevation

Datum:

Casing 4.25 HAS

Northing:

Easting:

Soil Sampler: 2-in Split Spoon

Start Date: 4/6/2005

Finish Date: same

Sample Hammer Wt. 140 lbs Fall: 30 inches

Contractor: Geologic - Northstar

Rock Sampler: NA

Driller: Scott Breeds

Other: GS EI = 419.1 TOC EI. = 418.8

Geologist: RLV

Depth	Sample Type	Blows per 6"	N or RQD %	Recovery (ft)	PID (PPM)	Headspace	Material Description	Well Completion Details
		1/2/1/1	na	0.50	<1	<1	Topsoil Boring located in grassy yard of adjoining property west of Bailey 0-1.5'	Grout 0-2'
		2/2/1/1	na	1.50	<1	<1	GC (resembles till): Gravel; sub-angular to sub-rounded sandy, clayey, slightly silty, increasing moisture with depth, wet at 6', dark brown, dark gray/black lense at ~5 ft with petroleum odor (nothing on PID) 1.5-9'	Bentonite Chips 2-3.5'
5		1/1/3/2	na	1.75	<1	<1		
		2/3/10/30	na	2.0	<1	<1		#0 Morie Sand Pack from 3.5-10.5'
10		22/ 50 for 0.4"	na	0.25	<1	<1	GN (resembles till): similar to MW-5 and MW-4 9 - 10'	
							(boring terminated at 10 ft due to transition to dense till)	Flush-mount well completion with locking j-plug cap. Threaded end cap at bottom of casing. PVC screen is 0.010 continuous wrap.
15								

Notes:

Appendix C

Groundwater Field Sampling Data Sheets

APRIL 2005 SAMPLING EVENT

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-1

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 50s F

SAMPLE TYPE: Groundwater ☒ Sediment ☐

Surface Water ☐ Other (specify): _____
Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	5.95
Measured Well Depth (feet)*:	7.01
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.17

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM
Time: 11:14 Date: 4/13/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Volume of Water Purged (gallons): 0.51

Did well purge dry? No ☐ Yes ☒
Did well recover? No ☐ Minimal Recovery ☐

Recovery time: 5-8 Minutes

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Sampled by:BJM Time: 11:30 Date: 04/18/05

SAMPLING DATA

Sample Appearance

Color: Clear to Milky Sediment: Some Trace Fines

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech Time: 14:30 Date: 04/18/05

COMMENTS:

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-2

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 50s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	5.51
Measured Well Depth (feet)*:	10.10
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.73

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by: BJM/DMJ

Time: 17:23 Date: 4/13/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 2.20 Gallons

Did well purge dry? No ☒

Yes ☐

Did well recover? No ☐

Minimal Recovery ☐

Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by: BJMDMJ Time: 09:35

Date: 04/13/05

SAMPLING DATA

Sample Appearance

Color: - Sediment: -

Odor: -

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

2 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: _____

Date: 04/14/05

COMMENTS:

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-3

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Clear

Temp: Upper 50s F

SAMPLE TYPE: Groundwater ☒
Sediment ☐

Surface Water ☐ Other (specify): _____
Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	3.90
Measured Well Depth (feet)*:	9.95
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.97

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM/DMJ
Time: 16:10 Date 04/13/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 2.90

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time: _____

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM/BJM **Time:** 17:15 **Date:** 04/13/05

SAMPLING DATA

Sample Appearance

Color: Brown **Sediment:** Silt

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 2 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech **Time:** _____ **Date:** 04/14/05

COMMENTS:

This well original developed with a bailer (5 gallons) and then peristaltic (6 gallons).

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-4

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 50s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	3.33
Measured Well Depth (feet)*:	11.42
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.29

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM/DMJ

Time: 15:40 Date 04/13/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 3.8 Gallons / ~ 20 gallons removed for development

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM/DMJ **Time:** 16:30 **Date:** 04/13/05

SAMPLING DATA

Sample Appearance

Color: Light Brown **Sediment:** Silt

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 2 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: _____ **Date:** 04/13/05

COMMENTS:

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-5 (MW-X)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 50s F

SAMPLE TYPE: Groundwater ☒
Sediment ☐

Surface Water ☐ Other (specify): _____
Leachate ☐ _____

WATER LEVEL DATA

Static Water Level (feet)*:	2.28
Measured Well Depth (feet)*:	8.86
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.05

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM/DMJ
Time: 13:20 Date 4/13/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 25 Gallons

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time: _____

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM/DMJ Time: 13:20 Date: 04/13/05

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Silt

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 2 - 1L Amber for SVOC's and 4 - VOA's for VOC's

Samples Delivered to: ChemTech Time: 17:00 Date: 06/22/05

COMMENTS:

MW-X Location. First used a bailer and then used a peristaltic pump to develop the, removing ~25 gallons of water.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-6 (MS/MSD)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 50s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	0.73
Measured Well Depth (feet)*:	8.16
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.18

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM

Time: 13:15 Date 4/13/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 3.56 Gallons - 11 Gallons for Development

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM?DMJ Time: 12:53 Date: 04/13/05

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Lots of Silt

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 3 - 1L Amber for SVOC's and 6 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: _____

Date: 04/13/05

COMMENTS:

MS/MSD Location First used a bailer and switched to peristaltic pump to develop, removed.
~ 11 gallons of water.

JUNE 2005 SAMPLING EVENT

**FIELD SAMPLING DATA SHEET**SITE: **Aramark Solvay Uniform Services**SAMPLE LOCATION: **MW-1**CLIENT: **Aramark Solvay Uniform Services**JOB #: **909.001**Weather Conditions: **Sunny**Temp: **Mid 70s F**SAMPLE TYPE: Groundwater ☒
Sediment ☐Surface Water ☐ Other (specify):
Leachate ☐**WATER LEVEL DATA**

Static Water Level (feet)*:	
Measured Well Depth (feet)*:	7.01
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify):

Measured by:BJM

Time: Date 6/22/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Volume of Water Purged (gallons):

Did well purge dry? No ☐ Yes ☐Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Sampled by:BJM Time: Date: 06/22/05

SAMPLING DATA

Sample Appearance

Color: Sediment:

Odor:

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: **ChemTech** Time: Date:**COMMENTS:**

This well was dry.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-2

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	6.60
Measured Well Depth (feet)*:	10.10
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.60

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM

Time: 15:35 Date 6/23/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 4.0 Gallons

Did well purge dry? No ☒

Yes ☐

Did well recover? No ☐

Minimal Recovery

Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM Time: 15:40 Date: 06/23/05

SAMPLING DATA

Sample Appearance

Color: Greyish Brown Sediment: Fine

Odor: Sulfur/Rotten Egg

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 17:44

Date: 06/23/05

COMMENTS:

This well has a definite odor on the on the water level probe.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-3

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Partly Cloudy

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒
Sediment ☐

Surface Water ☐ Other (specify): _____
Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	5.06
Measured Well Depth (feet)*:	9.95
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.72

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM

Time: 11:11 Date 6/22/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 2.2 Gallons

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time: _____

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM Time: 11:25 Date: 06/22/05

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Lots of Fines

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech Time: 17:00 Date: 6/22/05

COMMENTS:

This well was very heavily silted.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-4

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	4.45
Measured Well Depth (feet)*:	11.42
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.20

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM

Time: 11:46 Date 6/22/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 3.5 Gallons

Did well purge dry? No ☒

Yes ☐

Did well recover? No ☐

Minimal Recovery

Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM Time: 12:00 Date: 06/22/05

SAMPLING DATA

Sample Appearance

Color: Brown

Sediment: Lots

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 17:00

Date: 06/22/05

COMMENTS:

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-5 (MW-X)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒
Sediment ☐

Surface Water ☐ Other (specify): _____
Leachate ☐ _____

WATER LEVEL DATA

Static Water Level (feet)*:	2.52
Measured Well Depth (feet)*:	8.86
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.00

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM
Time: 13:33 Date 6/22/05

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 3.00

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time: _____

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM Time: 13:45 Date: 06/22/05

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Some Fines

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 2 - 1L Amber for SVOC's and 4 - VOA's for VOC's

Samples Delivered to: ChemTech Time: 17:00 Date: 06/22/05

COMMENTS:

MW-X Location. Annular space filled with water but not to the top of the riser.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION: MW-6 (MS/MSD)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	1.60
Measured Well Depth (feet)*:	9.32
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.23

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM

Time: 12:22 Date 6/22/05

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 3.7 Gallons

Did well purge dry? No ☒

Yes ☐

Did well recover? No ☐

Minimal Recovery

Recovery time:

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM Time: 12:31 Date: 06/22/05

SAMPLING DATA

Sample Appearance

Color: Light Brown

Sediment: Fine Sediment

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 3 - 1L Amber for SVOC's and 6 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 17:00

Date: 06/22/05

COMMENTS:

MS/MSD Location Silt content is lower in the water.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions:

SAMPLE LOCATION: MW-1
JOB #: 909.001
Temp:

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	
Measured Well Depth (feet)*:	7.01
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by: BJM/DHK
Time: Date 8/31/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Volume of Water Purged (gallons):

Did well purge dry? No ☐ Yes ☐
Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Sampled by: BJM/DHK Time: Date:

SAMPLING DATA

Sample Appearance
Color: Sediment:
Odor:

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

Samples Delivered to: Time: Date:

COMMENTS:

This well has been lost because of the house demolition adjacent to the well.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-2

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	6.50
Measured Well Depth (feet)*:	10.10
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.58

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by: BJM/DHK

Time: 15:35

Date 8/31/06

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 1.7 Gallons

Did well purge dry? No ☐

Yes ☐

Did well recover? No ☐

Minimal Recovery ☐

Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by: BJM/DHK Time: 14:30

Date: 08/31/06

SAMPLING DATA

Sample Appearance

Color: Greyish Brown

Sediment: Fine

Odor: Sulfur/Rotten Egg

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 16:00

Date: 08/31/06

COMMENTS:

This well has a definite odor even on the water level probe.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions: Partly Cloudy

SAMPLE LOCATION: MW-3
JOB #: 909.001
Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐ _____

WATER LEVEL DATA

Static Water Level (feet)*:	5.00
Measured Well Depth (feet)*:	9.95
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.79

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by: BJMDHK
Time: 12:31 Date 8/31/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 2.3 Gallons

Did well purge dry? No ☒ Yes ☐
Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by: BJM/DHK Time: 12:44 Date: 8/31/06

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Lots of Fines
Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech Time: 16:00 Date: 8/31/06

COMMENTS:

This well was very heavily silted.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-4

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater

☒

Surface Water

☐

Other (specify): _____

Sediment

☐

Leachate

☐

WATER LEVEL DATA

Static Water Level (feet)*:	4.32
Measured Well Depth (feet)*:	11.42
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.14

*depth from measuring point

Measuring Point: Top of Riser

☒

Other (specify): _____

Measured by:BJM/DHK

Time: 11:46

Date 6/22/05

PURGING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Volume of Water Purged (gallons): 3.4 Gallons

Did well purge dry? No

☒

Yes

☐

Did well recover? No

☐

Minimal Recovery

Recovery time:

SAMPLING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Sampled by:BJM/DHK Time: 12:54 Date: 08/31/06

SAMPLING DATA

Sample Appearance

Color: Brown

Sediment: Lots of Fines

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 17:00

Date: 06/22/05

COMMENTS:

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions: Sunny

SAMPLE LOCATION: MW-5 (MW-X)
JOB #: 909.001
Temp: Mid 70s F

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	2.55
Measured Well Depth (feet)*:	8.86
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.00

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM/DHK
Time: 13:11 Date 8/31/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 3.0 Gallons

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM/DHK Time: 13:29 Date: 8/31/06

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Some Fines
Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 2 - 1L Amber for SVOC's and 4 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 13:00 Date: 08/31/06

COMMENTS:

MW-X Location. Anular space filled with water but not to the top of the riser.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-6 (MS/MSD)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Mid 70s F

SAMPLE TYPE: Groundwater

☒

Surface Water

☐

Other (specify): _____

Sediment

☐

Leachate

☐

WATER LEVEL DATA

Static Water Level (feet)*:	1.51
Measured Well Depth (feet)*:	9.32
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.24

*depth from measuring point

Measuring Point: Top of Riser

☒

Other (specify): _____

Measured by:BJM/DHK

Time: 13:21

Date 8/31/06

PURGING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Volume of Water Purged (gallons): 3.74 Gallons

Did well purge dry? No

☒

Yes

☐

Did well recover? No

☐

Minimal Recovery

Recovery time:

SAMPLING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Sampled by:BJM/DHK Time: 13:32 Date: 08/31/06

SAMPLING DATA

Sample Appearance

Color: Light Brown

Sediment: Fine Sediment

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

3 - 1L Amber for SVOC's and 6 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 16:00

Date: 08/31/06

COMMENTS:

MS/MSD Location Silt content is lower in the water.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions:

SAMPLE LOCATION: MW-1
JOB #: 909.001
Temp:

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	
Measured Well Depth (feet)*:	7.01
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by: BJM/DHK
Time: Date 8/31/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Volume of Water Purged (gallons):

Did well purge dry? No ☐ Yes ☐
Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☐

Sampled by: BJM/DHK Time: Date:

SAMPLING DATA

Sample Appearance
Color: Sediment:
Odor:

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

Samples Delivered to: Time: Date:

COMMENTS:

This well has been lost because of the house demolition adjacent to the well.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-2

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 40's F

SAMPLE TYPE: Groundwater

☒

Surface Water

☐

Other (specify): _____

Sediment

☐

Leachate

☐

WATER LEVEL DATA

Static Water Level (feet)*:	6.19
Measured Well Depth (feet)*:	10.10
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.63

*depth from measuring point

Measuring Point: Top of Riser

☒

Other (specify): _____

Measured by: BJM/DHK

Time: 13:48 Date 11/2/06

PURGING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Volume of Water Purged (gallons): 1.88 Gallons

Did well purge dry? No

☐

Yes

☐

Did well recover? No

☐

Minimal Recovery

Recovery time:

SAMPLING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Sampled by:BJM/DHK Time: 13:55 Date: 11/2/06

SAMPLING DATA

Sample Appearance

Color: Greyish Brown Sediment: Fine

Odor: Sulfur/Rotten Egg

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 15:00

Date: 11/2/06

COMMENTS:

This well has a definite odor even on the water level probe.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions: Partly Cloudy

SAMPLE LOCATION: MW-3
JOB #: 909.001
Temp: Upper 40's F

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	4.49
Measured Well Depth (feet)*:	9.95
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	0.87

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by: BJMDHK
Time: 11:30 Date 11/2/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 2.6 Gallons

Did well purge dry? No ☒ Yes ☐
Did well recover? No ☐ Minimal Recovery ☐

Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by: BJM/DHK Time: 11:46 Date: 11/2/06

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Lots of Fines
Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 15:00 Date: 11/2/06

COMMENTS:

This well was very heavily silted.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-4 (Dupe)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 40's F

SAMPLE TYPE: Groundwater

☒

Surface Water

☐

Other (specify): _____

Sediment

☐

Leachate

☐

WATER LEVEL DATA

Static Water Level (feet)*:	4.00
Measured Well Depth (feet)*:	11.42
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.18

*depth from measuring point

Measuring Point: Top of Riser

☒

Other (specify): _____

Measured by:BJM/DHK

Time: 11:35

Date 11/2/06

PURGING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Volume of Water Purged (gallons): 3.56 Gallons

Did well purge dry? No

☒

Yes

☐

Did well recover? No

☐

Minimal Recovery

Recovery time:

SAMPLING METHOD

Equipment:

Bailer

☒

Submersible Pump

☐

Air Lift System

☐

Bladder Pump

☐

Foot Valve

☐

Peristaltic Pump

☐

Dedicated

☐

Non-dedicated

☒

Sampled by:BJM/DHK Time: 11:55

Date: 11/2/06

SAMPLING DATA

Sample Appearance

Color: Brown

Sediment: Lots of Fines

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

2 - 1L Amber for SVOC's and 4 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 15:00

Date: 11/2/06

COMMENTS:

Duplicate Loaction

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services
CLIENT: Aramark Solvay Uniform Services
Weather Conditions: Sunny

SAMPLE LOCATION: MW-5
JOB #: 909.001
Temp: Upper 40's F

SAMPLE TYPE: Groundwater ☒ Surface Water ☐ Other (specify): _____
Sediment ☐ Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	2.48
Measured Well Depth (feet)*:	8.86
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.02

*depth from measuring point

Measuring Point: Top of Riser ☒
Other (specify): _____
Measured by:BJM/DHK
Time: 12:55 Date 11/2/06

PURGING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Volume of Water Purged (gallons): 3.0 Gallons

Did well purge dry? No ☒ Yes ☐

Did well recover? No ☐ Minimal Recovery ☐ Recovery time:

SAMPLING METHOD

Equipment: Bailer ☒ Submersible Pump ☐ Air Lift System ☐
Bladder Pump ☐ Foot Valve ☐ Peristaltic Pump ☐
Dedicated ☐ Non-dedicated ☒

Sampled by:BJM/DHK Time: 13:08 Date: 11/2/06

SAMPLING DATA

Sample Appearance

Color: Brown Sediment: Some Fines
Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type) 1 - 1L Amber for SVOC's and 2 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 15:00 Date: 11/2/06

COMMENTS:

Anular space filled with water but not to the top of the riser.

FIELD SAMPLING DATA SHEET

SITE: Aramark Solvay Uniform Services

SAMPLE LOCATION:

MW-6 (MS/MSD)

CLIENT: Aramark Solvay Uniform Services

JOB #: 909.001

Weather Conditions: Sunny

Temp: Upper 40's F

SAMPLE TYPE: Groundwater ☒

Surface Water ☐

Other (specify): _____

Sediment ☐

Leachate ☐

WATER LEVEL DATA

Static Water Level (feet)*:	1.16
Measured Well Depth (feet)*:	9.32
Well Casing Diameter (inches):	2
Volume in Well Casing (gallons):	1.12

*depth from measuring point

Measuring Point: Top of Riser ☒

Other (specify): _____

Measured by:BJM/DHK

Time: 12:25 Date 11/2/06

PURGING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Volume of Water Purged (gallons): 3.36 Gallons

Did well purge dry? No ☒

Yes ☐

Did well recover? No ☐

Minimal Recovery ☐

Recovery time: _____

SAMPLING METHOD

Equipment:

Bailer ☒

Submersible Pump ☐

Air Lift System ☐

Bladder Pump ☐

Foot Valve ☐

Peristaltic Pump ☐

Dedicated ☐

Non-dedicated ☒

Sampled by:BJM/DHK Time: 12:25 Date: 11/2/06

SAMPLING DATA

Sample Appearance

Color: Light Brown

Sediment: Fine Sediment

Odor: None

Field Measured Parameters

pH (Standard Units)	-	Sp. Conductivity (umhos/cm)	-
Temperature (F)	-	Eh-Redox Potential (mV)	-
Turbidity (NTUs)	-	Dissolved Oxygen (mg/L)	-

Samples Collected (Number/Type)

3 - 1L Amber for SVOC's and 6 - VOA's for VOC's

Samples Delivered to: ChemTech

Time: 16:00

Date: 08/31/06

COMMENTS:

MS/MSD Location Silt content is lower in the water.

Appendix D

Drum Disposal Documentation

ATTENTION SHIPPERS!

FREIGHT CHARGES ARE PREPAID ON THIS BILL OF LADING UNLESS MARKED COLLECT.

STRAIGHT BILL OF LADING

ORIGINAL — NOT NEGOTIABLE

Shipper No. SWTN0000Carrier No. 54-166Page 1 of 1

OP-TECH Environmental Services, Inc.

Date 10-7-05

(Name of carrier)

(SCAC)

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. I.

TO:

Consignee OP-TECH Environmental Services, Inc.Street 370 Route 34City Waverly State NY Zip Code 14892

FROM:

Shipper Aramak Uniform ServicesStreet 3117 Milton AvenueCity Solvay State NY Zip Code 1320924 hr. Emergency Contact Tel. No. 800-225-6750

Route

Vehicle
NumberNo. of Units
& Container Type

HM

BASIC DESCRIPTION
Proper Shipping Name, Hazard Class or UN or NA Number, Packing Group or
UN or NA Number, Packing Group Hazard Class, Packing GroupTOTAL QUANTITY
(Weight, Volume,
Gallons, etc.)WEIGHT
(Subject to
Correction)

RATE

CHARGES
(For Carrier
Use Only)3 DMNon RCRA, Non DOT Regulated Liquids (Decon Water)Est 900

P

3 DMNon RCRA, Non DOT Regulated Solids (Sugar Cuttings)Est 1200

P

Approval#

Approval# 00250RECEIVED
10/13/05PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per

(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.

(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 380, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packed, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Signature

REMIT
C.O.D. TO:
ADDRESS

COD

Amt: \$

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

C.O.D. FEE:
PREPAID ☐
COLLECT ☐TOTAL
CHARGES \$

FREIGHT CHARGES

FREIGHT PREPAID
except when box or
right is checkedCheck box if charges
are to be
collected

RECEIVED. Subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in accordance with the conditions and conditions of the bill of lading, except as noted (contents and condition of contents of packages unknown), marked, consigned, and delivered as indicated above which said carrier (the word carrier being understood throughout this document as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier or the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to

continue and as to each party of any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification or the date of shipment.

Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assignee.

SHIPPER

Aramak Uniform Services

PER

CARRIER

OP-TECH Environmental Services, Inc.

PER

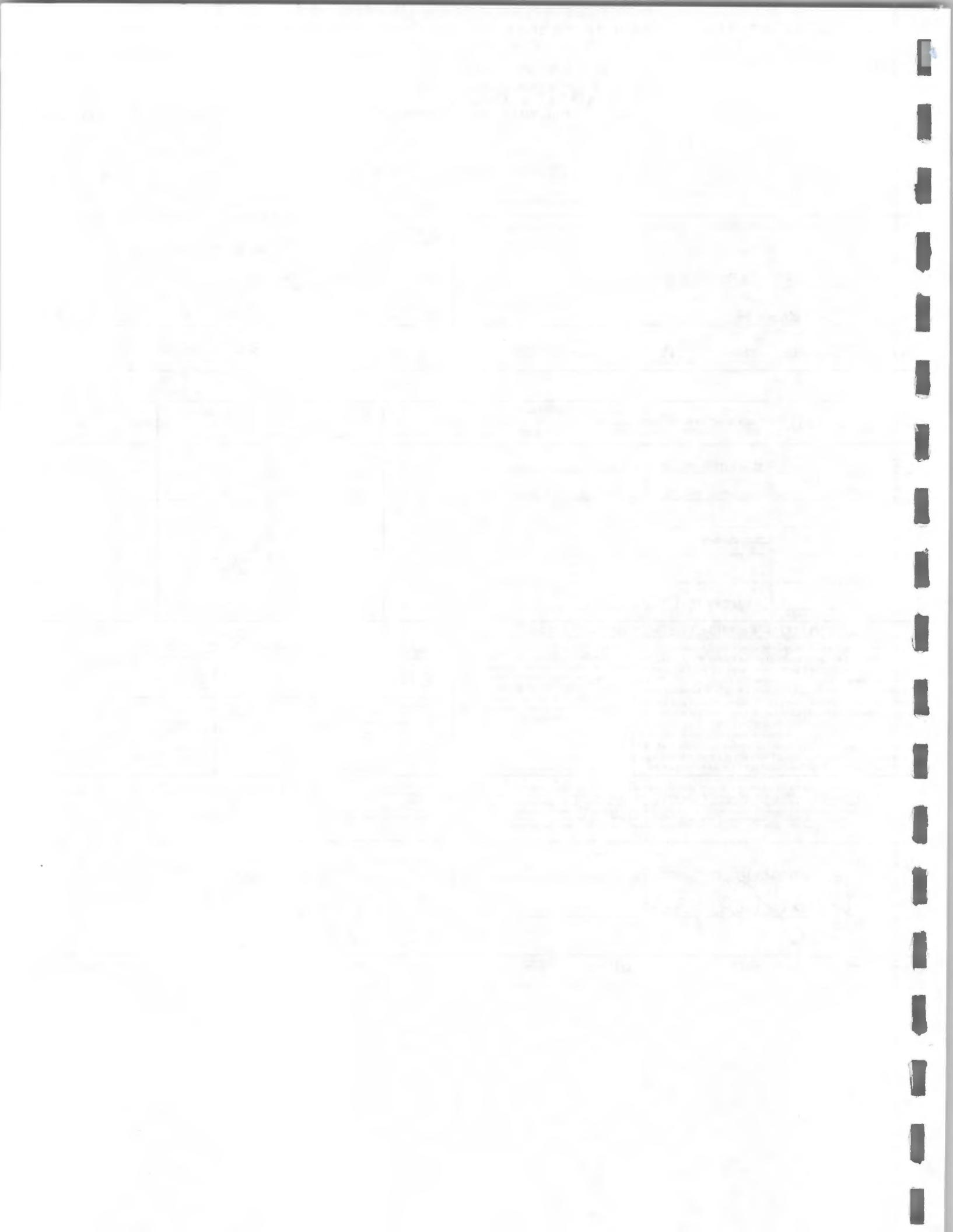
DATE

10-7-05

Permanent post-office address of shipper.



STYLE CF360-4 © 2003 LABELMASTER® (800) 621-5808 www.labelmaster.com



Nov 08 05 10:09a Andrea Fisher
Nov. 8. 2005 10:26AM
1313701074
No. 9585 P. 2

OP-TECH Environmental Services, Inc.

Acknowledgement of Disposal

This is to certify disposal of

Decon Water

On behalf of

Aramark Uniform Services

Has been completed in accordance with OP-TECH Environmental Services, Inc. Part 360

Used Oil Transfer, Storage, and Processing Facility



October 13, 2005
Date

Heath E. Robinson

Signature

11/08/2005 TUE 09:56 [TX/RX NO 5277]



[Faint, illegible handwritten text, possibly bleed-through from the reverse side of the page.]

Nov 08 05 10:09a Andrea Fisher
1315/010/44 No. 9585 P. 3

OP-TECH Environmental Services, Inc.

Certificate of Acceptance

This is to certify disposal of

Augar Cuttings

On behalf of

Aramark Uniform Services

Has been completed in accordance with OP-TECH Environmental Services, Inc. Part 360

Used Oil Transfer, Storage, and Processing Facility



October 13, 2005
Date

Heath E. Robinson

Signature

11/08/2005 TUE 09:56 [TX/RX NO 5277]

THE OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON, D. C.

TO THE SECRETARY OF THE ARMY
FROM THE SECRETARY OF THE ARMY
SUBJECT: [Illegible]

Very respectfully,
[Illegible Signature]

Appendix E

Data Tables and Summary Analytical Data Reports

- Table 1 – Monitoring Well Soil Boring Data (April 2005)
- Table 2 – Monitoring Well Groundwater Data (April 2005)
- Table 3 – Monitoring Well Groundwater Data (June 2005)
- Table 4 – Monitoring Well Groundwater Data (August 2006)
- Table 5 – Monitoring Well Groundwater Data (November 2006)
- Table 6 – Sub-slab and Soil Vapor Data (April 2005)
- Table 7 – Soil Vapor Data (October 2005)
- Final NYS DEC/DOH Soil Vapor/Indoor Air Matrices (October 2006)

Table 1
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Soil Boring Data
CHEMTECH Submission No. T2271
April 2005

Page 1 of 3

CAS NO.	PARAMETER	NYSDEC TAGM 4048* (ppb)	SOIL BORING SAMPLES							
			MW-1 (6-8FT)	MW-2 (7-9FT)	MW-3 (9.5-11FT)	MW-4 (8-10FT)	Duplicate MW-3 (6-8FT)	MW-4 (6-8FT)	MW-5 (6-8FT)	MW-6 (6-10FT)
	Volatile Organics EPA Method 8260		All results in ug/kg (ppb)							
75-71-8	Dichlorodifluoromethane	-	1 U	1 U	1 U	1 U	1.1 U	1.4 U	1.3 U	1.2 U
74-87-3	Chloromethane	-	1 U	1 U	0.99 U	1 U	1.1 U	1.4 U	1.3 U	1.2 U
75-01-4	Vinyl Chloride	200	0.96 U	11	0.96 U	1 U	1 U	1.3 U	1.3 U	1.1 U
74-83-9	Bromomethane	-	2.4 U	2.4 U	2.4 U	2.5 U	2.5 U	3.3 U	3.2 U	2.7 U
75-00-3	Chloroethane	1,900	2.5 U	2.5 U	2.5 U	2.6 U	2.6 U	3.4 U	3.3 U	2.9 U
75-69-4	Trichlorofluoromethane	-	1.5 U	1.5 U	1.4 U	1.5 U	1.5 U	2 U	1.9 U	1.7 U
78-13-1	1,1,2-Trichlorotrifluoroethane	-	0.78 U	0.78 U	0.77 U	0.81 U	0.82 U	1.1 U	1 U	0.9 U
75-35-4	1,1-Dichloroethene	400	0.67 U	0.67 U	0.67 U	0.7 U	0.71 U	0.92 U	0.9 U	0.77 U
67-64-1	Acetone	200	4.8 U	62 U	68 U	18 U	31 U	86 U	72 U	4.5 U
75-15-0	Carbon Disulfide	2,700	0.43 U	4.1 J	15	0.45 U	0.45 U	3 J	0.57 U	0.5 U
1634-04-4	Methyl tert-butyl Ether	-	0.43 U	0.43 U	0.43 U	0.45 U	0.45 U	0.59 U	0.57 U	0.5 U
79-20-9	Methyl Acetate	-	1 U	1 U	1 U	1.1 U	1.1 U	1.4 U	1.4 U	1.2 U
75-09-2	Methylene Chloride	100	2.1 U	2.1 U	3.7 U	2.2 U	2.3 U	2.9 U	3.9 U	2.5 U
156-60-5	trans-1,2-Dichloroethene	-	0.75 U	0.75 U	0.74 U	0.78 U	0.79 U	1 U	1 U	0.86 U
75-34-3	1,1-Dichloroethane	200	0.31 U	0.32 U	0.31 U	0.33 U	0.33 U	0.43 U	0.42 U	0.36 U
110-82-7	Cyclohexane	-	0.38 U	0.38 U	0.38 U	0.4 U	0.4 U	0.52 U	0.51 U	0.44 U
78-93-3	2-Butanone	300	3.3 U	7 J	7.7 J	3.4 U	3.5 U	4.8 U	11 J	3.8 U
56-23-5	Carbon Tetrachloride	600	0.52 U	0.52 U	0.52 U	0.54 U	0.55 U	0.71 U	0.69 U	0.6 U
156-59-2	cis-1,2-Dichloroethene	-	0.38 U	2.9 J	1.9 J	0.4 U	0.4 U	3.4 J	0.51 U	0.44 U
67-66-3	Chloroform	300	0.41 U	0.41 U	0.4 U	0.42 U	0.43 U	0.56 U	3.1 J	0.47 U
71-55-6	1,1,1-Trichloroethane	800	0.49 U	0.49 U	0.49 U	0.51 U	0.52 U	0.67 U	0.65 U	0.58 U
108-87-2	Methylocyclohexane	-	0.49 U	0.49 U	0.49 U	0.51 U	0.52 U	0.68 U	0.66 U	0.57 U
71-43-2	Benzene	60	0.47 U	0.47 U	0.46 U	0.49 U	0.49 U	0.64 U	0.62 U	0.54 U
107-06-2	1,2-Dichloroethane	100	0.36 U	0.36 U	0.36 U	0.37 U	0.38 U	0.5 U	0.48 U	0.41 U
79-01-6	Trichloroethene	700	0.36 U	1.7 J	0.36 U	0.38 U	0.38 U	0.5 U	0.48 U	0.42 U
78-87-5	1,2-Dichloropropane	-	0.46 U	0.47 U	0.46 U	0.48 U	0.49 U	0.64 U	0.62 U	0.54 U
75-27-4	Bromodichloromethane	-	0.39 U	0.39 U	0.39 U	0.41 U	0.41 U	0.54 U	0.52 U	0.45 U
108-10-1	4-Methyl-2-Pentanone	1,000	2.3 U	2.3 U	2.3 U	2.4 U	2.4 U	3.2 U	3.1 U	2.7 U
108-88-3	Toluene	1,500	1.8 J	2.1 J	1.5 J	0.49 U	0.5 U	0.65 U	0.63 U	0.55 U
10061-02-8	t-1,3-Dichloropropene	-	0.42 U	0.43 U	0.42 U	0.44 U	0.45 U	0.59 U	0.57 U	0.49 U
10061-01-5	cis-1,3-Dichloropropene	-	0.39 U	0.39 U	0.38 U	0.4 U	0.41 U	0.53 U	0.52 U	0.45 U
79-00-5	1,1,2-Trichloroethane	6,000	0.34 U	0.35 U	0.34 U	0.36 U	0.36 U	0.47 U	0.46 U	0.4 U
591-78-6	2-Hexanone	-	4 U	4.2 U	4.2 U	4.4 U	4.5 U	5.8 U	5.6 U	4.9 U
124-48-1	Dibromochloromethane	-	0.27 U	0.27 U	0.27 U	0.28 U	0.28 U	0.37 U	0.36 U	0.31 U
106-93-4	1,2-Dibromoethane	-	0.47 U	0.47 U	0.47 U	0.49 U	0.5 U	0.65 U	0.63 U	0.54 U
127-18-4	Tetrachloroethene	1,400	0.85 U	19	2.5 J	0.89 U	0.9 U	1.2 U	7.1 J	9.3
108-90-7	Chlorobenzene	1,700	0.42 U	0.43 U	0.42 U	0.44 U	0.45 U	0.58 U	0.57 U	0.49 U
100-41-4	Ethyl Benzene	5,500	0.41 U	0.42 U	0.41 U	0.43 U	0.44 U	0.57 U	0.55 U	0.48 U
136777-61-2	m/p-Xylenes	1,200	1 U	2.5 J	1 U	1.1 U	1.1 U	1.4 U	1.4 U	1.2 U
95-47-6	o-Xylene	1,200	0.45 U	2.5 J	0.45 U	0.47 U	0.47 U	0.62 U	0.6 U	0.52 U
100-42-5	Styrene	-	0.54 U	0.54 U	0.53 U	0.56 U	0.57 U	0.74 U	0.72 U	0.62 U
75-25-2	Bromoform	-	0.36 U	0.36 U	0.36 U	0.38 U	0.38 U	0.5 U	0.48 U	0.42 U
98-82-8	Isopropylbenzene	-	0.49 U	0.49 U	0.48 U	0.51 U	0.51 U	0.67 U	0.65 U	0.56 U
79-34-5	1,1,2,2-Tetrachloroethane	600	0.36 U	0.37 U	0.36 U	0.38 U	0.38 U	0.5 U	0.49 U	0.42 U
541-73-1	1,3-Dichlorobenzene	1,600	0.65 U	0.66 U	0.65 U	0.68 U	0.69 U	0.9 U	0.87 U	0.75 U
106-46-7	1,4-Dichlorobenzene	8,500	0.64 U	0.64 U	0.63 U	0.66 U	0.67 U	0.88 U	0.85 U	0.74 U
95-50-1	1,2-Dichlorobenzene	7,900	0.45 U	0.45 U	0.45 U	0.47 U	0.48 U	0.62 U	0.6 U	0.52 U
96-12-8	1,2-Dibromo-3-Chloropropane	-	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.5 U	1.5 U	1.3 U
120-82-1	1,2,4-Trichlorobenzene	3,400	0.8 U	0.8 U	0.79 U	0.83 U	0.84 U	1.1 U	1.1 U	0.92 U
	Total VOCs (Detectable)	10,000	1.8	52.8	28.6	0	0	6.4	21.2	9.3

Notes:
 * Recommended Soil Cleanup Objective.
 - = Compound in exceedance of Soil Cleanup Objective.

Qualifiers:
 U - Compound was analyzed for, but not detected.
 J - Indicates that the result should be considered approximate.
 B - Indicates that the analyte is found in the method blank and the sample.
 D - Identifies all compounds identified at the secondary dilution factor.

Table 1
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Soil Boring Data
CHEMTECH Submission No. T2271
April 2005

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CAS NO.	PARAMETER	SOIL BORING SAMPLES								
		NYSDEC TAGM 4046* (ppb)	MW-1 (6-8FT)	MW-2 (7-9FT)	MW-2 (9.5-11FT)	MW-3 (6-10FT)	Duplicate MW-3 (6-8FT)	MW-4 (6-8FT)	MW-5 (6-8FT)	MW-6 (6-10FT)
		All results in ug/kg (ppb)								
	Semi-Volatile Organics EPA Method 8270									
100-52-7	Benzaldehyde	-	80 U	160 U	78 U	82 U	83 U	110 U	100 U	91 U
108-95-2	Phenol	30 or MDL	59 U	120 U	57 U	60 U	61 U	80 U	77 U	67 U
111-44-4	bis(2-Chloroethyl)ether	-	61 U	120 U	60 U	63 U	64 U	83 U	81 U	70 U
95-57-8	2-Chlorophenol	800	62 U	120 U	61 U	64 U	64 U	84 U	82 U	71 U
95-48-7	2-Methylphenol	100 or MDL	64 U	130 U	63 U	66 U	67 U	87 U	85 U	74 U
108-60-1	2,2-oxybis(1-Chloropropane)	-	62 U	120 U	61 U	64 U	65 U	85 U	82 U	71 U
98-86-2	Acetophenone	-	57 U	110 U	56 U	58 U	59 U	77 U	75 U	65 U
106-44-5	3+4-Methylphenols	-	61 U	120 U	60 U	63 U	64 U	83 U	81 U	70 U
621-64-7	N-Nitroso-di-n-propylamine	-	64 U	130 U	63 U	66 U	67 U	87 U	85 U	73 U
67-72-1	Hexachloroethane	-	66 U	130 U	64 U	68 U	69 U	89 U	87 U	75 U
98-95-3	Nitrobenzene	200 or MDL	85 U	170 U	83 U	87 U	88 U	110 U	110 U	97 U
78-59-1	Isophorone	4,400	58 U	120 U	57 U	60 U	61 U	79 U	77 U	67 U
88-75-5	2-Nitrophenol	330 or MDL	60 U	120 U	58 U	61 U	62 U	81 U	79 U	68 U
105-67-9	2,4-Dimethylphenol	-	61 U	700 J	60 U	63 U	64 U	84 U	81 U	70 U
111-91-1	bis(2-Chloroethoxy)methane	-	64 U	130 U	62 U	66 U	66 U	87 U	84 U	73 U
120-83-2	2,4-Dichlorophenol	400	72 U	140 U	70 U	74 U	75 U	97 U	94 U	82 U
91-20-3	Naphthalene	13,000	66 U	16000 DJ	65 U	68 U	69 U	90 U	440 J	76 U
106-47-8	4-Chloroaniline	220 or MDL	46 U	92 U	45 U	47 U	48 U	63 U	61 U	53 U
87-68-3	Hexachlorobutadiene	-	60 U	120 U	58 U	61 U	62 U	81 U	79 U	68 U
105-60-2	Caprolactam	-	62 U	120 U	61 U	64 U	65 U	85 U	82 U	71 U
59-50-7	4-Chloro-3-methylphenol	240 or MDL	54 U	110 U	52 U	55 U	56 U	73 U	71 U	61 U
91-57-6	2-Methylnaphthalene	36,400	65 U	5200 DJ	63 U	67 U	68 U	88 U	350 J	74 U
77-47-4	Hexachlorocyclopentadiene	-	62 U	120 U	61 U	64 U	64 U	84 U	82 U	71 U
88-06-2	2,4,6-Trichlorophenol	-	57 U	110 U	56 U	59 U	59 U	77 U	75 U	65 U
95-95-4	2,4,5-Trichlorophenol	100	59 U	120 U	58 U	61 U	62 U	80 U	78 U	68 U
92-52-4	1,1-Biphenyl	-	64 U	1700	63 U	66 U	67 U	87 U	84 U	73 U
91-58-7	2-Chloronaphthalene	-	64 U	130 U	63 U	66 U	67 U	87 U	85 U	74 U
88-74-4	2-Nitroaniline	430 or MDL	49 U	98 U	48 U	51 U	51 U	67 U	65 U	56 U
131-11-3	Dimethylphthalate	2,000	62 U	120 U	61 U	64 U	65 U	85 U	82 U	71 U
208-96-8	Acenaphthylene	41,000	63 U	130 U	62 U	65 U	66 U	85 U	270 J	72 U
606-20-2	2,6-Dinitrotoluene	1,000	55 U	110 U	54 U	56 U	57 U	74 U	72 U	63 U
99-09-2	3-Nitroaniline	500 or MDL	50 U	100 U	49 U	52 U	53 U	69 U	67 U	58 U
83-32-9	Acenaphthene	50,000	69 U	140 U	68 U	71 U	72 U	94 U	480 J	79 U

Notes:

* Recommended Soil Cleanup Objective.

MDL - Compound in exceedance of Soil Cleanup Objective.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Table 1
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Soil Boring Data
CHEMTECH Submission No. T2271
April 2005

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CAS NO.	PARAMETER	SOIL BORING SAMPLES								
		NYSDEC TAGM 4046* (ppb)	MW-1 (6-8FT)	MW-2 (7-9FT)	MW-2 (9.5-11FT)	MW-3 (8-10FT)	Duplicate MW-3 (8-8FT)	MW-4 (8-8FT)	MW-5 (8-8FT)	MW-6 (8-10FT)
	Semi-Volatile Organics EPA Method 8270		All results in ug/kg (ppb)							
51-28-5	2,4-Dinitrophenol	200 or MDL	330 U	660 U	320 U	340 U	350 U	450 U	440 U	380 U
100-02-7	4-Nitrophenol	100 or MDL	48 U	96 U	47 U	49 U	50 U	65 U	63 U	55 U
132-64-9	Dibenzofuran	6,200	64 U	5700 B3	63 U	66 U	67 U	87 U	750 J	73 U
121-14-2	2,4-Dinitrotoluene	-	57 U	110 U	56 U	59 U	59 U	77 U	75 U	65 U
84-66-2	Diethylphthalate	7,100	67 U	130 U	66 U	69 U	70 U	91 U	88 U	76 U
7005-72-3	4-Chlorophenyl-phenylether	-	61 U	120 U	60 U	63 U	64 U	83 U	81 U	70 U
86-73-7	Fluorene	50,000	65 U	130 U	64 U	67 U	68 U	89 U	86 U	75 U
100-01-6	4-Nitroaniline	-	66 U	130 U	65 U	68 U	69 U	90 U	87 U	76 U
534-52-1	4,6-Dinitro-2-methylphenol	-	75 U	150 U	74 U	77 U	78 U	100 U	99 U	86 U
86-30-6	N-Nitrosodiphenylamine	-	64 U	130 U	63 U	66 U	67 U	87 U	84 U	73 U
101-55-3	4-Bromophenyl-phenylether	-	58 U	120 U	57 U	60 U	60 U	79 U	76 U	66 U
118-74-1	Hexachlorobenzene	410	62 U	120 U	61 U	64 U	65 U	84 U	82 U	71 U
1912-24-9	Atrazine	-	59 U	120 U	58 U	61 U	62 U	81 U	78 U	68 U
87-86-5	Pentachlorophenol	1000 or MDL	90 U	180 U	88 U	92 U	94 U	120 U	120 U	100 U
85-01-8	Phenanthrene	50,000	62 U	45000 DJ	140 J	64 U	64 U	84 U	5900 DJ	71 U
120-12-7	Anthracene	50,000	58 U	13000 DJ	57 U	60 U	61 U	79 U	1800 J	67 U
86-74-8	Carbazole	-	59 U	6100 DJ	58 U	61 U	62 U	80 U	590 J	68 U
84-74-2	Di-n-butylphthalate	8,100	59 U	120 U	58 U	61 U	62 U	80 U	78 U	68 U
206-44-0	Fluoranthene	50,000	58 U	27000 DJ	120 J	59 U	60 U	78 U	5000 DJ	66 J
129-00-0	Pyrene	50,000	69 U	23000 DJ	87 J	70 U	71 U	93 U	3800 DJ	78 U
85-68-7	Butylbenzylphthalate	50,000	63 U	120 U	61 U	64 U	65 U	85 U	83 U	72 U
91-94-1	3,3-Dichlorobenzidine	-	66 U	130 U	65 U	68 U	69 U	90 U	87 U	76 U
56-55-3	Benzo(a)anthracene	224 or MDL	70 U	110 U	53	56 U	57 U	74 U	71 U	62 U
218-01-9	Chrysene	400	74 U	1300 DJ	68 U	72 U	73 U	94 U	2300 DJ	80 U
117-81-7	bis(2-Ethylhexyl)phthalate	50,000	81 J	150 U	73 U	77 U	78 U	100 U	98 U	85 U
117-84-0	Di-n-octyl phthalate	50,000	66 U	130 U	65 U	68 U	69 U	90 U	87 U	75 U
205-99-2	Benzo(b)fluoranthene	1,100	43 U	5300 B3	48 J	44 U	44 U	58 U	2800	49 U
207-08-9	Benzo(k)fluoranthene	1,100	85 U	4400	84 U	88 U	89 U	120 U	1000 J	98 U
50-32-8	Benzo(a)pyrene	61	62 U	1300 B3	61 U	64 U	65 U	84 U	1400 J	71 U
193-39-5	Indeno(1,2,3-cd)pyrene	3,200	49 UJ	2400 J	48 U	51 U	51 UJ	67 U	660 J	56 U
53-70-3	Dibenz(a,h)anthracene	14	49 UJ	97 U	48 U	50 U	51 U	66 U	250	56 U
191-24-2	Benzo(g,h,i)perylene	50000	64 UJ	2200 J	63 U	66 U	67 U	87 U	710 J	73 U
	Total SVOCs (Detectable)	500,000	81	180,700	446	0	0	0	29,000	66

Notes:

* Recommended Soil Cleanup Objective.

MDL = Compound in exceedance of Soil Cleanup Objective.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

B - Indicates that the analyte is found in the method blank and the sample.

D - Identifies all compounds identified at the secondary dilution factor.

Date		Description		Amount	
1917	Jan 1	Balance		100.00	
1917	Jan 15	Received from A. B. C.		50.00	
1917	Feb 1	Received from D. E. F.		25.00	
1917	Feb 15	Received from G. H. I.		75.00	
1917	Mar 1	Received from J. K. L.		100.00	
1917	Mar 15	Received from M. N. O.		50.00	
1917	Apr 1	Received from P. Q. R.		25.00	
1917	Apr 15	Received from S. T. U.		75.00	
1917	May 1	Received from V. W. X.		100.00	
1917	May 15	Received from Y. Z. A.		50.00	
1917	Jun 1	Received from B. C. D.		25.00	
1917	Jun 15	Received from E. F. G.		75.00	
1917	Jul 1	Received from H. I. J.		100.00	
1917	Jul 15	Received from K. L. M.		50.00	
1917	Aug 1	Received from N. O. P.		25.00	
1917	Aug 15	Received from Q. R. S.		75.00	
1917	Sep 1	Received from T. U. V.		100.00	
1917	Sep 15	Received from W. X. Y.		50.00	
1917	Oct 1	Received from Z. A. B.		25.00	
1917	Oct 15	Received from C. D. E.		75.00	
1917	Nov 1	Received from F. G. H.		100.00	
1917	Nov 15	Received from I. J. K.		50.00	
1917	Dec 1	Received from L. M. N.		25.00	
1917	Dec 15	Received from O. P. Q.		75.00	
1917	Dec 31	Balance		100.00	

Table 2
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Groundwater Monitoring Well Data
CHEMTECH Submission No. T2366/T2423
April 13 - 18, 2005

Page 1 of 3

CAS NO.	PARAMETER	Groundwater Standard (ppb)	Groundwater Samples													
			MW-1		MW-2		MW-3		MW-4		MW-5		MW-X (MW-5)		MW-6	
			All results in ug/l (ppb)													
	Volatile Organics EPA Method 8260															
75-71-8	Dichlorodifluoromethane	-	0.2	U	0.2	UJ	0.17	UJ	0.17	UJ	0.17	UJ	0.17	UJ	0.17	UJ
74-87-3	Chloromethane	5	0.3	U	0.3	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ
75-01-4	Vinyl Chloride	2	0.3	U	18.0	J	0.33	UJ	0.33	UJ	0.33	UJ	0.7	UJ	0.33	UJ
74-83-9	Bromomethane	5	0.4	U	0.4	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ
75-00-3	Chloroethane	5	0.8	U	0.8	UJ	0.83	UJ	0.83	UJ	0.83	UJ	0.83	UJ	0.83	UJ
75-69-4	Trichlorofluoromethane	5	0.2	U	0.2	UJ	0.22	UJ	0.22	UJ	0.22	UJ	0.22	UJ	0.22	UJ
76-13-1	1,1,2-Trichlorotrifluoroethane	-	1.3	U	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ	1.3	UJ
75-35-4	1,1-Dichloroethene	5	0.4	U	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ
67-64-1	Acetone	[50]	2.3	U	27	J	2.3	UJ	2.3	UJ	2.3	UJ	2.3	UJ	2.3	UJ
75-15-0	Carbon Disulfide	-	0.4	U	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
1634-04-4	Methyl tert-butyl Ether	10	0.3	U	0.28	UJ	0.28	UJ	0.28	UJ	0.28	UJ	0.28	UJ	0.28	UJ
79-20-9	Methyl Acetate	-	0.2	U	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ	0.2	UJ
75-09-2	Methylene Chloride	5	0.4	U	0.43	UJ	0.43	UJ	0.43	UJ	0.43	UJ	0.43	UJ	0.43	UJ
156-60-5	trans-1,2-Dichloroethene	5	0.4	U	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
75-34-3	1,1-Dichloroethane	5	0.4	U	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ
110-82-7	Cyclohexane	-	0.4	U	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ
78-93-3	2-Butanone	[50]	1.1	U	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ
56-23-5	Carbon Tetrachloride	5	1.1	U	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ
156-59-2	cis-1,2-Dichloroethene	5	0.3	U	10	J	0.29	UJ	0.29	UJ	0.29	UJ	0.29	UJ	4.1	J
67-66-3	Chloroform	7	2.9	J	0.33	UJ	0.33	UJ	0.33	UJ	15	J	15	J	3.8	J
71-55-6	1,1,1-Trichloroethane	5	0.3	U	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ
108-87-2	Methylcyclohexane	-	0.3	U	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ
71-43-2	Benzene	0.7	0.4	U	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ	0.39	UJ
107-06-2	1,2-Dichloroethane	0.6	0.3	U	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ	0.34	UJ
79-01-6	Trichloroethene	5	0.5	U	1.8	J	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	1.3	J
78-87-5	1,2-Dichloropropane	1	0.4	U	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ	0.4	UJ
75-27-4	Bromodichloromethane	5	0.3	U	0.33	UJ	0.33	UJ	0.33	UJ	4.7	J	4.8	J	0.33	UJ
108-10-1	4-Methyl-2-Pentanone	-	1.6	U	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ	1.6	UJ
108-88-3	Toluene	5	0.4	U	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ
10061-02-6	t-1,3-Dichloropropene	0.4	0.3	U	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ
10061-01-5	cis-1,3-Dichloropropene	0.4	0.4	U	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ	0.36	UJ
79-00-5	1,1,2-Trichloroethane	1	0.4	U	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ
591-78-6	2-Hexanone	[50]	1.7	U	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ	1.7	UJ
124-48-1	Dibromochloromethane	[50]	0.3	U	0.26	UJ	0.26	UJ	0.26	UJ	0.26	UJ	0.26	UJ	0.26	UJ
106-93-4	1,2-Dibromoethane	-	0.3	U	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ
127-18-4	Tetrachloroethene	5	0.5	UJ	12	J	0.48	UJ	0.48	UJ	0.96	J	0.48	UJ	10	J
108-90-7	Chlorobenzene	5	0.5	U	0.47	UJ	0.47	UJ	0.47	UJ	0.47	UJ	0.47	UJ	0.47	UJ
100-41-4	Ethyl Benzene	5	0.5	U	0.45	UJ	0.45	UJ	0.45	UJ	0.45	UJ	0.45	UJ	0.45	UJ
136777-61-2	m/p-Xylenes	5	1.2	U	1.2	UJ	1.2	UJ	1.2	UJ	1.2	UJ	1.2	UJ	1.2	UJ
95-47-6	o-Xylene	5	0.5	U	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ
100-42-5	Styrene	5	0.4	U	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ	0.41	UJ
75-25-2	Bromoform	[50]	0.3	U	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ	0.32	UJ
98-82-8	Isopropylbenzene	5	0.4	U	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ
79-34-5	1,1,2,2-Tetrachloroethane	5	0.3	U	0.3	UJ	0.3	UJ	0.3	UJ	0.3	UJ	0.3	UJ	0.3	UJ
541-73-1	1,3-Dichlorobenzene	3	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ
106-46-7	1,4-Dichlorobenzene	3	0.5	U	0.54	UJ	0.54	UJ	0.54	UJ	0.54	UJ	0.54	UJ	0.54	UJ
95-50-1	1,2-Dichlorobenzene	3	0.4	U	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ	0.44	UJ
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	0.4	U	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ	0.38	UJ
120-82-1	1,2,4-Trichlorobenzene	-	0.5	U	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ	0.46	UJ
	Total VOCs (Detectable)	-	0.0		68.8		0.0		0.0		20.7		19.8		19.2	

Notes:
 [50] = Compound in excess of NYSDEC Groundwater Standards.
 Qualifiers: U - Compound was analyzed for, but not detected. J - Indicates that the result should be considered approximate.

Table 2
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Groundwater Monitoring Well Data
CHEMTECH Submission No. T2366/T2423
April 13 - 18, 2005

Page 2 of 3

CAS NO.	PARAMETER	Groundwater Samples							
		Groundwater Standard	MW-1	MW-2	MW-3	MW-4	MW-5	MW-X (MW-5)	MW-6
		(ppb)	All results in ug/l (ppb)						
	Semi-Volatile Organics EPA Method 8270								
100-52-7	Benzaldehyde	-	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	3.4 U	1.7 U
108-95-2	Phenol	1	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	2.7 U	1.4 UJ
111-44-4	bis(2-Chloroethyl)ether	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U
95-57-8	2-Chlorophenol	-	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U
95-48-7	2-Methylphenol	-	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	3.1 U	1.6 U
108-60-1	2,2-oxybis(1-Chloropropane)	[5]	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.5 U	1.3 U
98-86-2	Acetophenone	-	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U
106-44-5	3+4-Methylphenol	-	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.7 U	1.4 U
621-64-7	N-Nitroso-di-n-propylamine	-	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	2.9 U	1.5 U
67-72-1	Hexachloroethane	5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U
98-95-3	Nitrobenzene	0.4	1.7 U	1.7 U	1.6 U	1.7 U	1.6 U	3.3 U	1.7 U
78-59-1	Isophorone	[50]	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U
88-75-5	2-Nitrophenol	-	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U
105-67-9	2,4-Dimethylphenol	1	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.5 U	1.3 U
111-91-1	bis(2-Chloroethoxy)methane	5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.5 U
120-83-2	2,4-Dichlorophenol	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3.0 U	1.5 U
91-20-3	Naphthalene	[10]	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	2.9 U	1.5 U
106-47-8	4-Chloroaniline	5	0.9 U	0.9 UJ	0.890 UJ	0.900 UJ	0.890 UJ	1.8 U	0.910 UJ
87-68-3	Hexachlorobutadiene	0.5	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U
105-60-2	Caprolactam	-	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U
59-50-7	4-Chloro-3-methylphenol	-	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.8 U	1.4 U
91-57-6	2-Methylnaphthalene	-	1.1 U	6.9 J	1.1 U	1.1 U	1.1 U	2.3 U	1.2 U
77-47-4	Hexachlorocyclopentadiene	5	1.2 UJ	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U
88-06-2	2,4,6-Trichlorophenol	-	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U	1.2 U
95-95-4	2,4,5-Trichlorophenol	-	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.5 U	1.3 U
92-52-4	1,1-Biphenyl	-	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	2.9 U	1.5 U
91-58-7	2-Chloronaphthalene	[10]	1.5 U	1.5 U	1.4 U	1.5 U	1.4 U	2.9 U	1.5 U
88-74-4	2-Nitroaniline	5	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	1.1 U
131-11-3	Dimethylphthalate	-	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U
208-96-8	Acenaphthylene	-	1.4 U	1.4 U	1.3 U	1.4 U	5.2 J	8.8 J	1.4 U
606-20-2	2,6-Dinitrotoluene	5	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	2.6 U	1.3 U
99-09-2	3-Nitroaniline	5	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	2.1 U	1.1 U
83-32-9	Acenaphthene	[20]	1.4 U	10 J	1.4 U	1.4 U	4.3 J	5.9 J	1.4 U

Notes:

[] = Compound in exceedance of NYSDEC Groundwater Standard.

Qualifiers:

Qualifiers: U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Table 2
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Groundwater Monitoring Well Data
CHEMTECH Submission No. T2366/T2423
April 13 - 18, 2005

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CAS NO.	PARAMETER	Groundwater Samples														
		Groundwater Standard (ppb)	MW-1		MW-2		MW-3		MW-4		MW-5		MW-X (MW-5)		MW-6	
			All results in ug/l (ppb)													
	Semi-Volatile Organics EPA Method 8270															
51-28-5	2,4-Dinitrophenol	1	3.7	U	3.7	U	3.6	U	3.7	U	3.6	U	7.3	U	3.7	U
100-02-7	4-Nitrophenol	-	3.3	U	3.3	U	3.2	U	3.3	U	3.2	U	6.5	U	3.3	U
132-64-9	Dibenzofuran	-	1.4	U	15		1.3	U	1.4	U	4.6	J	6.2	J	1.4	U
121-14-2	2,4-Dinitrotoluene	[5]	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	2.5	U	1.3	U
84-66-2	Diethylphthalate	[50]	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	2.8	U	1.4	U
7005-72-3	4-Chlorophenyl-phenylether	-	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	2.8	U	1.4	U
86-73-7	Fluorene	[50]	1.5	U	24		1.5	U	1.5	U	11		15	J	1.5	U
100-01-6	4-Nitroaniline	5	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	2.3	U	1.2	U
534-52-1	4,6-Dinitro-2-methylphenol	-	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	3.3	U	1.7	U
86-30-6	N-Nitrosodiphenylamine	[50]	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	2.6	U	1.3	U
101-55-3	4-Bromophenyl-phenylether	-	1.6	U	1.6	U	1.5	U	1.6	U	1.5	U	3.1	U	1.6	U
118-74-1	Hexachlorobenzene	0.04	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	2.6	U	1.3	U
1912-24-9	Atrazine	7.5	1.3	U	1.3	U	1.3	U	1.3	U	1.3	U	2.6	U	1.3	U
87-86-5	Pentachlorophenol	1	1.7	U	1.7	U	1.6	U	1.7	U	1.6	U	3.3	U	1.7	U
85-01-8	Phenanthrene	[50]	1.5	U	46		1.5	U	1.5	U	39		60		1.5	U
120-12-7	Anthracene	[50]	1.5	U	13		1.5	U	1.5	U	11		18	J	1.5	U
86-74-8	Carbazole	-	1.3	U	20		1.3	U	1.3	U	5.0	J	6.4	J	1.4	U
84-74-2	Di-n-butylphthalate	50	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	2.7	U	1.4	U
206-44-0	Fluoranthene	[50]	1.3	U	31		1.3	U	1.3	U	49		86		1.3	U
129-00-0	Pyrene	[50]	1.5	U	20		1.5	U	1.5	U	39		68		1.5	U
85-68-7	Butylbenzylphthalate	[50]	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	3.0	U	1.5	U
91-94-1	3,3-Dichlorobenzidine	5	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	2.2	U	1.1	U
56-55-3	Benzo(a)anthracene	[0.002]	1.2	U	14		1.2	U	1.2	U	28		50		1.2	U
218-01-9	Chrysene	[0.002]	1.8	U	1.8	U	1.7	U	1.8	U	1.7		3.5		1.8	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	1.6	U	1.6	U	2.5	J	1.6	U	1.6	U	3.2	U	1.6	U
117-84-0	Di-n-octyl phthalate	[50]	1.4	U	1.4	U	1.3	U	1.4	U	1.3	U	2.7	U	1.4	U
205-99-2	Benzo(b)fluoranthene	[0.002]	0.79	U	15		0.780	U	0.790	U	41		66		0.800	U
207-08-9	Benzo(k)fluoranthene	[0.002]	2	U	8.5	J	2.0	U	2.0	U	16		33		2.0	U
50-32-8	Benzo(a)pyrene	[0.002]	1.2	U	12		1.2	U	1.2	U	29		47		1.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	[0.002]	0.87	U	2.6	J	0.860	U	0.870	U	0.860	U	9.0	J	0.880	U
53-70-3	Dibenzo(a,h)anthracene	-	0.91	U	0.910	U	0.900	U	0.910	U	0.900	U	1.8	U	0.920	U
191-24-2	Benzo(g,h,i)perylene	-	1.1	U	3.5	J	1.1	U	1.1	U	8.9	J	15	J	1.2	U
	Total SVOCs (Detectable)	-	0		259.5		2.5		0		292.7		497.8		0	

Notes:

 = Compound in exceedance of NYSDEC Groundwater Standard.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Date		Description		Amount	
1900	Jan 1	Balance		100.00	
1900	Jan 15	Received from A. B.		50.00	
1900	Feb 1	Received from C. D.		25.00	
1900	Mar 1	Received from E. F.		75.00	
1900	Apr 1	Received from G. H.		100.00	
1900	May 1	Received from I. J.		150.00	
1900	Jun 1	Received from K. L.		200.00	
1900	Jul 1	Received from M. N.		250.00	
1900	Aug 1	Received from O. P.		300.00	
1900	Sep 1	Received from Q. R.		350.00	
1900	Oct 1	Received from S. T.		400.00	
1900	Nov 1	Received from U. V.		450.00	
1900	Dec 1	Received from W. X.		500.00	
1900	Dec 31	Total		2500.00	

Table 3
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 2)
CHEMTECH Submission No. T3373
June 22, 2005

1 of 3

CAS NO.	PARAMETER	Groundwater Samples							
		Groundwater Standard (ppb)	MW-2	MW-3	MW-4	MW-5	MW-6	MW-XDUP (MW-5)	TRIPBLANK
	Volatile Organics EPA Method 8260								
75-71-8	Dichlorodifluoromethane	-	0.17 UJ	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
74-87-3	Chloromethane	5	0.34 UJ	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
75-01-4	Vinyl Chloride	2	0.34 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
74-83-9	Bromomethane	5	0.41 UJ	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
75-00-3	Chloroethane	5	0.83 UJ	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
75-69-4	Trichlorofluoromethane	5	0.22 UJ	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
76-13-1	1,1,2-Trichlorotrifluoroethane	-	1.3 UJ	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
75-35-4	1,1-Dichloroethene	5	0.42 UJ	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
67-64-1	Acetone	[50]	44 J	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
75-15-0	Carbon Disulfide	-	0.40 UJ	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1634-04-4	Methyl tert-butyl Ether	10	0.28 UJ	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
79-20-9	Methyl Acetate	-	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
75-09-2	Methylene Chloride	5	0.43 UJ	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
156-60-5	trans-1,2-Dichloroethene	5	0.70 J	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
75-34-3	1,1-Dichloroethane	5	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
110-82-7	Cyclohexane	-	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
78-93-3	2-Butanone	[50]	1.1 UJ	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
56-23-5	Carbon Tetrachloride	5	1.1 UJ	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
156-59-2	cis-1,2-Dichloroethene	5	0.29 UJ	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
67-66-3	Chloroform	7	0.33 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
71-55-6	1,1,1-Trichloroethane	5	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
108-87-2	Methylcyclohexane	-	0.34 UJ	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
71-43-2	Benzene	0.7	0.39 UJ	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
107-06-2	1,2-Dichloroethane	0.6	0.34 UJ	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
79-01-6	Trichloroethene	5	0.46 UJ	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
78-87-5	1,2-Dichloropropane	1	0.40 UJ	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
75-27-4	Bromodichloromethane	5	0.33 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
108-10-1	4-Methyl-2-Pentanone	-	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
108-88-3	Toluene	5	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
10061-02-6	1,1,3-Dichloropropane	0.4	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
10061-01-5	cis-1,3-Dichloropropene	0.4	0.36 UJ	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
79-00-5	1,1,2-Trichloroethane	1	0.41 UJ	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
591-78-6	2-Hexanone	[50]	1.7 UJ	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
124-48-1	Dibromochloromethane	[50]	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
106-93-4	1,2-Dibromoethane	-	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
127-18-4	Tetrachloroethene	5	0.48 UJ	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
108-90-7	Chlorobenzene	5	0.47 UJ	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
100-41-4	Ethyl Benzene	5	0.45 UJ	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
136777-61-2	m,p-Xylenes	5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
95-47-6	o-Xylene	5	0.46 UJ	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
100-42-5	Styrene	5	0.41 UJ	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
75-25-2	Bromoform	[50]	0.32 UJ	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
98-82-8	Isopropylbenzene	5	0.44 UJ	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
79-34-5	1,1,2,2-Tetrachloroethane	5	0.30 UJ	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
541-73-1	1,3-Dichlorobenzene	3	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
106-46-7	1,4-Dichlorobenzene	3	0.54 UJ	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
95-50-1	1,2-Dichlorobenzene	3	0.44 UJ	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	0.38 UJ	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
120-82-1	1,2,4-Trichlorobenzene	-	0.46 UJ	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
	Total VOCs (Detectable)	-	213.06	0	0	33.91	14.8	35.9	0

Notes:
 - = Compound in exceedance of NYSDEC Groundwater Standards.
 U - Compound was analyzed for, but not detected.
 J - Indicates that the result should be considered approximate.

Table 3
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 2)
CHEMTECH Submission No. T3373
June 22, 2005

2 of 3

CAS NO.	PARAMETER	Groundwater Samples						
		Groundwater Standard (ppb)	MW-2	MW-3	MW-4	MW-5	MW-6	MW-XDUP (MW-5)
	Semi-Volatile Organics EPA Method 8260							
100-52-7	Benzaldehyde	-	1.7 U	1.7 U	1.7 U	8.5 U	1.7 U	8.5 U
108-95-2	Phenol	1	1.3 U	1.3 U	1.3 U	6.7 U	1.3 U	6.7 U
111-44-4	bis(2-Chloroethyl)ether	1	1.5 U	1.5 U	1.5 U	7.5 U	1.5 U	7.5 U
95-57-8	2-Chlorophenol	-	1.2 U	1.2 U	1.2 U	6.0 U	1.2 U	6.0 U
95-48-7	2-Methylphenol	-	1.6 U	1.6 U	1.6 U	7.8 U	1.5 U	7.8 U
108-60-1	2,2-oxybis(1-Chloropropane)	[5]	1.3 U	1.3 U	1.3 U	6.3 U	1.3 U	6.3 U
98-86-2	Acetophenone	-	1.3 U	1.3 U	1.3 U	6.4 U	1.3 U	6.4 U
106-44-5	3+4-Methylphenol	-	1.4 U	1.4 U	1.4 U	6.8 U	1.3 U	6.8 U
621-64-7	N-Nitroso-di-n-propylamine	-	1.4 U	1.5 U	1.4 U	7.2 U	1.4 U	7.2 U
67-72-1	Hexachloroethane	5	1.2 U	1.2 U	1.2 U	6.1 U	1.2 U	6.1 U
98-95-3	Nitrobenzene	0.4	1.6 U	1.7 U	1.6 U	8.2 U	1.6 U	8.2 U
78-59-1	Isophorone	[50]	1.3 U	1.3 U	1.3 U	6.6 U	1.3 U	6.6 U
88-75-5	2-Nitrophenol	-	1.4 U	1.4 U	1.4 U	7.0 U	1.4 U	7.0 U
105-67-9	2,4-Dimethylphenol	1	2.4 U	1.2 U	1.2 U	6.1 U	1.2 U	6.1 U
111-91-1	bis(2-Chloroethoxy)methane	5	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	7.1 U
120-83-2	2,4-Dichlorophenol	1	1.5 U	1.5 U	1.5 U	7.4 U	1.5 U	7.4 U
91-20-3	Naphthalene	[10]	3.8 U	1.5 U	1.4 U	7.2 U	1.4 U	7.2 U
106-47-8	4-Chloroaniline	5	0.890 U	0.900 U	0.890 U	4.5 U	0.880 U	4.5 U
87-68-3	Hexachlorobutadiene	0.5	1.4 U	1.4 U	1.4 U	7.1 U	1.4 U	7.1 U
105-60-2	Caprolactam	-	1.3 UJ	1.3 UJ	1.3 UJ	6.5 UJ	1.3 UJ	6.5 UJ
59-50-7	4-Chloro-3-methylphenol	-	1.4 U	1.4 U	1.4 U	7.0 U	1.4 U	7.0 U
91-57-6	2-Methylnaphthalene	-	3.8 J	1.1 U	1.1 U	5.7 U	1.1 U	5.7 U
77-47-4	Hexachlorocyclopentadiene	5	1.2 U	1.2 U	1.2 U	6.0 U	1.2 U	6.0 U
88-06-2	2,4,6-Trichlorophenol	-	1.2 U	1.2 U	1.2 U	5.9 U	1.2 U	5.9 U
95-95-4	2,4,5-Trichlorophenol	-	1.3 U	1.3 U	1.3 U	6.3 U	1.3 U	6.3 U
92-52-4	1,1-Biphenyl	-	2.0 J	1.5 U	1.5 U	7.3 U	1.4 U	7.3 U
91-58-7	2-Chloronaphthalene	[10]	1.4 U	1.5 U	1.4 U	7.2 U	1.4 U	7.2 U
88-74-4	2-Nitroaniline	5	1.1 U	1.1 U	1.1 U	5.5 U	1.1 U	5.5 U
131-11-3	Dimethylphthalate	-	1.3 U	1.3 U	1.3 U	6.5 U	1.3 U	6.5 U
208-96-8	Acenaphthylene	-	1.3 U	1.4 U	1.3 U	11 J	1.3 U	13 J
606-20-2	2,6-Dinitrotoluene	5	1.3 U	1.3 U	1.3 U	6.5 U	1.3 U	6.5 U
99-09-2	3-Nitroaniline	5	1.1 U	1.1 U	1.1 U	5.3 U	1.0 U	5.3 U
83-32-9	Acenaphthene	[20]	8.3 J	1.4 U	1.4 U	7.0 U	1.4 U	7.0 U

Notes:

[Exceedance] = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

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Table 3
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 2)
CHEMTECH Submission No. T3373
June 22, 2005

3 of 3

CAS NO.	PARAMETER	Groundwater Samples												
		Groundwater Standard (ppb)	MW-2		MW-3		MW-4		MW-5		MW-6		MW-XDUP (MW-5)	
	Semi-Volatile Organics EPA Method 8260													
51-28-5	2,4-Dinitrophenol	1	3.6	UJ	3.7	UJ	3.6	UJ	18	UJ	3.6	UJ	18	UJ
100-02-7	4-Nitrophenol	-	3.2	UJ	3.3	UJ	3.2	UJ	16	UJ	3.2	UJ	16	UJ
132-64-9	Dibenzofuran	-	12		1.4	U	1.3	U	6.7	U	1.3	U	6.7	U
121-14-2	2,4-Dinitrotoluene	[5]	1.3	U	1.3	U	1.3	U	6.3	U	1.2	U	6.3	U
84-66-2	Diethylphthalate	[50]	1.4	U	1.4	U	1.4	U	6.9	U	1.4	U	6.9	U
7005-72-3	4-Chlorophenyl-phenylether	-	1.4	U	1.4	U	1.4	U	7.1	U	1.4	U	7.1	U
86-73-7	Fluorene	[50]	18		1.5	U	1.5	U	7.5	J	1.4	U	9.4	J
100-01-6	4-Nitroaniline	5	1.2	U	1.2	U	1.2	U	5.8	U	1.1	U	5.8	U
534-52-1	4,6-Dinitro-2-methylphenol	-	1.7	UJ	1.7	UJ	1.7	UJ	8.4	UJ	1.7	UJ	8.4	UJ
86-30-6	N-Nitrosodiphenylamine	[50]	1.3	U	1.3	U	1.3	U	6.5	U	1.3	U	6.5	U
101-55-3	4-Bromophenyl-phenylether	-	1.5	U	1.6	U	1.5	U	7.7	U	1.5	U	7.7	U
118-74-1	Hexachlorobenzene	0.04	1.3	U	1.3	U	1.3	U	6.4	U	1.3	U	6.4	U
1912-24-9	Atrazine	7.5	1.3	U	1.3	U	1.3	U	6.5	U	1.3	U	6.5	U
87-86-5	Pentachlorophenol	1	1.6	U	1.7	U	1.6	U	8.2	U	1.6	U	8.2	U
85-01-8	Phenanthrene	[50]	49		1.5	U	1.5	U	65		1.5	U	84	
120-12-7	Anthracene	[50]	11		1.5	U	1.5	U	18	J	1.4	U	24	J
86-74-8	Carbazole	-	20		1.3	U	1.3	U	6.6	U	1.3	U	6.6	U
84-74-2	Di-n-butylphthalate	50	1.4	U	1.4	U	1.4	U	6.8	U	1.3	U	6.8	U
206-44-0	Fluoranthene	[50]	33		1.3	U	2.3	J	140		1.2	U	170	
129-00-0	Pyrene	[50]	25		1.5	U	1.8	J	120		1.5	U	140	
85-68-7	Butylbenzylphthalate	[50]	1.5	U	1.5	U	1.5	U	7.5	U	1.5	U	7.5	U
91-94-1	3,3-Dichlorobenzidine	5	1.1	U	1.1	U	1.1	U	5.4	U	1.1	U	5.4	U
56-55-3	Benzo(a)anthracene	[0.002]	15		1.2	U	1.2	U	76		1.1	U	90	
218-01-9	Chrysene	[0.002]	13		1.8	U	1.7	U	74		1.7	U	85	
117-81-7	bis(2-Ethylhexyl)phthalate	5	4.2	J	1.7	J	1.9	J	7.9	U	1.6	U	7.9	U
117-84-0	Di-n-octyl phthalate	[50]	1.3	U	1.4	U	1.3	U	6.7	U	1.3	U	6.7	U
205-99-2	Benzo(b)fluoranthene	[0.002]	15		0.790	U	1.5	J	110		0.770	U	120	
207-08-9	Benzo(k)fluoranthene	[0.002]	5.9	J	2.0	U	2.0	U	29		1.9	U	35	J
50-32-8	Benzo(a)pyrene	[0.002]	11		1.2	U	1.2	U	76		1.2	U	89	
193-39-5	Indeno(1,2,3-cd)pyrene	[0.002]	3.5	J	0.870	U	0.860	U	26		0.850	U	28	J
53-70-3	Dibenzo(a,h)anthracene	-	0.900	U	0.910	U	0.900	U	4.5	U	0.890	U	4.5	U
191-24-2	Benzo(g,h,i)perylene	-	4.0	J	1.1	U	1.1	U	31	J	1.1	U	35	J
	Total SVOCs (Detectable)	-	294.1		1.7		7.5		783.5		0		923.4	

Notes:

☐ = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Table 4
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 3)
CHEMTECH Submission No. R2632578
August 31, 2006

1 of 3

CAS NO.	PARAMETER	Groundwater Samples							
		Groundwater Standard (ppb)	MW-2	MW-3	MW-4	MW-5	MW-6	MW-XDUP (MW-5)	TRIPBLANK
	Volatile Organics EPA Method 8260								
75-71-8	Dichlorodifluoromethane	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
74-87-3	Chloromethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-01-4	Vinyl Chloride	2	45 J	10 UJ	0.3 J	10 UJ	10 UJ	10 UJ	10 UJ
74-83-9	Bromomethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-00-3	Chloroethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-69-4	Trichlorofluoromethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-35-4	1,1-Dichloroethene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
76-13-1	1,1,2-Trichlorotrifluoroethane	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
67-64-1	Acetone	[50]	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	1 J
75-15-0	Carbon Disulfide	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
79-20-9	Methyl Acetate	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-09-2	Methylene Chloride	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
1634-04-4	Methyl tert-butyl Ether	10	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
156-60-5	trans-1,2-Dichloroethene	5	0.6 J	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-34-3	1,1-Dichloroethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
156-59-2	cis-1,2-Dichloroethene	5	58 J	10 UJ	0.6 J	10 UJ	2 J	10 UJ	10 UJ
78-93-3	2-Butanone	[50]	1 J	0.9 J	0.8 J	1 J	10 UJ	0.8 J	10 UJ
67-66-3	Chloroform	7	10 UJ	10 UJ	10 UJ	3 J	6 J	33 J	10 UJ
107-06-2	1,2-Dichloroethane	0.6	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
71-55-6	1,1,1-Trichloroethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
110-82-7	Cyclohexane	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
56-23-5	Carbon Tetrachloride	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
71-43-2	Benzene	0.7	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
79-01-6	Trichloroethene	5	10 J	10 UJ	10 UJ	10 UJ	1 J	10 UJ	10 UJ
108-87-2	Methylcyclohexane	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
78-87-5	1,2-Dichloropropane	1	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
75-27-4	Bromodichloromethane	5	10 UJ	10 UJ	10 UJ	10 J	10 UJ	10 J	10 UJ
10061-01-5	cis-1,3-Dichloropropene	0.4	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
10061-02-6	trans-1,3-Dichloropropene	0.4	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
79-00-5	1,1,2-Trichloroethane	1	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
124-48-1	Dibromochloromethane	[50]	10 UJ	10 UJ	10 UJ	2 J	10 UJ	2 J	10 UJ
75-25-2	Bromoform	[50]	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
108-10-1	4-Methyl-2-Pentanone	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
108-88-3	Toluene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
127-18-4	Tetrachloroethene	5	25 J	10 UJ	10 UJ	0.7 J	32 J	0.6 J	10 UJ
591-78-6	2-Hexanone	[50]	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ	10 UJ
106-93-4	1,2-Dibromoethane	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
108-90-7	Chlorobenzene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
100-41-4	Ethyl Benzene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
136777-61-2	m,p-Xylenes	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
95-47-6	o-Xylene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
100-42-5	Styrene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
98-82-8	Isopropylbenzene	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
79-34-5	1,1,2,2-Tetrachloroethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
541-73-1	1,3-Dichlorobenzene	3	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
106-46-7	1,4-Dichlorobenzene	3	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
95-50-1	1,2-Dichlorobenzene	3	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
120-82-1	1,2,4-Trichlorobenzene	-	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
	Total VOCs (Detectable)	-	189.6	0.9	1.7	46.7	21	46.4	1

Notes:

— = Compound in excess of NYSDEC Groundwater Standards.

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Qualifiers:

Table 4
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 3)
CHEMTECH Submission No. R2632578
August 31, 2006

2 of 3

CAS NO.	PARAMETER	Groundwater Samples												
		Groundwater Standard (ppb)	MW-2		MW-3		MW-4		MW-5		MW-6		MW-XDUP (MW-5)	
	Semi-Volatile Organics EPA Method 8260													
108-95-2	Phenol	1	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
111-44-4	bis(2-Chloroethyl)ether	1	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
95-57-8	2-Chlorophenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
108-60-1	2,2-oxybis(1-Chloropropane)	[5]	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
95-48-7	2-Methylphenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
621-64-7	N-Nitroso-di-n-propylamine	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
67-72-1	Hexachloroethane	5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
106-44-5	3+4-Methylphenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
98-95-3	Nitrobenzene	0.4	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
78-59-1	Isophorone	[50]	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
88-75-5	2-Nitrophenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
105-67-9	2,4-Dimethylphenol	1	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
111-91-1	bis(2-Chloroethoxy)methane	5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
120-83-2	2,4-Dichlorophenol	1	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
91-20-3	Naphthalene	[10]	2	J	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
106-47-8	4-Chloroaniline	5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
87-68-3	Hexachlorobutadiene	0.5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
59-50-7	4-Chloro-3-methylphenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
91-57-6	2-Methylnaphthalene	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
77-47-4	Hexachlorocyclopentadiene	5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
88-06-2	2,4,6-Trichlorophenol	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
95-95-4	2,4,5-Trichlorophenol	-	25	UJ	24	UJ	48	UJ	72	UJ	24	UJ	48	UJ
91-58-7	2-Chloronaphthalene	[10]	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
88-74-4	2-Nitroaniline	5	25	UJ	24	UJ	48	UJ	72	UJ	24	UJ	48	UJ
208-96-8	Acenaphthylene	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
131-11-3	Dimethylphthalate	-	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
606-20-2	2,6-Dinitrotoluene	5	10	UJ	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
83-32-9	Acenaphthene	[20]	4	J	10	UJ	19	UJ	29	UJ	10	UJ	19	UJ
99-09-2	3-Nitroaniline	5	25	UJ	24	UJ	48	UJ	72	UJ	24	UJ	48	UJ

Notes:

[] = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Table 4
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 3)
CHEMTECH Submission No. R2632578
August 31, 2006

3 of 3

CAS NO.	PARAMETER	Groundwater Samples										
		Groundwater Standard (ppb)	MW-2		MW-3		MW-4		MW-5		MW-6	MW-XDUP (MW-5)
	Semi-Volatile Organics EPA Method 8260											
51-28-5	2,4-Dinitrophenol	1	25 UJ		24 UJ		48 UJ		72 UJ	24 UJ	48 UJ	
132-64-9	Dibenzofuran	-	4 J		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
121-14-2	2,4-Dinitrotoluene	[5]	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
100-02-7	4-Nitrophenol	-	25 UJ		24 UJ		48 UJ		72 UJ	24 UJ	48 UJ	
86-73-7	Fluorene	[50]	3 J		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
7005-72-3	4-Chlorophenyl-phenylether	-	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
84-66-2	Diethylphthalate	[50]	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
100-01-6	4-Nitroaniline	5	25 UJ		24 UJ		48 UJ		72 UJ	24 UJ	48 UJ	
534-52-1	4,6-Dinitro-2-methylphenol	-	25 UJ		24 UJ		48 UJ		72 UJ	24 UJ	48 UJ	
86-30-6	N-Nitrosodiphenylamine	[50]	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
101-55-3	4-Bromophenyl-phenylether	-	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
118-74-1	Hexachlorobenzene	0.04	10 UJ		10 UJ		19 UJ		29 UJ	10 UJ	19 UJ	
87-86-5	Pentachlorophenol	1	25 UJ		24 UJ		48 UJ		72 UJ	24 UJ	48 UJ	
85-01-8	Phenanthrene	[50]	3 J		10 UJ		19 UJ	4 J		10 UJ	3 J	
120-12-7	Anthracene	[50]	2 J		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
86-74-8	Carbazole	-	7 J		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
84-74-2	Di-n-butylphthalate	50	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
206-44-0	Fluoranthene	[50]	5 J		10 UJ		19 UJ	9 J		10 UJ	7 J	
129-00-0	Pyrene	[50]	3 J		10 UJ		19 UJ	7 J		10 UJ	5 J	
85-68-7	Butylbenzylphthalate	[50]	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
91-94-1	3,3-Dichlorobenzidine	5	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
56-55-3	Benzo(a)anthracene	[0.002]	2 J		10 UJ		19 UJ	5 J		10 UJ	3 J	
218-01-9	Chrysene	[0.002]	2 J		10 UJ		19 UJ	5 J		10 UJ	4 J	
117-81-7	bis(2-Ethylhexyl)phthalate	5	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
117-84-0	Di-n-octyl phthalate	[50]	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
205-99-2	Benzo(b)fluoranthene	[0.002]	1 J		10 UJ		19 UJ	4 J		10 UJ	3 J	
207-08-9	Benzo(k)fluoranthene	[0.002]	1 J		10 UJ		19 UJ	5 J		10 UJ	3 J	
50-32-8	Benzo(a)pyrene	[0.002]	1 J		10 UJ		19 UJ	10 UJ		10 UJ	3 J	
193-39-5	Indeno(1,2,3-cd)pyrene	[0.002]	10 UJ		10 UJ		19 UJ	3 J		10 UJ	2 J	
53-70-3	Dibenzo(a,h)anthracene	-	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
191-24-2	Benzo(g,h,i)perylene	-	10 UJ		10 UJ		19 UJ	3 J		10 UJ	2 J	
1912-24-9	Atrazine	7.5	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
100-52-7	Benzaldehyde	-	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
98-86-2	Acetophenone	-	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
105-60-2	Caprolactam	-	25 UJ		24 UJ		48 UJ	72 UJ		24 UJ	48 UJ	
92-52-4	1,1-Biphenyl	-	10 UJ		10 UJ		19 UJ	29 UJ		10 UJ	19 UJ	
	Total VOCs (Detectable)	-	40		0		0	45		0	35	

Notes:

☐ = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

U - Compound was analyzed for, but not detected.

J - Indicates that the result should be considered approximate.

Date		Description		Amount	
1901	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	
1902	Jan 1	Balance		105.00	
	Feb 1	Interest		5.25	
	Mar 1	Interest		5.50	
	Apr 1	Interest		5.75	
	May 1	Interest		6.00	
	Jun 1	Interest		6.25	
	Jul 1	Interest		6.50	
	Aug 1	Interest		6.75	
	Sep 1	Interest		7.00	
	Oct 1	Interest		7.25	
	Nov 1	Interest		7.50	
	Dec 1	Interest		7.75	
1903	Jan 1	Balance		110.25	
	Feb 1	Interest		5.51	
	Mar 1	Interest		5.77	
	Apr 1	Interest		6.03	
	May 1	Interest		6.29	
	Jun 1	Interest		6.55	
	Jul 1	Interest		6.81	
	Aug 1	Interest		7.07	
	Sep 1	Interest		7.33	
	Oct 1	Interest		7.59	
	Nov 1	Interest		7.85	
	Dec 1	Interest		8.11	
1904	Jan 1	Balance		115.50	
	Feb 1	Interest		5.78	
	Mar 1	Interest		6.04	
	Apr 1	Interest		6.30	
	May 1	Interest		6.56	
	Jun 1	Interest		6.82	
	Jul 1	Interest		7.08	
	Aug 1	Interest		7.34	
	Sep 1	Interest		7.60	
	Oct 1	Interest		7.86	
	Nov 1	Interest		8.12	
	Dec 1	Interest		8.38	
1905	Jan 1	Balance		120.75	
	Feb 1	Interest		6.04	
	Mar 1	Interest		6.30	
	Apr 1	Interest		6.56	
	May 1	Interest		6.82	
	Jun 1	Interest		7.08	
	Jul 1	Interest		7.34	
	Aug 1	Interest		7.60	
	Sep 1	Interest		7.86	
	Oct 1	Interest		8.12	
	Nov 1	Interest		8.38	
	Dec 1	Interest		8.64	
1906	Jan 1	Balance		126.00	
	Feb 1	Interest		6.30	
	Mar 1	Interest		6.56	
	Apr 1	Interest		6.82	
	May 1	Interest		7.08	
	Jun 1	Interest		7.34	
	Jul 1	Interest		7.60	
	Aug 1	Interest		7.86	
	Sep 1	Interest		8.12	
	Oct 1	Interest		8.38	
	Nov 1	Interest		8.64	
	Dec 1	Interest		8.90	
1907	Jan 1	Balance		131.25	
	Feb 1	Interest		6.56	
	Mar 1	Interest		6.82	
	Apr 1	Interest		7.08	
	May 1	Interest		7.34	
	Jun 1	Interest		7.60	
	Jul 1	Interest		7.86	
	Aug 1	Interest		8.12	
	Sep 1	Interest		8.38	
	Oct 1	Interest		8.64	
	Nov 1	Interest		8.90	
	Dec 1	Interest		9.16	
1908	Jan 1	Balance		136.50	
	Feb 1	Interest		6.82	
	Mar 1	Interest		7.08	
	Apr 1	Interest		7.34	
	May 1	Interest		7.60	
	Jun 1	Interest		7.86	
	Jul 1	Interest		8.12	
	Aug 1	Interest		8.38	
	Sep 1	Interest		8.64	
	Oct 1	Interest		8.90	
	Nov 1	Interest		9.16	
	Dec 1	Interest		9.42	
1909	Jan 1	Balance		141.75	
	Feb 1	Interest		7.08	
	Mar 1	Interest		7.34	
	Apr 1	Interest		7.60	
	May 1	Interest		7.86	
	Jun 1	Interest		8.12	
	Jul 1	Interest		8.38	
	Aug 1	Interest		8.64	
	Sep 1	Interest		8.90	
	Oct 1	Interest		9.16	
	Nov 1	Interest		9.42	
	Dec 1	Interest		9.68	
1910	Jan 1	Balance		147.00	
	Feb 1	Interest		7.34	
	Mar 1	Interest		7.60	
	Apr 1	Interest		7.86	
	May 1	Interest		8.12	
	Jun 1	Interest		8.38	
	Jul 1	Interest		8.64	
	Aug 1	Interest		8.90	
	Sep 1	Interest		9.16	
	Oct 1	Interest		9.42	
	Nov 1	Interest		9.68	
	Dec 1	Interest		9.94	
1911	Jan 1	Balance		152.25	
	Feb 1	Interest		7.60	
	Mar 1	Interest		7.86	
	Apr 1	Interest		8.12	
	May 1	Interest		8.38	
	Jun 1	Interest		8.64	
	Jul 1	Interest		8.90	
	Aug 1	Interest		9.16	
	Sep 1	Interest		9.42	
	Oct 1	Interest		9.68	
	Nov 1	Interest		9.94	
	Dec 1	Interest		10.20	
1912	Jan 1	Balance		157.50	
	Feb 1	Interest		7.86	
	Mar 1	Interest		8.12	
	Apr 1	Interest		8.38	
	May 1	Interest		8.64	
	Jun 1	Interest		8.90	
	Jul 1	Interest		9.16	
	Aug 1	Interest		9.42	
	Sep 1	Interest		9.68	
	Oct 1	Interest		9.94	
	Nov 1	Interest		10.20	
	Dec 1	Interest		10.46	
1913	Jan 1	Balance		162.75	
	Feb 1	Interest		8.12	
	Mar 1	Interest		8.38	
	Apr 1	Interest		8.64	
	May 1	Interest		8.90	
	Jun 1	Interest		9.16	
	Jul 1	Interest		9.42	
	Aug 1	Interest		9.68	
	Sep 1	Interest		9.94	
	Oct 1	Interest		10.20	
	Nov 1	Interest		10.46	
	Dec 1	Interest		10.72	
1914	Jan 1	Balance		168.00	
	Feb 1	Interest		8.38	
	Mar 1	Interest		8.64	
	Apr 1	Interest		8.90	
	May 1	Interest		9.16	
	Jun 1	Interest		9.42	
	Jul 1	Interest		9.68	
	Aug 1	Interest		9.94	
	Sep 1	Interest		10.20	
	Oct 1	Interest		10.46	
	Nov 1	Interest		10.72	
	Dec 1	Interest		10.98	
1915	Jan 1	Balance		173.25	
	Feb 1	Interest		8.64	
	Mar 1	Interest		8.90	
	Apr 1	Interest		9.16	
	May 1	Interest		9.42	
	Jun 1	Interest		9.68	
	Jul 1	Interest		9.94	
	Aug 1	Interest		10.20	
	Sep 1	Interest		10.46	
	Oct 1	Interest		10.72	
	Nov 1	Interest		10.98	
	Dec 1	Interest		11.24	
1916	Jan 1	Balance		178.50	
	Feb 1	Interest		8.90	
	Mar 1	Interest		9.16	
	Apr 1	Interest		9.42	
	May 1	Interest		9.68	
	Jun 1	Interest		9.94	
	Jul 1	Interest		10.20	
	Aug 1	Interest		10.46	
	Sep 1	Interest		10.72	
	Oct 1	Interest		10.98	
	Nov 1	Interest		11.24	
	Dec 1	Interest		11.50	
1917	Jan 1	Balance		183.75	
	Feb 1	Interest		9.16	
	Mar 1	Interest		9.42	
	Apr 1	Interest		9.68	
	May 1	Interest		9.94	
	Jun 1	Interest		10.20	
	Jul 1	Interest		10.46	
	Aug 1	Interest		10.72	
	Sep 1	Interest		10.98	
	Oct 1	Interest		11.24	
	Nov 1	Interest		11.50	
	Dec 1	Interest		11.76	
1918	Jan 1	Balance		189.00	
	Feb 1	Interest		9.42	
	Mar 1	Interest		9.68	
	Apr 1	Interest		9.94	
	May 1	Interest		10.20	
	Jun 1	Interest		10.46	
	Jul 1	Interest		10.72	
	Aug 1	Interest		10.98	
	Sep 1	Interest		11.24	
	Oct 1	Interest		11.50	
	Nov 1	Interest		11.76	
	Dec 1	Interest		12.02	
1919	Jan 1	Balance		194.25	
	Feb 1	Interest		9.68	
	Mar 1	Interest		9.94	
	Apr 1	Interest		10.20	
	May 1	Interest		10.46	
	Jun 1	Interest		10.72	
	Jul 1	Interest		10.98	
	Aug 1	Interest		11.24	
	Sep 1	Interest		11.50	
	Oct 1	Interest		11.76	
	Nov 1	Interest		12.02	
	Dec 1	Interest		12.28	
1920	Jan 1	Balance		199.50	
	Feb 1	Interest		9.94	
	Mar 1	Interest		10.20	
	Apr 1	Interest		10.46	
	May 1	Interest		10.72	
	Jun 1	Interest		10.98	
	Jul 1	Interest		11.24	
	Aug 1	Interest		11.50	
	Sep 1	Interest		11.76	
	Oct 1	Interest		12.02	
	Nov 1	Interest		12.28	
	Dec 1	Interest		12.54	
1921	Jan 1	Balance		204.75	
	Feb 1	Interest		10.20	
	Mar 1	Interest		10.46	
	Apr 1	Interest		10.72	
	May 1	Interest		10.98	
	Jun 1	Interest		11.24	
	Jul 1	Interest		11.50	
	Aug 1	Interest		11.76	
	Sep 1	Interest		12.02	
	Oct 1	Interest		12.28	
	Nov 1	Interest		12.54	
	Dec 1	Interest		12.80	
1922	Jan 1	Balance		210.00	
	Feb 1	Interest		10.46	
	Mar 1	Interest		10.72	
	Apr 1	Interest		10.98	
	May 1	Interest		11.24	
	Jun 1	Interest		11.50	
	Jul 1	Interest		11.76	
	Aug 1	Interest		12.02	
	Sep 1	Interest		12.28	
	Oct 1	Interest		12.54	
	Nov 1	Interest		12.80	
	Dec 1	Interest		13.06	
1923	Jan 1	Balance		215.25	
	Feb 1	Interest		10.72	
	Mar 1	Interest		10.98	
	Apr 1	Interest		11.24	
	May 1	Interest		11.50	
	Jun 1	Interest		11.76	
	Jul 1	Interest		12.02	
	Aug 1	Interest		12.28	
	Sep 1	Interest		12.54	
	Oct 1	Interest		12.80	
	Nov 1	Interest		13.06	
	Dec 1	Interest		13.32	
1924	Jan 1	Balance		220.50	
	Feb 1	Interest		10.98	
	Mar 1	Interest		11.24	
	Apr 1	Interest		11.50	
	May 1	Interest		11.76	
	Jun 1	Interest		12.02	
	Jul 1	Interest		12.28	
	Aug 1	Interest		12.54	
	Sep 1	Interest		12.80	
	Oct 1	Interest		13.06	
	Nov 1	Interest		13.32	
	Dec 1	Interest		13.58	
1925	Jan 1	Balance		225.75	
	Feb 1	Interest		11.24	
	Mar 1	Interest		11.50	
	Apr 1	Interest		11.76	
	May 1	Interest		12.02	
	Jun 1	Interest		12.28	
	Jul 1	Interest		12.54	
	Aug 1	Interest		12.80	
	Sep 1	Interest		13.06	
	Oct 1	Interest		13.32	
	Nov 1	Interest		13.58	
	Dec 1	Interest		13.84</	

Table 5
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 4)
CHEMTECH Submission No. R2634462
November 2, 2006

1 of 3

CAS NO.	PARAMETER	Groundwater Samples														
		Groundwater Standard (ppb)	MW-2		MW-3		MW-4		MW-5		MW-6		MW-X		TRIPBLANK	
	Volatile Organics EPA Method 8260															
75-71-8	Dichlorodifluoromethane	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
74-87-3	Chloromethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-01-4	Vinyl Chloride	2	52	J	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
74-83-9	Bromomethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-00-3	Chloroethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-69-4	Trichlorofluoromethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
76-13-1	1,1,2-Trichlorotrifluoroethane	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
67-64-1	Acetone	[50]	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-35-4	1,1-Dichloroethene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
79-20-9	Methyl Acetate	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-09-2	Methylene Chloride	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-15-0	Carbon Disulfide	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
1634-04-4	Methyl tert-butyl Ether	10	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
156-60-5	trans-1,2-Dichloroethene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-34-3	1,1-Dichloroethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
78-93-3	2-Butanone	[50]	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
156-59-2	cis-1,2-Dichloroethene	5	50	J	10	UJ	10	UJ	10	UJ	2	J	10	UJ	10	UJ
67-66-3	Chloroform	7	10	UJ	10	UJ	10	UJ	20	J	5	J	10	UJ	10	UJ
110-82-7	Cyclohexane	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
107-06-2	1,2-Dichloroethane	0.6	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
71-55-6	1,1,1-Trichloroethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
56-23-5	Carbon Tetrachloride	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
71-43-2	Benzene	0.7	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
79-01-6	Trichloroethene	5	2	J	10	UJ	10	UJ	10	UJ	1	J	10	UJ	10	UJ
108-67-2	Methylcyclohexane	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
78-87-5	1,2-Dichloropropane	1	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
75-27-4	Bromodichloromethane	5	10	UJ	10	UJ	10	UJ	0	J	10	UJ	10	UJ	10	UJ
10061-01-5	cis-1,3-Dichloropropene	0.4	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
10061-02-6	trans-1,3-Dichloropropene	0.4	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
79-00-5	1,1,2-Trichloroethane	1	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
124-48-1	Dibromochloromethane	[50]	10	UJ	10	UJ	10	UJ	1	J	10	UJ	10	UJ	10	UJ
75-25-2	Bromoform	[50]	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
108-10-1	4-Methyl-2-Pentanone	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
108-88-3	Toluene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
591-78-6	2-Hexanone	[50]	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
127-18-4	Tetrachloroethene	5	2	J	10	UJ	10	UJ	10	UJ	13	J	10	UJ	10	UJ
106-93-4	1,2-Dibromoethane	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
108-90-7	Chlorobenzene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
100-41-4	Ethyl Benzene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
136777-61-2	m,p-Xylenes	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
95-47-6	o-Xylene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
100-42-5	Styrene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
98-82-8	Isopropylbenzene	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
79-34-5	1,1,2,2-Tetrachloroethane	5	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
541-73-1	1,3-Dichlorobenzene	3	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
106-46-7	1,4-Dichlorobenzene	3	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
95-50-1	1,2-Dichlorobenzene	3	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
96-12-8	1,2-Dibromo-3-Chloropropane	0.04	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
120-82-1	1,2,4-Trichlorobenzene	-	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
	Total VOCs (Detectable)	-	106		0		0		26		21		0		0	

Notes:
 - = Compound in exceedance of NYSDEC Groundwater Standards.
 U - Compound was analyzed for, but not detected.
 J - Indicates that the result should be considered approximate.

Table 5
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 4)
CHEMTECH Submission No. R2634462
November 2, 2006

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CAS NO.	PARAMETER	Groundwater Samples												
		Groundwater Standard (ppb)	MW-2		MW-3		MW-4		MW-5		MW-6		MW-XDUP	
	Semi-Volatile Organics EPA Method 8260													
108-95-2	Phenol	1	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
111-44-4	bis(2-Chloroethyl)ether	1	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
95-57-8	2-Chlorophenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
108-60-1	2,2-oxybis(1-Chloropropane)	[5]	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
95-48-7	2-Methylphenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
621-64-7	N-Nitroso-di-n-propylamine	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
67-72-1	Hexachloroethane	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
106-44-5	3+4-Methylphenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
98-95-3	Nitrobenzene	0.4	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
78-59-1	Isophorone	[50]	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
88-75-5	2-Nitrophenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
105-67-9	2,4-Dimethylphenol	1	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
111-91-1	bis(2-Chloroethoxy)methane	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
120-83-2	2,4-Dichlorophenol	1	10	UJ	24	UJ	10	UJ	10	UJ	10	UJ	10	UJ
91-20-3	Naphthalene	[10]	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
106-47-8	4-Chloroaniline	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
87-68-3	Hexachlorobutadiene	0.5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
59-50-7	4-Chloro-3-methylphenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
91-57-6	2-Methylnaphthalene	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
77-47-4	Hexachlorocyclopentadiene	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
88-06-2	2,4,6-Trichlorophenol	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
95-95-4	2,4,5-Trichlorophenol	-	25	UJ	24	UJ	24	UJ	10	UJ	24	UJ	24	UJ
91-58-7	2-Chloronaphthalene	[10]	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
88-74-4	2-Nitroaniline	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
208-96-8	Acenaphthylene	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
131-11-3	Dimethylphthalate	-	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
606-20-2	2,6-Dinitrotoluene	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
83-32-9	Acenaphthene	[20]	2	J	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ
99-09-2	3-Nitroaniline	5	10	UJ	9	UJ	10	UJ	10	UJ	10	UJ	10	UJ

Notes:

[Exceedance] = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

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Table 5
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York
Summary of Qualified Groundwater Data (Round 4)
CHEMTECH Submission No. R2634462
November 2, 2006

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CAS NO.	PARAMETER	Groundwater Standard (ppb)	Groundwater Samples							
			MW-2	MW-3	MW-4	MW-5	MW-6	MW-XDUP		
	Semi-Volatile Organics EPA Method 8260									
51-28-5	2,4-Dinitrophenol	1	25 UJ	9 UJ	24 UJ	25 UJ	24 UJ	24 UJ		
132-64-9	Dibenzofuran	-	1 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
121-14-2	2,4-Dinitrotoluene	[5]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
100-02-7	4-Nitrophenol	-	25 UJ	24 UJ	24 UJ	25 UJ	24 UJ	24 UJ		
86-73-7	Fluorene	[50]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
7005-72-3	4-Chlorophenyl-phenylether	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
84-66-2	Diethylphthalate	[50]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
100-01-6	4-Nitroaniline	5	25 UJ	24 UJ	24 UJ	25 UJ	24 UJ	24 UJ		
534-52-1	4,6-Dinitro-2-methylphenol	-	25 UJ	9 UJ	24 UJ	25 UJ	24 UJ	24 UJ		
86-30-6	N-Nitrosodiphenylamine	[50]	10 UJ	24 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
101-55-3	4-Bromophenyl-phenylether	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
118-74-1	Hexachlorobenzene	0.04	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
87-86-5	Pentachlorophenol	1	25 UJ	24 UJ	24 UJ	25 UJ	10 UJ	10 UJ		
85-01-8	Phenanthrene	[50]	1 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
120-12-7	Anthracene	[50]	1 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
86-74-8	Carbazole	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
84-74-2	Di-n-butylphthalate	50	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
206-44-0	Fluoranthene	[50]	4 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
129-00-0	Pyrene	[50]	2 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
85-68-7	Butylbenzylphthalate	[50]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
91-94-1	3,3-Dichlorobenzidine	5	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
56-55-3	Benzo(a)anthracene	[0.002]	1 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
218-01-9	Chrysene	[0.002]	1 J	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
117-81-7	bis(2-Ethylhexyl)phthalate	5	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
117-84-0	Di-n-octyl phthalate	[50]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
205-99-2	Benzo(b)fluoranthene	[0.002]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
207-08-9	Benzo(k)fluoranthene	[0.002]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
50-32-8	Benzo(a)pyrene	[0.002]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
193-39-5	Indeno(1,2,3-cd)pyrene	[0.002]	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
53-70-3	Dibenzo(a,h)anthracene	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
191-24-2	Benzo(g,h,i)perylene	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
1912-24-9	Atrazine	7.5	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
100-52-7	Benzaldehyde	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
98-86-2	Acetophenone	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
105-60-2	Caprolactam	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
92-52-4	1,1-Biphenyl	-	10 UJ	9 UJ	10 UJ	10 UJ	10 UJ	10 UJ		
	Total VOCs (Detectable)	-	14	0	0	0	0	0		

Notes:

☐ = Compound in exceedance of NYSDEC Groundwater Standards.

Qualifiers:

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J - Indicates that the result should be considered approximate.

Table 6
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Sub-Slab Vapor Data

VAPOR SAMPLING April 13-20, 2005										
PARAMETER	VP-1		VP-2		VP-3		Duplicate (VP-3)		VP-4	
AIR TOXIC TO-15 All units = ppbV or ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 1- Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 1- Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	4.0	21	11	55	7.5	37	6.8	34
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 2- Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 2- Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	5.0	25	3.0	ND	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Ethyltoluene	ND	ND	ND	ND	4.0	19	2.0	ND	ND	ND
Acetone	330	500	560	1,300	3,500	8,500	2,600	6,400	1,200	2,800
Allyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	2.0	6.8	2.0	8.0	8.1	26
Benzyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	3.0	22
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	0.2	ND	ND	ND	3.0	8.8	4.0	11	11	34

Table 6
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Sub-Slab Vapor Data

VAPOR SAMPLING April 13-20, 2005										
PARAMETER	VP-1		VP-2		VP-3		Duplicate (VP-3)		VP-4	
AIR TOXIC TO-15 All units = ppbV or ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	9.0	45	21	100	25	130	130	640
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	51	210	1,500	6,200	2,000	8,000	1,300	5,300
cis-1, 3- Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	27	95
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	5.0	22	14	61	6.4	28	7.2	32
Freon 11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptane	ND	ND	3.0	11	3.0	13	3.0	13	22	93
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ND	ND	3.0	11	4.0	13	4.0	15	59	210
Isopropyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ND	ND	9.9	44	31	130	14	61	16	70
Methyl Butyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Isobutyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	4.0	16	7.8	35	4.0	20	5.0	21

Table 6
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Sub-Slab Vapor Data

VAPOR SAMPLING April 13-20, 2005										
PARAMETER	VP-1		VP-2		VP-3		Duplicate (VP-3)		VP-4	
AIR TOXIC TO-15 All units = ppbV or ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3
p-Xylene	ND	ND	5.0	82	11	47	5.6	25	62	17
Propylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	3.0	14	2.0	3.0	2.0	1.0	3.0	14
Tetrachloroethylene	ND	ND	14	280	5,500	38,000	7,400	51,000	980	3,700
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	18	66	28	98	21	82	22	84
trans-1,2-Dichloroethene	ND	ND	ND	ND	12	47	14	57	15	52
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	16	48	920	5,000	1,200	6,500	580	3,000
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

 - Indicates detectable subsurface concentrations

Table 7
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Soil Vapor Data

VAPOR SAMPLING October 11, 2005														
PARAMETER	VP-5		VP-6		VP-7		VP-8		VP-9		VP-10		Trip Blank	
AIR TOXIC TO-15 All units = ppbV or ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3
1,1,1-Trichloroethane	ND	ND	1.8	10.0	1.8	9.7	ND	ND	ND	ND	5.4	30.0	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 1- Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 1- Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	18.0	4.0	20.0	4.0	20.0	5.8	29.0	4.8	24.0	ND	18.0	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 2- Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1, 2- Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.3	6.6	1.2	6.2	1.4	7.2	2.1	10.0	1.7	8.5	1.3	6.3	ND	ND
1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	0.1 J	0.73 J	ND	ND	0.1 J	0.86 J	0.1 J	0.86 J	0.1 J	0.61 J	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane	0.48	2.30	0.34	1.60	0.56	2.70	0.56	2.70	0.41	1.90	0.62	2.90	ND	ND
4-Ethyltoluene	2.0 J	10.0 J	2.0 J	11.0 J	2.0 J	10.0 J	2.7	13.0	2.0 J	12.0 J	2.0 J	10.0 J	ND	ND
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Allyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	4.2	14.0	12.0	38.0	5.4	18.0	3.9	13.0	5.0	16.0	6.8	22.0	ND	ND
Benzyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	1.6	11.0	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	0.4	1.4	4.6	15.0	5.0	16.0	5.2	16.0	0.44	1.4	4.4	14.0	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	0.63	4.0	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.19	0.9	0.25	1.2	ND	ND	1.4	6.8	44.0	220.0	0.35	1.7	ND	ND
Chloromethane	ND	ND	ND	ND	0.17	0.36	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	0.1 J	0.56	ND	ND	ND	ND	1.2	4.7	ND	ND	ND	ND
cis-1, 3- Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	3.2	11.0	40.0	140.0	7.2	25.0	5.7	20.0	ND	ND	7.8	27.0	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 7
Aramark Uniform Services
Voluntary Cleanup Project
Solvay, New York

Summary of Qualified Soil Vapor Data

VAPOR SAMPLING October 11, 2005														
PARAMETER	VP-5		VP-6		VP-7		VP-8		VP-9		VP-10		Trip Blank	
AIR TOXIC TO-15 All units = ppbV or ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3	ppbV	ug/m3
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.8	26.0	6.2	27.0	5.8	26.0	7.4	33.0	9.0	40.0	5.8	26.0	ND	ND
Freon 11	0.25	1.40	0.31	1.80	0.24	1.40	0.23	1.30	0.38	2.20	0.23	1.30	ND	ND
Freon 113	0.10	0.78 J	ND	ND	ND	ND	0.09	0.70	0.15	1.20	ND	ND	ND	ND
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon 12	0.56	2.80	0.60	3.0	0.86	4.30	0.58	2.90	0.34	1.70	0.52	2.60	ND	ND
Heptane	3.4	14.0	36.0	150.0	6.6	27.0	4.2	17.0	4.4	18.0	6.4	27.0	ND	ND
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	6.4	23.0	68.0	240.0	14.0	49.0	4.9	18.0	5.8	21.0	10.0	36.0	ND	ND
Isopropyl alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	14.0	61.0	18.0	79.0	16.0	69.0	20.0	88.0	24.0	110.0	15.0	68.0	ND	ND
Methyl Butyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Isobutyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	22.0	5.8	25.0	5.4	24.0	7.5	33.0	10.0	46.0	5.4	24.0	ND	ND
p-Xylene	7.4	33.0	6.6	29.0	6.8	30.0	9.8	43.0	17.0	73.0	8.6	38.0	ND	ND
Propylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	0.2	1.2	10.0	69.0	6.6	46.0	0.17	1.2	25.0	170.0	0.5	3.4	ND	ND
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	40.0	150.0	44.0	170.0	43.0	160.0	50.0	190.0	46.0	180.0	52.0	200.0	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	1.0	5.7	ND	ND	ND	ND	7.8	43.0	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Indicates detectable soil gas concentrations

J - Analyte detected at or below quantitation limits

Soil Vapor/Indoor Air Matrix 1

October 2006

TCE

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)			
	< 0.25	0.25 to < 1	1 to < 5.0	5.0 and above
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR / MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

MATRIX 1 Page 1 of 2

Soil Vapor/Indoor Air Matrix 2

October 2006

PCE/1,1,1-TCA

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)			
	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

No further action:

Given that the compound was not detected in the indoor air sample and that the concentration detected in the sub-slab vapor sample is not expected to significantly affect indoor air quality, no additional actions are needed to address human exposures.

Take reasonable and practical actions to identify source(s) and reduce exposures:

The concentration detected in the indoor air sample is likely due to indoor and/or outdoor sources rather than soil vapor intrusion given the concentration detected in the sub-slab vapor sample. Therefore, steps should be taken to identify potential source(s) and to reduce exposures accordingly (e.g., by keeping containers tightly capped or by storing volatile organic compound-containing products in places where people do not spend much time, such as a garage or outdoor shed). Resampling may be recommended to demonstrate the effectiveness of actions taken to reduce exposures.

MONITOR:

Monitoring, including sub-slab vapor, basement air, lowest occupied living space air, and outdoor air sampling, is needed to determine whether concentrations in the indoor air or sub-slab vapor have changed. Monitoring may also be needed to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined on a site-specific and building-specific basis, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MITIGATE:

Mitigation is needed to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system, and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

MONITOR / MITIGATE:

Monitoring or mitigation may be recommended after considering the magnitude of sub-slab vapor and indoor air concentrations along with building- and site-specific conditions.

See additional notes on page 2.

MATRIX 2 Page 1 of 2

Appendix F

Validated Data Packages (Bound Separately)

Appendix G

In-Situ Hydraulic Conductivity Data

Jacob's Method (Recovery)

MW-2 HC Test #1

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.26 feet
Transmissivity =	1,511 gpd/ft
$t_o =$	0.0001 min
$t_o =$	9.3E-08 days
Storage Coefficient =	6.1E-03

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	1.09 feet
Transmissivity =	363 gpd/ft
$t_o =$	1.2448 min
$t_o =$	8.6E-04 days
Storage Coefficient =	1.4E+01

MW-2 Saturated Thickness "b": 7 ft
 Average Transmissivity "T": 937 gpd/ft

$$K = T/b \quad 134 \text{ gpd/ft}^2$$

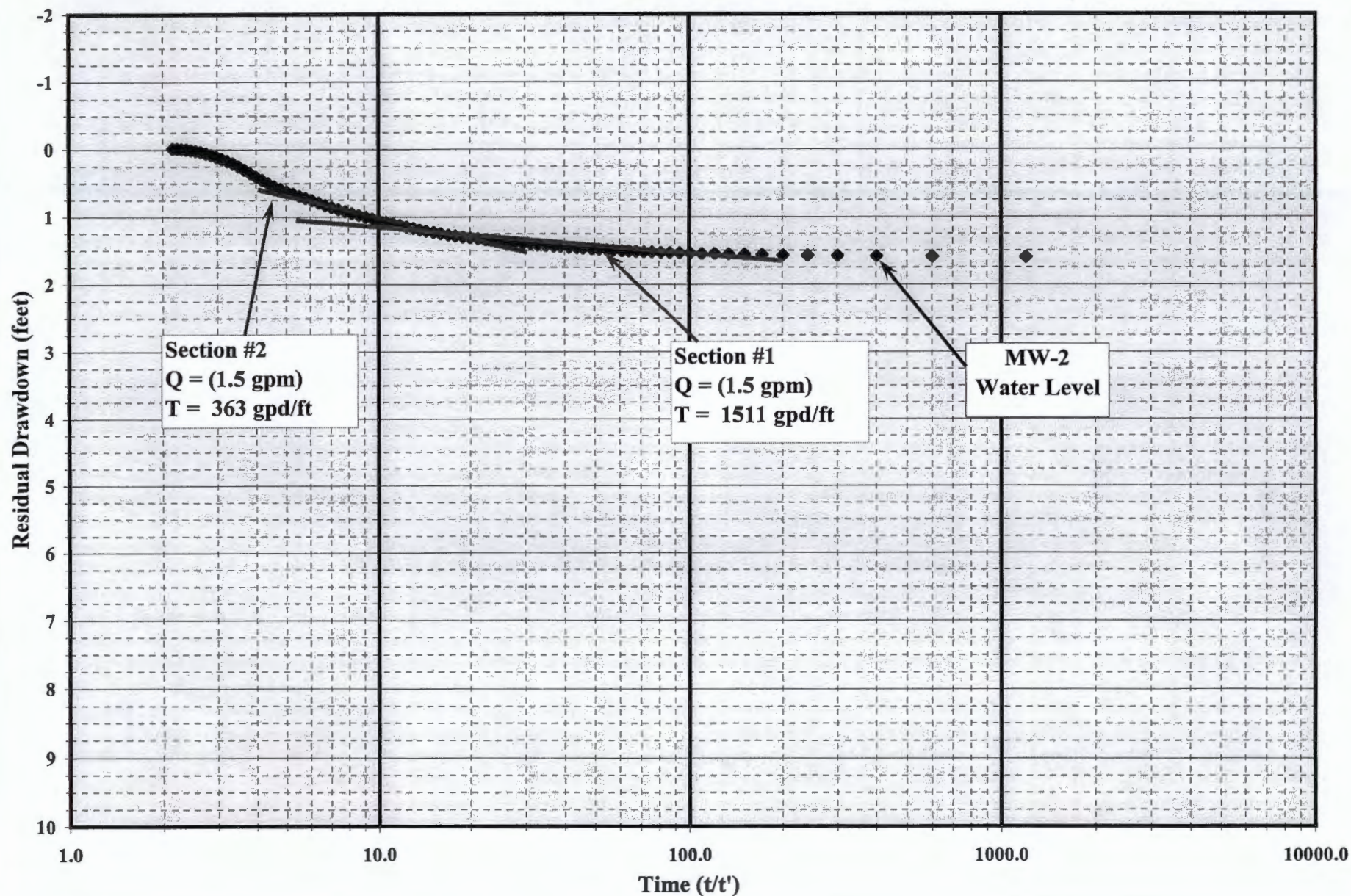
$$K / 7.48 \text{ gal/ft}^3 = 17.9 \text{ ft/day}$$

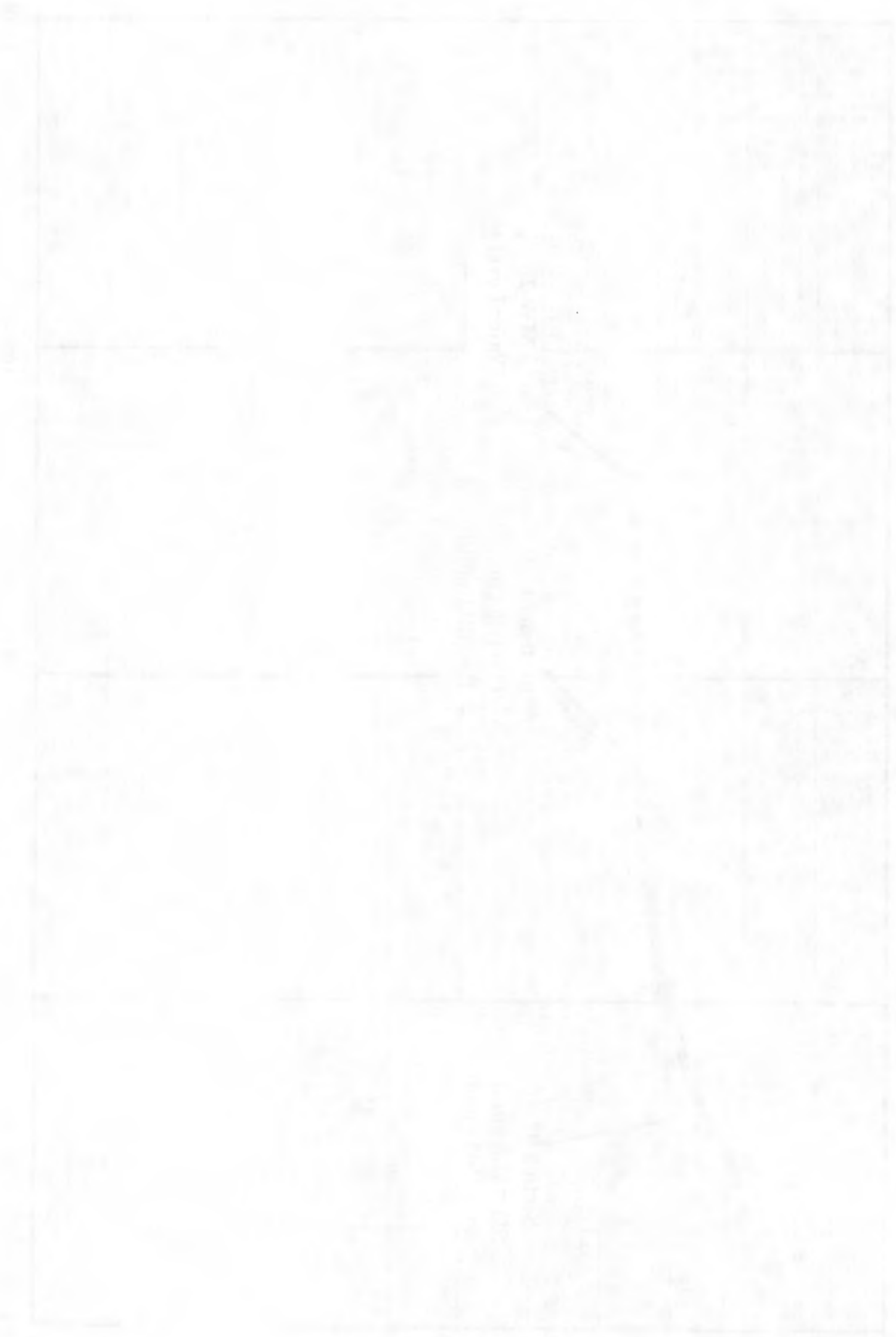
$$\text{conversion} \quad 2.07190\text{E-}04 \text{ ft/sec}$$

$$\text{conversion} \quad 6.31929\text{E-}05 \text{ m/sec}$$

Jacobs Recovery Analysis: MW-2 Test No. 1

June 2, 2005





1000 2000 3000

1000 2000 3000



Jacob's Analysis (Recovery)

Well ID: MW 2 HC Test 1

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.672 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 3:32 PM
 Time Recovery Ended: 6/2/05 3:37 PM
 Test Length: 5 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
6.005	0.005	1201.00	3.08	2.07	1.600
6.010	0.010	601.00	2.78	2.08	1.591
6.010	0.015	400.67	2.60	2.09	1.586
6.015	0.020	300.75	2.48	2.09	1.579
6.020	0.025	240.80	2.38	2.10	1.575
6.025	0.030	200.83	2.30	2.10	1.570
6.030	0.035	172.29	2.24	2.11	1.566
6.035	0.040	150.88	2.18	2.12	1.557
6.040	0.045	134.22	2.13	2.12	1.554
6.045	0.050	120.90	2.08	2.12	1.548
6.050	0.055	110.00	2.04	2.13	1.546
6.055	0.060	100.92	2.00	2.13	1.541
6.060	0.065	93.23	1.97	2.13	1.538
6.065	0.070	86.64	1.94	2.14	1.533
6.070	0.075	80.93	1.91	2.14	1.529
6.075	0.080	75.94	1.88	2.15	1.524
6.080	0.085	71.53	1.85	2.15	1.519
6.085	0.090	67.61	1.83	2.16	1.515
6.090	0.095	64.11	1.81	2.16	1.510
6.095	0.100	60.95	1.78	2.17	1.504
6.100	0.107	57.19	1.76	2.17	1.498
6.107	0.112	54.69	1.74	2.18	1.491
6.112	0.118	51.65	1.71	2.19	1.485
6.118	0.125	48.95	1.69	2.20	1.477
6.125	0.133	45.94	1.66	2.20	1.469
6.133	0.140	43.81	1.64	2.21	1.462
6.140	0.148	41.39	1.62	2.22	1.455
6.148	0.158	38.83	1.59	2.23	1.445
6.158	0.167	36.95	1.57	2.23	1.439
6.167	0.177	34.91	1.54	2.24	1.431
6.177	0.188	32.80	1.52	2.26	1.416

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
6.188	0.198	31.20	1.49	2.27	1.407
6.198	0.210	29.52	1.47	2.28	1.396
6.210	0.223	27.81	1.44	2.29	1.384
6.223	0.237	26.30	1.42	2.30	1.374
6.237	0.250	24.95	1.40	2.31	1.363
6.250	0.265	23.58	1.37	2.32	1.350
6.265	0.280	22.38	1.35	2.33	1.338
6.280	0.297	21.17	1.33	2.35	1.326
6.297	0.315	19.99	1.30	2.36	1.313
6.315	0.333	18.95	1.28	2.37	1.301
6.333	0.353	17.92	1.25	2.39	1.285
6.353	0.373	17.02	1.23	2.40	1.269
6.373	0.397	16.07	1.21	2.42	1.251
6.397	0.420	15.23	1.18	2.44	1.234
6.420	0.445	14.43	1.16	2.46	1.211
6.445	0.470	13.71	1.14	2.48	1.193
6.470	0.497	13.03	1.11	2.50	1.169
6.497	0.525	12.37	1.09	2.52	1.148
6.525	0.555	11.76	1.07	2.55	1.126
6.555	0.587	11.17	1.05	2.57	1.106
6.587	0.622	10.60	1.03	2.59	1.080
6.622	0.658	10.06	1.00	2.61	1.059
6.658	0.697	9.56	0.98	2.64	1.032
6.697	0.738	9.07	0.96	2.67	1.004
6.738	0.782	8.62	0.94	2.70	0.977
6.782	0.828	8.19	0.91	2.72	0.950
6.828	0.877	7.79	0.89	2.75	0.920
6.877	0.928	7.41	0.87	2.78	0.890
6.928	0.983	7.05	0.85	2.81	0.859
6.983	1.042	6.70	0.83	2.85	0.827
7.042	1.103	6.38	0.80	2.88	0.791
7.103	1.168	6.08	0.78	2.92	0.755
7.168	1.238	5.79	0.76	2.95	0.721
7.238	1.312	5.52	0.74	2.98	0.688
7.312	1.390	5.26	0.72	3.02	0.656
7.390	1.473	5.02	0.70	3.05	0.625
7.473	1.562	4.79	0.68	3.09	0.587
7.562	1.655	4.57	0.66	3.13	0.547
7.655	1.753	4.37	0.64	3.17	0.504
7.753	1.858	4.17	0.62	3.22	0.455

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
7.858	1.968	3.99	0.60	3.27	0.407
7.968	2.085	3.82	0.58	3.32	0.355
8.085	2.210	3.66	0.56	3.37	0.301
8.210	2.342	3.51	0.54	3.42	0.251
8.342	2.482	3.36	0.53	3.46	0.210
8.482	2.630	3.22	0.51	3.50	0.173
8.630	2.787	3.10	0.49	3.53	0.143
8.787	2.953	2.98	0.47	3.56	0.111
8.953	3.130	2.86	0.46	3.59	0.085
9.130	3.317	2.75	0.44	3.61	0.059
9.317	3.515	2.65	0.42	3.63	0.040
9.515	3.725	2.55	0.41	3.65	0.025
9.725	3.947	2.46	0.39	3.66	0.013
9.947	4.182	2.38	0.38	3.67	0.002
10.182	4.430	2.30	0.36	3.68	-0.004
10.430	4.693	2.22	0.35	3.68	-0.012
10.693	4.973	2.15	0.33	3.69	-0.013

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500
501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700
701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800
801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900
901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000

Jacob's Method (Recovery)

MW-2 HC Test #2

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	1.03 feet
Transmissivity =	383 gpd/ft
$t_o =$	0.4787 min
$t_o =$	3.3E-04 days
Storage Coefficient =	5.5E+00

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	2.67 feet
Transmissivity =	148 gpd/ft
$t_o =$	1.4421 min
$t_o =$	1.0E-03 days
Storage Coefficient =	6.4E+00

MW-2 Saturated Thickness "b":	7 ft
Average Transmissivity "T":	266 gpd/ft

$K = T/b$	38 gpd/ft ²
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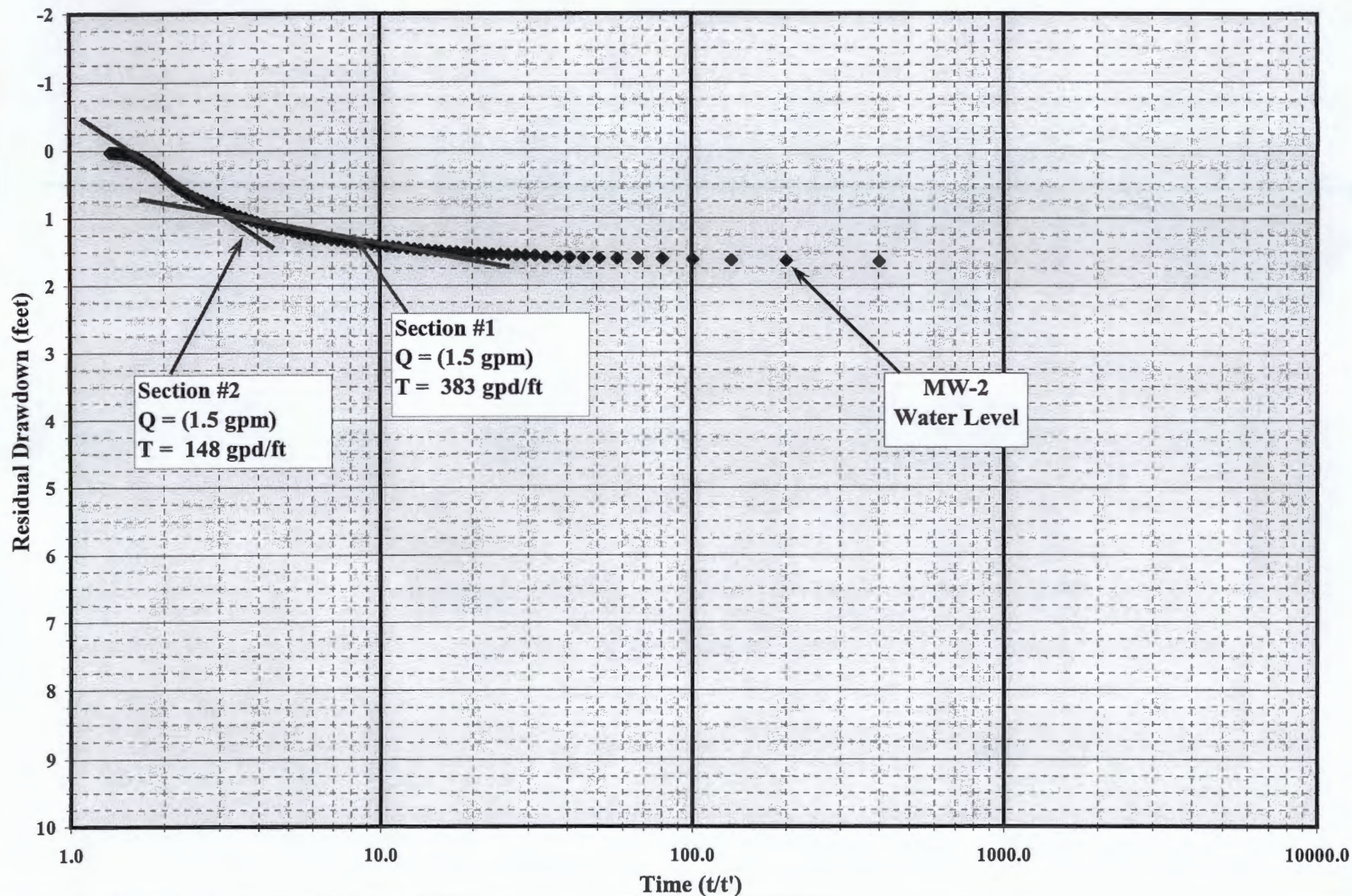
$K / 7.48 \text{ gal/ft}^3 =$	5.1 ft/day
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conversion	5.87923E-05 ft/sec
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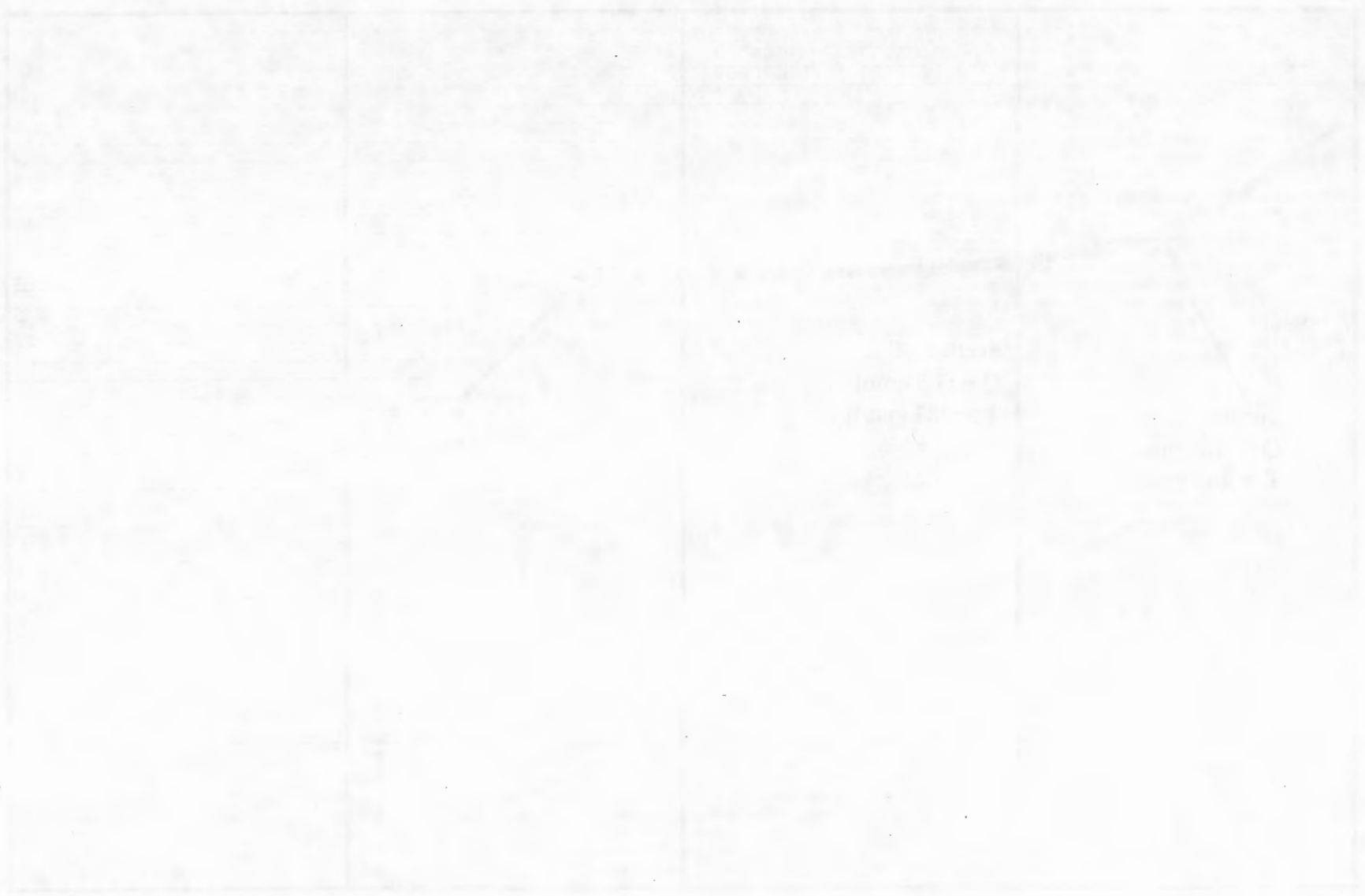
conversion	1.79317E-05 m/sec
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Jacobs Recovery Analysis: MW-2 Test No. 2

June 2, 2005



Location: ...
Date: ...



...

Jacob's Analysis (Recovery)

Well ID: MW 2 HC Test 2

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.708 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 3:39 PM
 Time Recovery Ended: 6/2/05 3:44 PM
 Test Length: 5 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
2.005	0.005	401.00	2.60	2.07	1.643
2.010	0.010	201.00	2.30	2.08	1.630
2.010	0.015	134.00	2.13	2.09	1.622
2.015	0.020	100.75	2.00	2.10	1.613
2.020	0.025	80.80	1.91	2.11	1.603
2.025	0.030	67.50	1.83	2.11	1.603
2.030	0.035	58.00	1.76	2.11	1.599
2.035	0.040	50.88	1.71	2.11	1.594
2.040	0.045	45.33	1.66	2.12	1.590
2.045	0.050	40.90	1.61	2.13	1.582
2.050	0.055	37.27	1.57	2.13	1.580
2.055	0.060	34.25	1.53	2.13	1.578
2.060	0.065	31.69	1.50	2.16	1.553
2.065	0.070	29.50	1.47	2.16	1.551
2.070	0.075	27.60	1.44	2.16	1.546
2.075	0.080	25.94	1.41	2.17	1.543
2.080	0.085	24.47	1.39	2.17	1.539
2.085	0.090	23.17	1.36	2.17	1.535
2.090	0.095	22.00	1.34	2.18	1.530
2.095	0.100	20.95	1.32	2.18	1.526
2.100	0.107	19.69	1.29	2.19	1.518
2.107	0.112	18.87	1.28	2.20	1.513
2.112	0.118	17.85	1.25	2.20	1.505
2.118	0.125	16.95	1.23	2.21	1.498
2.125	0.133	15.94	1.20	2.22	1.491
2.133	0.140	15.24	1.18	2.23	1.483
2.140	0.148	14.43	1.16	2.24	1.472
2.148	0.158	13.57	1.13	2.24	1.465
2.158	0.167	12.95	1.11	2.25	1.455
2.167	0.177	12.26	1.09	2.26	1.446
2.177	0.188	11.56	1.06	2.27	1.437

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
2.188	0.198	11.03	1.04	2.28	1.426
2.198	0.210	10.47	1.02	2.29	1.415
2.210	0.223	9.90	1.00	2.31	1.403
2.223	0.237	9.39	0.97	2.32	1.392
2.237	0.250	8.95	0.95	2.33	1.381
2.250	0.265	8.49	0.93	2.34	1.369
2.265	0.280	8.09	0.91	2.35	1.356
2.280	0.297	7.69	0.89	2.37	1.342
2.297	0.315	7.29	0.86	2.38	1.329
2.315	0.333	6.95	0.84	2.39	1.315
2.333	0.353	6.60	0.82	2.41	1.298
2.353	0.373	6.30	0.80	2.43	1.281
2.373	0.397	5.98	0.78	2.45	1.260
2.397	0.420	5.71	0.76	2.47	1.239
2.420	0.445	5.44	0.74	2.49	1.217
2.445	0.470	5.20	0.72	2.51	1.194
2.470	0.497	4.97	0.70	2.53	1.174
2.497	0.525	4.76	0.68	2.56	1.153
2.525	0.555	4.55	0.66	2.58	1.130
2.555	0.587	4.36	0.64	2.60	1.108
2.587	0.622	4.16	0.62	2.63	1.082
2.622	0.658	3.98	0.60	2.65	1.055
2.658	0.697	3.82	0.58	2.68	1.027
2.697	0.738	3.65	0.56	2.71	0.998
2.738	0.782	3.50	0.54	2.74	0.969
2.782	0.828	3.36	0.53	2.77	0.937
2.828	0.877	3.23	0.51	2.81	0.903
2.877	0.928	3.10	0.49	2.84	0.870
2.928	0.983	2.98	0.47	2.87	0.836
2.983	1.042	2.86	0.46	2.91	0.803
3.042	1.103	2.76	0.44	2.94	0.767
3.103	1.168	2.66	0.42	2.98	0.733
3.168	1.238	2.56	0.41	3.01	0.703
3.238	1.312	2.47	0.39	3.04	0.670
3.312	1.390	2.38	0.38	3.08	0.633
3.390	1.473	2.30	0.36	3.12	0.590
3.473	1.562	2.22	0.35	3.16	0.546
3.562	1.655	2.15	0.33	3.21	0.497
3.655	1.753	2.08	0.32	3.26	0.445
3.753	1.858	2.02	0.31	3.32	0.391

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
3.858	1.968	1.96	0.29	3.37	0.336
3.968	2.085	1.90	0.28	3.43	0.281
4.085	2.210	1.85	0.27	3.47	0.234
4.210	2.342	1.80	0.25	3.51	0.195
4.342	2.482	1.75	0.24	3.54	0.166
4.482	2.630	1.70	0.23	3.58	0.130
4.630	2.787	1.66	0.22	3.60	0.105
4.787	2.953	1.62	0.21	3.63	0.083
4.953	3.130	1.58	0.20	3.64	0.066
5.130	3.317	1.55	0.19	3.65	0.054
5.317	3.515	1.51	0.18	3.66	0.045
5.515	3.725	1.48	0.17	3.67	0.041
5.725	3.947	1.45	0.16	3.67	0.034
5.947	4.182	1.42	0.15	3.68	0.032
6.182	4.430	1.40	0.14	3.68	0.031
6.430	4.693	1.37	0.14	3.68	0.029
6.693	4.973	1.35	0.13	3.68	0.029

DATE	DESCRIPTION	AMOUNT	CHECK NO.	BANK	INITIALS
1/1/78	DEPOSIT	100.00		ABC BANK	JD
1/5/78	PAYROLL	50.00	101	ABC BANK	JD
1/10/78	RENT	25.00	102	ABC BANK	JD
1/15/78	SALES	75.00	103	ABC BANK	JD
1/20/78	UTILITIES	15.00	104	ABC BANK	JD
1/25/78	DEPOSIT	120.00		ABC BANK	JD
1/30/78	PAYROLL	55.00	105	ABC BANK	JD
2/5/78	RENT	25.00	106	ABC BANK	JD
2/10/78	SALES	80.00	107	ABC BANK	JD
2/15/78	UTILITIES	15.00	108	ABC BANK	JD
2/20/78	DEPOSIT	130.00		ABC BANK	JD
2/25/78	PAYROLL	60.00	109	ABC BANK	JD
2/28/78	RENT	25.00	110	ABC BANK	JD
3/5/78	SALES	90.00	111	ABC BANK	JD
3/10/78	UTILITIES	15.00	112	ABC BANK	JD
3/15/78	DEPOSIT	140.00		ABC BANK	JD
3/20/78	PAYROLL	65.00	113	ABC BANK	JD
3/25/78	RENT	25.00	114	ABC BANK	JD
3/30/78	SALES	100.00	115	ABC BANK	JD
4/5/78	UTILITIES	15.00	116	ABC BANK	JD
4/10/78	DEPOSIT	150.00		ABC BANK	JD
4/15/78	PAYROLL	70.00	117	ABC BANK	JD
4/20/78	RENT	25.00	118	ABC BANK	JD
4/25/78	SALES	110.00	119	ABC BANK	JD
4/30/78	UTILITIES	15.00	120	ABC BANK	JD
5/5/78	DEPOSIT	160.00		ABC BANK	JD
5/10/78	PAYROLL	75.00	121	ABC BANK	JD
5/15/78	RENT	25.00	122	ABC BANK	JD
5/20/78	SALES	120.00	123	ABC BANK	JD
5/25/78	UTILITIES	15.00	124	ABC BANK	JD
5/30/78	DEPOSIT	170.00		ABC BANK	JD
6/5/78	PAYROLL	80.00	125	ABC BANK	JD
6/10/78	RENT	25.00	126	ABC BANK	JD
6/15/78	SALES	130.00	127	ABC BANK	JD
6/20/78	UTILITIES	15.00	128	ABC BANK	JD
6/25/78	DEPOSIT	180.00		ABC BANK	JD
6/30/78	PAYROLL	85.00	129	ABC BANK	JD
7/5/78	RENT	25.00	130	ABC BANK	JD
7/10/78	SALES	140.00	131	ABC BANK	JD
7/15/78	UTILITIES	15.00	132	ABC BANK	JD
7/20/78	DEPOSIT	190.00		ABC BANK	JD
7/25/78	PAYROLL	90.00	133	ABC BANK	JD
7/30/78	RENT	25.00	134	ABC BANK	JD
8/5/78	SALES	150.00	135	ABC BANK	JD
8/10/78	UTILITIES	15.00	136	ABC BANK	JD
8/15/78	DEPOSIT	200.00		ABC BANK	JD
8/20/78	PAYROLL	95.00	137	ABC BANK	JD
8/25/78	RENT	25.00	138	ABC BANK	JD
8/30/78	SALES	160.00	139	ABC BANK	JD
9/5/78	UTILITIES	15.00	140	ABC BANK	JD
9/10/78	DEPOSIT	210.00		ABC BANK	JD
9/15/78	PAYROLL	100.00	141	ABC BANK	JD
9/20/78	RENT	25.00	142	ABC BANK	JD
9/25/78	SALES	170.00	143	ABC BANK	JD
9/30/78	UTILITIES	15.00	144	ABC BANK	JD
10/5/78	DEPOSIT	220.00		ABC BANK	JD
10/10/78	PAYROLL	105.00	145	ABC BANK	JD
10/15/78	RENT	25.00	146	ABC BANK	JD
10/20/78	SALES	180.00	147	ABC BANK	JD
10/25/78	UTILITIES	15.00	148	ABC BANK	JD
10/30/78	DEPOSIT	230.00		ABC BANK	JD
11/5/78	PAYROLL	110.00	149	ABC BANK	JD
11/10/78	RENT	25.00	150	ABC BANK	JD
11/15/78	SALES	190.00	151	ABC BANK	JD
11/20/78	UTILITIES	15.00	152	ABC BANK	JD
11/25/78	DEPOSIT	240.00		ABC BANK	JD
11/30/78	PAYROLL	115.00	153	ABC BANK	JD
12/5/78	RENT	25.00	154	ABC BANK	JD
12/10/78	SALES	200.00	155	ABC BANK	JD
12/15/78	UTILITIES	15.00	156	ABC BANK	JD
12/20/78	DEPOSIT	250.00		ABC BANK	JD
12/25/78	PAYROLL	120.00	157	ABC BANK	JD
12/30/78	RENT	25.00	158	ABC BANK	JD
1/5/79	SALES	210.00	159	ABC BANK	JD
1/10/79	UTILITIES	15.00	160	ABC BANK	JD
1/15/79	DEPOSIT	260.00		ABC BANK	JD
1/20/79	PAYROLL	125.00	161	ABC BANK	JD
1/25/79	RENT	25.00	162	ABC BANK	JD
1/30/79	SALES	220.00	163	ABC BANK	JD
2/5/79	UTILITIES	15.00	164	ABC BANK	JD
2/10/79	DEPOSIT	270.00		ABC BANK	JD
2/15/79	PAYROLL	130.00	165	ABC BANK	JD
2/20/79	RENT	25.00	166	ABC BANK	JD
2/25/79	SALES	230.00	167	ABC BANK	JD
2/28/79	UTILITIES	15.00	168	ABC BANK	JD
3/5/79	DEPOSIT	280.00		ABC BANK	JD
3/10/79	PAYROLL	135.00	169	ABC BANK	JD
3/15/79	RENT	25.00	170	ABC BANK	JD
3/20/79	SALES	240.00	171	ABC BANK	JD
3/25/79	UTILITIES	15.00	172	ABC BANK	JD
3/30/79	DEPOSIT	290.00		ABC BANK	JD
4/5/79	PAYROLL	140.00	173	ABC BANK	JD
4/10/79	RENT	25.00	174	ABC BANK	JD
4/15/79	SALES	250.00	175	ABC BANK	JD
4/20/79	UTILITIES	15.00	176	ABC BANK	JD
4/25/79	DEPOSIT	300.00		ABC BANK	JD
4/30/79	PAYROLL	145.00	177	ABC BANK	JD
5/5/79	RENT	25.00	178	ABC BANK	JD
5/10/79	SALES	260.00	179	ABC BANK	JD
5/15/79	UTILITIES	15.00	180	ABC BANK	JD
5/20/79	DEPOSIT	310.00		ABC BANK	JD
5/25/79	PAYROLL	150.00	181	ABC BANK	JD
5/30/79	RENT	25.00	182	ABC BANK	JD
6/5/79	SALES	270.00	183	ABC BANK	JD
6/10/79	UTILITIES	15.00	184	ABC BANK	JD
6/15/79	DEPOSIT	320.00		ABC BANK	JD
6/20/79	PAYROLL	155.00	185	ABC BANK	JD
6/25/79	RENT	25.00	186	ABC BANK	JD
6/30/79	SALES	280.00	187	ABC BANK	JD
7/5/79	UTILITIES	15.00	188	ABC BANK	JD
7/10/79	DEPOSIT	330.00		ABC BANK	JD
7/15/79	PAYROLL	160.00	189	ABC BANK	JD
7/20/79	RENT	25.00	190	ABC BANK	JD
7/25/79	SALES	290.00	191	ABC BANK	JD
7/30/79	UTILITIES	15.00	192	ABC BANK	JD
8/5/79	DEPOSIT	340.00		ABC BANK	JD
8/10/79	PAYROLL	165.00	193	ABC BANK	JD
8/15/79	RENT	25.00	194	ABC BANK	JD
8/20/79	SALES	300.00	195	ABC BANK	JD
8/25/79	UTILITIES	15.00	196	ABC BANK	JD
8/30/79	DEPOSIT	350.00		ABC BANK	JD
9/5/79	PAYROLL	170.00	197	ABC BANK	JD
9/10/79	RENT	25.00	198	ABC BANK	JD
9/15/79	SALES	310.00	199	ABC BANK	JD
9/20/79	UTILITIES	15.00	200	ABC BANK	JD
9/25/79	DEPOSIT	360.00		ABC BANK	JD
9/30/79	PAYROLL	175.00	201	ABC BANK	JD
10/5/79	RENT	25.00	202	ABC BANK	JD
10/10/79	SALES	320.00	203	ABC BANK	JD
10/15/79	UTILITIES	15.00	204	ABC BANK	JD
10/20/79	DEPOSIT	370.00		ABC BANK	JD
10/25/79	PAYROLL	180.00	205	ABC BANK	JD
10/30/79	RENT	25.00	206	ABC BANK	JD
11/5/79	SALES	330.00	207	ABC BANK	JD
11/10/79	UTILITIES	15.00	208	ABC BANK	JD
11/15/79	DEPOSIT	380.00		ABC BANK	JD
11/20/79	PAYROLL	185.00	209	ABC BANK	JD
11/25/79	RENT	25.00	210	ABC BANK	JD
11/30/79	SALES	340.00	211	ABC BANK	JD
12/5/79	UTILITIES	15.00	212	ABC BANK	JD
12/10/79	DEPOSIT	390.00		ABC BANK	JD
12/15/79	PAYROLL	190.00	213	ABC BANK	JD
12/20/79	RENT	25.00	214	ABC BANK	JD
12/25/79	SALES	350.00	215	ABC BANK	JD
12/30/79	UTILITIES	15.00	216	ABC BANK	JD
1/5/80	DEPOSIT	400.00		ABC BANK	JD
1/10/80	PAYROLL	195.00	217	ABC BANK	JD
1/15/80	RENT	25.00	218	ABC BANK	JD
1/20/80	SALES	360.00	219	ABC BANK	JD
1/25/80	UTILITIES	15.00	220	ABC BANK	JD
1/30/80	DEPOSIT	410.00		ABC BANK	JD
2/5/80	PAYROLL	200.00	221	ABC BANK	JD
2/10/80	RENT	25.00	222	ABC BANK	JD
2/15/80	SALES	370.00	223	ABC BANK	JD
2/20/80	UTILITIES	15.00	224	ABC BANK	JD
2/25/80	DEPOSIT	420.00		ABC BANK	JD
2/28/80	PAYROLL	205.00	225	ABC BANK	JD
3/5/80	RENT	25.00	226	ABC BANK	JD
3/10/80	SALES	380.00	227	ABC BANK	JD
3/15/80	UTILITIES	15.00	228	ABC BANK	JD
3/20/80	DEPOSIT	430.00		ABC BANK	JD
3/25/80	PAYROLL	210.00	229	ABC BANK	JD
3/30/80	RENT	25.00	230	ABC BANK	JD
4/5/80	SALES	390.00	231	ABC BANK	JD
4/10/80	UTILITIES	15.00	232	ABC BANK	JD
4/15/80	DEPOSIT	440.00		ABC BANK	JD
4/20/80	PAYROLL	215.00	233	ABC BANK	JD
4/25/80	RENT	25.00	234	ABC BANK	JD
4/30/80	SALES	400.00	235	ABC BANK	JD
5/5/80	UTILITIES	15.00	236	ABC BANK	JD
5/10/80	DEPOSIT	450.00		ABC BANK	JD
5/15/80	PAYROLL	220.00	237	ABC BANK	JD
5/20/80	RENT	25.00	238	ABC BANK	JD
5/25/80	SALES	410.00	239	ABC BANK	JD
5/30/80	UTILITIES	15.00	240	ABC BANK	JD
6/5/80	DEPOSIT	460.00		ABC BANK	JD
6/10/80	PAYROLL	225.00	241	ABC BANK	JD
6/15/80	RENT	25.00	242	ABC BANK	JD
6/20/80	SALES	420.00	243	ABC BANK	JD
6/25/80	UTILITIES	15.00	244	ABC BANK	JD
6/30/80	DEPOSIT	470.00		ABC BANK	JD
7/5/80	PAYROLL	230.00	245	ABC BANK	JD
7/10/80	RENT	25.00	246	ABC BANK	JD
7/15/80	SALES	430.00	247	ABC BANK	JD
7/20/80	UTILITIES	15.00	248	ABC BANK	JD
7/25/80	DEPOSIT	480.00		ABC BANK	JD
7/30/80	PAYROLL	235.00	249	ABC BANK	JD
8/5/80	RENT	25.00	250	ABC BANK	JD
8/10/80	SALES	440.00	251	ABC BANK	JD
8/15/80	UTILITIES	15.00	252	ABC BANK	JD
8/20/80	DEPOSIT	490.00		ABC BANK	JD
8/25/80	PAYROLL	240.00	253	ABC BANK	JD
8/30/80	RENT	25.00	254	ABC BANK	JD
9/5/80	SALES	450.00	255	ABC BANK	JD
9/10/80	UTILITIES	15.00	256	ABC BANK	JD
9/15/80	DEPOSIT	500.00		ABC BANK	JD
9/20/80	PAYROLL	245.00	257	ABC BANK	JD
9/25/80	RENT	25.00	258	ABC BANK	JD
9/30/80	SALES	460.00	259	ABC BANK	JD
10/5/80	UTILITIES	15.00	260	ABC BANK	JD
10/10/80	DEPOSIT	510.00		ABC BANK	JD
10/15/80	PAYROLL	250.00	261	ABC BANK	JD
10/20/80	RENT	25.00	262	ABC BANK	JD
10/25/80	SALES	470.00	263	ABC BANK	JD
10/30/80	UTILITIES	15.00	264	ABC BANK	JD
11/5/80	DEPOSIT	520.00		ABC BANK	JD
11/10/80	PAYROLL	255.00	265	ABC BANK	JD
11/15/80	RENT	25.00	266	ABC BANK	JD
11/20/80	SALES	480.00	267	ABC BANK	JD
11/25/80	UTILITIES	15.00	268	ABC BANK	JD
11/30/80	DEPOSIT	530.00		ABC BANK	JD
12/5/80	PAYROLL	260.00	269	ABC BANK	JD
12/10/80	RENT	25.00	270	ABC BANK	JD
12/15/80	SALES	490.00	271	ABC BANK	JD
12/20/80	UTILITIES	15.00	272	ABC BANK	JD
12/25/80	DEPOSIT	540.00		ABC BANK	JD
12/30/80	PAYROLL	265.00	273	ABC BANK	JD
1/5/81	RENT	25.00	274	ABC BANK	JD
1/10/81	SALES	500.00	275	ABC BANK	JD
1/15/81	UTILITIES	15.00	276	ABC BANK	JD
1/20/81	DEPOSIT	550.00</			

Jacob's Method (Recovery) **MW-2 HC Test #3**

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.93 feet
Transmissivity =	426 gpd/ft
$t_o =$	0.3511 min
$t_o =$	2.4E-04 days
Storage Coefficient =	4.5E+00

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	2.40 feet
Transmissivity =	165 gpd/ft
$t_o =$	1.6594 min
$t_o =$	1.2E-03 days
Storage Coefficient =	8.2E+00

MW-2 Saturated Thickness "b":	7 ft
Average Transmissivity "T":	295 gpd/ft

$K = T/b$	42 gpd/ft ²
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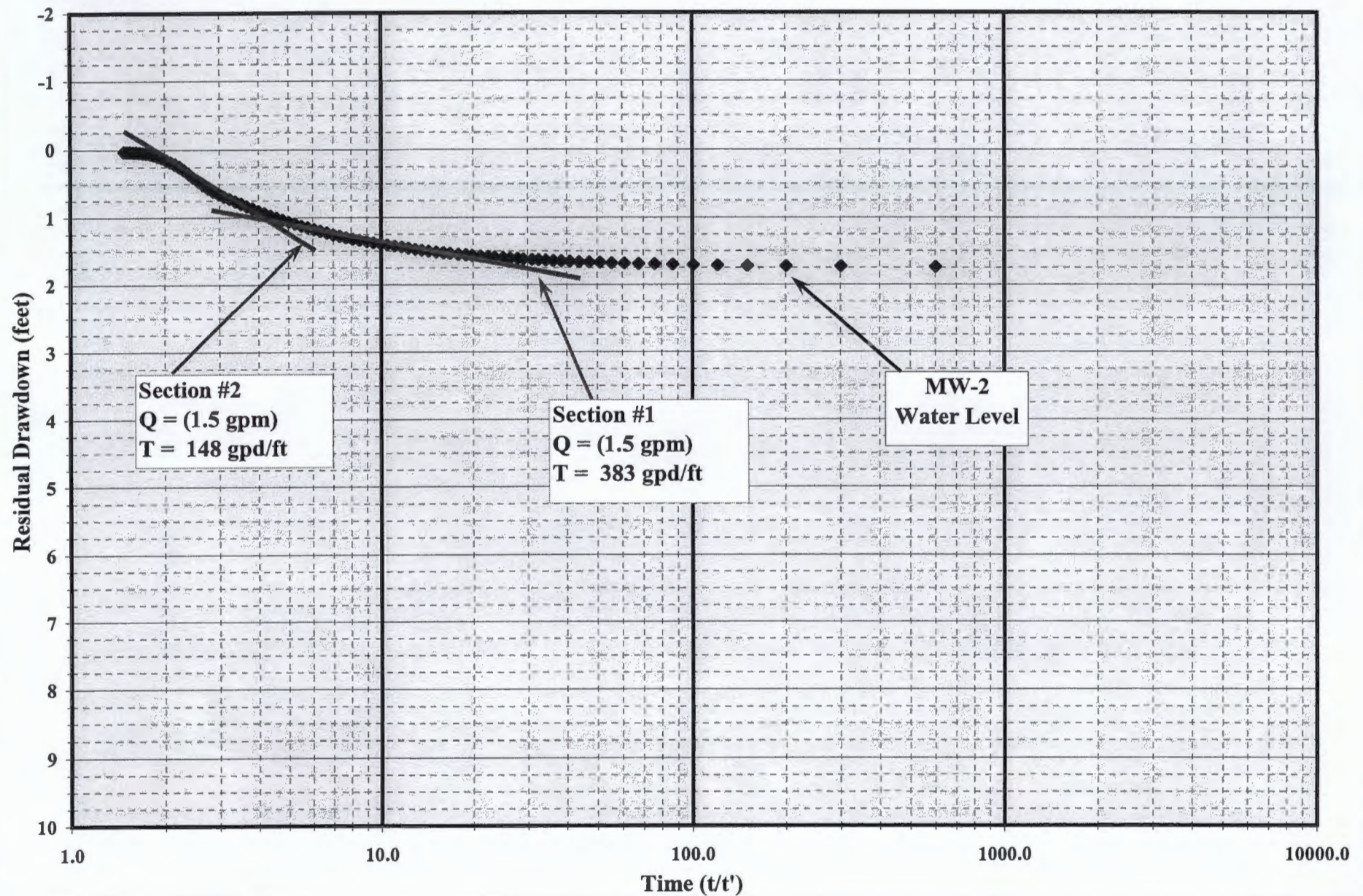
$K / 7.48 \text{ gal/ft}^3 =$	5.6 ft/day
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conversion	6.5267E-05 ft/sec
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conversion	1.99064E-05 m/sec
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Jacobs Recovery Analysis: MW-2 Test No. 3

June 2, 2005



Jacob's Analysis (Recovery)

Well ID: MW 2 HC Test 3

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.704 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 3:47 PM
 Time Recovery Ended: 6/2/05 3:53 PM
 Test Length: 6 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
3.005	0.005	601.00	2.78	1.97	1.739
3.010	0.010	301.00	2.48	1.98	1.728
3.010	0.015	200.67	2.30	1.98	1.725
3.015	0.020	150.75	2.18	1.98	1.724
3.020	0.025	120.80	2.08	1.99	1.715
3.025	0.030	100.83	2.00	1.99	1.710
3.030	0.035	86.57	1.94	2.00	1.702
3.035	0.040	75.88	1.88	2.01	1.694
3.040	0.045	67.56	1.83	2.01	1.690
3.045	0.050	60.90	1.78	2.02	1.685
3.050	0.055	55.45	1.74	2.02	1.680
3.055	0.060	50.92	1.71	2.03	1.672
3.060	0.065	47.08	1.67	2.04	1.667
3.065	0.070	43.79	1.64	2.04	1.663
3.070	0.075	40.93	1.61	2.05	1.658
3.075	0.080	38.44	1.58	2.05	1.650
3.080	0.085	36.24	1.56	2.06	1.646
3.085	0.090	34.28	1.54	2.07	1.638
3.090	0.095	32.53	1.51	2.07	1.633
3.095	0.100	30.95	1.49	2.08	1.628
3.100	0.107	29.06	1.46	2.08	1.621
3.107	0.112	27.82	1.44	2.09	1.613
3.112	0.118	26.30	1.42	2.10	1.608
3.118	0.125	24.95	1.40	2.11	1.599
3.125	0.133	23.44	1.37	2.11	1.591
3.133	0.140	22.38	1.35	2.12	1.585
3.140	0.148	21.17	1.33	2.13	1.577
3.148	0.158	19.88	1.30	2.14	1.566
3.158	0.167	18.95	1.28	2.15	1.558
3.167	0.177	17.92	1.25	2.16	1.549
3.177	0.188	16.87	1.23	2.17	1.537

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
3.188	0.198	16.08	1.21	2.18	1.526
3.198	0.210	15.23	1.18	2.19	1.515
3.210	0.223	14.37	1.16	2.20	1.502
3.223	0.237	13.62	1.13	2.22	1.486
3.237	0.250	12.95	1.11	2.23	1.472
3.250	0.265	12.26	1.09	2.25	1.455
3.265	0.280	11.66	1.07	2.26	1.440
3.280	0.297	11.06	1.04	2.28	1.426
3.297	0.315	10.47	1.02	2.30	1.409
3.315	0.333	9.95	1.00	2.32	1.389
3.333	0.353	9.43	0.97	2.33	1.378
3.353	0.373	8.98	0.95	2.35	1.358
3.373	0.397	8.50	0.93	2.37	1.338
3.397	0.420	8.09	0.91	2.38	1.321
3.420	0.445	7.69	0.89	2.41	1.299
3.445	0.470	7.33	0.87	2.43	1.277
3.470	0.497	6.99	0.84	2.45	1.255
3.497	0.525	6.66	0.82	2.48	1.227
3.525	0.555	6.35	0.80	2.50	1.201
3.555	0.587	6.06	0.78	2.53	1.175
3.587	0.622	5.77	0.76	2.55	1.150
3.622	0.658	5.50	0.74	2.58	1.123
3.658	0.697	5.25	0.72	2.61	1.095
3.697	0.738	5.01	0.70	2.64	1.064
3.738	0.782	4.78	0.68	2.67	1.036
3.782	0.828	4.57	0.66	2.70	1.003
3.828	0.877	4.37	0.64	2.73	0.972
3.877	0.928	4.18	0.62	2.77	0.937
3.928	0.983	3.99	0.60	2.80	0.907
3.983	1.042	3.82	0.58	2.83	0.870
4.042	1.103	3.66	0.56	2.87	0.833
4.103	1.168	3.51	0.55	2.91	0.796
4.168	1.238	3.37	0.53	2.94	0.760
4.238	1.312	3.23	0.51	2.98	0.725
4.312	1.390	3.10	0.49	3.01	0.691
4.390	1.473	2.98	0.47	3.05	0.654
4.473	1.562	2.86	0.46	3.09	0.615
4.562	1.655	2.76	0.44	3.13	0.571
4.655	1.753	2.65	0.42	3.18	0.521
4.753	1.858	2.56	0.41	3.24	0.465

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
4.858	1.968	2.47	0.39	3.29	0.410
4.968	2.085	2.38	0.38	3.35	0.351
5.085	2.210	2.30	0.36	3.41	0.296
5.210	2.342	2.22	0.35	3.45	0.251
5.342	2.482	2.15	0.33	3.49	0.213
5.482	2.630	2.08	0.32	3.52	0.182
5.630	2.787	2.02	0.31	3.55	0.151
5.787	2.953	1.96	0.29	3.58	0.122
5.953	3.130	1.90	0.28	3.60	0.100
6.130	3.317	1.85	0.27	3.62	0.081
6.317	3.515	1.80	0.25	3.64	0.066
6.515	3.725	1.75	0.24	3.65	0.057
6.725	3.947	1.70	0.23	3.66	0.049
6.947	4.182	1.66	0.22	3.66	0.044
7.182	4.430	1.62	0.21	3.66	0.040
7.430	4.693	1.58	0.20	3.67	0.039
7.693	4.973	1.55	0.19	3.67	0.035
7.973	5.270	1.51	0.18	3.67	0.034
8.270	5.583	1.48	0.17	3.67	0.033

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Jacob's Method (Recovery)

MW-3 HC Test #1

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.30 feet
Transmissivity =	1,319 gpd/ft
$t_o =$	0.0000 min
$t_o =$	1.8E-09 days
Storage Coefficient =	1.0E-04

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	3.40 feet
Transmissivity =	117 gpd/ft
$t_o =$	0.9574 min
$t_o =$	6.6E-04 days
Storage Coefficient =	3.3E+00

Saturated Thickness "b":	5 ft
Average Transmissivity "T":	718 gpd/ft

$$K = T/b \quad 144 \text{ gpd/ft}^2$$

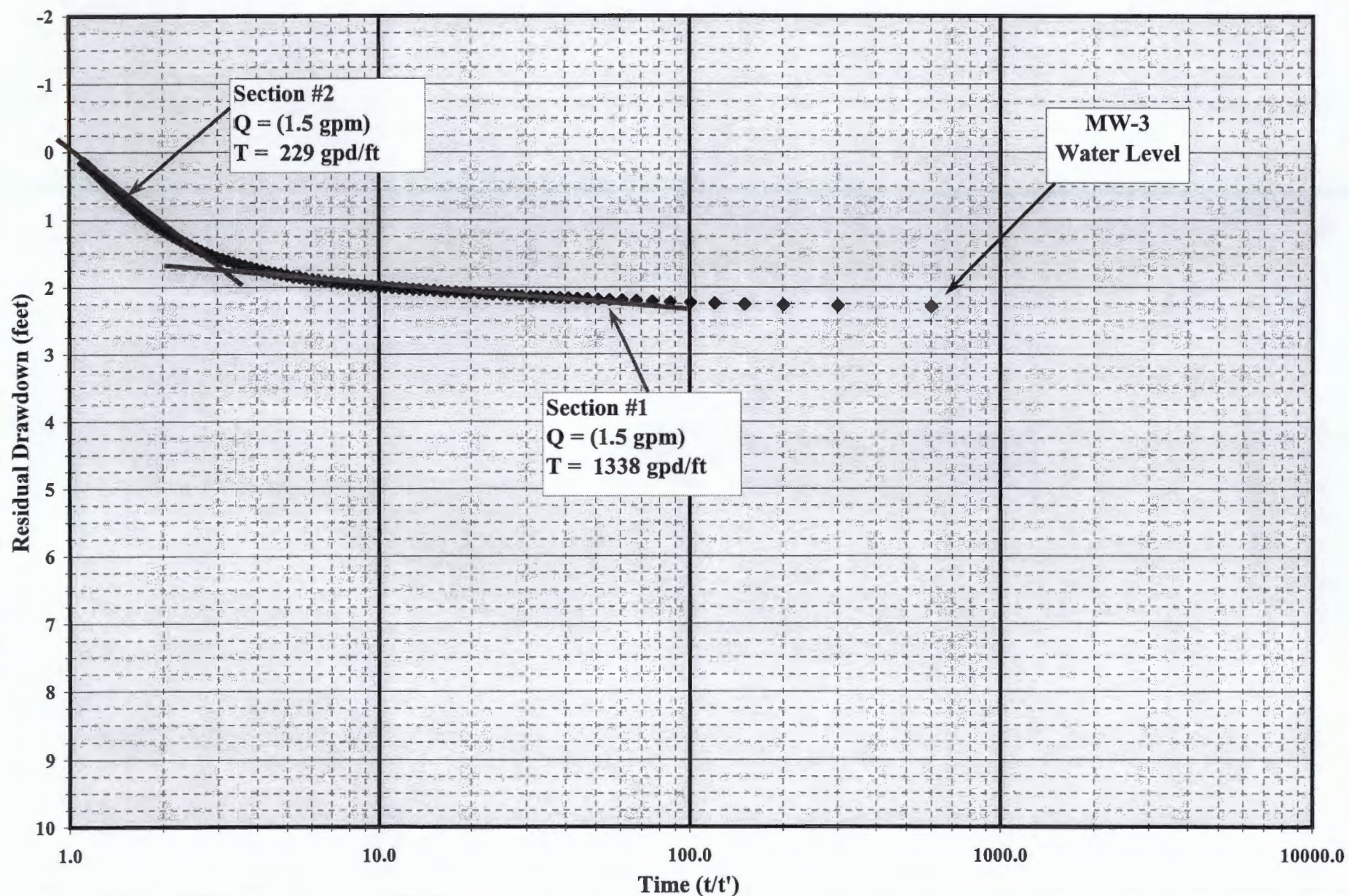
$$K / 7.48 \text{ gal/ft}^3 = 19.2 \text{ ft/day}$$

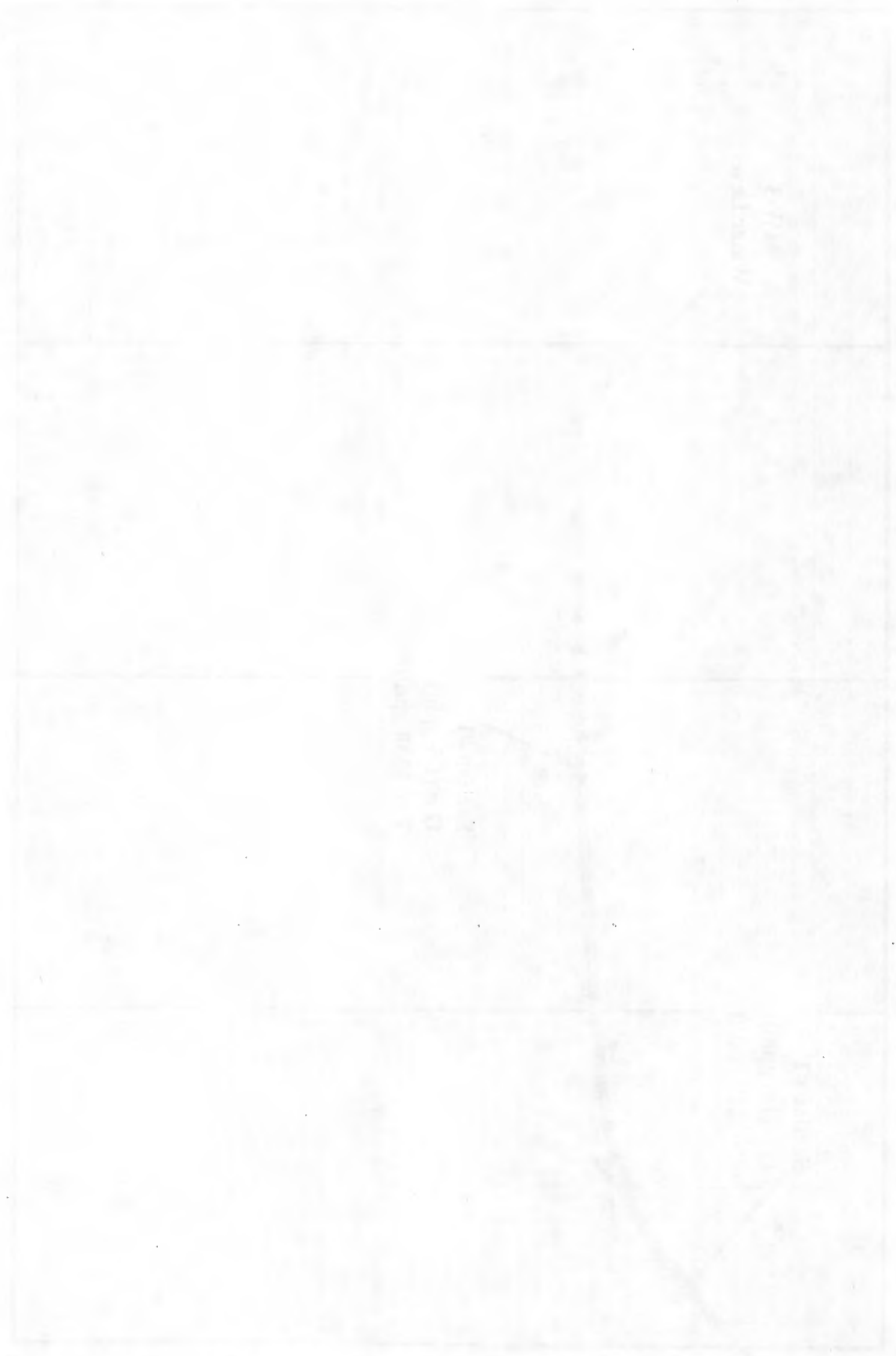
$$\text{conversion} \quad 2.22104\text{E-}04 \text{ ft/sec}$$

$$\text{conversion} \quad 6.77416\text{E-}05 \text{ m/sec}$$

Jacobs Recovery Analysis: MW-3 Test No. 1

June 2, 2005





2000 543002

2000 543002



Jacob's Analysis (Recovery)

Well ID: MW 3 HC Test 1

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.947 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 8:41 AM
 Time Recovery Ended: 6/2/05 8:58 AM
 Test Length: 17 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
3.005	0.005	601.00	2.78	1.66	2.289
3.010	0.010	301.00	2.48	1.67	2.276
3.010	0.015	200.67	2.30	1.68	2.266
3.015	0.020	150.75	2.18	1.69	2.255
3.020	0.025	120.80	2.08	1.70	2.243
3.025	0.030	100.83	2.00	1.71	2.233
3.030	0.035	86.57	1.94	1.72	2.223
3.035	0.040	75.88	1.88	1.73	2.214
3.040	0.045	67.56	1.83	1.74	2.203
3.045	0.050	60.90	1.78	1.75	2.195
3.050	0.055	55.45	1.74	1.76	2.190
3.055	0.060	50.92	1.71	1.76	2.183
3.060	0.065	47.08	1.67	1.77	2.177
3.065	0.070	43.79	1.64	1.78	2.171
3.070	0.075	40.93	1.61	1.78	2.164
3.075	0.080	38.44	1.58	1.79	2.158
3.080	0.085	36.24	1.56	1.79	2.153
3.085	0.090	34.28	1.54	1.80	2.147
3.090	0.095	32.53	1.51	1.81	2.142
3.095	0.100	30.95	1.49	1.81	2.137
3.100	0.107	29.06	1.46	1.82	2.131
3.107	0.112	27.82	1.44	1.83	2.122
3.112	0.118	26.30	1.42	1.83	2.119
3.118	0.125	24.95	1.40	1.83	2.113
3.125	0.133	23.44	1.37	1.84	2.106
3.133	0.140	22.38	1.35	1.85	2.099
3.140	0.148	21.17	1.33	1.86	2.089
3.148	0.158	19.88	1.30	1.86	2.084
3.158	0.167	18.95	1.28	1.87	2.080
3.167	0.177	17.92	1.25	1.87	2.073
3.177	0.188	16.87	1.23	1.88	2.067

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
3.188	0.198	16.08	1.21	1.89	2.060
3.198	0.210	15.23	1.18	1.90	2.050
3.210	0.223	14.37	1.16	1.91	2.042
3.223	0.237	13.62	1.13	1.91	2.035
3.237	0.250	12.95	1.11	1.92	2.031
3.250	0.265	12.26	1.09	1.92	2.024
3.265	0.280	11.66	1.07	1.93	2.016
3.280	0.297	11.06	1.04	1.94	2.008
3.297	0.315	10.47	1.02	1.95	2.001
3.315	0.333	9.95	1.00	1.95	1.993
3.333	0.353	9.43	0.97	1.96	1.983
3.353	0.373	8.98	0.95	1.97	1.973
3.373	0.397	8.50	0.93	1.98	1.965
3.397	0.420	8.09	0.91	1.99	1.958
3.420	0.445	7.69	0.89	2.00	1.948
3.445	0.470	7.33	0.87	2.01	1.938
3.470	0.497	6.99	0.84	2.02	1.924
3.497	0.525	6.66	0.82	2.03	1.913
3.525	0.555	6.35	0.80	2.05	1.901
3.555	0.587	6.06	0.78	2.06	1.890
3.587	0.622	5.77	0.76	2.07	1.877
3.622	0.658	5.50	0.74	2.09	1.854
3.658	0.697	5.25	0.72	2.10	1.847
3.697	0.738	5.01	0.70	2.12	1.826
3.738	0.782	4.78	0.68	2.14	1.809
3.782	0.828	4.57	0.66	2.15	1.794
3.828	0.877	4.37	0.64	2.17	1.775
3.877	0.928	4.18	0.62	2.19	1.755
3.928	0.983	3.99	0.60	2.21	1.735
3.983	1.042	3.82	0.58	2.24	1.710
4.042	1.103	3.66	0.56	2.26	1.686
4.103	1.168	3.51	0.55	2.28	1.665
4.168	1.238	3.37	0.53	2.31	1.637
4.238	1.312	3.23	0.51	2.34	1.611
4.312	1.390	3.10	0.49	2.37	1.582
4.390	1.473	2.98	0.47	2.39	1.556
4.473	1.562	2.86	0.46	2.42	1.525
4.562	1.655	2.76	0.44	2.45	1.493
4.655	1.753	2.65	0.42	2.49	1.460
4.753	1.858	2.56	0.41	2.52	1.424

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
4.858	1.968	2.47	0.39	2.56	1.388
4.968	2.085	2.38	0.38	2.60	1.350
5.085	2.210	2.30	0.36	2.63	1.313
5.210	2.342	2.22	0.35	2.67	1.274
5.342	2.482	2.15	0.33	2.71	1.238
5.482	2.630	2.08	0.32	2.75	1.200
5.630	2.787	2.02	0.31	2.79	1.162
5.787	2.953	1.96	0.29	2.82	1.125
5.953	3.130	1.90	0.28	2.86	1.090
6.130	3.317	1.85	0.27	2.90	1.052
6.317	3.515	1.80	0.25	2.94	1.012
6.515	3.725	1.75	0.24	2.97	0.974
6.725	3.947	1.70	0.23	3.01	0.934
6.947	4.182	1.66	0.22	3.05	0.893
7.182	4.430	1.62	0.21	3.10	0.849
7.430	4.693	1.58	0.20	3.14	0.807
7.693	4.973	1.55	0.19	3.18	0.767
7.973	5.270	1.51	0.18	3.22	0.727
8.270	5.583	1.48	0.17	3.26	0.691
8.583	5.915	1.45	0.16	3.29	0.653
8.915	6.267	1.42	0.15	3.33	0.616
9.267	6.640	1.40	0.14	3.37	0.580
9.640	7.035	1.37	0.14	3.40	0.545
10.035	7.453	1.35	0.13	3.44	0.510
10.453	7.897	1.32	0.12	3.47	0.478
10.897	8.367	1.30	0.11	3.50	0.447
11.367	8.865	1.28	0.11	3.53	0.415
11.865	9.392	1.26	0.10	3.56	0.386
12.392	9.950	1.25	0.10	3.59	0.361
12.950	10.542	1.23	0.09	3.62	0.330
13.542	11.168	1.21	0.08	3.64	0.306
14.168	11.832	1.20	0.08	3.67	0.278
14.832	12.535	1.18	0.07	3.69	0.257
15.535	13.280	1.17	0.07	3.72	0.232
16.280	14.070	1.16	0.06	3.73	0.215
17.070	14.907	1.15	0.06	3.75	0.196
17.907	15.792	1.13	0.05	3.77	0.181
18.792	16.730	1.12	0.05	3.78	0.167
19.730	17.723	1.11	0.05	3.79	0.159

DATE	DESCRIPTION	AMOUNT	BALANCE
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Jacob's Method (Recovery)

MW-3 HC Test #2

Linear Section #1

$$T = \frac{264Q}{\Delta s}$$

$$S = \frac{0.3Tt_o}{r^2}$$

$\Delta s =$	0.57 feet
Transmissivity =	695 gpd/ft
$t_o =$	0.0068 min
$t_o =$	4.7E-06 days
Storage Coefficient =	1.4E-01

Linear Section #2

$$T = \frac{264Q}{\Delta s}$$

$$S = \frac{0.3Tt_o}{r^2}$$

$\Delta s =$	2.92 feet
Transmissivity =	136 gpd/ft
$t_o =$	1.0568 min
$t_o =$	7.3E-04 days
Storage Coefficient =	4.3E+00

Saturated Thickness "b": 5 ft
Average Transmissivity "T": 415 gpd/ft

$K = T/b$ 83 gpd/ft²

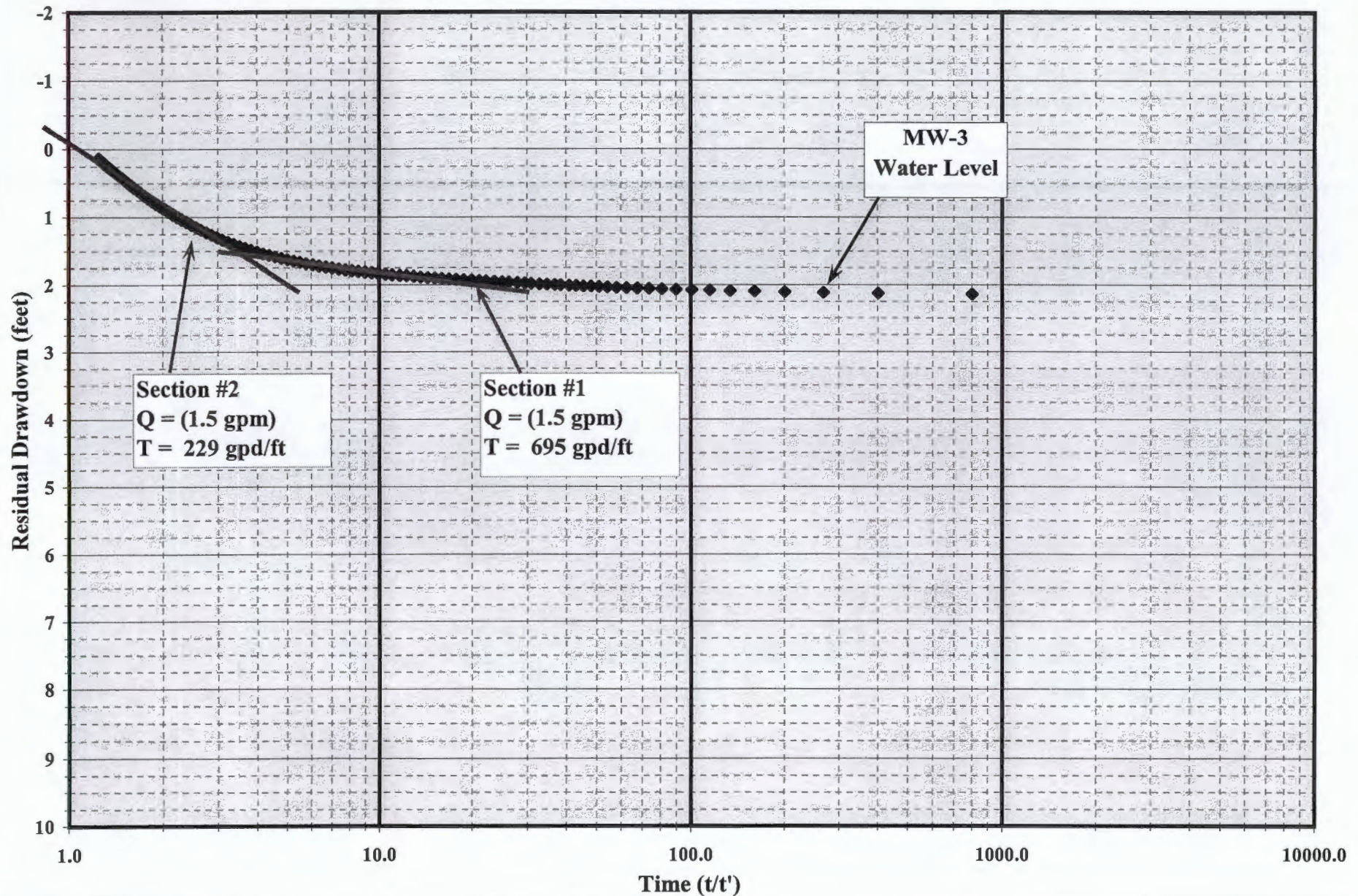
$K / 7.48 \text{ gal/ft}^3 =$ 11.1 ft/day

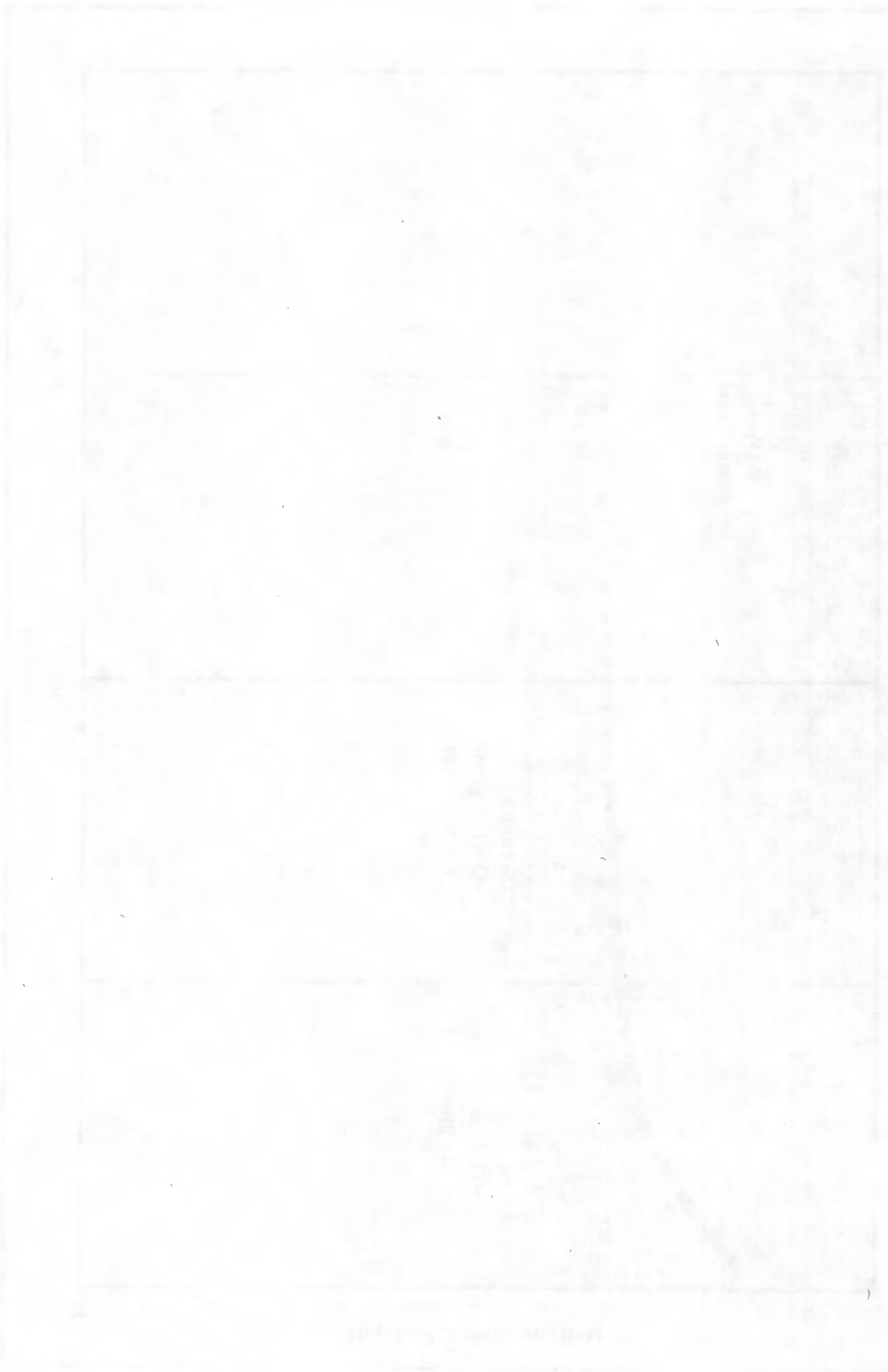
conversion 1.28477E-04 ft/sec

conversion 3.91853E-05 m/sec

Jacobs Recovery Analysis: MW-3 Test No. 2

June 2, 2005





THE
STATE OF
NEW YORK



Jacob's Analysis (Recovery)

Well ID: MW 3 HC Test 2

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.802 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 9:02 AM
 Time Recovery Ended: 6/2/05 9:15 AM
 Test Length: 13 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
4.005	0.005	801.00	2.90	1.66	2.140
4.010	0.010	401.00	2.60	1.67	2.128
4.010	0.015	267.33	2.43	1.69	2.117
4.015	0.020	200.75	2.30	1.70	2.105
4.020	0.025	160.80	2.21	1.71	2.096
4.025	0.030	134.17	2.13	1.71	2.089
4.030	0.035	115.14	2.06	1.72	2.080
4.035	0.040	100.88	2.00	1.73	2.074
4.040	0.045	89.78	1.95	1.74	2.067
4.045	0.050	80.90	1.91	1.74	2.060
4.050	0.055	73.64	1.87	1.75	2.054
4.055	0.060	67.58	1.83	1.75	2.050
4.060	0.065	62.46	1.80	1.76	2.045
4.065	0.070	58.07	1.76	1.76	2.039
4.070	0.075	54.27	1.73	1.77	2.034
4.075	0.080	50.94	1.71	1.78	2.025
4.080	0.085	48.00	1.68	1.78	2.020
4.085	0.090	45.39	1.66	1.78	2.019
4.090	0.095	43.05	1.63	1.79	2.013
4.095	0.100	40.95	1.61	1.79	2.009
4.100	0.107	38.44	1.58	1.80	2.003
4.107	0.112	36.78	1.57	1.80	1.998
4.112	0.118	34.75	1.54	1.81	1.992
4.118	0.125	32.95	1.52	1.82	1.987
4.125	0.133	30.94	1.49	1.82	1.980
4.133	0.140	29.52	1.47	1.83	1.974
4.140	0.148	27.91	1.45	1.83	1.968
4.148	0.158	26.20	1.42	1.84	1.962
4.158	0.167	24.95	1.40	1.84	1.958
4.167	0.177	23.58	1.37	1.85	1.951
4.177	0.188	22.18	1.35	1.86	1.945

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
4.188	0.198	21.12	1.32	1.86	1.939
4.198	0.210	19.99	1.30	1.87	1.931
4.210	0.223	18.85	1.28	1.88	1.925
4.223	0.237	17.85	1.25	1.88	1.919
4.237	0.250	16.95	1.23	1.89	1.911
4.250	0.265	16.04	1.21	1.90	1.905
4.265	0.280	15.23	1.18	1.90	1.898
4.280	0.297	14.43	1.16	1.91	1.891
4.297	0.315	13.64	1.13	1.92	1.885
4.315	0.333	12.95	1.11	1.93	1.876
4.333	0.353	12.26	1.09	1.94	1.863
4.353	0.373	11.66	1.07	1.94	1.860
4.373	0.397	11.03	1.04	1.95	1.853
4.397	0.420	10.47	1.02	1.96	1.843
4.420	0.445	9.93	1.00	1.97	1.834
4.445	0.470	9.46	0.98	1.98	1.824
4.470	0.497	9.00	0.95	1.99	1.813
4.497	0.525	8.57	0.93	2.00	1.803
4.525	0.555	8.15	0.91	2.01	1.792
4.555	0.587	7.76	0.89	2.02	1.780
4.587	0.622	7.38	0.87	2.04	1.767
4.622	0.658	7.02	0.85	2.05	1.751
4.658	0.697	6.69	0.83	2.07	1.736
4.697	0.738	6.36	0.80	2.08	1.721
4.738	0.782	6.06	0.78	2.10	1.703
4.782	0.828	5.77	0.76	2.11	1.688
4.828	0.877	5.51	0.74	2.13	1.668
4.877	0.928	5.25	0.72	2.15	1.650
4.928	0.983	5.01	0.70	2.17	1.628
4.983	1.042	4.78	0.68	2.19	1.608
5.042	1.103	4.57	0.66	2.22	1.587
5.103	1.168	4.37	0.64	2.24	1.565
5.168	1.238	4.17	0.62	2.26	1.541
5.238	1.312	3.99	0.60	2.29	1.516
5.312	1.390	3.82	0.58	2.31	1.490
5.390	1.473	3.66	0.56	2.34	1.461
5.473	1.562	3.50	0.54	2.37	1.431
5.562	1.655	3.36	0.53	2.40	1.401
5.655	1.753	3.23	0.51	2.43	1.370
5.753	1.858	3.10	0.49	2.47	1.335

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
5.858	1.968	2.98	0.47	2.50	1.300
5.968	2.085	2.86	0.46	2.54	1.264
6.085	2.210	2.75	0.44	2.58	1.224
6.210	2.342	2.65	0.42	2.62	1.187
6.342	2.482	2.56	0.41	2.65	1.149
6.482	2.630	2.46	0.39	2.69	1.111
6.630	2.787	2.38	0.38	2.73	1.073
6.787	2.953	2.30	0.36	2.77	1.036
6.953	3.130	2.22	0.35	2.80	0.999
7.130	3.317	2.15	0.33	2.84	0.961
7.317	3.515	2.08	0.32	2.88	0.922
7.515	3.725	2.02	0.30	2.92	0.883
7.725	3.947	1.96	0.29	2.96	0.843
7.947	4.182	1.90	0.28	3.00	0.805
8.182	4.430	1.85	0.27	3.04	0.765
8.430	4.693	1.80	0.25	3.08	0.724
8.693	4.973	1.75	0.24	3.12	0.682
8.973	5.270	1.70	0.23	3.16	0.641
9.270	5.583	1.66	0.22	3.20	0.599
9.583	5.915	1.62	0.21	3.24	0.564
9.915	6.267	1.58	0.20	3.27	0.528
10.267	6.640	1.55	0.19	3.31	0.490
10.640	7.035	1.51	0.18	3.35	0.455
11.035	7.453	1.48	0.17	3.39	0.415
11.453	7.897	1.45	0.16	3.42	0.387
11.897	8.367	1.42	0.15	3.45	0.354
12.367	8.865	1.39	0.14	3.48	0.324
12.865	9.392	1.37	0.14	3.51	0.296
13.392	9.950	1.35	0.13	3.54	0.267
13.950	10.542	1.32	0.12	3.56	0.239
14.542	11.168	1.30	0.11	3.59	0.212
15.168	11.832	1.28	0.11	3.62	0.185
15.832	12.535	1.26	0.10	3.64	0.161
16.535	13.280	1.25	0.10	3.66	0.141

Jacob's Method (Recovery) **MW-3 HC Test #3**

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.40 feet
Transmissivity =	988 gpd/ft
$t_o =$	0.0003 min
$t_o =$	2.1E-07 days
Storage Coefficient =	9.2E-03

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	2.96 feet
Transmissivity =	134 gpd/ft
$t_o =$	1.0484 min
$t_o =$	7.3E-04 days
Storage Coefficient =	4.2E+00

Saturated Thickness "b":	5 ft
Average Transmissivity "T":	561 gpd/ft

$K = T/b$	112 gpd/ft ²
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$K / 7.48 \text{ gal/ft}^3 =$	15.0 ft/day
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conversion	1.73579E-04 ft/sec
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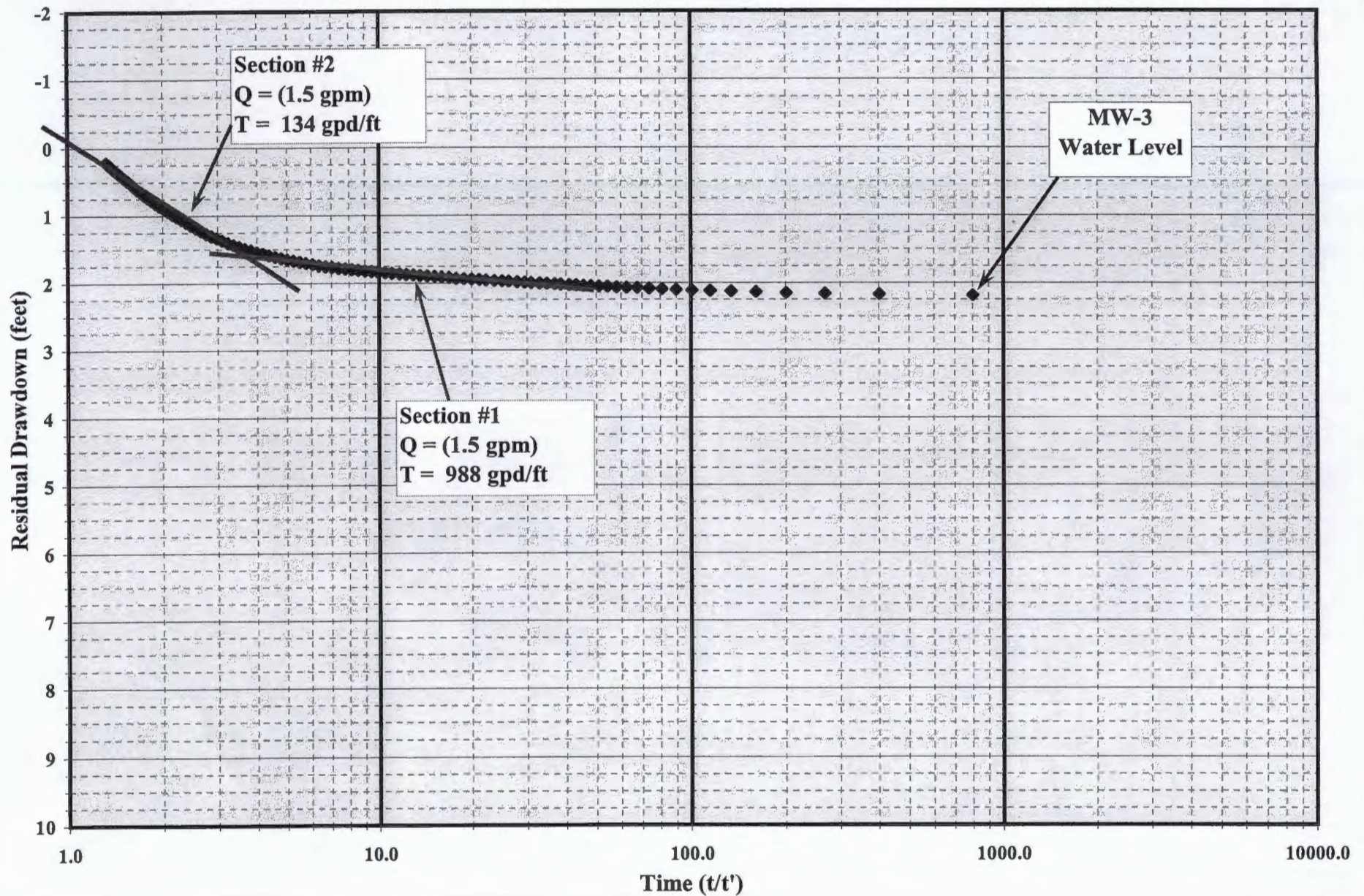
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1976-1977
1978-1979

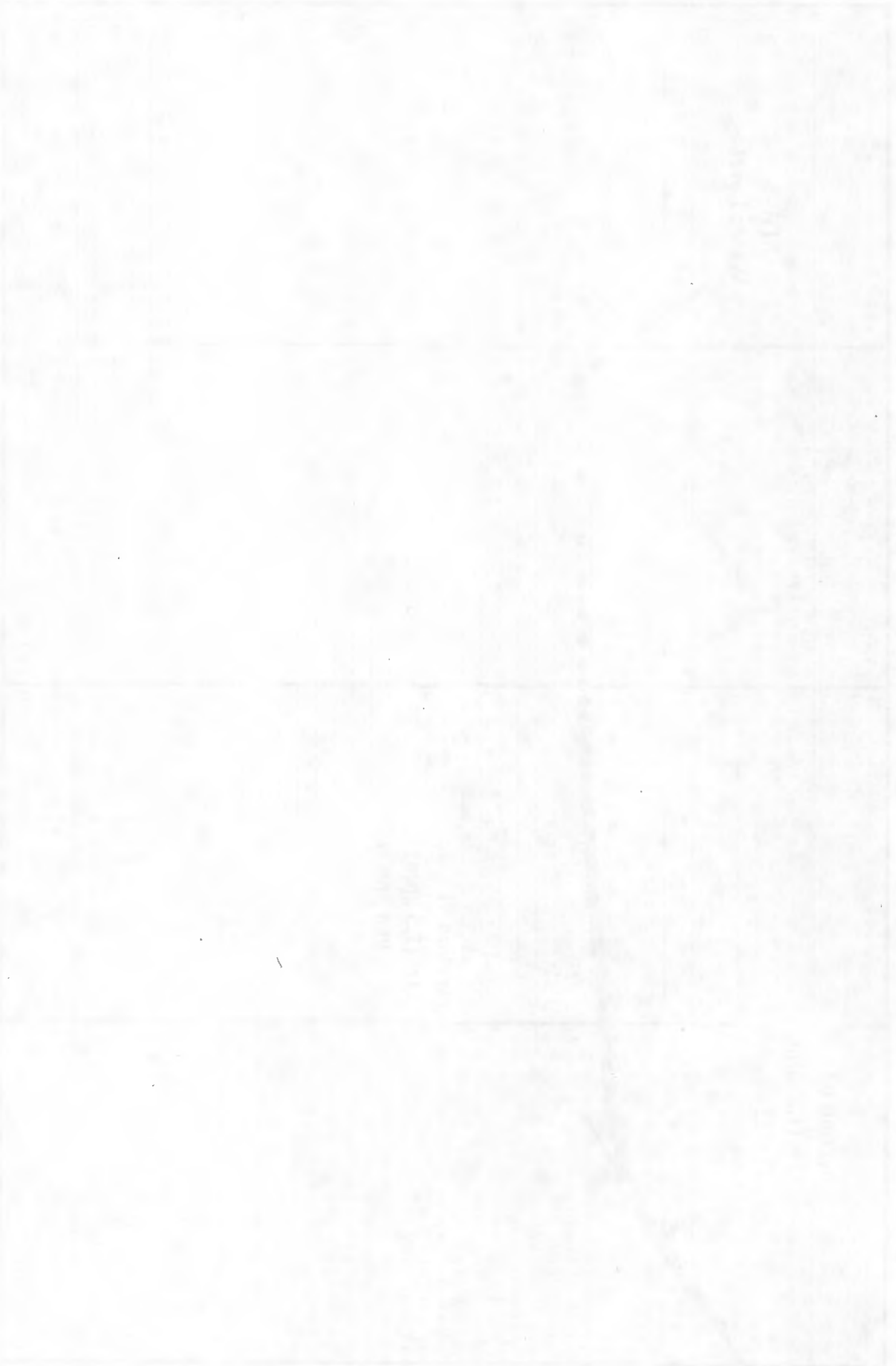
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Jacobs Recovery Analysis: MW-3 Test No. 3

June 2, 2005



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Jacob's Analysis (Recovery)

Well ID: MW 3 HC Test 3

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 3.709 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 9:19 AM
 Time Recovery Ended: 6/2/05 9:29 AM
 Test Length: 10 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
4.005	0.005	801.00	2.90	1.52	2.186
4.010	0.010	401.00	2.60	1.54	2.171
4.010	0.015	267.33	2.43	1.55	2.158
4.015	0.020	200.75	2.30	1.56	2.147
4.020	0.025	160.80	2.21	1.57	2.136
4.025	0.030	134.17	2.13	1.58	2.126
4.030	0.035	115.14	2.06	1.59	2.118
4.035	0.040	100.88	2.00	1.60	2.109
4.040	0.045	89.78	1.95	1.61	2.101
4.045	0.050	80.90	1.91	1.62	2.093
4.050	0.055	73.64	1.87	1.63	2.084
4.055	0.060	67.58	1.83	1.64	2.074
4.060	0.065	62.46	1.80	1.64	2.068
4.065	0.070	58.07	1.76	1.65	2.064
4.070	0.075	54.27	1.73	1.65	2.057
4.075	0.080	50.94	1.71	1.66	2.051
4.080	0.085	48.00	1.68	1.66	2.046
4.085	0.090	45.39	1.66	1.67	2.041
4.090	0.095	43.05	1.63	1.68	2.032
4.095	0.100	40.95	1.61	1.68	2.027
4.100	0.107	38.44	1.58	1.69	2.020
4.107	0.112	36.78	1.57	1.69	2.015
4.112	0.118	34.75	1.54	1.70	2.008
4.118	0.125	32.95	1.52	1.71	2.002
4.125	0.133	30.94	1.49	1.71	1.997
4.133	0.140	29.52	1.47	1.72	1.989
4.140	0.148	27.91	1.45	1.73	1.984
4.148	0.158	26.20	1.42	1.74	1.974
4.158	0.167	24.95	1.40	1.74	1.970
4.167	0.177	23.58	1.37	1.74	1.965
4.177	0.188	22.18	1.35	1.75	1.956

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
4.188	0.198	21.12	1.32	1.76	1.949
4.198	0.210	19.99	1.30	1.77	1.941
4.210	0.223	18.85	1.28	1.77	1.936
4.223	0.237	17.85	1.25	1.78	1.930
4.237	0.250	16.95	1.23	1.79	1.918
4.250	0.265	16.04	1.21	1.80	1.911
4.265	0.280	15.23	1.18	1.81	1.903
4.280	0.297	14.43	1.16	1.81	1.896
4.297	0.315	13.64	1.13	1.82	1.888
4.315	0.333	12.95	1.11	1.83	1.879
4.333	0.353	12.26	1.09	1.84	1.872
4.353	0.373	11.66	1.07	1.85	1.864
4.373	0.397	11.03	1.04	1.85	1.855
4.397	0.420	10.47	1.02	1.86	1.847
4.420	0.445	9.93	1.00	1.87	1.838
4.445	0.470	9.46	0.98	1.88	1.827
4.470	0.497	9.00	0.95	1.89	1.819
4.497	0.525	8.57	0.93	1.90	1.809
4.525	0.555	8.15	0.91	1.91	1.799
4.555	0.587	7.76	0.89	1.92	1.790
4.587	0.622	7.38	0.87	1.93	1.778
4.622	0.658	7.02	0.85	1.94	1.766
4.658	0.697	6.69	0.83	1.96	1.754
4.697	0.738	6.36	0.80	1.97	1.739
4.738	0.782	6.06	0.78	1.99	1.724
4.782	0.828	5.77	0.76	2.00	1.707
4.828	0.877	5.51	0.74	2.02	1.688
4.877	0.928	5.25	0.72	2.04	1.671
4.928	0.983	5.01	0.70	2.05	1.655
4.983	1.042	4.78	0.68	2.08	1.632
5.042	1.103	4.57	0.66	2.10	1.613
5.103	1.168	4.37	0.64	2.12	1.588
5.168	1.238	4.17	0.62	2.15	1.564
5.238	1.312	3.99	0.60	2.17	1.543
5.312	1.390	3.82	0.58	2.19	1.515
5.390	1.473	3.66	0.56	2.22	1.491
5.473	1.562	3.50	0.54	2.25	1.462
5.562	1.655	3.36	0.53	2.28	1.432
5.655	1.753	3.23	0.51	2.31	1.401
5.753	1.858	3.10	0.49	2.34	1.367

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
5.858	1.968	2.98	0.47	2.38	1.333
5.968	2.085	2.86	0.46	2.41	1.302
6.085	2.210	2.75	0.44	2.44	1.266
6.210	2.342	2.65	0.42	2.48	1.226
6.342	2.482	2.56	0.41	2.52	1.185
6.482	2.630	2.46	0.39	2.57	1.143
6.630	2.787	2.38	0.38	2.61	1.101
6.787	2.953	2.30	0.36	2.65	1.059
6.953	3.130	2.22	0.35	2.69	1.020
7.130	3.317	2.15	0.33	2.73	0.983
7.317	3.515	2.08	0.32	2.77	0.939
7.515	3.725	2.02	0.30	2.81	0.899
7.725	3.947	1.96	0.29	2.85	0.862
7.947	4.182	1.90	0.28	2.89	0.818
8.182	4.430	1.85	0.27	2.93	0.777
8.430	4.693	1.80	0.25	2.97	0.739
8.693	4.973	1.75	0.24	3.01	0.698
8.973	5.270	1.70	0.23	3.05	0.656
9.270	5.583	1.66	0.22	3.10	0.614
9.583	5.915	1.62	0.21	3.14	0.569
9.915	6.267	1.58	0.20	3.18	0.527
10.267	6.640	1.55	0.19	3.22	0.487
10.640	7.035	1.51	0.18	3.26	0.452
11.035	7.453	1.48	0.17	3.30	0.414
11.453	7.897	1.45	0.16	3.33	0.377
11.897	8.367	1.42	0.15	3.36	0.345
12.367	8.865	1.39	0.14	3.40	0.312
12.865	9.392	1.37	0.14	3.43	0.279
13.392	9.950	1.35	0.13	3.46	0.248
13.950	10.542	1.32	0.12	3.49	0.217

Date		Description		Amount	
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Jacob's Method (Recovery)

MW-4 HC Test #1

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.56 feet
Transmissivity =	702 gpd/ft
$t_o =$	0.4582 min
$t_o =$	3.2E-04 days
Storage Coefficient =	9.6E+00

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	1.59 feet
Transmissivity =	249 gpd/ft
$t_o =$	8.3266 min
$t_o =$	5.8E-03 days
Storage Coefficient =	6.2E+01

Saturated Thickness "b": 7 ft
Average Transmissivity "T": 475 gpd/ft

$K = T/b$ 68 gpd/ft²

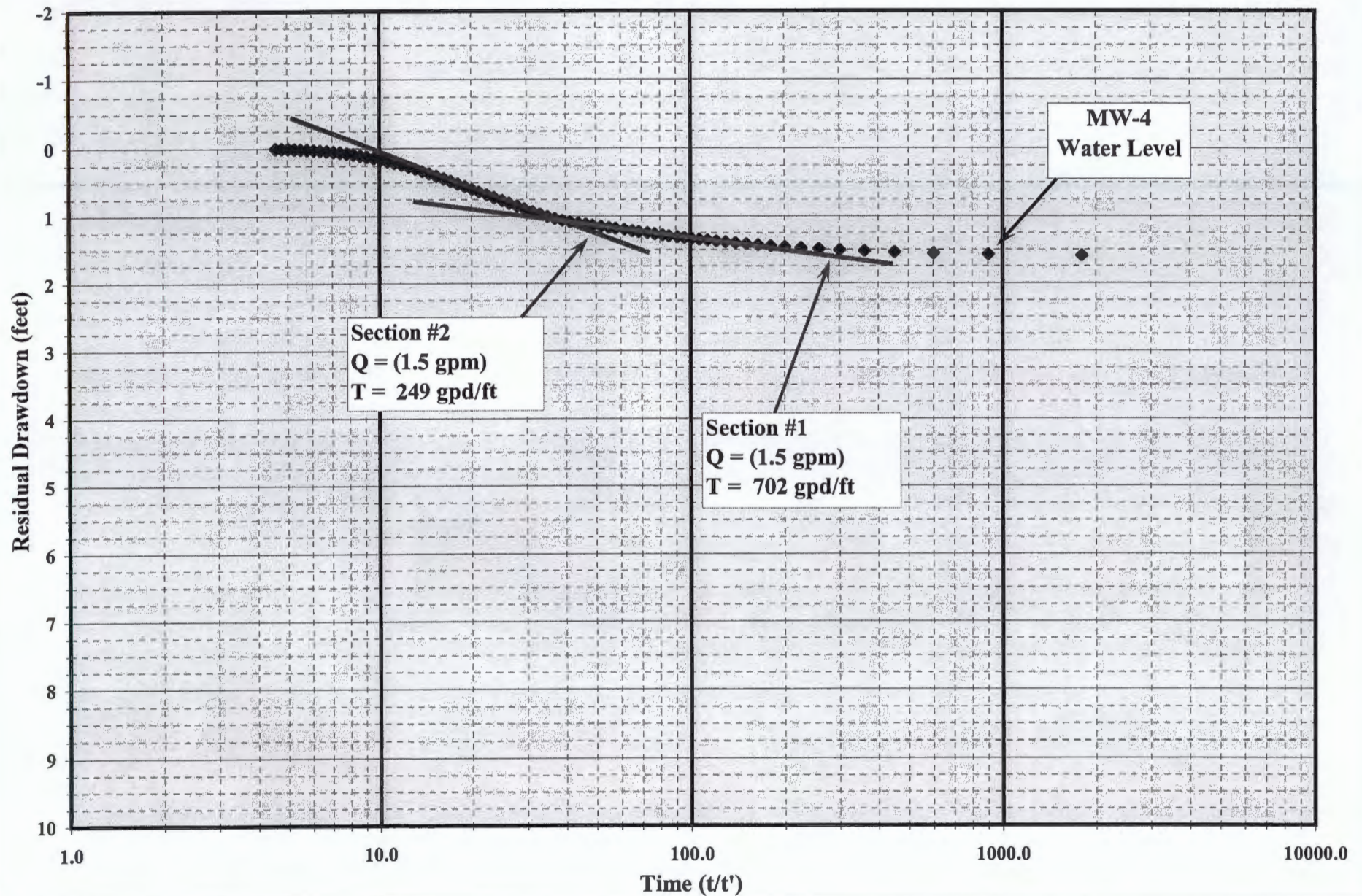
$K / 7.48 \text{ gal/ft}^3 =$ 9.1 ft/day

conversion 1.05052E-04 ft/sec

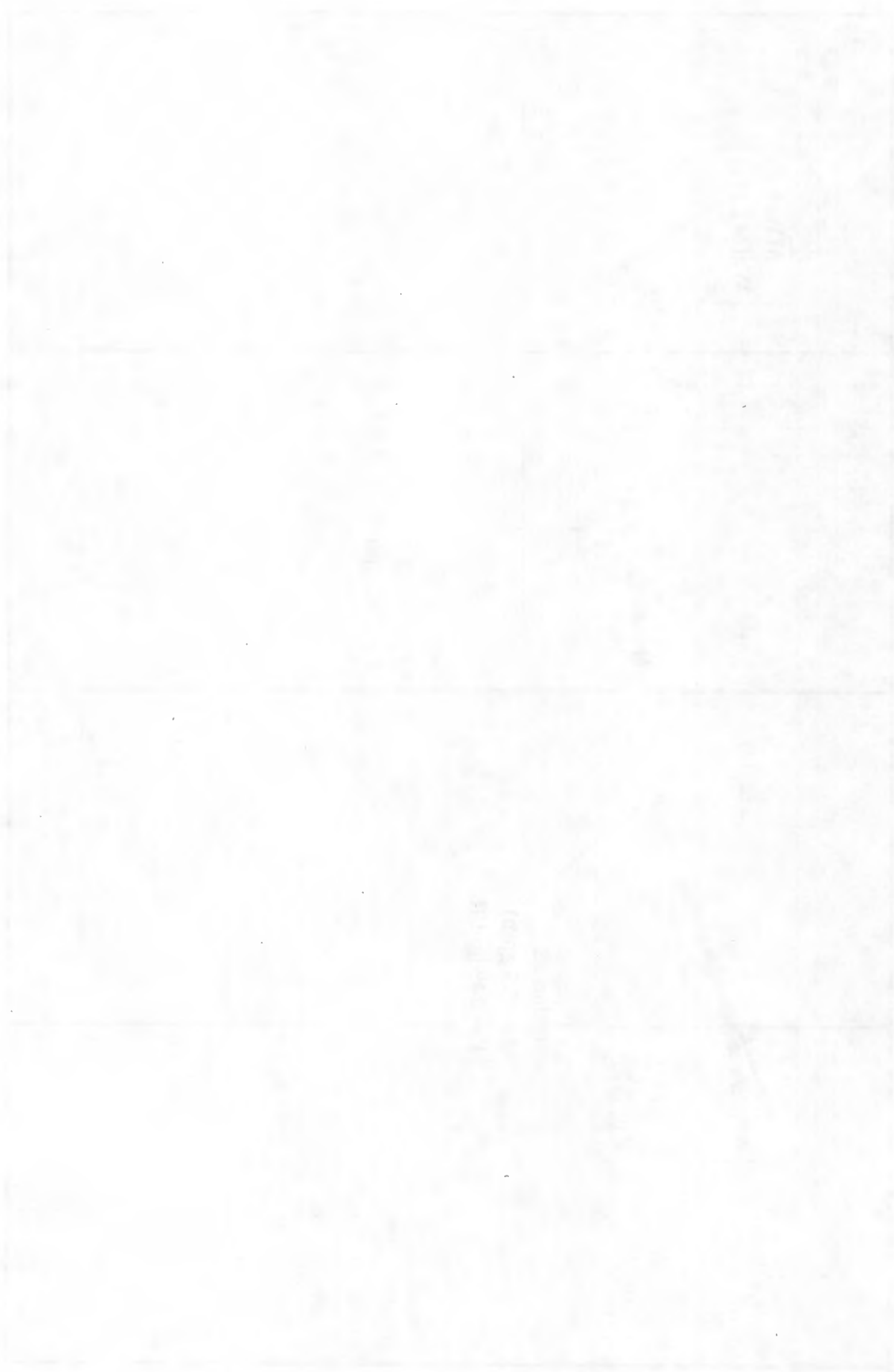
conversion 3.2041E-05 m/sec

Jacobs Recovery Analysis: MW-4 Test No. 1

June 2, 2005



10/1/40



10/1/40

10/1/40

10/1/40

Jacob's Analysis (Recovery)

Well ID: MW 4 HC Test 1

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.313 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 9:57 AM
 Time Recovery Ended: 6/2/05 10:00 AM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
9.005	0.005	1801.00	3.26	4.72	1.592
9.010	0.010	901.00	2.95	4.74	1.574
9.010	0.015	600.67	2.78	4.76	1.556
9.015	0.020	450.75	2.65	4.77	1.540
9.020	0.025	360.80	2.56	4.79	1.522
9.025	0.030	300.83	2.48	4.81	1.507
9.030	0.035	258.00	2.41	4.82	1.492
9.035	0.040	225.88	2.35	4.84	1.476
9.040	0.045	200.89	2.30	4.85	1.461
9.045	0.050	180.90	2.26	4.87	1.445
9.050	0.055	164.55	2.22	4.88	1.431
9.055	0.060	150.92	2.18	4.90	1.416
9.060	0.065	139.38	2.14	4.91	1.402
9.065	0.070	129.50	2.11	4.93	1.388
9.070	0.075	120.93	2.08	4.94	1.375
9.075	0.080	113.44	2.05	4.95	1.361
9.080	0.085	106.82	2.03	4.97	1.348
9.085	0.090	100.94	2.00	4.98	1.337
9.090	0.095	95.68	1.98	4.99	1.322
9.095	0.100	90.95	1.96	5.00	1.311
9.100	0.107	85.31	1.93	5.02	1.296
9.107	0.112	81.55	1.91	5.03	1.282
9.112	0.118	77.00	1.89	5.05	1.267
9.118	0.125	72.95	1.86	5.06	1.250
9.125	0.133	68.44	1.84	5.08	1.234
9.133	0.140	65.24	1.81	5.09	1.221
9.140	0.148	61.62	1.79	5.11	1.200
9.148	0.158	57.78	1.76	5.13	1.183
9.158	0.167	54.95	1.74	5.14	1.169
9.167	0.177	51.89	1.72	5.16	1.153
9.177	0.188	48.73	1.69	5.18	1.138

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.188	0.198	46.33	1.67	5.19	1.119
9.198	0.210	43.80	1.64	5.21	1.102
9.210	0.223	41.24	1.62	5.23	1.084
9.223	0.237	38.97	1.59	5.25	1.061
9.237	0.250	36.95	1.57	5.28	1.033
9.250	0.265	34.91	1.54	5.31	1.003
9.265	0.280	33.09	1.52	5.34	0.970
9.280	0.297	31.28	1.50	5.38	0.930
9.297	0.315	29.51	1.47	5.43	0.888
9.315	0.333	27.95	1.45	5.47	0.847
9.333	0.353	26.42	1.42	5.51	0.807
9.353	0.373	25.05	1.40	5.55	0.764
9.373	0.397	23.63	1.37	5.59	0.721
9.397	0.420	22.37	1.35	5.64	0.677
9.420	0.445	21.17	1.33	5.68	0.636
9.445	0.470	20.10	1.30	5.72	0.598
9.470	0.497	19.07	1.28	5.76	0.558
9.497	0.525	18.09	1.26	5.79	0.519
9.525	0.555	17.16	1.23	5.83	0.480
9.555	0.587	16.29	1.21	5.87	0.443
9.587	0.622	15.42	1.19	5.91	0.405
9.622	0.658	14.62	1.16	5.94	0.369
9.658	0.697	13.86	1.14	5.98	0.335
9.697	0.738	13.13	1.12	6.01	0.302
9.738	0.782	12.46	1.10	6.04	0.271
9.782	0.828	11.81	1.07	6.07	0.241
9.828	0.877	11.21	1.05	6.10	0.213
9.877	0.928	10.64	1.03	6.13	0.187
9.928	0.983	10.10	1.00	6.15	0.163
9.983	1.042	9.58	0.98	6.17	0.141
10.042	1.103	9.10	0.96	6.19	0.121
10.103	1.168	8.65	0.94	6.21	0.104
10.168	1.238	8.21	0.91	6.23	0.087
10.238	1.312	7.81	0.89	6.24	0.074
10.312	1.390	7.42	0.87	6.25	0.061
10.390	1.473	7.05	0.85	6.26	0.051
10.473	1.562	6.71	0.83	6.27	0.039
10.562	1.655	6.38	0.80	6.28	0.032
10.655	1.753	6.08	0.78	6.29	0.026
10.753	1.858	5.79	0.76	6.29	0.019

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
10.858	1.968	5.52	0.74	6.30	0.014
10.968	2.085	5.26	0.72	6.30	0.010
11.085	2.210	5.02	0.70	6.31	0.006
11.210	2.342	4.79	0.68	6.31	0.003
11.342	2.482	4.57	0.66	6.31	0.003

Date		Description		Amount	
1911	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	
1912	Jan 1	Balance		100.00	
	Feb 1	Interest		5.00	
	Mar 1	Interest		5.00	
	Apr 1	Interest		5.00	
	May 1	Interest		5.00	
	Jun 1	Interest		5.00	
	Jul 1	Interest		5.00	
	Aug 1	Interest		5.00	
	Sep 1	Interest		5.00	
	Oct 1	Interest		5.00	
	Nov 1	Interest		5.00	
	Dec 1	Interest		5.00	

Jacob's Method (Recovery)

MW-4 HC Test #2

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.49 feet
Transmissivity =	807 gpd/ft
$t_o =$	0.3033 min
$t_o =$	2.1E-04 days
Storage Coefficient =	7.3E+00

Linear Section #2

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	1.29 feet
Transmissivity =	308 gpd/ft
$t_o =$	7.4166 min
$t_o =$	5.2E-03 days
Storage Coefficient =	6.9E+01

Saturated Thickness "b": 7 ft
Average Transmissivity "T": 558 gpd/ft

$K = T/b$ 80 gpd/ft²

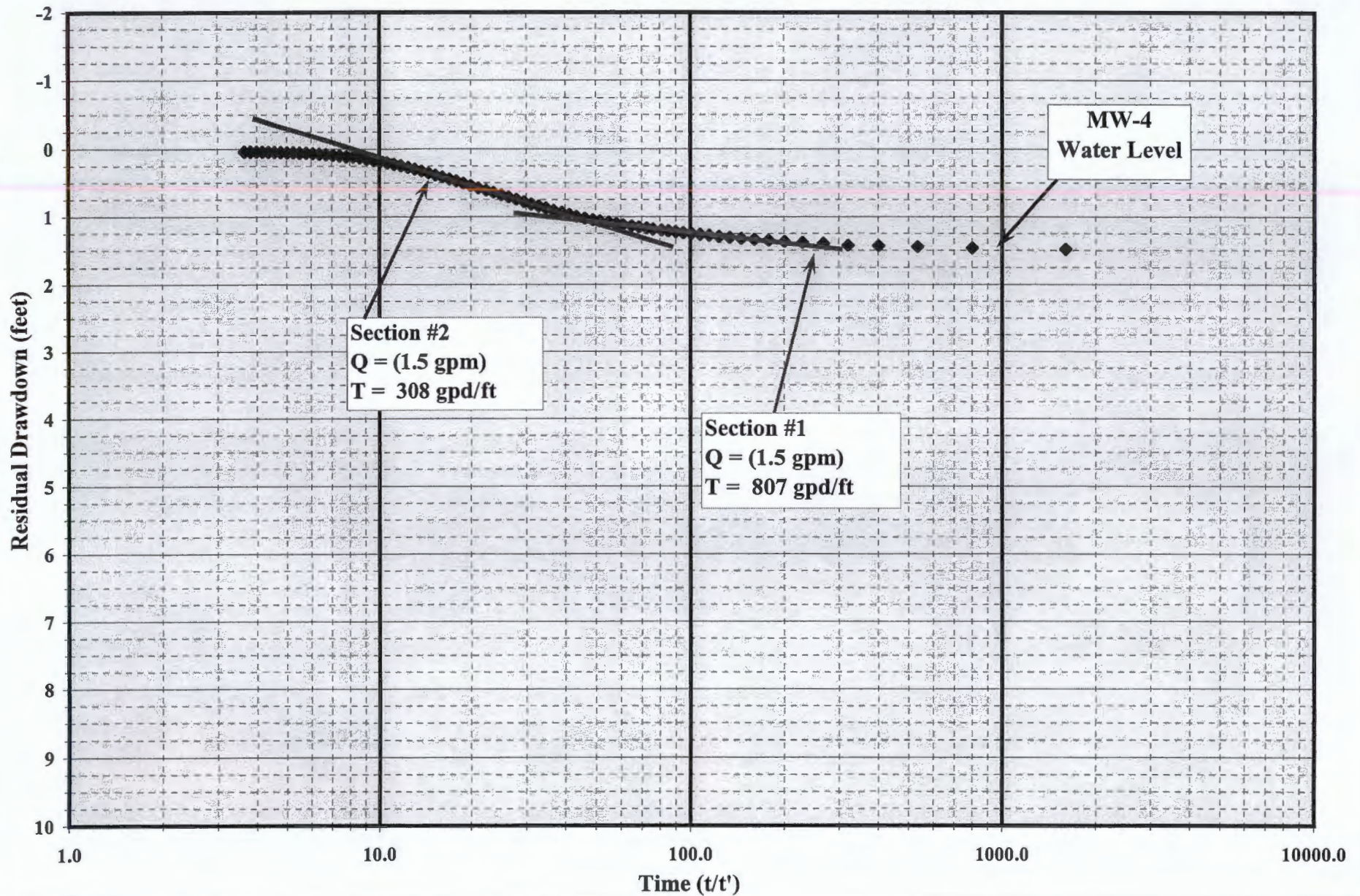
$K / 7.48 \text{ gal/ft}^3 =$ 10.7 ft/day

conversion 1.23276E-04 ft/sec

conversion 3.75991E-05 m/sec

Jacobs Recovery Analysis: MW-4 Test No. 2

June 2, 2005



100-1000

1000



1000

1000

Jacob's Analysis (Recovery)

Well ID: MW 4 HC Test 2

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.351 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 9:57 AM
 Time Recovery Ended: 6/2/05 10:00 AM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.005	0.005	1601.00	3.20	4.87	1.480
8.010	0.010	801.00	2.90	4.89	1.461
8.010	0.015	534.00	2.73	4.91	1.444
8.015	0.020	400.75	2.60	4.92	1.428
8.020	0.025	320.80	2.51	4.93	1.422
8.025	0.030	267.50	2.43	4.96	1.391
8.030	0.035	229.43	2.36	4.97	1.380
8.035	0.040	200.88	2.30	4.99	1.366
8.040	0.045	178.67	2.25	5.00	1.350
8.045	0.050	160.90	2.21	5.02	1.336
8.050	0.055	146.36	2.17	5.03	1.322
8.055	0.060	134.25	2.13	5.04	1.307
8.060	0.065	124.00	2.09	5.06	1.293
8.065	0.070	115.21	2.06	5.07	1.278
8.070	0.075	107.60	2.03	5.09	1.265
8.075	0.080	100.94	2.00	5.10	1.251
8.080	0.085	95.06	1.98	5.11	1.238
8.085	0.090	89.83	1.95	5.13	1.226
8.090	0.095	85.16	1.93	5.14	1.212
8.095	0.100	80.95	1.91	5.15	1.200
8.100	0.107	75.94	1.88	5.17	1.186
8.107	0.112	72.60	1.86	5.18	1.171
8.112	0.118	68.55	1.84	5.20	1.156
8.118	0.125	64.95	1.81	5.21	1.140
8.125	0.133	60.94	1.78	5.23	1.123
8.133	0.140	58.10	1.76	5.25	1.105
8.140	0.148	54.88	1.74	5.27	1.085
8.148	0.158	51.46	1.71	5.29	1.066
8.158	0.167	48.95	1.69	5.30	1.048
8.167	0.177	46.23	1.66	5.33	1.026
8.177	0.188	43.42	1.64	5.35	0.999

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
8.188	0.198	41.29	1.62	5.38	0.969
8.198	0.210	39.04	1.59	5.41	0.940
8.210	0.223	36.76	1.57	5.44	0.910
8.223	0.237	34.75	1.54	5.47	0.878
8.237	0.250	32.95	1.52	5.50	0.847
8.250	0.265	31.13	1.49	5.54	0.816
8.265	0.280	29.52	1.47	5.57	0.782
8.280	0.297	27.91	1.45	5.61	0.746
8.297	0.315	26.34	1.42	5.64	0.712
8.315	0.333	24.95	1.40	5.67	0.678
8.333	0.353	23.58	1.37	5.71	0.643
8.353	0.373	22.38	1.35	5.74	0.609
8.373	0.397	21.11	1.32	5.78	0.575
8.397	0.420	19.99	1.30	5.81	0.541
8.420	0.445	18.92	1.28	5.84	0.507
8.445	0.470	17.97	1.25	5.88	0.473
8.470	0.497	17.05	1.23	5.91	0.444
8.497	0.525	16.18	1.21	5.94	0.414
8.525	0.555	15.36	1.19	5.97	0.384
8.555	0.587	14.58	1.16	6.00	0.355
8.587	0.622	13.81	1.14	6.03	0.325
8.622	0.658	13.10	1.12	6.05	0.298
8.658	0.697	12.43	1.09	6.08	0.273
8.697	0.738	11.78	1.07	6.10	0.248
8.738	0.782	11.18	1.05	6.13	0.226
8.782	0.828	10.60	1.03	6.15	0.204
8.828	0.877	10.07	1.00	6.17	0.186
8.877	0.928	9.56	0.98	6.18	0.167
8.928	0.983	9.08	0.96	6.20	0.151
8.983	1.042	8.62	0.94	6.22	0.131
9.042	1.103	8.19	0.91	6.23	0.121
9.103	1.168	7.79	0.89	6.24	0.111
9.168	1.238	7.40	0.87	6.25	0.099
9.238	1.312	7.04	0.85	6.26	0.091
9.312	1.390	6.70	0.83	6.27	0.082
9.390	1.473	6.37	0.80	6.28	0.076
9.473	1.562	6.07	0.78	6.28	0.069
9.562	1.655	5.78	0.76	6.29	0.062
9.655	1.753	5.51	0.74	6.29	0.059
9.753	1.858	5.25	0.72	6.30	0.055

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.858	1.968	5.01	0.70	6.30	0.052
9.968	2.085	4.78	0.68	6.30	0.049
10.085	2.210	4.56	0.66	6.30	0.048
10.210	2.342	4.36	0.64	6.31	0.045
10.342	2.482	4.17	0.62	6.31	0.044
10.482	2.630	3.99	0.60	6.31	0.043
10.630	2.787	3.81	0.58	6.31	0.043
10.787	2.953	3.65	0.56	6.31	0.042

Jacob's Method (Recovery)

MW-4 HC Test #3

Linear Section #1

$$T = \frac{264Q}{\Delta s}$$

$$S = \frac{0.3Tt_o}{r^2}$$

$\Delta s =$	0.50 feet
Transmissivity =	788 gpd/ft
$t_o =$	0.5197 min
$t_o =$	3.6E-04 days
Storage Coefficient =	1.2E+01

Linear Section #2

$$T = \frac{264Q}{\Delta s}$$

$$S = \frac{0.3Tt_o}{r^2}$$

$\Delta s =$	1.21 feet
Transmissivity =	327 gpd/ft
$t_o =$	8.0892 min
$t_o =$	5.6E-03 days
Storage Coefficient =	7.9E+01

Saturated Thickness "b":	7 ft
Average Transmissivity "T":	558 gpd/ft

$$K = T/b \quad 80 \text{ gpd/ft}^2$$

$$K / 7.48 \text{ gal/ft}^3 = 10.7 \text{ ft/day}$$

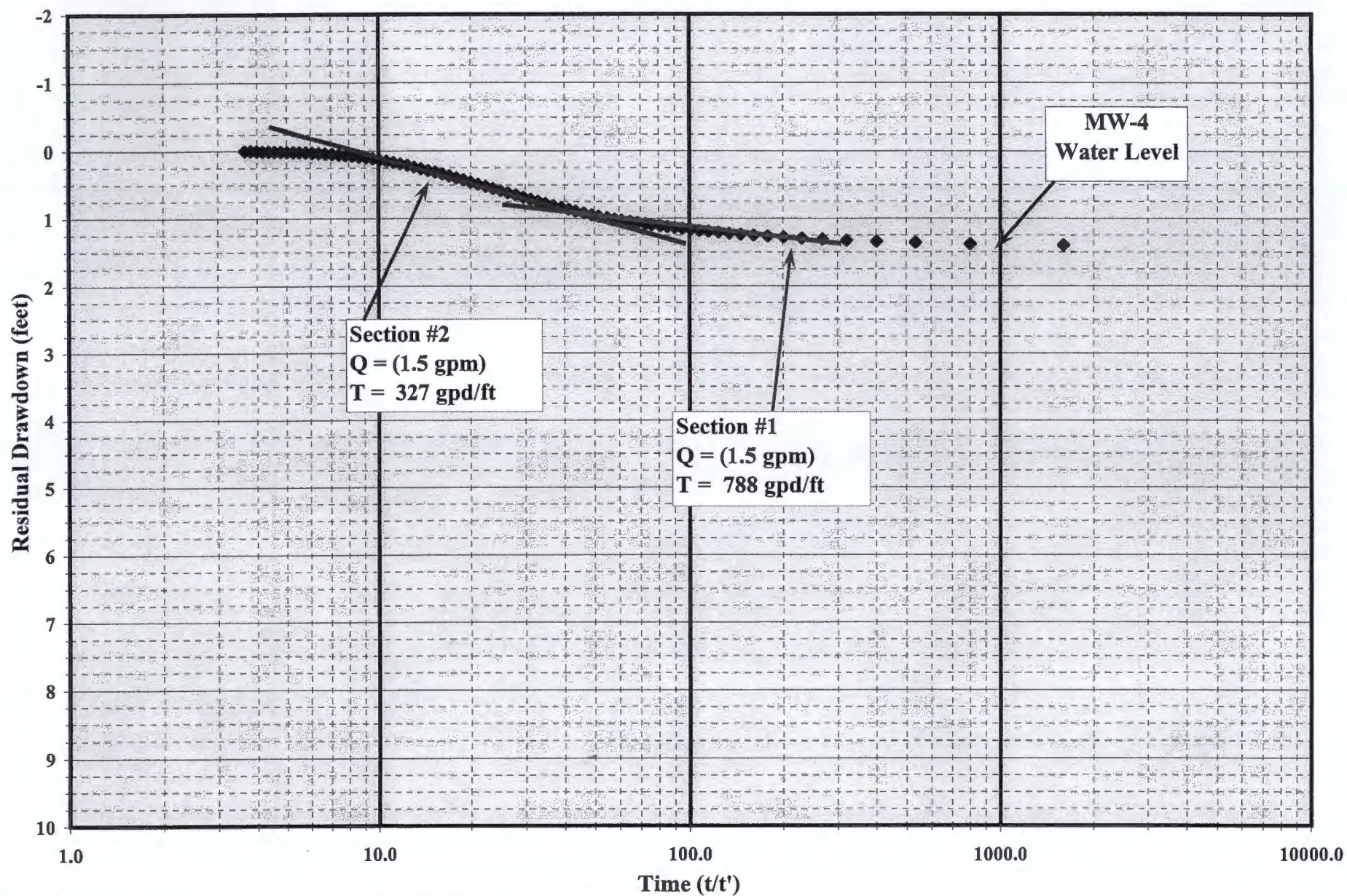
$$\text{conversion} \quad 1.23326\text{E-}04 \text{ ft/sec}$$

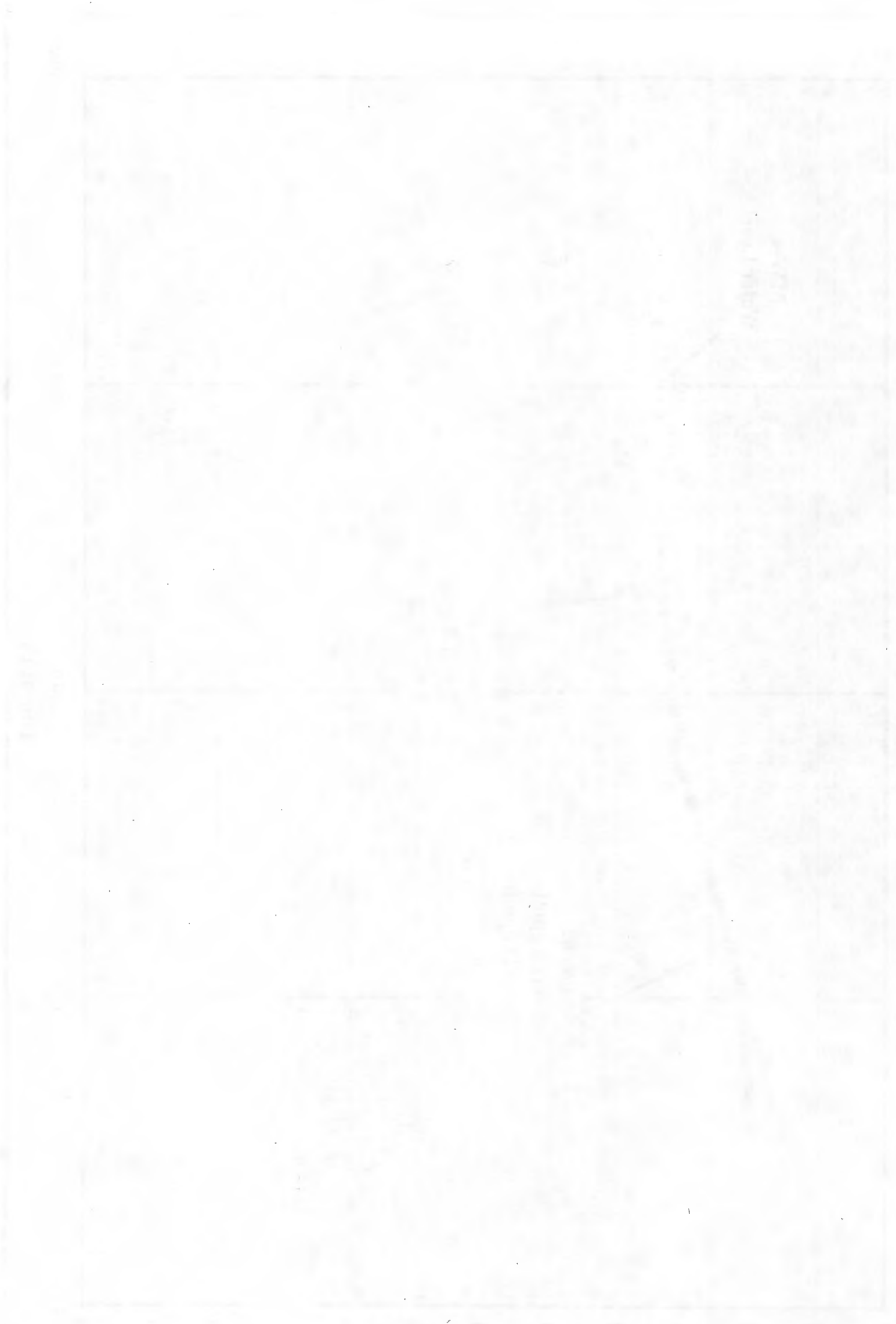
$$\text{conversion} \quad 3.76144\text{E-}05 \text{ m/sec}$$

TABLE I	
1	2
3	4
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7	8
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11	12
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99	100

Jacobs Recovery Analysis: MW-4 Test No. 3

June 2, 2005





10/12/2000

10/12/2000

Jacob's Analysis (Recovery)

Well ID: MW 4 HC Test 3

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.313 ft H₂O over probe
 b = 7 ft
 Time Pumping Ended: 6/2/05 10:19 AM
 Time Recovery Ended: 6/2/05 10:22 AM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.005	0.005	1601.00	3.20	4.92	1.396
8.010	0.010	801.00	2.90	4.94	1.376
8.010	0.015	534.00	2.73	4.96	1.356
8.015	0.020	400.75	2.60	4.98	1.338
8.020	0.025	320.80	2.51	4.99	1.327
8.025	0.030	267.50	2.43	5.00	1.310
8.030	0.035	229.43	2.36	5.02	1.295
8.035	0.040	200.88	2.30	5.03	1.279
8.040	0.045	178.67	2.25	5.05	1.265
8.045	0.050	160.90	2.21	5.06	1.251
8.050	0.055	146.36	2.17	5.08	1.236
8.055	0.060	134.25	2.13	5.09	1.221
8.060	0.065	124.00	2.09	5.11	1.206
8.065	0.070	115.21	2.06	5.12	1.192
8.070	0.075	107.60	2.03	5.13	1.180
8.075	0.080	100.94	2.00	5.15	1.164
8.080	0.085	95.06	1.98	5.16	1.151
8.085	0.090	89.83	1.95	5.17	1.140
8.090	0.095	85.16	1.93	5.19	1.125
8.095	0.100	80.95	1.91	5.20	1.113
8.100	0.107	75.94	1.88	5.21	1.099
8.107	0.112	72.60	1.86	5.23	1.083
8.112	0.118	68.55	1.84	5.25	1.066
8.118	0.125	64.95	1.81	5.26	1.049
8.125	0.133	60.94	1.78	5.28	1.032
8.133	0.140	58.10	1.76	5.30	1.013
8.140	0.148	54.88	1.74	5.32	0.993
8.148	0.158	51.46	1.71	5.34	0.971
8.158	0.167	48.95	1.69	5.36	0.949
8.167	0.177	46.23	1.66	5.39	0.921
8.177	0.188	43.42	1.64	5.42	0.895

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.188	0.198	41.29	1.62	5.45	0.865
8.198	0.210	39.04	1.59	5.48	0.837
8.210	0.223	36.76	1.57	5.50	0.811
8.223	0.237	34.75	1.54	5.53	0.780
8.237	0.250	32.95	1.52	5.57	0.748
8.250	0.265	31.13	1.49	5.59	0.719
8.265	0.280	29.52	1.47	5.63	0.686
8.280	0.297	27.91	1.45	5.66	0.653
8.297	0.315	26.34	1.42	5.69	0.620
8.315	0.333	24.95	1.40	5.72	0.589
8.333	0.353	23.58	1.37	5.76	0.556
8.353	0.373	22.38	1.35	5.79	0.524
8.373	0.397	21.11	1.32	5.82	0.491
8.397	0.420	19.99	1.30	5.85	0.460
8.420	0.445	18.92	1.28	5.89	0.428
8.445	0.470	17.97	1.25	5.91	0.399
8.470	0.497	17.05	1.23	5.94	0.369
8.497	0.525	16.18	1.21	5.97	0.342
8.525	0.555	15.36	1.19	6.00	0.312
8.555	0.587	14.58	1.16	6.03	0.287
8.587	0.622	13.81	1.14	6.05	0.260
8.622	0.658	13.10	1.12	6.08	0.236
8.658	0.697	12.43	1.09	6.10	0.210
8.697	0.738	11.78	1.07	6.12	0.190
8.738	0.782	11.18	1.05	6.14	0.169
8.782	0.828	10.60	1.03	6.17	0.147
8.828	0.877	10.07	1.00	6.18	0.131
8.877	0.928	9.56	0.98	6.20	0.114
8.928	0.983	9.08	0.96	6.21	0.100
8.983	1.042	8.62	0.94	6.23	0.087
9.042	1.103	8.19	0.91	6.24	0.074
9.103	1.168	7.79	0.89	6.25	0.063
9.168	1.238	7.40	0.87	6.26	0.056
9.238	1.312	7.04	0.85	6.27	0.046
9.312	1.390	6.70	0.83	6.27	0.039
9.390	1.473	6.37	0.80	6.28	0.033
9.473	1.562	6.07	0.78	6.29	0.028
9.562	1.655	5.78	0.76	6.29	0.023
9.655	1.753	5.51	0.74	6.29	0.019
9.753	1.858	5.25	0.72	6.30	0.016

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.858	1.968	5.01	0.70	6.30	0.015
9.968	2.085	4.78	0.68	6.30	0.011
10.085	2.210	4.56	0.66	6.30	0.011
10.210	2.342	4.36	0.64	6.31	0.008
10.342	2.482	4.17	0.62	6.31	0.007
10.482	2.630	3.99	0.60	6.31	0.006
10.630	2.787	3.81	0.58	6.31	0.003
10.787	2.953	3.65	0.56	6.31	0.003

Jacob's Method (Recovery) **MW-5 HC Test #1**

<u>Linear Section #1</u>	
$T = \frac{264 Q}{\Delta s}$	$\Delta s = 0.34 \text{ feet}$ Transmissivity = 1,164 gpd/ft $t_0 = 28.2155 \text{ min}$ $t_0 = 2.0E-02 \text{ days}$ Storage Coefficient = 9.9E+02
$S = \frac{0.3 T t_0}{r^2}$	

MW-5 Saturated Thickness "b": 5 ft
Transmissivity "T": 1164 gpd/ft

$K = T/b$ 233 gpd/ft²

$K / 7.48 \text{ gal/ft}^3 =$ 31.1 ft/day

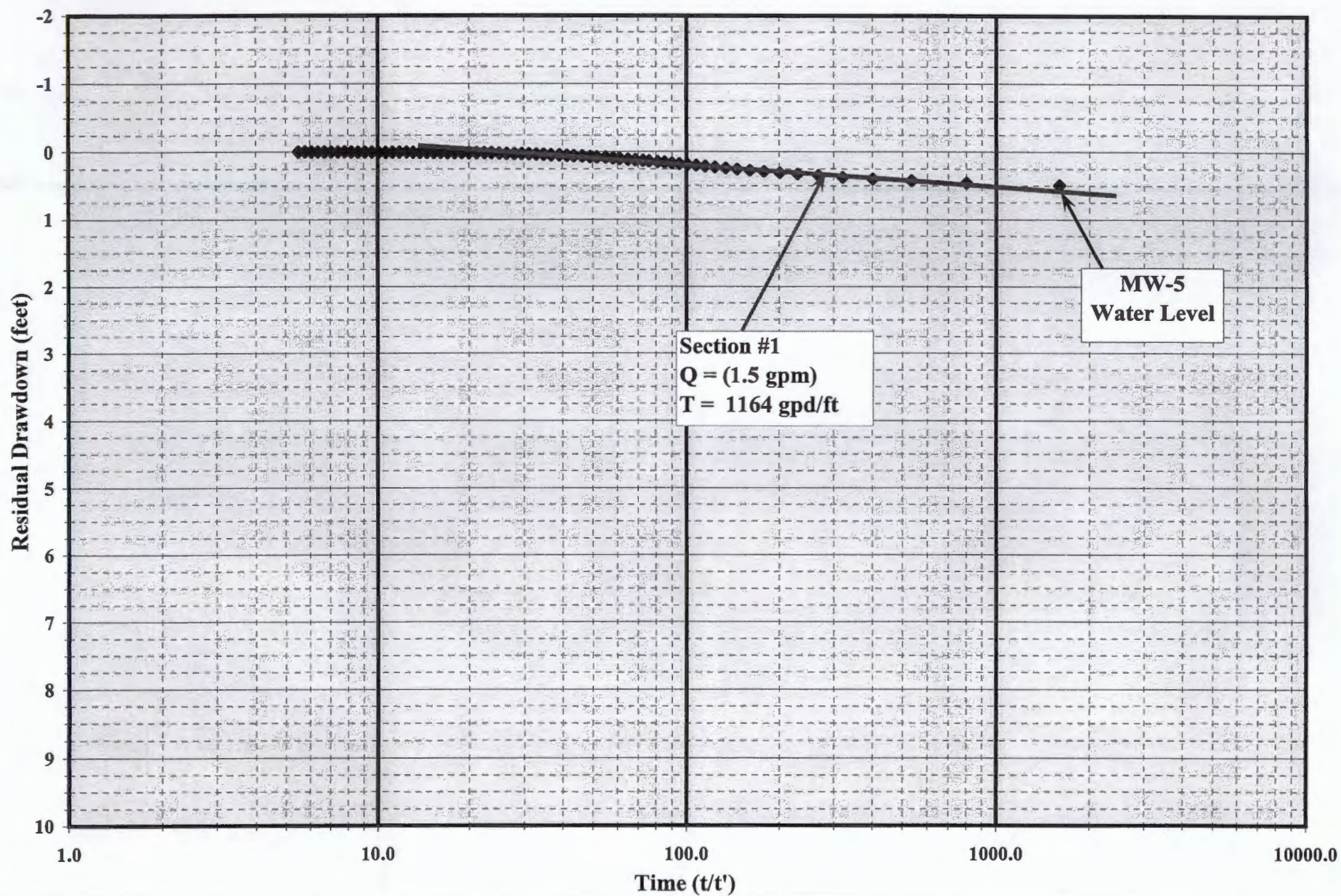
conversion 3.60320E-04 ft/sec

conversion 1.09898E-04 m/sec

TABLE 1	
1	2
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Jacobs Recovery Analysis: MW-5 Test No. 1

June 2, 2005





Jacob's Analysis (Recovery)

Well ID: MW 5 HC Test 1

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 4.660 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 10:40 AM
 Time Recovery Ended: 6/2/05 10:42 AM
 Test Length: 2 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.005	0.005	1601.00	3.20	4.17	0.494
8.010	0.010	801.00	2.90	4.20	0.459
8.010	0.015	534.00	2.73	4.23	0.428
8.015	0.020	400.75	2.60	4.26	0.399
8.020	0.025	320.80	2.51	4.29	0.374
8.025	0.030	267.50	2.43	4.31	0.349
8.030	0.035	229.43	2.36	4.33	0.328
8.035	0.040	200.88	2.30	4.35	0.308
8.040	0.045	178.67	2.25	4.37	0.289
8.045	0.050	160.90	2.21	4.39	0.272
8.050	0.055	146.36	2.17	4.41	0.255
8.055	0.060	134.25	2.13	4.42	0.237
8.060	0.065	124.00	2.09	4.44	0.224
8.065	0.070	115.21	2.06	4.45	0.210
8.070	0.075	107.60	2.03	4.46	0.197
8.075	0.080	100.94	2.00	4.48	0.185
8.080	0.085	95.06	1.98	4.49	0.173
8.085	0.090	89.83	1.95	4.50	0.163
8.090	0.095	85.16	1.93	4.51	0.153
8.095	0.100	80.95	1.91	4.51	0.147
8.100	0.107	75.94	1.88	4.52	0.136
8.107	0.112	72.60	1.86	4.53	0.129
8.112	0.118	68.55	1.84	4.54	0.118
8.118	0.125	64.95	1.81	4.55	0.111
8.125	0.133	60.94	1.78	4.56	0.101
8.133	0.140	58.10	1.76	4.57	0.090
8.140	0.148	54.88	1.74	4.58	0.081
8.148	0.158	51.46	1.71	4.58	0.077
8.158	0.167	48.95	1.69	4.59	0.073
8.167	0.177	46.23	1.66	4.60	0.064
8.177	0.188	43.42	1.64	4.60	0.059

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.188	0.198	41.29	1.62	4.61	0.055
8.198	0.210	39.04	1.59	4.61	0.048
8.210	0.223	36.76	1.57	4.61	0.046
8.223	0.237	34.75	1.54	4.62	0.041
8.237	0.250	32.95	1.52	4.62	0.038
8.250	0.265	31.13	1.49	4.63	0.034
8.265	0.280	29.52	1.47	4.63	0.029
8.280	0.297	27.91	1.45	4.63	0.029
8.297	0.315	26.34	1.42	4.64	0.025
8.315	0.333	24.95	1.40	4.64	0.022
8.333	0.353	23.58	1.37	4.64	0.016
8.353	0.373	22.38	1.35	4.64	0.016
8.373	0.397	21.11	1.32	4.64	0.016
8.397	0.420	19.99	1.30	4.64	0.017
8.420	0.445	18.92	1.28	4.64	0.016
8.445	0.470	17.97	1.25	4.65	0.015
8.470	0.497	17.05	1.23	4.65	0.014
8.497	0.525	16.18	1.21	4.65	0.012
8.525	0.555	15.36	1.19	4.65	0.012
8.555	0.587	14.58	1.16	4.65	0.012
8.587	0.622	13.81	1.14	4.65	0.011
8.622	0.658	13.10	1.12	4.65	0.007
8.658	0.697	12.43	1.09	4.65	0.006
8.697	0.738	11.78	1.07	4.65	0.006
8.738	0.782	11.18	1.05	4.65	0.006
8.782	0.828	10.60	1.03	4.65	0.007
8.828	0.877	10.07	1.00	4.65	0.007
8.877	0.928	9.56	0.98	4.66	0.003
8.928	0.983	9.08	0.96	4.66	0.003
8.983	1.042	8.62	0.94	4.66	0.005
9.042	1.103	8.19	0.91	4.66	0.003
9.103	1.168	7.79	0.89	4.66	-0.002
9.168	1.238	7.40	0.87	4.66	0.000
9.238	1.312	7.04	0.85	4.66	0.001
9.312	1.390	6.70	0.83	4.66	0.002
9.390	1.473	6.37	0.80	4.66	0.003
9.473	1.562	6.07	0.78	4.66	0.003
9.562	1.655	5.78	0.76	4.66	-0.002
9.655	1.753	5.51	0.74	4.66	0.001

Jacob's Method (Recovery)

MW-5 HC Test #2

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.20 feet
Transmissivity =	1,999 gpd/ft
$t_o =$	2.3911 min
$t_o =$	1.7E-03 days
Storage Coefficient =	1.4E+02

MW-5 Saturated Thickness "b": 5 ft
 Transmissivity "T": 1999 gpd/ft

$$K = T/b \quad 400 \text{ gpd/ft}^2$$

$$K / 7.48 \text{ gal/ft}^3 = 53.4 \text{ ft/day}$$

$$\text{conversion} \quad 6.18546\text{E-}04 \text{ ft/sec}$$

$$\text{conversion} \quad 1.88657\text{E-}04 \text{ m/sec}$$

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STATE OF NEW YORK

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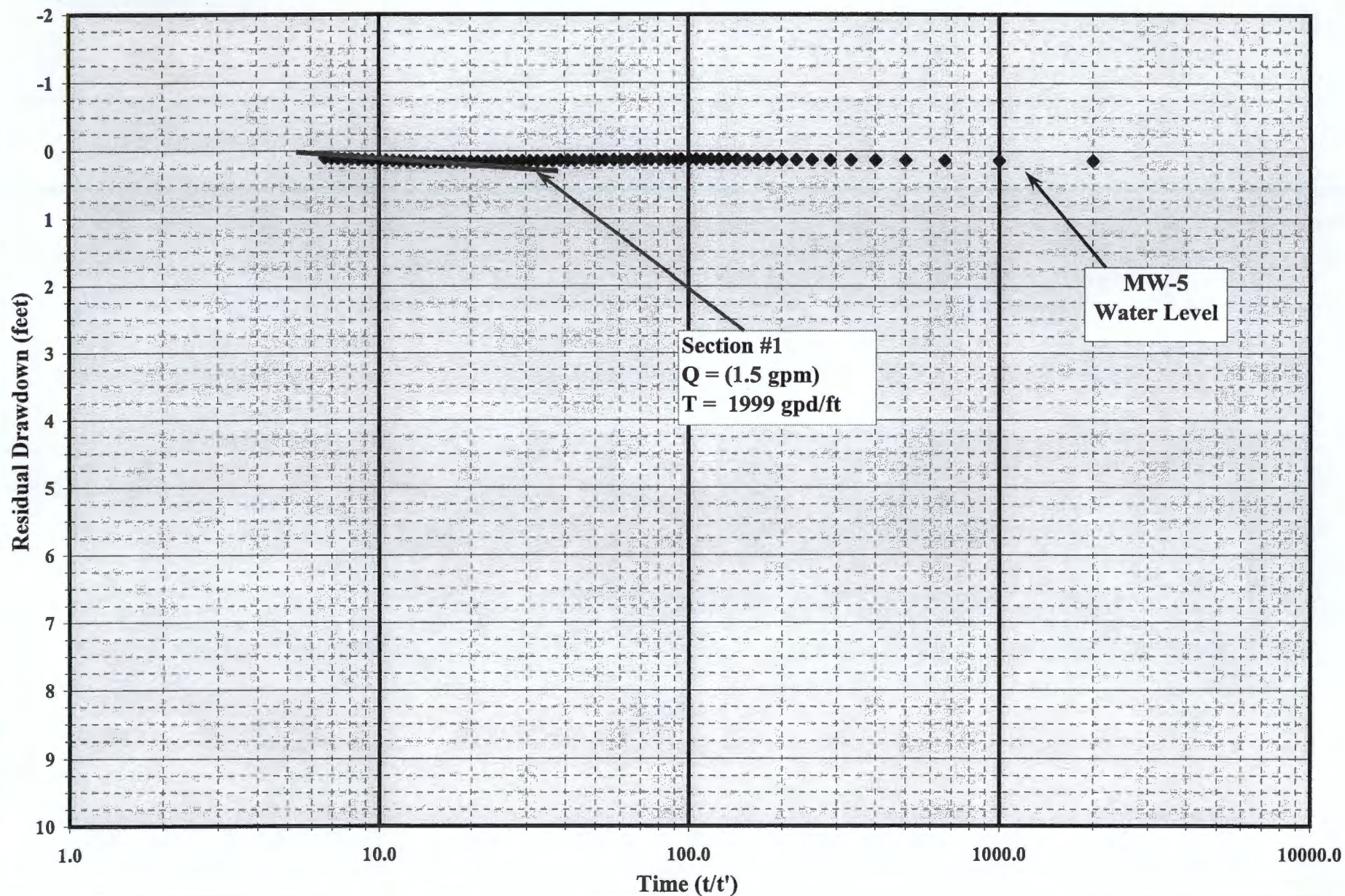
CHAPTER XV

CHAPTER XVI

CHAPTER XVII

Jacobs Recovery Analysis: MW-5 Test No. 2

June 2, 2005



Jacob's Analysis (Recovery)

Well ID: MW 5 HC Test 2

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 5.400 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 10:55 AM
 Time Recovery Ended: 6/2/05 11:03 AM
 Test Length: 8 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
10.005	0.005	2001.00	3.30	5.26	0.138
10.010	0.010	1001.00	3.00	5.26	0.137
10.010	0.015	667.33	2.82	5.27	0.132
10.015	0.020	500.75	2.70	5.27	0.133
10.020	0.025	400.80	2.60	5.27	0.130
10.025	0.030	334.17	2.52	5.27	0.131
10.030	0.035	286.57	2.46	5.27	0.128
10.035	0.040	250.88	2.40	5.27	0.127
10.040	0.045	223.11	2.35	5.28	0.125
10.045	0.050	200.90	2.30	5.27	0.126
10.050	0.055	182.73	2.26	5.28	0.125
10.055	0.060	167.58	2.22	5.28	0.125
10.060	0.065	154.77	2.19	5.28	0.125
10.065	0.070	143.79	2.16	5.28	0.124
10.070	0.075	134.27	2.13	5.28	0.123
10.075	0.080	125.94	2.10	5.28	0.124
10.080	0.085	118.59	2.07	5.28	0.123
10.085	0.090	112.06	2.05	5.28	0.123
10.090	0.095	106.21	2.03	5.28	0.121
10.095	0.100	100.95	2.00	5.28	0.121
10.100	0.107	94.69	1.98	5.28	0.121
10.107	0.112	90.51	1.96	5.28	0.122
10.112	0.118	85.45	1.93	5.28	0.125
10.118	0.125	80.95	1.91	5.28	0.125
10.125	0.133	75.94	1.88	5.28	0.124
10.133	0.140	72.38	1.86	5.27	0.126
10.140	0.148	68.36	1.83	5.28	0.125
10.148	0.158	64.09	1.81	5.27	0.126
10.158	0.167	60.95	1.78	5.27	0.129
10.167	0.177	57.55	1.76	5.27	0.130
10.177	0.188	54.04	1.73	5.27	0.131

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
10.188	0.198	51.37	1.71	5.27	0.132
10.198	0.210	48.56	1.69	5.27	0.133
10.210	0.223	45.72	1.66	5.27	0.135
10.223	0.237	43.20	1.64	5.26	0.137
10.237	0.250	40.95	1.61	5.26	0.137
10.250	0.265	38.68	1.59	5.26	0.137
10.265	0.280	36.66	1.56	5.26	0.142
10.280	0.297	34.65	1.54	5.26	0.144
10.297	0.315	32.69	1.51	5.25	0.146
10.315	0.333	30.95	1.49	5.25	0.148
10.333	0.353	29.25	1.47	5.25	0.146
10.353	0.373	27.73	1.44	5.25	0.149
10.373	0.397	26.15	1.42	5.25	0.147
10.397	0.420	24.75	1.39	5.25	0.152
10.420	0.445	23.42	1.37	5.25	0.154
10.445	0.470	22.22	1.35	5.24	0.156
10.470	0.497	21.08	1.32	5.24	0.156
10.497	0.525	19.99	1.30	5.24	0.157
10.525	0.555	18.96	1.28	5.24	0.156
10.555	0.587	17.99	1.26	5.24	0.157
10.587	0.622	17.03	1.23	5.25	0.155
10.622	0.658	16.13	1.21	5.24	0.157
10.658	0.697	15.30	1.18	5.25	0.155
10.697	0.738	14.49	1.16	5.25	0.154
10.738	0.782	13.74	1.14	5.25	0.153
10.782	0.828	13.02	1.11	5.25	0.147
10.828	0.877	12.35	1.09	5.25	0.147
10.877	0.928	11.72	1.07	5.26	0.143
10.928	0.983	11.11	1.05	5.26	0.141
10.983	1.042	10.54	1.02	5.26	0.137
11.042	1.103	10.01	1.00	5.27	0.134
11.103	1.168	9.50	0.98	5.27	0.130
11.168	1.238	9.02	0.96	5.28	0.125
11.238	1.312	8.57	0.93	5.28	0.122
11.312	1.390	8.14	0.91	5.28	0.117
11.390	1.473	7.73	0.89	5.29	0.115
11.473	1.562	7.35	0.87	5.29	0.109
11.562	1.655	6.99	0.84	5.30	0.105
11.655	1.753	6.65	0.82	5.30	0.099
11.753	1.858	6.32	0.80	5.31	0.091

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
11.858	1.968	6.02	0.78	5.31	0.087
11.968	2.085	5.74	0.76	5.32	0.080
12.085	2.210	5.47	0.74	5.32	0.076
12.210	2.342	5.21	0.72	5.33	0.072
12.342	2.482	4.97	0.70	5.33	0.067
12.482	2.630	4.75	0.68	5.34	0.059
12.630	2.787	4.53	0.66	5.34	0.056
12.787	2.953	4.33	0.64	5.35	0.053
12.953	3.130	4.14	0.62	5.35	0.048
13.130	3.317	3.96	0.60	5.36	0.040
13.317	3.515	3.79	0.58	5.37	0.032
13.515	3.725	3.63	0.56	5.38	0.025
13.725	3.947	3.48	0.54	5.38	0.021
13.947	4.182	3.34	0.52	5.38	0.017
14.182	4.430	3.20	0.51	5.39	0.012
14.430	4.693	3.07	0.49	5.39	0.012
14.693	4.973	2.95	0.47	5.39	0.010
14.973	5.270	2.84	0.45	5.39	0.009
15.270	5.583	2.73	0.44	5.40	0.005
15.583	5.915	2.63	0.42	5.40	0.005
15.915	6.267	2.54	0.40	5.40	0.002
16.267	6.640	2.45	0.39	5.40	0.002
16.640	7.035	2.37	0.37	5.40	0.001
17.035	7.453	2.29	0.36	5.40	-0.003
17.453	7.897	2.21	0.34	5.40	-0.001

Jacob's Method (Recovery)

MW-6 HC Test #1

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	1.01 feet
Transmissivity =	392 gpd/ft
$t_o =$	13.1094 min
$t_o =$	9.1E-03 days
Storage Coefficient =	1.5E+02

Saturated Thickness "b":	5 ft
Transmissivity "T":	392 gpd/ft

$$K = T/b \quad 78 \text{ gpd/ft}^2$$

$$K / 7.48 \text{ gal/ft}^3 = 10.5 \text{ ft/day}$$

$$\text{conversion} \quad 1.21278\text{E-}04 \text{ ft/sec}$$

$$\text{conversion} \quad 3.69897\text{E-}05 \text{ m/sec}$$

James T. McPherson
1861-1862

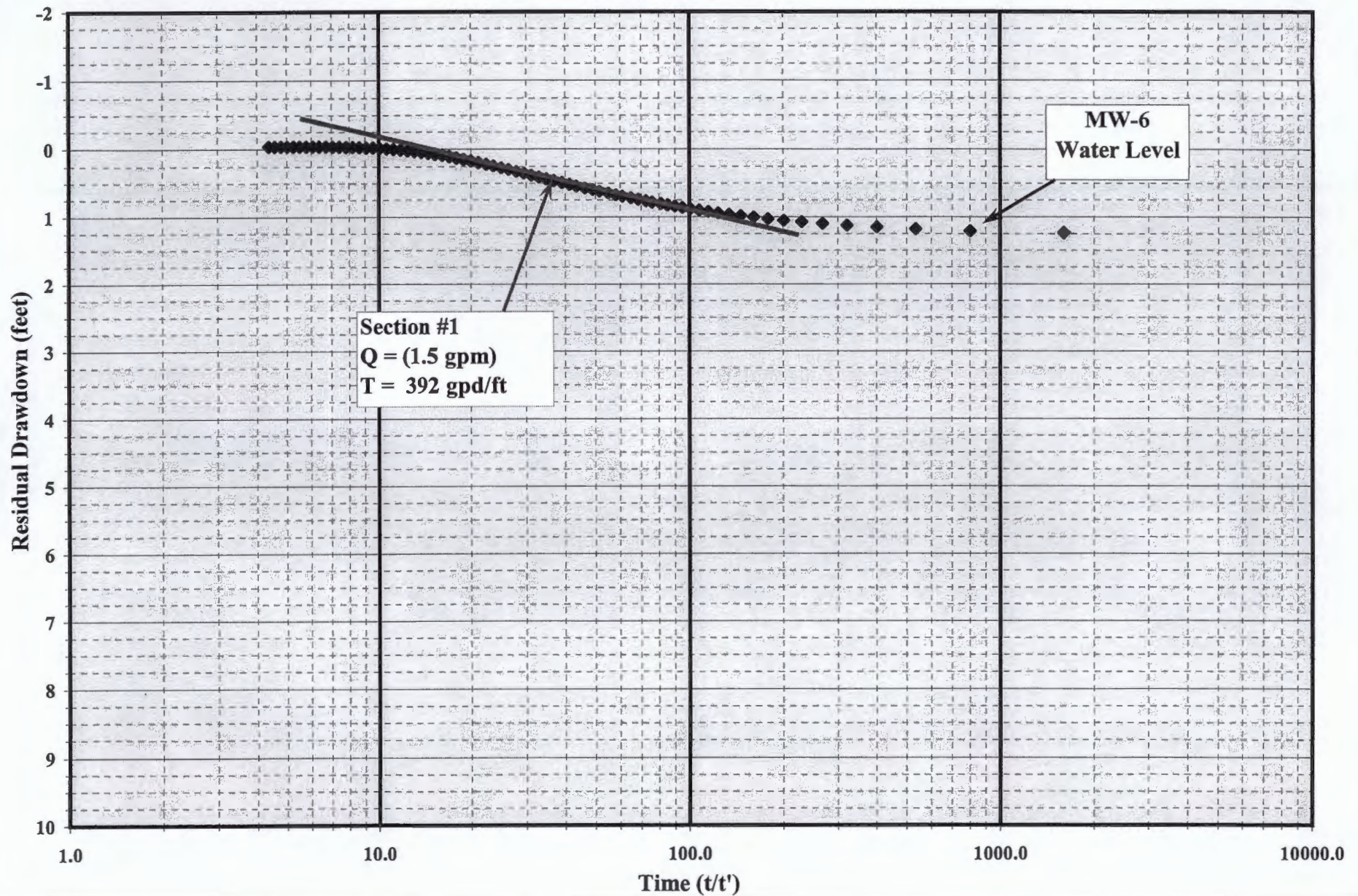
List of Names	
1	James T. McPherson
2	John A. McPherson
3	William A. McPherson
4	Robert A. McPherson
5	Thomas A. McPherson
6	Charles A. McPherson
7	Henry A. McPherson
8	George A. McPherson
9	Edward A. McPherson
10	Frederick A. McPherson

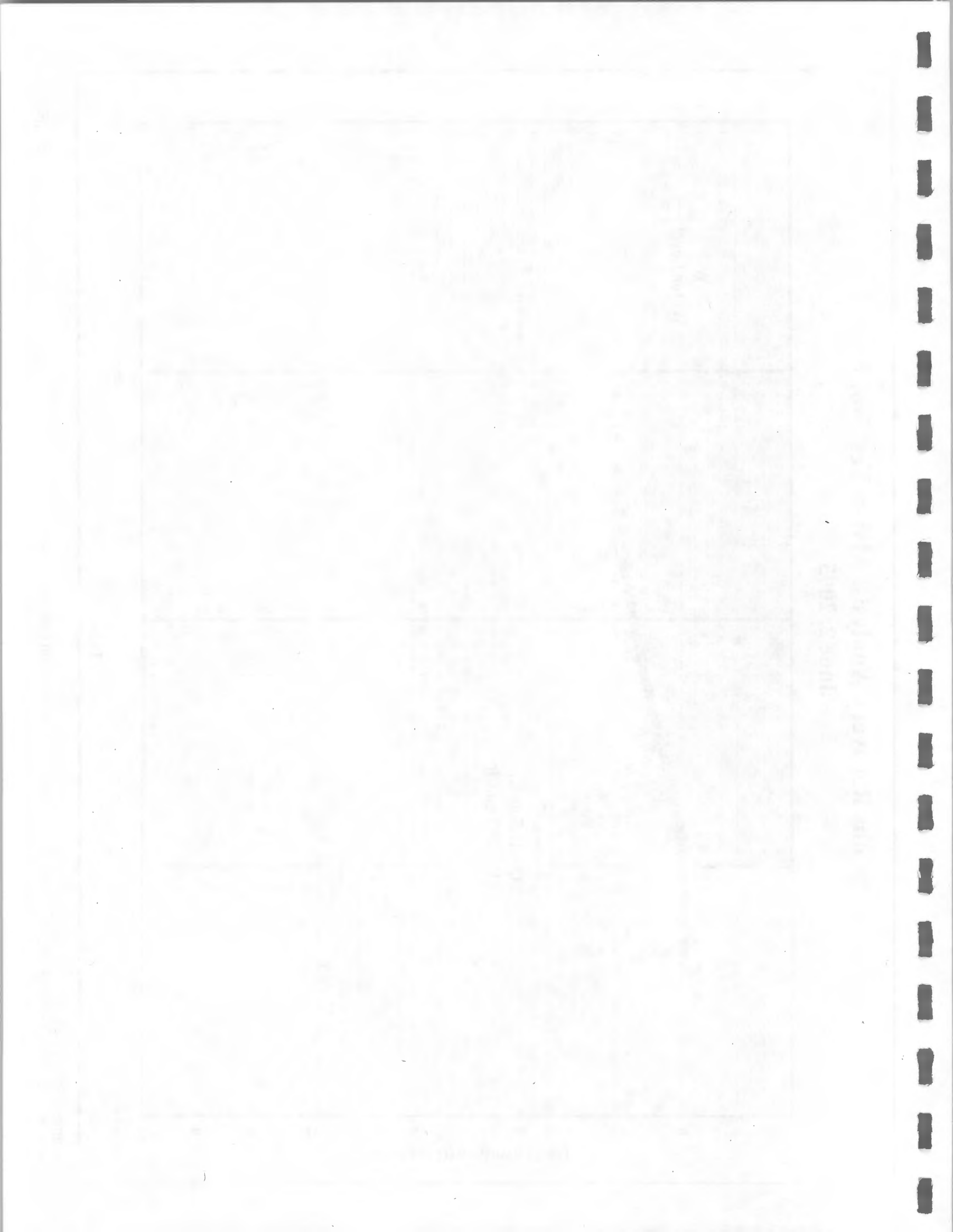
James T. McPherson
John A. McPherson
William A. McPherson
Robert A. McPherson
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George A. McPherson
Edward A. McPherson
Frederick A. McPherson

Jacobs Recovery Analysis: MW-6 Test No. 1

June 2, 2005





Jacob's Analysis (Recovery)

Well ID: MW 6 HC Test 1

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.648 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 12:31 PM
 Time Recovery Ended: 6/2/05 12:34 PM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.005	0.005	1601.00	3.20	5.42	1.232
8.010	0.010	801.00	2.90	5.44	1.209
8.010	0.015	534.00	2.73	5.47	1.176
8.015	0.020	400.75	2.60	5.50	1.150
8.020	0.025	320.80	2.51	5.52	1.124
8.025	0.030	267.50	2.43	5.55	1.099
8.030	0.035	229.43	2.36	5.57	1.075
8.035	0.040	200.88	2.30	5.60	1.052
8.040	0.045	178.67	2.25	5.62	1.029
8.045	0.050	160.90	2.21	5.64	1.005
8.050	0.055	146.36	2.17	5.66	0.984
8.055	0.060	134.25	2.13	5.69	0.962
8.060	0.065	124.00	2.09	5.71	0.941
8.065	0.070	115.21	2.06	5.73	0.921
8.070	0.075	107.60	2.03	5.75	0.901
8.075	0.080	100.94	2.00	5.77	0.880
8.080	0.085	95.06	1.98	5.79	0.861
8.085	0.090	89.83	1.95	5.81	0.841
8.090	0.095	85.16	1.93	5.83	0.823
8.095	0.100	80.95	1.91	5.84	0.804
8.100	0.107	75.94	1.88	5.86	0.784
8.107	0.112	72.60	1.86	5.89	0.763
8.112	0.118	68.55	1.84	5.91	0.742
8.118	0.125	64.95	1.81	5.93	0.718
8.125	0.133	60.94	1.78	5.96	0.693
8.133	0.140	58.10	1.76	5.98	0.671
8.140	0.148	54.88	1.74	6.00	0.645
8.148	0.158	51.46	1.71	6.03	0.619
8.158	0.167	48.95	1.69	6.05	0.597
8.167	0.177	46.23	1.66	6.08	0.572
8.177	0.188	43.42	1.64	6.10	0.544

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
8.188	0.198	41.29	1.62	6.13	0.518
8.198	0.210	39.04	1.59	6.16	0.490
8.210	0.223	36.76	1.57	6.19	0.463
8.223	0.237	34.75	1.54	6.21	0.436
8.237	0.250	32.95	1.52	6.24	0.408
8.250	0.265	31.13	1.49	6.27	0.381
8.265	0.280	29.52	1.47	6.30	0.352
8.280	0.297	27.91	1.45	6.32	0.325
8.297	0.315	26.34	1.42	6.35	0.297
8.315	0.333	24.95	1.40	6.38	0.271
8.333	0.353	23.58	1.37	6.40	0.245
8.353	0.373	22.38	1.35	6.43	0.219
8.373	0.397	21.11	1.32	6.45	0.195
8.397	0.420	19.99	1.30	6.48	0.172
8.420	0.445	18.92	1.28	6.50	0.150
8.445	0.470	17.97	1.25	6.52	0.129
8.470	0.497	17.05	1.23	6.54	0.108
8.497	0.525	16.18	1.21	6.56	0.088
8.525	0.555	15.36	1.19	6.57	0.076
8.555	0.587	14.58	1.16	6.59	0.059
8.587	0.622	13.81	1.14	6.60	0.045
8.622	0.658	13.10	1.12	6.62	0.033
8.658	0.697	12.43	1.09	6.63	0.023
8.697	0.738	11.78	1.07	6.64	0.011
8.738	0.782	11.18	1.05	6.65	0.003
8.782	0.828	10.60	1.03	6.65	-0.005
8.828	0.877	10.07	1.00	6.66	-0.011
8.877	0.928	9.56	0.98	6.67	-0.020
8.928	0.983	9.08	0.96	6.67	-0.019
8.983	1.042	8.62	0.94	6.67	-0.025
9.042	1.103	8.19	0.91	6.68	-0.029
9.103	1.168	7.79	0.89	6.68	-0.030
9.168	1.238	7.40	0.87	6.68	-0.033
9.238	1.312	7.04	0.85	6.68	-0.034
9.312	1.390	6.70	0.83	6.68	-0.035
9.390	1.473	6.37	0.80	6.68	-0.035
9.473	1.562	6.07	0.78	6.68	-0.035
9.562	1.655	5.78	0.76	6.68	-0.036
9.655	1.753	5.51	0.74	6.68	-0.036
9.753	1.858	5.25	0.72	6.68	-0.036

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.858	1.968	5.01	0.70	6.68	-0.036
9.968	2.085	4.78	0.68	6.69	-0.038
10.085	2.210	4.56	0.66	6.69	-0.038
10.210	2.342	4.36	0.64	6.69	-0.038

Jacob's Method (Recovery) **MW-6 HC Test #2**

<u>Linear Section #1</u>	
$T = \frac{264 Q}{\Delta s}$	$\Delta s = 0.69 \text{ feet}$ Transmissivity = 575 gpd/ft
$S = \frac{0.3 T t_o}{r^2}$	$t_o = 18.4358 \text{ min}$ $t_o = 1.3E-02 \text{ days}$ Storage Coefficient = 3.2E+02

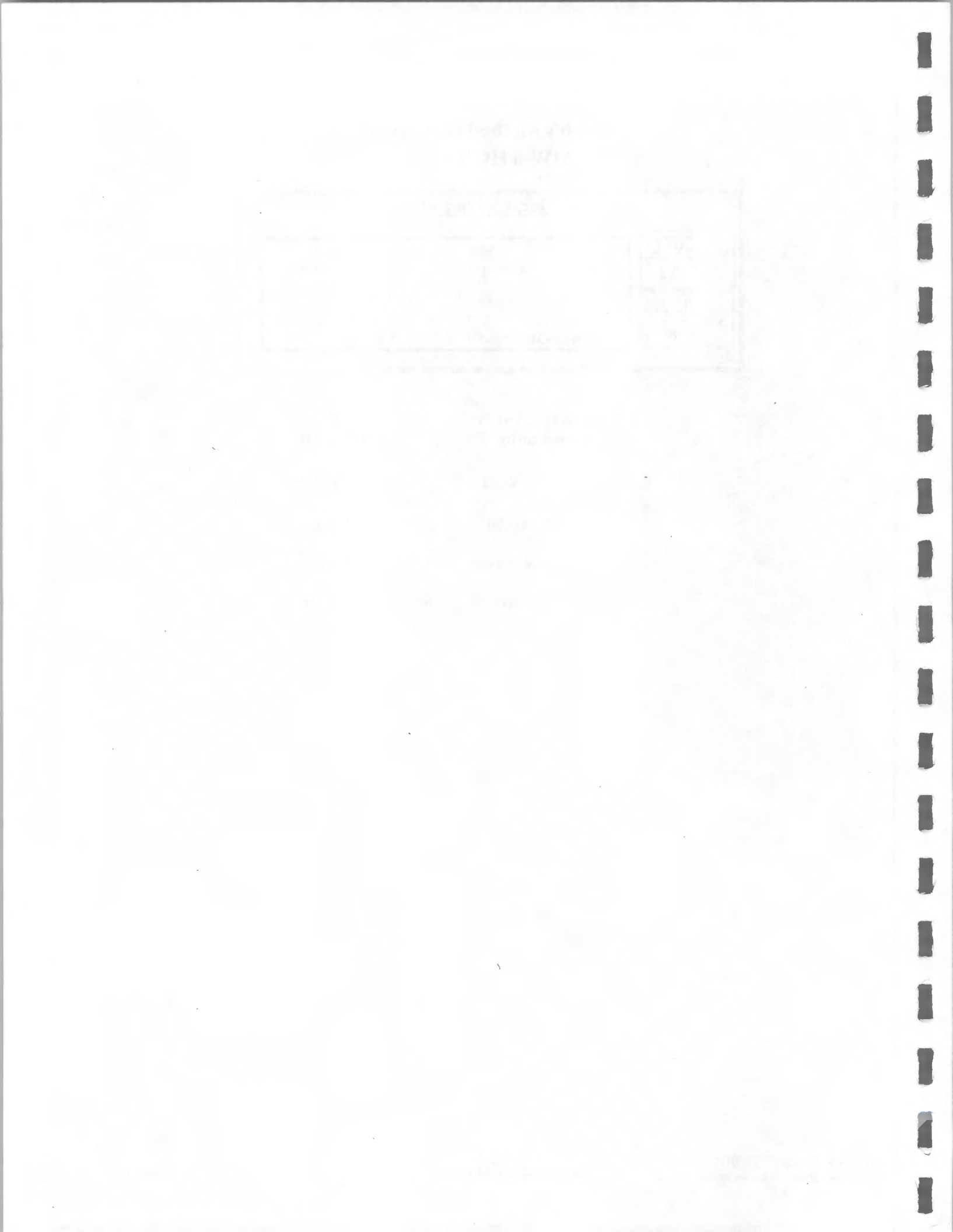
Saturated Thickness "b": 5 ft
Transmissivity "T": 575 gpd/ft

$K = T/b$ 115 gpd/ft²

$K / 7.48 \text{ gal/ft}^3 =$ 15.4 ft/day

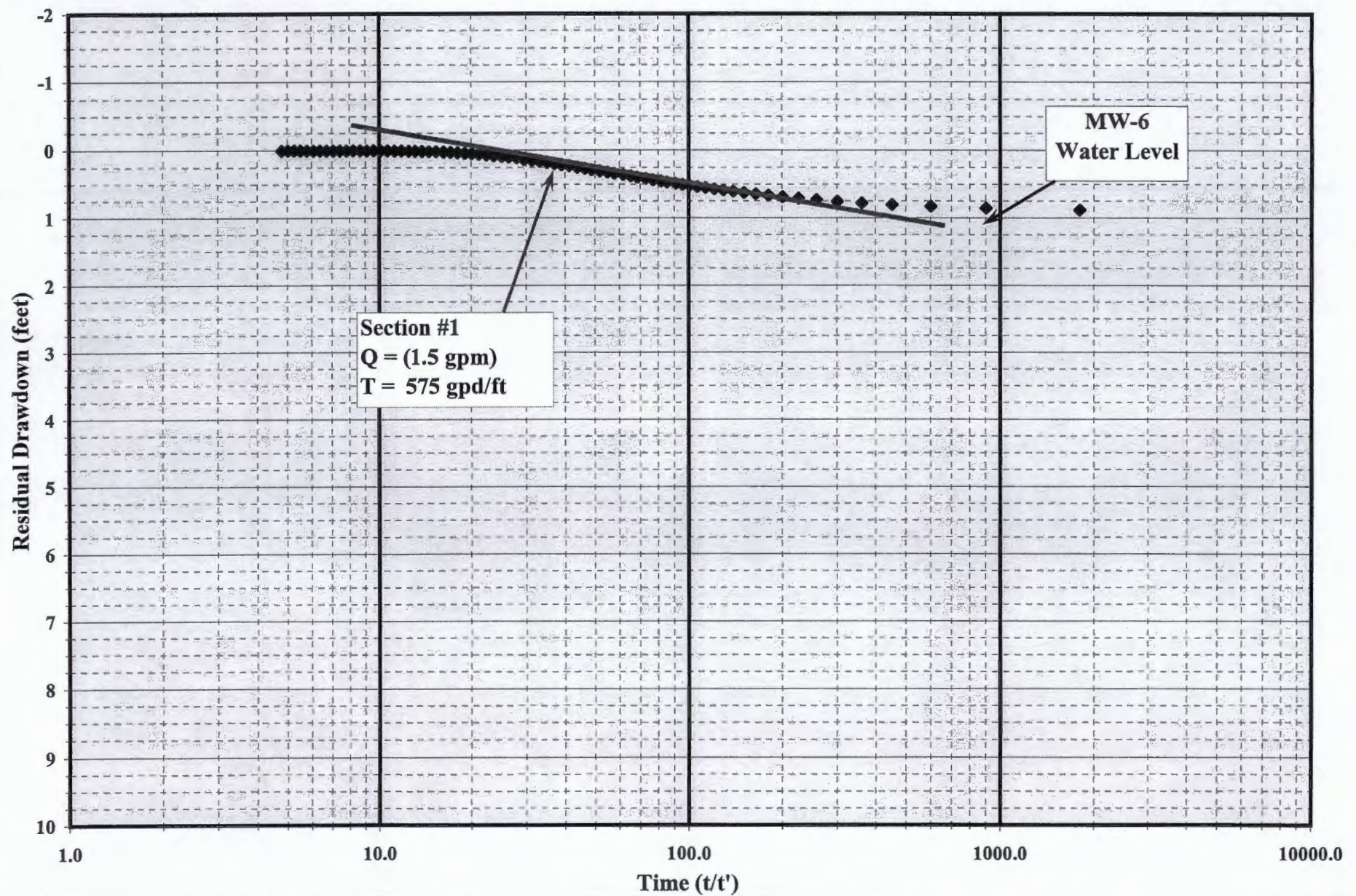
conversion 1.77975E-04 ft/sec

conversion 5.42824E-05 m/sec



Jacobs Recovery Analysis: MW-6 Test No. 2

June 2, 2005



Jacob's Analysis (Recovery)

Well ID: MW 6 HC Test 2

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.693 ft H2O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 12:44 PM
 Time Recovery Ended: 6/2/05 12:47 PM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
9.005	0.005	1801.00	3.26	5.81	0.885
9.010	0.010	901.00	2.95	5.84	0.855
9.010	0.015	600.67	2.78	5.86	0.829
9.015	0.020	450.75	2.65	5.89	0.803
9.020	0.025	360.80	2.56	5.92	0.778
9.025	0.030	300.83	2.48	5.94	0.755
9.030	0.035	258.00	2.41	5.96	0.732
9.035	0.040	225.88	2.35	5.98	0.709
9.040	0.045	200.89	2.30	6.01	0.688
9.045	0.050	180.90	2.26	6.03	0.667
9.050	0.055	164.55	2.22	6.05	0.646
9.055	0.060	150.92	2.18	6.07	0.628
9.060	0.065	139.38	2.14	6.09	0.608
9.065	0.070	129.50	2.11	6.10	0.590
9.070	0.075	120.93	2.08	6.12	0.572
9.075	0.080	113.44	2.05	6.14	0.553
9.080	0.085	106.82	2.03	6.16	0.537
9.085	0.090	100.94	2.00	6.17	0.521
9.090	0.095	95.68	1.98	6.19	0.505
9.095	0.100	90.95	1.96	6.20	0.490
9.100	0.107	85.31	1.93	6.22	0.471
9.107	0.112	81.55	1.91	6.24	0.454
9.112	0.118	77.00	1.89	6.26	0.436
9.118	0.125	72.95	1.86	6.28	0.417
9.125	0.133	68.44	1.84	6.30	0.398
9.133	0.140	65.24	1.81	6.31	0.380
9.140	0.148	61.62	1.79	6.33	0.359
9.148	0.158	57.78	1.76	6.35	0.340
9.158	0.167	54.95	1.74	6.37	0.324
9.167	0.177	51.89	1.72	6.39	0.305
9.177	0.188	48.73	1.69	6.41	0.287

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.188	0.198	46.33	1.67	6.43	0.267
9.198	0.210	43.80	1.64	6.44	0.249
9.210	0.223	41.24	1.62	6.46	0.231
9.223	0.237	38.97	1.59	6.48	0.214
9.237	0.250	36.95	1.57	6.50	0.195
9.250	0.265	34.91	1.54	6.52	0.178
9.265	0.280	33.09	1.52	6.53	0.161
9.280	0.297	31.28	1.50	6.55	0.147
9.297	0.315	29.51	1.47	6.56	0.133
9.315	0.333	27.95	1.45	6.59	0.108
9.333	0.353	26.42	1.42	6.59	0.099
9.353	0.373	25.05	1.40	6.60	0.092
9.373	0.397	23.63	1.37	6.61	0.080
9.397	0.420	22.37	1.35	6.62	0.070
9.420	0.445	21.17	1.33	6.63	0.061
9.445	0.470	20.10	1.30	6.64	0.052
9.470	0.497	19.07	1.28	6.65	0.045
9.497	0.525	18.09	1.26	6.65	0.040
9.525	0.555	17.16	1.23	6.66	0.033
9.555	0.587	16.29	1.21	6.67	0.028
9.587	0.622	15.42	1.19	6.67	0.024
9.622	0.658	14.62	1.16	6.67	0.022
9.658	0.697	13.86	1.14	6.68	0.018
9.697	0.738	13.13	1.12	6.68	0.016
9.738	0.782	12.46	1.10	6.68	0.014
9.782	0.828	11.81	1.07	6.68	0.011
9.828	0.877	11.21	1.05	6.68	0.011
9.877	0.928	10.64	1.03	6.69	0.008
9.928	0.983	10.10	1.00	6.69	0.008
9.983	1.042	9.58	0.98	6.69	0.006
10.042	1.103	9.10	0.96	6.69	0.007
10.103	1.168	8.65	0.94	6.69	0.005
10.168	1.238	8.21	0.91	6.69	0.006
10.238	1.312	7.81	0.89	6.69	0.007
10.312	1.390	7.42	0.87	6.69	0.007
10.390	1.473	7.05	0.85	6.69	0.007
10.473	1.562	6.71	0.83	6.69	0.007
10.562	1.655	6.38	0.80	6.69	0.007
10.655	1.753	6.08	0.78	6.69	0.007
10.753	1.858	5.79	0.76	6.69	0.007

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
10.858	1.968	5.52	0.74	6.69	0.006
10.968	2.085	5.26	0.72	6.69	0.004
11.085	2.210	5.02	0.70	6.69	0.006
11.210	2.342	4.79	0.68	6.69	0.007
11.342	2.482	4.57	0.66	6.69	0.006
11.482	2.630	4.37	0.64	6.69	0.007
11.630	2.787	4.17	0.62	6.69	0.007
11.787	2.953	3.99	0.60	6.69	0.005
11.953	3.130	3.82	0.58	6.69	0.007
12.130	3.317	3.66	0.56	6.69	0.005

Jacob's Method (Recovery) **MW-6 HC Test #3**

Linear Section #1

$$T = \frac{264 Q}{\Delta s}$$

$$S = \frac{0.3 T t_o}{r^2}$$

$\Delta s =$	0.47 feet
Transmissivity =	840 gpd/ft
$t_o =$	18.6219 min
$t_o =$	1.3E-02 days
Storage Coefficient =	4.7E+02

Saturated Thickness "b":	5 ft
Transmissivity "T":	840 gpd/ft

$$K = T/b \quad 168 \text{ gpd/ft}^2$$

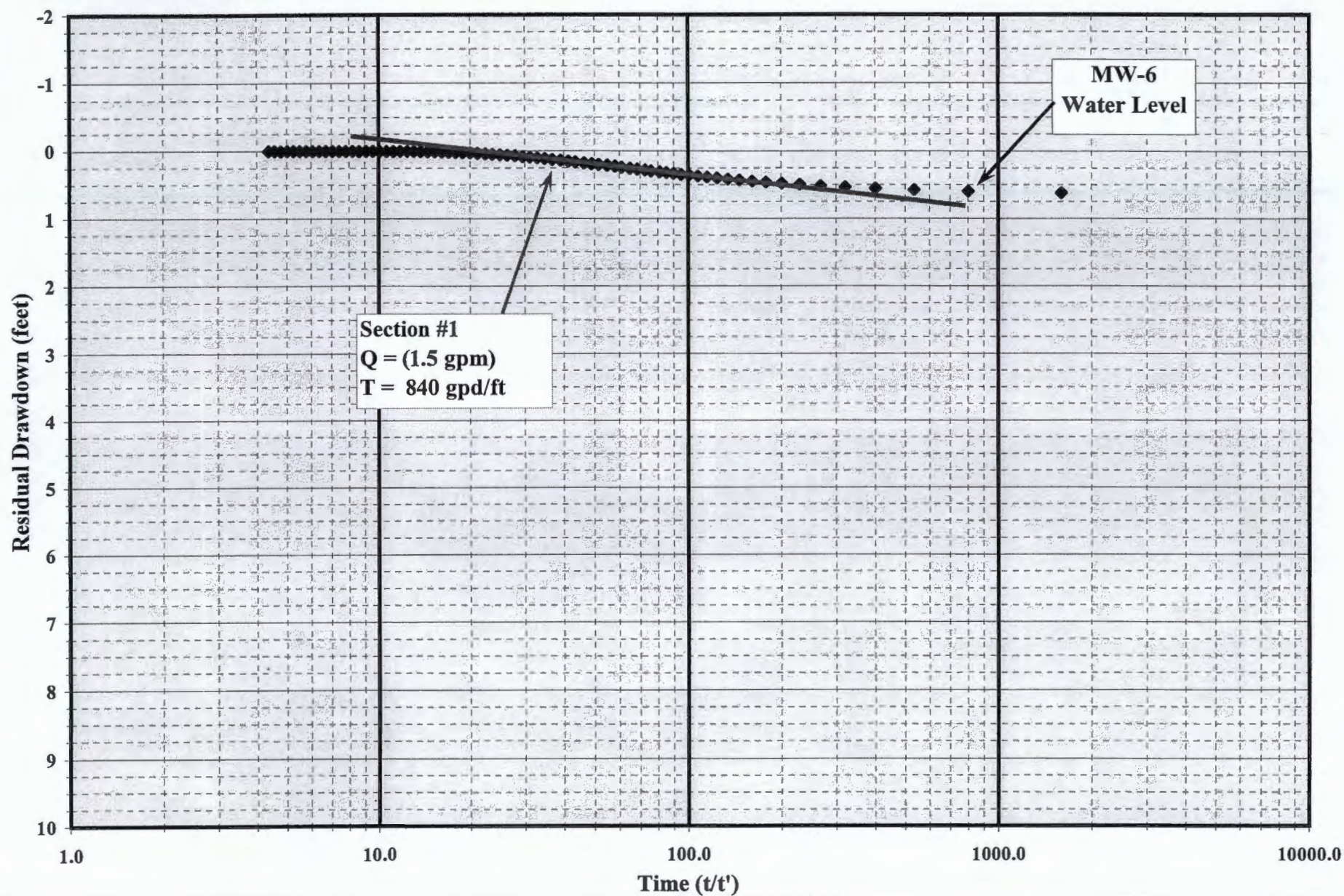
$$K / 7.48 \text{ gal/ft}^3 = 22.5 \text{ ft/day}$$

$$\text{conversion} \quad 2.59932\text{E-}04 \text{ ft/sec}$$

$$\text{conversion} \quad 7.92792\text{E-}05 \text{ m/sec}$$

Jacobs Recovery Analysis: MW-6 Test No. 3

June 2, 2005



Jacob's Analysis (Recovery)

Well ID: MW 6 HC Test 3

Job No.: 909.001
 Client: Aramark Uniform Services
 Test By: DMJ/BJM
 Analysis By: RLV
 M.P. = Ground Surface (flush-mount wells)

Q = 1.5 gpm
 r = 0.08 ft
 S.W.L. = 6.689 ft H₂O over probe
 b = 5 ft
 Time Pumping Ended: 6/2/05 12:56 PM
 Time Recovery Ended: 6/2/05 12:59 PM
 Test Length: 3 min

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement (feet of water over probe)	Residual Drawdown (s) (feet)
8.005	0.005	1601.00	3.20	6.07	0.619
8.010	0.010	801.00	2.90	6.09	0.597
8.010	0.015	534.00	2.73	6.12	0.574
8.015	0.020	400.75	2.60	6.14	0.554
8.020	0.025	320.80	2.51	6.15	0.535
8.025	0.030	267.50	2.43	6.17	0.516
8.030	0.035	229.43	2.36	6.19	0.497
8.035	0.040	200.88	2.30	6.21	0.480
8.040	0.045	178.67	2.25	6.23	0.463
8.045	0.050	160.90	2.21	6.24	0.446
8.050	0.055	146.36	2.17	6.26	0.431
8.055	0.060	134.25	2.13	6.27	0.415
8.060	0.065	124.00	2.09	6.29	0.400
8.065	0.070	115.21	2.06	6.30	0.385
8.070	0.075	107.60	2.03	6.32	0.372
8.075	0.080	100.94	2.00	6.33	0.358
8.080	0.085	95.06	1.98	6.34	0.346
8.085	0.090	89.83	1.95	6.36	0.333
8.090	0.095	85.16	1.93	6.37	0.321
8.095	0.100	80.95	1.91	6.38	0.309
8.100	0.107	75.94	1.88	6.39	0.296
8.107	0.112	72.60	1.86	6.41	0.283
8.112	0.118	68.55	1.84	6.42	0.270
8.118	0.125	64.95	1.81	6.43	0.256
8.125	0.133	60.94	1.78	6.45	0.243
8.133	0.140	58.10	1.76	6.46	0.228
8.140	0.148	54.88	1.74	6.48	0.213
8.148	0.158	51.46	1.71	6.49	0.201
8.158	0.167	48.95	1.69	6.50	0.192
8.167	0.177	46.23	1.66	6.51	0.179
8.177	0.188	43.42	1.64	6.52	0.165

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
8.188	0.198	41.29	1.62	6.54	0.154
8.198	0.210	39.04	1.59	6.55	0.141
8.210	0.223	36.76	1.57	6.56	0.129
8.223	0.237	34.75	1.54	6.57	0.117
8.237	0.250	32.95	1.52	6.58	0.106
8.250	0.265	31.13	1.49	6.59	0.096
8.265	0.280	29.52	1.47	6.60	0.087
8.280	0.297	27.91	1.45	6.61	0.076
8.297	0.315	26.34	1.42	6.62	0.069
8.315	0.333	24.95	1.40	6.63	0.059
8.333	0.353	23.58	1.37	6.64	0.052
8.353	0.373	22.38	1.35	6.64	0.045
8.373	0.397	21.11	1.32	6.65	0.040
8.397	0.420	19.99	1.30	6.66	0.033
8.420	0.445	18.92	1.28	6.66	0.029
8.445	0.470	17.97	1.25	6.66	0.025
8.470	0.497	17.05	1.23	6.67	0.022
8.497	0.525	16.18	1.21	6.67	0.019
8.525	0.555	15.36	1.19	6.67	0.016
8.555	0.587	14.58	1.16	6.68	0.014
8.587	0.622	13.81	1.14	6.68	0.012
8.622	0.658	13.10	1.12	6.68	0.010
8.658	0.697	12.43	1.09	6.68	0.010
8.697	0.738	11.78	1.07	6.68	0.008
8.738	0.782	11.18	1.05	6.68	0.008
8.782	0.828	10.60	1.03	6.68	0.008
8.828	0.877	10.07	1.00	6.68	0.007
8.877	0.928	9.56	0.98	6.68	0.006
8.928	0.983	9.08	0.96	6.68	0.006
8.983	1.042	8.62	0.94	6.68	0.007
9.042	1.103	8.19	0.91	6.68	0.006
9.103	1.168	7.79	0.89	6.68	0.006
9.168	1.238	7.40	0.87	6.68	0.006
9.238	1.312	7.04	0.85	6.68	0.006
9.312	1.390	6.70	0.83	6.69	0.004
9.390	1.473	6.37	0.80	6.68	0.006
9.473	1.562	6.07	0.78	6.68	0.006
9.562	1.655	5.78	0.76	6.68	0.006
9.655	1.753	5.51	0.74	6.68	0.006
9.753	1.858	5.25	0.72	6.68	0.006

Time Since Pumping Started (t) (minutes)	Time Since Pumping Stopped, t' (minutes)	Ratio t/t'	Log (t/t')	Transducer Measurement	Residual Drawdown (s) (feet)
				(feet of water over probe)	
9.858	1.968	5.01	0.70	6.68	0.006
9.968	2.085	4.78	0.68	6.68	0.007
10.085	2.210	4.56	0.66	6.68	0.006
10.210	2.342	4.36	0.64	6.69	0.004
10.342	2.482	4.17	0.62	6.69	0.004
10.482	2.630	3.99	0.60	6.69	0.004
10.630	2.787	3.81	0.58	6.69	0.004
10.787	2.953	3.65	0.56	6.69	0.004